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Installation & Operation Manual

Electrak 10 Actuator Repair Kits



#### INTRODUCTION

This manual provides complete instructions for installing all repair kits available for Thomson Electrak 10 Actuators. Replacement parts are available for Thomson Linear Actuators in kit form. Descriptions of the kits, installation instructions, diagrams, and part numbers are found on the following pages. Please follow the instructions provided in this manual carefully to ensure safe, reliable operation after the repair kits have been installed. Normal precautions must be taken and safe working practices exercised to avoid injury when installing the kits shown in this manual.

All stated or implied manufacturer's warranties are voided if this product is not installed and operated in accordance with these instructions.

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# ELECTRAK 10 LINEAR ACTUATOR Repair Kits Installation Instructions

Replacement parts are available for Thomson actuators in kit form. Descriptions of the kits, installation instructions and diagrams, and part numbers are found on the next 3 pages. Replacement parts are to be ordered from the Customer Service Department:

Thomson 203A West Rock Road - Radford, VA 24141 540-633-3400

Please be prepared to identify your actuator by the model number found on the label or in stamp marks on the side of the gear housing. i.e., A12-05B5-04D

# **REPAIR KIT INSTALLATION**

**NOTE:** All screws can be replaced with standard machine screws (#12-24 and #10-32). Tighten all screws/nuts to 70 in-lbs. upon reassembly (except single screw in rear housing —tighten to 20 in-lbs.).

# **COVER TUBE**



Remove 4 screws from front housing. Slip holder plate off of cover tube. Press cover tube off of extension tube. Replace in reverse order.

Model No.	Part No.
4" Ball Screw Cover Tube	9200-288-011
8" Ball Screw Cover Tube	9200-288-013
12" Ball Screw Cover Tube	9200-288-014

\*One holder supplied with each kit.

# **REAR HOUSING**



**Rear Housing** 

Remove 4 screws from front housing and 1 screw from rear housing. Pull housing free.

Install one of the furnished plastic bumpers inside the new housing. The thick bumper is used for the DXX-05 actuator (5:1 ratio), the thin bumper is used for the DXX-10 and DXX-20 (10:1 & 20:1 ratio) actuators. Install the new housing in reverse order.

Model No.	Part No.
Standard Mounting Orientation	9200-536-011

## **INTERMEDIATE GEAR SET**



Remove rear housing as directed above. Slip washers and gear off of support pin.\* To replace: If two different size washers are provided, the thick washer goes up against the front housing (goes in first).

Model No.	Part No.	
DXX-05	9205-505-001	
DXX-20	9220-505-002	

\*Two new washers are supplied with each kit.

#### **CLUTCH KITS** (BALL SCREW)



Slide clutch from screw shaft. Remove key. Remove washer underneath clutch. Two replacement washers and key are supplied with each kit.

Replace in reverse order.

Model No.	Part No.	
D12, D24-05	9200-271-011	
D12, D24-20	9200-271-010	

Washer Washer Key Clutch

**Ball Screw** 

# DRIVE SCREW ASSEMBLY (BALL SCREW)



Remove cover tube, rear housing, intermediate gear and clutch. Slide brake and screw assembly out of front housing.

To reassemble, remove clamp from screw replacement kit. Slide screw with brake back through front housing being careful not to lose any brake components.

Reassemble in reverse order.

Two washers and key are supplied with each kit.

Model No.	Stroke Length	Part No.
DXX-XXB5-04	4"	9200-191-012
DXX-XXB5-08	8″	9200-191-014
DXX-XXB5-12	12″	9200-191-015

#### MOTOR



available in Seal Kit)

Remove rear housing as previously described. Remove 2 motor nuts from front housing. Pull motor free. (Take care not to disturb the gear train.) Replace in reverse order.

Model No.	Part No.
D12-05; 12 VDC	9205-635-002
D24-05; 24 VDC	9205-635-004
D12-20; 12 VDC	9210-635-002
D24-20; 24 VDC	9210-635-004

### FRONT HOUSING (BALL SCREW)



Remove cover tube and holder, rear housing, intermediate gear, clutch, drive screw and motor as previously described. Save all gaskets and seals or replace with new seals from seal kit below. Discard front housing. Replace with housing from replacement kit. Reassemble in reverse order.

Model No.	Part No.
DXX-05B	9205-536-005
DXX-20B	9220-536-005

### **SEALING KIT**



It is advisable to replace the appropriate seals whenever the actuator is disassembled.



9200-795-001

Sealing Kit consists of:

Cover Tube Seal Gasket Between Housings Motor Seal O-Ring Lip Seal

#### WARRANTY

Thomson warrants that it will repair or replace (whichever it deems advisable) any product manufactured and sold by it which proves to be defective in material or workmanship within a period of one (1) year from the date of original purchase for consumer, commercial or industrial use.

This warranty extends only to the original purchaser and is not transferable or assignable without Thomson's prior consent.

Warranty service can be obtained in the U.S.A. by returning any defective product, transportation charges prepaid, to the appropriate Thomson factory. Additional warranty information may be obtained by writing the Customer Service Department:

#### Thomson

#### 203A West Rock Road - Radford, VA 24141 540-633-3400

A purchase receipt or other proof of original purchase will be required before warranty service is rendered. If found defective under the terms of this warranty, repair or replacement will be made, without charge, together with a refund for transportation costs. If found not to be defective, you will be notified and, without your consent, the item will be repaired or replaced and returned to you at your expense.

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Thomson 1300 N. State St. Marengo, II. 60152 Phone: 540-633-3400 Fax: 540-639-4162 www.thomsonlinear.com Or write: Thomson 1300 N. State St. Marengo, II. 60152