Thank you for sending in your registration card! This will help us to serve you better in the future.

-Mohawk Resources Ltd.

READ MANUAL THOROUGHLY BEFORE INSTALLING, OPERATING OR MAINTAINING LIFT !!!

MOHAWK RESOURCES LTD.
65 VROOMAN AVENUE
AMSTERDAM, NY 12010
TOLL FREE : 1-800-833-2006
FAX : 1-518-842-1289
LOCAL : 1-518-842-1431

IMPORTANT SAFETY INSTRUCTIONS

When using your garage equipment, basic safety precautions should always be followed, including the following:

1. Read all instructions. Before assembling unit, become familiar with part names and have a good understanding of how this unit is to be assembled and of how individual parts operate.

2. Care must be taken as burns can occur from touching hot parts.

3. Do not operate equipment with a damaged cord or if the equipment has been dropped or damaged - until it has been examined by a qualified serviceman.

4. Do not let cord or hoses come in contact with hot manifolds or moving fan blades.

5. If an extension cord is necessary, a cord with a current rating equal to or more than that of the equipment should be used. Cords rated for less current than the equipment may overheat. Care should be taken to arrange the cord so that it will not be tripped over or pulled.

6. Always unplug equipment from electrical outlet when not in use. Never use the cord to pull the plug from the outlet. Grasp plug and pull to disconnect.

7. To reduce the risk of fire, do not operate equipment in the vicinity of open containers of flammable liquids (gasoline).

8. Adequate ventilation should be provided when working on operating internal combustion engines.

9. Keep hair, loose clothing, fingers, and all parts of body away from moving parts.

10. To reduce the risk of electric shock, do not use on wet surfaces or expose to rain.

11. Use only as described in this manual. Use only manufacturer’s recommended attachments.

12. ALWAYS WEAR SAFETY GLASSES. Everyday eyeglasses only have impact resistant lenses, they are NOT safety glasses.

SAVE THESE INSTRUCTIONS
HAVE A QUESTION?

Call your local
Mohawk distributor
For parts, service and technical support.

Please have this unit’s model and serial number when calling for service.

Model Number ______________________
Serial Number ______________________

OR CONTACT:

MOHAWK RESOURCES LTD.
65 Vrooman Ave.
P.O. Box 110
Amsterdam, NY 12010
Toll Free: 1-800-833-2006
Local: 1-518-842-1431
Fax: 1-518-842-1289
Internet: www.MOHAWKLIIFTS.com
E-Mail: Service@MOHAWKLIIFTS.com
MOHAWK WARRANTIES
EFFECTIVE DATE: 4/14/2003

GENERAL WARRANTY INFORMATION:
MOHAWK’S OBLIGATION UNDER THIS WARRANTY IS LIMITED TO REPAIRING OR REPLACING ANY PART OR PARTS RETURNED TO THIS FACTORY, TRANSPORTATION CHARGES PREPAID, WHICH PROVE UPON INSPECTION TO BE DEFECTIVE AND WHICH HAVE NOT BEEN MISUSED. DAMAGE OR FAILURE TO ANY PART DUE TO FREIGHT DAMAGE OR FAULTY MAINTENANCE IS NOT COVERED UNDER THIS WARRANTY. THIS WARRANTY DOES NOT COVER ANY CONSEQUENTIAL OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, LOSS OF REVENUES OR BUSINESS HARM. THIS EQUIPMENT HAS BEEN DESIGNED FOR USE IN NORMAL COMMERCIAL VEHICLE MAINTENANCE APPLICATIONS. A SPECIFIC INDIVIDUAL WARRANTY MUST BE ISSUED FOR UNITS THAT DEVIATE FROM INTENDED USAGE, SUCH AS HIGH CYCLE USAGE IN INDUSTRIAL APPLICATIONS, OR USAGE IN EXTREMELY ABUSIVE ENVIRONMENTS, ETC. MOHAWK RESERVES THE RIGHT TO DECLARE LIABILITY WHEN REPAIRS HAVE BEEN MADE OR ATTEMPTED BY OTHERS. THIS WARRANTY DOES NOT COVER DOWNTIME EXPENSES INCURRED WHEN UNIT IS IN REPAIR. THE MODEL NAME AND SERIAL NUMBER OF THE EQUIPMENT MUST BE FURNISHED WITH ALL WARRANTY CLAIMS. THIS WARRANTY STATEMENT CONTAINS THE ENTIRE AGREEMENT BETWEEN MOHAWK RESOURCES LTD. AND THE PURCHASER UNLESS OTHERWISE SPECIFICALLY EXPRESSED IN WRITING. THIS NON-TRANSFERABLE WARRANTY APPLIES TO THE ORIGINAL PURCHASER ONLY. THIS WARRANTY IS APPLICABLE TO UNITS LOCATED ONLY IN THE UNITED STATES OF AMERICA AND CANADA. CONTACT MOHAWK RESOURCES LTD. FOR SPECIFIC WARRANTY PROVISIONS FOR UNITS LOCATED OUTSIDE OF THESE COUNTRIES.

5-YEAR WARRANTY:
THIS WARRANTY IS APPLICABLE TO THE FOLLOWING MOHAWK LIFTS ONLY: A-7, SYSTEM IA, SYSTEM IA-10, TO MAHAWK-9000, LMF-12, TP-15, TP-18, TP-20, TP-26, TP-30 AND STANDARD OPTIONS.

3-YEAR WARRANTY:

2-YEAR WARRANTY:
THIS WARRANTY IS APPLICABLE TO THE FOLLOWING MOHAWK LIFTS ONLY: PARALLELOGRAM SERIES AND USL-6000 AND STANDARD OPTIONS.

1-YEAR WARRANTY:
THIS WARRANTY IS APPLICABLE TO THE FOLLOWING MOHAWK LIFTS ONLY: HR-6, TD-1000, CT-1000 AND STANDARD OPTIONS.

STRUCTURAL COMPONENTS:
ALL STRUCTURAL AND MECHANICAL COMPONENTS OF THIS UNIT ARE GUARANTEED FOR THE ABOVE STATED TIME FRAME, SPECIFIC TO MODEL, FROM THE DATE OF INVOICE, AGAINST DEFECTS IN WORKMANSHIP AND/OR MATERIALS WHEN LIFT IS INSTALLED AND USED ACCORDING TO SPECIFICATIONS.
SEE MOHAWK’S “EXTENDED LIFETIME CYLINDER WARRANTY” FOR SPECIFIC WARRANTY PROVISIONS FOR HYDRAULIC CYLINDERS. THE “EXTENDED LIFETIME CYLINDER WARRANTY” IS APPLICABLE TO THE FOLLOWING MOHAWK LIFTS ONLY: A-7, SYSTEM IA, LMF-12, TP-15, TP-18, TP-20, TP-26, TP-30, MP-SERIES AND TL-SERIES LIFTS.

POWER UNIT:
ALL POWER UNIT COMPONENTS (MOTOR, PUMP AND RESERVOIR) ARE GUARANTEED FOR THE ABOVE STATED TIME FRAME, SPECIFIC TO MODEL, FROM THE DATE OF INVOICE, AGAINST DEFECTS IN WORKMANSHIP AND/OR MATERIALS WHEN THE LIFT IS INSTALLED AND USED ACCORDING TO SPECIFICATIONS.

ELECTRICAL COMPONENTS:
ALL ELECTRICAL COMPONENTS (EXCLUDING MOTOR) ARE GUARANTEED FOR ONE YEAR FOR PARTS ONLY (EXCLUDING LABOR), FROM THE DATE OF INVOICE, AGAINST DEFECTS IN WORKMANSHIP AND/OR MATERIALS WHEN THE LIFT IS INSTALLED AND USED ACCORDING TO SPECIFICATIONS.

PNEUMATIC (AIR) COMPONENTS:
ALL PNEUMATIC (AIR) COMPONENTS (I.E. AIR CYLINDERS AND POPPET AIR VALVES) ARE GUARANTEED FOR ONE YEAR FOR PARTS ONLY (EXCLUDING LABOR), FROM THE DATE OF INVOICE, AGAINST DEFECTS IN WORKMANSHIP AND/OR MATERIALS WHEN THE LIFT IS INSTALLED AND USED ACCORDING TO SPECIFICATIONS.

WARRANTY EXCEPTIONS:
ALL “SPECIAL” LIFTS AND/OR “CUSTOMIZED” OPTIONS ON THIS UNIT ARE GUARANTEED FOR ONE YEAR FOR PARTS ONLY (EXCLUDING LABOR), FROM THE DATE OF INVOICE, AGAINST DEFECTS IN WORKMANSHIP AND/OR MATERIALS WHEN THE LIFT IS INSTALLED AND USED ACCORDING TO SPECIFICATIONS.

THIS WARRANTY SUPERSEDES ALL OTHER WARRANTY POLICIES PREVIOUSLY STATED AND IN ALL OTHER MOHAWK PRODUCT SPECIFIC LITERATURE.
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<td>23</td>
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## STRUCTURAL ASSY DIAGRAMS

- LIFT DIMENSIONAL LAYOUT
- EQUALIZING CHAIN ROUTING
- POST SHIMMING
- ANCHOR BOLT INSTALL SPECS
- WHEEL CHOCK PLACEMENT

## HYDRAULIC/PNEUMATIC DIAGRAMS

- CONSOLE CONNECTIONS
- HYDRAULIC/PNEUMATIC PLUMBING
- HYDRAULIC SCHEMATIC
- PNEUMATIC SCHEMATIC

## ELECTRICAL DIAGRAMS

- LIFT ELECTRICAL CABLE ROUTING
- TRACK JUNCTION BOX WIRING
- CONTROL PANEL FUNCTIONS
- TRACK LEVELER FUNCTIONS
- REED SWITCH ADJUSTMENT, LOCKS OPEN
- REED SWITCH ADJUSTMENT, LOCKS NOT CLOSED
- ELECTRICAL SCHEMATIC
- ELECTRICAL WIRING DIAGRAMS

## PARTS DRAWINGS

## SAFETY DIAGRAMS
GENERAL INFORMATION

BEFORE INSTALLING A LIFT

• BEFORE INSTALLING A MOHAWK LIFT REVIEW THE FOLLOWING ITEMS. EACH REPAIR SHOP BAY IS DIFFERENT. IN AN ATTEMPT TO PREVENT OVERSIGHTS, ALL OF THE FOLLOWING INFORMATION MUST BE VERIFIED.

WHAT ARE THE LIFT SPECIFICATIONS?

THE SPECIFICATIONS IN THIS MANUAL ARE FOR A STANDARD TR - 110. ANY SPECIAL FEATURES WILL BE INDICATED ON THE LIFT VERIFICATION SHEET.

OVERHEAD OBSTRUCTIONS:

THE AREA THAT THE LIFT WILL BE LOCATED SHALL BE FREE OF OBSTRUCTIONS. HEATERS, BUILDING SUPPORTS, ELECTRICAL CONDUIT. ALL OF THESE ITEMS ARE TO BE (20 FT) TWENTY FEET ABOVE THE BAY FLOOR

CONCRETE FLOOR:

VISUALLY LOOK OVER THE BAY FLOOR. THE LIFT CAN NOT BE INSTALLED ON EXPANSION SEAMS, OR CONCRETE THAT IS CRACKED. THE LIFT CANNOT BE EXPECTED TO BE STRUCTURALLY SOUND ON DEFECTIVE CONCRETE.

TEST DRILL THE FLOOR:

TEST DRILL THE FLOOR TO VERIFY CONCRETE THICKNESS. TEST DRILL EACH BAY WHEN MORE THAN ONE LIFT IS BEING INSTALLED.

FLOOR REQUIREMENTS:

THIS INFORMATION IS IN THE GENERAL FLOOR REQUIREMENTS.

POWER SUPPLY:

REFER TO THE LIFT VERIFICATION SHEET FOR THE POWER SUPPLY SPECIFICATIONS.

BAY SIZE:

REFER TO THE LIFT VERIFICATION SHEET FOR DIMENSIONAL SPECS FOR LIFT.

SPECIFICATIONS:

REFERENCE ALL SPECIFICATIONS PRIOR TO INSTALLING THE LIFT.

IMPORTANT

• ALL INFORMATION, ILLUSTRATIONS, AND SPECIFICATIONS IN THIS MANUAL ARE SPECIFIC TO THE MOHAWK MODEL TR - 110. WE RESERVE THE RIGHT TO MAKE CHANGES AT ANY TIME WITHOUT NOTICES.

• ALWAYS REFER TO THE LIFT VERIFICATION SHEET. SPECIFIC INFORMATION PERTAINING TO THIS LIFT IS FOUND ON THESE PAGES.
### RECOMMENDED TOOL LIST

<table>
<thead>
<tr>
<th>SIZE / QTY</th>
<th>TOOL Used For</th>
</tr>
</thead>
<tbody>
<tr>
<td>3/4 IN</td>
<td>WRENCH / SOCKET HYDRAULIC HOSES</td>
</tr>
<tr>
<td>11 / 16 IN</td>
<td>WRENCH / SOCKET HYDRAULIC FITTINGS</td>
</tr>
<tr>
<td>5 / 8 IN</td>
<td>WRENCH / SOCKET HYDRAULIC FITTINGS</td>
</tr>
<tr>
<td>1-1/16 IN</td>
<td>WRENCH / SOCKET RAMP / CROSSRAIL</td>
</tr>
<tr>
<td>1-1/8 IN</td>
<td>WRENCH / SOCKET RAMP / CROSSRAIL / WEJ-IT ANCHORS</td>
</tr>
<tr>
<td>1-1/4 IN</td>
<td>WRENCH / SOCKET CHAIN CONNECTORS</td>
</tr>
<tr>
<td>1 SET ALLEN WRENCHES</td>
<td>AS REQUIRED</td>
</tr>
<tr>
<td>1 PLIERS / NEEDLE NOSE</td>
<td>CHAIN MASTER LINKS</td>
</tr>
<tr>
<td>1 RATCHET</td>
<td>AS REQUIRED</td>
</tr>
<tr>
<td>50 FT MEASURING TAPE</td>
<td>SITE LAYOUT</td>
</tr>
<tr>
<td>1 CHALK LINE</td>
<td>SITE LAYOUT (BLUE / YELLOW CHALK)</td>
</tr>
<tr>
<td>4 FT BUBBLE LEVEL</td>
<td>VERIFY LEVEL ASSEMBLY</td>
</tr>
<tr>
<td>25 FT FISH TAPE</td>
<td>PULLING CHAINS</td>
</tr>
<tr>
<td>1 HAMMER</td>
<td>AS REQUIRED</td>
</tr>
<tr>
<td>8 FT STEP LADDER</td>
<td>ASSEMBLE ELEVATED ITEMS</td>
</tr>
<tr>
<td>4 4 X 4 X 24 IN DUNNAGE</td>
<td>SUPPORT TRACKS OFF FLOOR</td>
</tr>
<tr>
<td>1 PRY BAR</td>
<td>ADJUST HEAVY ITEMS</td>
</tr>
<tr>
<td>50 / 100 FT LEAD CORD</td>
<td>OPERATE ELECTRICAL TOOLS</td>
</tr>
<tr>
<td>3/4 IN MASONRY DRILL BIT</td>
<td>DRILL ANCHOR HOLES</td>
</tr>
<tr>
<td>1 IMPACT DRILL</td>
<td>DRILL ANCHOR HOLES</td>
</tr>
<tr>
<td>1 FORK TRUCK (8000 LBS. MIN CAP.)</td>
<td>ERECT / MOVE HEAVY COMPONENTS</td>
</tr>
</tbody>
</table>

### WARNING

**BEFORE DRILLING THE MOUNTING HOLES**

- **AFTER VERIFYING THAT THE UNIT IS OPERATING SMOOTHLY AND ALL POSTS ARE SQUARE AND PLUMB, THE UNIT CAN BE SECURELY MOUNTED TO THE SHOP FLOOR. DO NOT ANCHOR INDIVIDUAL POSTS TO FLOOR PRIOR TO ASSEMBLY OF LIFT OR OPERATION!**

- **REFERENCE ANCHOR BOLT INSTALLATION SPECS FOR DRILLING AND INSTALLING ANCHORS. OBEY ALL WARNINGS.**

- **ENSURE THAT ALL POSTS ARE SHIMMED PROPERLY. CHECK THE DIMENSIONS OF THE POST AT THE BOTTOM FROM THE FACE OF POST ONE TO THE FACE OF POST NUMBER TWO.**

- **CHECK THE DIMENSIONS OF THE POST AT THE BOTTOM FROM THE FACE OF POST THREE TO THE FACE OF POST NUMBER FOUR**

- **USING THE HOLES AT THE BASE OF EACH POST AS A GUIDE, DRILL THE FOUR MOUNTING HOLES FOR THE ANCHORS. USE A SHARP DRILL BIT AS NOT TO DRILL AN UNDERSIZED HOLE. DRILL THE HOLE EQUAL TO THE LENGTH OF THE WEJ-IT ANCHOR.. BLOW OUT THE HOLE WITH SHOP AIR, OR VACUUM. INSERT THE ANCHOR SO THAT THE WASHER RESTS AGAINST THE POST FOOTING. WHEN THE LEVEL HAS BEEN VERIFIED, TIGHTEN THE NUT THREE TO FIVE FULL TURNS. (165-175 FOOT POUNDS)**

- **MAKE SURE THE CONCRETE IS SOLID WHEN DRILLING. CRACKS AND EXPANSION SEAMS REDUCE THE EFFECTIVENESS OF THE WEJ-IT ANCHOR. NEVER INSTALL THE ANCHOR UNDER THESE CONDITIONS.**

- **NEVER USE AN IMPACT TOOL TO TIGHTEN THE WEJ-IT ANCHORS. USE A TORQUE WRENCH ONLY.**
GENERAL INFORMATION CONTINUED

FLOOR REQUIREMENTS

<table>
<thead>
<tr>
<th>MODEL</th>
<th>MINIMUM THICKNESS</th>
<th>MINIMUM COMPRESSIVE STRENGTH</th>
<th>MINIMUM AGING</th>
</tr>
</thead>
<tbody>
<tr>
<td>TR-110</td>
<td>8 INCHES</td>
<td>4000 P.S.I.</td>
<td>28 DAYS</td>
</tr>
</tbody>
</table>

NOTE

CONSULT WITH A BUILDING ARCHITECT FOR SPECIFIC INFORMATION ON THE INSTALLATION SIGHT.

DO NOT INSTALL ANY MOHAWK LIFT ON ANY OTHER SURFACE OTHER THAN CONCRETE CONFORMING IT THE MINIMUM TENSILE STRENGTH, MINIMUM AGING, AND THE MINIMUM THICKNESS STATED ABOVE.

DO NOT INSTALL ANY MOHAWK LIFT ON EXPANSION SEAMS OR ON CRACKED, OR DEFECTIVE CONCRETE.

DO NOT INSTALL ANY MOHAWK LIFT ON SECONDARY FLOOR LEVELS OR ON ANY GROUND WITH A BASEMENT BENEATH WITHOUT WRITTEN AUTHORIZATION FROM THE BUILDING ARCHITECT.

NEVER, NEVER HAND MIX YOUR OWN CONCRETE.

IF FOR ANY REASON A NEW CONCRETE SLAB SECTION IS REQUIRED, FOLLOW THE INSTRUCTIONS FOR THE FLOOR MODIFICATION DATA.

FLOOR MODIFICATION DATA

<table>
<thead>
<tr>
<th>MODEL</th>
<th>FOOTING THICKNESS</th>
<th>FOUR PADS WIDTH X LENGTH</th>
<th>TOTAL POUR VOLUME</th>
</tr>
</thead>
<tbody>
<tr>
<td>TR-110</td>
<td>12 INCHES</td>
<td>6 FT x 6 FT</td>
<td>5.4 CUBIC YARDS</td>
</tr>
</tbody>
</table>

NOTE

FOUR FOOTINGS 6 FT X 6 FT X 12 IN DEEP MAY BE USED.

IF, FOR ANY REASON, A NEW CONCRETE SLAB SECTION IS REQUIRED, MINIMUM THICKNESS, COMPRESSIVE STRENGTH, AND PROPER AGING IS MANDATORY.

NEVER, NEVER HAND MIX YOUR OWN CONCRETE.

CERTIFIED STRENGTH DOCUMENTATION SHOULD BE OBTAINED FROM THE FIRM WHO SUPPLIES THE CONCRETE MIXTURE AT THE TIME OF THE POUR.

FOR TYPICAL SLAB DRAWING AND DETAILED REQUIREMENTS CONTACT: MOHAWK RESOURCES LTD.
## GENERAL INFORMATION CONTINUED

### TR-110 STANDARD LIFT SPECIFICATIONS

<table>
<thead>
<tr>
<th>Specification</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>GROSS LIFTING CAPACITY</td>
<td>110,000 LBS.</td>
</tr>
<tr>
<td>LIFTING SPEED (UP CYCLE)</td>
<td>2 MINUTES APPROX</td>
</tr>
<tr>
<td>LIFTING HEIGHT (STROKE)</td>
<td>5 FEET 60 IN.</td>
</tr>
<tr>
<td>OVERALL WIDTH (W/O CONSOLE)</td>
<td>15 FT. 9 IN. 189 IN.</td>
</tr>
<tr>
<td>OVERALL LENGTH</td>
<td>48 FT. 9 1/2 IN. 585 1/2 IN.</td>
</tr>
<tr>
<td>TRACK WIDTH</td>
<td>3 FT. 36 IN.</td>
</tr>
<tr>
<td>WIDTH CLEARANCE BETWEEN POSTS</td>
<td>11 FT 132 IN.</td>
</tr>
<tr>
<td>MAXIMUM VEHICLE WHEEL BASE</td>
<td>27 FT. APPROX 324 IN. APPROX</td>
</tr>
<tr>
<td>SHIPPING WEIGHT</td>
<td>33,000 LBS. APPROX</td>
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</tbody>
</table>

### POWER UNIT SPECIFICATIONS

<table>
<thead>
<tr>
<th>Specification</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>MODEL NUMBER</td>
<td>F.P.S. CUSTOM, MOHAWK #601-300-063*</td>
</tr>
<tr>
<td>MOTOR VOLTAGE</td>
<td>208-230/460 VAC</td>
</tr>
<tr>
<td>MOTOR HORSE POWER</td>
<td>20 HP</td>
</tr>
<tr>
<td>MOTOR PHASE</td>
<td>THREE</td>
</tr>
<tr>
<td>MOTOR NAMEPLATE AMPERAGE</td>
<td>53-48/24</td>
</tr>
<tr>
<td>MOTOR CYCLE / Hertz</td>
<td>60</td>
</tr>
<tr>
<td>MOTOR SPEED</td>
<td>1750 RPM</td>
</tr>
<tr>
<td>PUMP FLOW</td>
<td>10 GPM APPROX</td>
</tr>
<tr>
<td>RELIEF VALVE SETTING</td>
<td>2700-2800 PSI MAX</td>
</tr>
<tr>
<td>RESERVOIR CAPACITY</td>
<td>30 U.S.GALLONS</td>
</tr>
<tr>
<td>POWER UNIT</td>
<td>T-STYLE</td>
</tr>
<tr>
<td>HYDRAULIC FLUID MEDIUM</td>
<td>DEXRON III</td>
</tr>
<tr>
<td>CIRCUIT BREAKER RECOMMENDED</td>
<td>100 AMP @ 208 VAC, 60 AMP @ 460 VAC (REFER TO N.E.C. &amp; LOCAL CODES)</td>
</tr>
</tbody>
</table>

### SUGGESTED MINIMUM BAY SIZE

<table>
<thead>
<tr>
<th>WIDTH</th>
<th>DEPTH</th>
<th>HEIGHT</th>
</tr>
</thead>
<tbody>
<tr>
<td>20 FEET</td>
<td>60 FEET</td>
<td>20 FEET</td>
</tr>
</tbody>
</table>

**NOTE**

THE PLACEMENT OF THE UNIT IS DETERMINED BY THE TYPE / LENGTH, WIDTH, HEIGHT OF VEHICLES BEING SERVICED. ALLOW AMPLE ROOM (THREE TO FOUR FEET) FOR WALKWAYS ETC.

### ANCHOR / WEJ-IT

<table>
<thead>
<tr>
<th>LENGTH</th>
<th>DIAMETER</th>
<th>DRILL SIZE MINIMUM</th>
<th>DRILL SIZE MAXIMUM</th>
<th>TORQUE FOOT POUNDS</th>
</tr>
</thead>
<tbody>
<tr>
<td>6 1/2 INCHES</td>
<td>3/4 INCH</td>
<td>0.775</td>
<td>0.787</td>
<td>165-175</td>
</tr>
</tbody>
</table>

**WARNING**

NEVER USE AN IMPACT WRENCH OR TOOL TO TIGHTEN THE WEJ-IT ANCHORS.
APPENDAGES

RECOMMENDATIONS BY THE INDIVIDUAL USER OR USING ORIGINATION FOR IMPROVING THIS PUBLICATION OR ANY ASPECT OF THE PRODUCT ARE ENCOURAGED AND SHOULD BE FORWARDED IN WRITING TO:

MOHAWK RESOURCES LTD.
PRODUCT IMPROVEMENTS
P. O. BOX 110
AMSTERDAM, NY, 12010

THIS IS NOT A VEHICLE LIFTING PROCEDURE MANUAL AND NO ATTEMPT IS MADE OR IMPLIED HEREIN TO INSTRUCT THE USER IN LIFTING METHODS PARTICULARLY TO THE INDIVIDUAL APPLICATION OF THE EQUIPMENT DESCRIBED IN THIS MANUAL. RATHER, THE CONTENTS OF THIS MANUAL ARE INTENDED AS A BASE LINE FOR OPERATION, MAINTENANCE, TROUBLE SHOOTING, AND PARTS LISTING OF THE UNIT AS IT STANDS ALONE AND AS IT IS INTENDED AND ANTICIPATED TO BE USED IN CONJUNCTION WITH OTHER EQUIPMENT.

PROPER APPLICATION OF THE EQUIPMENT DESCRIBED HEREIN IS LIMITED TO THE PARAMETERS DETAILED IN THE SPECIFICATIONS AND THE USES SET FORTH IN THE DESCRIPTIVE PASSAGES. ANY OTHER PROPOSED APPLICATION OF THIS EQUIPMENT SHOULD BE DOCUMENTED AND SUBMITTED IN WRITING TO:

MOHAWK RESOURCES LTD.
FOR EXAMINATION. THE USER ASSUMES FULL RESPONSIBILITY FOR ANY EQUIPMENT DAMAGE, PERSONAL INJURY, OR ALTERATION OF THE EQUIPMENT DESCRIBED IN THIS MANUAL OR ANY SUBSEQUENT DAMAGES.

DO NOT WELD, APPLY HEAT, OR MODIFY THIS EQUIPMENT IN ANY MANNER WITHOUT WRITTEN AUTHORIZATION FROM:

MOHAWK RESOURCES LTD.
CERTAIN ALLOY OR HEAT-TREATED COMPONENTS MAY BE DISTORTED OR WEAKENED, RESULTING IN AN UNSAFE CONDITION. MOHAWK RESOURCES LTD. IS NOT RESPONSIBLE FOR DISTORTIONS WHICH RESULT FROM WELDING ON THIS EQUIPMENT AFTER MANUFACTURING IS COMPLETED. UNAUTHORIZED WELDING, APPLICATION OF HEAT, OR MODIFICATION OF THIS EQUIPMENT voids any and / or all applicable WARRANTIES COVERING THIS EQUIPMENT.

ALL WARRANTIES APPLICABLE TO THIS EQUIPMENT ARE CONTINGENT ON STRICT ADHERENCE TO THE MAINTENANCE SCHEDULES AND PROCEDURES IN THIS MANUAL.

KEEP ALL SHIELDS AND GUARDS IN PLACE. INSURE ALL SAFETY MECHANISMS ARE OPERABLE. KEEP HANDS, FEET, AND CLOTHING AWAY FROM POWER-DRIVEN AND MOVING PARTS.

THIS EQUIPMENT MUST BE INSTALLED ON A LEVEL CONCRETE FLOOR WITH A MINIMUM THICKNESS OF EIGHT INCHES. THE CONCRETE MUST BE AGED AT LEAST TWENTY EIGHT DAYS PRIOR TO INSTALLATION AND HAVE A MINIMUM TENSILE STRENGTH OF FOUR THOUSAND P.S.I..

WARNING

• Do not install this unit in a pit or depression due to fire or explosion risk

IMPORTANT

Do not install this unit on any asphalt surface.

Do not install this unit on any surface other than concrete conforming to the minimum specifications stated in the general floor requirements.

Do not install this unit on expansion seams or on cracked, defective concrete. Check with building architect.

Do not install this unit on a second floor or any ground floor with a basement beneath without written authorization from the building architect.
INSTALL THIS EQUIPMENT ON CONCRETE ONLY


IMPORTANT NOTE

A LEVEL FLOOR IS SUGGESTED FOR A PROPER INSTALLATION SITE AND WILL ENSURE LEVEL LIFTING. IF A FLOOR IS OF QUESTIONABLE SLOPE, CONSIDER A SURVEY OF THE SIGHT AND / OR THE POSSIBILITY OF POURING A NEW LEVEL CONCRETE SLAB SECTION. SIMPLY STATED, FOR OPTIMUM LEVEL LIFTING, THE EQUIPMENT, AT BEST, CAN LIFT ONLY AS LEVEL AS THE FLOOR ON WHICH IT IS LOCATED... AND SHOULD NOT BE EXPECTED TO COMPENSATE FOR DRASTIC FLOOR SLOPE DIFFERENCES.

WARNING

ALL ACCESSORIES (I.E. LIFTING PADS, HEIGHT ADAPTERS, JACKING BEAMS) SUPPLIED WITH THIS LIFT ARE TO BE USED ON THIS LIFT ONLY. ACCESSORIES FROM OTHER LIFTS ARE NOT ACCEPTABLE AND COULD RESULT IN INJURY TO THE USER AND DAMAGE TO THE UNIT.

WARNING

LOADING OF THE JACKING BEAMS OR COMBINATION OF JACKING BEAMS ABOVE THE RATED CAPACITY OF THE LIFT ITSELF COULD RESULT IN PERSONAL INJURY TO THE OPERATOR AND/OR DAMAGE TO THE LIFT AND/OR VEHICLE. THE LOAD RATING OF ANY JACKING BEAM OR COMBINATION OF JACKING BEAMS ON THIS UNIT MUST NOT EXCEED THE RATED CAPACITY OF THE LIFT.

CAUTION

THE EQUIPMENT DESCRIBED IN THIS MANUAL COULD BE POTENTIALLY DANGEROUS IF IMPROPERLY OR CARELESSLY OPERATED. FOR THE PROTECTION OF ALL PERSONS AND EQUIPMENT, ONLY COMPETENTLY TRAINED OPERATORS WHO ARE CRITICALLY AWARE OF THE PROPER OPERATING PROCEDURES, POTENTIAL DANGERS, AND SPECIFIC APPLICATION OF THIS EQUIPMENT SHOULD BE ALLOWED TO TOUCH THE CONTROLS AT ANY TIME.

SAFE OPERATION OF THIS EQUIPMENT IS DEPENDENT ON USE IN COMPLIANCE WITH THE OPERATION PROCEDURES OUTLINED IN THIS MANUAL ALONG WITH THE MAINTENANCE AND INSPECTION PROCEDURES WITH CONSIDERATION OF PREVAILING CONDITIONS.

THE EQUIPMENT DESCRIBED IN THIS MANUAL IS NEITHER DESIGNED NOR INTENDED FOR ANY APPLICATION ALONE OR IN CONJUNCTION WITH ANY OTHER EQUIPMENT THAT INVOLVES THE LIFTING OR MOVING OF PERSONS.

ALWAYS CONSULT THE VEHICLE LIFTING GUIDE FOR THE PROPER LIFTING POINTS ON ANY VEHICLE. THESE GUIDES ARE AVAILABLE FROM THE VEHICLE MANUFACTURERS.

AFTER LIFTING THE VEHICLE TO THE DESIRED HEIGHT, ALWAYS LOWER THE UNIT ONTO THE MECHANICAL SAFETIES. THE FORMING OF GOOD OPERATIONAL WORK HABITS WILL ELIMINATE OVERSIGHTS IN THE USE OF PROVIDED SAFETY DEVICES.
# TR-110 STANDARD PACKING LIST

<table>
<thead>
<tr>
<th>PACKED</th>
<th>QTY</th>
<th>PART NUMBER</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 EA</td>
<td>110-004-XXX</td>
<td>POST ASSEMBLY (POST # 1 &amp; 4)</td>
<td></td>
</tr>
<tr>
<td>2 EA</td>
<td>110-004-XXX</td>
<td>POST ASSEMBLY (POST # 3 &amp; 2)</td>
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<tr>
<td>2</td>
<td>110-004-020</td>
<td>CROSSRAIL ASSEMBLY</td>
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<tr>
<td>1</td>
<td>110-004-045</td>
<td>MAINSIDE TRACK ASSEMBLY</td>
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</tr>
<tr>
<td>1</td>
<td>110-004-047</td>
<td>OFF SIDE TRACK WELDMENT</td>
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<tr>
<td>2</td>
<td>110-004-055</td>
<td>DRIVE ON RAMP ASSEMBLY, ~15° Long</td>
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</tr>
<tr>
<td>1</td>
<td>110-004-064</td>
<td>CONTROL CONSOLE ASSEMBLY</td>
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<tr>
<td>1</td>
<td>110-004-XXX</td>
<td>PARTS BOX # 1</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>110-004-XXX</td>
<td>PARTS BOX # 2</td>
<td></td>
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</tbody>
</table>

1 | 110-004-XXX | PARTS BOX # 1 |
1 | 110-004-XXX | MANUAL / INSTALLATION (TR - 110) |
1 | 601-800-003 | MANUAL / SAFETY (LIFTING IT RIGHT) |
1 | 601-800-006 | AUTOMOTIVE SAFETY TIPS CARD |
4 | 600-930-001 | WHEEL CHOCKS |
2 | 110-004-133 | TRACK STOPS (BOTTOM) |
2 | 110-004-132 | TRACK STOPS (TOP) |
6 | 110-004-067 | HYDRAULIC HOSE ASSEMBLIES |
1 | 601-800-070 | WARRANTY REGISTRATION CARD PACKAGE |

1 | 110-004-XXX | PARTS BOX # 2 |
1 | 110-004-XXX | SMALL PARTS BAG |
6 | 601-630-002 | SPRAY PAINT (YELLOW) |
6 | 601-630-001 | SPRAY PAINT (RED) |
16 | 600-670-009 | WEJ-IT ANCHOR (3/4 X 6 1/4) |

1 | 110-002-XXX | SMALL PARTS BAG |
10 | 600-740-003 | SHIM, 1/4 IN BLACK |
10 | 600-740-002 | SHIM, 1/8 IN RED |
10 | 600-740-001 | SHIM, 1/16 IN BLUE |
1 | 601-610-002 | THREAD SEALING COMPOUND |

PACKED BY:
INSTALLATION INSTRUCTIONS

IMPORTANT

READ THIS MANUAL IN ITS ENTIRETY. BE FAMILIAR WITH PART NAMES AND HAVE A GOOD UNDERSTANDING OF HOW THIS UNIT IS TO BE ASSEMBLED AND OF HOW INDIVIDUAL PARTS OPERATE.

IMPORTANT

• INSTALL THE UNIT AS INDICATED ON THE LIFT VERIFICATION SHEET. YOU CANNOT REVERSE THE TRACK ONLY. THE UNIT CAN ONLY BE ROTATED IN ITS ENTIRETY.

• THE UNIT MUST NOT BE SECURELY MOUNTED TO THE FLOOR UNTIL THE UNIT HAS BEEN CYCLED AND OPERATES SMOOTHLY. USE EXTREME CAUTION AS NOT TO DISRUPT THE STABILITY OF THE UP-RIGHT POST. FAILURE TO DO SO COULD RESULT IN PERSONAL INJURY.

TO BEGIN

USE THE PACKING LIST IN THIS MANUAL AND VERIFY ALL SUPPLIED PARTS ARE PRESENT. IF MISSING PARTS ARE NOTED, THEY CAN BE OBTAINED BY CALLING 1-800-833-2006 OR BY CONTACTING YOUR LOCAL MOHAWK DISTRIBUTOR.

USING A CHALK LINE, LAYOUT THE FLOOR DIMENSIONS WHERE THE UNIT IS TO BE LOCATED. REFER TO ENCLOSED SETUP DIAGRAM

NOTE MARKINGS ON CARRIAGES & CROSSRAILS:

THE CARRIAGES AND CROSS RAILS ARE MATCHED DRILLED AND LABELED ONE, TWO, THREE, AND FOUR. THERE ARE REFERENCE MARKS ON THE TOP OF THE CROSS RAILS AND THE TOP PLATE ON THE ADJOINING CARRIAGES. REFERENCE SETUP DIAGRAM FOR NUMBER LOCATIONS.

ALIGN POST ONE AND TWO INTO PLACE ON THE CHALK LINE LAYOUT.

NOTE

• POST TWO IS TO BE SET ONE FOOT OUT AWAY FROM POST ONE. UNTIL THE CROSSRAIL CHAINS HAVE BEEN ROUTED THROUGH THE CARRIAGES.

• VERIFY THAT THE INTERNAL HYDRAULIC LINES IN BOTH CROSS RAILS ARE TIGHT BEFORE ASSEMBLY.

WARNING

• INSURE ALL HYDRAULIC LINE CONNECTIONS ARE LOCATED TO THE INSIDE OF THE UNIT

SET THE CROSSRAIL MARKED ONE AND TWO INTO PLACE BETWEEN POST ONE AND TWO IN THE CORRESPONDING ORIENTATION.

USING THE FISH TAPE ROUTE THE TWO EQUALIZING CHAINS THROUGH THE CROSSRAIL AND CARRIAGES. LAY THE EXCESS CHAIN ONTO THE CROSSRAIL.

WARNING

• DO NOT CROSS OR TWIST THE EQUALIZING CHAINS WHEN FISHING THEM THROUGH THE CROSS RAIL. ALWAYS VERIFY THIS USING A DROP LIGHT OR FLASH LIGHT. FAILURE TO DO SO COULD RESULT IN PERSONAL INJURY.
ALIGN THE CROSS RAIL MOUNTING HOLES WITH THE MOUNTING HOLES ON THE CARRIAGE ON POST NUMBER ONE. WHEN THE CROSS RAIL IS IN PLACE, INSERT AND HAND TIGHTEN THE SEVEN 3/4 - 16 NF X 3 INCH BOLTS AND 3/4 - 16 NF NYLON LOCK NUTS. NOTE THAT ONE OF THE TOP BOLT HOLES IS NOT USED TO LEAVE CLEARANCE FOR THE CHAIN.

ALIGN THE CROSS RAIL MOUNTING HOLES WITH THE MOUNTING HOLES ON THE CARRIAGE ON POST NUMBER TWO. WHEN THE CROSS RAIL IS IN PLACE, INSERT AND HAND TIGHTEN THE SEVEN 3/4 - 16 NF X 3 INCH BOLTS AND 3/4 - 16 NF NYLON LOCK NUTS. NOTE THAT ONE OF THE TOP BOLT HOLES IS NOT USED TO LEAVE CLEARANCE FOR THE CHAIN.

FULLY TIGHTEN THE FOURTEEN CROSS RAIL MOUNTING BOLTS TO 420 FOOT POUNDS.

CONNECT THE TWO EQUALIZING CHAINS TO THE TOP OF POST ONE AND TWO.

TIGHTEN THE NYLON LOCK NUT SO THAT THE THREADS OF THE CHAIN CONNECTOR PROTRUDE PAST THE NYLON BY AT LEAST THREE THREADS AND THE CHAIN IS TAUT.

PLACE THE MAIN AND OFF SIDE TRACK INTO POSITION ON THE CROSS RAIL. ELEVATE THE TRACKS OFF OF THE CROSS RAIL USING THE 4 X 4 X 12 DUNNAGE.

NOTE

• THE MAIN SIDE TRACK IS TO BE LOCATED ON THE SIDE WITH THE CONTROL CONSOLE. REFERENCE LIFT VERIFICATION SHEET AND SETUP DIAGRAM.

ALIGN POST THREE AND FOUR INTO PLACE ON THE CHALK LINE LAYOUT.

POST THREE IS TO BE SET ONE FOOT OUT AWAY FROM POST FOUR UNTIL THE CROSSRAIL CHAINS HAVE BEEN ROUTED THROUGH THE CARRIAGES.

SET THE CROSSRAIL MARKED THREE AND FOUR INTO PLACE BETWEEN POST THREE AND FOUR IN THE CORRESPONDING ORIENTATION.

USING THE FISH TAPE ROUTE THE TWO EQUALIZING CHAINS THROUGH THE CROSS RAIL AND CARRIAGES. LAY THE EXCESS CHAIN ONTO THE CROSS RAIL.

WARNING

• DO NOT CROSS OR TWIST THE EQUALIZING CHAINS WHEN FISHING THEM THROUGH THE CROSS RAIL. ALWAYS VERIFY THIS USING A DROP OR FLASH LIGHT. FAILURE TO DO SO COULD RESULT IN PERSONAL INJURY.

ALIGN THE CROSS RAIL MOUNTING HOLES WITH THE MOUNTING HOLES ON THE CARRIAGE ON POST NUMBER THREE. WHEN THE CROSS RAIL IS IN PLACE, INSERT AND HAND TIGHTEN THE SEVEN 3/4 - 16 NF X 3 INCH BOLTS AND 3/4 - 16 NF NYLON LOCK NUTS. NOTE THAT ONE OF THE TOP BOLT HOLES IS NOT USED TO LEAVE CLEARANCE FOR THE CHAIN.

ALIGN THE CROSS RAIL MOUNTING HOLES WITH THE MOUNTING HOLES ON THE CARRIAGE ON POST NUMBER FOUR. WHEN THE CROSS RAIL IS IN PLACE, INSERT AND HAND TIGHTEN THE SEVEN 3/4 - 16 NF X 3 INCH BOLTS AND 3/4 - 16 NF NYLON LOCK NUTS. NOTE THAT ONE OF THE TOP BOLT HOLES IS NOT USED TO LEAVE CLEARANCE FOR THE CHAIN.

FULLY TIGHTEN THE FOURTEEN CROSS RAIL MOUNTING BOLTS TO 420 FOOT POUNDS.

CONNECT THE TWO EQUALIZING CHAINS TO THE TOP OF POST THREE AND FOUR.

TIGHTEN THE NYLON LOCK NUT SO THAT THE THREADS OF THE CHAIN CONNECTOR PROTRUDE PAST THE NYLON BY AT LEAST THREE THREADS AND THE CHAIN IS TAUT.
INSTALLATION INSTRUCTIONS

REFER TO THE HYDRAULIC/PNEUMATIC PLUMBING DIAGRAMS ENCLOSED FOR THE FOLLOWING PLUMBING ASSEMBLIES:

ASSEMBLE THE SIX HYDRAULIC HOSES TO THE FORE AND AFT END OF THE UNIT. (CONNECTIONS BETWEEN THE MAIN SIDE TRACK TO THE CARRIAGES). REFER TO PLUMBING DIAGRAMS.

MOVE THE CONTROL CONSOLE INTO PLACE BESIDE THE MAIN SIDE TRACK. (CENTERED, APPROXIMATELY FOUR FOOT FROM THE TRACK)

ASSEMBLE THE THREE HYDRAULIC HOSE ASSEMBLIES AND THE AIR LINE FROM THE CONTROL CONSOLE TO THE MAIN SIDE TRACK MANIFOLD. REFER TO TRACK MANIFOLD PLUMBING DIAGRAM.

CONNECT HOSES AND AIRLINES INSIDE OF CARRIAGES AS SHOWN IN PLUMBING DIAGRAMS. INSURE ALL HYDRAULIC CONNECTIONS ARE PROPERLY TIGHTENED.

REFER TO THE ELECTRICAL DIAGRAMS FOR THE FOLLOWING ASSEMBLIES:

MOUNT THE TRACK JUNCTION BOX ON THE MAINSIDE TRACK TO THE RIGHT OF THE HYDRAULIC MANIFOLD BLOCK USING HARDWARE PROVIDED.

CONNECT THE PLUGS FROM THE TRACK JUNCTION BOX TO THE TRACK LEVELER. THESE ARE LABELED FORE AND AFT.

CONNECT ALL OTHER PLUGS WITHIN CARRIAGES AS LABELED AND DEPICTED IN ELECTRICAL CABLE ROUTING DIAGRAM.

CONNECT CABLES FROM POST #1 AND POST #3 INTO TRACK JUNCTION BOX AS SHOWN IN TERMINAL STRIP WIRING DIAGRAM.

CONNECT CABLE FROM CONTROL CONSOLE TO TRACK JUNCTION BOX TERMINALS AS SHOWN IN TERMINAL STRIP WIRING DIAGRAM.

ELECTRICAL FEED: IMPORTANT

• AT THIS TIME HAVE A QUALIFIED LICENSED ELECTRICIAN CONNECT THE POWER SUPPLY TO THE CONTROL CONSOLE. ATTACH AIR SUPPLY TO CONSOLE AT THIS TIME AS WELL. (80 PSI MINIMUM)

IMPORTANT

FAMILIARIZE YOURSELF WITH THE CONTROL CONSOLE FUNCTIONS. (SEE LIFTING AND RAISING)

PRE-STARTUP

• INSURE ALL HYDRAULIC CONNECTIONS ARE PROPERLY TIGHTENED.

• VERIFY THE MOTOR ROTATION. CLOCKWISE AS VIEWED FROM THE TOP OF THE MOTOR. INCOMING POWER FEEDS MAY NEED TO BE ALTERNATED TO ACHIEVE THIS.

• ENSURE ALL DEBRIS AND PERSONEL HAVE BEEN REMOVED FROM THE LIFTING AREA..

• TURN THE KEYED POWER SWITCH TO ON. OBSERVE THE POWER INDICATOR LIGHT.

FOLLOWING THE PROCEDURES FOR RAISING AND LOWERING THE UNIT, RAISE THE UNIT APPROXIMATELY ONE FOOT. INSURE THAT THE TRACKS HAVE SEATED THEMSELVES INTO THE ALIGNMENT TABS ON THE CROSS RAIL ADJUST AS NEEDED.

PRESS THE LOWER BUTTON TO ENSURE THAT THE LOCKS RELEASE AND THE LIFT LOWERS TO THE FLOOR.

RAISE LIFT FULLY AND LET REST FOR A FEW MINUTES.

BLEED ALL THE CYLINDERS AT THE TOP BY LOOSENING TOP FITTINGS SLIGHTLY UNTIL AIR BUBBLES ESCAPE. RETIGHTEN ALL FITTINGS. RAISE SLIGHTLY AND BLEED AGAIN.

CYCLE THE UNIT ONE OR TWO TIMES. ENSURE EVEN AND SMOOTH OPERATION USE THE PROVIDED SHIMS TO LEVEL POST ONE, TWO, THREE, AND FOUR.
ASSEMBLE THE TWO TRACK STOPS TO THE FORE END OF THE MAIN AND OFF SIDE TRACK USING THE EIGHT 3/4 - 16 NF X 3 - 1/2 IN BOLTS AND 3/4 - 16 NF NYLON LOCK NUTS.

FOLLOWING THE INSTRUCTIONS FOR RAISING AND LOWERING THE UNIT, AGAIN CYCLE THE UNIT. AFTER RAISING THE UNIT FULLY LOWER THE UNIT.

WITH THE UNIT FULLY LOWERED, ADJUST ALL FOUR EQUALIZING CHAINS TO REMOVE ANY REMAINING SLACK. ALL FOUR CHAINS ARE TO BE TAUT.

AFTER THE UNIT IS RUNNING PROPERLY, MATCH DRILL AND ANCHOR ALL THE BASE PLATES TO THE FLOOR USING ANCHOR BOLTS PROVIDED. REFER TO ANCHOR BOLT INSTALLATION INSTRUCTIONS ENCLOSED.
SAFETY TIPS

PLEASE POST THE SAFETY TIPS (COPY IN BACK OF MANUAL) IN A PLACE WHERE THE OPERATOR WILL BE CONSTANTLY REMINDED OF THEIR IMPORTANCE. ALWAYS REFER TO THE LIFT’S SPECIFIC SAFETY, OPERATING AND MAINTENANCE INSTRUCTIONS.

• OPERATING VALVES, SWITCHES, AND LOCKING DEVICES ARE DESIGNED FOR MAXIMUM SAFETY. NEVER ATTEMPT TO BLOCK OR OVERRIDE THEM.

• NEVER OVERLOAD YOUR LIFT BEYOND STATED LIFTING CAPACITY.

• DO NOT ALLOW CUSTOMERS OR BY-STANDERS TO OPERATE THE LIFT OR TO BE IN A LIFTING AREA DURING ITS OPERATION. ONLY PROPERLY TRAINED PERSONNEL SHOULD BE ALLOWED TO OPERATE LIFT.

• NEVER RAISE VEHICLE WITH ANYONE INSIDE IT.

• BE SURE WORK AREA AROUND THE LIFT IS CLEAR AND FREE OF OBSTRUCTIONS. (DEBRIS, GREASE, OIL)

• NEVER ATTEMPT TO OPERATE A LIFT IF IT APPEARS TO BE MALFUNCTIONING OR IF BROKEN OR DAMAGED PARTS ARE EVIDENT.

• FULLY LOWER THE UNIT BEFORE LOADING OR UNLOADING A VEHICLE.

• LOAD LIFT CAREFULLY. AVOID QUICK STOPS AND STARTS.

• PERFORM THE PRE-OPERATION CHECK LIST, PER INSTRUCTIONS, BEFORE RAISING VEHICLE TO DESIRED HEIGHT.

• BEFORE REMOVING VEHICLE FROM THE LIFT AREA, REMOVE THE WHEEL CHOCKS TO ASSURE THAT VEHICLE OR LIFT WILL NOT BE DAMAGED.
CONTROL PANEL FUNCTIONS
DEFINITIONS

NUMBERS PREFIXED INDICATES REFERENCE NUMBER ON FIGURE

1. ON-OFF KEYED ROTARY SWITCH:
   • TURNS CONTROL POWER TO THE UNIT ON OR OFF. (THIS IS NOT A DISCONNECT SWITCH OR A LOCKOUT/TAGOUT DEVICE, WHICH IS THE RESPONSIBILITY OF THE INSTALLER/CUSTOMER)

2. UP BUTTON:
   • WHEN PRESSED, ALLOWS PRESSURIZED FLUID TO FLOW TO THE MAIN LIFTING CYLINDERS, THEREBY RAISING THE LIFTING TRACKS.

3. DOWN BUTTON:
   • WHEN PRESSED, ALLOWS PRESSURIZED FLUID TO BE RELEASED FROM THE MAIN LIFTING CYLINDERS, THEREBY LOWERING THE LIFTING TRACKS UNTIL THE BUTTON IS RELEASED.

4. PARK BUTTON (W/ YELLOW LIGHT):
   • THIS BUTTON IS ONLY FUNCTIONAL WHEN ILLUMINATED, INDICATING THAT THE LIFT IS IN A STATE TO BE “PARKED” ON THE MECHANICAL LOCKS. WHEN PRESSED, THE HYDRAULIC PRESSURE TO THE LIFT IS RELEASED, ENABLING THE OPERATOR TO LOWER THE LIFT COMPLETELY ON THE MECHANICAL LOCKS OR TO THE FLOOR WITH ZERO PRESSURE IN THE LIFTING CYLINDERS.

5. POWER ON INDICATOR LIGHT (GREEN):
   • WHEN ILLUMINATED, INDICATES UNIT IS ON.

6. LOW AIR INDICATOR LIGHT (RED):
   • WHEN ILLUMINATED, INDICATES NO AIR PRESSURE PRESENT TO LIFT. LACK OF AIR TO THE LIFT WILL DISABLE AIR LOCK RELEASE AND PREVENT LOWERING OF LIFTING TRACKS.

7. OUT OF PARALLEL INDICATOR LIGHT (RED):
   • WHEN ILLUMINATED, INDICATES LIFTING TRACKS HAVE GONE BEYOND AN ACCEPTABLE TOLERANCE OF LEVEL. LIFT WILL BE DISABLED UNTIL TRACKS ARE BROUGHT BACK WITHIN AN ACCEPTABLE LEVEL TOLERANCE. USE OF MANUAL LOWERING AND RAISING VALVES CAN ACCOMPLISH THIS.

8. CHECK FILTER INDICATOR LIGHT (RED):
   • WHEN ILLUMINATED CONSTANTLY (NOT MOMENTARILY), INDICATES THAT THE MAIN FILTER ON THE RESERVOIR NEEDS TO BE CLEANED OR REPLACED.

MANUAL OVER-RIDE CONTROLS:

WITHIN THE CONTROL CONSOLE IS A SELECTOR VALVE, HAND PUMP, MANUAL LOWERING VALVES. IN THE EVENT THAT THERE IS A POWER LOSS TO THE LIFT OR THE LIFT IS OUT OF LEVEL, THESE CONTROLS CAN BE USED TO OVER-RIDE THE STANDARD OPERATING CONTROLS ON THE LIFT.

HAND PUMP: USE THIS IN CONJUNCTION WITH THE SELECTOR VALVE. SELECT EITHER THE FORE OR AFT AND THE HAND PUMP WILL RAISE THE CHOSEN SIDE. USE THIS TO RAISE THE LIFT OFF A LOCK DURING A POWER OUTAGE.

MANUAL LOWERING VALVES: THESE RED HANDLED VALVES LOWER THE LIFT. PULL EITHER THE FORE OR AFT VALVE TO LOWER. NOTE THAT THESE VALVES DO NOT RELEASE THE AIR LOCKS, WHICH NEED TO BE MANUALLY PULLED BACK OR RELEASED WITH AIR. CONNECT AIR SUPPLY DIRECTLY TO AIRLINE TO TRACKS IF AIR LOCK RELEASE BYPASS IS NEEDED.
PRE OPERATION CHECK LIST

TRAINED OPERATOR

• THE OPERATOR MUST BE FULLY TRAINED AND QUALIFIED TO SAFELY AND EFFECTIVELY OPERATE THIS EQUIPMENT OF THIS SPECIFIC MAKE AND MODEL.

ABSENCE OF OBSTRUCTIONS

• THE TOTAL WORK AREA MUST BE FREE OF ANY AND ALL OBSTRUCTIONS AND BE GENERALLY CLEAN. (FREE OF OIL AND DEBRIS)

VISUAL INSPECTION

• THOROUGHLY INSPECT THE UNIT WITH A TRAINED EYE, NOTING ANY PROBLEM AREAS. INSPECT THE FLOOR AND THE ANCHORING FASTENERS AS WELL. REPORT ANY QUESTIONABLE ITEMS.

NO LOAD PERFORMANCE CHECK

• ALL MECHANICAL SAFETIES OPERATE PROPERLY AND CONSISTENTLY.
• NO EXTERNAL FLUID LEAKS.
• NO BLEED DOWN.
• EFFORTLESS AND SIMULTANEOUS MOVEMENT.
• LEVEL LIFTING.
• CONTROLS FUNCTION PROPERLY.
• ALL SAFETY MECHANISMS FULLY FUNCTIONAL.

PREVIOUS DAY’S OPERATION REPORT

• VERIFY WITH SUPERVISOR THAT THERE WERE NO PROBLEMS EXPERIENCED DURING THE PREVIOUS DAY’S USAGE. IF THERE WERE ANY PROBLEMS, VERIFY THAT ALL NECESSARY REPAIRS HAVE BEEN COMPLETED.

LIFTING PROCEDURES

PRE-OPERATION & VEHICLE POSITIONING

• PERFORM PRE-OPERATION CHECK LIST ITEM BY ITEM.
• POSITION THE VEHICLE ONTO THE UNIT SO THAT ALL TIRES ARE SECURELY ON THE TRACKS. CENTER THE VEHICLE SO THAT THE WEIGHT IS DISTRIBUTED EVENLY FORE AND AFT.
• PLACE THE WHEEL CHOCKS IN A POSITION SO THAT THE VEHICLE WILL BE SECURE ON THE UNIT. FIGURE 13

TO RAISE

• INSPECT THE LIFTING AREA TO INSURE THAT ALL PERSONNEL AND DEBRIS HAVE BEEN CLEARED FROM THE LIFTING AREA.
• TURN ON THE UNIT (IF NOT ALREADY ON).
• PRESS THE UP BUTTON AND RELEASE WHEN DESIRED ELEVATION IS ACHIEVED WHILE THE PARK BUTTON IS ILLUMINATED.
• PRESS THE PARK BUTTON TO LOWER THE LIFT SUPPORTS ONTO THE MECHANICAL LOCKS.

TO LOWER

• INSPECT THE LIFTING AREA TO INSURE THAT ALL PERSONNEL AND DEBRIS HAVE BEEN CLEARED FROM THE LIFTING AREA.
• RAISE UNIT APPROXIMATELY TWO INCHES.
• PRESS THE DOWN BUTTON AND LOWER UNIT TO THE DESIRED WORKING HEIGHT OR ALL THE WAY DOWN TO THE FLOOR.

NOTICE:
ALWAYS LOWER THE UNIT ONTO THE MECHANICAL SAFETY LOCKS BEFORE BEGINNING WORK ON VEHICLES.
MAINTENANCE PROCEDURES

DAILY

• PERFORM PRE-OPERATION CHECK LIST.

• REPORT ANY AND ALL EQUIPMENT MALFUNCTIONS IMMEDIATELY.

• CLEAN AND LUBRICATE ALL MOVING PARTS.

• KEEP AREA AROUND THIS EQUIPMENT FREE OF DIRT, OIL, SAND, SALT, WATER, ETC.

• INSPECT ANCHOR CONDITIONS FOR ANY POSSIBLE CORROSION AND INSPECT THE FLOOR CONDITION FOR ANY SIGNS OF FATIGUE OR CRACKS.

• CLEAN AND LUBRICATE CHAINS WITH A LIGHT CHAIN LUBRICANT. (DO NOT USE HEAVY GREASE) INSPECT CHAINS FOR ANY SIGN OF UNUSUAL OR EXCESSIVE WEAR.

WEEKLY

• WIPE CLEAN, THE CYLINDERS’ WIPER SEALS AND THE BASE OF EACH POST TO REMOVE WEEPING OIL AND DUST.

• VERIFY FLUID LEVEL. WITH UNIT FULLY LOWERED, LEVEL INDICATOR ON RESERVOIR IS TO READ FULL. USE DEXRON III AS REPLACEMENT FLUID.

MONTHLY

• INSPECT ALL HYDRAULIC COMPONENTS FOR LEAKS, AND DEFORMATION DUE TO WEAR OR CORROSION.

• TIGHTEN ALL FASTENERS AND HYDRAULIC FITTINGS.

• RE-QUALIFY ALL PERSONNEL IN THE SAFE OPERATION OF THIS UNIT.

SEMI-ANNUAL TRAINING

ANNUALLY

• REPLACE AND RE-BLEED THE HYDRAULIC FLUID. ALWAYS USE A CLEAN FUNNEL AND FILTER.

• REPLACE/CLEAN HYDRAULIC FLUID FILTER ELEMENT.

• INSPECT ALL FLANGE BEARINGS FOR UNUSUAL OR EXCESSIVE WEAR.

• PERFORM THE DAILY, WEEKLY, AND MONTHLY MAINTENANCE.
## TROUBLE SHOOTING CHART

**WARNING:** NEVER ATTEMPT TO LOOSEN HYDRAULIC FITTINGS, OR OVERRIDE SAFETY DEVICES IN AN ATTEMPT TO CORRECT A PROBLEM. ALL SERVICES ARE TO BE PERFORMED WITH **NO** VEHICLE ON THE UNIT.

<table>
<thead>
<tr>
<th>POSSIBLE CAUSE</th>
<th>PROBLEM</th>
<th>SOLUTION</th>
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<tbody>
<tr>
<td><strong>NOT RAISING LOAD</strong></td>
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<tr>
<td>LOW HYDRAULIC FLUID</td>
<td>LOWER UNIT COMPLETELY. DISCONNECT POWER SUPPLY. OPEN CONSOLE. VERIFY PROPER FLUID LEVEL AT SIGHT GLASS ON RESERVOIR.</td>
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<tr>
<td>PRESSURE RELIEF ADJUSTMENT</td>
<td>SET @ 2700 PSI. REFER TO POWER UNIT SPECIFICATIONS.</td>
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<tr>
<td>UNIT OVERLOADED</td>
<td>VEHICLE TO HEAVY TO BE RAISED.</td>
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<tr>
<td>WRONG ROTATION OF MOTOR</td>
<td>REVERSE POWER LINES. ROTATION TO BE CLOCKWISE AS VIEWED FROM TOP OF MOTOR. (HAVE AN ELECTRICIAN SERVICE )</td>
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<tr>
<td>VEHICLE NOT CENTERED ON UNIT</td>
<td>CENTER VEHICLE WEIGHT ON TRACKS.</td>
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<tr>
<td>LOW VOLTAGE</td>
<td>HAVE AN ELECTRICIAN SERVICE.</td>
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<tr>
<td><strong>NOT LOWERING</strong></td>
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<tr>
<td>LOCKS ENGAGED</td>
<td>DEPRESS THE UP BUTTON. RAISE UNIT APPROX. 2 INCHES. THEN PRESS THE DOWN BUTTON.</td>
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<tr>
<td>OBSTRUCTION UNDER UNIT OR VEHICLE</td>
<td>REMOVE OBSTRUCTION.</td>
<td></td>
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<tr>
<td>NO AIR PRESENT</td>
<td>NO AIR IS PRESENT TO RELEASE LOCKS. VERIFY THAT PRESSURE REGULATOR IN POWER UNIT IS SET TO 80 PSI.</td>
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<tr>
<td><strong>RAISING OR LOWERING QUESTIONS</strong></td>
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<tr>
<td>RAISING: UNIT STOPS THEN ONE END RAISES, UNIT BEGINS TO RAISE NORMALLY.</td>
<td>UNIT IS AUTO-LEVELING. IF THE FORE / AFT END OF THE UNIT IS LOW DURING RAISING THE UNIT WILL STOP, RAISE THE LOW END TO LEVEL THE UNIT, THEN BEGIN TO RAISE NORMALLY.</td>
<td></td>
</tr>
<tr>
<td>LOWERING: UNIT STOPS LOWERING, THEN ONE END LOWERS, THEN UNIT BEGINS TO LOWER NORMALLY.</td>
<td>UNIT IS AUTO-LEVELING. IF THE FORE / AFT END OF THE UNIT IS LOW DURING LOWERING THE UNIT WILL STOP, LOWER THE HIGH END TO LEVEL THE UNIT, THEN BEGIN TO LOWER NORMALLY.</td>
<td></td>
</tr>
<tr>
<td>UNIT CONSTANTLY MAKING AUTO ADJUSTMENTS.</td>
<td>CENTER VEHICLE WEIGHT ON TRACKS. - OR - FLUID LEVEL IN AUTO LEVELER IS EITHER TOO LOW OR TOO HIGH</td>
<td></td>
</tr>
</tbody>
</table>
TO BE USED IN CONJUNCTION WITH DRAWING NUMBER 110-004-090

1. ALL ELECTRICAL EQUIPMENT AND WIRING SHALL CONFORM TO ANSI/NFP 70 - 1990, NATIONAL ELECTRICAL CODE.

2. IT SHALL BE THE RESPONSIBILITY OF THE OWNER / EMPLOYER TO PROVIDE NECESSARY LOCKOUTS / TAGOUTS OF ENERGY SOURCES IN ACCORDANCE WITH ANSI Z244, 1 - 1982, BEFORE ATTEMPTING REPAIRS.

3. ALL FIELD WIRING / ELECTRICAL RELATED LABOR SHALL BE PERFORMED BY CERTIFIED ELECTRICIANS.

4. UNIT MUST BE PROPERLY GROUNDED IN ACCORDANCE TO NEC ARTICLE 250 (GROUNDING), AND APPLICABLE LOCAL CODES.

5. 11 DENOTES WIRE NUMBERS.

6. LABEL MARKERS SHALL BE PLACED ON ALL WIRES (BOTH ENDS), SWITCHES, RELAYS, LAMPS, ETC., ALL WIRES TO BE INSTALLED WITH TERMINAL LUGS. ALL CONNECTIONS SHALL BE WRENCH TIGHT.

7. THE FOLLOWING COLOR WIRES SHALL BE RESERVED.
   GREEN: ALL EQUIPMENT GROUNDING CONDUCTORS.
   WHITE: ALL NEUTRAL CONDUCTORS.

8. VERIFY PROPER MOTOR WIRING FOR PROPER VOLTAGE & ROTATION AT INITIAL START-UP.

9. TRANSFORMER TERMINALS TO BE WIRED AND FUSED ACCORDING TO CUSTOMER'S POWER SUPPLY. SEE TABLES ABOVE FOR FUSE SIZES, HEATER ELEMENT SIZES, & TRANSFORMER WIRING.

10. ALL FUSES TO BE CLASS CC TIME DELAY TYPE.
**SERVICE CHART**

MODEL TR-110  
SERIAL NUMBER: ________________________________  
DATE OF INSTALLATION: _________________________

<table>
<thead>
<tr>
<th>DATE</th>
<th>PART REPLACED / SERVICED</th>
<th>SERVICE COMPANY</th>
<th>SERVICED BY</th>
</tr>
</thead>
<tbody>
<tr>
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**MAINTENANCE CHART**

<table>
<thead>
<tr>
<th>DATE</th>
<th>MAINTENANCE PERFORMED</th>
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</tr>
</tbody>
</table>

23
MOHAWK
MADE IN THE U.S.A.

MODEL TR-110

STRUCTURAL ASSY DIAGRAMS
MODEL TR-110
4-POST TRACK LIFT
WITH 3' WIDE X 30' LG TRACKS
CAPACITY: 110,000 LBS
ORIENTATION: A

POWER UNIT:
WITH 35 GALLON RESERVOIR FILLED WITH DEXRON II HYDRAULIC FLUID

FORE
OFFSIDE
AFT
MAIN SIDE

20° APPROX HOSE
36° TYP

4 3/4"
132" (11'-0"
MAX

18 7/8"
64 3/4" @ 5'STRKE
(5'-4 3/4"

78 7/8"
5'STRKE
(6'-6 7/8"

413"
(34'-5"

585 1/2" (48'-9 1/2"

172 1/2"
(14'-4 1/2"

123" (10'-5"

123" (14'-3"
MAX
EQUALIZING CHAIN ROUTING:

ADJUSTABLE CHAIN CONNECTOR

EQUALIZING CHAINS

CROSSRAIL

- END VIEW -

CHAIN ADJUSTMENT

Lower the unit completely.

Tighten the chain connectors at the top of the posts.

The adjustment is complete when both equalizing chains are taut.
All post shims are designed to be underneath the base plates and around the anchor bolts.

Shim beneath post footings to ensure level assembly
### Maximum Tensile and Shear Capacity for Static Loads

<table>
<thead>
<tr>
<th>Anchor &amp; Hole Size</th>
<th>Embedment Tension 2000 psi (lbs)</th>
<th>Embedment Tension 3000 psi (lbs)</th>
<th>Embedment Tension 5000 psi (lbs)</th>
<th>Embedment Tension 7000 psi (lbs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/4</td>
<td>1 1/8</td>
<td>1 1/8</td>
<td>1 1/8</td>
<td>1 1/8</td>
</tr>
<tr>
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<tr>
<td>5/16</td>
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<td>2</td>
<td>2</td>
</tr>
<tr>
<td>3/8</td>
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<td>1 1/4</td>
<td>1 1/4</td>
<td>1 1/4</td>
</tr>
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<td>3/8</td>
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<td>6</td>
</tr>
<tr>
<td>5/8</td>
<td>•</td>
<td>3</td>
<td>3</td>
<td>3</td>
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<tr>
<td>5/8</td>
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<td>3/4</td>
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</tr>
<tr>
<td>3/4</td>
<td>•</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>7/8</td>
<td>•</td>
<td>4</td>
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<td>4</td>
</tr>
<tr>
<td>7/8</td>
<td>•</td>
<td>7</td>
<td>7</td>
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<tr>
<td>1</td>
<td>•</td>
<td>5</td>
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<td>1</td>
<td>•</td>
<td>7</td>
<td>7</td>
<td>7</td>
</tr>
</tbody>
</table>

Source: 1) University of Texas, Austin, TX (using new ICBO-ES testing criteria); 1993. 2) AA Engineers & Associates, Inc., Denver, CO; 1981.

### Specifications, Approvals and Listings

<table>
<thead>
<tr>
<th>Type</th>
<th>Zinc Plating ASTM B-633, Type III, SCI</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>ICBO-ES Report #1821</td>
</tr>
<tr>
<td></td>
<td>City of Los Angeles #RR 24939</td>
</tr>
<tr>
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<td>DOT</td>
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<tr>
<td></td>
<td>Federal QQZ-325C, Type II, Class 3</td>
</tr>
<tr>
<td></td>
<td>Specifications FFS-325, Group II, Type 4, Class 1</td>
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</tbody>
</table>

### Key Features/Benefits

- **Time-Tested, Proven Reliability.** An industry standard for over 45 years.
- **Fully Assembled and Ready to Use.** Unparalleled job-site convenience.
- **BOLT SIZE IS HOLE SIZE®.** Allows precision placement of equipment through pre-drilled holes.
- **Exclusive “Positive Wedge Connections.”** Minimizes wedge loosening due to vibratory loads.

### Edge Distance and Spacing Requirements

<table>
<thead>
<tr>
<th>Embedment (E) in Anchor Diameters (d)</th>
<th>Spacing</th>
<th>Edge Distance</th>
</tr>
</thead>
<tbody>
<tr>
<td>E &lt; 6d (shallow)</td>
<td>3.50E</td>
<td>1.75E</td>
</tr>
<tr>
<td>6d ≤ E ≤ 8d (standard)</td>
<td>2.00E</td>
<td>1.00E</td>
</tr>
<tr>
<td>8d &lt; E (deep)</td>
<td>1.50E</td>
<td>0.75E</td>
</tr>
</tbody>
</table>

### Notes:

- Information provided only for the use of a qualified design engineer. Use of technical data by persons not qualified could cause serious damage, injury, or even death.
- Ultimate values shown. For static loads, use one-fourth of the maximum tensile and shear capacities for the recommended 4:1 safety factor.
INSTALLATION INSTRUCTIONS

1. Drill the hole perpendicular to the work surface.* To assure full holding power, do not ream the hole or allow the drill to wobble.

2. Drill the hole deeper than the intended embedment of the anchor, but not closer than two anchor diameters to the bottom (opposite) surface of the concrete.

3. Clean the hole using compressed air and a nylon brush. A clean hole is necessary for proper performance.

4. Insert anchor into hole until washer rests solidly against fixture.

5. Tighten the nut 3 to 5 turns past the hand tight position.

* Always wear safety glasses. Follow the drill manufacturer’s safety instructions. Use only solid carbide-tipped drill bits meeting ANSI B212.15 diameter standards as listed on back cover.

ORDER INFORMATION

<table>
<thead>
<tr>
<th>Catalog Number</th>
<th>Anchor Diameter &amp; Length (in)</th>
<th>Minimum Embedment (in)</th>
<th>Thread Length (in)</th>
<th>Quantity Box/Carton</th>
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<td>2</td>
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</tr>
</tbody>
</table>

LENGTH SELECTION GUIDE

\[ (D) = (A) + (B) + 1/2 \times \text{Bolt Diameter} \]

* Always wear safety glasses. Follow the drill manufacturer’s safety instructions. Use only solid carbide-tipped drill bits meeting ANSI B212.15 diameter standards as listed on back cover.
WHEEL CHOCK PLACEMENT

WHEEL CHOCK LOCATIONS

WHEEL CHOCK LOCATIONS
MOHAWK
MADE IN THE U.S.A.
MODEL TR-110

HYDRAULIC & PNEUMATIC DIAGRAMS
LIFT HYDRAULIC & PNEUMATIC PLUMBING

NOTE:
PLUMBING SHOWN IN ORIENTATION "D"

POST #1

POST #2

POST #3

TRACK MANIFOLD

POST #4

ENTRANCE DIRECTION
PNEUMATIC LOCK RELEASE CIRCUIT

NOTES:
AFTER SHIFTING VALVE, ALL CYLINDERS RETRACT TO DISENGAGE LOCKS AND ACTIVATE LOCK OPEN REED SWITCHES

INCOMING AIR SUPPLY 80 PSI MINIMUM (DRY)
MOHAWK
MADE IN THE U.S.A.
MODEL TR-110

ELECTRICAL DIAGRAMS
## TR-110 CONTROL PANEL FUNCTIONS

<table>
<thead>
<tr>
<th>Power</th>
<th>Low Air</th>
<th>Out of Parallel</th>
<th>Check Filter</th>
</tr>
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<tbody>
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<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
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<table>
<thead>
<tr>
<th>Off On</th>
<th>Raise</th>
<th>Lower</th>
<th>Park</th>
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<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

1. On/Off Keyed Switch
2. Raise Button
3. Lower Button
4. Park Button
5. Power On Indicator
6. Low Air Indicator
7. Out of Parallel Indicator
8. Change Filter Indicator
TRACK LEVELER FUNCTIONS

SYSTEM IS LEVEL

AFT END OF LIFT IS LOW

WHEN RAISING:
FORE END WILL
STOP AND
AFT END WILL
RAISE ONLY

WHEN LOWERING:
AFT END WILL
STOP AND
FORE END WILL
LOWER ONLY

USE ANTI-FREEZE AS FLUID REPLACEMENT ONLY!!

FORE END OF LIFT IS LOW

WHEN RAISING:
AFT END WILL
STOP AND
FORE END WILL
RAISE ONLY

WHEN LOWERING:
FORE END WILL
STOP AND
AFT END WILL
LOWER ONLY
REED SWITCH POSITIONING: DETECT LOCKS OPEN

NOTES:

1. OVER-RIDE AIR SOLENOID TO FULLY RELEASE ALL LOCKS (AIR SUPPLIED TO ALL LOCK CYLINDERS)

2. DISCONNECT PLUG FROM REED SWITCHES AND CONNECT SWITCHES TO BATTERY TEST MODULE.

3. ADJUST POSITION OF REED SWITCH AT PORT END OF CYLINDER TO DETERMINE BAND OF READING (WHEN SWITCH LED LIGHTS). POSITION SWITCH TOWARD ROD END OF BAND AT SHOWN DIMENSION. ENSURE REED SWITCHES ROTATED AWAY FROM EACH OTHER AS SHOWN IN DIAGRAM TO LEFT. SECURE CLAMP SNUG BUT DO NOT OVERTIGHTED CLAMP OR SWITCH MAY BECOME DAMAGED.

4. VERIFY ALL REED SWITCHES ADJUSTED PROPERLY BY LOWERING LIFT WITH LOWER BUTTON.
REED SWITCH POSITIONING: DETECT LOCKS NOT CLOSED

NOTES:

1. RAISE LIFT UNTIL LOCK IS RESTING AGAINST BACK OF LOCK BAR (NOT IN LOCK RACK HOLE)

2. DISCONNECT PLUG FROM REED SWITCHES AND CONNECT SWITCHES TO BATTERY TEST MODULE.

3. ADJUST POSITION OF REED SWITCH AT ROD END OF CYLINDER TO DETERMINE BAND OF READING (WHEN SWITCH LED LIGHTS). POSITION SWITCH TOWARD PORT END OF BAND AT SHOWN DIMENSION. ENSURE REED SWITCHES ROTATED AWAY FROM EACH OTHER AS SHOWN IN DIAGRAM TO LEFT. SECURE CLAMP SNUG BUT DO NOT OVERTIGHTED CLAMP OR SWITCH MAY BECOME DAMAGED.

4. VERIFY ALL REED SWITCHES ADJUSTED PROPERLY BY RAISING UNTIL LOCKS FALL INTO NEXT HIGHER LOCK RACK HOLE. YELLOW LIGHT ON PARK BUTTON SHOULD ILLUMINATE. ILLUMINATION WILL BE LOST WHEN LIFT RAISED AND LOCK IS HIDDEN BEHIND LOCK RACK.
24 VDC POWER SUPPLY

230 VA TRANSFORMER

MOTOR STARTER 120 VAC COIL

NOTE:
1. TERMINALS 1-5, 6-13, & 14-19 JUMPERED.
2. TERMINAL LABELS ON EXPANSION MODULES RENAMED TO ELIMINATE CONFUSION ON DUPLICATE LABELING.

WARNING:

1. ISOLATION BARRIERS
2. HAZARDOUS ZONE
3. SAFE ZONE
4. EXPANSION MODULE
5. NOTE:
6. EXPANSION MODULE #1
7. EXPANSION MODULE #2
8. EXPANSION MODULE #3
9. NOTE:
10. SWITCH POSITION 0000 & 0001
11. NOTE:
12. SWITCH POSITION 1111 & 1110

NOTE:
1. TERMINAL S-1 & S-3 JUMPERED
2. TERMINAL LABELS ON EXPANSION MODULES RENAMED TO ELIMINATE CONFUSION ON DUPLICATE LABELING.

NOTE:
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1. TERMINAL S-1 & S-3 JUMPERED
2. TERMINAL LABELS ON EXPANSION MODULES RENAMED TO ELIMINATE CONFUSION ON DUPLICATE LABELING.

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MOHAWK
MADE IN THE U.S.A.
MODEL TR-110
PARTS
DRAWINGS
NOTES:
1. DO NOT OVERTIGHTEN CLAMPS ON REED SWITCHES! (SNUG ONLY)
2. POSITION SWITCHES ON CYLINDER USING BATTERY MODULE.
MOHAWK
MADE IN THE U.S.A.
MODEL TR-110

SAFETY DIAGRAMS
Lift to be used by trained operator ONLY.

Authorized personnel only in lift area.

The messages and pictographs shown are generic in nature and are meant to generally represent hazards common to all automotive lifts regardless of specific style.

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SAFETY INSTRUCTIONS

Read operating and safety manuals before using lift.

©

SAFETY INSTRUCTIONS

Proper maintenance and inspection is necessary for safe operation.

©

SAFETY INSTRUCTIONS

Do not operate a damaged lift.

©

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Because Quality Lasts Forever.

Model USL-6000
Full rise, space-saving, no-post, portable scissors lift, offers full under-car access.

Model A-7
The A-7 is a 7,000 lb. capacity asymmetric lift that allows full opening of all vehicle doors as well as total undercar/underdash access, thanks to Mohawk's unique "clear-floor" design. Low 4' arms accommodate all imports and low-riding sports cars. Includes both 3' and 6' truck adapters.

Model System I
The 9,000 lb. capacity System I, like all Mohawk lifts, features Mohawk's patented hydraulic equalization system with adjustable overhead (or optional underground) hydraulic lines. Offers low 3 1/2" swing arms and comes standard with truck adapters.

Model LMF-12, TP-15, TP-18, TP-26 & TP-30
These 12,000 to 30,000 lb. capacity models are the ideal heavy-duty lifts for up to Class VI trucks. Mohawk's unique "clear floor" design makes these the perfect lifts for all fleet applications. Truck adapters are standard equipment.

TR-Series Ramp Style Lifts
Standard models from 25,000 up to 125,000 lbs. for total under-vehicle access. Ramp lengths from 20' to 50'. Completely operated by a single technician, and features fully interlocked, redundant safety systems.

www.mohawklifts.com

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FAX 518-842-1289