

MIDLAND HYDRAULIC DOORS OPERATORS MANUAL

PLEASE READ THIS MANUAL BEFORE OPERATING OR INSTALLING DOOR. IT IS IMPORTANT THAT THIS DOOR BE INSTALLED CORRECTLY IN ORDER TO ACHIEVE PROPER OPERATION AND ENSURE WARRANTABILITY.

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(Inside Control Box Cover)

Midland Hydraulic Door Operating Instructions

Warning

**** Do not operate door if any mechanical deficiency or problem is apparent****

Before Operating the Hydraulic Door:

1. Make sure all objects are cleared away from the outward and upward / downward motion of the door.
2. Always close the walk-in service door (if equipped) securely before opening hydraulic door and remove cane bolt (if equipped) from floor.
3. Inspect lines, hoses and cylinders for leaks and repair any faulty pieces.
4. Push "Open" or "Close" button as desired. Constant pressure is required to operate door.
5. Never leave the door unattended while the door is in operation.
6. Do not work, walk or move equipment under door when it is in operation.
7. If you plan to leave the building, always close the door securely and never leave the door in the open position if you will be leaving the area.
8. **Caution** - Keep door closed during high winds. Failure to do so may result in damage to door and building or may cause serious injury or death.

Maintenance

1. Inspect all fittings on lines and hoses to insure they are tight 30 days after installation. Follow same procedure every 3 months.
2. Inspect all cylinders and pin clips every month for signs of wear. Replace any clips or pins showing signs of wear immediately.
3. Check oil level in reservoir before operation. If oil level is down, replace with ATF or Aircraft hydraulic fluid. Consult factory to determine what you have in reservoir.
4. Check pressure during operation to ensure pump is working properly.
5. Lubricate hinges on an annual basis or as needed depending on usage of door.
6. If you are experiencing problems with your door, please contact a factory representative at 800-921-7008.

MAINTENANCE SCHEDULE

CAUTION: BEFORE SERVICING, ALWAYS DISCONNECT OPERATOR FROM POWER SUPPLY

Check at the intervals listed in the following chart

Item	Procedure	Each Use	3 Months	12 months
Cylinders	Check for leaks	*		*
	Check for alignment	*		*
	Check for wear of pin /clip	*		*
Hoses & Fittings	Check for leaks	*		*
	Replace if necessary	*		*
Hydraulic pump	Check flow rate	*		*
	Adjust relief valve as necessary	*		*
Hinges	Lubricate if necessary			*
Fastners	Check & Tighten as necessary		*	*
Reservoir	Check oil level	*	*	*
	Use ATF or Aircraft Hydraulic fluid to refill			

** Inspect and service whenever a malfunction is observed or suspected **

How to order repair parts or service door

Please contact a Midland Door Solutions Representative
 1-800-921-7008
 Hours 8:00 a.m. to 5:00 p.m. CST
 Monday through Friday

We service all makes and models of bi-fold and hydraulic doors.
 If you need service on your bi-fold door, please give one of our reps a call.

TROUBLE SHOOTING GUIDE

	PROBLEM	SOLUTION
Motor will not run	<ol style="list-style-type: none">1. No Power2. Reset button tripped3. Loose electrical connection4. Motor wired wrong5. Defective Motor	Power not connected to building Replace circuit breaker or fuse Push reset button Make sure all connections are tight Check wiring in motor Replace motor
Motor hums but door does not move	<ol style="list-style-type: none">1. Door Obstructed2. Screw loose in control panel3. Inadequate voltage4. Motor defective	Check path of travel Tighten screw Check for correct voltage or make sure Wire is sized properly Replace motor
Motor runs but makes a lot of noise and gets hot	<ol style="list-style-type: none">1. Obstructed valve2. Low oil in tank3. Defective Motor	Check for obstructions in valve/fluid Fill tank with ATF Replace motor
Motor will not start under load	<ol style="list-style-type: none">1. Low voltage2. No fluid in tank3. Loose wire	Increase wire size to operator Fill reservoir Tighten screw or wire nut
Door Jumps	<ol style="list-style-type: none">1. Air in lines2. Flow Control not set	Bleed air from system Ensure flow control valve is dialed In properly
Door lifts crooked	<ol style="list-style-type: none">1. Cylinder seal leak2. Obstruction in line3. Line Length Varies	Replace seal Remove obstruction Make sure all lines and hoses are of Equal length

ELECTRICAL REQUIREMENTS

- SAFETY:**
1. Wiring of the door should be done by a qualified electrician.
 2. Always disconnect the power source before servicing the door.

The door is equipped with electrical wiring from the factory for both the power supply and the control circuits. This wiring is intended to facilitate testing and for temporary use. It is the responsibility of the owner to provide permanent wiring to meet the local electrical code.

Wiring diagrams for the operator can be found inside the control panel.

Wire size requirements:

- Control circuits (24 VDC) should use 16 gauge wire minimum.
- Power voltage and horsepower are listed on the control box and motor. The following chart can be used to help determine the appropriate wire size for your application. Proper sizing should be verified with qualified electrician.

MINIMUM WIRE SIZES FOR SINGLE PHASE MOTORS

230 volt

Motor HP	25 feet	50 feet	100 feet	150 feet	200 feet
2	14 ga.	12 ga.	8 ga.	6 ga.	6 ga.
5	8 ga.	8 ga.	6 ga.	4 ga.	2 ga.

MINIMUM WIRE SIZES FOR THREE PHASE MOTORS

Motor HP	25—50 feet			100 feet			150—200 feet		
	208 V	230 V	460 V	208 V	230 V	460 V	208 V	230 V	460 V
2	12 ga.	12 ga.	14 ga.	8 ga.	10 ga.	14 ga.	6 ga.	6 ga.	12 ga.
5	8 ga.	10 ga.	12 ga.	6 ga.	6 ga.	12 ga.	4 ga.	4 ga.	10 ga.