

www.c@{ { • [}]] * &.com

Installation & Operation Manual

Electrak 5 Actuator Repair Kits A12 and A22 Models



INTRODUCTION

This manual provides complete instructions for installing all repair kits available for Thomson Electrak 5 Actuators. Replacement parts are available for Thomson 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.

Table of Contents

Description	Page
Cover Tube	3
Rear Housing	4
Intermediate Gears	4
Clutch Gears	5
Drive Screws	5
Motors	6
Front Housings	6
Seals, Gaskets, Grease and Screws	6
Brake Assembly	7



REAR HOUSING

Replacement parts are to be ordered from:

EY[^] **d**[^] __ 1300 N. State St. Marengo, II. 60152 Phone: 1-800-554-8466 Fax: 1-800-445-0329 www.thomsonlinear.com NOTE: Do not replace screws except with factory original screws. An ordinary machine screw may lead to actuator failure. It is advisable to replace appropriate seals and grease whenever the actuator is disassembled.

Please be prepared to identify your actuator by model number found on the label or in stamp marks on the side of the gear housing. I.E., A12-05135-041D



Cover Tube & Holder Replacement Kit

Remove four screws from front housing and one screw from rear housing. Remove two screws from motor. Remove cover tube and holder. Replace in reverse order. Make sure cover tube is assembled first and gear backlash is proper (no binding). Repack gearset with new grease, reinstall washer on top of clutch, and make sure gaskets and seals are properly seated before and after tightening screws and nuts.

Model No.	Kit No.	Stroke Length
AXX-XXB5-04D	9200-288-071	4" Stroke
AXX-XXB5-08D	9200-288-072	8" Stroke
AXX-XXB5-12D	9200-288-073	12" Stroke
AXX-XXB5-18D	9200-288-074	18" Stroke
AXX-XXB5-24D	9200-288-075	24" Stroke

Rear Housing Replacement Kit



Remove four screws from front housing and one screw from rear housing. Remove rear housing. Replace in reverse order, making sure an adequate supply of lubrication is on the gear train (available in seal kit) and that the gasket is seated before and after tightening screws.

Intermediate Gear Replacement Kit



Remove four screws from front housing and one screw from rear housing. Remove rear housing. Remove intermediate gear. Replace in reverse order making sure support pin is adequately tight and gear backlash is proper (no binding). Repack gearset with new grease, reinstall washer on top of clutch and make sure gaskets and seals are properly seated before and after tightening screws and nuts.



Remove four screws from front housing and one screw from rear housing. Remove rear housing. Remove intermediate gear. Support output shaft and remove pin. Replace in reverse order, making sure gear backlash is proper (no binding). Repack gearset with new grease. Replace one washer on each side of the clutch gear. Ensure the pin is flush or below each side of the hub on the clutch gear and that gaskets are properly seated before and after tightening screws.



Remove four screws from front housing, one screw from rear housing and two screws from motor. Remove rear housing. Remove intermediate gear. Support output shaft and remove pin. Replace in reverse order. Repack gearset with new grease. Make sure gear backlash is correct (no binding) and that one washer is located on each side of the clutch gear.

Model No.	Kit No.	Stroke Length
AXX-XXB5-04D	9200-191-071	4" Stroke
AXX-XXB5-08D	9200-191-072	8" Stroke
AXX-XXB5-12D	9200-191-073	12" Stroke
AXX-XXB5-18D	9200-191-074	18" Stroke
AXX-XXB5-24D	9200-191-075	24" Stroke

The pin should be flush or below each side of the hub on the clutch gear. Make sure gaskets are properly seated before and after tightening screws.

Drive Screw Replacement Kit

Motor Replacement Kit

Remove four screws from front housing and one screw from rear housing. Remove two screws from motor. Replace in reverse order. Make sure gear backlash is proper (no binding). Repack gearset with new grease. Make sure the washer is installed on top of the clutch and that the gasket and seals are properly seated before and after tightening screws and nuts.

Model No.	Kit No.
A12-XXB5-XXD	9210-635-033
A22-XXB5-XXD	9210-635-035





Front Housing Replacement Kit

Remove four screws from front housing and one screw from rear housing. Remove rear housing. Remove intermediate gear and motor screws. Remove pin from clutch gear and make sure shaft is supported. Replace in reverse order. Repack gearset with new grease. Make sure gear backlash is proper (no binding). Install one washer on each side of clutch gear pin, pressing it flush or below hub on clutch gear. Check that gaskets and seals are properly seated before and after tightening screws.

Model No.	Kit No.
AXX-05B5-XXD	9205-536-005
AXX-10B5-XXD	9210-536-005

Sealing Kit

Replacing gaskets and seals and repacking the gearset with new grease are advisable procedures whenever reassembling an actuator. The sealing kit includes all necessary gaskets, seals, and assembly hardware, as well as a container of grease, to facilitate rebuilding with any of the other kits described in this manual.

Kit No. 9200-795-001







Voltage	Model No.	Kit No.
115 VAC	A12-XXB5-XXD	9200-170-002
230 VAC	A22-XXB5-XXD	9200-170-003

Remove two screws on the motor brake cover and remove cover. Remove four screws and cotter pin from solenoid. Remove pawl and rotor assembly. Install the new solenoid using two #6-32 \times .25 long screws and tighten to 10 lb. in. Install pawl over sleeve and assemble .50 O.D. \times .03 thick washer and #8-32 \times 1.25 long screw and tighten to 10 lb. in. Align pawl and solenoid and insert cotter pin. The pawl must rotate freely. Assemble spring, .41 O.D. \times .03 thick washer, rotor assembly (note that the letter "T" must be facing up), .82 O.D. \times .105 thick washer, 0.43 O.D. \times .03 thick washer and #4-40 \times .25 screw. Tighten to 10 lb. in. Connect orange and white wires to solenoid in any sequence. Make sure wires keep free from moving parts.

Thomson 1300 N. State St. Marengo, II. 60152 Phone: 1-800-554-8466 Fax: 1-800-445-0329 www.thomsonlinear.com

> Or write: Thomson 1300 N. State St. Marengo, II. 60152