MOHAWK



MADE IN THE U.S.A.

MODEL TR - 33

33,000 LB. CAPACITY FOUR POST TRUCK LIFT MANUAL

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WARRANTY CARD

INSTALLATION

Thank you for sending in your Warranty Registration Card.
- Mohawk Service Department

✓ MAINTENANCE

OPERATION

☑ PARTS MANUAL



MOHAWK RESOURCES LTD.

65 VROOMAN AVENUE P.O. BOX 110

AMSTERDAM, NY 12010 TOLL FREE: 1-800-833-2006

FAX: 1-518-842-1289 LOCAL: 1-518-842-1431 READ MANUAL THOROUGHLY BEFORE INSTALLING, OPERATING OR SERVICING THIS LIFT!!

Deliver these instructions to lift owner/user/employer along with other instructional materials furnished with this lift.

TR-33.DOC REV. 5/5/2006

IMPORTANT SAFETY INSTRUCTIONS

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

- 1. Read this manual and review all illustrations of this manual thoroughly before attempting to install, operate or maintain this lift.
- 2. Deliver these operation, inspection, and maintenance instructions to the lift owner/user/employer along with the other instructional materials furnished with this lift.
- 3. Maintenance on this equipment is to be performed only by trained lift service personnel, and and worn or broken parts are to be replaced only with genuine Mohawk brand supplied parts.
- 4. Care must be taken as burns can occur from touching hot parts.
- 5. 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.
- 6. Do not let cord or hoses hang over edge of table, bench or counter or come in contact with hot manifolds or moving fan blades.
- 4. 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.
- 5. 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
- 6. To reduce the risk of fire, do not operate equipment in the vicinity of open containers of flammable liquids (gasoline). WARNING: Risk of Explosion: This equipment has internal arcing and sparking parts which should not be exposed to flammable vapors. This equipment is only suitable for installation in a garage having sufficient air circulation to be considered a non-hazardous location.
- 7. Adequate ventilation should be provided when working on operating internal combustion engines.
- 8. Keep hair, loose clothing, fingers, and all parts of body away from moving parts.
- 9. To reduce the risk of electric shock, do not use on wet surfaces or expose to rain.
- 10. Use only as described in this manual. Use only manufacturer's (Mohawk) recommended attachments.
- 11. ALWAYS WEAR SAFETY GLASSES. Everyday eyeglasses only have impact resistant lenses, they are NOT safety glasses.

SAVE THESE INSTRUCTIONS Rev (10/22/99)

TR-33.DOC REV. 5/5/2006

APPENDAGE:

WARNING:

All accessories (i.e. Lifting Pads, Height Adapters, Wheel Adapters, Turf Adapters) 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.

WARNING:

Loading of the jacking beams or combinations 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.

HAVE A QUESTION?

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

Distributor Place Card Here	

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.MOHAWKLIFTS.com
E-Mail: Service@MOHAWKLIFTS.com





The Automotive Lift Institute (ALI) is a trade association comprised of US and Canadian manufacturers and certain national distributors of automotive lifts. For almost 50 years, the ALI in cooperation with the American National Standards Institute (ANSI) has continued to sponsor the national standard ANSI/ALI ALCTV-1998 "Safety Requirements for Construction, Testing, and validation for Automotive Lifts."

The new "ALI/ETL Automotive Lift Certification Program" is based on ALI developed methods and criteria for third party testing of automotive lifts to validate conformance with ANSI/ALI ALCTV-1998.

For automotive lifts to be certified, manufacturers must execute an agreement with the ALI and ETL / Intertek Testing Services and must meet certain requirements:

- ♦ Must be structurally tested in accordance with the test requirements as outlined in ANSI/ALI ALCTV- 1998.
- ♦ All motor operated units must be listed by a nationally recognized testing laboratory (NRTL) in accordance with ANSI/UL-201.
- ♦ The manufacturer's production facility must meet quality control requirements as set forth in the ANSI Z34.1-1987 and the ALI/ETL Automotive Lift Certification Program Procedural Guide.
- ♦ All manufacturer-provided instructions, manuals, and operator safety documents, must meet the requirements of the ANSI/ALI ALCTV-1998 and ANSI/UL-201.

Lifts meeting these rigid requirements may be listed in the directory of certified lifts and be labeled with the "ALI/ETL certification mark" (Above on right), and, if applicable, the ETL listing mark to ANSI/UL-201.

Mohawk has been a long-standing member of ALI and most of Mohawk's popular models are currently listed and certified. Other Mohawk models are in various stages of testing. To obtain a complete and current certification listing, contact Mohawk Resources Ltd. To obtain a copy of the current automotive lift standard, contact ALI or ANSI.

Some people purchase quality products and others do not. You are assured of quality when you purchase a Mohawk product in compliance with the certification program.

MOHAWK WARRANTIES

EFFECTIVE DATE: 3/2/2006 *

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. ALL WARRANTY CLAIMS MUST BE PERFORMED IN ACCORDANCE TO MOHAWK'S WARRANTY PARTS RETURN POLICY (CONTACT MOHAWK'S SERVICE DEPARTMENT FOR MORE INFORMATION). THIS WARRANTY DOES NOT COVER MIS-DIAGNOSING OF UNIT OR PARTS RETURNED THAT ARE NON-DEFECTIVE. THIS WARRANTY DOES NOT COVER ANY CONSEQUENTIAL OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, LOST 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 DECLINE RESPONSIBILITY 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.

STRUCTURAL COMPONENTS (ALL LIFTS):

ALL STRUCTURAL AND MECHANICAL COMPONENTS OF THIS UNIT ARE GUARANTEED FOR THE BELOW STATED TIME FRAME, SPECIFIC TO MODEL LISTED, FROM THE DATE OF INVOICE, AGAINST DEFECTS IN WORKMANSHIP AND/OR MATERIALS WHEN LIFT IS INSTALLED AND USED ACCORDING TO SPECIFICATIONS.

<u>5-YEAR:</u> MODELS A-7, SYSTEM IA, SYSTEM IA-10, TOMAHAWK-9000, LMF-12, TP-15, TP-16, TP-18, TP-20, TP-26, TP-30, & TL-7.

<u>3-YEAR:</u> MODELS TR-19, TR-25, FL-25, TR-33, TR-35, TR-50, TR-75, TR-110, TR-120, MP-SERIES, RP-SERIES LIFTS.

2-YEAR: MODELS PARALLELOGRAM SERIES LIFTS.

1-YEAR: MODELS HR-6, TD-1000, CT-1000, USL-6000.

POWER UNIT (ALL LIFTS):

ALL POWER UNIT COMPONENTS (MOTOR, PUMP AND RESERVOIR) ARE GUARANTEED FOR TWO YEARS FOR PARTS (ONE YEAR LABOR), FROM THE DATE OF INVOICE, AGAINST DEFECTS IN WORKMANSHIP AND/OR MATERIALS WHEN THE LIFT IS INSTALLED AND USED ACCORDING TO SPECIFICATIONS.

HYDRAULIC CYLINDERS (MODEL SPECIFIC LIFTS):

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, SYSTEM IA-10, LMF-12, TP-15, TP-18, TP-20, TP-26, TP-30. ALL OTHER MODELS ARE GUARANTEED FOR TWO YEARS PARTS AND ONE YEAR LABOR (EXCEPT HR-6, WHICH IS ONE YEAR PARTS ONLY), 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 LIFTS):

ALL ELECTRICAL COMPONENTS (EXCLUDING MOTOR) ARE GUARANTEED FOR ONE YEAR FOR PARTS AND 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 LIFTS):

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

STANDARD OPTIONS (ALL LIFTS):

ALL STANDARD OPTIONS OF THIS UNIT ARE GUARANTEED FOR ONE YEAR FOR PARTS AND LABOR, FROM THE DATE OF INVOICE, AGAINST DEFECTS IN WORKMANSHIP AND/OR MATERIALS WHEN LIFT IS INSTALLED AND USED ACCORDING TO SPECIFICATIONS.

SPECIAL AND/OR CUSTOMIZED LIFTS AND OPTIONS:

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.

WARRANTY EXCEPTIONS (ALL LIFTS):

ADJUSTMENTS: THIS WARRANTY DOES NOT COVER CASUAL AND ROUTINE ADJUSTMENTS SUCH AS, BUT NOT LIMITED TO: FITTINGS, J-BAR ADJUSTMENTS, ANCHOR BOLT RE-TIGHTENING, OR ANY SHIMMING OR ADJUSTMENTS REQUIRED DURING A PROPER AND PROFESSIONAL INSTALLATION BY A QUALIFIED INSTALLER.

MAINTENANCE AND INSPECTIONS: IF THIS UNIT IS NOT MAINTAINED AND INSPECTED IN ACCORDANCE TO THE RELEVANT SECTIONS IN THE USERS MANUAL FOR THIS SPECIFIC MODEL, WARRANTY IS SUSPENDED UNTIL THE LIFT CONDITION IS PROVEN TO BE TO MOHAWK'S SATISFACTION (ANY CURRENT CLAIMS WILL NOT BE PAID UNTIL THIS REQUIREMENT IS MET). OSHA, ANSI AND MOHAWK REQUIRE THAT RECORDS MUST BE MAINTAINED TO PROVE THAT INSPECTIONS AND MAINTENANCE OF THIS UNIT HAVE BEEN ROUTINELY PERFORMED BY QUALIFIED INDIVIDUALS.

ABUSE: IF THIS UNIT IS FOUND TO BE OVERLOADED (PURPOSELY OR UNKNOWINGLY), USED IN A SITUATION BEYOND ITS INTENDED FUNCTION, NOT MAINTAINED OR INSPECTED REGULARLY, OR USED IN AN ABUSIVE ENVIRONMENT, ETC., THIS WARRANTY IS VOID IN ITS ENTIRETY.

NON-EXISTENT PROBLEMS: FOR SERVICE VISITS, PART REPLACEMENTS, LABOR, ETC. FOR PARTS FOUND TO BE NON-DEFECTIVE, OR FOR A UNIT DIS-FUNCTION THAT DOES NOT EXIST, IT IS THE LIFT OWNER THAT REQUESTED THE SERVICE VISIT WHO BEARS THE RESPONSIBILITY OF ALL RELATED EXPENSES.

* THIS WARRANTY SUPERSEDES ALL OTHER WARRANTY POLICIES PREVIOUSLY STATED AND IN ALL OTHER MOHAWK PRODUCT SPECIFIC LITERATURE (MANUALS, BROCHURES, ETC.).

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• PARTS DRAWINGS

• NEW SLAB RECOMMENDATIONS

ELECTRICAL SCHEMATIC

PANEL WIRING DIAGRAM

CONTROL BOX WIRING DIAGRAM

• LIFTING IT RIGHT BOOKLET *

033-002-093

033-002-091

033-002-094

^{*} A SAFETY MANUAL FROM THE AUTOMOTIVE LIFT INSTITUTE AND IS NOT PART OF THE UNIT'S INSTALLATION PROCEDURES.

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-33. ANY SPECIAL FEATURES WILL BE INDICATED ON THE LIFT VERIFICATION SHEET. USE THE LIFT VERIFICATION SHEET AND THE TR 33 DIMENSIONAL CHART TO VERIFY THE UNITS' SPECIFICATIONS AND SET-UP DIMENSIONS.

OVERHEAD OBSTRUCTIONS:

THE AREA IN WHICH 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 AND THE DIMENSIONAL CHART.

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-33. WE RESERVE THE RIGHT TO MAKE CHANGES AT ANY TIME WITHOUT NOTICES.
- ALWAYS REFER TO THE LIFT VERIFICATION SHEET AND THE TR-33 DIMENSIONAL CHART. SPECIFIC INFORMATION PERTAINING TO THIS LIFT IS FOUND ON THESE PAGES.

GENERAL INFORMATION CONTINUED

RECOMMENDED TOOL LIST

SIZE / QTY	TOOL	USED FOR
3/4 IN	WRENCH / SOCKET	HYDRAULIC HOSES
11 / 16 IN	WRENCH / SOCKET	HYDRAULIC FITTINGS
5 / 8 IN	WRENCH / SOCKET	HYDRAULIC FITTINGS
1-1/16 IN	WRENCH / SOCKET	RAMP / CROSSRAIL
1-1/8 IN	WRENCH / SOCKET	RAMP / CROSSRAIL / WEJ-IT ANCHORS
1-1/4 IN	WRENCH / SOCKET	CHAIN CONNECTORS
1 SET	ALLEN WRENCHES	AS REQUIRED
1	PLIERS / NEEDLE NOSE	CHAIN MASTER LINKS
1	RATCHET	AS REQUIRED
50 FT	MEASURING TAPE	SITE LAYOUT
1	CHALK LINE	SITE LAYOUT (BLUE / YELLOW CHALK)
4 FT	BUBBLE LEVEL	VERIFY LEVEL ASSEMBLY
25 FT	FISH TAPE	PULLING CHAINS
1	HAMMER	AS REQUIRED
8 FT	STEP LADDER	ASSEMBLE ELEVATED ITEMS
4	4 X 4 X 24 IN DUNNAGE	SUPPORT TRACKS OFF FLOOR
1	PRY BAR	ADJUST HEAVY ITEMS
50 / 100 FT	LEAD CORD	OPERATE ELECTRICAL TOOLS
3/4 IN	MASONRY DRILL BIT	DRILL ANCHOR HOLES
1	IMPACT DRILL	DRILL ANCHOR HOLES
1	FORK TRUCK (6000 LBS. MIN CAP.)	ERECT / MOVE HEAVY COMPONENTS

WARNING

BEFORE DRILLING THE MOUNTING HOLES

- REFERENCE ANCHOR SPECIFICATION DIAGRAMS FOR DRILLING AND WEJ-IT WARNINGS AND INSTALLATION INSTRUCTIONS.
- 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
- USE A SHARP DRILL BIT SO AS NOT TO DRILL AN UNDERSIZED HOLE. DRILL THE HOLE EQUAL TO THE LENGTH OF THE WEJIT 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, INSTALL ANCHOR AS STATED IN ANCHOR SPECIFICATIONS.

- MAKE SURE THE CONCRETE IS SOLID WHEN DRILLING. CRACKS AND EXPANSION SEAMS REDUCE THE EFFECTIVENESS OF THE WEJ-IT ANCHOR. NEVER INSTALL THE ANCHORS WITHIN 6" OF ANY CRACKS, CONTROL JOINTS OR EXPANSION SEAMS.
- NEVER USE AN IMPACT TOOL TO TIGHTEN THE WEJ-IT ANCHORS. USE A TORQUE WRENCH ONLY.
- AFTER DRILLING EACH HOLE, VACUUM CLEAN AND INSERT THE WEJ-IT ANCHOR.
- ONLY AFTER VERIFYING A SQUARE LEVEL UNIT, CAN THE UNIT BE SECURELY MOUNTED TO THE SHOP FLOOR.
- USING THE HOLES AT THE BASE OF EACH POST AS A GUIDE, DRILL THE FOUR MOUNTING HOLES FOR THE ANCHORS.

GENERAL INFORMATION CONTINUED

FLOOR REQUIREMENTS

MODEL	MINIMUM THICKNESS	MINIMUM COMPRESSIVE	MINIMUM AGING
		STRENGTH	
TR-33	4 1/2 INCHES	4000 P.S.I.	28 DAYS

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. ALL ANCHORS MUST BE A MINIMUM OF 6" AWAY FROM ANY CRACKS OR SEAMS.

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 NEW SLAB RECOMMENDATIONS IN THE BACK OF THIS MANUAL.

FLOOR MODIFICATION DATA

MODEL	FOOTING	FOUR PADS	VOLUME
	THICKNESS	WIDTH X LENGTH	
TR-33	12 INCHES	6 FT x 6 FT	5.4 CUBIC YARDS

NOTE

SEE NEW SLAB RECOMMENDATIONS IN THE BACK OF THIS MANUAL FOR SPECIFICS ON THE SLAB.

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

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

NEVER, NEVER HAND MIX YOUR OWN CONCRETE.

GENERAL INFORMATION CONTINUED

TR-33 STANDARD LIFT SPECIFICATIONS (20' TRACKS)

GROSS LIFTING CAPACITY	33,000 LBS.	
LIFTING SPEED (UP CYCLE) APPROX.	2 MINUTES 10 SECONDS	
LIFTING HEIGHT (STROKE)	5 FEET	60 INCHES
OVERALL WIDTH (W/O CONSOLE)	14 FT. 5 IN.	173 IN.
OVERALL LENGTH	29 FT. 2 - 5/8 IN.	350 - 5/8 IN.
TRACK WIDTH	2 FT.	24 IN.
CLEARANCE BETWEEN POST (WIDTH)	11 FT. 8 IN	140 IN.
MAXIMUM WHEEL BASE	17 FT.	204 IN.
SHIPPING WEIGHT	10,700 LBS. APPROXIMATE	

POWER UNIT SPECIFICATIONS

MONARCH MODEL	T-09-08-0-18-01-1-000000-00-0-0
MOTOR VOLTAGE	208-230/460 VAC
MOTOR HORSE POWER	5 HP
MOTOR FULL LOAD AMPS	14.2 AMP
MOTOR PHASE	THREE PHASE
MOTOR CYCLE / HERTZ	60 HZ
MOTOR SPEED (RPM)	1800 RPM
PUMP FLOW (GPM)	3.3 GPM
RELIEF VALVE SETTING (PSIG)	2500 PSI
RESERVOIR CAPACITY (GALLONS)	8 U.S. GALLON
POWER UNIT	HORIZONTAL
HYDRAULIC FLUID MEDIUM	DEXRON III
FILTER	10 MICRON – SPIN ON
CIRCUIT BREAKER	PER N.E.C. / LOCAL CODE

SUGGESTED MINIMUM BAY SIZE

WIDTH	DEPTH	HEIGHT
18 FEET	35 FEET	20 FEET

NOTE

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

ANCHOR / WEJ-IT

LENGTH	DIAMETER	DRILL SIZE	DRILL SIZE	TORQUE
		MINIMUM	MAXIMUM	FOOT POUNDS
5 ½	3/4 INCH	0.775	0.787	60 TO 80
INCHES				

WARNING

NEVER USE AN IMPACT TOOL TO TIGHTEN THE WEJ-IT ANCHOR.

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 65 VROOMAN AVENUE 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 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 4 1/2 INCHES. THE CONCRETE MUST BE AGED AT LEAST TWENTY EIGHT DAYS PRIOR TO INSTALLATION AND HAVE A MINIMUM TENSILE STRENGTH OF 4000 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 REOUIREMENTS.

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.

APPENDAGES

INSTALL THIS EQUIPMENT ON CONCRETE ONLY

IF, FOR ANY REASON, A NEW CONCRETE SLAB SECTION IS REQUIRED, THE **MINIMUM** THICKNESS, STRENGTH, AND AGING ARE MANDATORY. FOR YOUR PROTECTION. CERTIFIED STRENGTH DOCUMENTATION SHOULD BE OBTAINED FROM THE FIRM WHO SUPPLIES THE CONCRETE MIXTURE AT THE TIME OF THE POUR. SPECIAL CONSIDERATION SHOULD BE MADE TO THE JOINING OF THE EXISTING FLOOR AND THE NEW SECTION BEING ADDED. CHECK WITH BUILDING ARCHITECT. THE SUGGESTED SIZE OF THE NEW CONCRETE SLAB SECTION IS IN THE. GENERAL FLOOR REQUIREMENTS. AND / OR THE FLOOR MODIFICATION DATA SHEET.

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.

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-33 STANDARD PACKING LIST

TR-33 STANDARD PACKING LIST			
PACKED	QTY	PART NUMBER	DESCRIPTION
	2 EA	033-002-024	LEG / POST ASSEMBLY (POST # 1 & 4)
	2 EA	033-002-025	LEG / POST ASSEMBLY (POST # 3 & 2)
	1	033-002-015	CROSS RAIL ASSEMBLY (FORE)
	1	033-002-035	CROSS RAIL ASSEMBLY (AFT)
	1	033-002-034	MAIN SIDE TRACK ASSEMBLY
	1	033-002-033	OFF SIDE TRACK ASSEMBLY
	2	033-000-021	DRIVE ON RAMP ASSEMBLY
	1	033-002-045	CONTROL CONSOLE ASSEMBLY
	1	033-002-047	PARTS BOX # 1
	1	033-002-048	PARTS BOX # 2
	1	033-002-047	PARTS BOX # 1
	1	033-002-053	MANUAL / INSTALLATION (TR-33)
	4	600-930-001	WHEEL CHOCKS
	2	050-000-179	TRACK STOPS (BOTTOM)
	2	050-000-157	TRACK STOPS (TOP)
	4	033-002-072	HYDRAULIC HOSE ASSEMBLIES
	1	601-800-070	WARRANTY REGISTRATION CARD PACKAGE
	2	050-004-033	HOSE ASSY, 3/8 ID X 20 FT LONG
	2	050-004-032	HOSE ASSY, 1/4 ID X 20 FT LONG
	4	033-002-070	HOSE ASSY (XRAIL TO AIR CYL)
	4	033-002-071	HOSE ASSY (XRAIL TO HYD CYL)
	4	601-420-084	STRAIGHT, ¼ FNPT TP #6 MJIC
	4	601-520-003	ELBOW, 90 DEG, ¼ MNPT TO ¼ TUBE
	4	6010520-002	ELBOW, 90 DEG, 1/8 MNPT TO 1/4 TUBE
	4	033-002-405	TUBE, 1/4, BLACK PLASTIC, 7 ½ LONG
	1	033-002-048	PARTS BOX # 2
	1	033-002-049	SMALL PARTS BAG
	6	601-630-002	SPRAY PAINT (YELLOW)
	6	601-630-002	SPRAY PAINT (RED)
	16	600-670-002	WEJ-IT ANCHOR (3/4 X 5)
	36	600-640-072	BOLT, 34-16 NF X 3 IN
	36	600-690-003	NUT 3/4 NF NLN
	2	050-010-115	CROSSRAIL LINE COVER (LEFT)
	2	050-010-116	CROSSRAIL LINE COVER (RIGHT)
	_		
	1	033-002-049	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
	12	600-720-011	WASHER, LOCK, 3/8
	12	600-680-012	NUT, PLAIN, 3/8-16 NC
	24	600-710-009	WASHER, FLAT, 3/8
	12	601-600-050	BLACK PLASTIC PULL TIE, 8" LG
	12	600-640-069	BOLT 3/8-16 NC X 1 3/4 IN
	4	600-710-012	WASHER, FLAT 7/8 IN
	4	600-690-010	NUT 7/8 NF NLN
	3	601-140-022	HOSE SUPPORT CLAMP
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. THE UNIT CAN BE ROTATED IN ITS ENTIRETY OR PLUMBED FROM THE CONSOLE TO EITHER END OF TRACK. IF PLUMBING IS DESIRED ON THE RIGHT SIDE OF THE TRACK, THE MANIFOLD BLOCKS ON THE TRACK MUST BE SWITCHED.
- THE UNIT WILL 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 UPRIGHT POST. FAILURE TO DO SO COULD RESULT IN PERSONAL INJURY.

TO BEGIN

USE THE PACKING LIST IN THIS MANUAL AND VERIFY ALL SUPPLIED PARTS. 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.

NOTE

THE CARRIAGES AND CROSS RAILS ARE MATCHED DRILLED ONE, TWO, THREE, AND FOUR. THESE ARE REFERENCE MARKS ON THE TOP OF THE CROSS RAIL AND THE TOP PLATE ON THE ADJOINING CARRIAGE.

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 CROSS RAIL CHAINS HAVE BEEN ROUTED THROUGH THE CARRIAGES.
- VERIFY THAT THE TWO 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 CROSS RAIL 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 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 LIGHT OR FLASH LIGHT. FAILURE TO DO SO COULD RESULT IN PERSONAL INJURY.

INSTALLATION INSTRUCTIONS

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 FIVE 3/4 - 16 NF X 2 - 1/2 IN BOLT AND 3/4 - 16 NF NYLON LOCK NUT.

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 FIVE 3/4 - 16 NF X 2 - 1/2 IN BOLT AND 3/4 - 16 NF NYLON LOCK NUT.

FULLY TIGHTEN THE TEN 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.

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 IN DUNNAGE.

NOTE

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

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 CROSS RAIL CHAINS HAVE BEEN ROUTED THROUGH THE CARRIAGES.

USE THE SAME PROCEDURE FOR CONNECTING POSTS THREE AND FOUR TO THE CROSS RAIL AS STATED PREVIOUSLY FOR POST ONE AND TWO.

ATTACH RAMPS TO ENDS OF TRACKS WITH HARDWARE PROVIDED.

ASSEMBLE ALL THE HYDRAULIC LINE ASSEMBLIES AS SHOWN IN THE FITTING LIST IN THE BACK OF THIS MANUAL. ENSURE ALL FITTINGS ARE TIGHT TO PREVENT LEAKAGE.

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

ASSEMBLE THE THREE HYDRAULIC HOSE ASSEMBLIES FROM THE CONTROL CONSOLE TO THE MAIN SIDE TRACK.

ASSEMBLE THE HUBBLE PLUGS FROM THE CONTROL CONSOLE TO THE SELF LEVELING DEVICE.

INSTALLATION INSTRUCTIONS

IMPORTANT

 AT THIS TIME HAVE A QUALIFIED LICENSED ELECTRICIAN CONNECT THE POWER SUPPLY AND AIR SUPPLY TO THE CONTROL CONSOLE.

USING THE TEXT AND DIAGRAM, FAMILIARIZE YOURSELF WITH THE CONTROL CONSOLE FUNCTIONS.

PRE-STARTUP

- INSURE ALL HYDRAULIC CONNECTIONS ARE PROPERLY TIGHTENED.
- PLACE THE AUTO / MANUAL SWITCH ON THE CONTROL PANEL CONSOLE TO THE MANUAL POSITION.
- VERIFY THE MOTOR ROTATION.
- ENSURE ALL DEBRIS AND PERSONAL HAVE BEEN REMOVED FROM THE LIFTING AREA..
- PLACE THE POWER UNIT STARTER SWITCH ON THE CONTROL PANEL TO THE ON POSITION. 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.

BLEEDING HYDRAULIC SYSTEM:

RAISE UNIT FULLY. FOR NEXT STEP, HAVE CLOTH AVAILABLE TO WIPE UP DRIPPING HYDRAULIC FLUID.

- CAUTION -

THE FOLLOWING PROCEDURE CAN BE INHERENTLY DANGEROUS IF NOT PERFORMED TO THE FOLLOWING PROCEDURE. ALWAYS USE CAUTION WHEN BLEEDING UNIT, AND NEVER REMOVE PLUGS FULLY. BE AWARE AND STAY CLEAR OF ANY PROJECTING FLUID.

SLOWLY AND CAREFULLY LOOSEN
(DO NOT REMOVE) PLUGS ON ENDS OF EACH
BARREL OF EACH CYLINDER UNTIL AIR
BUBBLES FORM (APPROXIMATELY A QUARTER
TO HALF A FULL TURN). WAIT FOR CYLINDERS
TO FINISH VENTING TRAPPED AIR. TIGHTEN
PLUGS. FULLY LOWER UNIT.

RAISE UNIT FULLY AND OBSERVE SMOOTH LIFTING. IF LIFT IS VIBRATING WHILE LIFTING, REPEAT PROCEDURE FOR BLEEDING HYDRAULIC SYSTEM.

FULLY CYCLE THE UNIT THREE TIMES TO FAMILIARIZE YOURSELF WITH THE FUNCTIONS OF THE UNIT, AND TO ALLOW ALL AIR TO BE REMOVED FROM THE HYDRAULIC SYSTEM. ENSURE PROPER LOCK ENGAGEMENT & TEST LOCK DISENGAGEMENT BY PRESSING THE LOCK RELEASE BUTTON ON THE CONTROL CONSOLE. 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.

CHECK ALL HYDRAULIC FITTINGS FOR LEAKS. TIGHTEN AS REQUIRED.

ASSEMBLE THE FOUR HYDRAULIC LINE COVER PLATES ONTO THE CROSS RAIL USING THE TWELVE HEX HEAD 5/16 - 24 NF X 5/8 IN SELF TAPPING BOLTS.

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

DO THIS LAST:

ONCE LIFT HAS BEEN TOTALLY ASSEMBLED AND CYCLED A FEW TIMES AND PERFORMS SMOOTHLY, SECURE ALL POSTS TO FLOOR WITH ANCHOR BOLTS PROVIDED. SEE FIGURE IN END OF MANUAL FOR ANCHOR BOLT INSTALLATION.

SAFETY TIPS

PLEASE POST THE SAFETY TIPS (COPY IN PARTS BOX) IN A PLACE WHERE THE OPERATOR WILL BE CONSTANTLY REMINDED OF THEIR IMPORTANCE. ALWAYS REFER TO THE LIFTS 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

- 1. FORE PRESSURE GAUGE:
- INDICATES THE PRESSURE IN THE CYLINDERS AT THE FORE END OF THE UNIT.
- 2. AFT PRESSURE GAUGE:
- INDICATES THE PRESSURE IN THE CYLINDERS AT THE AFT END OF THE UNIT.
- 3. POWER ON INDICATOR LIGHT:
- INDICATES UNIT IS ON.
- 4. POWER OFF SWITCH (RED):
- TURNS UNIT OFF.
- 5. LEVEL CONTROL SWITCH:
- SETS MODE OF MONITORING THE LEVEL OF THE UNIT, EITHER MANUALLY OR AUTOMATICALLY.
- 6. DOWN SETTLE SWITCH:
- BYPASSES HYDRAULIC SAFETIES TO ALLOW UNIT TO REST COMPLETELY ON MECHANICAL LOCKS. ALLOWS TOTAL RELIEF OF PRESSURE IN FORE AND AFT CYLINDERS.
- 7. POWER ON SWITCH:
- TURNS UNIT ON.
- 8. LOCK RELEASE BUTTON:
- ALLOWS AIR TO ENERGIZE THE LOCK RELEASE SYSTEM. LIFT MUST BE RAISED OFF OF LOCK POSITIONS TO ENABLE LOCKS TO BE RELEASED.
- 9. UP BUTTON:
- ALLOWS FLUID TO ENERGIZE THE LIFTING CYLINDERS.

10. FORE CONTROL BUTTON:

• WITH LEVEL CONTROL SWITCH IN THE MANUAL MODE, ALLOWS OPERATOR TO MANUALLY ADJUST THE FORE END OF THE LIFT UP WHEN IT IS LOW. (INOPERABLE WHEN THE LEVEL CONTROL SWITCH IS IN THE AUTO MODE)

11. FORE LEVEL INDICATOR LIGHT:

 WITH THE LEVEL CONTROL SWITCH IN AUTO, WILL ILLUMINATE WHEN THE FORE END OF LIFT IS LOW. (WHEN THE LEVEL CONTROL SWITCH IS IN THE MANUAL MODE, LIGHT ILLUMINATES WHEN FORE BUTTON PRESSED)

12. DOWN BUTTON:

 WHEN USED IN CONJUNCTION WITH THE LOCK RELEASE BUTTON, ALLOWS THE LOWERING OF THE LIFTING CYLINDERS.
 WHEN USED WITHOUT THE LOCK RELEASE BUTTON, ALLOWS LIFT TO BE LOWERED ON MECHANICAL LOCKS.

13. AFT CONTROL BUTTON:

• WITH LEVEL CONTROL SWITCH IN MANUAL, ALLOWS OPERATOR TO MANUALLY ADJUST THE AFT END OF THE LIFT UP WHEN IT IS LOW. (INOPERABLE WHEN THE LEVEL CONTROL SWITCH IS IN THE AUTO MODE)

14. AFT LEVEL INDICATOR LIGHT:

• WITH THE LEVEL CONTROL SWITCH IN AUTO, WILL ILLUMINATE WHEN THE AFT END OF LIFT IS LOW.(WHEN THE LEVEL CONTROL SWITCH IS IN THE MANUAL MODE, LIGHT ILLUMINATES WHEN AFT BUTTON PRESSED)

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 PROBABLE PROBLEM AREA. INSPECT THE FLOOR AND THE ANCHORING FASTENERS AS WELL. REPORT ANY OUESTIONABLE 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

OPERATION

- PERFORM PRE-OPERATION CHECK LIST ITEM BY ITEM.
- POSITION THE VEHICLE ONTO THE UNIT SO THAT ALL TIRES ARE SECURELY ON THE TRACKS. REFER TO "LIFTING IT RIGHT" MANUAL AND ANSI/SAE J2184-OCT92 FOR VEHICLE LIFT POINTS AND PROPER STANDARD LIFTING PRACTICES.
- CENTER THE VEHICLE SO THAT THE WEIGHT IS DISTRIBUTED EVENLY FORE AND AFT. THIS CAN BE VERIFIED BY MONITORING THE PRESSURE GAUGES ON THE CONTROL CONSOLE PANEL. THE READINGS WILL BE THE SAME OR WITHIN 300 P.S.I.
- PLACE THE WHEEL CHOCKS IN A POSITION SO THAT THE VEHICLE WILL BE SECURE ON THE UNIT.

TO RAISE

- TURN ON THE POWER UNIT.
- PRESS THE UP BUTTON.
- RAISE VEHICLE TO THE DESIRED WORKING HEIGHT.
- LOWER THE UNIT ONTO THE SAFETIES BY PRESSING THE DOWN BUTTON.

TO LOWER

- INSPECT THE LIFTING AREA TO INSURE THAT ALL PERSONNEL AND DEBRIS HAVE BEEN CLEARED FROM THE LIFTING AREA.
- PRESS THE UP BUTTON.
- RAISE UNIT APPROXIMATELY THREE INCHES. RELEASE THE UP BUTTON. PRESS THE LOCK RELEASE BUTTON AND HOLD FOR 5 SECONDS. MAINTAIN THE LOCK RELEASE BUTTON AND PRESS THE DOWN BUTTON.
- LOWER UNIT TO THE DESIRED WORKING HEIGHT. RELEASE THE LOCK RELEASE BUTTON.
- REPEATEDLY PRESS THE DOWN BUTTON UNTIL THE PRESSURE GAUGES ON THE CONTROL CONSOLE PANEL READ ZERO. IF ONE GAUGE DOES NOT ZERO, PRESS THE DOWN SETTLE SWITCH AND DOWN BUTTON SIMULTANEOUSLY UNTIL BOTH GAUGES READ ZERO.
- IF WORK IS COMPLETE, CONTINUE LOWERING UNIT TO FLOOR AND ZERO GAUGES AS STATED PREVIOUSLY.

NOTE

• IF THE UNIT DOES NOT LOWER, EITHER THE LIFT WAS NOT RAISED HIGH ENOUGH OFF OF THE LOCKS, OR THE LOCK RELEASE PUSH BUTTON WAS PROBABLY NOT DEPRESSED. REPEAT STEPS ABOVE TO LOWER. REMEMBER, THE LOCK RELEASE BUTTON MUST BE DEPRESSED THROUGHOUT THIS OPERATIONAL SEQUENCE UNTIL DESIRED ELEVATION IS ACHIEVED.

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, SAND, WATER, ETC.

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.
- INSPECT ANCHOR CONDITIONS FOR ANY POSSIBLE CORROSION AND INSPECT THE FLOOR CONDITION FOR ANY SIGNS OF FATIGUE.

• CLEAN AND LUBRICATE CHAINS WITH A LIGHT CHAIN LUBRICANT. (DO NOT USE HEAVY GREASE) REMOVE CAP IN CENTERS OF CROSSRAILS TO VISUALLY INSPECT CHAINS THAT ARE ROUTED THROUGH CROSSRAILS. ALSO, REMOVE COVERS FROM CARRIAGES TO VISUALLY INSPECT CHAIN AT BEARING LOCATIONS. REFER TO CHAIN INSPECTION PROCEDURE ON FOLLOWING PAGE.

SEMI- ANNUAL TRAINING

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

ANNUALLY

- REPLACE AND RE-BLEED THE HYDRAULIC FLUID. ALWAYS USE A CLEAN FUNNEL AND FILTER.
- REPLACE HYDRAULIC FLUID FILTER ELEMENT.
- INSPECT ALL FLANGE BEARINGS FOR UNUSUAL OR EXCESSIVE WEAR.
- PERFORM THE DAILY, WEEKLY, AND MONTHLY MAINTENANCE.
- INSPECT SAFETY LOCKS FOR SMOOTH PIVOT MOTION.

CHAIN INSPECTION - MAINTENANCE PROCEDURES:

The following checks to be performed MONTHLY:

Inspect for contamination.

Visually inspect chain for areas of dirt/debris and any areas showing evidence of rust/corrosion. If dirty, clean chain using a light lubricant (WD-40) - 0.5 oz. per foot by spraying.

Inspect for corrosion.

If excessive rust or corrosion is witnessed, replace chain.

Inspect chain link pins.

Visually inpect link pins for wear on both ends, ensuring that pins retain links. If any links are loose or worn, replace chain.

Inspect chain links.

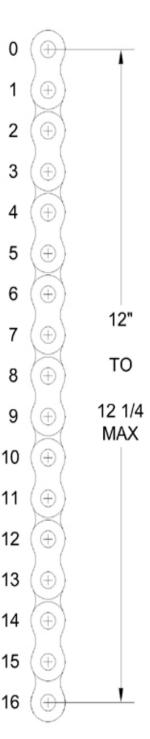
Inspect links for wear on surfaces in contact with yoke rollers. Inspect yoke rollers as well. If excessive wear is found, replace both chain and rollers.

Inspect for excessive chain stretch.

Measure 16 pitches of chain while taut (see picture to right). Dimension should be no more than 12 1/4. If longer, replace chain.

Note: It is a rule-of-thumb that when the chain is replaced, the yoke rollers are replaced as well.

File: Man133.dwg



TROUBLE SHOOTING CHART

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

POSSIBLE CAUSE	PROBLEM SOLUTION
NOT RAISING LO	OAD
LOW HYDRAULIC FLUID	LOWER UNIT COMPLETELY. DISCONNECT POWER SUPPLY. OPEN CONSOLE. VERIFY PROPER FLUID LEVEL AT SIGHT GLASS ON RESERVOIR.
PRESSURE RELIEF ADJUSTMENT	REFER TO POWER UNIT SPECIFICATIONS.
UNIT OVERLOADED	VEHICLE TO HEAVY TO BE RAISED.
WRONG ROTATION OF MOTOR	REVERSE POWER LINES. (HAVE AN ELECTRICIAN SERVICE)
VEHICLE NOT CENTERED ON UNIT	CENTER VEHICLE ON UNIT SO THAT BOTH CONSOLE PRESSURE GAUGES ARE EVEN.
LOW VOLTAGE	HAVE AN ELECTRICIAN SERVICE.
NOT LOWERIN	IG .
LOCKS ENGAGED	DEPRESS LOCK RELEASE BUTTON. (AN AUDIBLE ALARM WILL SOUND) THEN DEPRESS THE UP BUTTON. RAISE UNIT APPROX. 3 INCHES. THEN WHILE STILL DEPRESS THE LOCK RELEASE BUTTON. DEPRESS THE LOWERING BUTTON.
NO AIR PRESSURE TO CONSOLE	VERIFY AIR PRESSURE TO CONSOLE. ENSURE THAT LOCK CYLINDERS ARE RETRACTING WHEN LOCK RELEASE BUTTON IS ENGAGED. ENSURE THAT AIR PRESSURE GAUGE IN CONSOLE IS READING 100 PSI.
OBSTRUCTION UNDER UNIT OR VEHICLE	REMOVE OBSTRUCTION.
FORE / AFT END NOT LOWERING	RAISE LOW END TO EVEN UNIT BEFORE LOWERING. USE THE FORE / AFT BUTTONS.
RAISING OR LOWERING QUESTIONS (IN AUTO POSITION)	
RAISING: UNIT STOPS THEN ONE END RAISES, UNIT BEGINS TO RAISE NORMA	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 EVEN THE UNIT, THEN BEGAN TO RAISE NORMALLY.
LOWERING : UNIT STOPS LOWERING, THEN ONE END RAISES, UNIT BEGINS TO LOWER NORMALLY.	O UNIT IS AUTO-LEVELING. IF THE FORE / AFT END OF THE UNIT IS LOW DURING LOWERING THE UNIT WILL STOP, RAISE THE LOW END TO EVEN THE UNIT, THEN BEGAN TO LOWER NORMALLY.
UNIT CONSTANTLY MAKING AUTO ADJUSTMENTS.	CENTER VEHICLE ON UNIT SO THAT BOTH CONSOLE PRESSURE GAUGES ARE EVEN. OR FLUID LEVEL IN AUTO LEVELER IS EITHER TOO LOW OR TOO HIGH

RAISING OR LOWERING QUESTIONS (IN NORMAL POSITION)	
UNIT RAISING UNEVEN	CENTER VEHICLE ON UNIT SO THAT BOTH CONSOLE PRESSURE GAUGES ARE EVEN.
UNIT LOWERING UNEVEN	CENTER VEHICLE ON UNIT SO THAT BOTH CONSOLE PRESSURE GAUGES ARE EVEN.

TO BE USED IN CONJUNCTION WITH ELECTRICAL SCHEMATIC

TR-33 POWER UNIT SPECS

POWER UNIT #601-300-052 5 HP, 3 PHASE, 60 HZ, 1800 RPM

VOLTAGE	FULL	PRIMARY	SECONDARY	PRIMARY	SECONDARY
(VAC)	LOAD AMPS	FUSE (AMPS)	FUSE (AMPS)	X-FORM WIRING	X-FORM WIRING
208	14.2	1.6	3.2	H1-H2	X1-X4
230	13	1.4	3.2	H1-H2	X1-X4
480	6.2	0.6	3.2	H1-H4	X1-X4
575	5.1	0.6	3.2	H1-H5	X1-X4

- 1. ALL ELECTRICAL EQUIPMENT AND WIRING SHALL CONFORM TO ANSI/NFPA 70, 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, 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.

MODEL:

SERIAL NUM	BER:						
DATE OF INST	TALLATION:						
SERVICE CHART							
DATE	PART REPLACED / SERVICED	SERVICE COMPANY	SERVICED BY				
	MAINTENANCE	CHART					
DATE	MAINTENANCE PERFORMED	SERVICE COMPANY	SERVICED BY				

MOHAWK

MODEL TR-33

FIGURES & DIAGRAMS

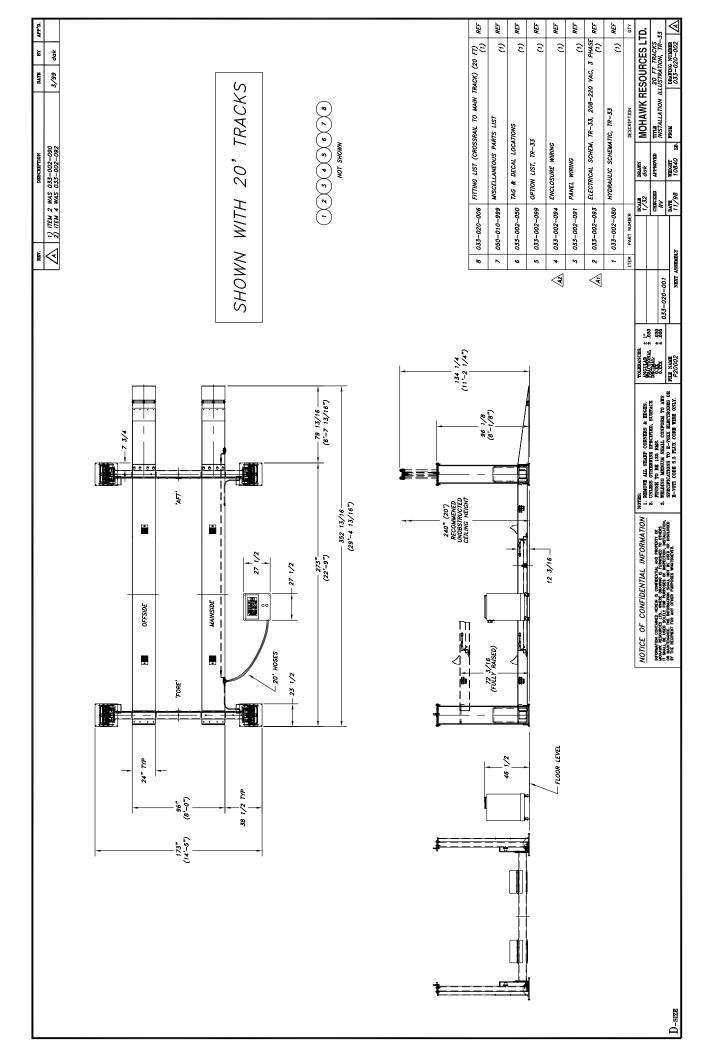


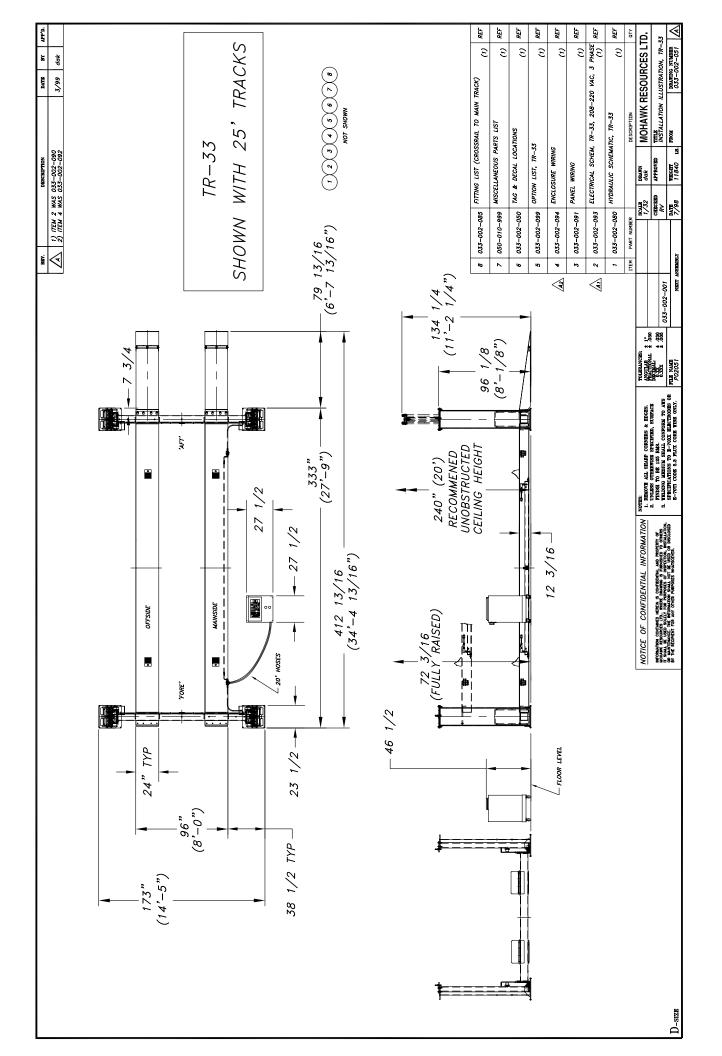
MOHAWK RESOURCES LTD.

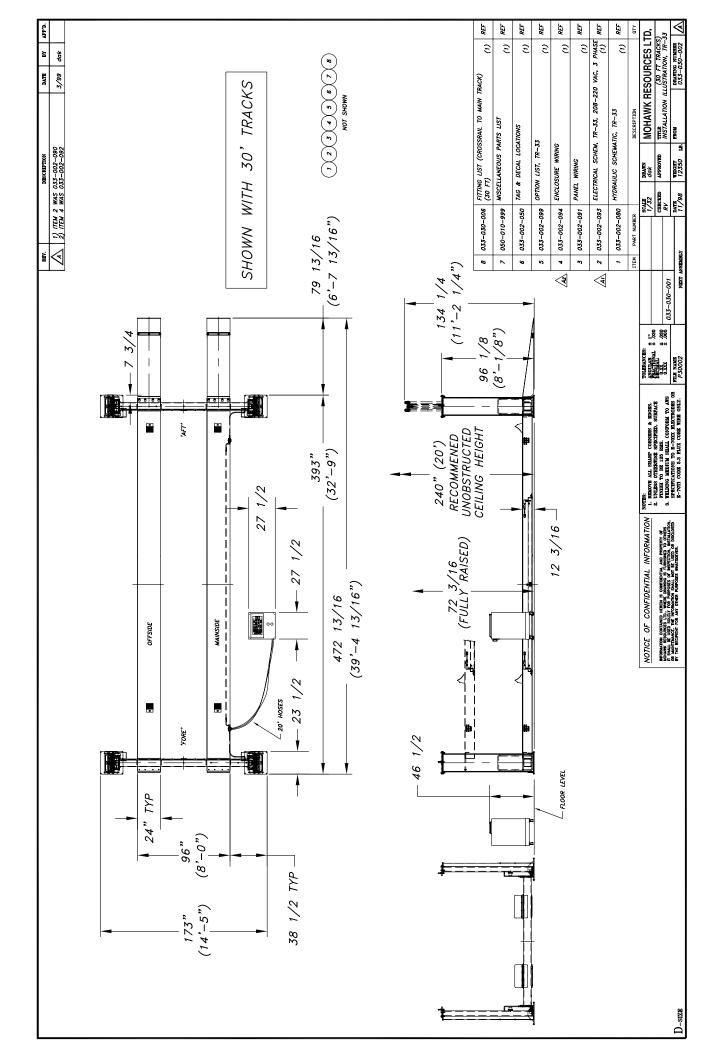
65 VROOMAN AVENUE AMSTERDAM, NY 12010

TOLL FREE: 1-800-833-2006

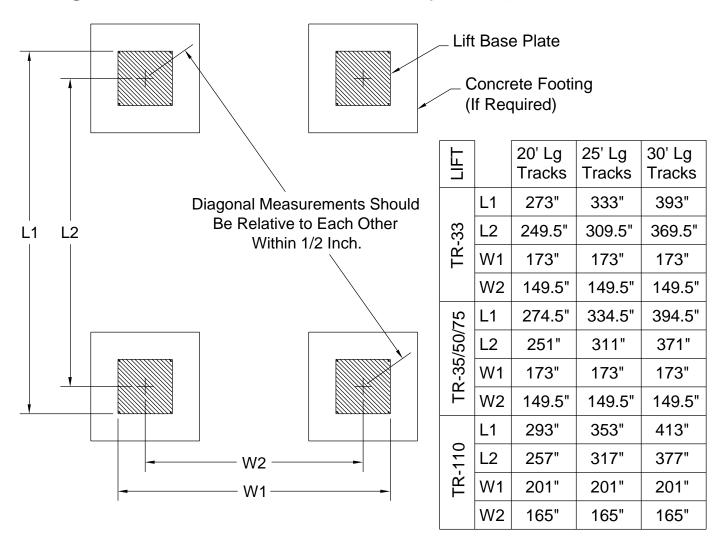
FAX: 1-518-842-1289 LOCAL: 1-518-842-1431







Diagonal Measurements Layout (TR-Series)



FLOOR:

The floor should be flat and level. Concrete should be in good condition with a 4000 psi minimum strength and a five (5") inch minimum thickness. Concrete should be steel reinforced as per good commercial standard practices.

CONCRETE:

All concrete specifications must be carefully followed. Failure to do so may jeopardize life, equipment and property.

IMPORTANT:

DO NOT DRILL mounting holes until the lift has been cycled up and down and is running freely. Insure all safety latches are free and performance is proper and absolute.

FOOTINGS:

Four (4) footings 6 foot x 6 foot x 1 foot deep may be used if pre-existing concrete is of insufficient or questionable strength. These footings must be surrounded by a typical slab of structurally sound concrete with a minimum thickness of four (4") inches. These footings should be tied into the surrounding slab with steel reinforcement.



The Original wej-it Wedge Anchors

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.

SPECIFICATIONS, APPROVALS AND LISTINGS

Түре			
Zinc Plating	ASTM B-633, Type III, SCI		
ICBO-ES	Report #1821		
City of Los Angeles	#RR 24939		
DOT	Please call Customer Service for		
	specific information by state.		
Federal	QQZ-325C, Type II, Class 3		
Specifications	(Clear Chromate added)		
	FFS-325, Group II, Type 4, Class 1		

MAXIMUM TENSILE AND SHEAR CAPACITY FOR STATIC LOADS

		LIMESTONE		Unreinforced Stone Aggregate Concrete						Unreinforced			
		Aggregat	E	Zinc Plated Carbon Steel				Lightweight (Idealite)					
Anchor	Embed-	2000) psi	Embed-	d- 3000 psi 5000 psi 7000 psi		Embed- 5000 psi) psi				
& Hole	ment	Tension	Shear	ment	Tension	Shear	Tension	Shear	Tension	Shear	ment	Tension	Shear
Size	(in)	(lbs)	(lbs)	(in)	(lbs)	(lbs)	(lbs)	(lbs)	(lbs)	(lbs)	(in)	(lbs)	(lbs)
1/4	1 1/8	1132	1211	1 1/8	1320	1751	1760	2316	2464	2494	1 1/2	1861	1947
1/4	1 3/4	1256	1211	1 1/2	1856	1751	2473	2316	3462	2494	•	•	•
5/16	1 1/4	1308	1210	1 1/4	2057	1839	2742	2530	3939	3439	1 1/2	2493	3064
5/16	2	1181	1210	1 3/4	2389	1839	3185	2530	4459	3439	•	•	•
3/8	1 1/4	994	1223	1 1/2	2876	4286	3834	5213	5368	5658	1 3/4	3125	4289
3/8	4	1728	1223	4	3488	4286	4650	5213	6510	5658	•	•	•
1/2	1 3/4	1542	3009	2 1/4	3473	7138	5789	10748	8105	11550	2 1/4	4778	9833
1/2	6	2695	3009	5	4809	7138	8015	10748	11221	11550	•	•	•
5/8	•	•	•	3 1/2	7582	10719	12636	15583	17690	16700	2 1/2	6455	12500
5/8	•	•	•	4 3/4	9179	10719	15299	15583	21419	16700	•	•	•
3/4	•	•	•	3	11579	15537	19299	21000	27019	23103	3 1/2	17293	19050
3/4	•	•	•	7	15444	15537	25740	21000	36036	23103	•	•	•
7/8	•	•	•	4 1/2	15266	•	25444	25099	33622	28718	•	•	•
7/8	•	•	•	7	16992	•	28320	25099	39648	28718	•	•	•
1	•	•	•	5 1/2	16351	•	27252	33083	38153	35700	4 1/2	21616	31666
1	•	•	•	7	17837	•	29728	33083	41619	35700	•	•	•
Source		1					2					2	

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

EDGE DISTANCE AND SPACING REQUIREMENTS

Embedment (E) in	Spacing	Edge Distance		
Anchor Diameters (d)				
E < 6d (shallow)	3.50E	1.75E		
$6d \le E \le 8d \text{ (standard)}$	2.00E	1.00E		
8d < E (deep)	1.50E	0.75E		

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.

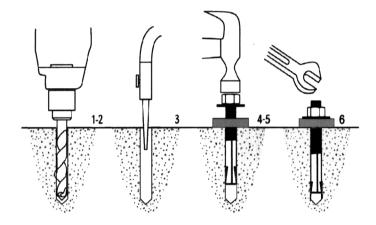


ORDER INFORMATION

	Anchor	Minimum	Thread	Quantity
Catalog	Diameter &	Embed-	Length	Box/
Number	Length (in)	ment (in)	(in)	Carto
1413	1/4 x 1 3/4	1	1/2	100/600
1423	1/4 x 2 3/4	1	1/2	100/600
1430	1/4 x 3	1	1/2	100/600
5620	5/16 x 2	1 1/4	5/8	100/600
5630	5/16 x 3	1 1/4	5/8	100/600
3820	3/8 x 2	1 1/2	3/4	100/600
3823	3/8 x 2 3/4	1 1/2	3/4	100/600
3832	3/8 x 3 1/2	1 1/2	3/4	50/300
3850	3/8 x 5	1 1/2	3/4	50/300
3860	3/8 x 6	1 1/2	3/4	50/300
1223	1/2 x 2 3/4	2	1	50/300
1232	1/2 x 3 1/2	2	1	50/300
1250	1/2 x 5	2	1	25/150
1260	1/2 x 6	2	1	25/150
1270	1/2 x 7	2	1	25/150
5832	5/8 x 3 1/2	3	1 1/4	25/150
5842	5/8 x 4 1/2	3	1 1/4	25/150
5850	5/8 x 5	3	1 1/4	20/120
5860	5/8 x 6	3	1 1/4	15/90
5870	5/8 x 7	3	1 1/4	15/90
3440	3/4 x 4	3	1 1/2	18/108
3450	3/4 x 5	3	1 1/2	12/72
3460	3/4 x 6	3	1 1/2	12/72
3470	3/4 x 7	3	1 1/2	10/60
3482	3/4 x 8 1/2	3	1 1/2	10/30
3410	3/4 x 10	3	1 1/2	10/30
7880	7/8 x 8	4 1/2	1 3/4	10/30
7810	7/8 x 10	4 1/2	1 3/4	10/30
7812	7/8 x 12	4 1/2	1 3/4	5/15
1080	1 x 8	5 1/2	2	10/30
1010	1 x 10	5 1/2	2	5/15
1012	1 x 12	5 1/2	2	5/15

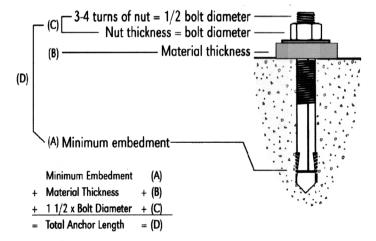
INSTALLATION INSTRUCTIONS - MOHAWK LIFTS

- Drill the hole perpendicular to the work surface.* To assure full holding power, do not ream the hole or allow the drill to wobble.
- 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.
- Clean the hole using compressed air and a nylon brush. A clean hole is necessary for proper performance.
- Turn the nut on to the anchor until contact is made with the top of the spears and the bottom of the washer. Insert anchor into hole.
- Tap anchor into hole with a 2 ½ lb. hammer until the washer rests solidly against fixture.
- Tighten the nut to 175 Ft. Lbs. maximum torque and not less than 3 full turns, but not more than 5 turns past the hand tight position. (Use of an Impact wrench for Installation of anchor is not recommended)



^{*} 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.

LENGTH SELECTION GUIDE

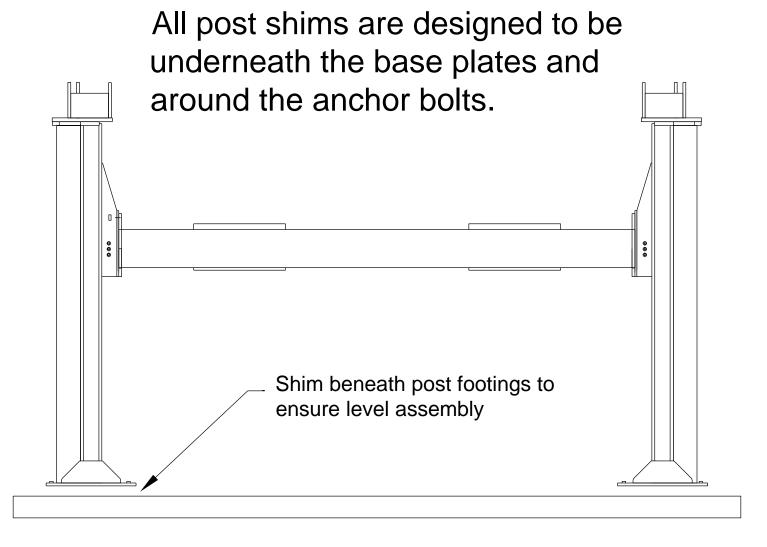


POST SHIMMING





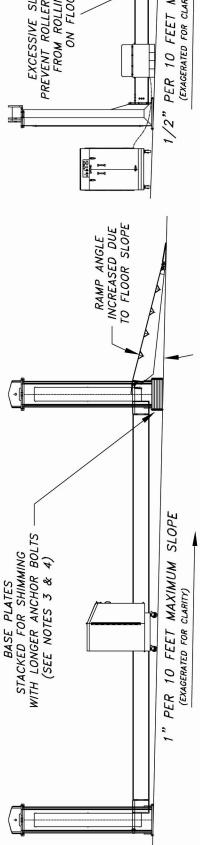


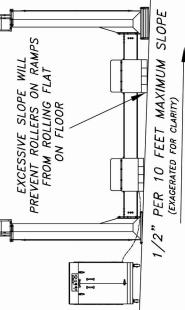


SHIMMING GUIDELINES TR-SERIES FLOOR SLOPE &

IMPORTANT NOTICE

SINCE EVERY OWNER'S SHOP FLOOR IS DIFFERENT, REVIEW THE FOLLOWING GUIDELINES TO PROPERLY LEVEL THIS LIFT. SHIMMING AND/OR FLOOR MODIFICATIONS MAY BE REQUIRED TO LEVEL LIFT. THIS LIFT WILL ONLY LIFT AS LEVEL AS THE FLOOR IT IS LOCATED ON.



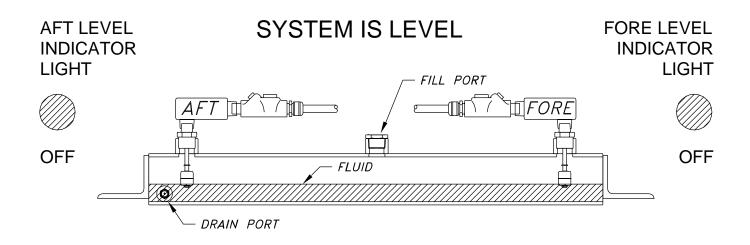


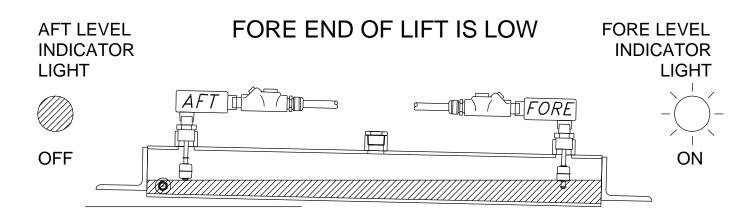
RECOMMENDED GUIDELINES:

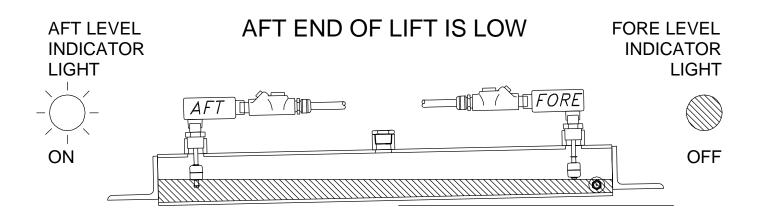
- 1. MAXIMUM LENGTHWISE SLOPE IS 1" PER 10' MAXIMUM WIDTHWISE SLOPE IS 1/2" PER 10' FOR SLOPES GREATER THAN THIS, IT IS RECOMMENDED TO POUR A NEW SLAB FOR THIS LIFT.
- FOR SHIMMING IN EXCESS OF 2", IT IS RECOMMENDED TO POUR NEW SLABS FOR POSTS. ENSURE THAT THE SURFACE OF THESE SLABS ARE LEVEL WITH RESPECT TO EACH OTHER. S
- USE 1/2" BASE PLATES FOR SHIMMING OF 1/2" OR GREATER UNDER POSTS. STACK BASE PLATES AS NEEDED. (CONTACT MOHAWK FOR EXTRA BASE PLATES FOR SHIMMING) М,
- FOR SHIMMING IN EXCESS OF 1/2", LONGER WEJ-IT ANCHORS ARE REQUIRED. (CONTACT MOHAWK FOR LONGER ANCHORS PER YOUR SPECIFIC SHIMMING SITUATION) 4.
- 5. FOR SHIMMING LESS THAN 1/2", USE PLASTIC SHIMS UNDER LOWEST BASE PLATE.
- NOTICE THAT SHIMMING THE APPROACH (RAMP) END OF THE LIFT WILL INCREASE THE RAMP ANGLE SLIGHTLY. 9

REV: 12/99 FILE: MAN1341

TRACK LEVELER FUNCTIONS

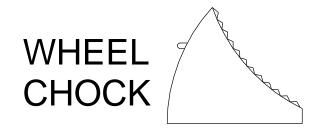


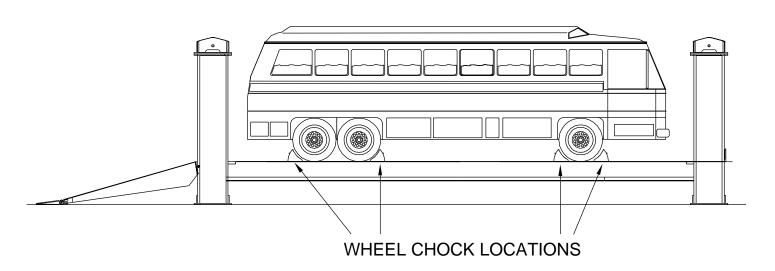


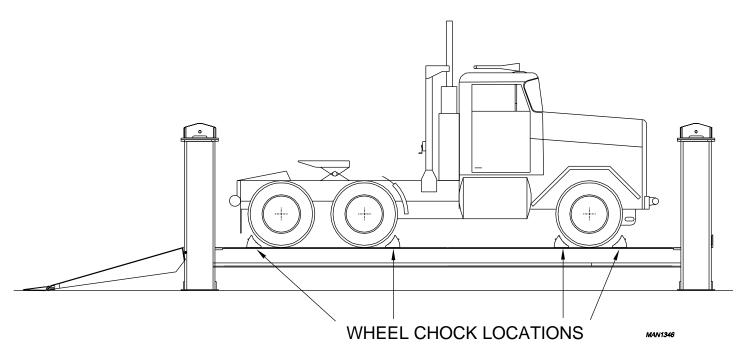


USE ANTI-FREEZE AS FLUID REPLACEMENT ONLY!!

WHEEL CHOCK PLACEMENT







MOHAWK

MODEL TR-33

ELECTRICAL/HYDRAULIC SCHEMATICS

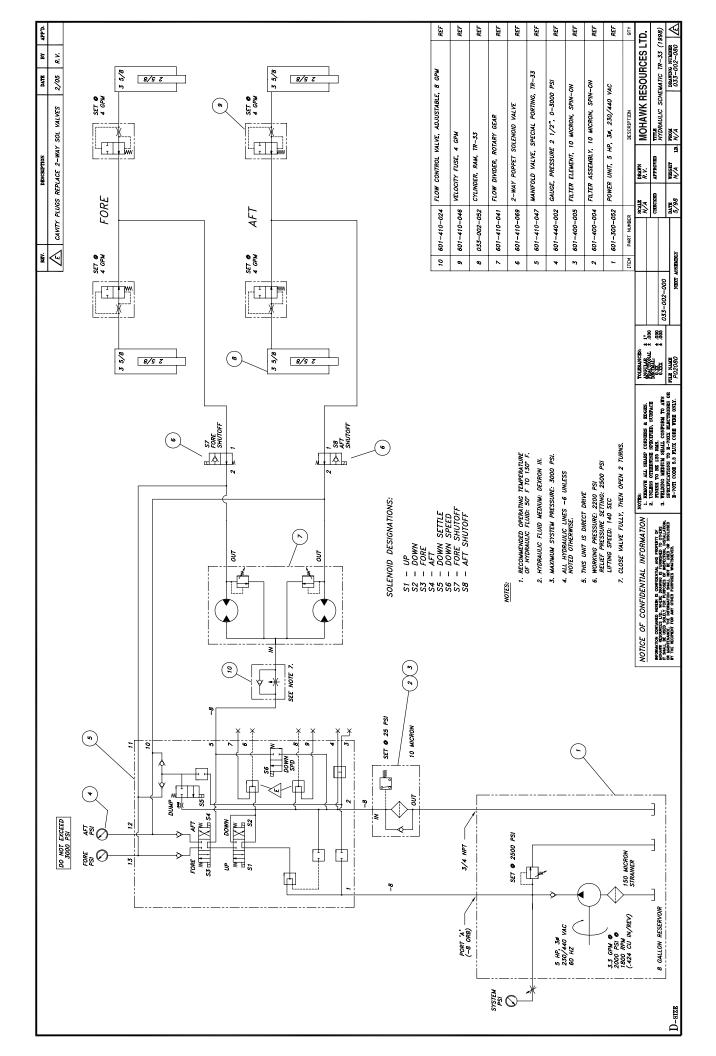


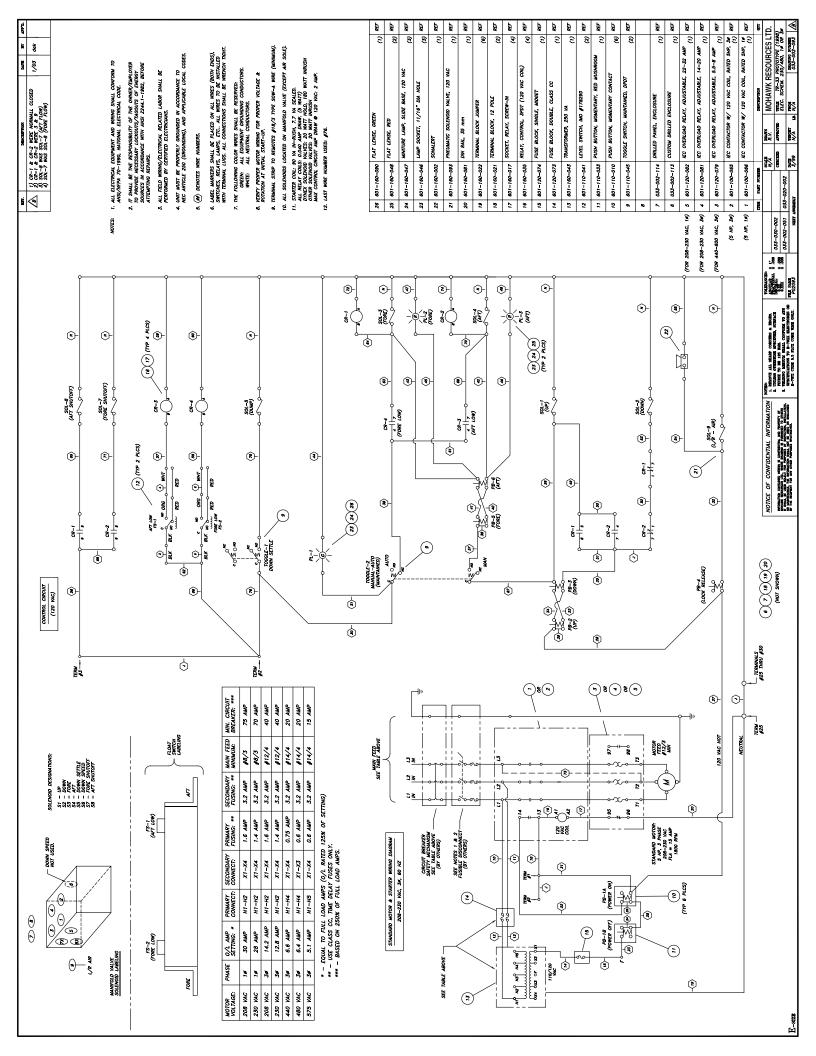
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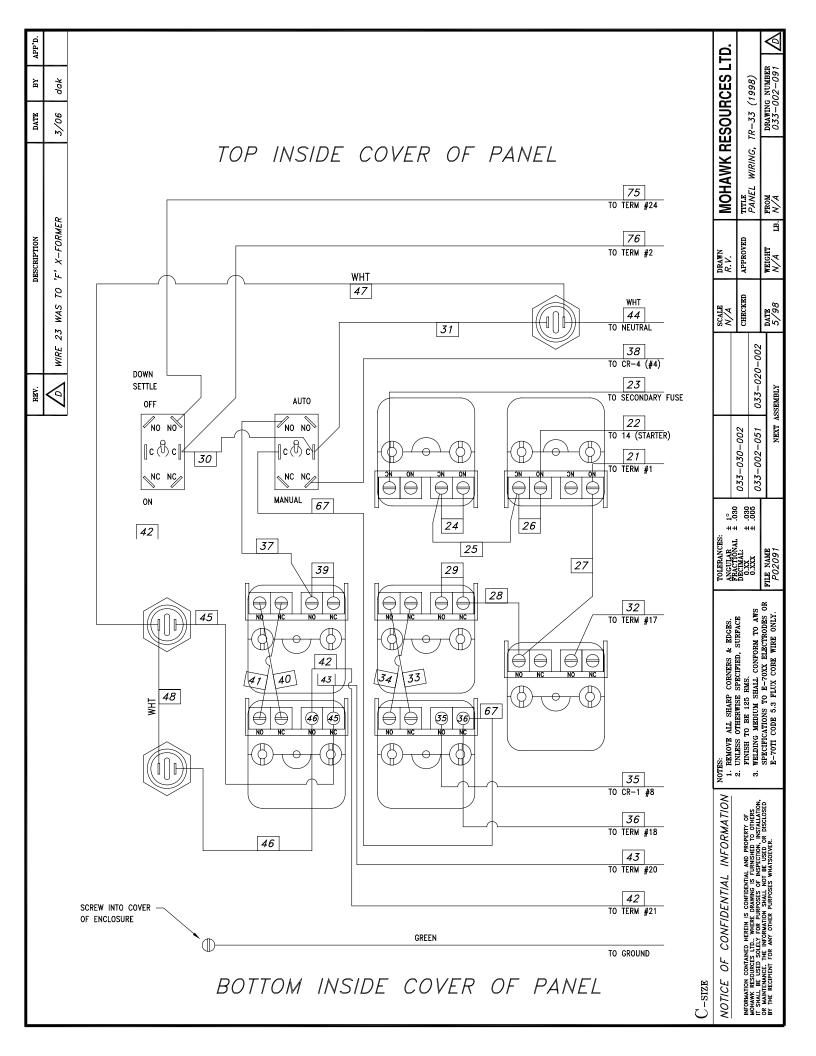
65 VROOMAN AVENUE AMSTERDAM, NY 12010

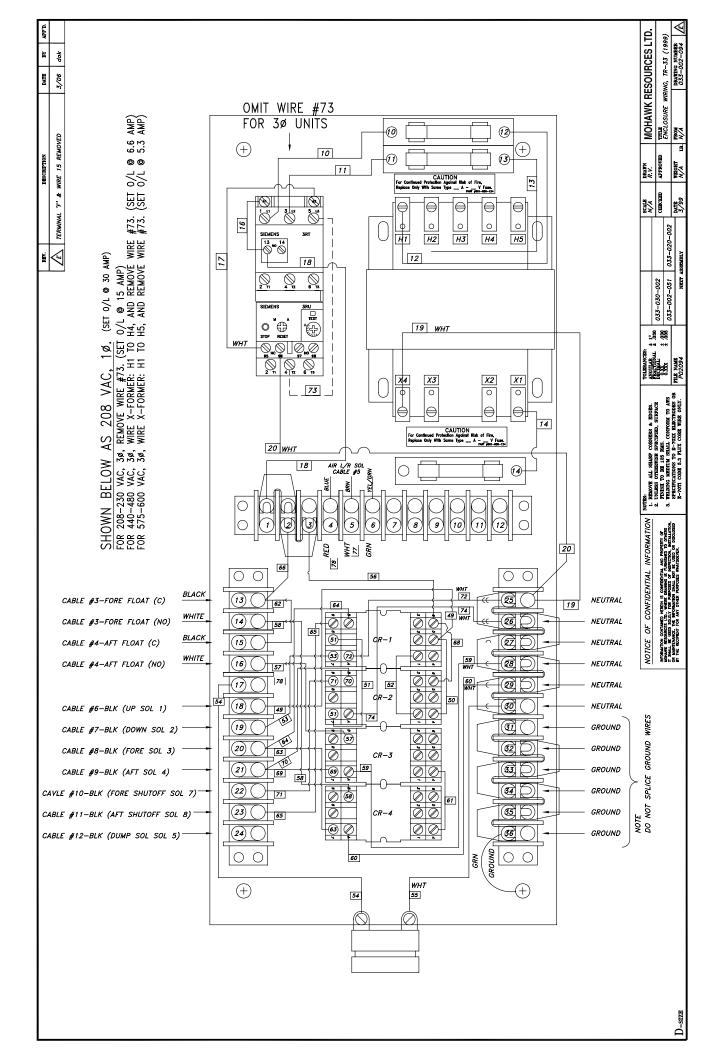
TOLL FREE: 1-800-833-2006

FAX: 1-518-842-1289 LOCAL: 1-518-842-1431









MOHAWK

MODEL TR-33

PARTS DRAWINGS

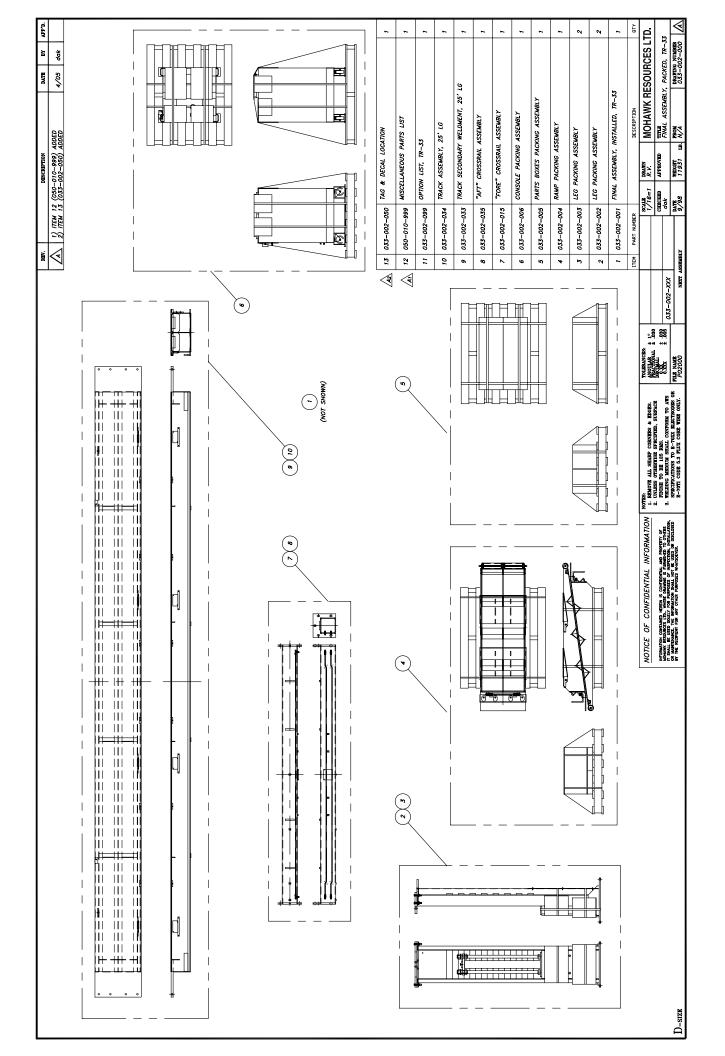


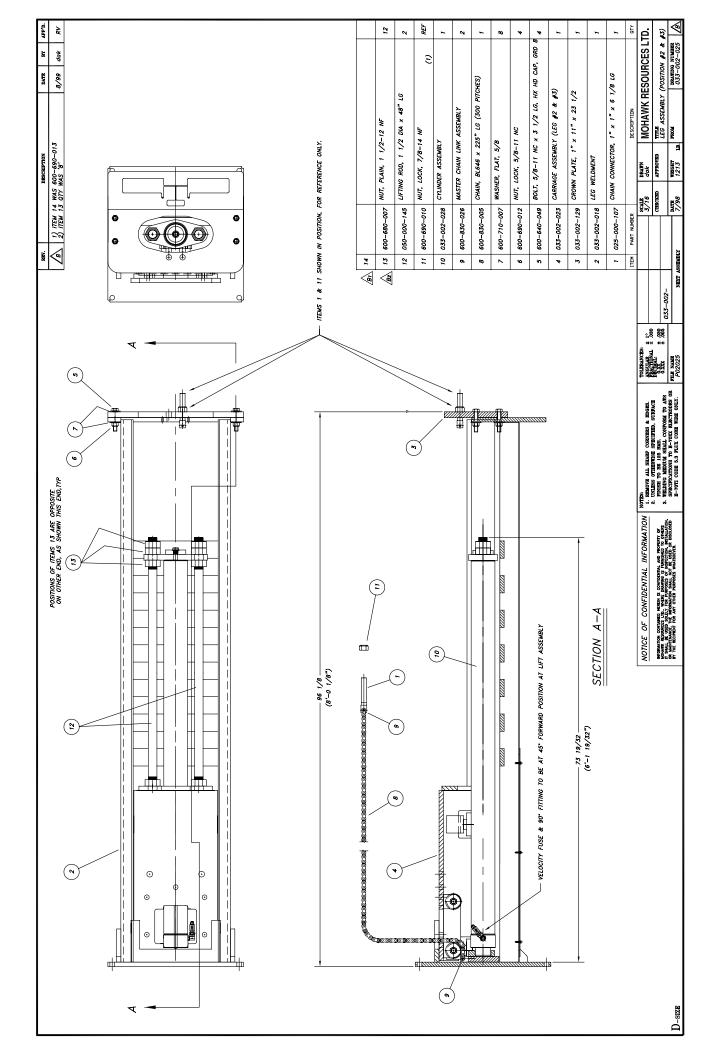
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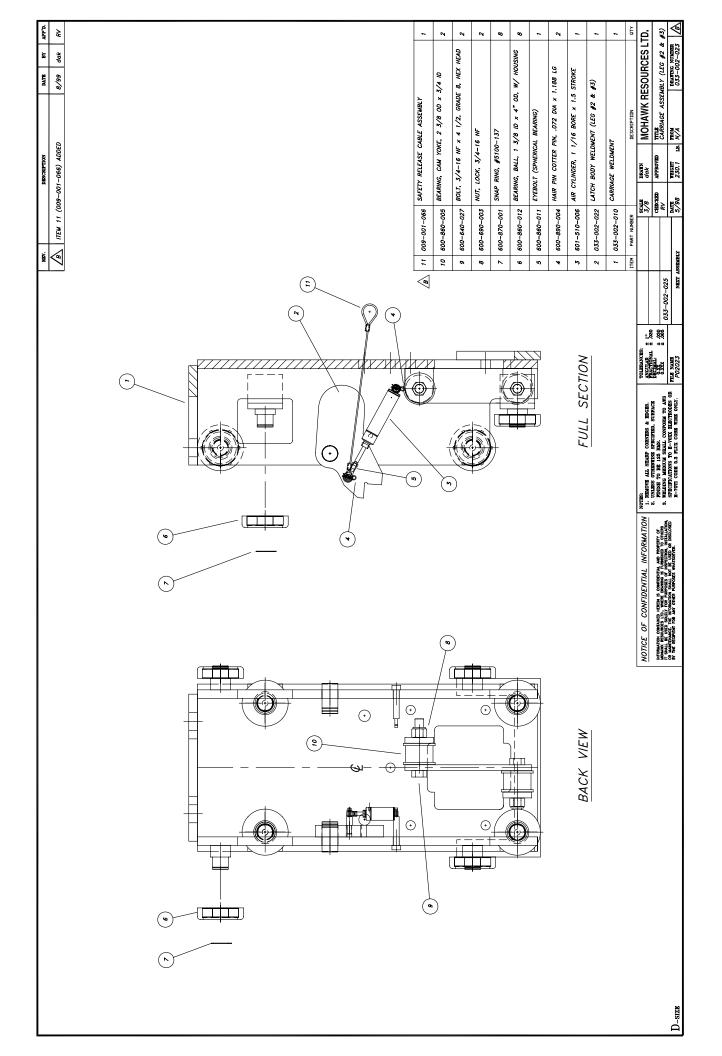
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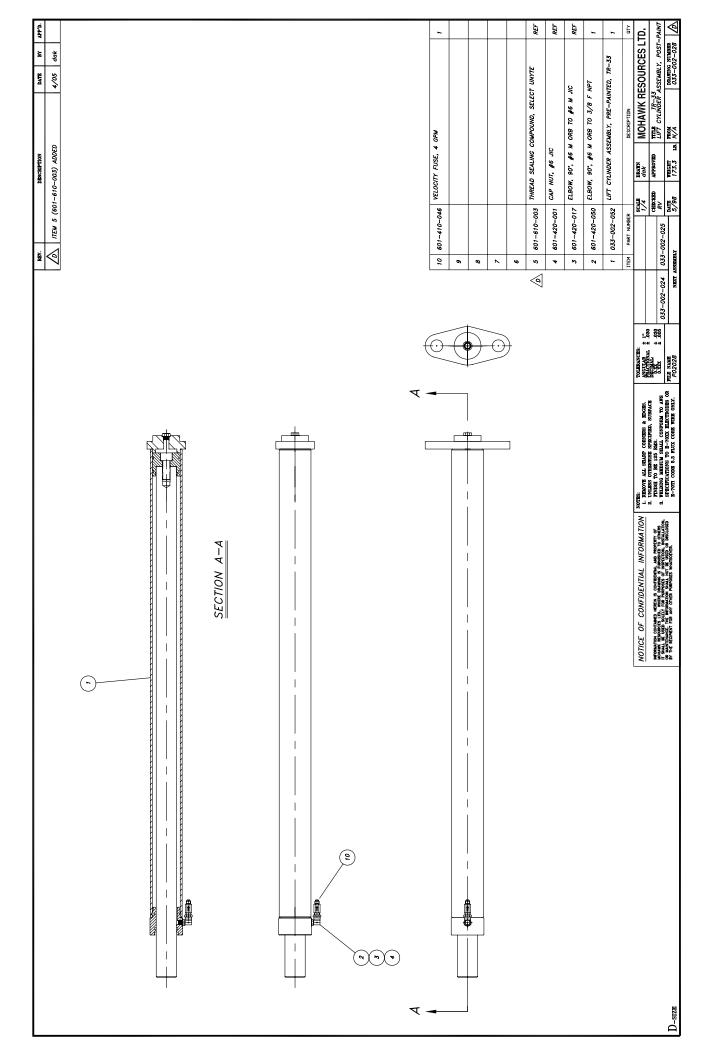
TOLL FREE: 1-800-833-2006

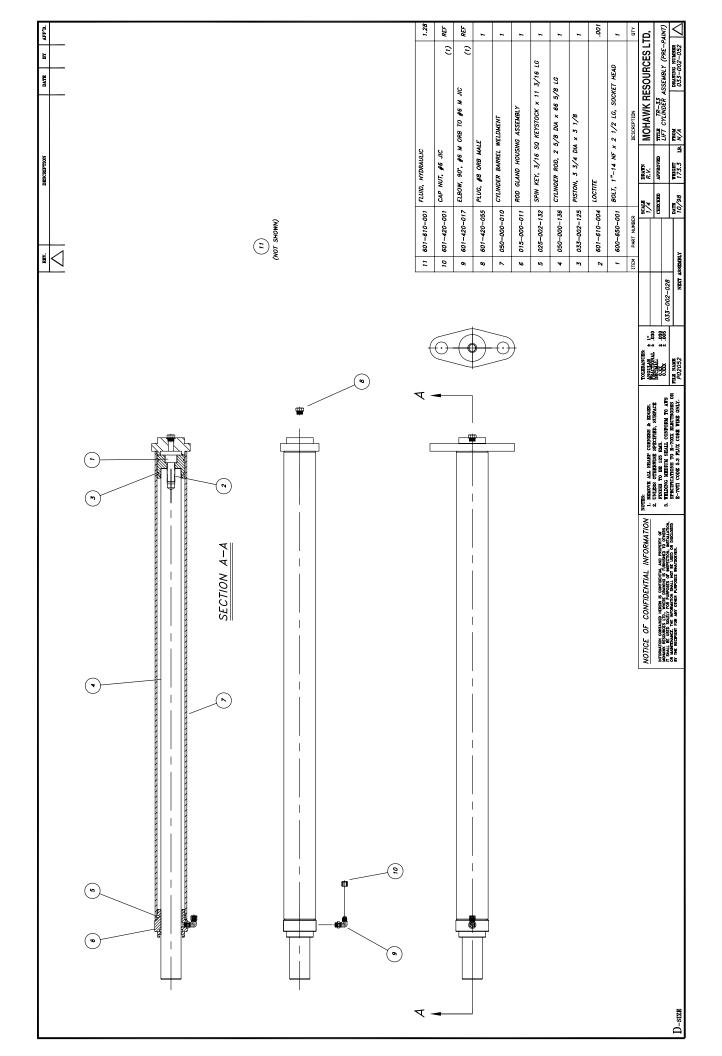
FAX: 1-518-842-1289 LOCAL: 1-518-842-1431

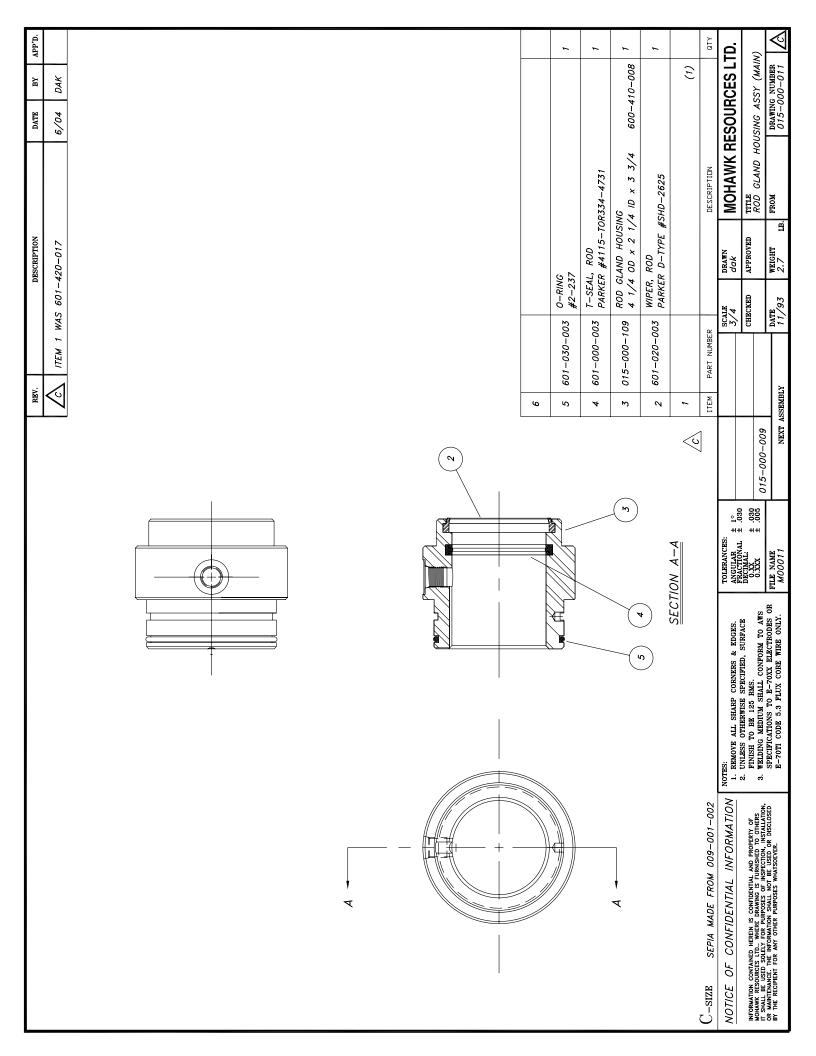


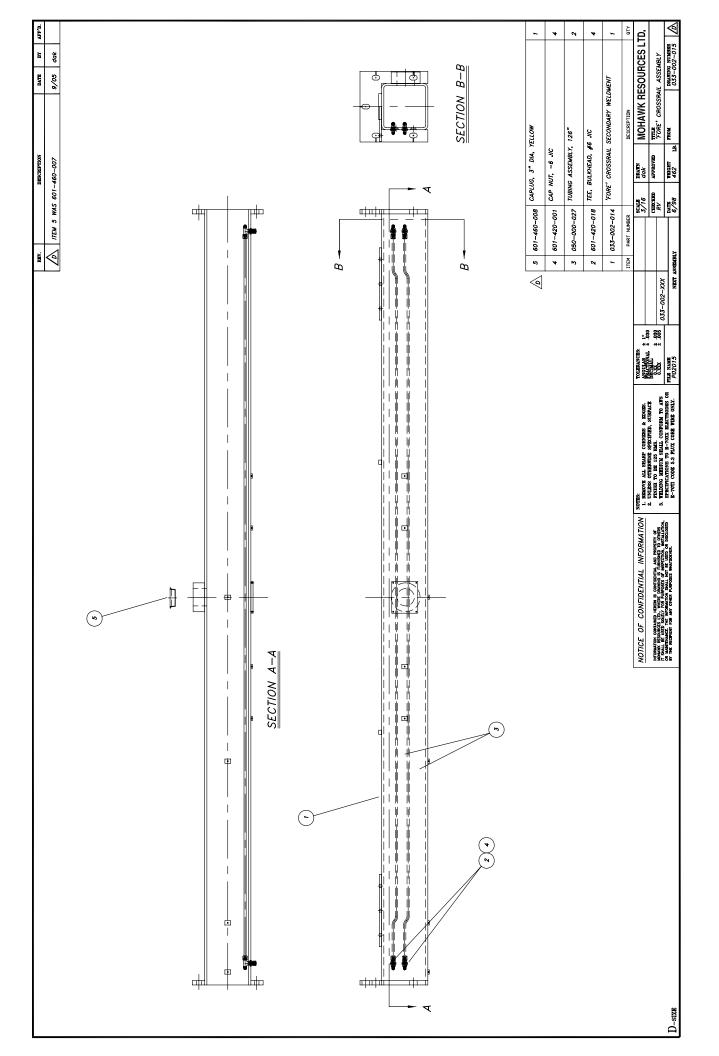


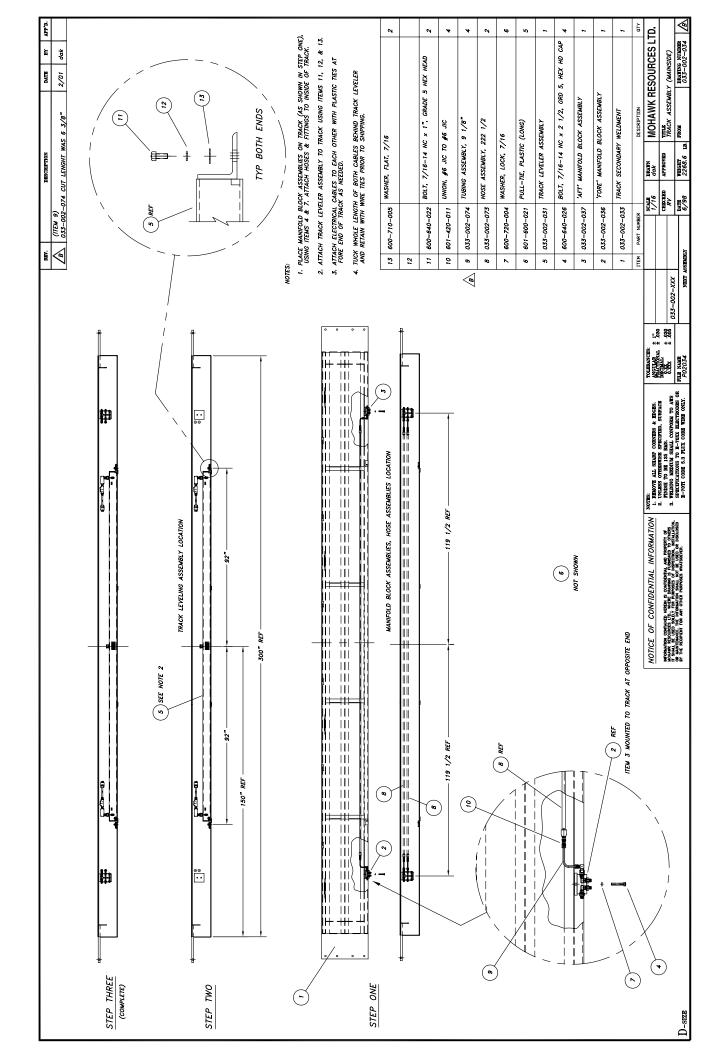


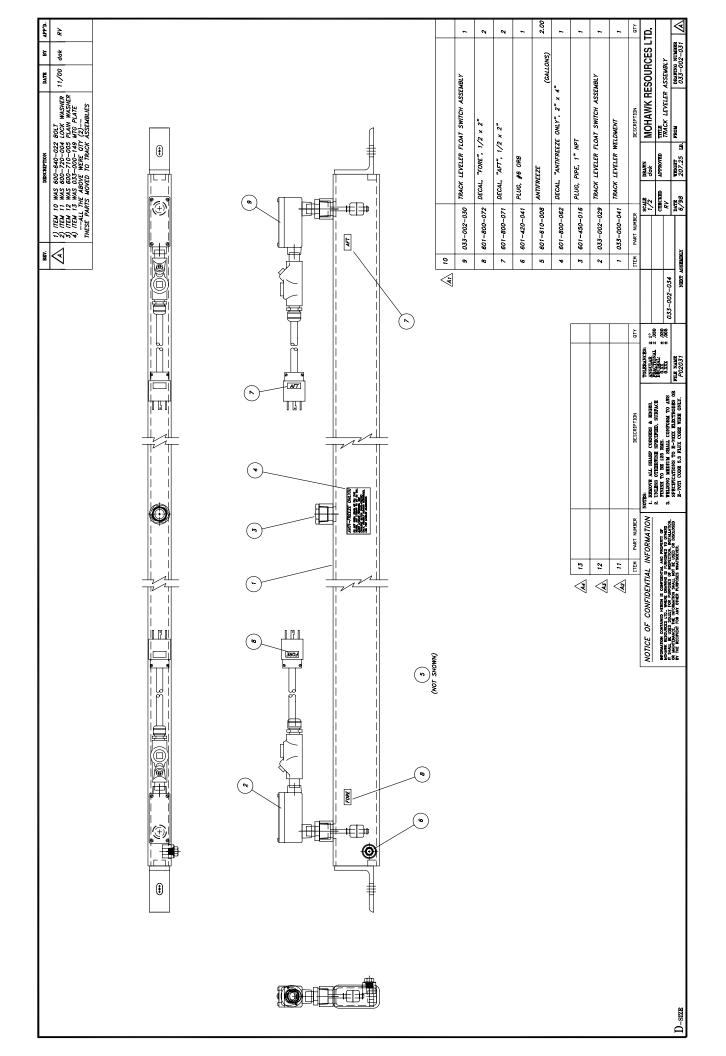


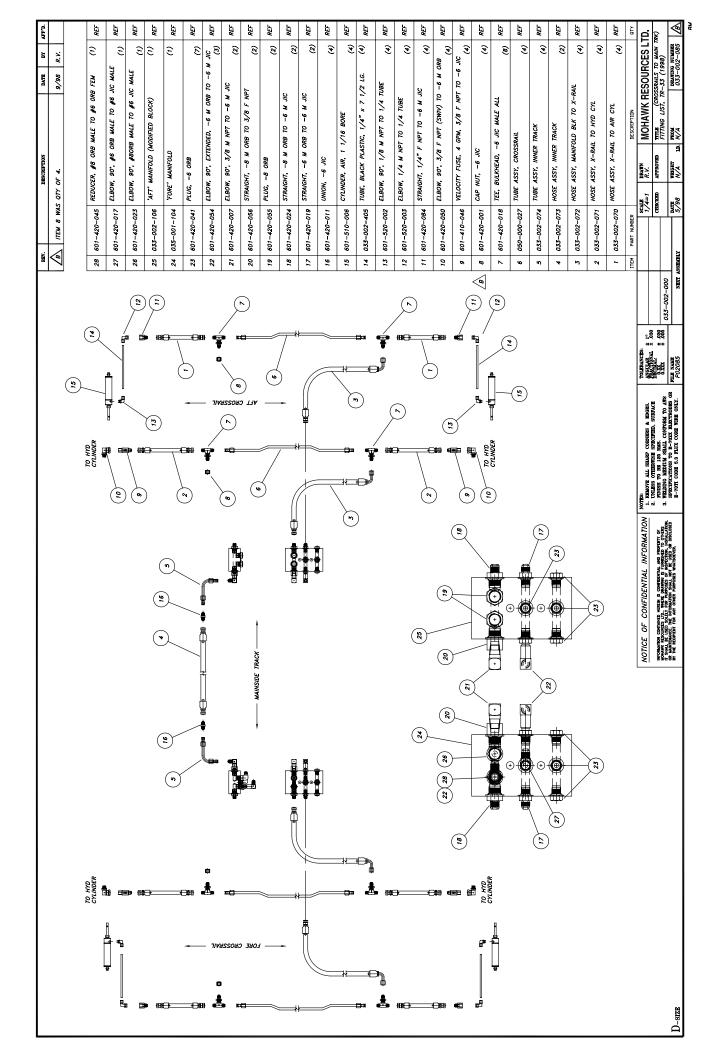


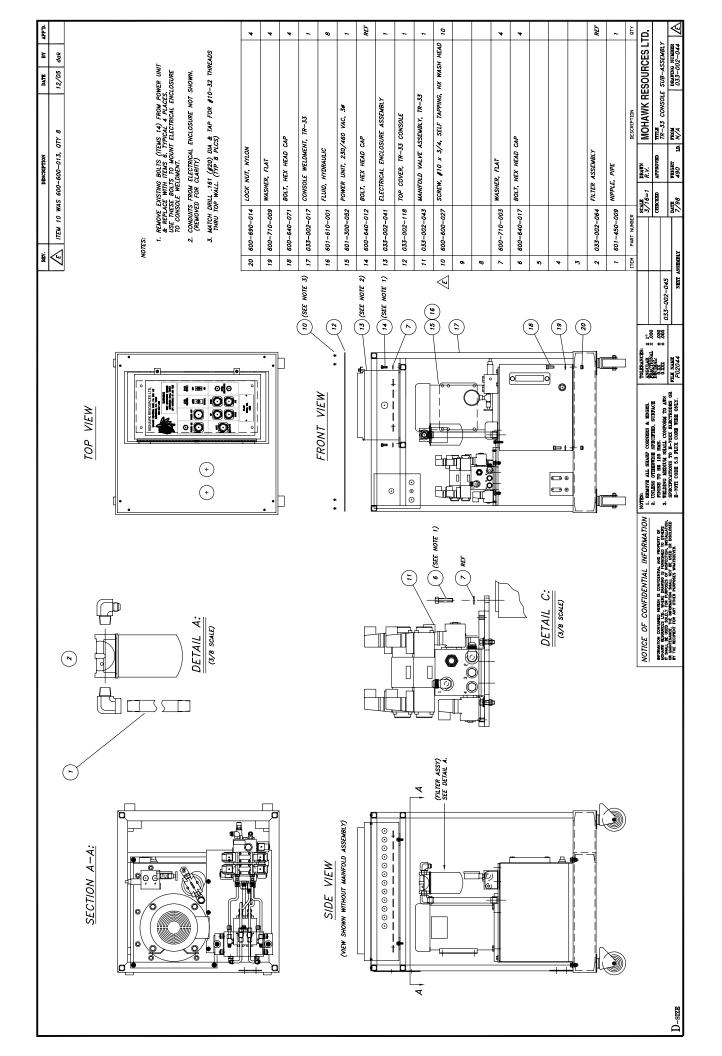


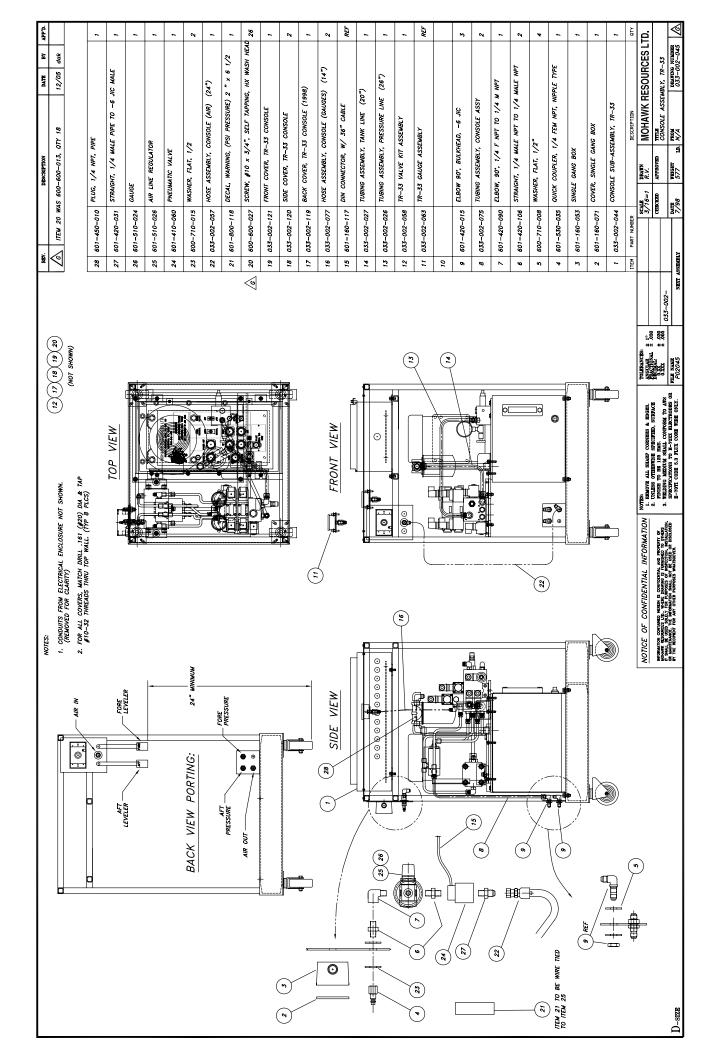


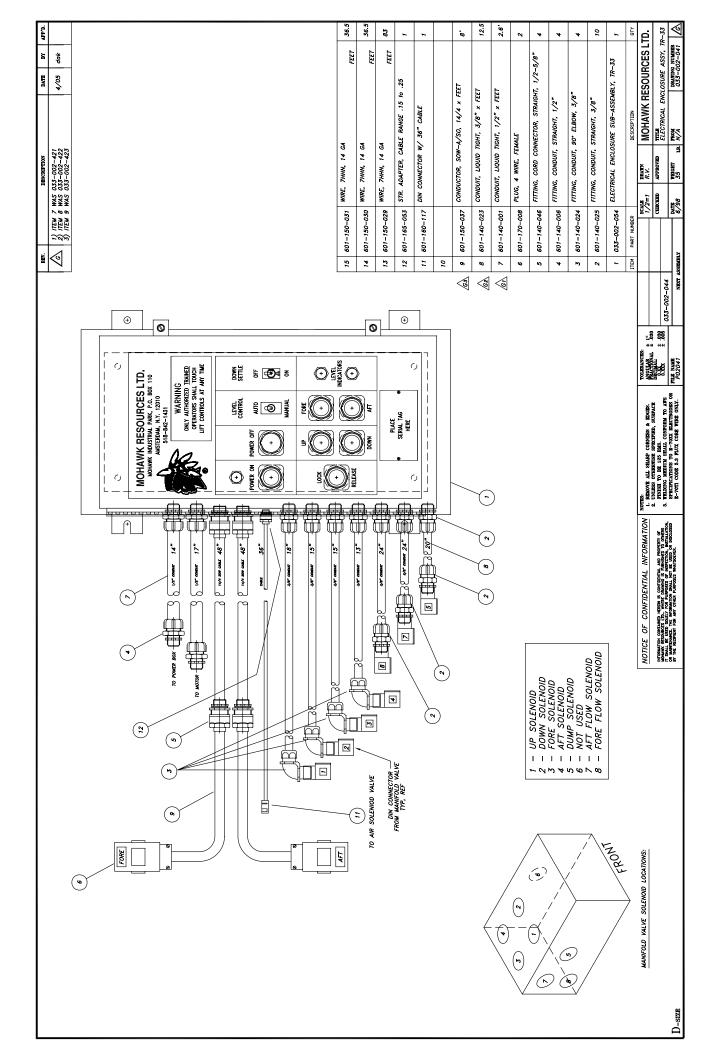


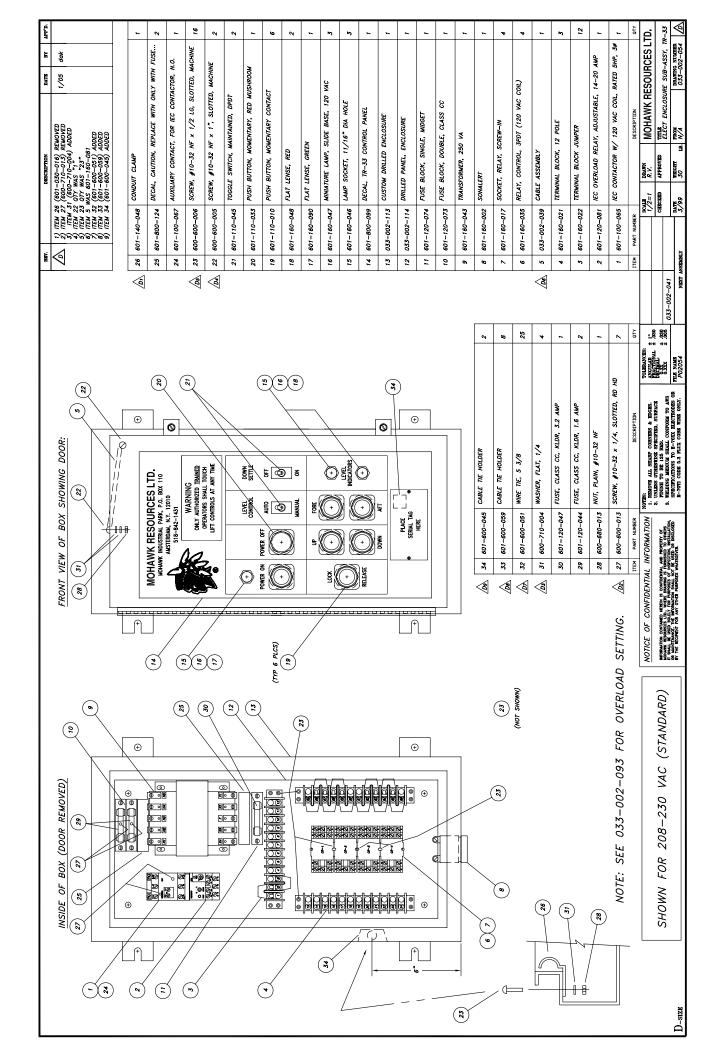


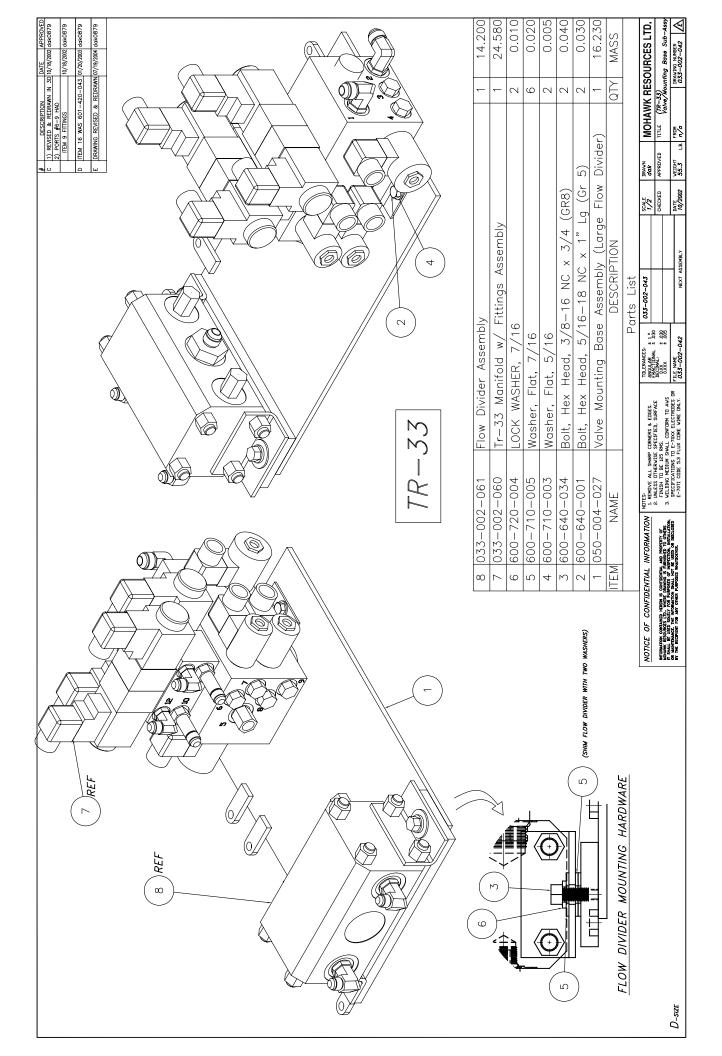


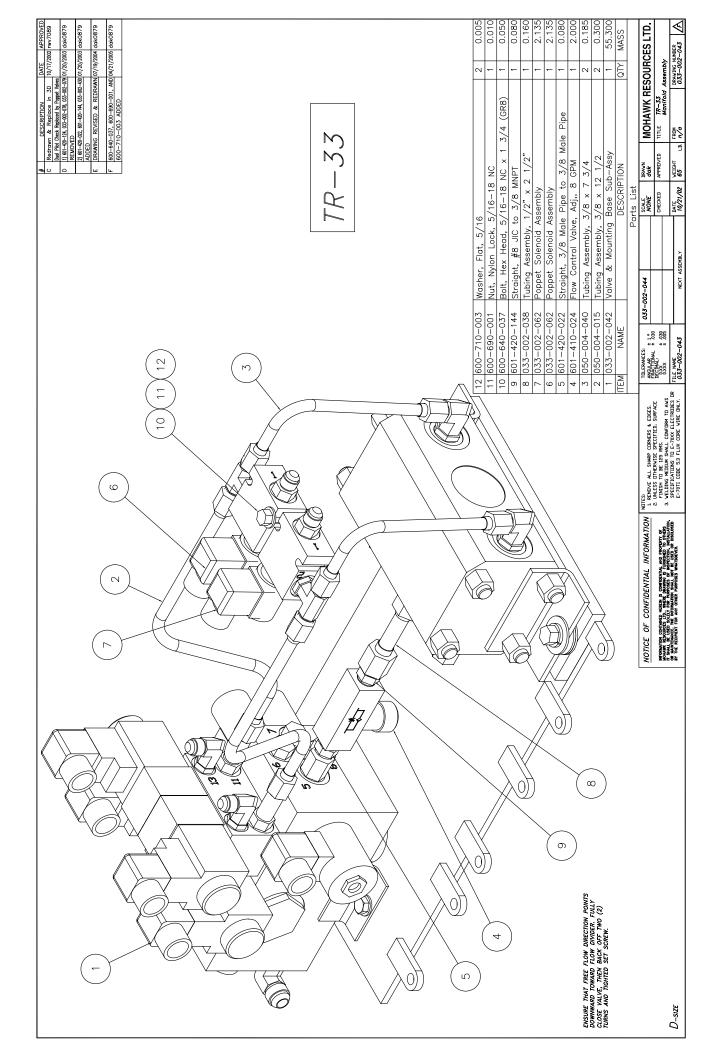


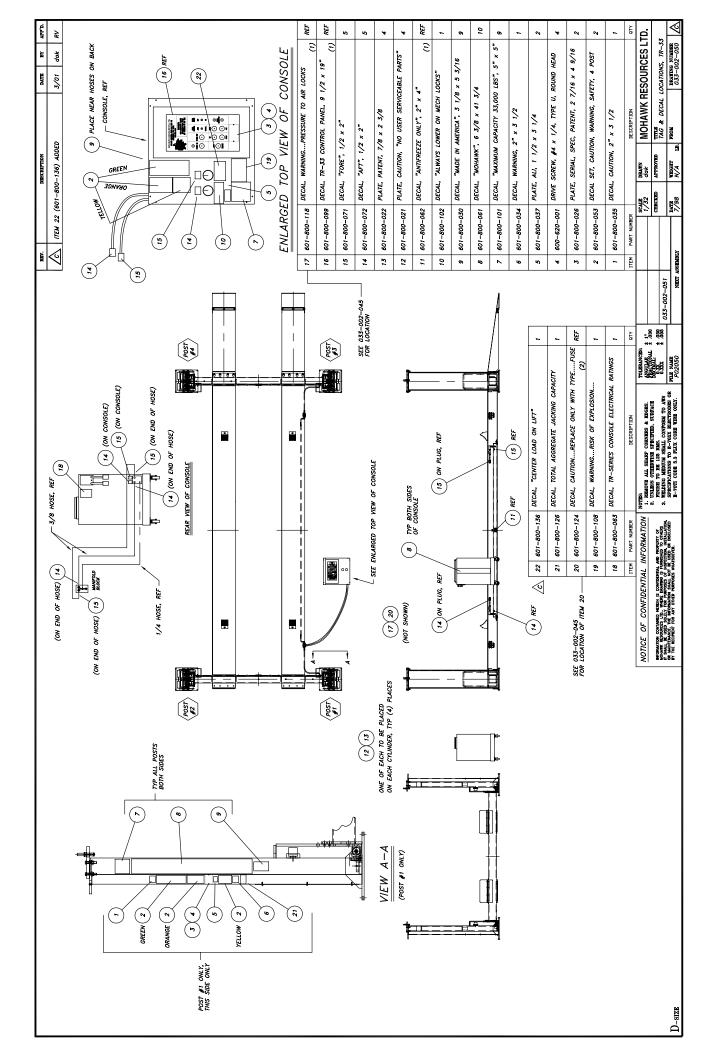












MOHAWK

NEW SLAB RECOMMEDATIONS



MOHAWK RESOURCES LTD.

65 VROOMAN AVE. AMSTERDAM, NY 12010 **TOLL FREE :** 1-800-833-2006

LOCAL: 1-518-842-1431 **FAX**: 1-518-842-1289

INTERNET: www.MOHAWKLIFTS.com E-MAIN: Service@MOHAWKLIFTS.com

New Slab Recommendations:

The information contained in this appendage supercedes any other information given in the accompanied manual. This information is presented for design recommendations for a new concrete slab in the event that the pre-existing floor does not meet minimum requirements of the applicable lift type. Please read all instructions below carefully before producing new slab.

Basic Concrete Requirements:

Minimum Tensile Strength of Concrete:

4,000 P.S.I.

Minimum Aging of New Concrete Slab:

28 days (cure time)

Minimum Thickness of Concrete Slab:

See New Slab Table & Figure Attached

Minimum Width and Length of Slab:

See New Slab Table & Figure Attached

All properties of the new concrete slab are mandatory and must conform to the above stated properties before installation of the lift is deemed acceptable. The new slab must be totally surrounded by an existing concrete floor. Certified strength documentation should be obtained from the firm who supplies the concrete mixture at the time of the pour.

The slab above is designed as "stand alone" and does not take into account the contribution of strength from surrounding concrete. It may be desirable to reinforce the new slab to the pre-existing surrounding floor. Care should be taken to locate these specific reinforcement bars away from any anchor positions of the specific lift.

This new slab design does not account for second floor installations or installations in a ground floor with a basement beneath. For this case, the lift should not be installed without written authorization from the building architect.

Never, Never, hand mix your own concrete.

Rev: 4/20/2005 File: New-Slab.doc



New Slab Recommendations

File: New-slab.xls Rev Date: 3/18/2005

NEW SLABS MUST BE 12" THICK MINIMUM!!

Lift Model	W Slab Width, (Feet)	L Slab Length, (Feet)	R Reinforcement Size, (Inch) (See Note 1 & 2)	\$1 & \$2 Reinforcement Spacing, (Inch) (See Note 3)	D Wej-it Dia, (Inch)	l Wej-it Length, (Inch)
A-7	4 Ft	14 Ft	12 - #4 - Main Bars 21 - #4 - Temperature Bars	4 in - Long Bars 8 in - Short Bars	3/4 in	5 in
Tomahawk-9000	4 Ft	14 Ft	12 - #4 - Main Bars 21 - #4 - Temperature Bars	4 in - Long Bars 8 in - Short Bars	3/4 in	5 in
System IA	4 Ft	14 Ft	12 - #4 - Main Bars 21 - #4 - Temperature Bars	4 in - Long Bars 8 in - Short Bars	3/4 in	5 in
System IA-10	4 Ft	14 Ft	12 - #4 - Main Bars 21 - #4 - Temperature Bars	4 in - Long Bars 8 in - Short Bars	3/4 in	5 in
LMF-12	6 Ft	15 Ft	18 - #4 - Main Bars 23 - #4 - Temperature Bars	4 in - Long Bars 8 in - Short Bars	3/4 in	6 in
TP-15	6 Ft	15 Ft	18 - #4 - Main Bars 23 - #4 - Temperature Bars	4 in - Long Bars 8 in - Short Bars	3/4 in	6 in
TP-18	6 Ft	18 Ft	24 - #4 - Main Bars 24 - #4 - Temperature Bars	3 in - Long Bars 8 in - Short Bars	3/4 in	6 in
TP-20	6 Ft	18 Ft	24 - #4 - Main Bars 24 - #4 - Temperature Bars	3 in - Long Bars 8 in - Short Bars	3/4 in	6 in
TP-26	6 Ft	18 Ft	24 - #4 - Main Bars 24 - #4 - Temperature Bars	3 in - Long Bars 8 in - Short Bars	1 in	10 in
TP-30	6 Ft	18 Ft	24 - #4 - Main Bars 24 - #4 - Temperature Bars	3 in - Long Bars 8 in - Short Bars	1 in	10 in
TR-19*	2 Ft	2 Ft	4 - #4 Bars 8 Bars Total	6 in - Each Way	3/4 in	5 in
FL-25*	2 Ft	2 Ft	4 - #4 Bars 8 Bars Total	6 in - Each Way	3/4 in	5 in
TR-25*	2 Ft	2 Ft	4 - #4 Bars 8 Bars Total	6 in - Each Way	3/4 in	5 in
TR-33*	6 Ft	6 Ft	12 - #4 Bars 24 Bars Total	6 in - Each Way	3/4 in	5 in
TR-35*	6 Ft	6 Ft	12 - #4 Bars 24 Bars Total	6 in - Each Way	3/4 in	5 in
TR-50*	6 Ft	6 Ft	12 - #4 Bars 24 Bars Total	6 in - Each Way	3/4 in	5 in
TR-75*	6 Ft	6 Ft	12 - #4 Bars 24 Bars Total	6 in - Each Way	3/4 in	5 in

^{*} Four Separate Slabs Formed at each Post.

Note 1: An additional layer of 6 X 6 - 10/10 WWF at mid height of new slab would be advisable in any extremely hot or cold climate to control cracking due to temperature fluctuations and shrinkage.

At anchor bolt locations only keep WWF mesh below the elevation of the anchorage to avoid drilling interference with the wire.

Note 2: The main reinforcing and lower temperature steel shall be Grade 60 deformed bars

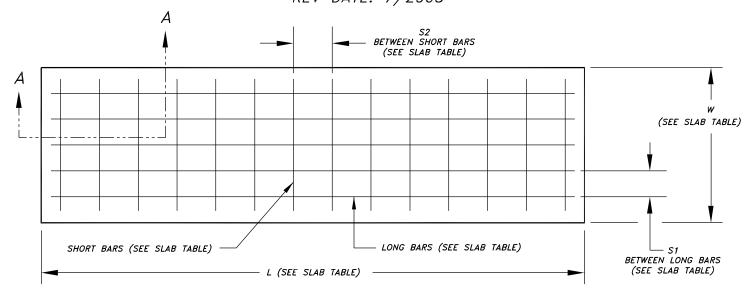
CAPACITY IS LOWER THAN THIS VALUE WILL REQUIRE SPECIAL ATTENTION.

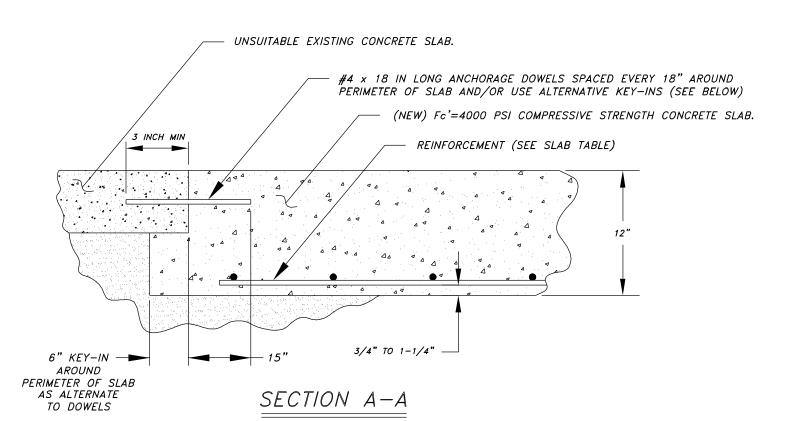
Note 3: The tolerance on spacing of the bars in each direction shall be the value shown, plus or minus 1 inch. In addition, the number of bars specified in the table must be used.

Note 4: THE CONCRETE OUTLINE DIMENSIONS AND THE REINFORCING SHOWN ARE FOR A FOUNDATION BED ALLOWABLE
BEARING CAPACITY OF NOT LESS THAN 2,000 LB/SQ FT (1 TON PER SQUARE FOOT). MANY CLAYS, AND MOST ALL FIRM
CLAY, HARD CLAY, SAND & CLAY MIXES, DRY SANDS, COURSE DRY SANDS, DRY SAND AND SILT MIXES, SAND AND
GRAVEL MIXES, AND GRAVEL TYPE SOILS MEET OR EXCEED THIS ALLOWABLE BEARING CAPACITY. IF THERE IS QUESTION
REGARDING THE FOUNDATION BED ALLOWABLE BEARING CAPACITY A SOILS TESTING
ENGINEER SHOULD BE CONSULTED. SITUATIONS WHERE THE ALLOWABLE BEARING

NEW RECOMMENDED SLAB DESIGN FOR 2-POST LIFTS

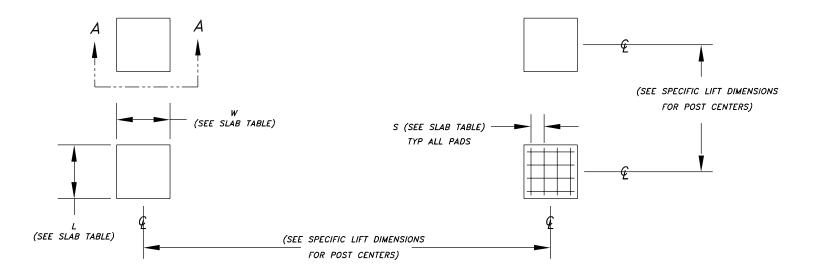
FILE: MAN066 DATE: 2/98 REV DATE: 7/2003

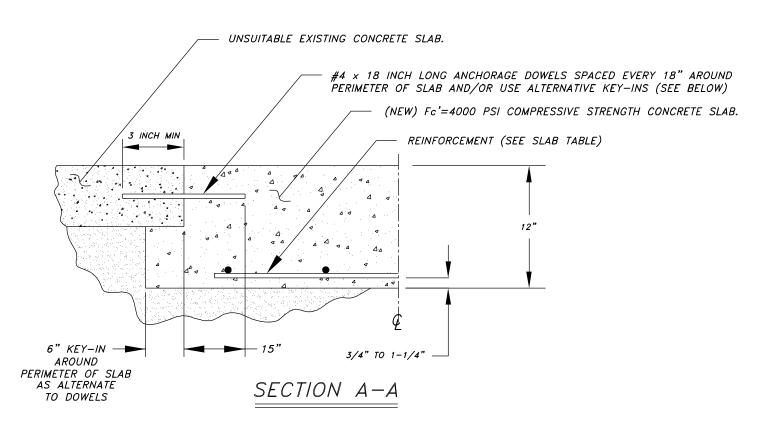




NEW RECOMMENDED SLAB DESIGN FOR 4-POST LIFTS

FILE: MAN089 DATE: 10/00 REV DATE: 7/2003





 $C_{-\text{SIZE}}$ NOTICE OF CONFIDENTIAL INFORMATION NHOBALATION CONTAINED HFEEIN IS CONFIDENTIAL AND PROFERTY OF NOHAWK RESOURCES LTD., WHEEE DAMING IS DURNISHED TO OTHERS TO SHALL BY USED SOLELY FOR PUPPOSES OF INSPECTION, INSTALLATION OF JAMITEMANCE. THE INFORMATION SHALL NOT BE USED ON DISCUSSED BY THE RECIPIENT FOR ANY OTHER PUPPOSES WHATSOLVER. \triangleright TYPICAL BASE PLATE DETAIL (SYSTEM IA SHOWN BELOW — 8 ANCHORS PER BASE PLATE) NOTES:

1. REMOVE ALL SHARP CORNERS & EDGES.
2. UNLESS OTHERWISE SPECIFIED, SURFACE
FINISH TO BE 125 RMS.
3. WELDING MEDIUM SHALL CONFORM TO AWS
SPECIFICATIONS TO E-70XX ELECTRODES OR
E-70TI CODE 5.3 FLUX CORE WIRE ONLY. SECTION A-A: ANGULAR ± 1° FRACTIONAL ± .030 DECIMAL: ± .030 0.XXX ± .030 0.XXX ± .005 .030 009-010-006 REV. \triangleright CHECKED R. V. SCALE 1/4 OF 1/4") WITH COLORED SHIMS ANCHOR BOLT INSTALLATION SPECIFICATIONS ATTACHED. SHIM PROVIDED (HORSESHOE SHAPED). SQUARE AND PLUMB (MAXIMUM TO ENSURE THAT POSTS ARE UNDER BASE PLATE AS NEEDED 3. INSTALL ANCHORS PER EXPANSION ANCHOR BOLTS). DIAMETER ORIGINAL WEJ-IT STYLE ATTACHED FOR DRILL SIZE. INSTALLATION SPECIFICATIONS HOLES. REFER TO ANCHOR BOLT 2. MATCH DRILL ALL BASE PLATE POST DIMENSION IS 120") DIMENSIONS OF COLUMNS, LIFT MANUAL FOR INSIDE SETUP DIMENSIONS. REFER TO LOCATION OF BAY, PER LIFT 1. LOCATE POSTS IN DESIRED INSTRUCTIONS: BASE PLATE ANCHORING (FOR SYSTEM IA-10, THE INSIDE DESCRIPTION DRAWN rwv7089 APPROVED TITLE
Base Plate Anchoring Detail MOHAWK RESOURCES LTD. DATE ETC. ВΥ APP'D.

NEXT ASSEMBLY

DATE 2/05

PROM N/A

DRAWING NUMBER ZZ912

The Original wej-it Wedge Anchors



Time-Tested, Pr ven 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.

SPECIFICATIONS, APPROVALS AND LISTINGS

TYPE	
Zinc Plating	ASTM B-633, Type III, SCI
ICBO-ES	Report #1821
City of Los Angeles	#RR 24939
DOT	Please call Customer Service for specific information by state.
Federal	QQZ-325C, Type II, Class 3
Specifications	(Clear Chromate added)
	FFS-325, Group II, Type 4, Class 1

MAXIMUM TENSILE AND SHEAR CAPACITY FOR STATIC LOADS

	LIMESTONE AGGREGATE			Unreinforced Stone Aggregate oncrete Zin Plated arbon Steel						Unreinforced Lightweight (Idealite)			
Anchor	Embed- 2000 psi		Embed- 3000 psi		5000 psi		7000 psi		Embed-	5000	5000 psi		
& Hole Size	ment (in)	Tension (lbs)	Shear (lbs)	ment (in)	Tension (lbs)	Shear (lbs)	Tension (lbs)		Tension (lbs)	Shear (lbs)	ment (in)	Tension (lbs)	Shear (lbs)
1/4	1 1/8	1132	1211	1 1/8	1320	1751	1760	2316	2464	2494	1 1/2	1861	1947
1/4	1 3/4	1256	1211	1 1/2	1856	1751	2473	2316	3462	2494	•	•	•
5/16	1 1/4	1308	1210	1 1/4	2057	1839	2742	2530	3939	3439	1 1/2	2493	3064
5/16	2	1181	1210	1 3/4	2389	1839	3185	2530	4459	3439			•
3/8	1 1/4	994	1223	1 1/2	2876	4286	3834	5213	5368	5658	1 3/4	3125	4289
3/8	4	1728	1223	4	3488	4286	4650	5213	6510	5658	•	•	•
1/2	1 3/4	1542	3009	2 1/4	3473	7138	5789	10748	8105	11550	2 1/4	4778	9833
1/2	6	2695	3009	5	4809	7138	8015	10748	11221	11550		•	•
5/8		•:	•	3 1/2	7582	10719	12636	15583	17690	16700	2 1/2	6455	12500
5/8			•	4 3/4	9179	10719	15299	15583	21419	16700			•
3/4		•	•	3	11579	15537	19299	21000	27019	23103	3 1/2	17293	19050
3/4	•	•	•	7	15444	15537	25740	21000	36036	23103	•	•	•
7/8		•	•	4 1/2	15266	•	25444	25099	33622	28718	•	•	•
7/8		•		7	16992		28320	25099	39648	28718		•	•
1		•		5 1/2	16351	•	27252	33083	38153	35700	4 1/2	21616	31666
1		•		7	17837		29728	33083	41619	35700	•		•
Source	e 1				797 97912-53		2			2			

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

EDGE DISTANCE AND SPACING REQUIREMENTS

Embedment (E) in	Spacing	Edge Distance		
Anchor Diameters (d)				
E < 6d (shallow)	3.50E	1.75E		
6d ≤ E ≤ 8d (standard)	2.00E	1.00E		
8d < E (deep)	1.50E	0.75E		

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.

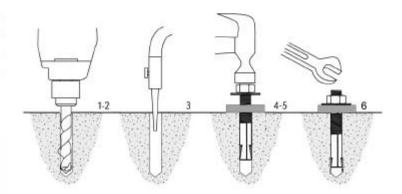


ORDER INFORMATION

	Anchor	Minimum	Thread	Quantity
Catalog	Diameter &	Embed-	Length	Box/
Number	Length (in)	ment (in)	(in)	Carto
1413	1/4 x 1 3/4	1	1/2	100/600
1423	1/4 x 2 3/4	1	1/2	100/600
1430	1/4 x 3	1	1/2	100/600
5620	5/16 x 2	1 1/4	5/8	100/600
5630	5/16 x 3	1 1/4	5/8	100/600
3820	3/8 x 2	1 1/2	3/4	100/600
3823	3/8 x 2 3/4	1 1/2	3/4	100/600
3832	3/8 x 3 1/2	1 1/2	3/4	50/300
3850	3/8 x 5	1 1/2	3/4	50/300
3860	3/8 x 6	1 1/2	3/4	50/300
1223	1/2 x 2 3/4	2	1	50/300
1232	1/2 x 3 1/2	2	1	50/300
1250	1/2 x 5	2	1	25/150
1260	1/2 x 6	2	1	25/150
1270	1/2 x 7	2	1	25/150
5832	5/8 x 3 1/2	3	1 1/4	25/150
5842	5/8 x 4 1/2	3	1 1/4	25/150
5850	5/8 x 5	3	1 1/4	20/120
5860	5/8 x 6	3	1 1/4	15/90
5870	5/8 x 7	3	1 1/4	15/90
3440	3/4 x 4	3	1 1/2	18/108
3450	3/4 x 5	3	1 1/2	12/72
3460	3/4 x 6	3	1 1/2	12/72
3470	3/4 x 7	3	1 1/2	10/60
3482	3/4 x 8 1/2	3	1 1/2	10/30
3410	3/4 x 10	3	1 1/2	10/30
7880	7/8 x 8	4 1/2	1 3/4	10/30
7810	7/8 x 10	4 1/2	1 3/4	10/30
7812	7/8 x 12	4 1/2	1 3/4	5/15
1080	1 x 8	5 1/2	2	10/30
1010	1 x 10	5 1/2	2	5/15
1012	1 x 12	5 1/2	2	5/15

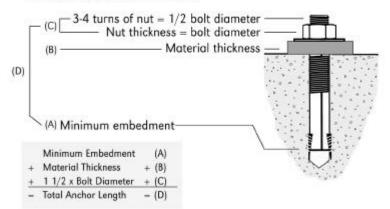
INSTALLATION INSTRUCTIONS - MOHAWK LIFTS

- Drill the hole perpendicular to the work surface.* To assure full holding power, do not ream the hole or allow the drill to wobble.
- 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.
- Clean the hole using compressed air and a nylon brush. A clean hole is necessary for proper performance.
- Turn the nut on to the anchor until contact is made with the top of the spears and the bottom of the washer. Insert anchor into hole.
- Tap anchor into hole with a 2 ½ lb. hammer until the washer rests solidly against fixture.
- Tighten the nut to 175 Ft. Lbs. maximum torque and not less than 3 full turns, but not more than 5 turns past the hand tight position. (Use of an Impact wrench for Installation of anchor is not recommended)



* 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.

LENGTH SELECTION GUIDE







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.

Funding for the development and validation of these labels was provided by the Automotive Lift Institute, PO Box 33116 Indialantic, FL 32903

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ALI/WL200c

SAFETY INSTRUCTIONS



Read operating and safety manuals before using lift.

SAFETY INSTRUCTIONS



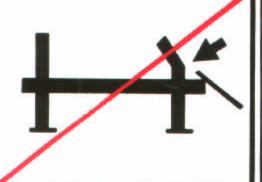
Proper maintenance and inspection is necessary for safe operation.



SAFETY INSTRUCTIONS

0

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Do not operate a damaged lift.

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ALI/WL200s





self-closing

lift controls.



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ALI/WL200W

MOHAWK.

Because Quality Lasts Forever.



Model USL-6000

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



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.





Mohawk Industrial Park • P.O. Box 110 Amsterdam, NY 12010 1-800-833-2006 or 518-842-1431 FAX 518-842-1289



www.mohawklifts.com