MOHAWK



MADE IN THE U.S.A.

MODEL TR - 75

75,000 LB. CAPACITY FOUR POST TRUCK LIFT MANUAL

WARRANTY CARD

THANK YOU
FOR SENDING IN
YOUR
REGISTRATION
CARD.
MOHAWK SERVICE
DEPARTMENT



INSTALLATION



OPERATION



MAINTENANCE



PARTS MANUAL



MOHAWK RESOURCES LTD.

65 VROOMAN AVE. 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 MAINTAINING LIFT!!

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.
- 3. Do not let cord or hoses 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).



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 recommended attachments.
- 11. 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.

Distributor Place Card Here	

OR CONTACT:

MOHAWK RESOURCES LTD.

Serial Number

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

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, 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.

5-YEAR WARRANTY:

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

3-YEAR WARRANTY:

THIS WARRANTY IS APPLICABLE TO THE FOLLOWING MOHAWK LIFTS ONLY: TSL-7, PL-6000, TR-19, TR-25, FL-25, TR-33, TR-35, TR-40, TR-50, TR-60, TR-75, TR-110, MP-SERIES AND RP-SERIES MOBILE COLUMN LIFTS, SL-SERIES SCISSOR LIFTS, FP-SERIES LIGHT DUTY FOUR POST LIFTS, TL-SERIES LIFTS AND STANDARD OPTIONS.

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 I, 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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- PARTS (& ASSEMBLY) DRAWINGS
- NEW SLAB RECOMMENDATIONS
- SAFETY, CAUTION & WARNING DIAGRAMS

ALSO INCLUDED WITH MANUAL: SAFETY TIPS CARD
ALI LIFTING IT RIGHT MANUAL

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 - 75. ANY SPECIAL FEATURES WILL BE INDICATED ON THE LIFT VERIFICATION SHEET. USE THE LIFT VERIFICATION SHEET AND THE TR 35 / 50 / 75 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 REOUIREMENTS:

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 - 75. WE RESERVE THE RIGHT TO MAKE CHANGES AT ANY TIME WITHOUT NOTICES.
- ALWAYS REFER TO THE LIFT VERIFICATION SHEET AND THE TR 35/50/75 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	1 CHALK LINE SITE LAYOUT (BLUE / YELLOW CHAI	
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	ERECT / MOVE HEAVY COMPONENTS
	CAP.)	

WARNING

BEFORE DRILLING THE MOUNTING HOLES

- REFERENCE ANCHOR INSTALLATION INFO IN FIGURE SECTION 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 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 AS STATED FOR 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 ANCHOR UNDER THESE CONDITIONS.
- 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	MINIMUM	MINIMUM
	THICKNESS	THICKNESS COMPRESSIVE	
		STRENGTH	
TR - 75	5 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 TO 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

MODEL	FOOTING	FOUR PADS	VOLUME
	THICKNESS	WIDTH X LENGTH	
TR - 75	12 INCHES	6 FT X 6 FT	5.4 CUBIC YARDS

NOTE

FOUR FOOTINGS 6 FT X 6 FT X 12 IN DEEP MAY BE USED. FIGURE 1

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.

FOR TYPICAL SLAB DRAWING AND DETAILED REQUIREMENTS CONTACT:

MOHAWK RESOURCES LTD.

GENERAL INFORMATION CONTINUED

TR - 75 STANDARD LIFT SPECIFICATIONS

GROSS LIFTING CAPACITY	75,000 LBS.	
LIFTING SPEED (UP CYCLE) APPROX.	2 MINUTES - 20 SECONDS	
LIFTING HEIGHT (STROKE)	5 FEET	60 INCHES
OVERALL WIDTH (W/O CONSOLE)	14 FT. 5 IN.	173 IN.
OVERALL LENGTH (FOR 25' STD TRACKS)	41 FT. 4 - 1/8 IN.	495 - 1/8 IN.
TRACK WIDTH	2 FT.	24 IN.
CLEARANCE BETWEEN POST (WIDTH)	11 FT. 10 IN	142 IN.
MAXIMUM WHEEL BASE (FOR 25' TRKS)	27 FT.	324 IN.
SHIPPING WEIGHT	17,000 LBS.	

POWER UNIT SPECIFICATIONS

MONARCH MODEL	T-12-30-0-20-01-1-000000-00-0-0
MOTOR VOLTAGE	208-230 VAC
MOTOR HORSE POWER	10 HP
MOTOR FULL LOAD AMPS	40 AMP
MOTOR PHASE	THREE PHASE
MOTOR CYCLE / HERTZ	60 HZ
MOTOR SPEED (RPM)	1800 RPM
PUMP FLOW (GPM)	8.8 GPM
RELIEF VALVE SETTING (PSIG)	2750 PSI
RESERVOIR CAPACITY (GALLONS)	30 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	45 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 INCHES	3/4 INCH	0.775	0.787	See Diagram

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 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 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 FIVE 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.

APPENDAGES

INSTALL THIS EQUIPMENT ON CONCRETE ONLY

IF, FOR ANY REASON, A NEW CONCRETE SLAB SECTION IS REOUIRED. THE **MINIMUM** THICKNESS, STRENGTH, AND AGING MANDATORY. FOR YOUR PROTECTION, CERTIFIED STRENGTH DOCUMENTATION SHOULD 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.

WARNING:

ALL ACCESSORIES (I.E. LIFTING PADS, HEIGHT ADAPTORS, JACKING BEAMS, ETC.) 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 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.

TR - 75 STANDARD PACKING LIST

PACKED	QTY	PART NUMBER	DESCRIPTION
	2.54	075 010 011	LEG / DOGE AGGENDLY / DOGE # 1 0 A)
	2 EA	075-010-011	LEG / POST ASSEMBLY (POST # 1 & 4)
	2 EA	075-010-012	LEG / POST ASSEMBLY (POST # 3 & 2)
	2 1	050-010-008	CROSS RAIL MAIN SIDE TRACK ASSEMBLY
		075-010-005	
	1	050-011-013 050-010-037	OFF SIDE TRACK ASSEMBLY
	2 1	075-010-004	DRIVE ON RAMP ASSEMBLY CONTROL CONSOLE ASSEMBLY
	1	FILE MAN1312	PARTS BOX # 1
	1	FILE MAN1312	PARTS BOX # 2
	1	FILE MAN1312	PARTS BOX # 1
		FILE WANTS12	TARTS BOX # 1
	1	075-010-016	MANUAL / INSTALLATION (TR - 50)
	4	600-930-001	WHEEL CHOCKS
	2	050-000-179	TRACK STOPS (BOTTOM)
	2	050-000-157	TRACK STOPS (TOP)
	6	075-010-008	HYDRAULIC HOSE ASSEMBLIES
	1	601-800-070	WARRANTY REGISTRATION CARD PACKAGE
	1	FILE MAN1313	PARTS BOX # 2
	6	050-000-032	TUBING ASSEMBLY
	6	035-001-006	TUBING ASSEMBLY CLUSTER (W/T-FITTING)
	1	050-010-016	SMALL PARTS BAG
	6	601-630-002	SPRAY PAINT (YELLOW)
	6	601-630-001	SPRAY PAINT (RED)
	16	600-670-002	WEJ-IT ANCHOR (3/4 X 5)
	32	600-640-024	BOLT, 3/4 X 2-1/2 IN
	16	6000640-028	BOLT, 3/4 X 3-1/2 IN
	48	600-690-003	NUT 3/4 NF NLN
	4	050-000-160	CARRIAGE COVER PLATE
	2	050-010-115	CROSSRAIL LINE COVER (LEFT)
	2	050-010-116	CROSSRAIL LINE COVER (RIGHT)
	1	050-010-016	SMALL PARTS BAG
		100 = 10 000	
	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
	2	600-640-012	BOLT 5/16 X 3/4 IN
	4	600-710-012	WASHER, FLAT 7/8 IN
	4	600-690-010	NUT 7/8 NF NLN
	4 4	600-870-005 600-870-004	SNAP RING SNAP RING
	12	600-640-069	BOLT, 3/8-16 NC x 1 ¾ LG
	24	600-710-009	WASHER, FLAT, 3/8
	12	600-680-012	NUT, PLAIN, 3/8-16 NC
	12	600-720-011	WASHER, LOCK, 3/8
	3	601-140-022	HOSE SUPPORT CLAMP
DACKED		001-140-022	HOOD BUILONT CLAIM
PACKED	DI:		

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

FULLY TIGHTEN THE SIXTEEN 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.

SET THE CROSS RAIL 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 EIGHT 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 FOUR. WHEN THE CROSS RAIL IS IN PLACE, INSERT AND HAND TIGHTEN THE EIGHT 3/4 - 16 NF X 2 - 1/2 IN BOLT AND 3/4 - 16 NF NYLON LOCK NUT.

FULLY TIGHTEN THE SIXTEEN 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.

INSTALLATION INSTRUCTIONS

ASSEMBLE THE TWELVE HYDRAULIC LINE ASSEMBLIES MARKED ONE, TWO, THREE, AND FOUR ONTO THE CARRIAGE AND TRACKS. DO NOT CROSS THREAD OR OVER TIGHTEN THE CONNECTORS.

ASSEMBLE THE SIX 40.50 IN HYDRAULIC HOSES TO THE FORE AND AFT END OF THE UNIT. (CONNECTIONS ON THE MAIN SIDE TRACK .FROM THE CARRIAGE TO THE CROSS RAIL)

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

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

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

IMPORTANT

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

IMPORTANT

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.
- PLACE THE HIGH / LOW SWITCH ON THE CONTROL PANEL CONSOLE TO THE LOW 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.

CYCLE THE UNIT TWO TO THREE TIMES. OBSERVE 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.

CHECK ALL HYDRAULIC FITTINGS FOR LEAKS. TIGHTEN AS REQUIRED.

SNAP INTO PLACE THE FOUR CARRIAGE ACCESS COVER PLATES ONTO THE CARRIAGES

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.

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.

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

NUMBERS PREFIXED INDICATES REFERENCE NUMBER ON FIGURE

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. FILTER INDICATOR LIGHT:

 WHEN ILLUMINATED CONSTANTLY, THE FILTER NEEDS TO BE REPLACED.

5. DOWN SPEED HIGH / LOW SWITCH:

 SETS MODE ON DOWN SPEED, INCREASES OR DECREASES THE LOWERING SPEED OF THE UNIT.

6. LEVEL CONTROL SWITCH:

• SETS MODE OF MONITORING THE LEVEL OF THE UNIT, EITHER MANUALLY OR AUTOMATICALLY.

7. POWER ON / POWER OFF SWITCH:

 TURN UNIT ON OR OFF. HAS LOCKOUT CAPABILITY.

8. LOCK RELEASE BUTTON:

 ALLOWS FLUID TO ENERGIZE THE LOCK RELEASE SYSTEM.

9. UP BUTTON:

• WHEN USED IN CONJUNCTION WITH THE LOCK RELEASE 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 REMAIN ILLUMINATED UNTIL FORE END IS OUT OF LEVEL. (INOPERABLE, AND NOT ILLUMINATED WHEN THE LEVEL CONTROL SWITCH IS IN THE MANUAL MODE)

12. DOWN BUTTON:

 WHEN USED IN CONJUNCTION WITH THE LOCK RELEASE BUTTON, ALLOWS THE LOWERING OF THE LIFTING CYLINDERS.

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, LIGHT WILL REMAIN ILLUMINATED UNTIL AFT END IS OUT OF LEVEL (INOPERABLE AND NOT ILLUMINATED WHEN THE LEVEL CONTROL SWITCH IS IN THE MANUAL MODE)

15. DOWN SETTLE BUTTON:

• PRESSING THIS BUTTON WILL REMOVE THE PRESSURE FROM THE LIFTING CYLINDERS AND ZERO THE FORE AND AFT GAUGES. USE THIS BUTTON TO SET THE UNIT ON THE MECHANICAL SAFETIES OR TO LOWER THE UNIT COMPLETELY FLAT ON THE FLOOR.

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 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

PLACING VEHICLE ON LIFT

- 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 SHOULD BE THE SAME OR WITHIN 300 P.S.I. THE LIFT MAY NEED TO BE RAISED SLIGHTLY TO OBTAIN THESE PRESSURE READING.
- PLACE THE WHEEL CHOCKS IN A POSITION SO THAT THE VEHICLE WILL BE SECURE ON THE UNIT.

TO RAISE

- TURN ON THE POWER UNIT.
- SIMULTANEOUSLY PRESS & HOLD THE LOCK RELEASE THEN THE UP BUTTON.
- RAISE VEHICLE TO THE DESIRED WORKING HEIGHT, RELEASE BUTTONS.
- LOWER THE UNIT ONTO THE MECHANICAL SAFETIES BY PRESSING THE DOWN SETTLE

- BUTTON UNTIL THE GAUGES BOTH READ APPROXIMATELY ZERO.
- TURN OFF THE POWER UNIT

TO LOWER

- INSPECT THE LIFTING AREA TO INSURE THAT ALL PERSONNEL AND DEBRIS HAVE BEEN CLEARED FROM THE LIFTING AREA.
- TURN ON THE POWER UNIT.
- SIMULTANEOUSLY PRESS & HOLD THE LOCK RELEASE AND THE UP BUTTON.
- RAISE UNIT APPROXIMATELY TWO INCHES.
 RELEASE THE UP BUTTON ONLY, STILL
 HOLDING THE LOCK RELEASE BUTTON AND
 THEN PRESS THE DOWN BUTTON.
- CONTINUE TO HOLD THE BUTTONS UNTIL THE TRACKS ARE AT THE DESIRED HEIGHT OR ARE FULLY LOWERED AND DOWNWARD MOTION HAS HALTED.
- IF LOWERING ONTO MECHANICAL SAFETIES, RELEASE BOTH BUTTONS, THEN PRESS THE DOWN SETTLE BUTTON UNTIL THE GAUGES BOTH READ APPROXIMATELY ZERO.
- IF LOWERING TO THE FLOOR, LOWER FULLY UNTIL UNIT STOPS, RELEASE DOWN BUTTON ONLY, AND WHILE MAINTAINING LOCK RELEASE BUTTON, PRESS THE DOWN SETTLE BUTTON UNTIL THE GAUGES BOTH READ APPROXIMATELY ZERO.
- TURN OFF THE POWER UNIT

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 II 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.

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.
- REMOVE AND INSPECT SAFETY LOCKING BARS AND WEDGES.

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.

POSSIBLE CAUSE	1	PROBLEM	SOLUTION	
	NO	Γ RAISING LOAD		
LOCK RELEASE BUTTON NOT ENGAGED		DEPRESS LOCK RELEASE BUTTON. (AN AUDIBLE ALARM WILL SOUND) THEN DEPRESS THE UP BUTTON.		
LOW HYDRAULIC FLUID		LOWER UNIT COMPLETELY. DISCONNECT POWER SUPPLY. OPEN CONSOLE. VERIFY PROPER FLUID LEVEL AT SIGHT GLASS ON RESERVOIR.		
PRESSURE RELIEF ADJUSTMENT	R	REFER TO POWER UNIT SPECIFICATIONS.		
UNIT OVERLOADED	V	VEHICLE TO HEAVY TO BE RAISE	D.	
WRONG ROTATION OF MOTOR	R	REVERSE POWER LINES. (HAVE A	AN ELECTRICIAN SERVICE)	
VEHICLE NOT CENTERED ON UNIT	-	CENTER VEHICLE ON UNIT SO THE	AT BOTH CONSOLE PRESSURE GAUGES ARE	
LOW VOLTAGE	F	IAVE AN ELECTRICIAN SERVICE.		
	NO	OT LOWERING		
LOCKS ENGAGED	Г	DEPRESS LOCK RELEASE BUTTON. (AN AUDIBLE ALARM WILL SOUND) THEN DEPRESS THE UP BUTTON. RAISE UNIT APPROX. 5 INCHES. THEN WILE STILL DEPRESS THE LOCK RELEASE BUTTON. DEPRESS THE LOWERING BUTTON.		
OBSTRUCTION UNDER UNIT OR VEHICLE	R	REMOVE OBSTRUCTION.		
FORE / AFT END NOT LOWERING		RAISE LOW END TO EVEN UNIT BE BUTTONS.	EFORE LOWERING. USE THE FORE / AFT	
RAISING OR LO	OWERIN	G QUESTIONS (IN AU	JTO POSITION)	
RAISING: UNIT STOPS THEN ONE END RAISES BEGINS TO RAISE NORMALLY.	Ĺ		FORE / AFT END OF THE UNIT IS LOW STOP, RAISE THE LOW END TO EVEN THE RMALLY.	
LOWERING : UNIT STOPS LOWERING, THEN (RAISES, UNIT BEGINS TO LOWER NORMALLY	Υ. Γ		FORE / AFT END OF THE UNIT IS LOW LL STOP, RAISE THE LOW END TO EVEN THE DRMALLY.	
UNIT CONSTANTLY MAKING AUTO ADJUSTN		CENTER VEHICLE ON UNIT SO THE	AT BOTH CONSOLE PRESSURE GAUGES ARE	
	F	LUID LEVEL IN AUTO LEVELER I	- OR - S EITHER TOO LOW OR TOO HIGH	
RAISING OR LOV	WERING	QUESTIONS (IN NOR	RMAL POSITION)	
UNIT RAISING UNEVEN	-	CENTER VEHICLE ON UNIT SO THE	AT BOTH CONSOLE PRESSURE GAUGES ARE	
UNIT LOWERING UNEVEN	-	CENTER VEHICLE ON UNIT SO THAT BOTH CONSOLE PRESSURE GAUGES ARE EVEN.		

TO BE USED IN CONJUNCTION WITH ELECTRICAL SCHEMATIC

TR-35 POWER UNIT SPECS

POWER UNIT #601-300-011 5 HP, 3 PHASE, 60 HZ, 1800 RPM

VOLTAGE	FULL	HEATER	PRIMARY	SECONDARY	PRIMARY	SECONDARY
(VAC)	LOAD AMPS	ELEMENT	FUSE (AMPS)	FUSE (AMPS)	X-FORM WIRING	X-FORM WIRING
208	17	W-56	1.6	3.2	H1-H2	X1-X4
230	15.4	W-54	1.4	3.2	H1-H2	X1-X4
480	7.7	W-47	0.6	3.2	H1-H4	X1-X4
575	6.2	W-45	0.6	3.2	H1-H5	X1-X4

TR-50 POWER UNIT SPECS

POWER UNIT #601-300-009

7.5 HP, 3 PHASE, 60 HZ, 1800 RPM

VOLTAGE	FULL	HEATER	PRIMARY	SECONDARY	PRIMARY	SECONDARY
(VAC)	LOAD AMPS	ELEMENT	FUSE (AMPS)	FUSE (AMPS)	X-FORM WIRING	X-FORM WIRING
208	25.5	W-60	1.6	3.2	H1-H2	X1-X4
230	20	W-59	1.4	3.2	H1-H2	X1-X4
480	11.5	W-51	0.6	3.2	H1-H4	X1-X4
575	9.2	W-49	0.6	3.2	H1-H5	X1-X4

TR-75 POWER UNIT SPECS

POWER UNIT #601-300-015

10 HP, 3 PHASE, 60 HZ, 1800 RPM

Ī	VOLTAGE	FULL	HEATER	PRIMARY	SECONDARY	PRIMARY	SECONDARY
	(VAC)	LOAD AMPS	ELEMENT	FUSE (AMPS)	FUSE (AMPS)	X-FORM WIRING	X-FORM WIRING
	208	40	W-63	1.6	3.2	H1-H2	X1-X4
	230	36	W-62	1.4	3.2	H1-H2	X1-X4
	480	18	W-54	0.6	3.2	H1-H4	X1-X4
Ī	575	14.5	W-52	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.

SERVICE CHART

MODEL TR-75	
SERIAL NUMBER:	
DATE OF INSTALLATION:	

DATE	PART REPLACED / SERVICED	SERVICE COMPANY	SERVICED BY

MAINTENANCE CHART

DATE	MAINTENANCE PERFORMED	SERVICE COMPANY	SERVICED BY

MOHAWK

MODEL TR-75

FIGURES & DIAGRAMS

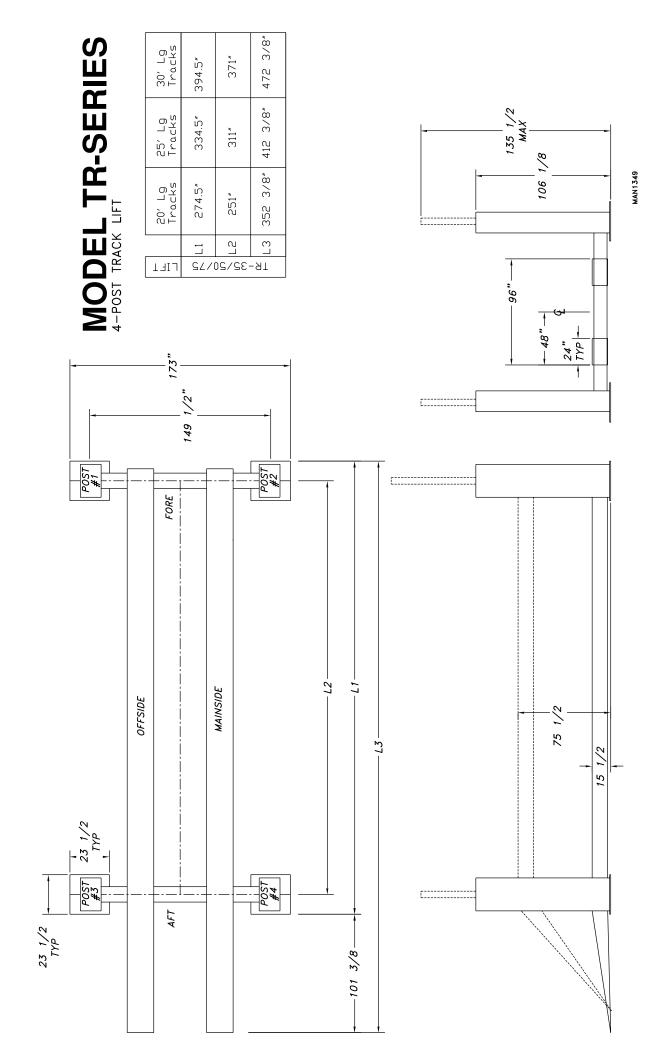


MOHAWK RESOURCES LTD.

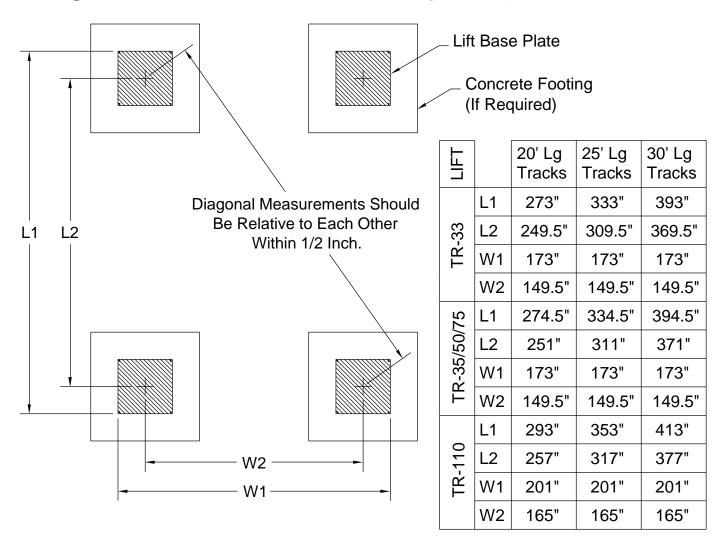
65 VROOMAN AVENUE AMSTERDAM, NY 12010

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-	300	0 psi	500	0 psi	7000	O psi	Embed-	Embed- 5000 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.

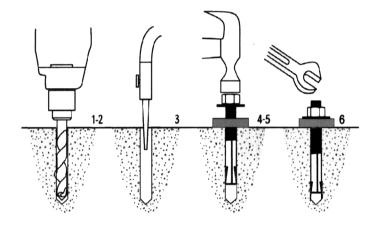


ORDER INFORMATION

	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	$3/4 \times 5$	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

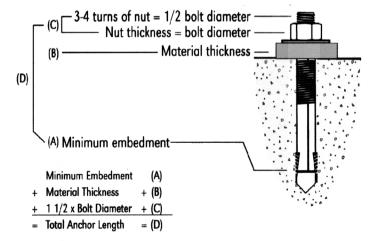
INSTALLATION INSTRUCTIONS - MOHAWK LIFTS

- 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





AT Wedge Anchors

KEY FEATURES/BENEFITS

- Will fit through a 1/16" larger prepunched hole.
- **Sets up fast.** Needs less rotation to achieve required torque.
- Unique "Safety Shoulder" feature. Supports clip when anchor is under stain, minimizes bolt-end collapse and/or clip slippage under ultimate loading conditions.
- Enlarged dimples on clip. Reduces slip, more responsive in lighter concrete
- 360° segment contact on clip. Equalizes load distribution providing greater load performance carrying capacity and "more forgiving" design.

SPECIFICATIONS, APPROVALS AND LISTINGS

Түре					
Zinc Plating	ASTM B-633, Type III, SCI				
Galvanizing	ASTM A-153; B-454; B-695-82 and				
	MIL-C-81562A with stainless steel clip.				
ICBO-ES	Report #1821				
City of Los Angeles	#RR 24939				
DOT	Please call Customer Service for				
	specific information by state.				
Federal Specifications	QQZ-325Z, Type II, Class 3				
	(Clear Chromate added)				
	FFS-325 Group II, Type 4, Class 1				
Dade County	Acceptance #00-0328.02 METRO-DADE				

MAXIMUM TENSILE AND SHEAR CAPACITY FOR STATIC LOADS

ZINC PLATED CARBON STEEL							
Anchor		4000	0 psi	6000 psi			
& Hole	Embedment	Tension	Shear	Tension	Shear		
Size	(in)	(lbs)	(lbs)	(lbs)	(lbs)		
1/4	1 1/4	2000	2811	2042	2813		
3/8	1 3/4	3165	3075	3165	3075		
	4 5/8	4275	3075	5584	3075		
1/2	2 1/2	6805	6260	8024	6260		
	6 1/4	8249	7135	10713	7135		
5/8	3 1/4	5180	9760	5057	6860		
	6	12862	9760	16705	9760		
3/4	3 3/4	12000	15860	12016	15860		
	7 7/8	17756	23680	23060	23680		
1	4	13000	32494	13278	32494		

CONCRETE FILLED STEEL DECK ULTIMATE TENSION & SHEAR (FT. LBS.)

Lower Flute of Steel Deck with Lightweight Concrete Fill*

Concrete Fill* $f'_{-} = 3.000 \text{ PSI}$

			$f'_{c} = 3.0$	00 PSI
Anchor	Install.	Embed.	Tension	Shear
Dia. (in)	Torque	Depth (in)	(lbs)	(lbs)
3/8	20-25	1 3/4	2414	4054
3/8		3	3169	
1/2	50-55	2 1/2	3458	5038
1/2		4	4274	
5/8	90-95	3 1/4	4199	5884
5/8		5	5036	
3/4	*	3 3/4	5136	8030
3/4		5 1/2	7711	

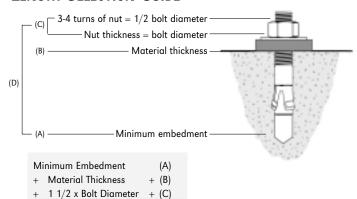
^{*}Available upon request

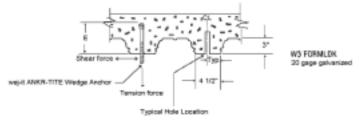
Notes:

- 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.
- Tested to ASTM E-488 Test Standard.
- Sources (available upon request): 1) U.S. Testing Co., Tulsa, OK

LENGTH SELECTION GUIDE

Total Anchor Length



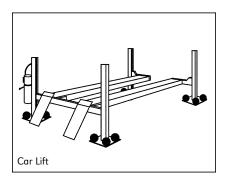


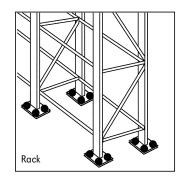
E= Embedment depth in inches (SI: 1 inch = 25.4 mm)

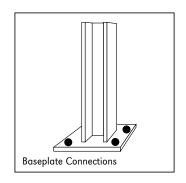
EDGE DISTANCE AND SPACING REQUIREMENTS

Embedment (E) in	Spacing	Edge
Anchor Diameters (d)		Distance
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

Typical Applications







Order Information

	Catalog			Anchor	Minimum	Thread	
	n Steel	Stainless			Embedment		Quantity
Zinc Plated	Galvanized	303/302HQ	316	& Length (in)	(in)	(in)	Box/Carton
AT1413	ATG1413*	ATS 1413	•	1/4 x 1 3/4		5/8	100/800
AT1421	ATG1421*	ATS1421	ATSS1421	1/4 x 2 1/4		1	100/800
AT1431	ATG1431*	ATS1431	ATSS1431	1/4 x 3 1/4	1 1/4	1	100/800
AT3821	ATG3821	ATS3821	ATSS3821	3/8 x 2 1/4	1 3/4	1	50/400
AT3823	ATG3823	ATS3823	ATSS3823	3/8 x 2 3/4	1 3/4	1 1/4	50/400
AT3830	ATG3830	ATS3830	ATSS3830	$3/8 \times 3$	1 3/4	1 1/4	50/400
AT3833	ATG3833	ATS3833	ATSS3833	$3/8 \times 3 \times 3/4$	1 3/4	1 1/4	50/400
AT3850	ATG3850	ATS3850		3/8 x 5	1 3/4	1 1/4	50/300
AT1223	ATG1223	ATS1223	ATSS 1223	1/2 x 2 3/4	2 1/8	1 1/8	25/200
AT1233	ATG 1233	ATS1233	ATSS1233	1/2 x 3 3/4		1 1/2	25/200
AT1241	ATG 1241	ATS1241	ATSS 1241	1/2 x 4 1/4		2	25/200
AT1252	ATG1252	ATS1252	ATSS1252	1/2 x 5 1/2	,	3 1/4	25/150
AT1270	ATG1270	ATS1270	•	1/2 x 7	2 1/8	3 1/2	25 [′] /150
AT5832	ATG5832	ATS5832	•	5/8 x 3 1/2	2 5/8	1 5/16	10/80
AT5841	ATG5841	ATS5841	ATSS5841	5/8 x 4 1/4		2	10/80
AT5850	ATG5850	ATS5850	ATSS5850	5/8 x 5	2 5/8	2 3/4	10/80
AT5860	ATG5860	ATS5860	ATSS5860	5/8 x 6	2 5/8	3 1/2	10/80
AT5870	ATG5870	ATS5870	•	5/8 x 7	2 5/8	3 1/2	10/80
AT5882	ATG5882	ATS5882	•	5/8 x 8 1/2		3 1/2	10/40
AT5810	•	•	•	5/8 x 10	2 5/8	3 1/2	10/40
AT3441	ATG3441	ATS3441	•	3/4 x 4 1/4	3 1/4	1 1/2	10/80
AT3443	ATG3443	ATS3443	ATSS3443	3/4 x 4 3/4		2	10/80
AT3452	ATG3452	ATS3452	ATSS3452	3/4 x 5 1/2		2 3/4	10/60
AT3461	ATG3461	ATS3461	•	3/4 x 6 1/4		3 1/2	10/60
AT3470	ATG3470	ATS3470	ATSS3470	3/4 x 7	3 1/4	3 1/2	10/60
AT3482	ATG3482	ATS3482	•	3/4 x 8 1/2	3 1/4	3 1/2	10/40
AT3410	ATG3410	ATS3410	•	3/4 x 10	3 1/4	3 1/2	10/40
AT3412	ATG3412*	•	•	3/4 x 12	3 1/4	3 1/2	5/20
AT7860	ATG7860*	•	•	7/8 x 6	3 7/8	2 5/8	5/30
AT7880	ATG7880*	•	•	7 [′] /8 x 8	3 7/8	3	5/20
AT7810	ATG7810*	•	•	7/8 x 10	3 7/8	3	5/20
AT1060	ATG 1060*	ATS 1060	•	1 x 6	4 1/2	2 1/4	5/30
AT1090	ATG 1090*	ATS 1090	•	1 x 9	4 1/2	3	5/20
AT1012	ATG1012*	ATS 1012	•	1 x 12	4 1/2	3	5/20

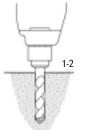
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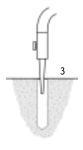
Anchor	Recommended	W/O Inspection
Diameter	Setting	Turns
(in)	Torque (ft lb)	To Set
1/4	6-8	3-5
3/8	20-25	3-5
1/2	50-55	3-5
5/8	90-95	3-5
3/4	165-175	3-5
7/8	240-250	3-5
1	290-300	3-5

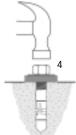


Installation Instructions

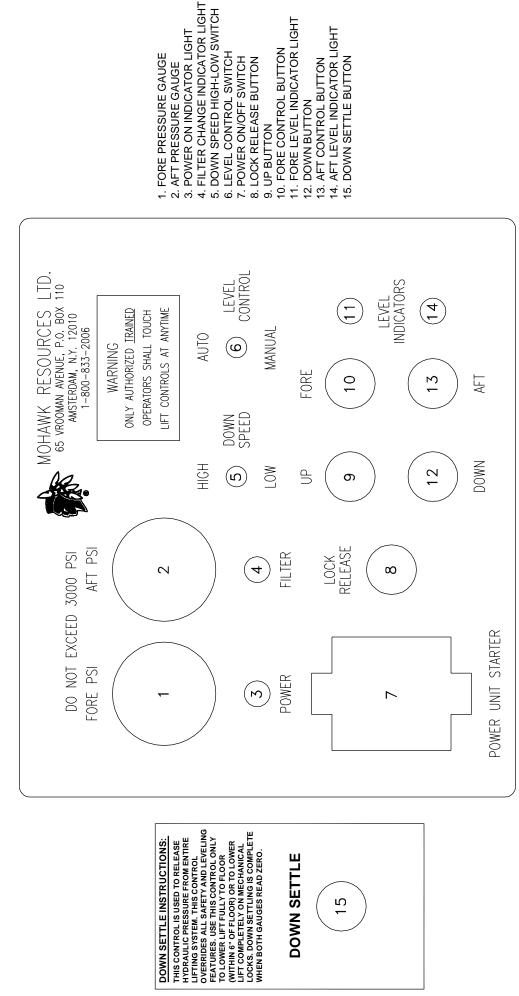
- Drill the hole perpendicular to the work surface.** To assure full holding power, do not ream the hole or allow the drill to wobble.
- 2. Drill the hole deeper than the intended embedment of the anchor, but not closer than two anchor diameters to the bottom (opposite) surface of the concrete.
- Clean the hole using compressed air and a nylon brush.* A clean hole is necessary for proper performance.
- 4. Assemble the washer and nut on the anchor so that the nut protrudes slightly beyond the fixture. Insert anchor into the hole making sure the nut rests solidly against the fixture.
- 5. Tighten the nut 3 to 5 turns past the hand tight position. For torque settings refer to table at bottom left of page.
- * Call Customer Service for box/carton quantities.
- ** 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.











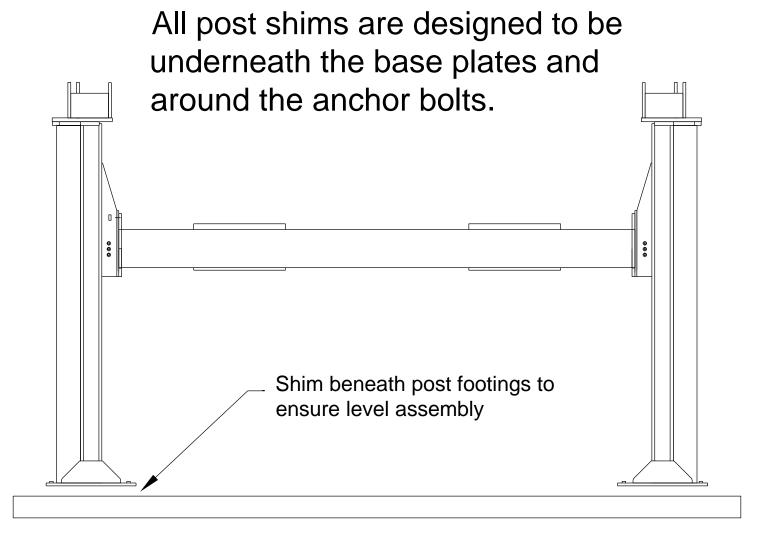
FILE: MAN1450

POST SHIMMING





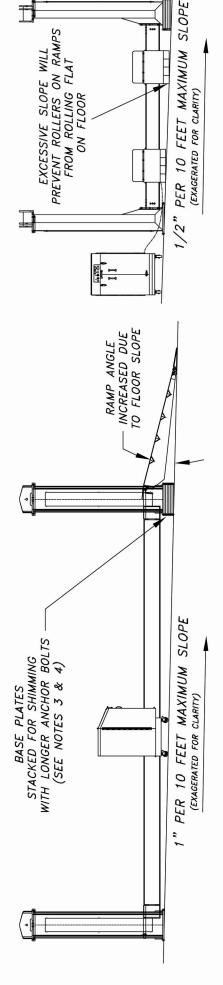




TR-SERIES FLOOR SLOPE & SHIMMING GUIDELINES

IMPORTANT NOTICE:

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

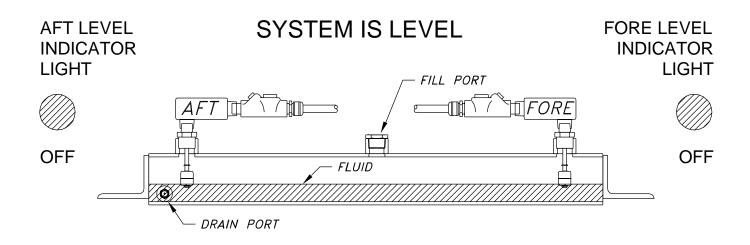


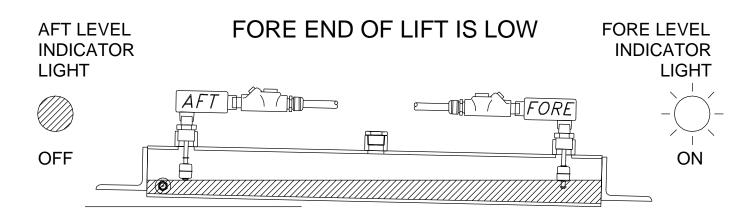
RECOMMENDED GUIDELINES:

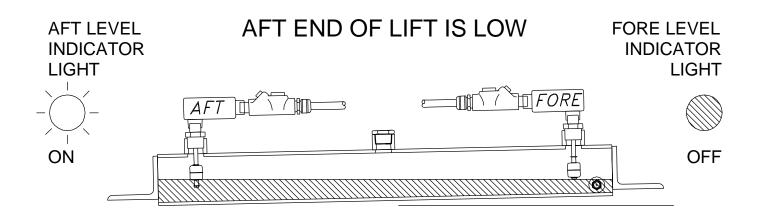
- 1. MAXIMUM LENGTHWISE SLOPE IS 1" PER 10' MAXIMUM WIDTHWISE SLOPE IS 1/2" PER 10' FOR SLOPES GREATER THAN THIS, IT IS RECOMMENDED TO POUR A NEW SLAB FOR THIS LIFT.
- 2. FOR SHIMMING IN EXCESS OF 2", IT
 IS RECOMMENDED TO POUR NEW
 SLABS FOR POSTS. ENSURE THAT THE
 SURFACE OF THESE SLABS ARE LEVEL
 WITH RESPECT TO EACH OTHER.
- 3. 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)
- 4. FOR SHIMMING IN EXCESS OF 1/2", LONGER WEJ—IT ANCHORS ARE REQUIRED. (CONTACT MOHAWK FOR LONGER ANCHORS PER YOUR SPECIFIC SHIMMING SITUATION)
- 5. FOR SHIMMING LESS THAN 1/2", USE PLASTIC SHIMS UNDER LOWEST BASE PLATE.
- 6. NOTICE THAT SHIMMING THE APPROACH (RAMP) END OF THE LIFT WILL INCREASE THE RAMP ANGLE SLIGHTLY.

REV: 12/99 FILE: MAN1341

TRACK LEVELER FUNCTIONS

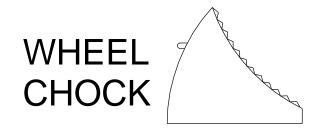


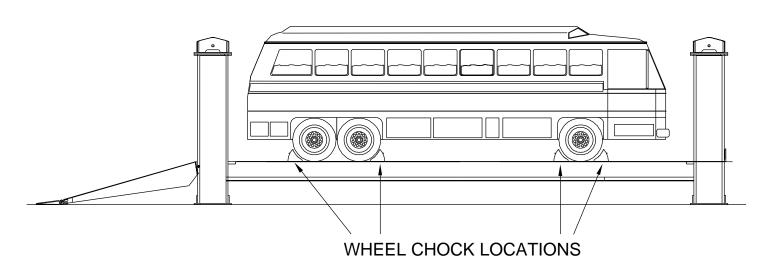


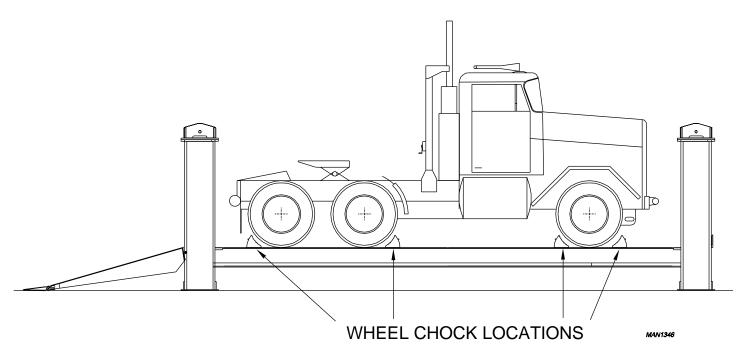


USE ANTI-FREEZE AS FLUID REPLACEMENT ONLY!!

WHEEL CHOCK PLACEMENT







MOHAWK

MODEL TR-75

ELECTRICAL/HYDRAULIC SCHEMATICS

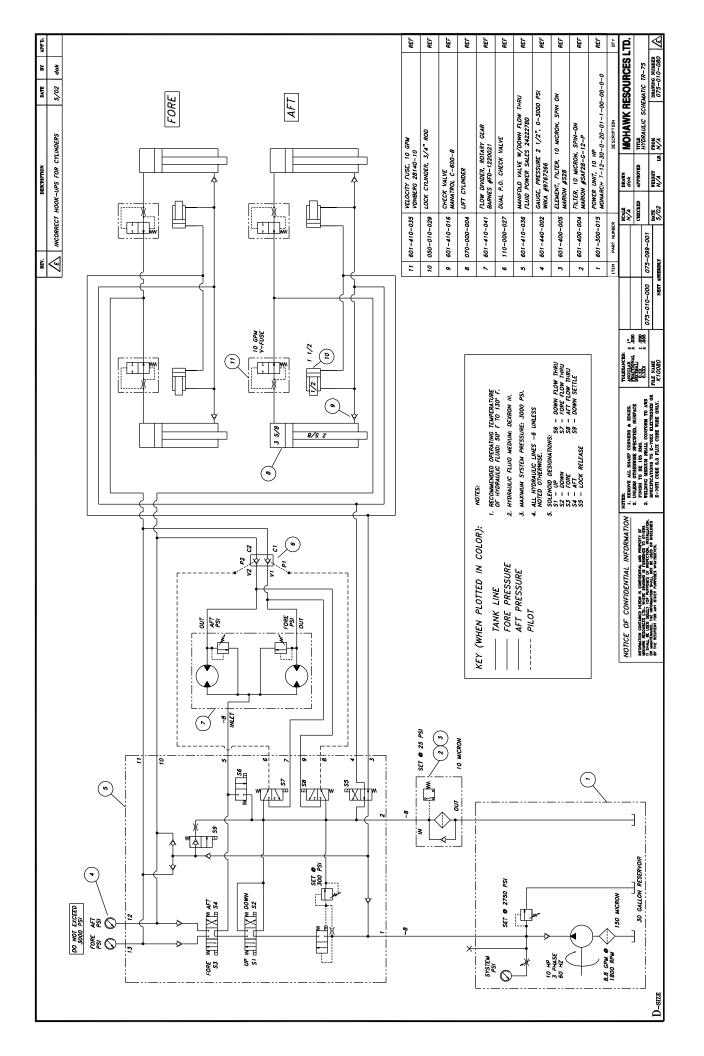


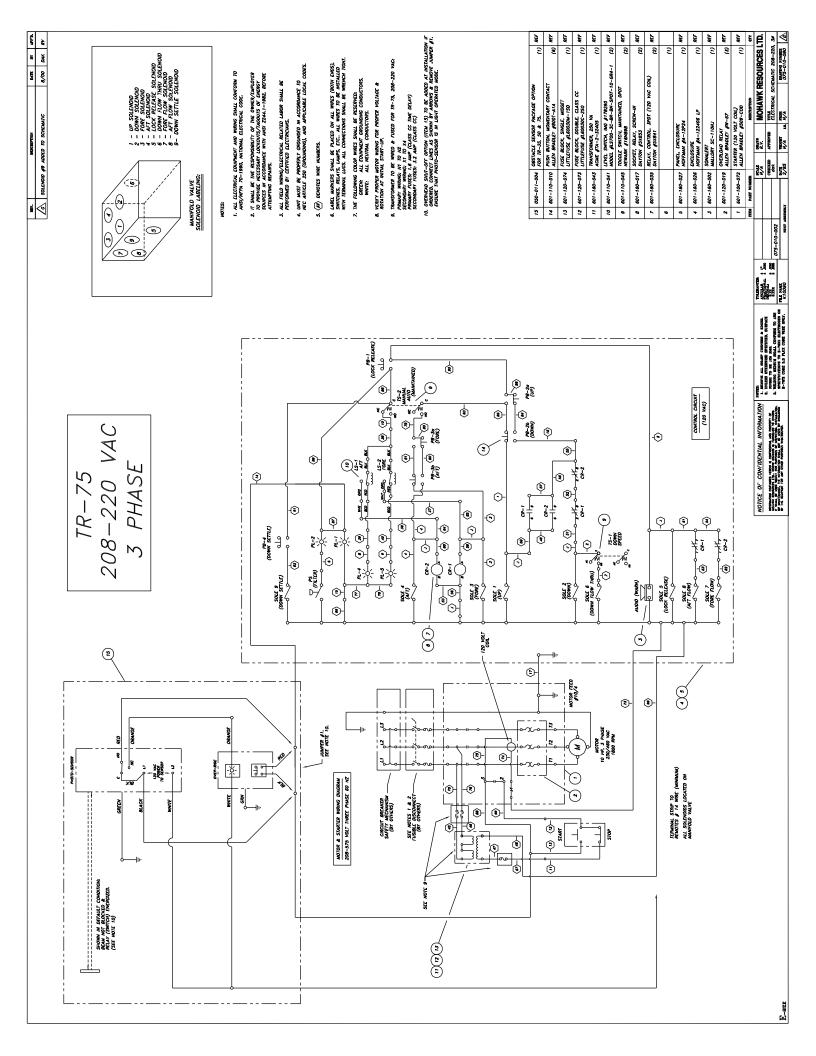
MOHAWK RESOURCES LTD.

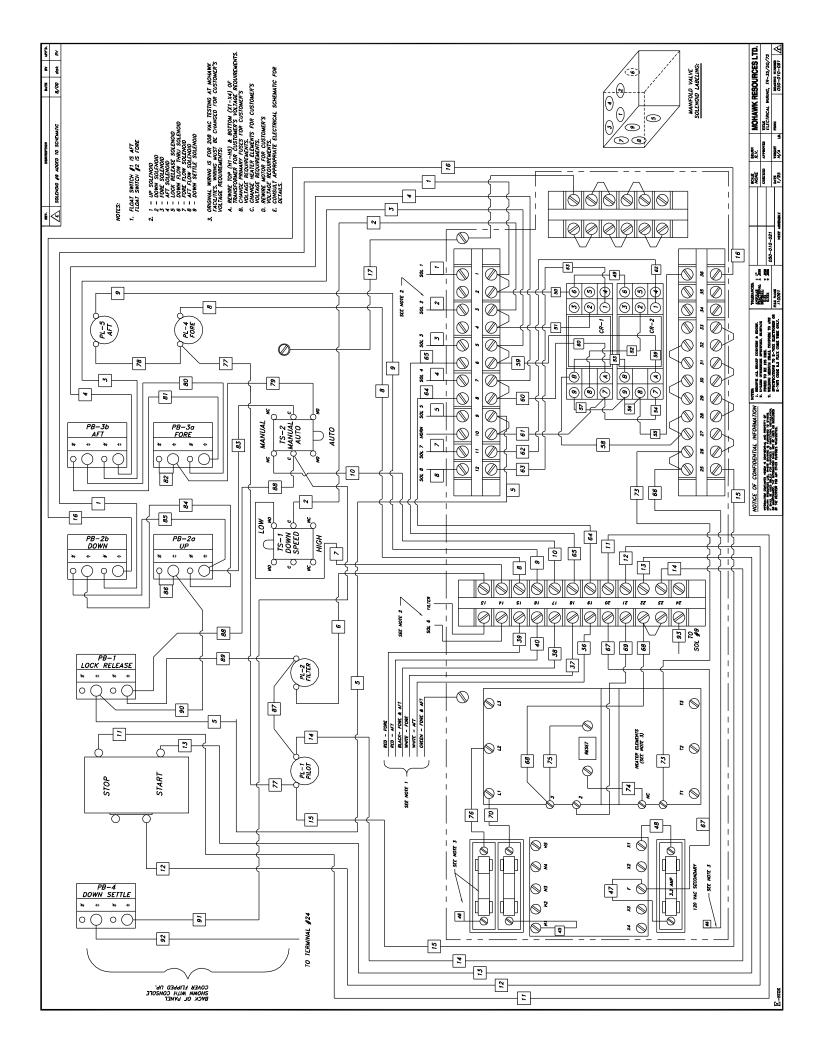
65 VROOMAN AVENUE AMSTERDAM, NY 12010

TOLL FREE: 1-800-833-2006

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







MOHAWK

MODEL TR-75

PARTS DRAWINGS

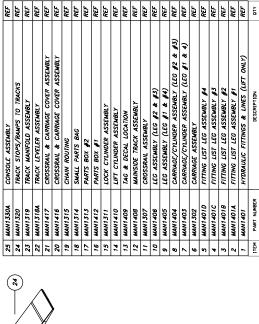


MOHAWK RESOURCES LTD.

65 VROOMAN AVENUE AMSTERDAM, NY 12010

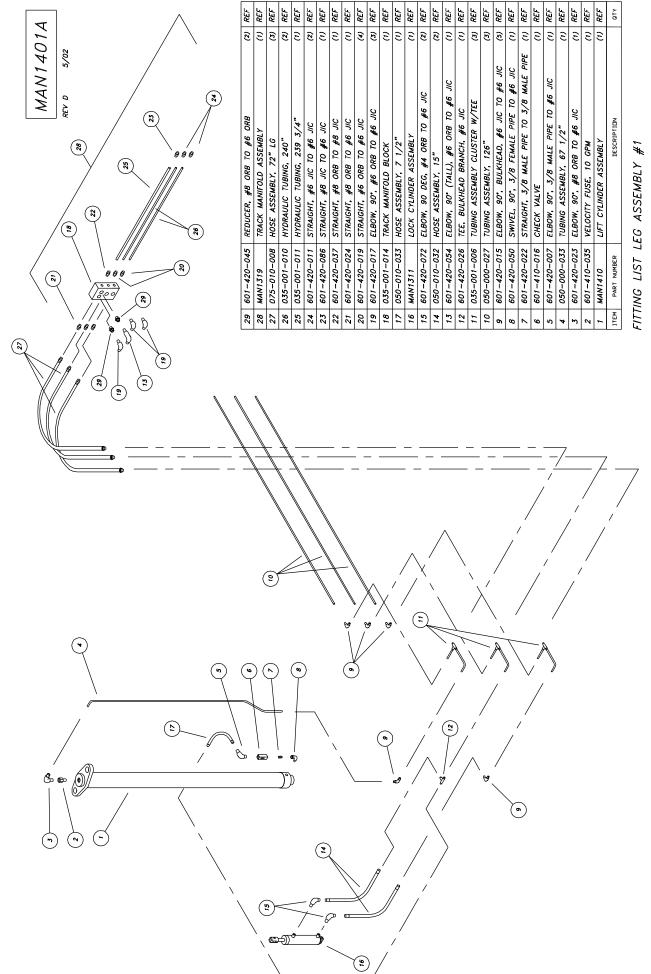
TOLL FREE: 1-800-833-2006

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



REV-B 5 6 7 9 14 15 (1) (1) (1) (1) (1) LEG ASSEMBLY #4 (2) 92 LEG ASSEMBLY #2 12 22 23 24 3 6 8 10 14 15 LEG ASSEMBLY #3 4 6 8 10 14 15 (1) 2 6 7 9 14 15 LEG ASSEMBLY #1

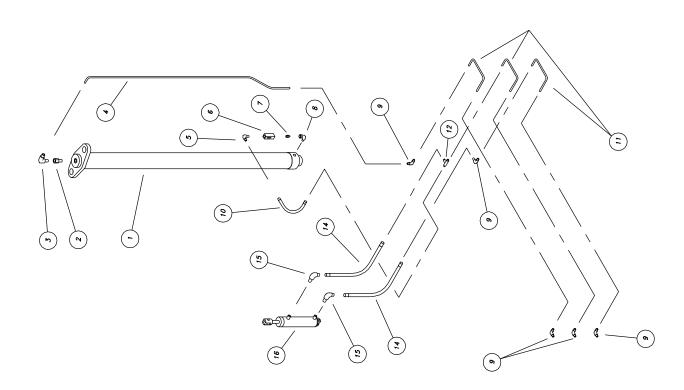
TR-75 LIFT FINAL ASSEMBLY



FITTING LIST LEG ASSEMBLY #2

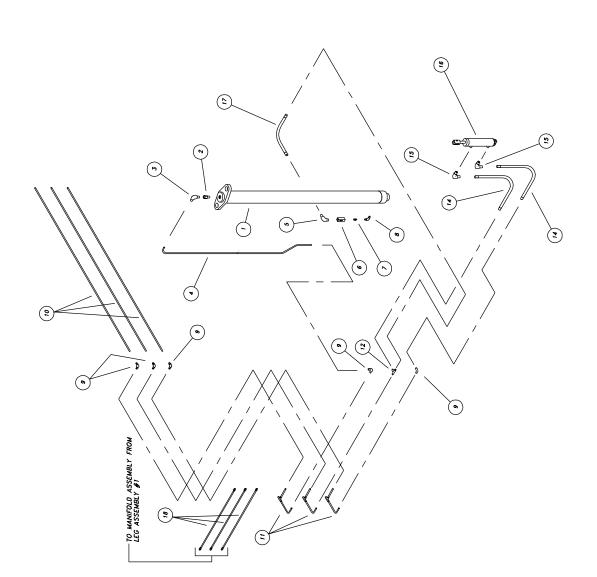
MAN1401B	6/10
	u

16	MAN1311	LOCK CYLINDER ASSEMBLY	ε	REF
15	601-420-072	ELBOW, 90 DEG, #4 ORB TO #6 JIC	ε	REF
14	050-010-032	HOSE ASSEMBLY, 15"	(2)	REF
13				
12	601-420-026	TEE, BULKHEAD BRANCH, #6 JIC	\hat{c}	REF
11	050-000-032	TUBING ASSEMBLY, 13 1/8"	છ	REF
10	050-010-033	HOSE ASSEMBLY, 7 1/2"	ε	REF
6	601-420-015	ELBOW, 90°, BULKHEAD, #6 JIC TO #6 JIC	(2)	REF
80	601-420-050	SWIVEL, 90°, 3/8 FEMALE PIPE TO #6 JIC	ε	REF
7	601-420-022	STRAIGHT, 3/8 MALE PIPE TO 3/8 MALE PIPE (1)	ε	REF
9	601-410-016	CHECK VALVE	ω	REF
5	601-420-007	ELBOW, 90°, 3/8 MALE PIPE TO #6 JIC	ω	REF
4	£50-000-050	TUBING ASSEMBLY, 67 1/2"	ω	REF
3	601-420-023	ELBOW, 90°, #8 ORB TO #6 JIC	ε	REF
2	601-410-035	VELOCITY FUSE, 10 GPM	ε	REF
1	MAN1410	LIFT CYLINDER ASSEMBLY	ω	REF
ITEM	PART NUMBER	DESCRIPTION		ΩTΥ



FITTING LIST LEG ASSEMBLY #3

075-010-008	HOSE ASSEMBLY, 72" LG	3	REF
050-010-033	HOSE ASSEMBLY, 7 1/2"	ε	REF
MAN1311	LOCK CYLINDER ASSEMBLY	ε	REF
601-420-072	ELBOW, 90 DEG, #4 ORB TO #6 JIC	3	REF
050-010-032	HOSE ASSEMBLY, 15"	3	REF
601-420-026	TEE, BULKHEAD BRANCH, #6 JIC	ε	REF
035-001-006	TUBING ASSEMBLY CLUSTER W/TEE	ව	REF
050-000-027	TUBING ASSEMBLY, 126"	ව	REF
601-420-015	ELBOW, 90°, BULKHEAD, #6 JIC TO #6 JIC	છ	REF
601-420-050	SWIVEL, 90°, 3/8 FEMALE PIPE TO #6 JIC	ω	REF
601-420-022	STRAIGHT, 3/8 MALE PIPE TO 3/8 MALE PIPE	ε	REF
601-410-016	CHECK VALVE	ε	REF
601-420-007	ELBOW, 90°, 3/8 MALE PIPE TO #6 JIC	ε	REF
050-000-033	TUBING ASSEMBLY, 67 1/2"	ε	REF
601-420-023	ELBOW, 90°, #8 ORB TO #6 JIC	ε	REF
601-410-035	VELOCITY FUSE, 10 GPM	ε	REF
MAN1410	LIFT CYLINDER ASSEMBLY	(ι)	REF
PART NUMBER	DESCRIPTION		γTΩ
	MAN1311 601-420-072 050-010-032 050-010-032 035-001-006 035-001-006 050-000-027 601-420-015 601-420-015 601-410-016 MAN1410 PART NUMBER		TOSE ASSEMBLY, 15" THOSE ASSEMBLY, 15" HOSE ASSEMBLY, 15" TEE, BULKHEAD BRANCH, #6 JIC TUBING ASSEMBLY, 126" TUBING ASSEMBLY, 126" SWIVEL, 90", 3/8 FEMALE PIPE TO #6 JIC STRAIGHT, 3/9 MALE PIPE TO 3/8 MALE PIPE TUBING ASSEMBLY, 67 1/2" TUBING ASSEMBLY, 67 1/2" TUBING ASSEMBLY, 67 1/2" TUBING ASSEMBLY, 67 1/2" TUBING ASSEMBLY TUBING



MAN1401C

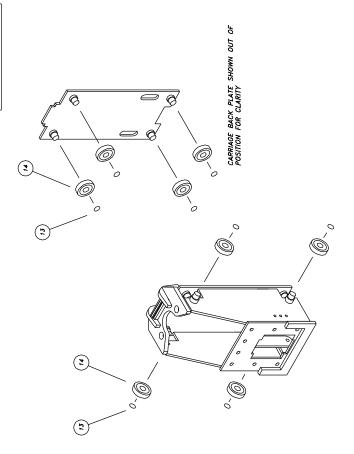
REV B 5/02

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FITTING LIST LEG ASSEMBLY #4

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20/5						2 nc	JIC :	TE PIPE	JIC				
B VEV B		2/10		U)# O1 :	9# 01	3/8 MA	9#	\ \			
	11.7	# 01 B		l, #6 JI	1/8")/r 9#	TE PIPE	PE 70	PIPE T	1/2" 2 #6 JI		۰,	DESCRIPTION
	ASSEMB	#4 OK	c/	BRANCH	7, 13	KHEAD,	'8 FEMA	WALE PI	8 MALE	7. 67 ORB 70	10 GPA	SSEMBL	DESC
	LINDER	90 DEG,	SEMBLI	KHEAD	ASSEMBL	90°, BU	90°, 3/	, 3/8 ALVE	90°, 3/	ASSEMBL 90°. #8	FUSE,	INDER A	
	LOCK CYLINDER ASSEMBLY	ELBOW, 90 DEG, #4 ORB TO #6 JIC	103£ A3	TEE, BULKHEAD BRANCH, #6 JIC	TUBING ASSEMBLY, 13 1/8"	FLBOW, 90°, BULKHEAD, #6 JIC TO #6 JIC	SWIVEL, 90°, 3/8 FEMALE PIPE TO #6 JIC	STRAIGHT, 3/8 MALE PIPE TO 3/8 MALE PIPE CHECK VALVE	ELBOW, 90°, 3/8 MALE PIPE TO	TUBING ASSEMBLY, 67 1/2" ELBOW, 90", #8 ORB TO #6 JIC	VELOCITY FUSE, 10 GPM	LIFT CYLINDER ASSEMBLY	
	\vdash	-	_	\vdash	_	_	\vdash	_	-	_	-	\vdash	BER
	MAN1311	601-420-072	-010-00	601-420-026	050-000-032	601-420-015	601-420-050	601-420-022	601-420-007	050-000-033 601-420-023	601-410-035	MAN1410	PART NUMBER
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(1) REF (2) REF (2) REF (1) REF (2) REF (3) REF (4) REF (7) REF



(2)

	80	2	7	2	1	1	,	,	1	2	1	-	1	ŢŢ
14 050-000-047 CARRIAGE ROLLER ASSEMBLY, 4" DIA	600-870-001 SNAP RING, #5100-137	600-640-027 BOLT, 3/4-16 NF x 4 1/2 LG	600-860-005 BEARING, CAM YOKE	600-690-003 NUT. LOCK, 3/4-16 NF	601-470-004 GREASE FITTING, 1/4-28 NF	600-640-018 BOLT, 1/2-13 NC x 3" LG	026-000-127 WEDGE LOCKING PLATE	600-680-008 NUT, PLAIN, 1/2-13 NC	600-660-001 EYEBOLT, 1/2-13 NC x 2 11/16 LG	600-690-009 NUT, LOCK, 1/2-13 NC	050-010-029 LOCK CYLINDER ASSEMBLY	600-640-044 BOLT, 1/2-13 NC x 4" LG	CARRIAGE WELDMENT	DESCRIPTION
050-000-047	600-870-001	600-640-027	900-860-009		601-470-004	600-640-018	026-000-127	800-089-009	100-099-009	600-069-009	050-010-050	600-640-044	050-000-005	PART NUMBER
7	13	12	:	0	6	8	_	9	5	4	3	7	1	LTEM

CARRIAGE SIDE PLATE REMOVED FOR CLARITY

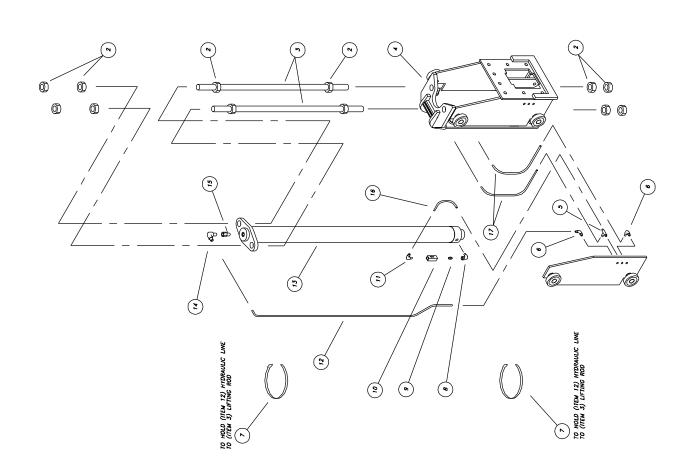
CARRIAGE ASSEMBLY (050-000-009)

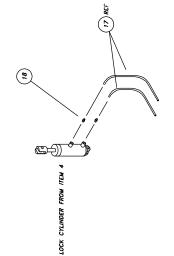
FILE: MAN1302 DATE: 7/96

REV-C

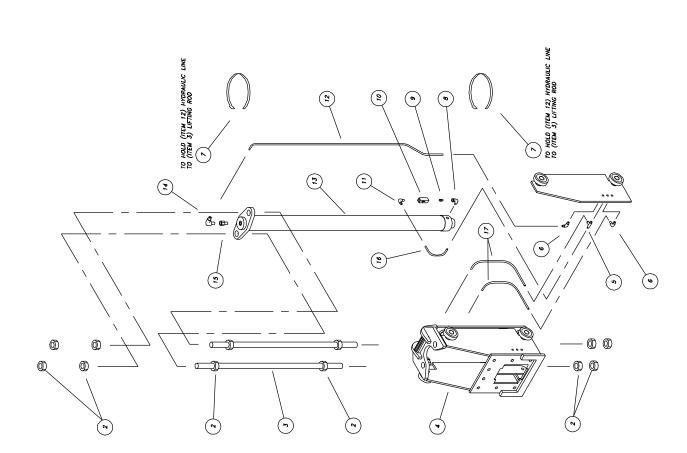
8	601-420-025	FITTING, UNION, #4 ORB TO #6 JIC	7
17	050-010-032	17 050-010-032 HOSE ASSEMBLY, 15"	2
16	050-010-033	HOSE ASSEMBLY, 7 1/2"	1
15		601-410-035 VELOCITY FUSE, 10 GPM	-
7.	601-420-023	FITTING, 90" ELBOW, #8 ORB TO #6 JIC	-
5	MAN1410	LIFT CYLINDER ASSEMBLY	-
12	050-000-033	TUBING ASSEMBLY, 67 1/2"	•
:	601-420-007	FITTING, 90" ELBOW, 3/8 MALE PIPE TO #6 JIC	^
10		601-410-016 VALVE, CHECK	-
o,	601-420-022	FITTING, UNION, 3/8 MALE PIPE TO 3/8 MALE PIPE	-
80	601-420-050	601-420-050 FITTING, 90" ELBOW, SWIV,3/8 FEM PIPE TO #6 ORB	-
^	601-600-021	PULL TIE, PLASTIC, LONG	~
ø	601-420-015	FITTING, 90" ELBOW, BULKHEAD, #6 JIC TO #6 JIC	2
S	601-420-026	FITTING, TEE, BULKHEAD, #6 JIC BRANCH	-
4	MAN 1302	CARRIAGE ASSEMBLY	-
'n	050-000-145 LIFTING ROD	LIFTING ROD	~
~	600-680-007	NUT, PLAIN, 1 1/2-12 NF	12
•			
ITEN	PART NUMBER	DE SCRIPTION	710

LOCK CYLINDER FROM ITEM 4	
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2	
	EF (17)





7	2	-	-	-	-	-	-	-	-	-	7	~	1	-	~	12		Ţ
601-420-025 FITTING, UNION, #4 ORB TO #6 JIC	HOSE ASSEMBLY, 15"	HOSE ASSEMBLY, 7 1/2"	VELOCITY FUSE, 10 GPM	FITTING, 90" ELBOW, #8 ORB TO #6 JIC	LIFT CYLINDER ASSEMBLY	TUBING ASSEMBLY, 67 1/2"	FITTING, 90" ELBOW, 3/8 MALE PIPE TO #6 JIC	VALVE, CHECK	FITTING, UNION, 3/8 MALE PIPE TO 3/8 MALE PIPE	FITTING, 90" ELBOW, SWIV,3/8 FEM PIPE TO #6 ORB	PULL TIE, PLASTIC, LONG	FITTING, 90" ELBOW, BULKHEAD, #6 JIC TO #6 JIC	FITTING, TEE, BULKHEAD, #6 JIC BRANCH	CARRIAGE ASSEMBLY	LIFTING ROD	NUT, PLAIN, 1 1/2-12 NF		DESCRIPTION
601-420-025	050-010-032	050-010-033	601-410-035	601-420-023	MAN1410	050-000-033	601-420-007	601-410-016	601-420-022	601-420-050	601-600-021	601-420-015	601-420-026	MAN1302	050-000-145	200-089-009		PART NUMBER
18	17	91	15	14	7.3	12	11	0,	6	80	_	9	2	4	5	2	,	MGL



MAN1404

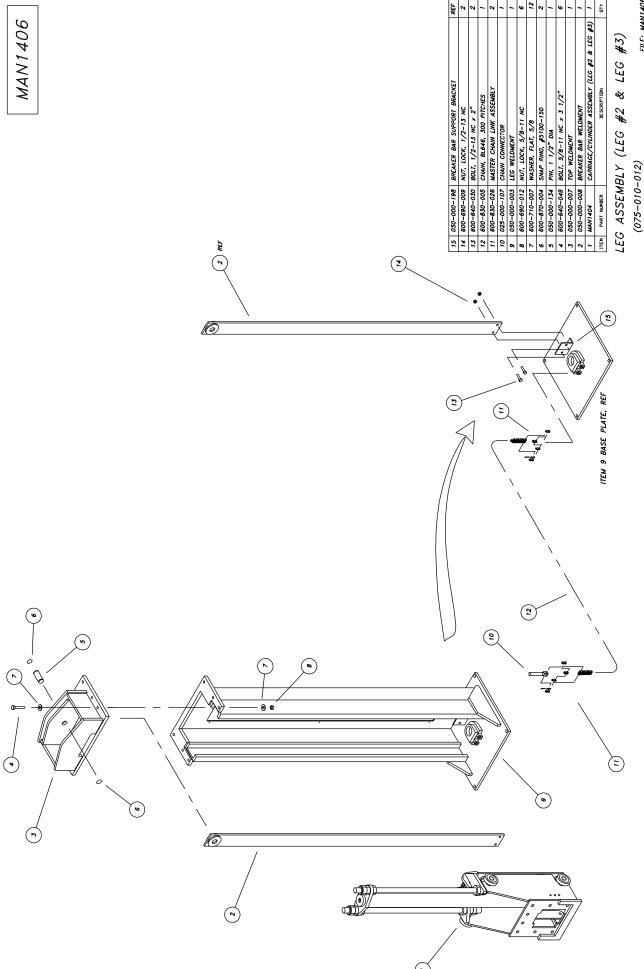
REV-C 5/02

REF	2	~	-	7	-	-	9	12	7	-	9	-	-	,	ΥTO
BREAKER BAR SUPPORT BRACKET	NUT, LOCK, 1/2-13 NC	BOLT, 1/2-13 NC x 2"	CHAIN, BL646, 300 PITCHES	MASTER CHAIN LINK ASSEMBLY	CHAIN CONNECTOR	LEG WELDMENT	NUT, LOCK, 5/8-11 NC	WASHER, FLAT, 5/8	SNAP RING, #5100-150	PIN, 1 1/2" DIA	BOLT, 5/8-11 NC x 3 1/2"	TOP WELDMENT	BREAKER BAR WELDMENT	CARRIAGE/CYLINDER ASSEMBLY (LEG #1 & LEG #4)	NULLEIBUSSE
050-000-198	600-069-009	600-640-030	600-830-005	600-830-026	025-000-107	050-000-003	600-690-012	600-710-003	600-870-004	050-000-134	600-640-049	050-000-007	020-000-008	MAN1403	PART NIMBER
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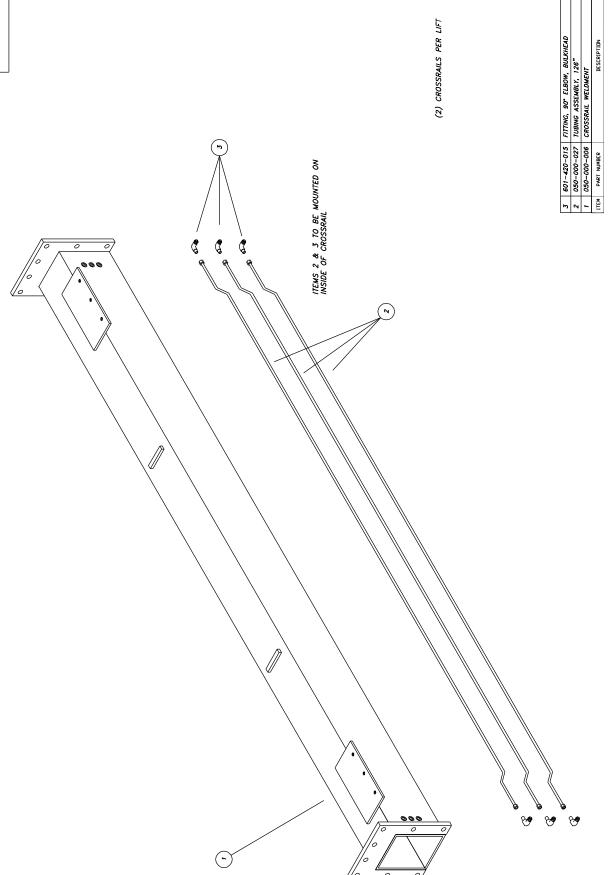
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(2) REF	(13) (13) (14) (15) (15) (16) (16) (17) (18) (18) (19) (19) (19) (19) (19) (19) (19) (19

LEG ASSEMBLY (LEG #1 & LEG #4)
(075-010-011)

FILE: MAN1405 DATE: 8/96



FILE: MAN1406 DATE: 8/96

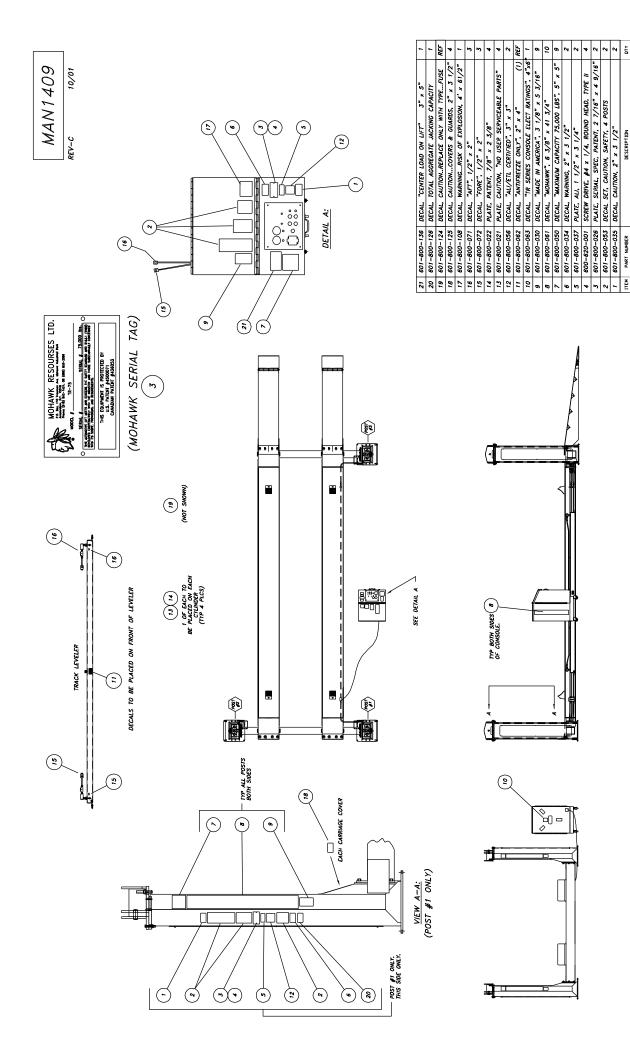


CROSSRAIL ASSEMBLY (050-010-008)

FILE: MAN1307 DATE: 7/96

	,		710		FILE: MAN1408
96/01					FILE:
REV-A		SSEMBLY	DESCRIPTION	EMBLY	
	CK WELDMENT	2 MAN1319 TRACK MANIFOLD ASSEMBLY 1 MAN1318A TRACK LEVELER ASSEMBLY		ASS	5)
	00-001 TRAC	19 TRAC	NUMBER	DE TRA	(075-010-005)
	3 075-0	2 MAN13	ITEM PART NUMBER	MAINSI	(075
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	7				
[Fee]					

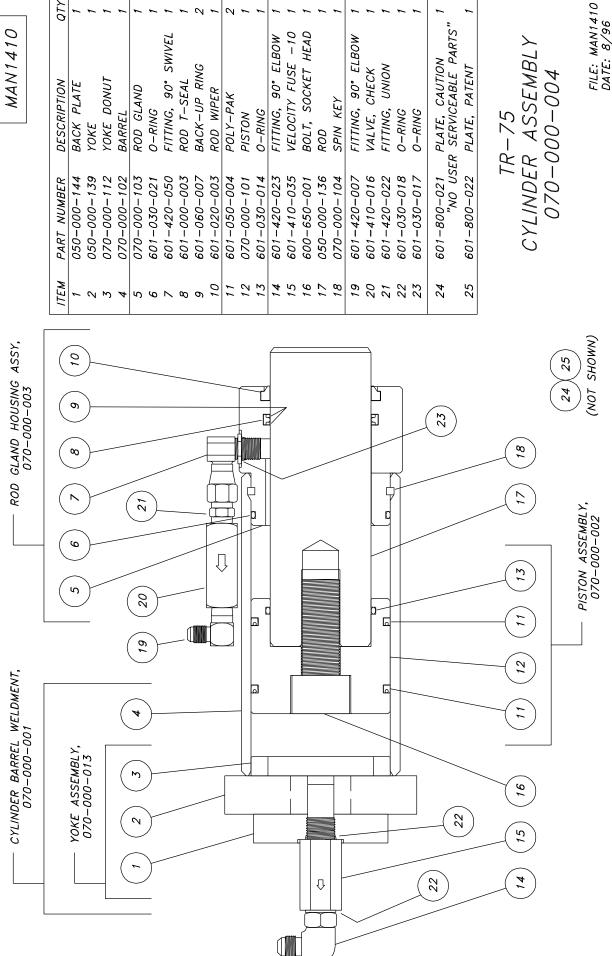
FILE: MAN1408 DATE: 8/96

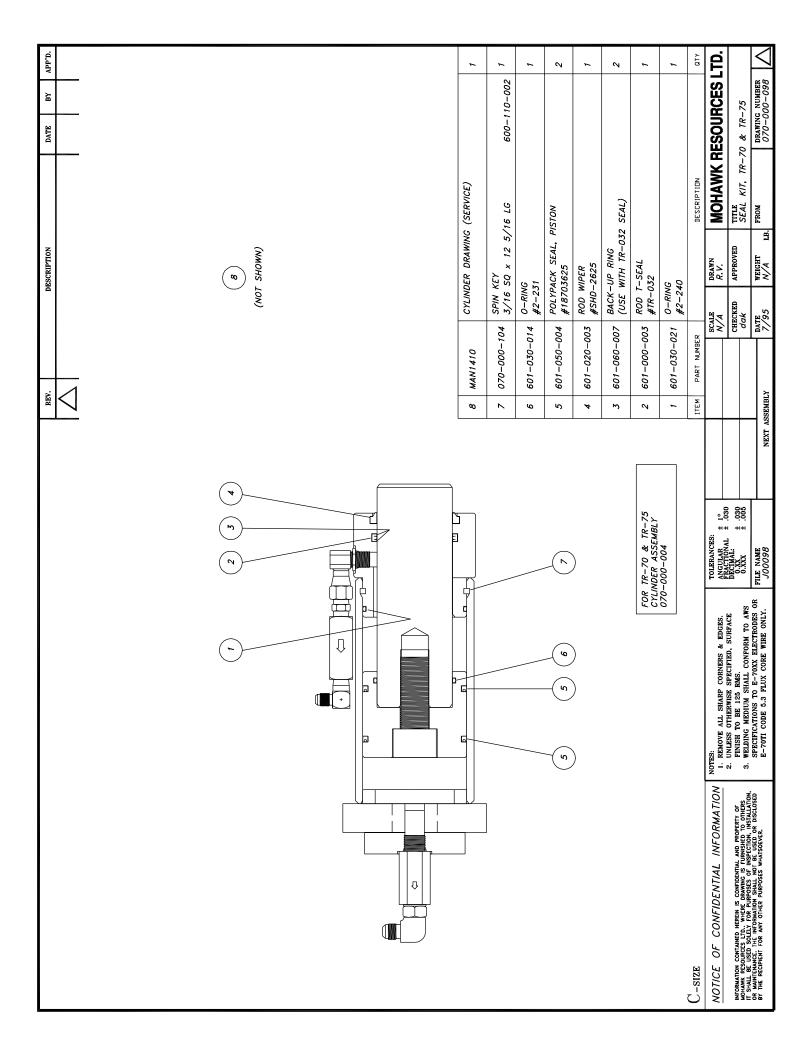


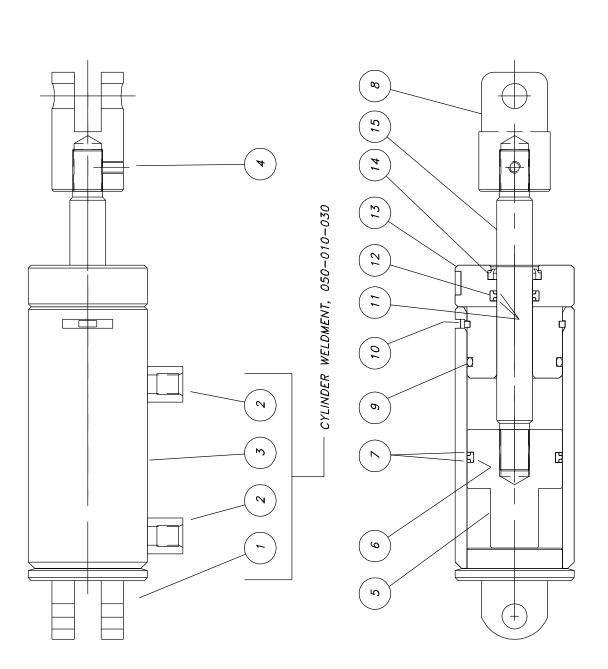
TR-75 TAG & DECAL LOCATION

DESCRIPTION

770







077 END CAP HALF COUPLING BACK-UP RING PISTON T-SEAL BACK-UP RING DESCRIPTION ROD T-SEAL ROD GLAND SET SCREW ROD WIPER SPIN KEY CLEVIS O-RING BARREL PISTON PART NUMBER 050-010-105 050-000-146 050-010-106 600-630-003 050-010-104 601-010-012 050-000-123 601-030-025 007-001-172 601-060-018 601-000-011 050-010-102 601-020-007 050-010-103 601-060-017 ITEM 4 2 0 V 8 9 0 1 1 2 1

TR-35, 50 & 75 LOCK CYLINDER ASSEMBLY 050-010-029

FILE: MAN1311 DATE: 7/96

PARTS BOX #1

DESCRIPTION

ITEM PART NUMBER

| 601-800-070 | WARRANTY REGISTRATION CARD FACKAGE | 6 050-000-157 | TRACK STOP, TOP | 5 600-930-001 | RUBBER WHEEL CHOCK | 4 075-010-008 | HOSE ASSEMBLY | 5 075-010-016 | TR-75 MANUAL ASSEMBLY | 5 033-000-116 | TRACK STOP, BOTTOM | 1 601-600-023 | BOX, CORRUGATED | INSTRUBILINA

WARRANTY REGISTRATION CARD PACKAGE

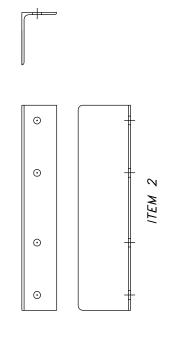
MAN1412

66/9

REV-B

ITEM 7 (SECURED TO OUTSIDE OF ITEM 1 CARTON)

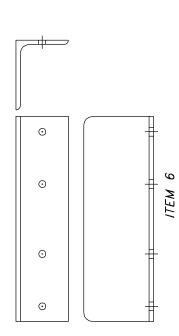
TR-75 MANUAL ASSEMBLY



ITEM 3

0

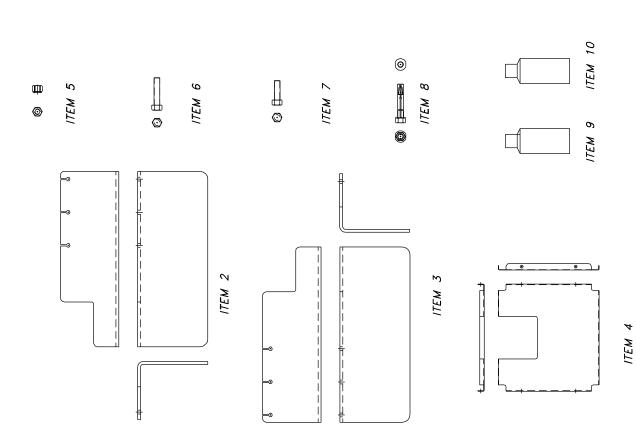




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ITEM 5	·	TEM 6
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9	9	_	9	9	9	32	91	8*	4	7	7	,	YIO
TUBING ASSEMBLY, 13 1/8"	035-001-006 TUBING ASSEMBLY CLUSTER W/TEE	050-010-016 SMALL PARTS BAG	SPRAY PAINT, TOUCH-UP, YELLOW	601-630-001 SPRAY PAINT, TOUCH-UP, RED	ANCHOR BOLT, WEJ-IT, 3/4 x 5 1/2"	600-640-024 BOLT, 3/4-16 NF x 2 1/2"	BOLT, 3/4-16 NF x 3 1/2"	NUT, LOCK, 3/4-16 NF	050-000-160 CARRIAGE COVER PLATE	CROSSRAIL LINE COVER (RIGHT)	050-010-115 CROSSRAIL LINE COVER (LEFT)	601-600-023 BOX, CORRUGATED	DESCRIPTION
13 050-000-032	035-001-006	050-010-016	601-630-002	601-630-001	800-029-009	600-640-024	600-640-028	200-069-009	050-000-160	911-010-050	050-010-115	601-600-023	PART NUMBER
13	12	11	0	6	00	7	9	2	4	3	~	,	TEM

PARTS BOX #2

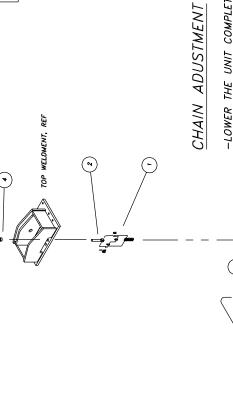


MAN1314

4 600-680-010 NUT, LOCK, 778-14 NF 3 600-830-005 CHAIN, BL646, 225" (300 PTICHES) 2 025-000-107 CHAIN CONNECTER 1 600-830-026 MASTER CHAIN LINK ASSEMBLY DESCRIPTION ITEM PART NUMBER

CHAIN ROUTING

QUANTITY SHOWN IS THE SAME FOR FORE & AFT' LEG ASSEMBLIES



MAN1315

-LOWER THE UNIT COMPLETELY

-TIGHTEN THE CHAIN CONNECTOR (ITEM 2) AT THE TOP OF THE POST

-THE ADJUSTMENT IS COMPLETE WHEN BOTH EQUALIZING CHAINS ARE TAUT

BASE PLATE, REF

TOP WELDMENT, REF (REAR PLATES NOT SHOWN FOR CLARITY)

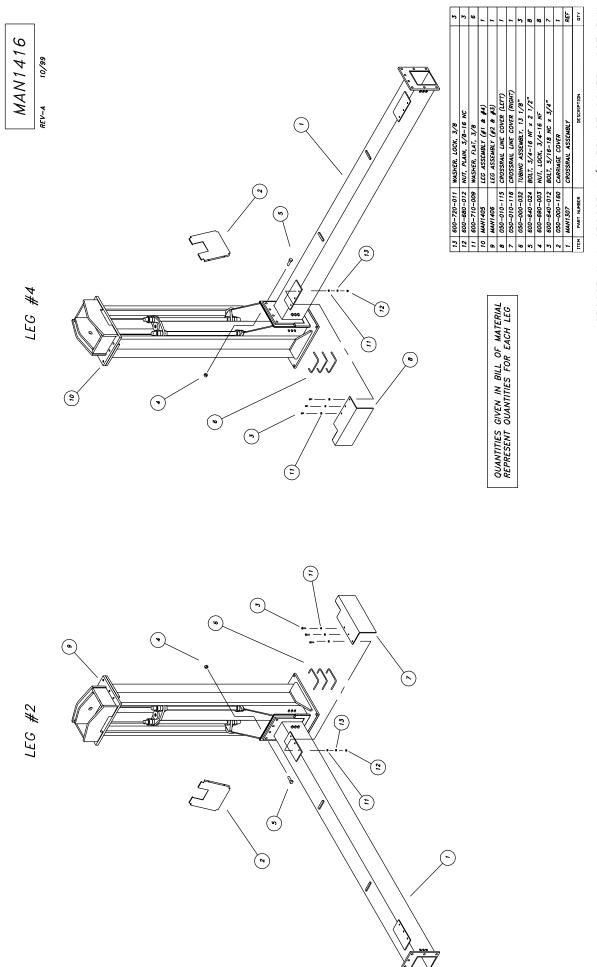




3) EQUALIZING CHAINS



BASE PLATE, REF



CROSSRAIL & CROSSRAIL/CARRIAGE COVER ASSEMBLY

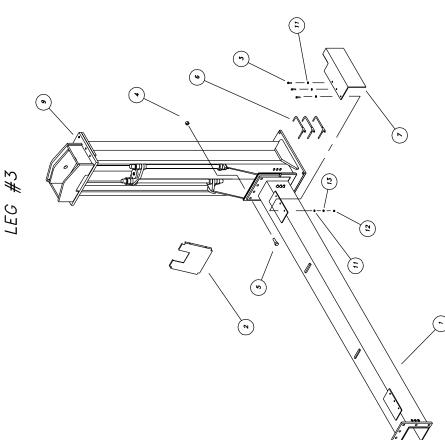
LEG #1

CROSSRAIL & CROSSRAIL/CARRIAGE COVER ASSEMBLY

۳	5	9	1	1	,	_	۳,	8	8	7	_	REF	Ϋ́
600-720-011 WASHER, LOCK, 3/8	NUT, PLAIN, 3/8-16 NC	WASHER, FLAT, 3/8	LEG ASSEMBLY (#1 & #4)	LEG ASSEMBLY (#2 & #3)	050-000-044 CROSSRAIL LINE COVER	CROSSRAIL LINE COVER	035-001-006 TUBING ASSEMBLY CLUSTER W/TEE	600-640-024 BOLT, 3/4-16 NF x 2 1/2"	600-690-003 NUT, LOCK, 3/4-16 NF	600-640-012 BOLT, 5/16-18 NC x 3/4"	CARRIAGE COVER	CROSSRAIL ASSEMBLY	DESCRIPTION
600-720-011	600-680-012	600-710-009	MAN1405	MAN1406	050-000-044	050-000-043	035-001-006	600-640-024	£00-069-009	600-640-012	050-000-160	MAN1307	PART NUMBER
73	12	11	10	6	8	_	9	s	7	m	7	1	ITEM
								ERIAL	3				

QUANTITIES GIVEN IN BILL OF MATES REPRESENT QUANTITIES FOR EACH L

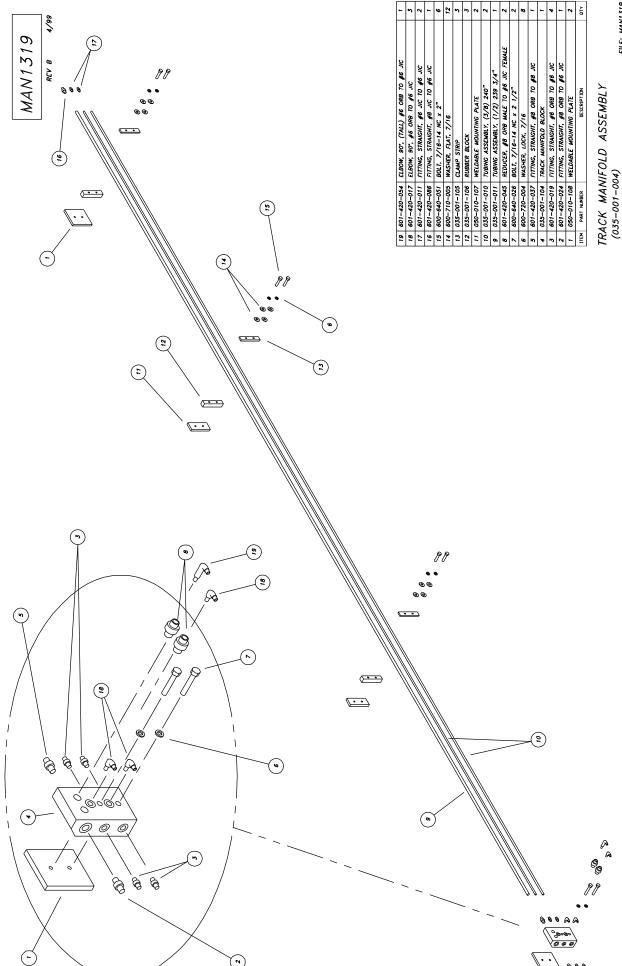
(2)



(m)

FILE: MAN1318A DATE: 10/99

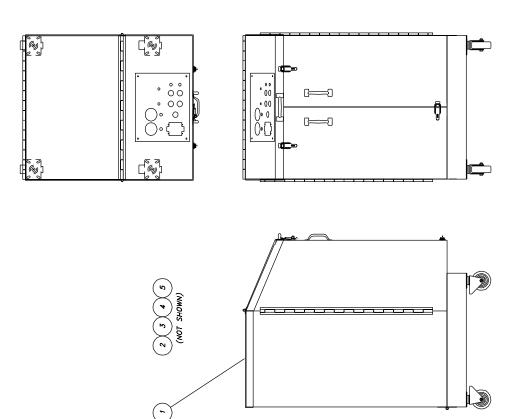
(033-002-031)



FILE: MAN1319 DATE: 7/96

	REF	REF	REF	REF	1	ΔTΥ
	(8)			(8)		
MAN1320 REV-A 6/99	NUT, LOCK, 3/4-16 NF	TRACK STOP, BOTTOM	TRACK STOP, TOP	BOLT, 3/4-16 NF x 3 1/2"	RAMP ASSEMBLY, 8' LG	DESCRIPTION
(h) (4)	800-069-009	050-000-179	050-000-157	600-640-028	050-010-037	PART NUMBER
	9-009 5	4 050-0	3 050-0	2 600-6	1 050-0	ITEM PART
MAINSIDE OR OFFSIDE TRACK, REF			(5))		
			1	>		

TRACK STOPS/RAMPS TO TRACKS



MOTOR WIRING:

VAC	4	7 0	•	- 27
FOR 440-480 VAC:	رئ ص	 %	o—	- 2
FOR	9	o s	ზ	- 17
FOR 208-240 VAC:	4 0	o	0	- 13
208-2	20	∞	~	- 3
FOR	60	<i>o</i> v ⊙—	M ⊕	- 17

NOTES:

- 1. REFER TO ABOVE FOR MOTOR WIRING.
- 2. REFER TO MAN1330B FOR ADDITIONAL ELECTRICAL SPECS

4 OSO-010-091 ELECTRICAL WIRNG 1 4 OSO-010-091 ELECTRICAL WIRNG 1 3 MAN1332 TUBING & HOSE LIST, TR-CONSOLE 1 2 MAN1333 ITTING LIST, TR-SERIES CONSOLE 1 1 MAN1333 CONSOLE ASSEMBLY, UNFUSED 1 1 PRINT MANIBAR 017

CONSOLE ASSEMBLY, TR-SERIES

FILE: MAN1330A DATE: 8/96



TR-35

575-600 VAC 3 PHASE

1 BLOCKS 440-480 VAC 3 PHASE

10 16

TO TERMINAL

Ø 3.2 AMP ⊗

Ø 3.2 AMP ⊗

TO 509-BOD STARTER W/ W-45 HEATER ELEMENTS

© 0.6 AMP ©

TO 509-BOD STARTER W/ W-47 HEATER ELEMENTS

© 0.6 AMP ©

230-240 VAC 3 PHASE

208-220 VAC 3 PHASE

TO 509-BOD STARTER W/ W-54 HEATER ELEMENTS

@ 1.4 AMP ©

TO 509-BOD STARTER W/ W-56 HEATER ELEMENTS

Ø □1.6 AMP Ø Ø 1.6 AMP ⊗

-ULL LOAD AMPS	17 15.4 7.7
SECONDARY FUI FUSE: (OTY 1)	1-120-047 1-120-047 1-120-047
PRIMARY SE FUSE: (OTY 2)	601-120-025 601-120-044 601-120-047 601-120-014 601-120-042 601-120-047 601-120-030 601-120-038 601-120-047
HEATER ELEMENT: (QTY 3)	601-120-025 601-120-014 601-120-030
VOLTS:	208–220 230–240 460–480
ELECTRICAL SCHEMATICS	035-010-090 035-010-090 035-010-091
POWER UNIT:	601-300-011 035-010-090 5 HP, 3 PHASE 035-010-090 230/460 VAC 035-010-091

TR-50

	ELECTRICAL SCHEMATICS	VOLTS:	HEATER ELEMENT: (OTY 3)	PRIMARY FUSE: (OTY 2)	SECONDARY FUSE: (OTY 1)	FULL LOAD AMPS
050-010-030	060	208-220	601-120-008	601-120-008 601-120-044 601-120-047	601-120-047	25.5
.5 HP, 3 PHASE 050-010-090	90	230-240	601-120-026	601-120-026 601-120-042 601-120-047	601-120-047	20
050-010-092	22	460-480	601-120-031	601-120-031 601-120-038 601-120-047	601-120-047	11.5
SPECIAL		575	601-120-028	601-120-028 601-120-038 601-120-047	601-120-047	9.2

TR-50

1 BLOCKS 440-480 VAC 3 PHASE

01 01 01

TO TERMINAL BL

Ø 3.2 AMP ⊗

230-240 VAC 3 PHASE

208-220 VAC 3 PHASE

TO 509-BOD STARTER W/ W-59 HEATER ELEMENTS

Ø 1.4 AMP Ø Ø 1.4 AMP Ø

TO 509-B0D STARTER W/ W-60 HEATER ELEMENTS

@ | 1.6 AMP | ©

*NOTE: REWIRE MOTOR FOR 575 VAC

PRUME: PRUME: POR 575

*NOTE: REWIRE MOTOR FOR 460 VAC

MOTE:

NOTE:

NO

230-240 VAC 3. PHASE

208-220 VAC 3 PHASE

Ø 1.4 AMP Ø

TO 509-COD STARTER W/ W-63 HEATER ELEMENTS

@ 1.6 AMP @

*NOTE: REWIRE MOTOR FOR 575 VAC

0 3.2 AMP

MOTE: MOTOR: MOTOR: MOTOR: MOTOR WAS A WOTOR WAS A WOT

Ø 0.6 AMP ⊗

TO 509-BOD STARTER W/ W-51 HEATER ELEMENTS

© 0.6 AMP ©

POWER UNIT: S	SCHEMATICS	VOLTS:	ELEMENT: (QTY 3)	FUSE: (OTY 2)	FUSE: (QTY 1)	AMPS
2-01	075-010-090	208-220	601-120-027	601-120-027 601-120-044 601-120-047	601-120-047	40
10-5	10 HP, 3 PHASE 075-010-090	230-240	601-120-007	601-120-007 601-120-042 601-120-047	601-120-047	36
075-010-091	160-0	460-480	601-120-014	601-120-014 601-120-038 601-120-047	601-120-047	18
SPECIAL	/AL	575	601-120-024	601-120-024 601-120-038 601-120-047	601-120-047	14.5

575-600 VAC 3 PHASE

0 I 0 I 0 I

440-480 VAC 3 PHASE

Ø 3.2 AMP Ø

S ANP S ANP

- TO 509-B0D STARTER W/ W-52 HEATER - ELEMENTS

© 0.6 AMP ©

- TO 509-BOD STARTER W/ W-54 HEATER - ELEMENTS

O O.6 AMP

Ø 0.6 AMP Ø

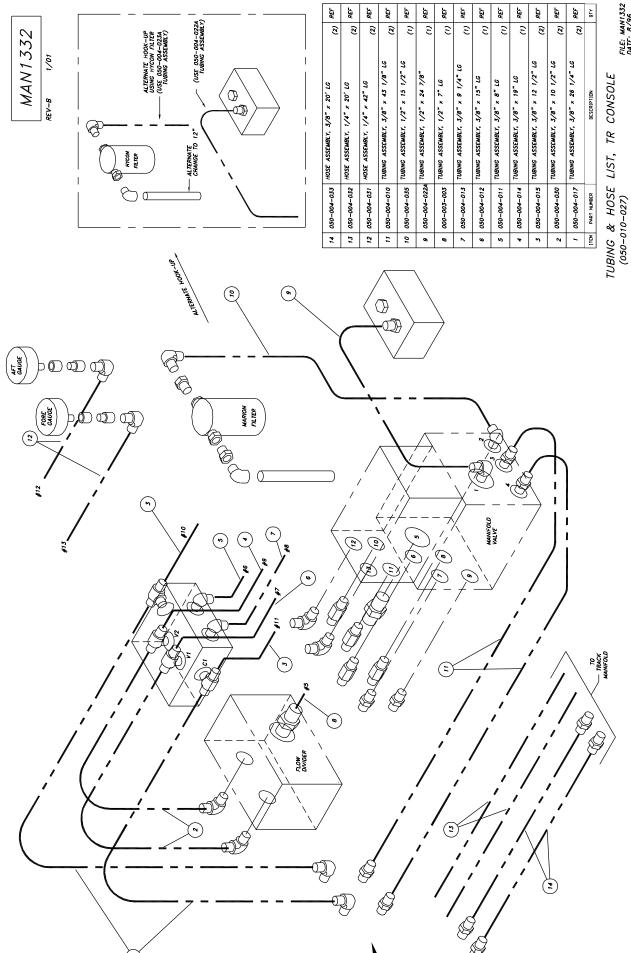
*NOTE: REWIRE MOTOR FOR 460 VAC

Ø 3.2 AMP S

TR-SERIES ELECTRICAL SPECIFICATIONS

FILE: MAN1330B DATE: 8/96

		REF REF			REF	REF		REF REF	REF	REF	REF	REF		REF		41331 96
MAN1331	4 MALE PIPE (2) NPT M SWII (4)	/4 NPT FEM (2)	JIC F. SWIV		(1) (1) -12 ORB	/4 NPT F. (1)	ω	(1) ICH) (4)		(5)	Θ	- 1	(E) (S)	3	(5)	FILE: MAN1331 DATE: 8/96
NAM STORY	ORB TO 1/2	T FEM TO 1,	7. 70 -6 0, -6 JIC	EAD, -6 JK	IPT MALE TO	IPT M. TO 3	5. 26	6 JIC (BRAI	JIF 9- 01 82	N 9- 01 8	31.8-07.8	70 -6 JIC	N 9- 01 B	JIC 9- 01	L 8- 07 85	37c
\(\)	NG. #4 FEM HT, 1/2" HC	NG. 1/4 NP	4T, 1/2 NP1 4T, BULKHEA	90°, BULKH	90°, 3/4 N	90°, 3/4 !	/4" × 9 1/	-8 UNB 6 ORB 70 -	90°, -6 01	90°, -8 00	47, -16 ORE	47, -8 ORB 47, -6 ORB	90°4 01	47, -6 ORB	90°, -8 00	CONSOL
MUCON PLESS ALIES CHANGE TO 12"	FITTING, COUPLING, #4 FEM ORB TO 1/4 MALE PIPE (2) FITTING, STRAIGHT, 1/2" HOSE TO 1/2 NPT M SWIY (4)	FITTING, COUPLING, 1/4 NPT FEM TO 1/4 NPT FEM (2) FITTING, COUPLING, 1/4 NPT FEM TO 1/4 NPT FEM (2) FITTING, ELBOW, 90°, #4 MALE ORB TO -6 JIC (2)	FITTING, STRAIGHT, 1/2 NPT F. TO -6 JIC F. SWIY FITTING, STRAIGHT, BULKHEAD, -6 JIC (4)	FITTING, ELBOW, 90°, BULKHEAD, -6 JIC	FITTING, ELBOW, 90°, 3./4 NPT MALE TO -8 JIC (1) FITTING, STRAIGHT, 3./4 NPT FEMALE TO -12 O(2)	FITTING, ELBOW, 90°, 3/4 NPT M. TO 3/4 NPT	NIPPLE, PIPE, 3/4" x 9 1/2" LG	FITTING, PLUG, -8 OKB FITTING, TEE, -6 ORB TO -6 JIC (BRANCH)	601-420-017 FITTING, ELBOW, 90", -6 ORB TO	FITTING, ELBOW, 90°, -8 ORB TO -6 JIC	FITTING, STRAIGHT, -16 ORB TO -8 JIC	FITTING, STRAIGHT, -8 ORB TO -8 JIC FITTING, STRAIGHT, -6 ORB TO -6 JIC (TALL)	FITTING, ELBOW, 90", -4 ORB TO -6 JIC	601-420-019 FITTING, STRAIGHT, -6 ORB TO -6 JIC	FITTING, ELBOW, 90°, -8 ORB TO -8 JIC	TR-SERIES CONSOLE
MILER CHANGO									0-017 FITT				_	9-019 FITT		TR-S
		20 601-430-030 19 601-450-093 18 601-420-072			14 601-420-070 13 601-420-034	12 601-420-036		9 601-420-055	8 601-421	7 601-420-023	6 601-420-087	5 601-420-037	3 601-420-074	2 601-420		G L/ST, TI
L		<u> </u>	1-1-				\	_						<u> </u>		FITTING LIST, (050-010-025)
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FILE: MAN1332 DATE: 8/96

REV-A

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DETAIL A:

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NOTES:

- 1. SIDE & FRONT COVERS OF CONTROL HOUSING WELDMENT REMOVED FOR CLARITY.
- 2. ATTACH OPEN ENDS OF CONDUIT & HOSING FROM ENCLOSURE TO CORRESPONDING POSITIONS INDICATED ON ENCLOSURE SUB-ASSEMBLY. FOR CLARITY, CONDUIT & HOSING FROM ENCLOSURE NOT SHOWN ON THIS DRAWING.

GAUGE, REF 7

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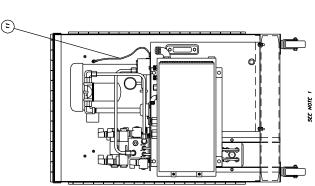
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CONNECTOR, CORD, STRAIGHT, 5/8-3/4, YELLOW	CONSOLE LEVELER CABLE ASSY	FITTING, 90" ELBOW, #4 MALE ORB TO #6 MALE JIC	FITTING, PIPE COUPLING, #4 FEM ORB TO 1/4 MALE PRESSURE CONNECTION #6404-04-04	FITTING, COUPLING, 1/4 NPT INT TO 1/4 NPT INT AEROOUIP #2096-45	HOSE ASSEMBLY, 3/8 ID x 20' LG	HOSE ASSEWBLY, 1/4 ID x 20' LG	CABLE ASSEMBLY	ENCLOSURE ASSEMBLY	CONTROL PANEL ASSEMBLY	HOSE ASSEMBLY, 1/4 ID × 42" LG	CONSOLE SUB-ASSEMBLY	SCREW, PAN HEAD 10-32 NF x 1/2 LG	JUNCTION BOX, B" x 4" x 2 3/4" NEMA 6,12,13	WASHER, FLAT 1/4 FLAT	NUT, LOCK 1/4-20 NC	BOLT, HEX HEAD CAP 1/4-20 NC x 3/4 LG	HOSE BRACKET 1/4 x 2" (FLAT) x 12" 600-010-029	DESCRIPTION
601-140-047	050-010-028	601-420-072	601-420-133	601-420-093	050-004-033	050-004-032	050-004-026	MAN1336	MAN1335	050-004-031	MAN1334	600-600-001	601-160-025	600-710-005	600-690-005	600-640-013	050-004-106	PART NUMBER
18	11	91	57	7	73	12	11	0,	6	80	^	ø	ĸ	4	ъ,	2	,	ITEM

CONSOLE ASSEMBLY

SEE NOTE 1

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(050-004-001)

FILE: MAN1333 DATE: 8/96

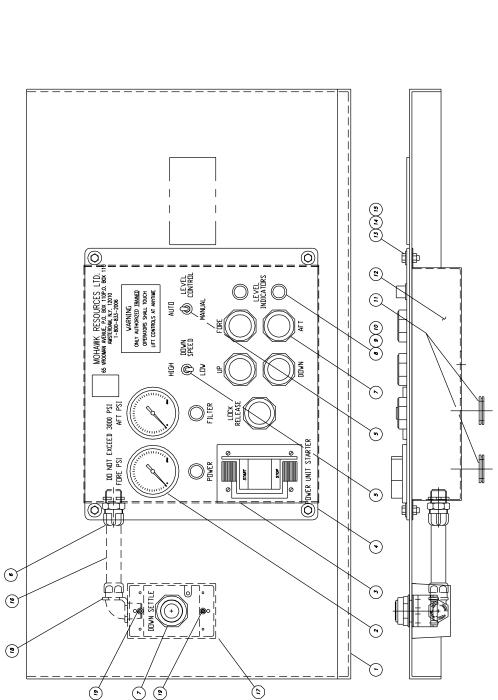
MAN1334

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MAN1334	REV-A 4/99	SIDE, FRONT & TOP COVERS OF CONSOLE WELDMENT REMOVED FOR CLARITY.		STRAIGHT, -8 ORB TO -8 JIC	PLUG, —8 ORB	TUBING ASSEMBLY 1/2 OD x 24 7/8" LG	TUBING ASSEMBLY 1/2 00 x 15 1/2" LG	FLUID, HYDRAULIC (GALLONS)	CONSOLE WELDMENT	MANIFOLD VALVE ASSEMBLY (LARGE FLOW DIVIDER)	NUT, LOCK 5/16–18 NC	WASHER, FLAT 5/16	80LT, HEX HEAD CAP 5/16-18 NC × 1 1/4 LG	TUBING ASSEMBLY 3/8 00 x 43 1/8 LG	STRAIGHT, BULKHEAD, -6 JIC	CONNECTOR, CORD, STRAIGHT, 5/8-3/4	ELBOW, 90", BULKHEAD, -6 JIC	TUBING ASSEMBLY 3/8 OD x 26 1/4 LG		FILTER ASSEMBLY, 10 MICRON, SPIN-ON	STRAIGHT, 3/4 MALE PIPE TO -12 ORB	ELBOW, 90°, 3/4 MALE PIPE TO 3/4 FEMALE PIPE	NIPPLE, PIPE 3/4 DIA x 9 1/2" LG	DESCRIPTION
		, FRONT & TO		601-420-037	601-420-055	050-004-0224	050-004-035	601-610-001	050-004-004	MAN1337	100-089-009	600-710-003	600-640-017	050-004-010	601-420-040	601-140-019	601-420-015	050-004-017	601-420-070	601-400-001	601-420-034	601-420-036	050-004-114	PART NUMBER
	NOTE:	SIDE, M		20	61	81	17	91	51	7.	13	12	11	01	6	90		·o	'n	4	'n	2	1	изи
		11				(91)													POWER UNIT, REF			0)	
			DETAIL A:			_								c.a					6					

CONSOLE SUB-ASSEMBLY (050-004-024)

FILE: MAN1334 DATE: 8/96

REV-B



REF 050-010-119 600-030-008 600-030-011 CAUGE, PRESSURE, 0-3000 PSI, W/ MOUNT CLAMP WIKA #9767266 CONDUIT, LIQUID TIGHT. FLEXIBLE, 3/8 x 4 1/4 ELEC-FLEX #FF-10 SCREW, #6-32 x 1/2, OVAL HEAD, MACHINE MINITURE LAMP, SLIDE BASE, 120 VOLT IDI #120-PSB SINGLE GANG DEVICE BOX DCI #784401—39215, CAT #IH3-1-LM PUSH BUTTON STATION, START/STOP ALLEN BRADLEY #800S-2SA4 FITTING, CONDUIT, 90" ELBOW, 3/8 PUSH BUTTON, NEMA 4/13, GREEN ALLEN BRADLEY #800T-41A TOGGLE SWITCH, MAINTAINED, DPDT NEWARK #16N898 LAMP SOCKET, 11/16" DIA HOLE IDI #2802 GROMMET, RUBBER, FOR 1 1/4" MCMASTER #9602K18 CONSOLE FRONT COVER 10 GA. x 17 5/8 x 33 1/8 FITTING, CONDUIT, STR, 3/8 T & B #5331 CONTROL PANEL PAN 20 (18) CA. x 17" x 19" CONTROL PANEL DECAL 1/16 THK x 12" x 14" BOLT, HEX HEAD CAP 1/4-20 NC x 1/2 LG FLAT LENSE, RED IDI #2851 WASHER, FLAT 1/4 FLAT NUT, PLAIN 1/4-20 NC 601-110-003 900-089-009 £00-600-014 601-140-024 601-160-053 601-140-023 600-640-042 035-010-102 600-130-002 601-160-047 601-160-046 601-110-010 601-140-025 601-110-045 050-010-120 601-440-002 050-000-149 600-710-011 601-160-048 PART NUMBER 18 17 7.4 7.3 12 11

CONTROL PANEL ASSEMBLY

(050-004-025)

FILE: MAN1335 DATE: 8/96

10/00

REV-A

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NOTES:
1. FRONT & SIDE VIEWS SHOWN WITHOUT CONDUIT ATTACHMENTS.
2. REMOVE SOLENOID ELECTRICAL, CONNECTORS FROM MANIFOLD VIALKE AND ATTACH TO CONDUIT FIONS AS SHOWN.
3. CUT ALL CONDUIT TO LEVORTHS SHOWN.
4. REMOVE FILTER SENSOR FROM FILTER & ATTACH TO ITEM 10 WITHIN ENGLOSURE.

Panel

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TO FLOAT SWITCHES — ON TRACK

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SEE NOTE 3.

TO BE USED WITH EACH FITTING.

SEE NOTE 2.

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(FYP 9 PLCS)
SEE NOTE 3.

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O-RING, 1.062 OD × 0.812 ID × .125 DIA PARKER #2-211	CLOGGING INDICATOR, FILTER	CONNECTOR, CORD, STRAIGHT, 1/4-3/8", CLEAR 0-Z/GEDNEY #SR-50-375	CONDUIT, LIQUID TIGHT FLEXIBLE, 1/2" x 73" LG ELEC-FLEX #AF-11	SONALERT MALLORY #SC-110HJ	CONDUCTOR, 18/3, STO, 36" LG CAROL #86663	601-140-005 FITING, CONDUIT, 90" ELBOW, 1/2"	FITTING, CONDUIT, STRAIGHT, 1/2" T&B #5332	ELBOW, 90°, CONDUIT FITTING, 3/8" T&B #5351	601-140-023 CONDUIT, LIQUID TICHT FLEXIBLE, 3/8" x 196 1/2 ELEC-FLEX #EF-10	CONNECTOR, CORD, STRAIGHT, 5/8-3/4, YELLOW O-Z/GEDNEY #SR-100-750	ENCLOSURE DRILLING 601-160-026	ELBOW, 90°, CONDUIT FITTING, 1" RACO #3424-1	CONDUIT, LIQUID TIGHT FLEXIBLE, 1" x 64" LONG ELEC-FLEX #LA13-50	601-140-025 STRAIGHT, CONDUIT FITTING, 3/8" 1488 #5531	DESCRIPTION
601-030-026	601-160-066	601-140-045	601-140-001	601-160-002	601-150-040	601-140-005	601-140-006	601-140-024	601-140-023	601-140-047	050-004-107	601-140-027	601-140-026	601-140-025	PART NUMBER
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ENCLOSURE ASSEMBLY

SEE NOTE 1.

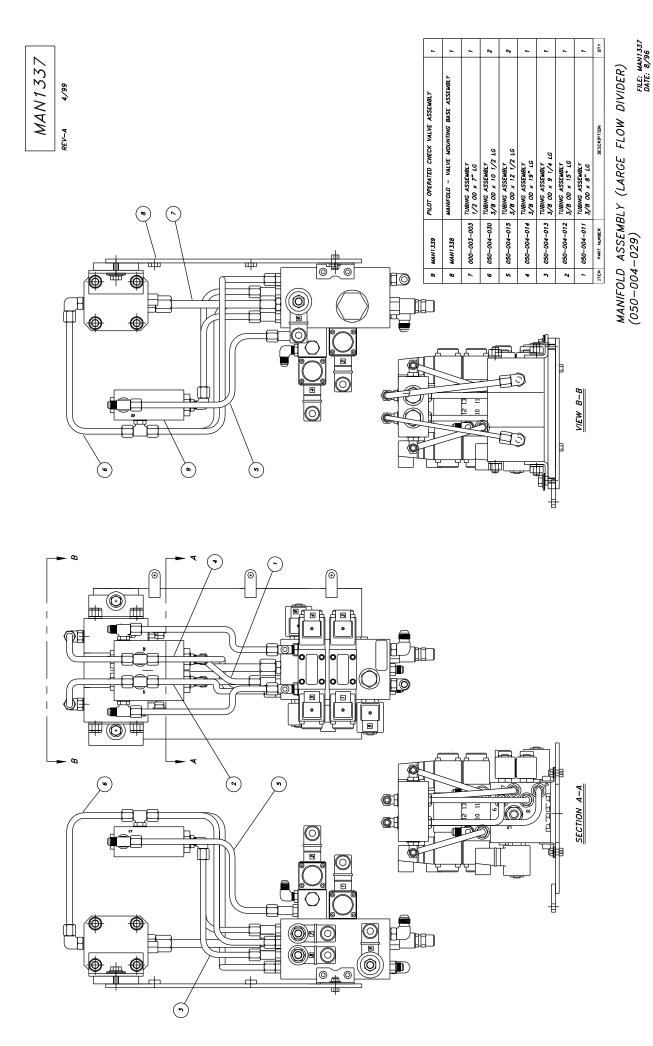
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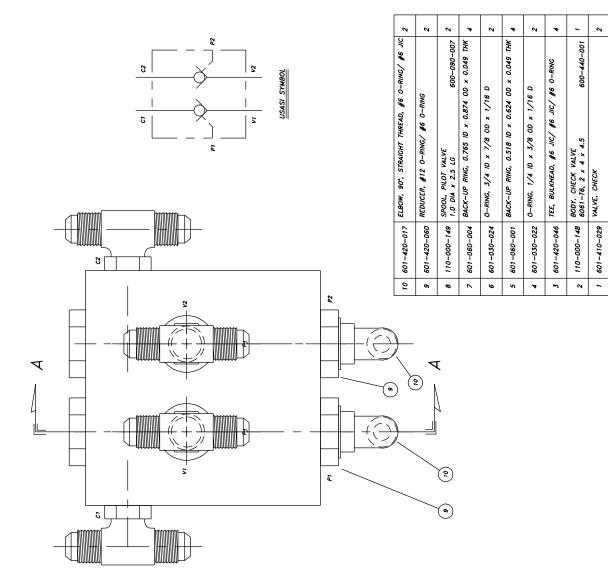
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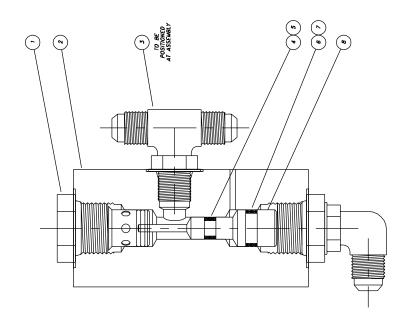
(050-004-007 & 050-004-008)

FILE: MAN1336 DATE: 8/96



(050-004-028)





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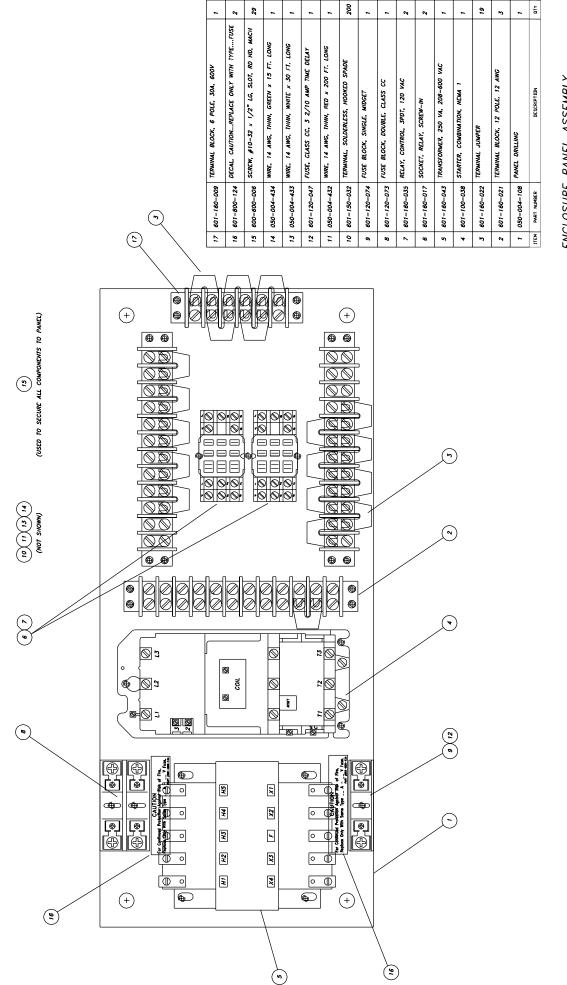
PILOT OPERATED CHECK VALVE ASSEMBLY

DESCRIPTION

ITEM PART NUMBER

(110-000-027)

FILE: MAN1339 DATE: 8/96



ENCLOSURE PANEL ASSEMBLY

(020-004-000)

TRACK MANIFOLD & LEVELER CONNECTIONS
THE: WAITAB

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: 2/20/98

File: New-Slab.doc

New Slab Recommendations

File: New-slab.xls

Rev Date: 10/12/01 NEW SLABS MUST BE 12" THICK MINIMUM !!

Lift Model	W Slab Width, (Feet)	L Slab Length, (Feet)	R Reinforcement Size, (Inch)	S Reinforcement Spacing, (Inch)	D Wej-it Dia, (Inch)	l Wej-it Length, (Inch)
A-7	4'	14'	#3 (3/8") *	8"	3/4"	5 1/2"
Tomahawk	4'	14'	#3 (3/8") *	8"	3/4"	5 1/2"
System IA	4'	14'	#3 (3/8") *	8"	3/4"	5 1/2"
LMF-12	6'	15'	#3 (3/8") *	8"	3/4"	6 1/4"
TP-15	6'	15'	#3 (3/8") *	8"	3/4"	6 1/4"
TP-18	6'	16'	#3 (3/8") *	8"	3/4"	6 1/4"
TP-20	6'	16'	#3 (3/8") *	8"	3/4"	6 1/4"
TP-26	N/A**	N/A**	N/A**	N/A**	N/A**	N/A**
TP-30	N/A**	N/A**	N/A**	N/A**	N/A**	N/A**
TR-19****	2'	2'	N/A***	N/A***	3/4"	5 1/2"
FL-25****	2'	2'	N/A***	N/A***	3/4"	5 1/2"
TR-25****	2'	2'	N/A***	N/A***	3/4"	5 1/2"
TR-33****	6'	6'	N/A***	N/A***	3/4"	5 1/2"
TR-35****	6'	6'	N/A***	N/A***	3/4"	5 1/2"
TR-50****	6'	6'	N/A***	N/A***	3/4"	5 1/2"
TR-75****	6'	6'	N/A***	N/A***	3/4"	5 1/2"

^{*} An Acceptable Alternative is to use 4 x 4 Wire Mesh at same specified location.

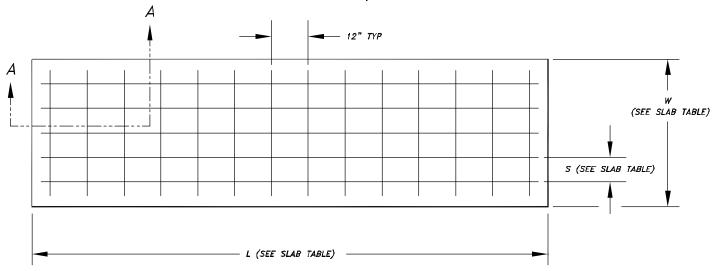
^{**} See Subframe Installation Instructions

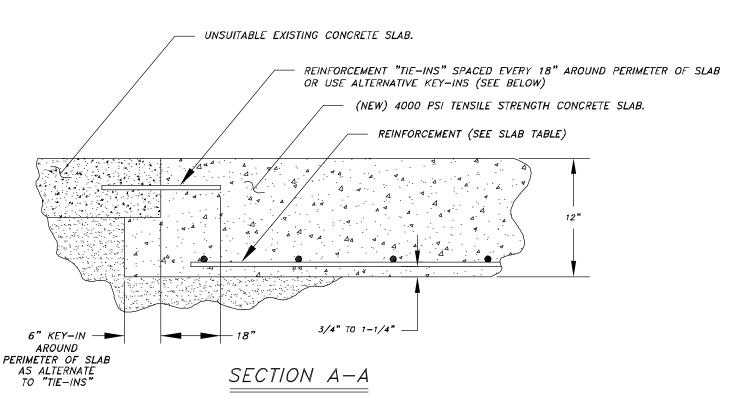
^{***} No Reinforcement Required (4 x 4 Wire Mesh Recommended)

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

NEW RECOMMENDED SLAB DESIGN FOR 2-POST LIFTS

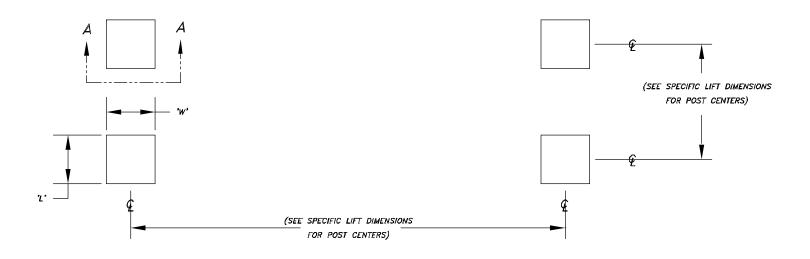
FILE: MAN066 DATE: 2/98 REV DATE: 4/99

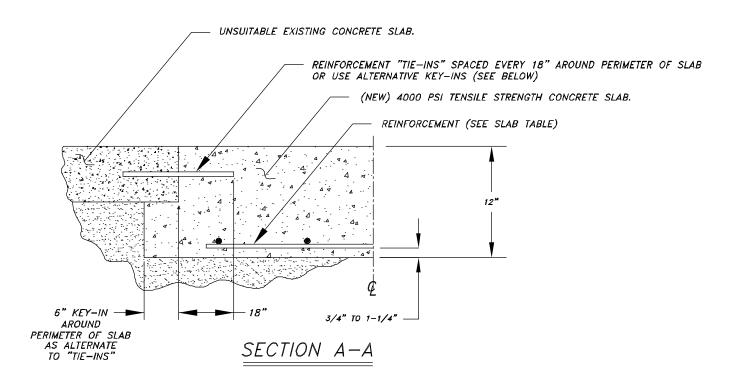




NEW RECOMMENDED SLAB DESIGN FOR 4-POST LIFTS

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









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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ALI/WL200c

SAFETY INSTRUCTIONS



Read operating and safety manuals before using lift.

SAFETY INSTRUCTIONS



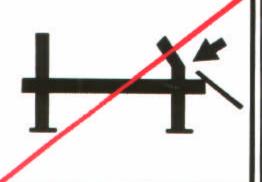
Proper maintenance and inspection is necessary for safe operation.



SAFETY INSTRUCTIONS

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Do not operate a damaged lift.

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/WL200s





self-closing

lift controls.



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

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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

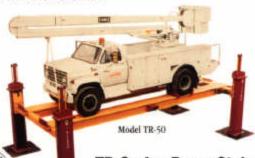
all vehicle doors as well as total undercar/underdash access, thanks to Mohawk's unique "clear-floor" design. Low 4" arms accommodate all imports and low-riding sports cars. Includes both 3" and 6" truck adapters.

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