



TLO7E
(600 Series)
Two Post Surface Mounted Lifts
Capacity: 3,100kg (775 kg per arm)

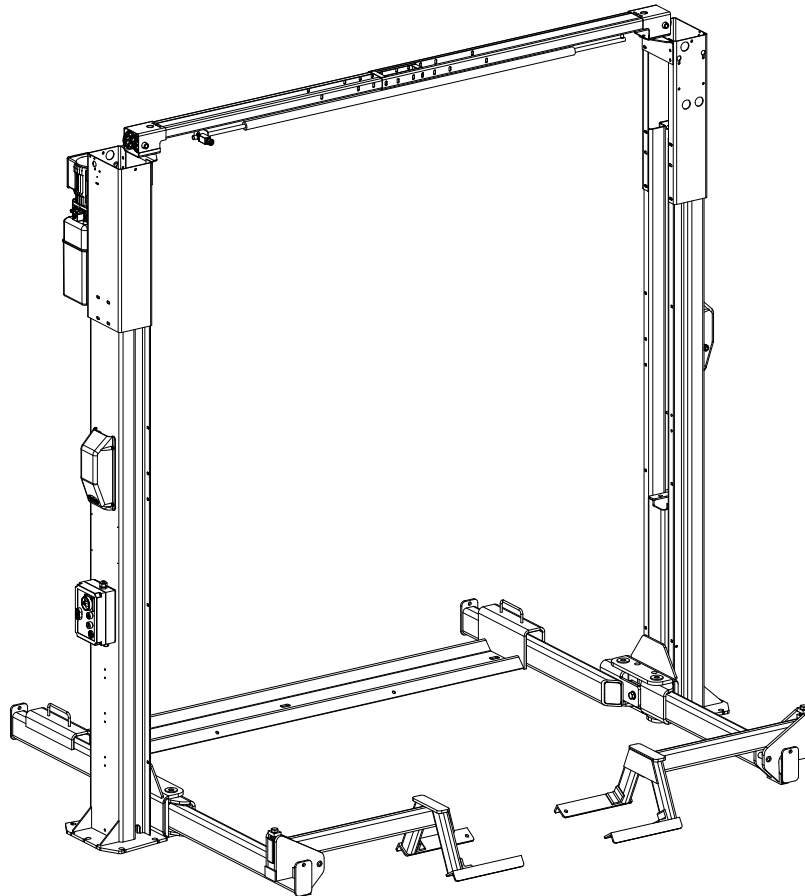


Table of Contents

Safety Instructions	2
Lift Controls	3
Operating Instructions	4
Maintenance Instructions	6
Trouble Shooting.....	6
Manual Lowering Instructions	10

INSTALLER: Please return this booklet to literature package and give to lift owner/operator.

Only those technicians who have been properly trained in the usage and care of the lift should be allowed to operate the lift.

Local regulations MAY require that the trained operator be at least 18 years of age or be supervised by a trained operator while:

- A. positioning the vehicle in the service bay,**
- B. positioning the lifting devices, and,**
- C. actuating the lift controls.**

Display this manual in a conspicuous location in the lift area convenient to the operator.

The lift is to be used for raising unoccupied motor vehicles ONLY!

ALWAYS lift the vehicle using all lifting devices together.
NEVER raise just one end, one corner, or one side of the vehicle.

ONLY lift vehicles which have an individual axle weight that does not exceed one-half the lift capacity. See load capacity table below.

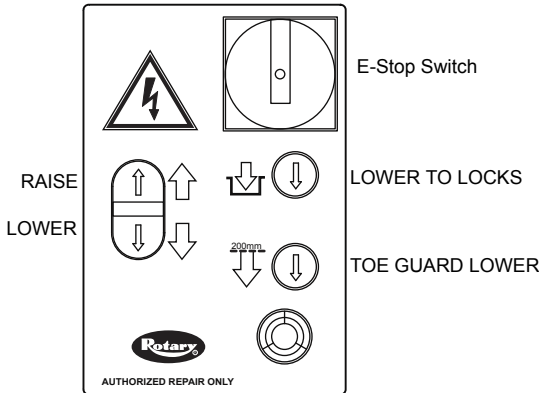
MODEL	LOAD CAPACITY
TL07E	1100kg FOR 3-WHEEL VEHICLES
	2300kg FOR 4-WHEEL VEHICLES

1. Lift Controls

Read operating instructions on lift before operating, Fig. 1.

OPERATING INSTRUCTIONS

Only Authorized Personnel Are to Operate Lift. Before operating lift, read Operation & Maintenance Manual documents supplied with lift. Follow all instructions contained within the manual. Short version is listed below.
Assure overhead photosensor will contact highest point on the vehicle.



RAISE
LOWER

E-Stop Switch

LOWER TO LOCKS

TOE GUARD LOWER

Rotary
AUTHORIZED REPAIR ONLY

1. BEFORE LOADING:

- Inspect lift to assure it is in good operating condition. See Operation & Maintenance Manual for details.
- Assure lift is fully lowered and service bay clear of all objects, grease, oil & personnel.
- Retract forks to give widest drive-thru position.
- Turn E-Stop Switch to "ON" position.

2. LOADING:

- Do Not overload lift. See capacity label.
- Position vehicle with the rear wheels centered on the ramp. Driving over forks is permitted with wide vehicles.
- Move forks so the front wheels are fully cradled.
- Use small wheel adapter on forks when necessary.
- For 3-wheel vehicles, center single wheel on ramp.

3. TO RAISE LIFT:

- Do Not permit anyone on lift or inside vehicle when it is in motion.
- Maintain visual contact with arms, pick-up points, & vehicle throughout the motion of the lift while remaining clear of lift.
- Actuate RAISE switch.
- Raise vehicle until tires clear floor.
- Stop: Check for stable contact with vehicle.
- Continue to raise to desired height only if vehicle is secure on lift.
- Actuate LOWER TO LOCKS switch to lower lift onto latches after desired height is reached.

4. WHILE USING LIFT:

- Avoid excessive rocking of vehicle.
- No one shall climb onto vehicle or lifting devices when elevated.

5. BEFORE LOWERING LIFT:

- Remove all obstacles from under vehicle and lift.
- Assure personnel are not in lift area.

6. TO LOWER LIFT:

- Remain clear of lift & actuate RAISE switch to raise lift off safety latches.
- Actuate LOWER switch to lower lift.
- Lift will stop 200mm from floor. Actuate TOE GUARD LOWER switch to lower completely while keeping feet clear.

7. UNLOADING:

- Assure lift is fully lowered.
- Retract forks as far as possible.
- Carefully remove vehicle from lift area.

8. POWER OFF:

- Turn E-Stop Switch to "OFF" position while lift is not in use.

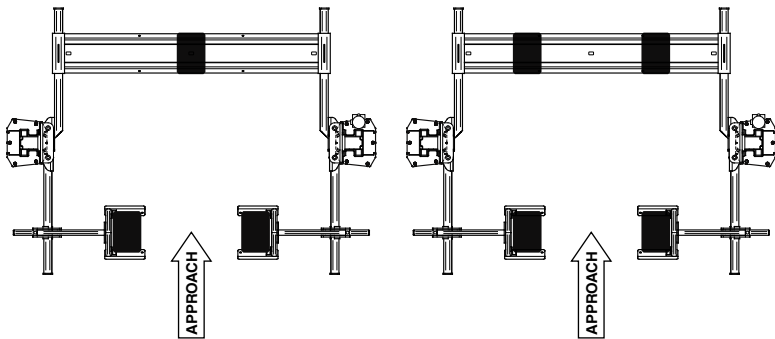
9. TROUBLE SHOOTING:

- See Operation & Maintenance Manual.

10. MAINTENANCE:

- Check fluid level with lift lowered.
- Check for bolt tightness and worn parts.
- See Operation & Maintenance Manual for more details.

LOADING DIAGRAMS



3-wheel vehicles

4-wheel vehicles

© May 2007 by ROTARY LIFT / A DOVER COMPANY Madison, Indiana USA 47250. All rights reserved

NP876
Rev. A 05/24/07

OPERATING INSTRUCTIONS

Surface Mounted Frame Engaging Lifts



To avoid personal injury and/or property damage, permit only trained personnel to operate lift. After reviewing these instructions, get familiar with lift controls by running the lift through a few cycles before loading vehicle on lift.

IMPORTANT

Always lift the vehicle using all lifting devices. **NEVER** raise just one end, one corner, or one side of vehicle.

Assure overhead bar will contact highest point on the vehicle.


1. Before Loading:

- Inspect Lift - See "Operator Maintenance" on page 8. Never operate if lift malfunctions or has broken or damaged parts.
- Lift must be fully lowered and service bay clear of all personnel before the vehicle is positioned onto lift.
- Position rear ramp and front forks so that they match vehicle wheel base and are centered on columns.
- Assure area around lift is free of tools, debris, grease, and oil.
- Assure Forks and Ramp are free from grease and oil.
- Do Not allow unauthorized persons in shop area while lift is in use.
- Do Not use any part of the lift as a crane or as a support for another lifting mechanism. (i.e.: block & tackle, etc.)
- Retract forks to give widest drive through.


2. Loading:

- Do Not allow unauthorized or untrained persons to position vehicle or operate lift.
- Do Not overload lift. See capacity label on lift.
- Position vehicle with the rear wheels centered on the rear ramp. (Driving over forks is permitted with wide vehicles).
- Move forks so the front wheels are fully cradled.
- Use small wheel adapter on forks when necessary, see Fig. 2.
- For 3-wheel vehicles, center single wheel on rear ramp.

3. To Raise Lift:

- Do Not permit anyone on lift or inside vehicle when it is being raised (or lowered).
- Maintain visual contact with pickup points and vehicle throughout the motion of the lift while remaining clear of lift.
- Press,  on control box Fig. 1.

Note: Allow 2 seconds between motor starts. Failure to comply may cause motor burnout.

- Raise vehicle until tires clear the floor.
- Stop and check for stable contact with vehicle.
- Continue to raise to desired height **only** if vehicle is stable on lift.
- Lower lift onto safety latches after desired height is reached. (Lift is to be raised high enough for locking latches to engage.) Push  on control box to lower lift onto safety latches.
- Repeat complete spotting, loading, and raising procedures if vehicle is unstable.



4. While Using Lift:

- Avoid excessive rocking of vehicle while on lift.
- Avoid accidental touching of exposed exhaust system on raised vehicles. Watch for air hoses and electrical cords which may be tripped over.
- Wear safety glasses while working under vehicle.

5. Before Lowering Lift:

- Remove all tools or other objects from lift area.
- Assure personnel are not in lift area.

6. To Lower Lift:

- Remain clear of lift when lowering vehicle. Keep Feet Clear!
- Push  on control panel to raise lift off locking latches.
- Push  on control panel to lower lift.

7 Unloading:

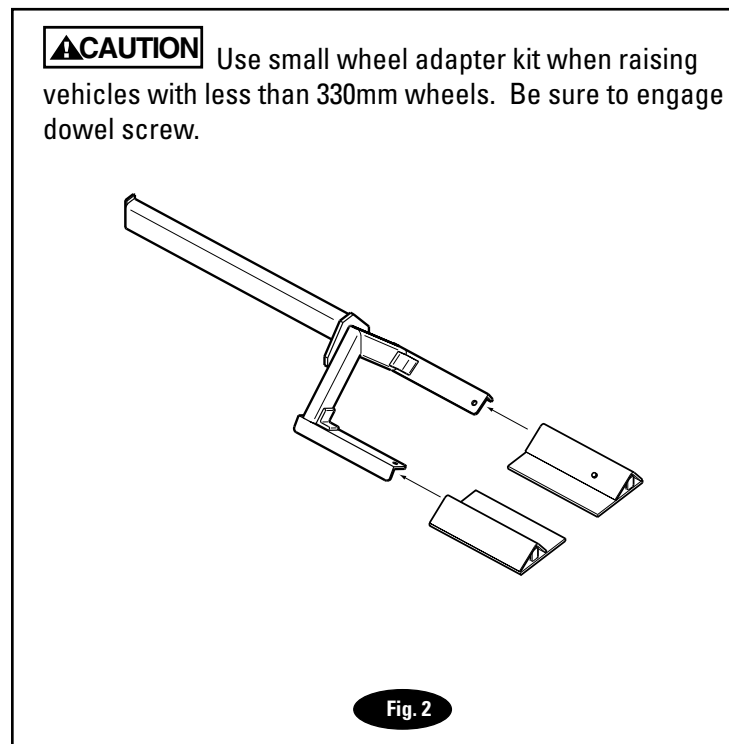
- Assure lift is fully lowered.
- Retract forks as far as possible.
- Assure Exit area is clear of objects and personnel before removing vehicle from lift.

8. Trouble Shooting:

- See page 6.

9. Maintenance:

- See page 6.



RESIDUAL RISKS

- Check tire inflation and attachment to axles to assure proper fit on lifting attachments of lift.
- Vehicles with heavy accessories attached, will have a changed center of gravity. Use stands when working on such vehicles.
- Assure lawn mower attachments do not cause either individual axle weight to exceed one half lift capacity.

OPERATOR INSPECTION & MAINTENANCE

MAINTENANCE AUTHORIZED BY OPERATOR

- **Always** keep bolts tight. Check periodically.
- **Always** assure arm stop bolts are in place.
- **Always** keep lift components clean.
- **Always**, if oil leakage is observed, call local service representative.
- **Daily**: Check cables and sheaves for wear. If parts are worn, call local service representative.
- **Daily**: Inspect adapters for damage or excessive wear. If parts are worn, call local service representative.
- **Daily**: Check for permanent deformation to the latches. If present, call local service representative to replace parts.
- **Monthly**: Check equalizer cable tension. If parts are worn, call local service representative.
- **Monthly**: Check overhead sensor for function.
- **Every 3 Months**: Check anchor bolts for tightness. Anchors should be torqued to 200Nm (12.4kg-m).
- **Every 6 months**: Check fluid level of lift power unit and refill to proper level in level indicator with lift fully lowered.
- Replace all decals on the lift if unable to read or missing. Reorder labels from Rotary Lift.
- **Monthly**: Clean and check base of lift. Remove any rust and touch-up with paint.

TROUBLE SHOOTING FOR OPERATORS

FOR M SERIES LIFTS

Trouble	Cause	Remedy
Motor does not run.	1. Blown fuse or circuit breaker.	1. Replace blown fuse or reset circuit breaker. 2. Contact service representative for further assistance.
Motor runs but will not raise lift.	1. Low oil level.	1. Fill tank to MIN___ mark with ISOVG32 hydraulic oil or Dexron III ATF. 2. Contact service representative for further assistance.
Motor runs—raises unloaded lift but will not raise vehicle.	1. Overloading lift.	1. Check vehicle weight and/or balance vehicle weight on lift. 2. Contact service representative for further assistance.
Lift slowly settles down.	See Remedy	1. Contact service representative for further assistance.
Slow lifting speed or oil blowing out filler breather cap.	See Remedy	1. Contact service representative for further assistance.
Lift going up unlevel.	See Remedy	1. Contact service representative for further assistance.
Anchors will not stay tight.	See Remedy	1. Contact service representative for further assistance.
Locking latches do not engage.	See Remedy	1. Contact service representative for further assistance.
Locking latches do not disengage.	See Remedy	1. Contact service representative for further assistance.

TROUBLE SHOOTING FOR OPERATORS FOR E SERIES LIFTS



button actuated but lift doesn't raise

Trouble	Cause	Remedy
Motor won't run.	<ol style="list-style-type: none"> 1. Overhead Sensor Actuated. 2. Up button not functioning. 3. Incorrect voltage to power unit. 	<ol style="list-style-type: none"> 1. Check sensor for contact with vehicle. 2. Check UP button on opposite column if neither UP button is functioning contact service representative for further assistance. 3. Contact service representative for further assistance.
Motor runs but will not raise lift.	<ol style="list-style-type: none"> 1. Overloading lift. 	<ol style="list-style-type: none"> 1. Check vehicle weight and/or balance vehicle weight on lift. 2. Contact service representative for further assistance
Locking latches do not engage.	<ol style="list-style-type: none"> 1. Broken latch spring. 	<ol style="list-style-type: none"> 1. Contact service representative for further assistance.



button actuated but lift doesn't lower

Trouble	Cause	Remedy
Lift won't lower.	<ol style="list-style-type: none"> 1. Down button not functioning. 2. Safety Latches won't release. 3. Lowering Valve not functioning. 	<ol style="list-style-type: none"> 1. Contact service representative for further assistance. 2. Contact service representative for further assistance. 3. Contact service representative for further assistance.



button actuated but lift doesn't lower

Trouble	Cause	Remedy
Lift won't lower.	<ol style="list-style-type: none"> 1. Down button not functioning. 2. Lowering Valve not functioning. 	<ol style="list-style-type: none"> 1. Contact service representative for further assistance. 2. Contact service representative for further assistance.

REPAIR MAINTENANCE

MAINTENANCE AUTHORIZED BY QUALIFIED SERVICE REPRESENTATIVE ONLY

- **Lockout** all energy sources before beginning any repairs.
- **DO NOT** modify the lift in any manner without the prior written consent of the manufacturer.
- If electrical problems develop, make repairs according to local electrical codes. Use genuine Rotary Lift parts when replacement is necessary.
- **Replace** worn parts as required with Rotary Genuine Parts.
- Adjust equalizer cable tension per lift installation instructions.
- **Monthly:** Lubricate locking latch shafts. Actuate latch handle several times for oil to penetrate joints.

ANNUAL INSPECTION PERFORMED BY AUTHORIZED PERSONNEL ONLY

Aside from the routine checks that are stated under "Operator Maintenance", the following annual inspection is to be performed and a record of this inspection permanently retained on site. All deficiencies are to be corrected by the proper authorized personnel.

INSPECTION POINTS

- Check accessibility of the operating procedures.
- Check accessibility and readability of all labels.
- Check the rated load capacity of the lift.
- Examine all structural components including welds.
- Check electrical cords for insulation damage.
- Check fluid level.
- Check the lift controls for function.
- Check for proper function of swing arm restraints.
- Check all fastening devices for tightness including floor anchor bolts.
- Check exposed surfaces and edges.
- Operate the lift and check the operation of the positive stop and the lift safety latches.
- Check for proper operation of adapters.
- With a representative vehicle on the lift, check the lowering speed (not to exceed 0.15m/s).
- Check the operation of the synchronization or equalization system so that both sides raise and lower equally. Perform check with and without a vehicle representative load.
- Check the function of overhead sensor.
- Check all accessible piping, tubing, hose, valves and fittings. Review lift oil consumption records.
- Operate lift through full excursion and observe. Perform check with and without a vehicle representative load.
- With lift loaded, stop the lift at midpoint of travel and observe for drifting down and hydraulic leaks.
- Check with operator to ascertain any unusual operating characteristics.

TROUBLE SHOOTING FOR AUTHORIZED MAINTENANCE PERSONNEL FOR ALL LIFTS

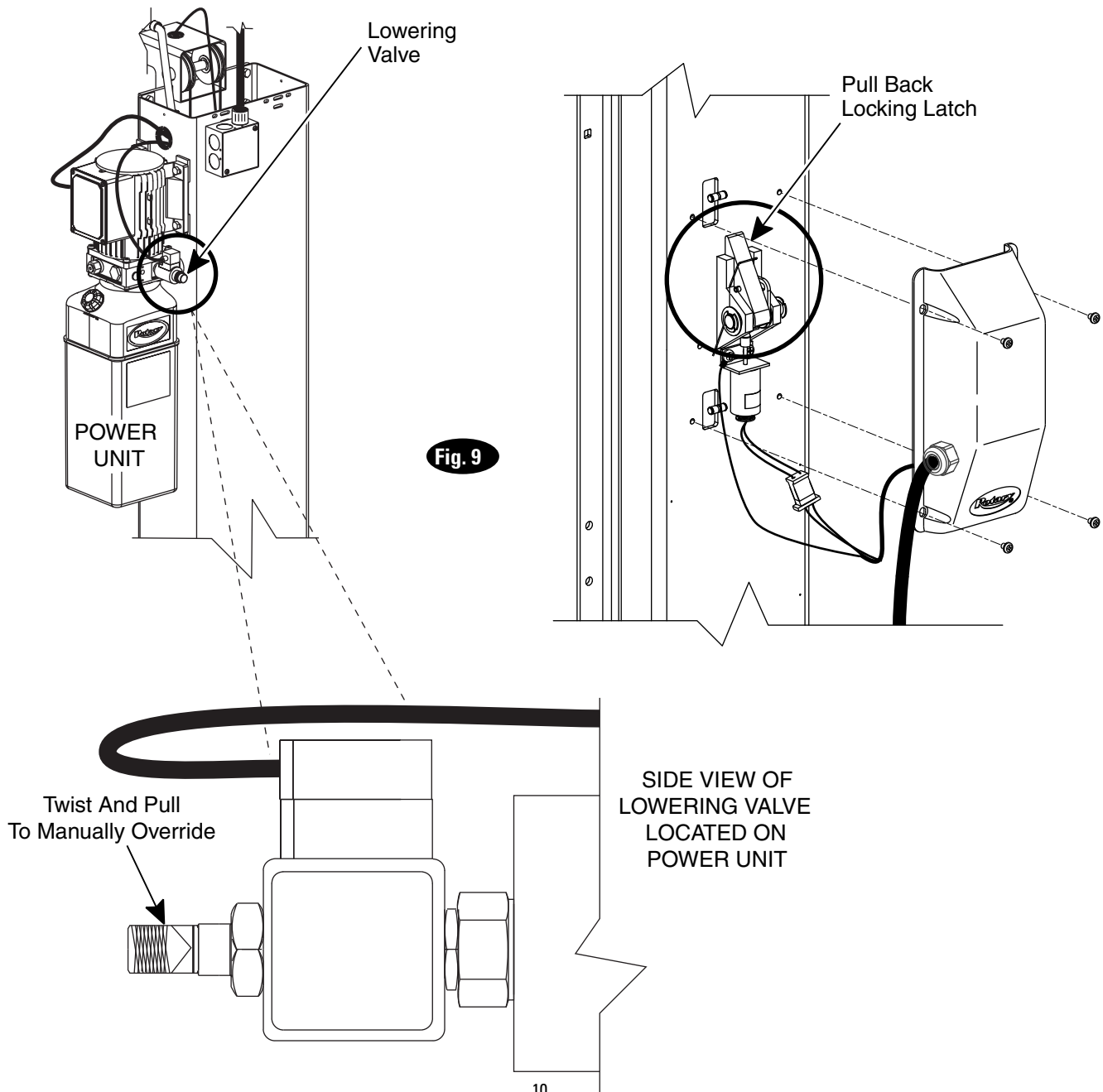
Trouble	Cause	Remedy
Motor does not run.	<ol style="list-style-type: none"> 1. Blown fuse/circuit breaker. 2. Incorrect voltage to motor. 3. Bad wiring connections. 4. Motor up switch burned out. 5. Overhead limit switch burned out. 6. Motor windings burned out. 	<ol style="list-style-type: none"> 1. Replace fuse or reset breaker. 2. Supply correct voltage to motor. 3. Repair and insulate all connections. 4. Replace switch/control buttons. 5. Replace overhead limit switch. 6. Replace motor.
Motor runs but will not raise lift.	<ol style="list-style-type: none"> 1. Overloading lift. 2. Motor running on low voltage. 3. Debris in lowering valve. 4. Pump sucking air. 5. Suction stub off pump. 6. Low oil level. 7. Improper relief valve adjustment. 8. Open lowering valve. 	<ol style="list-style-type: none"> 1. Check vehicle weight and/or balance vehicle weight on lift. 2. Supply correct voltage to motor. 3. Clean lowering valve. 4. Tighten all suction line fittings. 5. Replace suction stub. 6. Fill tank to proper level with ISOVG32 hydraulic oil or Dexron III ATF 7. Replace relief valve. 8. Repair/replace lowering valve.
Lift slowly settles down.	<ol style="list-style-type: none"> 1. Debris in check valve seat. 2. Debris in lowering valve seat. 3. External oil leaks. 	<ol style="list-style-type: none"> 1. Clean check valve. 2. Clean lowering valve. 3. Repair external leaks.
Slow lifting speed or oil blowing out filler breather cap.	<ol style="list-style-type: none"> 1. Air mixed with oil. 2. Air mixed with oil suction. 3. Oil return tube loose. 	<ol style="list-style-type: none"> 1. Change oil to Dexron III ATF or ISOVG32 Hydraulic Oil. 2. Tighten all suction line fittings. 3. Reinstall oil return tube.
Lift going up unlevel.	<ol style="list-style-type: none"> 1. Equalizer cables out of adjustment. 2. Lift installed on unlevel floor. 	<ol style="list-style-type: none"> 1. Adjust equalizer cables to correct tension. 2. Shim lift to level columns (Not to exceed 13mm).*
Anchors will not stay tight.	<ol style="list-style-type: none"> 1. Holes drilled oversize. 2. Concrete floor thickness or holding strength not sufficient. 	<ol style="list-style-type: none"> 1. Relocate lift using new bit to drill holes. Reference installation instructions for proper anchoring method and minimum spacing requirements. 2. Break out old concrete and re-pour new pads for lift per lift installation instruction.
Lift stops short of full rise or chatters.	<ol style="list-style-type: none"> 1. Air in hydraulic lines or cylinder. 2. Low oil level. 	<ol style="list-style-type: none"> 1. Start unit, raise lift about 610mm. Open cylinder bleeders approximately 2 turns. Close bleeders when fluid streams. Fully lower lift and refill power unit per Step 2 below. 2. Fully lower lift. Fill tank to MIN___ mark with ISOVG32 Hydraulic Oil or Dexron III ATF.

***Note:** Shim thickness of 51mm is possible by using optional shim kit #FC5393. Contact your authorized Rotary repair person.

MANUAL LOWERING OF LIFT

If your lift is in a raised position and you lose power it is important to know how to lower the lift manually. Make sure nothing is under the lift and all unauthorized personnel are away from the lift area.

- 1.) Place a hydraulic pipe under the arm carriage.
- 2.) Raise lift off of the locking latch. You should only have to raise lift approximately 2mm to disengage the lock.
- 3.) Remove access panel with your fingers then you don't have the latch off of the lock. Repeat step #2 until lock is disengaged.
- 4.) Place a flat piece of steel behind latch dog and back of column to keep it off of the lock.
- 5.) Slowly lower hydraulic jack and pipe out from under the arm carriage.
- 6.) Repeat procedures 1 through 5 on slave control panel column.
- 7.) The lift is now being held up by hydraulics at this point.
- 8.) Remove cap from lowering valve and press to lower lift, Fig. 9. The lift will lower at a slow speed. Replace cap on lowering valve after lift has been lowered.
- 9.) If your facility has lost power the lift will operate once power has been restored.
- 10.) If your facility power was not lost, have a certified electrician check wiring to lift or call an authorized service representative.




EC Declaration of Conformity to Type

Manufacturer's Name	Rotary Lift/Dover Corporation
Manufacturer's Address	2700 Lanier Drive Madison, Indiana 47250 USA
Representative's Name	John Uhl
Representative's Address	Rotary Lift 2700 Lanier Drive Madison, Indiana 47250 USA
Type of Equipment	Hydraulic Automotive Lift
Model Numbers	TL07E (E, M, & i Series)
Relevant Directives	98/37/EC
Approval Body	TÜV Rheinland
Certificate Number	BM 60002498 0001

I, the undersigned, hereby declare that the equipment specified above conforms with the type-tested sample certified by the Approval Body stated above.

Place: Madison, Indiana, USA



(Signature)

ENGINEERING MANAGER

**Trained Operators and Regular Maintenance Ensures
Satisfactory Performance of Your Rotary Lift.**

Replacement Parts: See installers package for parts breakdown sheet. Order Genuine Rotary replacement parts from your nearest Authorized Parts Distributor.

Maintenance Assistance: Contact your local Rotary distributor.

Should further assistance be required, contact Rotary Lift, at one of the phone numbers listed below.

Rotary World Headquarters

2700 Lanier Drive
Madison, IN 47250, USA
www.rotarylif.com

North America Contact Information

Tech. Support: p 800.445.5438
f 800.578.5438
e userlink@rotarylif.com
Sales: p 800.640.5438
f 800.578.5438
e userlink@rotarylif.com

World Wide Contact Information

World Headquarters/USA: 1.812.273.1622
Canada: 1.905.812.9920
European Headquarters/Germany: +49.771.9233.0
United Kingdom: +44.178.747.7711
Australasia: +60.3.7660.0285
Latin America / Caribbean: +54.3488.431.608
Middle East / Northern Africa: +49.771.9233.0



A **DOVER** COMPANY

