

MOHAWK

MADE IN THE USA



MODEL A-7

7,000 LB. CAPACITY TWO POST VEHICLE LIFT MANUAL

**THANK YOU
FOR SENDING IN YOUR
WARRANTY REGISTRATION
CARD**

**MOHAWK SERVICE
DEPARTMENT**

- ☒ INSTALLATION
- ☒ OPERATION
- ☒ MAINTENANCE
- ☒ PARTS



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-MAIL: SERVICE@MOHAWKLIFTS.COM

A7-Master.doc

Rev Date 4/23/2002

Part #601-800-065

IMPORTANT SAFETY INSTRUCTIONS

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

1. Read all instructions.
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). **WARNING: Risk of Explosion:** This equipment has internal arcing and sparking parts which should not be exposed to flammable vapors. This equipment is only suitable for installation in a garage having sufficient air circulation to be considered a non-hazardous location.
7. Adequate ventilation should be provided when working on operating internal combustion engines.
8. Keep hair, loose clothing, fingers, and all parts of body away from moving parts.
9. To reduce the risk of electric shock, do not use on wet surfaces or expose to rain.
10. Use only as described in this manual. Use only manufacturer's recommended attachments.
11. **ALWAYS WEAR SAFETY GLASSES.** Everyday eyeglasses only have impact resistant lenses, they are NOT safety glasses.

SAVE THESE INSTRUCTIONS

Rev (8/3/98)

APPENDAGE: Rev (8/3/98)

NOTE:

All accessories (i.e. Lifting Pads, Height Adapters, Wheel Adapters, Turf Adapters) supplied with this lift are to be used on this lift only. Accessories from other lifts are not acceptable and could result in injury to the user.

WARNING:

Latches do not automatically reset after disengagement. After the latches have been manually disengaged, this lift must be raised approximately 2 inches to reactivate the latches.

PROPER SELECTION OF POWER SUPPLY CORD:

Acceptable Cord Types: SO, SEO, STO, SOW, SEOO, SOW-A

Cord Size: 12/4

Cord Ampacity: 20 Amps

Cord Wiring: Use Female NEMA Plug supplied with lift and wire as follows (See Diagram Below),

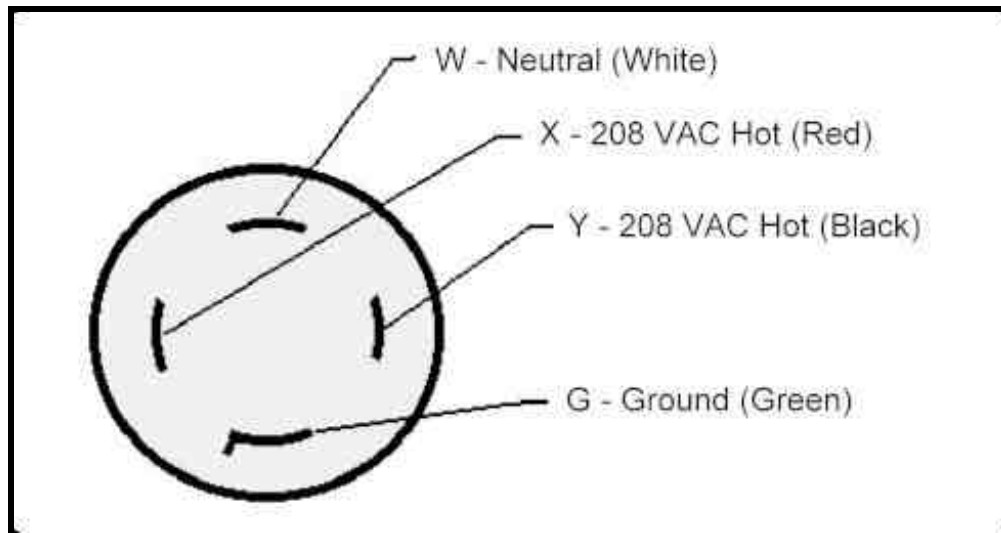
G: Ground (green)

W: Neutral (white)

X: 208 VAC Hot, 110 VAC to ground (Red)

Y: 208 VAC Hot, 110 VAC to ground (Black)

Face of Plug Represented:



HAVE A QUESTION?

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

Distributor Place Card Here

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

Model Number _____

Serial Number _____

OR CONTACT:

MOHAWK RESOURCES LTD.

65 Vrooman Ave.

P.O. Box 110

Amsterdam, NY 12010

Toll Free: 1-800-833-2006

Local: 1-518-842-1431

Fax: 1-518-842-1289

Internet: www.MOHAWKLIFTS.com

E-Mail: Service@MOHAWKLIFTS.com



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

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

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

- ◆ Must be structurally tested in accordance with the test requirements as outlined in ANSI/ALI ALCTV-1998.
- ◆ All motor operated units must be listed by a nationally recognized testing laboratory (NRTL) in accordance with ANSI/UL 73.
- ◆ The manufacturer's production facility must meet quality control requirements as set forth in the ANSI Z34.1-1987 and the ALI/ETL Automotive Lift Certification Program Procedural Guide.
- ◆ All manufacturer-provided instructions, manuals, and operator safety documents, must meet the requirements of the ANSI/ALI ALCTV-1998 and ANSI/UL73.

Lifts meeting these rigid requirements may be listed in the directory of certified lifts and be labeled with the "ALI/ETL certification mark" (Above on right), and, if applicable, the ETL listing mark to ANSI/UL-73.

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

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

MOHAWK MODEL A- /
MOHAWK WARRANTIES
EFFECTIVE DATE: 1/1/2002

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. 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 I, 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: USL-6000 AND STANDARD OPTIONS.

1-YEAR WARRANTY:

THIS WARRANTY IS APPLICABLE TO THE FOLLOWING MOHAWK LIFTS ONLY: HR-6, TOMAHAWK, 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.

EXTENDED LIFETIME CYLINDER WARRANTY

AS THE ORIGINAL PURCHASER OF A MOHAWK LIFT MANUFACTURED BY MOHAWK RESOURCES, LTD. YOU ARE ENTITLED TO AN EXTENDED CYLINDER SEAL KIT REPAIR WARRANTY. TO QUALIFY FOR THIS WARRANTY, THE FOLLOWING CONDITIONS MUST BE MET:

- ◆ ALL LIFTS MUST BE REGISTERED WITH MOHAWK RESOURCES, LTD., P.O. BOX 110, 65 VROOMAN AVENUE, AMSTERDAM, NY 12010, WITH THE ORIGINAL CUSTOMER NAME, ADDRESS AND PHONE NUMBER, WITHIN 30 DAYS OF INSTALLATION.
(PLEASE USE THE POSTAGE PAID WARRANTY REGISTRATION CARD ATTACHED TO THE FRONT OF THIS MANUAL.)
- ◆ ANY CYLINDER THAT IS PAST ITS NORMAL 5-YEAR WARRANTY PERIOD MUST BE SHIPPED FREIGHT PRE-PAID TO THE MOHAWK PLANT.
- ◆ UPON COMPLETION OF INSTALLING A COMPLETE SEAL KIT, MOHAWK WILL SHIP THE CYLINDER TO YOU, FREIGHT COLLECT.
- ◆ MOHAWK'S OBLIGATION UNDER THIS WARRANTY IS LIMITED TO REPAIRING ANY CYLINDER, WHICH UPON INSPECTION HAS NOT BEEN MISUSED. MOHAWK RESERVES THE RIGHT TO DECLINE RESPONSIBILITY WHEN THE REPAIRS HAVE BEEN MADE, OR ATTEMPTED BY OTHERS. THE FOREGOING CONTAINS THE ENTIRE AGREEMENT BETWEEN MOHAWK RESOURCES, LTD. AND THE PURCHASER, UNLESS SPECIFICALLY EXPRESSED IN WRITING. THIS WARRANTY IS NON-TRANSFERABLE AND RUNS TO THE ORIGINAL PURCHASER ONLY.

THIS IS NOT A "LEND A CYLINDER" POLICY. AS STATED ABOVE, YOUR ORIGINAL CYLINDER (WHEN OUT OF ITS ORIGINAL 5-YEAR WARRANTY) WILL HAVE ITS SEALS REPLACED, WITH ALL FREIGHT CHARGES THE RESPONSIBILITY OF YOU, THE CUSTOMER.

CONTENTS

TEXT

	PAGE
APPENDAGES	2
SPECIFICATIONS	3
PACKING LIST	4
RECOMMENDED TOOL LIST	5
BEFORE INSTALLING A LIFT / WEJ-IT INSTALLATION	6
INSTALLATION INSTRUCTIONS	7-8
SAFETY TIPS	9
PRE - OPERATION CHECK LIST / LIFTING PROCEDURES	10
MAINTENANCE PROCEDURES	11
NOTES	12
TROUBLE SHOOTING	13-14
SERVICE CHART	15
MAINTENANCE CHART	15

FIGURES / DIAGRAMS

	FIGURE	PAGE
FLOOR MODIFICATION	1	17
BAY SIGHT LAYOUT / INSTALLATION DIMENSIONS	2	18
CARRIAGE STOP ASSEMBLY	3	19
WEJ-IT INSTALLATION	4-5	20-21
POST-LEVELING	6	22
POST-SHIMMING	7	23
CYLINDER SHIMS	8	24
CENTERING VEHICLE / BASE PLATE DETAIL	9	25
UNEVEN FLOORS	10	26
SPECIAL LIFTING PADS	11	27
POWER UNIT	12-12A	28-29
RELIEF VALVE ADJUSTMENT PROCEDURE	13	30
J-BAR ADJUSTMENT	14	31

PARTS

	FIGURE	PAGE
ISOMETRIC FINAL ASSEMBLY	MAN120	33
MAIN SIDE ASSEMBLY	MAN120-A	34
OFF SIDE ASSEMBLY	MAN120-B	35
HYDRAULIC SYSTEM	MAN101	36
CARRIAGE, CHAIN, & ARM LOCK	MAN122	37
LATCH BODY ASSEMBLY	MAN123	38
YOKE ASSEMBLY	MAN104	39
HEIGHT ADAPTER & BRACKET / CYLINDER CLAMPS	MAN105	40
CARRIAGE / SWING ARMS / SLIDERS / LIFTING PADS	MAN126	41
LEG WELDMENT / LINE SUPPORTS / CARRIAGE STOPS	MAN127	42
TAG & DECAL LOCATIONS	MAN128	43
MAIN SIDE CYLINDER ASSEMBLY	MAN109	44
OFF SIDE CYLINDER ASSEMBLY	MAN110	45
SMALL PARTS BAG	MAN131	46
PARTS BOX	MAN132	47
DIVERTER VALVE ASSEMBLY	MAN235	48
SPRING PLUNGER ASSEMBLY	MAN233	49

NEW SLAB RECOMMENDATIONS

	PAGE
NEW SLAB RECOMMENDATIONS	50-53

ALL INFORMATION, ILLUSTRATIONS, AND SPECIFICATIONS IN THIS MANUAL ARE BASED ON THE LATEST PRODUCT INFORMATION AVAILABLE AT THE TIME OF PRINTING. WE RESERVE THE RIGHT TO MAKE CHANGES AT ANY TIME WITHOUT NOTICE.

APPENDAGES

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

**MOHAWK RESOURCES LTD.
PRODUCT IMPROVEMENTS
65 VROOMAN AVE.
AMSTERDAM, NY, 12010**

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

PROPER APPLICATION OF THE EQUIPMENT DESCRIBED HEREIN IS LIMITED TO THE PARAMETERS DETAILED IN THE SPECIFICATIONS AND THE USES SET FORTH IN THE DESCRIPTIVE PASSAGES. ANY OTHER PROPOSED APPLICATION OF THIS EQUIPMENT SHOULD BE DOCUMENTED AND SUBMITTED IN WRITING TO MOHAWK RESOURCES LTD. FOR EXAMINATION. THE USER ASSUMES FULL RESPONSIBILITY FOR ANY EQUIPMENT DAMAGE, PERSONAL INJURY, OR ALTERATION OF THE EQUIPMENT DESCRIBED IN THIS MANUAL OR ANY SUBSEQUENT DAMAGES.

DO NOT WELD, APPLY HEAT, OR MODIFY THIS EQUIPMENT IN ANY MANNER WITHOUT WRITTEN AUTHORIZATION FROM MOHAWK RESOURCES LTD. CERTAIN ALLOY OR HEAT-TREATED COMPONENTS MAY BE DISTORTED OR WEAKENED, RESULTING IN AN UNSAFE CONDITION.

MOHAWK RESOURCES LTD. IS NOT RESPONSIBLE FOR DISTORTIONS, WHICH RESULT FROM WELDING ON THIS EQUIPMENT AFTER MANUFACTURING IS COMPLETED. UNAUTHORIZED WELDING, APPLICATION OF HEAT, OR MODIFICATION OF THIS EQUIPMENT VOIDS ANY AND / OR ALL APPLICABLE WARRANTIES COVERING THIS EQUIPMENT.

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

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

WARNING

- DO NOT INSTALL THIS UNIT IN A PIT OR DEPRESSION DUE TO FIRE OR EXPLOSION RISK

IMPORTANT NOTE

A LEVEL FLOOR IS SUGGESTED FOR A PROPER INSTALLATION SITE AND WILL ENSURE LEVEL LIFTING. SMALL DIFFERENCES IN FLOOR SLOPES MAY BE COMPENSATED FOR WITH SPECIAL LIFTING PADS. ANY MAJOR SLOPE CHANGES WILL AFFECT THE LOW PROFILE HEIGHT OF THE LIFTING PADS AND / OR THE UNITS LEVEL LIFTING PERFORMANCE. 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.

THIS EQUIPMENT MUST BE INSTALLED ON A LEVEL CONCRETE FLOOR WITH A MINIMUM THICKNESS OF 4-1/2" THE CONCRETE MUST BE AGED AT LEAST (28) TWENTY EIGHT DAYS PRIOR TO INSTALLATION AND HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4000 P.S.I.

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 **PRE-EXISTING FLOOR REQUIREMENTS SECTION**.

DO NOT INSTALL THIS UNIT ON EXPANSION SEAMS OR ON CRACKED, DEFECTIVE CONCRETE. CHECK WITH BUILDING ARCHITECT.

DO NOT INSTALL THIS UNIT ON A SECOND FLOOR OR ANY GROUND FLOOR WITH A BASEMENT BENEATH WITHOUT WRITTEN AUTHORIZATION FROM THE BUILDING ARCHITECT.

INSTALL THIS EQUIPMENT ON CONCRETE ONLY

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

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**.

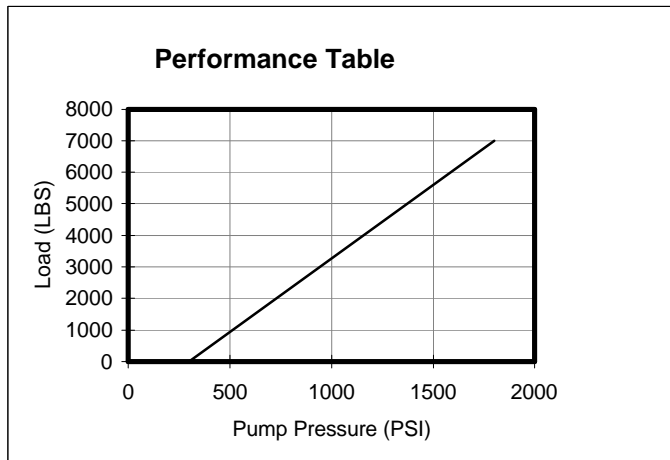
ALWAYS CONSULT THE VEHICLE LIFTING GUIDE FOR THE PROPER LIFTING POINTS ON ANY VEHICLE. THESE GUIDES ARE AVAILABLE FROM THE VEHICLE MANUFACTURERS. AFTER LIFTING THE VEHICLE TO THE DESIRED HEIGHT, ALWAYS LOWER THE UNIT ONTO THE MECHANICAL SAFETIES. THE FORMING OF GOOD OPERATIONAL WORK HABITS WILL ELIMINATE OVERSIGHTS IN THE USE OF PROVIDED SAFETY DEVICES.

A-7 SPECIFICATIONS**A-7 SPECIFICATIONS**

LIFT TYPE / TWO POST	ELECTRIC / HYDRAULIC
GROSS LIFTING CAPACITY	7,000 LBS.
PER ARM CAPACITY	1,750 LBS.
LIFTING SPEED APPROX.	45 SECONDS
LIFTING HEIGHT	72 INCHES
OVERALL WIDTH	127 INCHES
WIDTH BETWEEN POST	91 INCHES
WIDTH BETWEEN LIFTING ARMS	83.3 INCHES
POST HEIGHT	96 INCHES
OVERHEAD HYDRAULIC LINES	144 INCHES
LIFTING PAD HEIGHT (MIN)	4 INCHES
LIFTING PAD HEIGHT (MAX)	85 INCHES
SHIPPING WEIGHT	1,900 LBS.

POWER UNIT SPECIFICATIONS

BRAND NAME	MONARCH
MODEL	M-4509-0110
POWER UNIT TYPE	VERTICAL
MOTOR VOLTAGE	208 / 230
F.L.A. AT RATED CAPACITY	17.4 / 14.6
MOTOR HORSEPOWER	2
MOTOR PHASE	SINGLE
MOTOR CYCLE / HERTZ	60
MOTOR SPEED (R.P.M.)	3450
PUMP FLOW (G.P.M.)	2.39 @ 3450 R.P.M.
RELIEF VALVE SETTING	2050 P.S.I.
WORKING PRESSURE	1800 P.S.I.
RESERVOIR CAPACITY	2.5 GALLONS
HYDRAULIC FLUID MEDIUM	DEXRON III

**SUGGESTED SITE SELECTION / BAY SIZE**

WIDTH	DEPTH	HEIGHT
15 FEET	20 FEET	12 FEET

NOTE

THE PLACEMENT OF THE UNIT IS DETERMINED BY THE TYPE (LENGTH, WIDTH, HEIGHT) OF VEHICLE BEING SERVICED.

WEJ-IT ANCHOR SPECIFICATIONS

LENGTH	DRILL DEPTH	DRILL SIZE	DRILL SIZE MIN.	DRILL SIZE MAX.	TORQUE
5 1/2 IN.	5 1/2 IN.	3/4 IN.	.775 IN.	.787 IN.	80

PRE-EXISTING FLOOR REQUIREMENTS

MINIMUM THICKNESS	MINIMUM COMPRESSIVE STRENGTH	MINIMUM AGING
4 - 1/2 IN	4000 P.S.I.	28 DAYS

DO NOT INSTALL ANY MOHAWK LIFT ON ANY SURFACE OTHER THAN CONCRETE CONFORMING TO THE MINIMUM COMPRESSIVE 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 ANY SURFACE WITH A BASEMENT BENEATH WITHOUT WRITTEN AUTHORIZATION FROM THE BUILDING ARCHITECT. 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
NEW FLOOR SECTION**

THICKNESS	SLAB SIZE WIDTH X LENGTH	CUBIC YARDS
12 INCHES	4 FT X 14 FT	2.1

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

THE NEW SLAB SECTION MUST BE TOTALLY SURROUNDED BY AN EXISTING CONCRETE FLOOR THAT IS STRUCTURALLY SOUND. CERTIFIED STRENGTH DOCUMENTATION SHOULD BE OBTAINED FROM THE FIRM WHO SUPPLIES THE CONCRETE MIXTURE AT THE TIME OF THE POUR.

NEVER HAND MIX THE CONCRETE.. REFER TO NEW SLAB RECOMMENDATIONS SECTION.

A-7 PACKING LIST***** ALSO SEE DRAWINGS MAN131 / MAN132 IN PARTS MANUAL *****

ORDER NUMBER	PART NUMBER	PART DESCRIPTION	QTY.
	007-010-012	PARTS BOX CONTENTS	
563	009-001-141	CARRIAGE STOP	4
064	025-002-126	HEIGHT ADAPTER BRACKET	2
045	025-002-128	HEIGHT ADAPTER (6 INCH)	4
044	025-002-127	HEIGHT ADAPTER (3 INCH)	4
460	601-170-008	HUBBLE CONNECTOR (FEMALE)	1
068	007-007-036	LIFTING PAD	4
095	007-010-016	MANUAL (INSTALLATION)	1
623	007-007-075	SHIM BAG	1
	007-010-014	SMALL PARTS BAG	1
112	601-630-001	SPRAY PAINT (RED)	1
113	601-630-002	SPRAY PAINT (YELLOW)	1
146	007-007-132	SWING ARM PIN	4
076	600-670-008	WEJ-IT ANCHOR (3/4 X 5 1/2)	14
	600-690-015	NUT, LOCK (JAM) 1 1/2-12 NF	4
	007-010-103	SWING ARM PIN, 1 1/2 DIA x 6 3/4	4
	007-010-014	SMALL PARTS BAG CONTENTS	
171	600-640-019	BOLT, 1/4-20 X 1-1/2	8
258	600-690-005	NUT, LOCK, 1/4-20 NC	8
259	600-710-004	WASHER, 1/4 SAE FLAT	4
621	600-710-014	WASHER, 1-3/8 SAE FLAT	8
	600-710-006	WASHER, FLAT, FENDER, 5/16 ID X 1 1/2 OD	4
021	601-310-005	BREATHING CAP	1
094	601-420-011	FITTING, DOUBLE MALE UNION # 6 JIC	4
409	601-710-001	DOUBLE LINE CLIP	4
	007-007-075	SHIM BAG CONTENTS	
633	600-740-001	SHIM, 1/16 (BLUE)	8
634	600-740-002	SHIM, 1/8 (RED)	8
635	600-740-003	SHIM, 1/4 (BLACK)	8

RECOMMENDED TOOL LIST

SIZE / QTY	DESCRIPTION	USED IN
1 - 1/8 IN	WRENCH & SOCKET	WEJ-IT ANCHORS
15 / 16 IN	WRENCH & SOCKET	CARRIAGE STOPS
11/16 IN	WRENCH	HYDRAULIC LINES
5/8 IN	WRENCH	HYDRAULIC LINES
1/2 IN	WRENCH & SOCKET	BACK BOARD / CYLINDER RETAINER
7/16 IN	WRENCH	SWING ARM RESTRAINT ASSEMBLIES
1	RATCHET WRENCH	AS NEEDED
1	SNAP RING PLIERS	SWING ARM PINS
1	VICE GRIPS	AS NEEDED
1	CRESCENT WRENCH	AS NEEDED
1	4 FT BUBBLE LEVEL	VERIFY LEVEL ASSEMBLY
1	PRY BAR	MOVING HEAVY ITEMS
1	TIN SNIPS	PACKAGING BANDING
1	CHALK LINE	FLOOR LAYOUT
1	SOAP STONE	FLOOR LAYOUT
1	25 FT TAPE MEASURE	FLOOR LAYOUT / SQUARING POST
1	MEDIUM HAMMER	WEJ-IT ANCHORS
1	HAMMER DRILL	DRILLING CONCRETE
1	DRILL BIT (3/4 INCH)	DRILLING CONCRETE
1 TON	LIFTING DEVICE	LIFTING / MOVING HEAVY ITEMS
8 FT	STEP LADDER	ASSEMBLE ELEVATED ITEMS
100 FT	LEAD CORD	OPERATE ELECTRICAL TOOLS

BEFORE INSTALLING A LIFT

IMPORTANT

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

OVERHEAD OBSTRUCTIONS

THE AREA WHERE THE LIFT WILL BE LOCATED SHALL BE FREE OF OBSTRUCTIONS. HEATERS, BUILDING SUPPORTS, ELECTRICAL CONDUIT; ALL OF THESE ITEMS ARE TO BE TWELVE FEET ABOVE THE BAY FLOOR. **REFER TO FIGURE 2 & 9.**

DEFECTIVE CONCRETE

VISUALLY INSPECT THE BAY FLOOR AREA. THE UNIT CANNOT BE INSTALLED ON EXPANSION SEAMS, OR CONCRETE THAT IS CRACKED. THE UNIT IS ONLY AS STRONG AS THE FLOOR IT IS INSTALLED ON.

FLOOR REQUIREMENTS

THIS INFORMATION IS IN THE GENERAL FLOOR REQUIREMENTS. IF THE BAY FLOOR DOES NOT CONFORM TO THESE SPECIFICATIONS, REFER TO THE "NEW SLAB RECOMMENDATIONS" SECTION IN THIS MANUAL. **REFER TO FIGURE 1.**

LOCATE THE MAIN SIDE POST ON THE HIGH SIDE OF THE FLOOR IF A SLOPE IS NOTED. **REFER TO FIGURE 10.**

POWER SUPPLY

THE STANDARD POWER UNIT IS 220-VOLT SINGLE PHASE. REFER TO THE POWER UNIT SPECIFICATIONS SECTION. REQUIREMENTS MAY VARY ON SPECIAL ORDERS.

THE MAIN SIDE POST WILL REQUIRE THE POWER SUPPLY FOR THE UNIT. NOTE THE LOCATION OF THE POWER SUPPLY.

BAY SIZE

TO OPTIMIZE SHOP SPACE, IT IS ADVISED TO LOCATE A VEHICLE IN THE BAY PRIOR TO LAYOUT. NOTE WALKWAY'S OVERHEAD OBSTRUCTIONS, AND ABILITY TO MOVE EQUIPMENT IN THE BAY AREA. **REFER TO FIGURE 2 & 9.**

REQUIREMENTS MAY VARY ON SPECIAL ORDERS.

SPECIFICATIONS

REFERENCE ALL SPECIFICATIONS PRIOR TO INSTALLING A LIFT.

WARNING

BEFORE DRILLING THE MOUNTING HOLES

- REFERENCE ALL FIGURES PERTAINING TO DRILLING, WEJ-IT WARNINGS, AND INSTALLATION INSTRUCTIONS. **SEE FIGURES 4 & 5.**
- CHECK THE INSIDE DIMENSIONS OF THE POST AT THE BOTTOM FROM THE FACE OF THE MAIN SIDE POST TO THE FACE OF THE OFF SIDE POST. THE INSIDE DIMENSION IS 91-3/4 INCHES.
- USE A SHARP DRILL BIT TO PREVENT DRILLING 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 WEJ-IT ANCHOR SO THAT THE WASHER RESTS AGAINST THE POST FOOTING. TIGHTEN THE NUT 2 TO 3 FULL TURNS. (60 TO 80 FOOT POUNDS)
- NEVER USE AN IMPACT TOOL TO TIGHTEN THE WEJ-IT ANCHORS. USE A TORQUE WRENCH ONLY.
- 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.
- DRILL SEVEN 3/4-INCH HOLES ON THE OUTSIDE OF THE MAIN SIDE POST USING THE HOLES AT THE BASE OF THE POST AS A GUIDE. INSERT AND TIGHTEN THE WEJ-IT ANCHOR 2 TO 3 FULL TURNS. (60 TO 80 FOOT POUNDS)
- INSURE THE INSIDE DIMENSIONS BETWEEN THE MAIN AND OFF SIDE POST IS STILL CORRECT. 91-3/4 INCHES.
- DRILL SEVEN 3/4-INCH HOLES ON THE OUTSIDE OF THE OFF SIDE POST USING THE HOLES AT THE BASE OF THE POST AS A GUIDE. INSERT AND TIGHTEN THE WEJ-IT ANCHOR 2 TO 3 FULL TURNS. (60 TO 80 FOOT POUNDS)

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, BEFORE ASSEMBLING THE UNIT.

USING A CHALK LINE, LAYOUT THE FLOOR DIMENSIONS WHERE THE UNIT WILL BE LOCATED. **SEE FIGURE 2 & 9.**

CUT THE SWING ARM BANDING AND REMOVE THE SWING ARMS.

SECURE THE OVERHEAD LIFTING DEVICE TO THE MAIN SIDE POST USING STRAPS OR CHAINS.

WARNING

- EACH POST WEIGHS OVER 800 LBS. ERECT THE POSTS WITH CHAINS AND STRAPS ATTACHED TO THE TOP OF THE POST. DO NOT REMOVE THE CHAINS AND STRAPS UNTIL THE POST HAS BEEN SECURED.

SEPARATE THE POSTS. REMOVE THE PARTS BOX, HYDRAULIC LINES AND SUPPORTS. VERIFY PARTS BOX CONTENTS. IF MISSING PARTS ARE NOTED, THEY CAN BE OBTAINED BY CALLING 1-800-833-2006 OR BY CONTACTING YOUR LOCAL MOHAWK DISTRIBUTOR.

USING THE 5/8-INCH PACKING BOLTS, NUTS AND WASHERS, ASSEMBLE THE CARRIAGE STOPS TO THE TOP OF THE MAIN SIDE POST. TIGHTEN TO 150 FOOT POUNDS. **SEE FIGURE 3.**

ERECT THE MAIN AND OFF SIDE POSTS TO THE UP-RIGHT POSITION. ALIGN THE POST FOOTINGS TO THE CHALK LINE LAYOUTS.

SECURE THE MAIN AND OFF SIDE POSTS TO THE BAY FLOOR USING THE (14) 3/4 X 5 1/2 INCH WEJ-IT ANCHORS. REFER TO "BEFORE DRILLING THE MOUNTING HOLES" SECTION.

USING THE 5/8-INCH PACKING BOLTS, NUTS AND WASHERS, ASSEMBLE THE CARRIAGE STOPS TO THE TOP OF THE OFF SIDE POST. TIGHTEN TO 150 FOOT POUNDS. **SEE FIGURE 3.**

ASSEMBLE THE TWO OVERHEAD HYDRAULIC LINES (FLAT ON THE FLOOR) USING THE FOUR DOUBLE MALE UNIONS.

ASSEMBLE TWO OF THE DOUBLE LINE CLIPS TO THE CENTER SPAN OF THE OVERHEAD LINES APPROXIMATELY 3 INCHES FROM THE DOUBLE UNIONS.

NOTE

- THE 88 IN LINE IS TO BE PLACED TO THE FRONT AND THE 89-1/2 IN LINE TO BE PLACED TO THE REAR

ASSEMBLE THE TWO OVERHEAD LINE SUPPORT BRACKETS TO THE TOP OF THE MAIN AND OFF SIDE POST.

ERECT THE OVERHEAD HYDRAULIC LINE ASSEMBLIES. ROUTE THE LINES THROUGH THE TOP OF EACH POST. ASSEMBLE THE LINES TO THE HYDRAULIC CONNECTIONS AT THE TOP OF EACH POST.

SECURE THE LINES TO THE OVERHEAD LINE SUPPORTS USING THE TWO DOUBLE LINE CLIPS.

REMOVE THE BREATHER PORT PLUG ON THE POWER UNITS RESERVOIR AND DISCARD.

VERIFY FLUID LEVEL. (1/2 IN. BELOW BREATHER PORT IN THE POWER UNIT RESERVOIR WHEN BOTH CYLINDERS ARE FULLY RETRACTED) INSTALL THE BREATHER CAP.

AT THIS TIME HAVE A QUALIFIED ELECTRICIAN CONNECT THE POWER SUPPLY TO THE UNIT

ENGAGE THE UP BUTTON ON THE POWER UNIT AND RAISE THE CARRIAGES APPROX. 3 FEET, OR TO A HEIGHT SUITABLE FOR INSTALLING THE SWING ARMS.

LIFTING UP ON THE SWING ARM RESTRAINT. INSERT THE FOUR SWING ARMS INTO THE CARRIAGES.

ALIGN THE THROUGH HOLES IN THE CARRIAGES WITH THE THROUGH HOLES IN THE SWING ARMS. SECURE THE SWING ARMS TO THE CARRIAGES USING THE FOUR SWING ARM PINS AND EIGHT SNAP RINGS.

PLACE THE FOUR LIFTING PADS INTO PLACE IN THE MOUNTING HOLE AT THE END OF EACH SLIDER.

SHIMMING FOR CHAIN TENSION

LIFT UP ON THE YOKE, MEASURE THE SPACE BETWEEN THE TOP OF THE CHROME ROD AND THE BASE OF THE YOKE. THIS WILL BE THE AMOUNT OF SHIMS REQUIRED. **SEE FIGURE 8.**

TO SHIM, MANUALLY LIFT THE CARRIAGE ONE-FOOT APPROX. AND LOWER THE CARRIAGE ONTO THE MECHANICAL SAFETY.

WARNING

- VISUALLY VERIFY SAFETY ENGAGEMENT BEFORE PROCEEDING.

PLACE THE CORRECT NUMBER OF SHIMS ON THE TOP OF THE CHROME ROD AND RE-INSTALL THE YOKE.

INSTALLATION INSTRUCTIONS

BLEEDING PROCEDURE

ENGAGE THE UP BUTTON ON THE POWER UNIT. OBSERVE THE CARRIAGE. WHEN THE MAIN AND OFF SIDE CARRIAGES HAVE REACHED FULL HEIGHT CONTINUE TO RUN THE UNIT FOR TWO MINUTES. (THIS WILL PURGE THE AIR FROM THE HYDRAULIC SYSTEM)

NOTE

- LISTEN FOR THE PRESSURE RELIEF VALVE. A NOTICEABLE INCREASE IN POWER UNIT VOLUME THIS WILL INDICATE AN EXCESS OF SHIMS BENEATH THE YOKE ASSEMBLIES RESTRICTING THE MAIN OR OFF SIDE CYLINDERS FROM REACHING FULL STROKE. IF THIS OCCURS, REMOVE ONE SHIM FROM BENEATH THE YOKE.

ASSEMBLE THE TWO HEIGHT ADAPTERS BRACKETS TO THE BACK OF THE MAIN AND OFF SIDE POST USING THE CYLINDER CLAMPS, WASHERS & NYLON LOCK NUTS.

PLACE THE FOUR 3 IN. AND FOUR 6 IN. HEIGHT ADAPTERS INTO PLACE INTO THE HEIGHT ADAPTER BRACKETS.

SHIMMING THE POST

LEVEL THE POST BY INSERTING THE SUPPLIED SHIMS UNDER THE POST FOOTING AROUND THE WEJ-IT ANCHOR. THE LIFT MUST BE LEVEL BOTH FRONT TO REAR AND SIDE TO SIDE. A LEVELING DEVICE AND A MEASURING TAPE MUST BE USED. **SEE FIGURE 6 & 7.**

- LEVEL THE MAIN SIDE POST FRONT TO REAR AND SIDE-TO-SIDE USING A BUBBLE LEVEL.
- LEVEL THE OFF SIDE POST FRONT TO REAR USING A BUBBLE LEVEL. SET THE POST PARALLEL TO THE MAIN SIDE POST USING A MEASURING TAPE, MEASURING FROM THE EDGE OF THE MAIN SIDE CHANNEL TO THE EDGE OF THE OFF SIDE CHANNEL AT THE BASE AND AT THE TOP OF THE POST.
- THE MEASUREMENT AT THE TOP OF THE POST MUST BE THE SAME AS THE MEASUREMENT AT THE BASE OF THE POST.

AT THIS TIME PERFORM THE PRE-OPERATION CHECK LIST AND MAINTENANCE PROCEDURES (DAILY - WEEKLY - MONTHLY) MAKE ALL ADJUSTMENTS PERTAINING TO THESE PROCEDURES.

DIVERTER VALVE OPERATION

WARNING

AS WITH ALL FUNCTIONS OF THE LIFT UNIT, NEVER OPERATE THE DIVERTER VALVE UNLESS YOU HAVE FIRST PERFORMED THIS OPERATION WITH NO VEHICLE, AND FULLY UNDERSTAND ITS FUNCTIONS.

BOTH MECHANICAL SAFETIES MUST BE ENGAGED BEFORE OPERATING THE DIVERTER VALVE.

PURPOSE

- THE PURPOSE OF THE DIVERTER VALVE IS TO ENABLE THE OPERATOR TO RAISE OR LOWER THE OFF SIDE CARRIAGE INDEPENDENTLY OF THE MAIN SIDE CARRIAGE.

TO OPERATE THE DIVERTER VALVE

ENGAGE THE DIVERTER VALVE BY PULLING DOWN ON THE DIVERTER VALVE PULL KNOB.

- THIS WILL DIVERT ALL FUNCTIONS OF THE POWER UNIT TO THE OFF SIDE CYLINDER.

WITH THE VALVE ENGAGED, ENERGIZE THE POWER UNIT BY PUSHING THE UP BUTTON.

WHEN THE DESIRED HEIGHT HAS BEEN ACHIEVED, RELEASE THE DIVERTER VALVE PULL KNOB AND THE UP BUTTON.

PULLING DOWN ON THE LOWERING HANDLE, LOWER THE UNIT ONTO BOTH MECHANICAL SAFETIES ENDING THIS PROCEDURE.

SAFETY TIPS

PLEASE POST THE **AUTOMOTIVE LIFT SAFETY TIPS CARD**, (A COPY IS INCLUDED IN THE PARTS BOX) WHERE THEY WILL BE CONSTANTLY REMINDED TO YOUR LIFT OPERATOR. FOR INFORMATION SPECIFIC TO THE LIFT, ALWAYS REFER TO THE MOHAWK MANUAL.

- | | |
|--|--|
| <ul style="list-style-type: none"> • INSPECT YOUR LIFT DAILY. NEVER OPERATE IT IF IT MALFUNCTIONS OR IF IT HAS BROKEN OR DAMAGED PARTS. REPAIRS SHOULD BE MADE WITH ORIGINAL MOHAWK PARTS. • OPERATING CONTROLS ARE DESIGNED TO CLOSE WHEN RELEASED. DO NOT BLOCK OPEN OR OVERRIDE THEM. • NEVER OVERLOAD YOUR LIFT BEYOND STATED LIFTING CAPACITY. RATED CAPACITY IS SHOWN ON NAMEPLATE AFFIXED TO THE LIFT. • ONLY TRAINED AND AUTHORIZED PERSONNEL SHOULD DO POSITIONING OF VEHICLE AND OPERATION OF THE LIFT. • 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 A VEHICLE WITH PERSONS INSIDE. • ALWAYS KEEP LIFT AREA FREE OF OBSTRUCTIONS, DEBRIS, GREASE, AND OIL. • PERFORM THE PRE-OPERATION CHECK LIST, PER INSTRUCTIONS, BEFORE RAISING VEHICLE TO DESIRED HEIGHT. • BEFORE DRIVING VEHICLE INTO THE BAY, POSITION ARMS AND SUPPORTS TO PROVIDE | <p>UNOBSTRUCTED CLEARANCE. DO NOT HIT OR RUN OVER LIFT ARMS, ADAPTERS, OR AXLE SUPPORTS. THIS COULD DAMAGE LIFT OR VEHICLE.</p> <ul style="list-style-type: none"> • LOAD VEHICLE ON LIFT CAREFULLY. POSITION LIFT SUPPORTS TO CONTACT AT THE VEHICLE MANUFACTURER'S RECOMMENDED LIFTING POINTS. RAISE LIFT UNTIL SUPPORTS CONTACT VEHICLE. CHECK SUPPORTS FOR SECURE CONTACT WITH VEHICLE. RAISE LIFT TO DESIRED WORKING HEIGHT. CAUTION: IF YOU ARE WORKING UNDER VEHICLE, LIFT SHOULD BE RAISED HIGH ENOUGH FOR LOCKING DEVICE TO BE ENGAGED. • NOTE THAT WITH SOME VEHICLES, THE REMOVAL OR INSTALLATION OF COMPONENTS MAY CAUSE A CRITICAL SHIFT IN THE CENTER OF GRAVITY, AND RESULT IN RAISED VEHICLE INSTABILITY. REFER TO THE VEHICLE MANUFACTURER'S SERVICE MANUAL FOR RECOMMENDED PROCEDURES WHEN VEHICLE COMPONENTS ARE REMOVED. • BEFORE LOWERING LIFT, BE SURE TOOL TRAY'S, STANDS, ETC. ARE REMOVED FROM UNDER VEHICLE. RELEASE LOCKING DEVICES BEFORE ATTEMPTING TO LOWER LIFT. • BEFORE REMOVING VEHICLE FROM THE LIFT AREA, POSITION LIFT ARMS AND SUPPORTS TO PROVIDE AN UNOBSTRUCTED EXIT. |
|--|--|

PRE - OPERATION CHECK LIST**TRAINED OPERATOR**

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

ABSENCE OF OBSTRUCTIONS

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

VISUAL INSPECTION

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

NO LOAD PERFORMANCE CHECK

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

PREVIOUS DAY'S OPERATION REPORT

- VERIFY WITH SUPERVISOR THAT THERE WAS NO PROBLEMS EXPERIENCED THE PREVIOUS DAY. IF THERE WERE ANY PROBLEMS, VERIFY THAT ALL NECESSARY REPAIRS HAVE BEEN COMPLETED.

LIFTING PROCEDURES**OPERATION**

- PERFORM PRE-OPERATION CHECK LIST ITEM BY ITEM.
- POSITION THE SWING ARM TO THE OUTSIDE OF THE UNIT.
- POSITION THE VEHICLE AS INDICATED BY THE MFG'S RECOMMENDED LIFT POINTS. **SEE ALI/LP-GUIDE.**

NOTE

ALIGN THE VEHICLE'S CENTER OF GRAVITY WITH THE CENTERLINE OF THE POSTS. THIS CAN BE VERIFIED BY VIEWING THE CAM FOLLOWER BEARINGS ON THE CARRIAGE. THESE BEARINGS ARE LOCATED AT EACH CORNER OF THE CARRIAGE. CENTERING OF VEHICLE IS ACHIEVED WHEN ALL 4 CAM FOLLOWER BEARINGS ARE FREE TO SPIN.

- PLACE THE LIFTING PADS PER MFG'S RECOMMENDED LIFT POINTS. **SEE ALI/LP-GUIDE.**

TO RAISE

- ENGAGE THE UP-BUTTON ON THE POWER UNIT.
- RAISE VEHICLE TO THE DESIRED WORKING HEIGHT.
- LOWER THE UNIT ONTO THE MECHANICAL SAFETIES.

TO LOWER

- INSPECT THE LIFTING AREA TO INSURE THAT ALL PERSONNEL AND DEBRIS HAVE BEEN CLEARED FROM THE LIFTING AREA.
- ENGAGE THE UP-BUTTON ON THE POWER UNIT.
- RAISE UNIT APPROXIMATELY TWO INCHES.
- DISENGAGE THE MECHANICAL SAFETIES.
- LOWER UNIT TO THE DESIRED WORKING HEIGHT.
- ALWAYS ENGAGE THE UP-BUTTON ON THE POWER UNIT AND RAISE UNIT UNTIL BOTH MECHANICAL SAFETIES RE-ENGAGE.
- LOWER THE UNIT ONTO THE MECHANICAL SAFETIES.
- IF WORK IS COMPLETE, CONTINUE LOWERING THE UNIT UNTIL BOTH CARRIAGES ARE FULLY LOWERED.

MAINTENANCE PROCEDURES

QUALIFIED MAINTENANCE PERSONNEL ONLY

DAILY

- PERFORM THE PRE-OPERATION CHECK LIST.
- REPORT ANY AND ALL EQUIPMENT MALFUNCTIONS IMMEDIATELY.
- CLEAN ALL MOVING PARTS. (IT IS NOT RECOMMENDED TO GREASE THE INSIDE OF THE CHANNEL ON THE POST, SWING ARMS OR SWING ARM RESTRAINTS.) IF OXIDIZATION IS OCCURRING USE A LIGHT LUBRICANT. (WD - 40 OR EQUIVALENT)
- KEEP AREA AROUND THIS EQUIPMENT FREE OF DIRT, SAND, WATER, ETC.

WEEKLY

- PERFORM THE DAILY OPERATION CHECK LIST.
- WIPE CLEAN, THE CYLINDERS' WIPER SEALS AND THE BASE OF EACH POST TO REMOVE ANY WEEPING OIL AND DUST.
- VERIFY FLUID LEVEL. WITH THE UNIT FULLY LOWERED, THE FLUID LEVEL WILL BE 1/2 INCH BELOW THE BREATHER CAP PORT. USE DEXRON III AS REPLACEMENT FLUID.
- LUBRICATE THE ARM RESTRAINT ASSEMBLIES AS NEEDED TO INSURE FREE, AND SMOOTH OPERATION. **(DO NOT USE GREASE)**
- CYCLE UNIT TO FULL HEIGHT, AND BLEED APPROXIMATELY 30 SECONDS.

MONTHLY

- INSPECT LIFTING CHAINS AND COMPONENTS FOR DEFORMATION, WEAR OR CORROSION.
- INSPECT ALL HYDRAULIC COMPONENTS FOR LEAKS, DEFORMATION, WEAR OR CORROSION.

- TIGHTEN ALL FASTENERS AND HYDRAULIC FITTINGS AS REQUIRED.
 1. ALL O - RING BOSS FITTINGS JAM NUTS ARE TO BE TIGHTENED TO 15-FOOT POUNDS TORQUE.
 2. ALL PIPE FITTINGS, IF LEAKING IS TO BE REMOVED, RE-SEALED, AND RE - INSTALLED. (SELECT - UNITE THREAD SEALANT OR EQUIVALENT ON FITTING THREADS)
- INSPECT ANCHOR CONDITIONS FOR ANY POSSIBLE CORROSION AND INSPECT THE FLOOR FOR ANY SIGNS OF FATIGUE OR FRACTURES.

SEMI- ANNUAL TRAINING

- QUALIFY / 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. USE DEXRON III HYDRAULIC FLUID.
- INSPECT ALL BEARINGS FOR UNUSUAL OR EXCESSIVE WEAR. (REPLACE IF NEEDED)
- REMOVE THE SWING ARM RESTRAINTS. THOROUGHLY CLEAN. USE A LIGHT LUBRICANT (WD-40 OR EQUIVALENT) REINSTALL. **DO NOT USE GREASE.**
- REMOVE THE SWING ARMS. THOROUGHLY CLEAN. USE A LIGHT LUBRICANT (WD-40 OR EQUIVALENT) REINSTALL. **DO NOT USE GREASE.**
- REMOVE THE LIFTING CHAINS, THOROUGHLY CLEAN, LUBRICATE AND RE-INSTALL. (REPLACE IF UNUSUAL OR EXCESSIVE WEAR IS NOTED)
- PERFORM THE DAILY, WEEKLY, AND MONTHLY MAINTENANCE PROCEDURES.

NOTES:

TROUBLE SHOOTING

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

HYDRAULIC SAFETY CHECK

NOTE: THE HYDRAULIC SAFETY CHECK IS TO BE PERFORMED WITH NO VEHICLE ON THE UNIT.
CONTACT YOUR LOCAL MOHAWK DISTRIBUTOR OR THE MOHAWK FACTORY IF EITHER TEST FAILS.

MAINSIDE SAFETY CHECK:

1. RAISE THE UNIT APPROXIMATELY 3 FEET
2. DISENGAGE THE **OFFSIDE** MECHANICAL SAFETY
3. LOWER THE UNIT ONTO THE **MAINSIDE** MECHANICAL SAFETY
4. WHILE CONTINUING TO HOLD DOWN THE POWER UNIT LOWERING HANDLE, OBSERVE THE **OFFSIDE** CARRIAGE FOR MOVEMENT. THE UNIT HAS CHECK OUT OK IF THERE IS NO MOVEMENT (**OFFSIDE** CARRIAGE DOES NOT CONTINUE TO LOWER)

OFFSIDE SAFETY CHECK:

1. RAISE THE UNIT APPROXIMATELY 3 FEET
2. DISENGAGE THE **MAINSIDE** MECHANICAL SAFETY
3. LOWER THE UNIT ONTO THE **OFFSIDE** MECHANICAL SAFETY
4. WHILE CONTINUING TO HOLD DOWN THE POWER UNIT LOWERING HANDLE, OBSERVE THE **MAINSIDE** CARRIAGE FOR MOVEMENT. THE UNIT HAS CHECK OUT OK IF THERE IS NO MOVEMENT (**MAINSIDE** CARRIAGE DOES NOT CONTINUE TO LOWER)

POSSIBLE CAUSE	SOLUTION
NOT RAISING LOAD	
LOW HYDRAULIC FLUID LEVEL	LOWER UNIT. REMOVE RESERVOIR BREATHER CAP. FILL UNIT TO WITHIN 1/2 INCH BELOW PORT. USE DEXRON III TRANSMISSION / HYDRAULIC FLUID.
PRESSURE RELIEF ADJUSTMENT	REFER TO POWER UNIT SPECIFICATIONS. SEE FIGURE 13.
PRESSURE RELIEF CONTAMINATION	REFER TO POWER UNIT SPECIFICATIONS. REMOVE AND CLEAN DEBRIS FROM VALVE ASSEMBLY. SEE FIGURE 13.
VOLTAGE TO POWER UNIT	REFER TO POWER UNIT SPECIFICATIONS. CONSULT AN ELECTRICIAN
UNIT OVERLOADED	VEHICLE IS TOO HEAVY TO BE RAISED
NOT LOWERING	
MECHANICAL LOCKS ENGAGED	RAISE UNIT. DISENGAGE MECHANICAL LOCKS.
UNIT UNEVEN (SIDE TO SIDE)	RAISE UNIT TO FULL HEIGHT TO EQUALIZE. THEN LOWER OR USE DIVERTER VALVE TO EQUALIZE
POSTS OUT OF SQUARE	VERIFY LEVEL ASSEMBLY. MAKE ANY AND ALL NECESSARY ADJUSTMENTS. SEE FIGURE 6 & 7.
DEBRIS IN POSTS (TOOLS ETC.)	CLEAN UNIT
OBSTRUCTION UNDER VEHICLE OR LIFT	REMOVE OBSTRUCTION.
RAISING UNEVEN	
<u>RULE OF THUMB:</u> IF THE MAIN SIDE IS HIGH, RUN UNIT TO FULL HEIGHT. IF THE MAIN SIDE IS LOW, LOWER UNIT TO FLOOR. ALLOW TIME FOR THE OFF SIDE TO EQUALIZE.	
AIR IN SYSTEM	BLEED UNIT. REFER TO BLEEDING PROCEDURES.
CARRIAGE BEARINGS CONTACTING CARRIAGE STOPS	CARRIAGE BEARINGS ON THE MAIN SIDE MUST NOT CONTACT CARRIAGE STOPS. (RESULT OF INCORRECT CYLINDER SHIMS.) SEE "SHIMMING FOR CHAIN TENSION" SECTION. SEE FIGURE 8.
POSTS OUT OF SQUARE	VERIFY LEVEL ASSEMBLY. MAKE ANY AND ALL NECESSARY ADJUSTMENTS. SEE FIGURE 6 & 7.
CYLINDER SHIMS	VERIFY CYLINDER SHIMS. MAKE ANY AND ALL NECESSARY ADJUSTMENTS. SEE "SHIMMING FOR CHAIN TENSION" SECTION. SEE FIGURE 8.
SHOP FLOOR UNEVEN	VERIFY PROPER INSTALLATION OF MAIN SIDE POST. MAIN SIDE TO BE ON HIGH SIDE. SEE FIGURE 10.

TROUBLE SHOOTING, CONTINUED

POSSIBLE CAUSE	SOLUTION
RAISING UNEVEN, CONTINUED	
SHOP FLOOR UNEVEN	USE SPECIAL LIFT PADS. SEE FIGURE 11.
DIVERTER VALVE	REMOVE BLEED LINE FROM THE TOP OF THE OFF SIDE CYLINDER AND CAP USING MOHAWK PART # 601-420-001. IF THE UNIT CONTINUES TO DRIFT DOWN THE DIVERTER PULL VALVE WILL NEED TO BE CLEANED OR REPLACED.
OFF SIDE CYLINDER	REMOVE BLEED LINE FROM THE TOP OF THE OFF SIDE CYLINDER AND CAP USING MOHAWK PART # 601-420-001. IF THE UNIT NO LONGER DRIFTS DOWN THE OFFSIDE CYLINDER WILL NEED TO BE SERVICED..
MAIN SIDE CYLINDER	PERFORM HYDRAULIC SAFETY CHECKS. CHECK FOR INTERNAL HYDRAULIC LEAKS
SLOW DRIFT DOWN	
SAFETIES NOT ENGAGED	RAISE UNIT TO RE-ENGAGE SAFETIES. THEN LOWER UNIT ONTO SAFETIES.
POWER UNIT LOWERING VALVE CONTAMINATION	BACK FLUSH POWER UNIT: PULL DOWN ON THE LOWERING HANDLE, AND THEN ENGAGE THE UP BUTTON AT THE SAME TIME. RUN UNIT APPROX. 10 SECONDS
DIVERTER VALVE	REMOVE BLEED LINE FROM THE TOP OF THE OFF SIDE CYLINDER AND CAP USING MOHAWK PART # 601-420-001. IF THE UNIT CONTINUES TO DRIFT DOWN THE DIVERTER PULL VALVE WILL NEED TO BE CLEANED OR REPLACED.
OFF SIDE CYLINDER	REMOVE BLEED LINE FROM THE TOP OF THE OFF SIDE CYLINDER AND CAP USING MOHAWK PART # 601-420-001. IF THE UNIT NO LONGER DRIFTS DOWN THE OFFSIDE CYLINDER WILL NEED TO BE SERVICED..
EXTERNAL HYDRAULIC LEAKS	
NOTE: TIGHTEN ALL FITTINGS PER SPECIFICATIONS	
MAIN SIDE CYLINDER	THOROUGHLY CLEAN THE CYLINDER. VERIFY LEAK ORIGIN. FITTINGS ARE TO BE TIGHTENED PER SPECIFICATIONS
OFF SIDE CYLINDER	THOROUGHLY CLEAN THE CYLINDER. VERIFY LEAK ORIGIN. FITTINGS ARE TO BE TIGHTENED PER SPECIFICATIONS.
BAD FLAIR OR FITTING	REMOVE THE HYDRAULIC LINE AND INSPECT FLAIR AND FITTING FOR DEFORMATION. REPLACE IF NEEDED.
BAD O-RING (O-RING TYPE FITTINGS)	CHANGE O-RING
LOOSE PIPE FITTING	REMOVE, RESEAL, AND RE-INSTALL FITTING. SEAL ALL PIPE FITTING CONNECTIONS WITH THREAD SEALANT MOHAWK PART # 601-610-002 NOTE: DO NOT USE TEFLON TAPE.
MECHANICAL LOCK RE-ENGAGES	
J-BAR OUT OF ADJUSTMENT	ADJUST THE J-BAR SO THAT THE CORD END OF THE FLIPPER IS LOWER THAN THE BLIND END WHEN THE LOCK IS DISENGAGED. MAKE THIS ADJUSTMENT WITH A VEHICLE ON THE UNIT. SEE FIGURE 14.
MECHANICAL LOCK HARD TO PULL	
SPRING PLUNGER OUT OF ADJUSTMENT	ADJUST ALLEN SET SCREW TWO THREADS INTO PLUNGER HOUSING.
FLIPPER STICKING ONTO LOCK BAR	APPLY A SMALL AMOUNT OF LUBRICANT TO THE LOCK BAR WHERE THE FLIPPER RIDES. (DO NOT USE HEAVY GREASE)

SERVICE CHART

MODEL A-7

SERIAL NUMBER: _____

DATE OF INSTALLATION: _____

DATE	PART REPLACED / SERVICED	SERVICE COMPANY	SERVICED BY

MAINTENANCE CHART

DATE	MAINTENANCE PERFORMED	SERVICE COMPANY	SERVICED BY

MOHAWK

MODEL A-7

FIGURES & DIAGRAMS



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

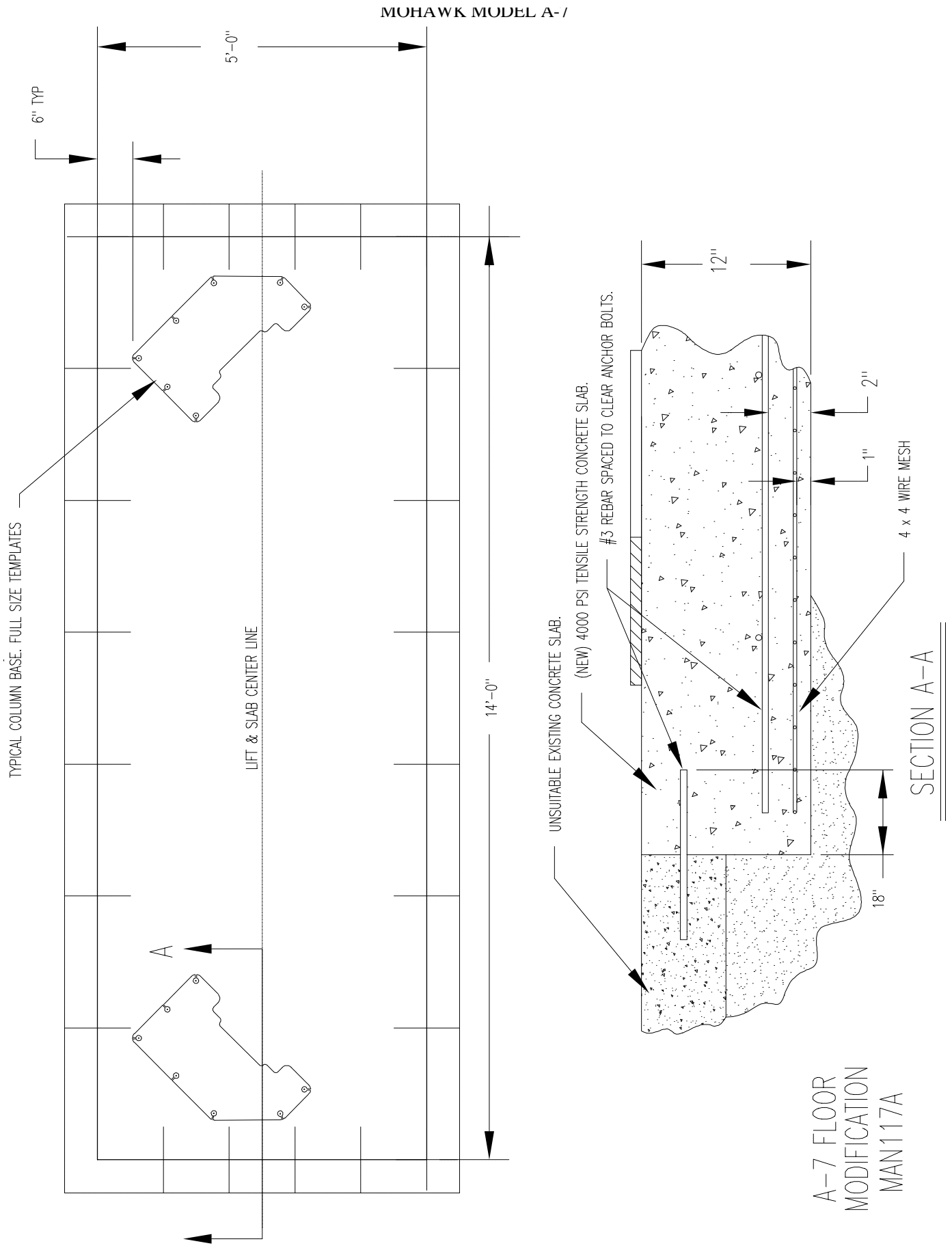
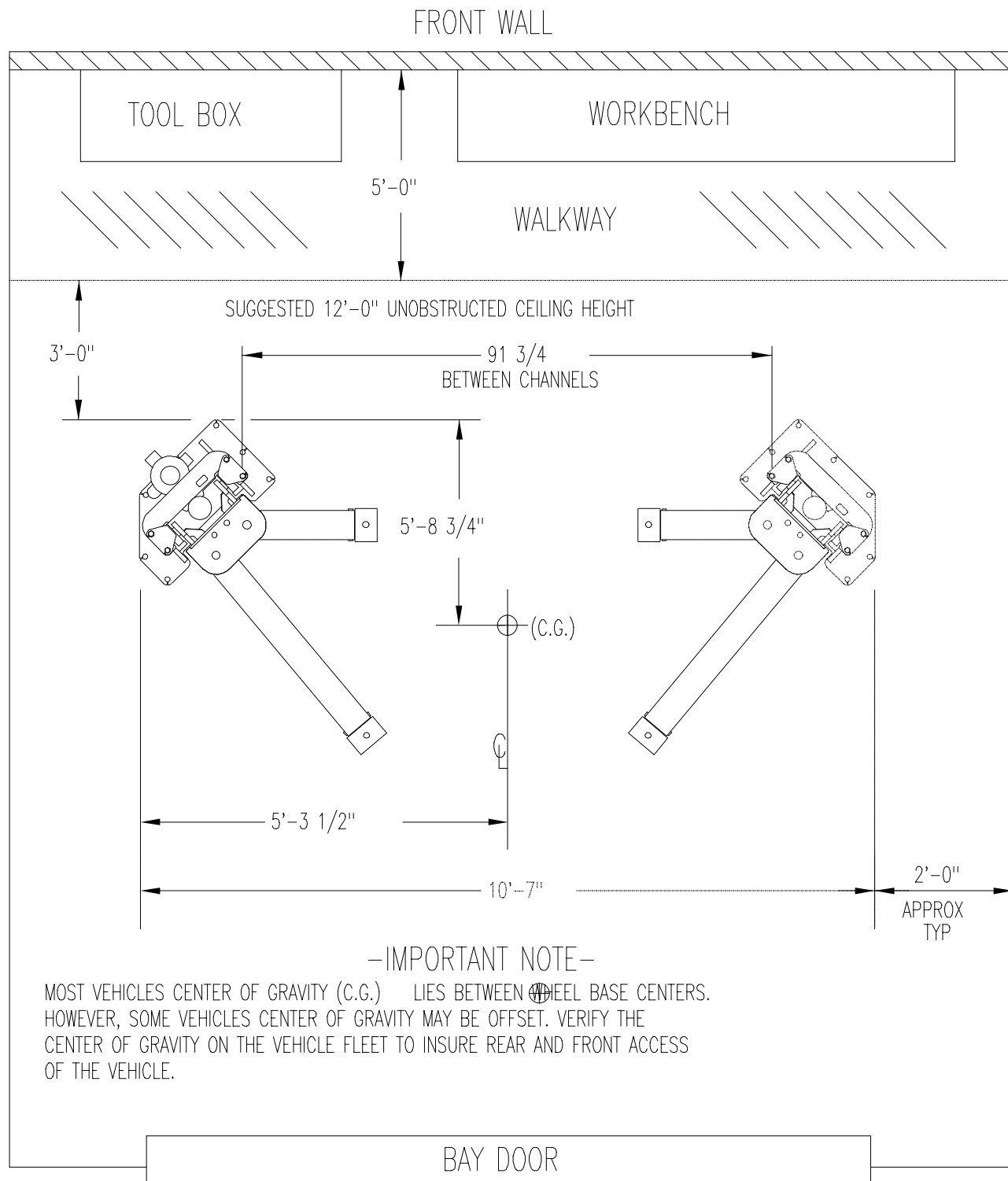


Figure 1

MOHAWK MODEL A- /
MOHAWK MODEL A- /
BAY SIGHT LAYOUT

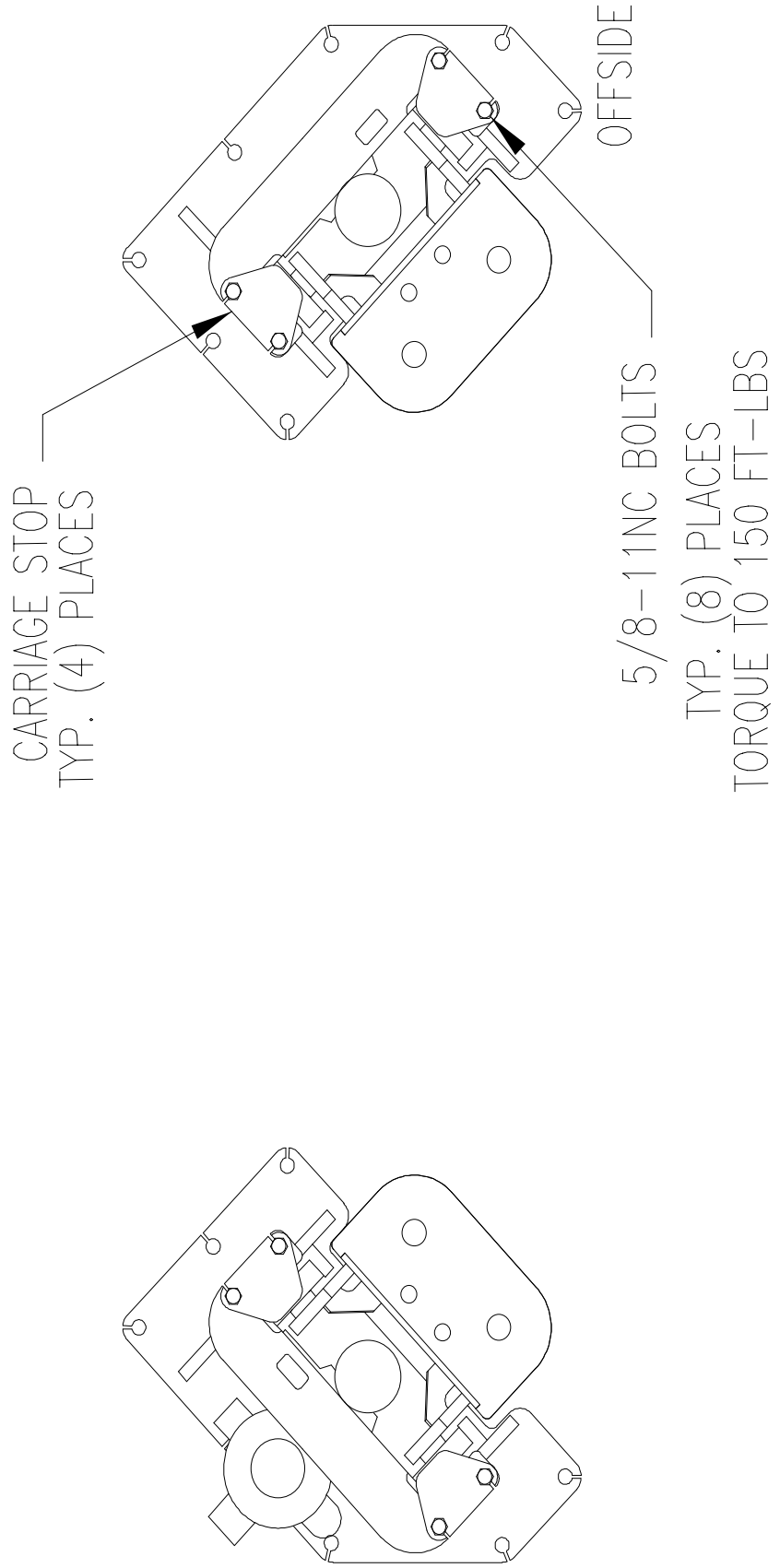


MAN117E

Figure 2

—CAUTION—

THESE CARRIAGE STOPS ARE TO BE USED IN THE ASSEMBLY OF THIS LIFT. IT IS EXTREMELY IMPORTANT TO PLACE THESE IN THEIR DESIGNATED POSITION, WHICH IS SHOWN BELOW.



MAN117K

Figure 3

WEJ-IT INSTALLATION



**DO NOT USE
IMPACT WRENCH**

USE HAND WRENCH ONLY

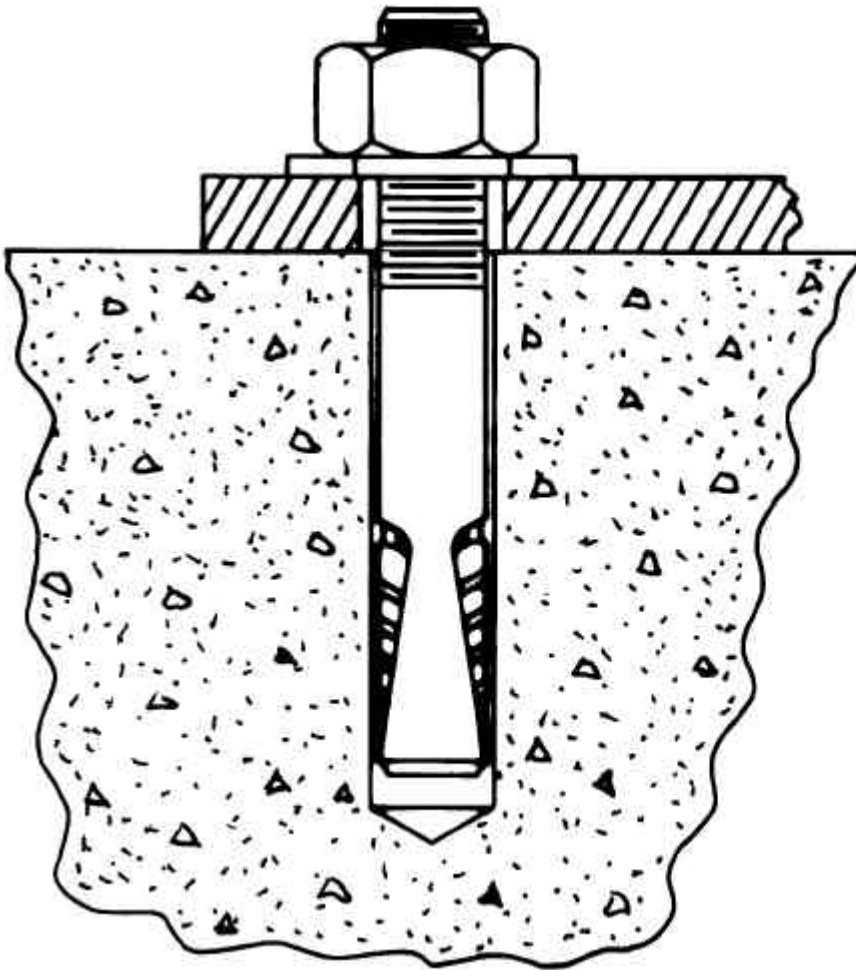
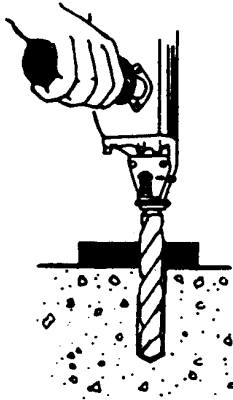


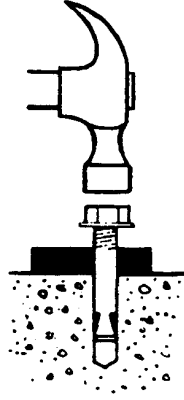
Figure 4

Quick, Easy Installation



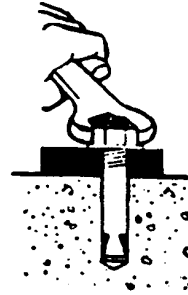
1.

Drill hole to depth equal to length of Wej-it.



2.

Insert Wej-it so that washer rests against fixture.

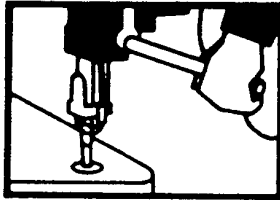


3.

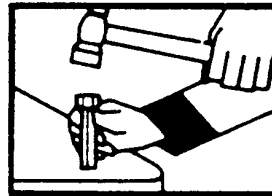
Tighten nut, two-to-three full turns.

Installation Procedure

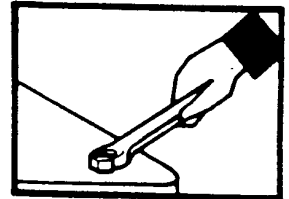
1. Wear safety glasses as a good practice.
2. Use solid, carbide-tipped drill bits manufactured to ANSI B94 Standard tolerances on the tip ends as follows:



3. Don't use excessively worn bits.
4. Keep drill in a perpendicular line while drilling.
5. Let the drill do the work. Don't apply excessive pressure.
6. Lift up and down several times, to remove dust and reduce binding.
7. Drill hole to depth equal to the full length of Wej-it.
8. Blow out dust from hole. Cleaning insures highest holding values.



9. Tap Wej-it into hole until washer rests against fixture.



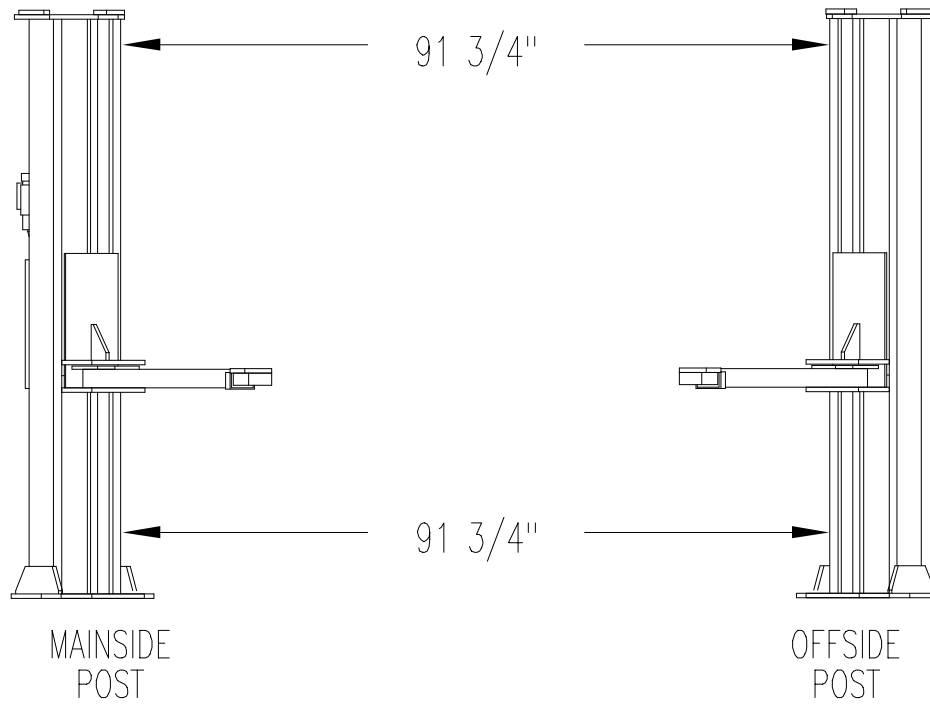
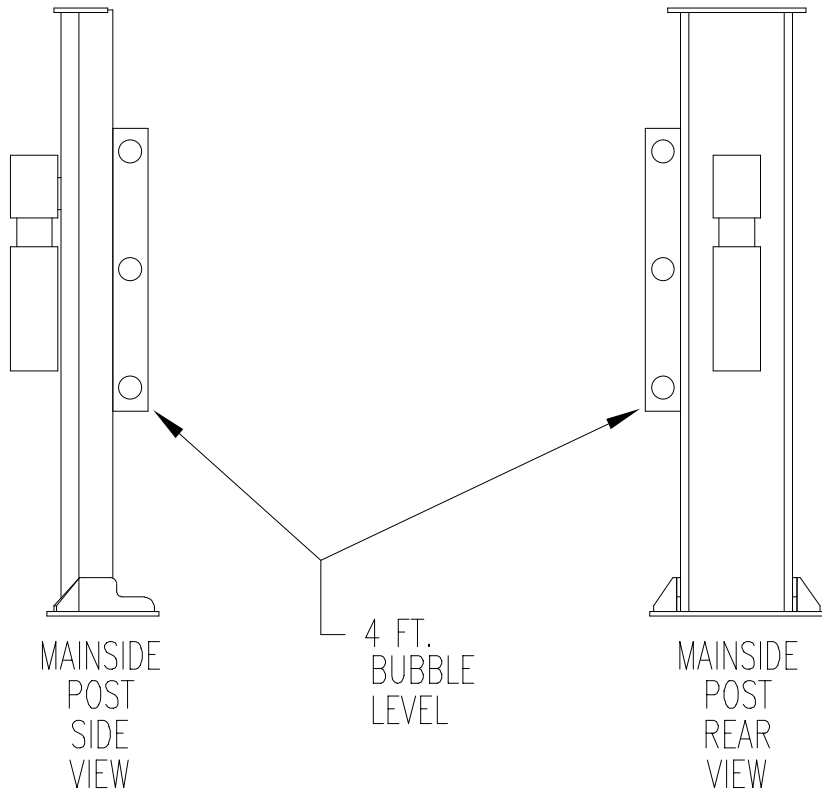
10. Choose whichever of the following methods is suitable:

DIAMETER	MINIMUM INCHES	MAXIMUM INCHES
3/4	0.775	0.787

WEJ-IT DIAMETER	FULL TURNS OF NUT	TORQUE FOOT POUNDS
3/4	2 - 3	60 - 80

EITHER METHOD SHOULD PRODUCE COMPARABLE RESULTS UNDER MOST FIELD CONDITIONS.

Figure 5



POST LEVELING
MAN117G

Figure 6

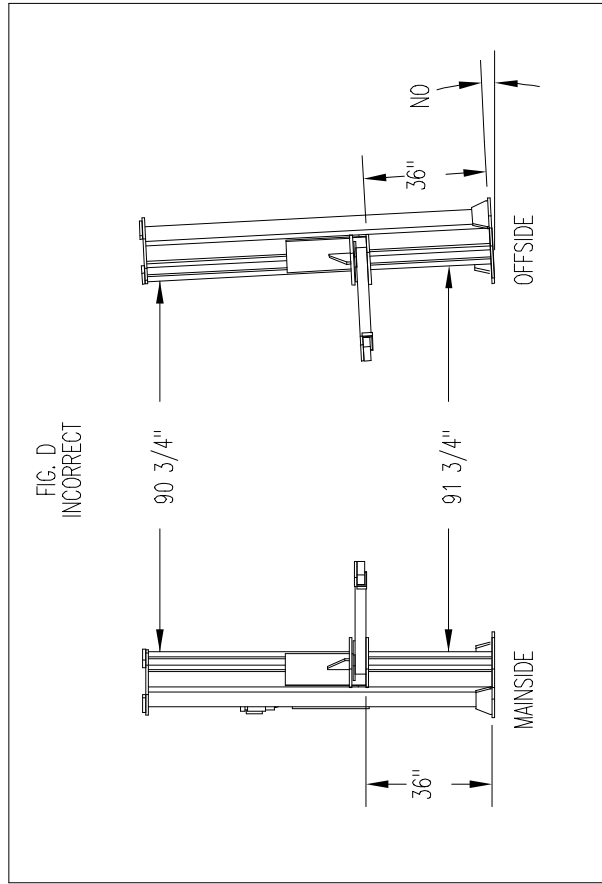
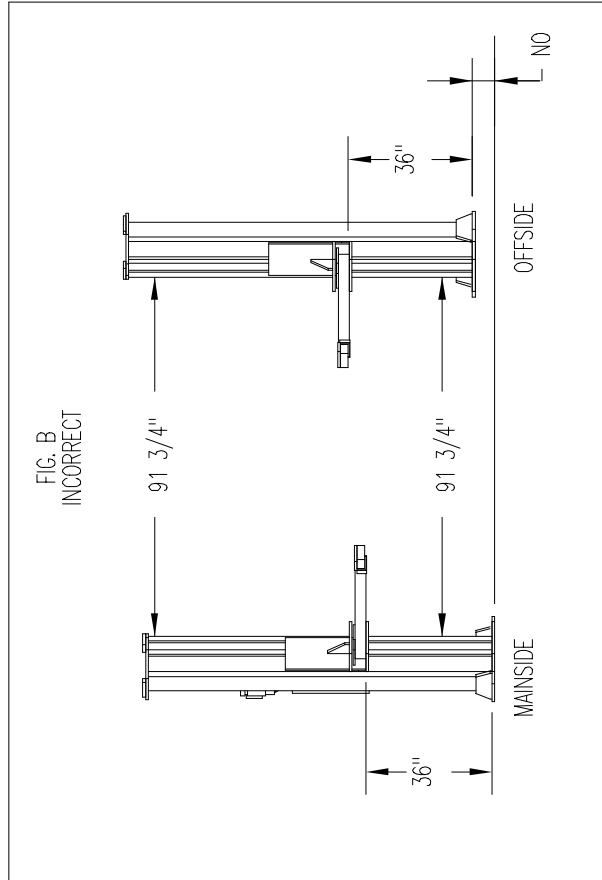
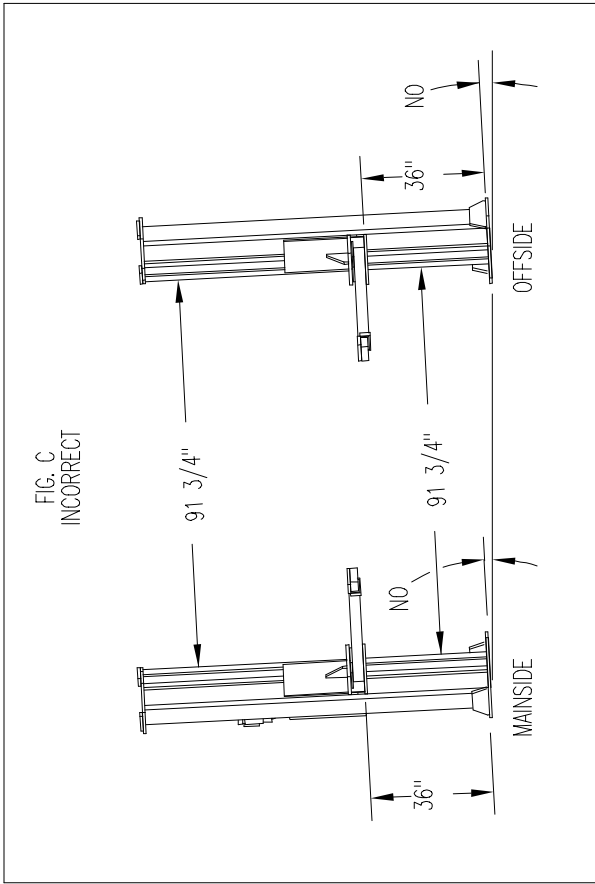
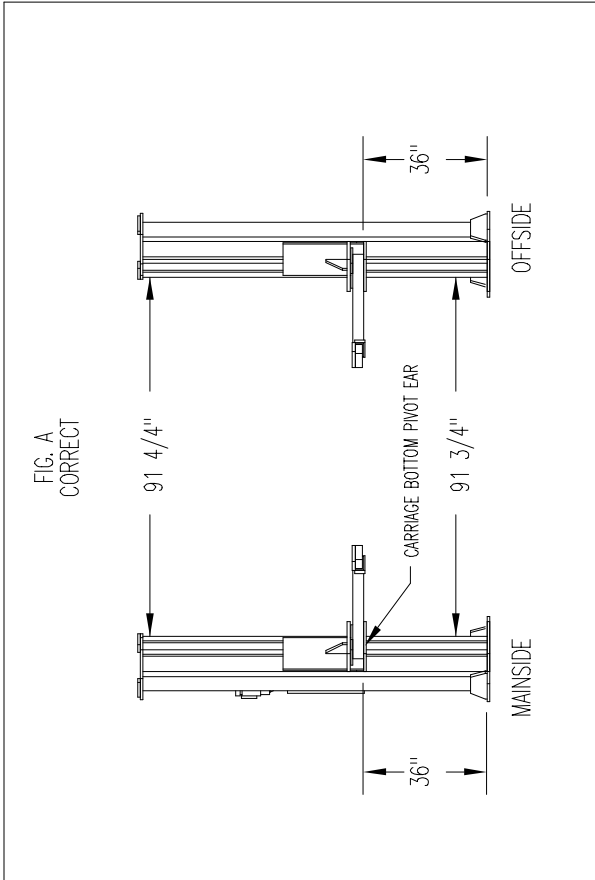
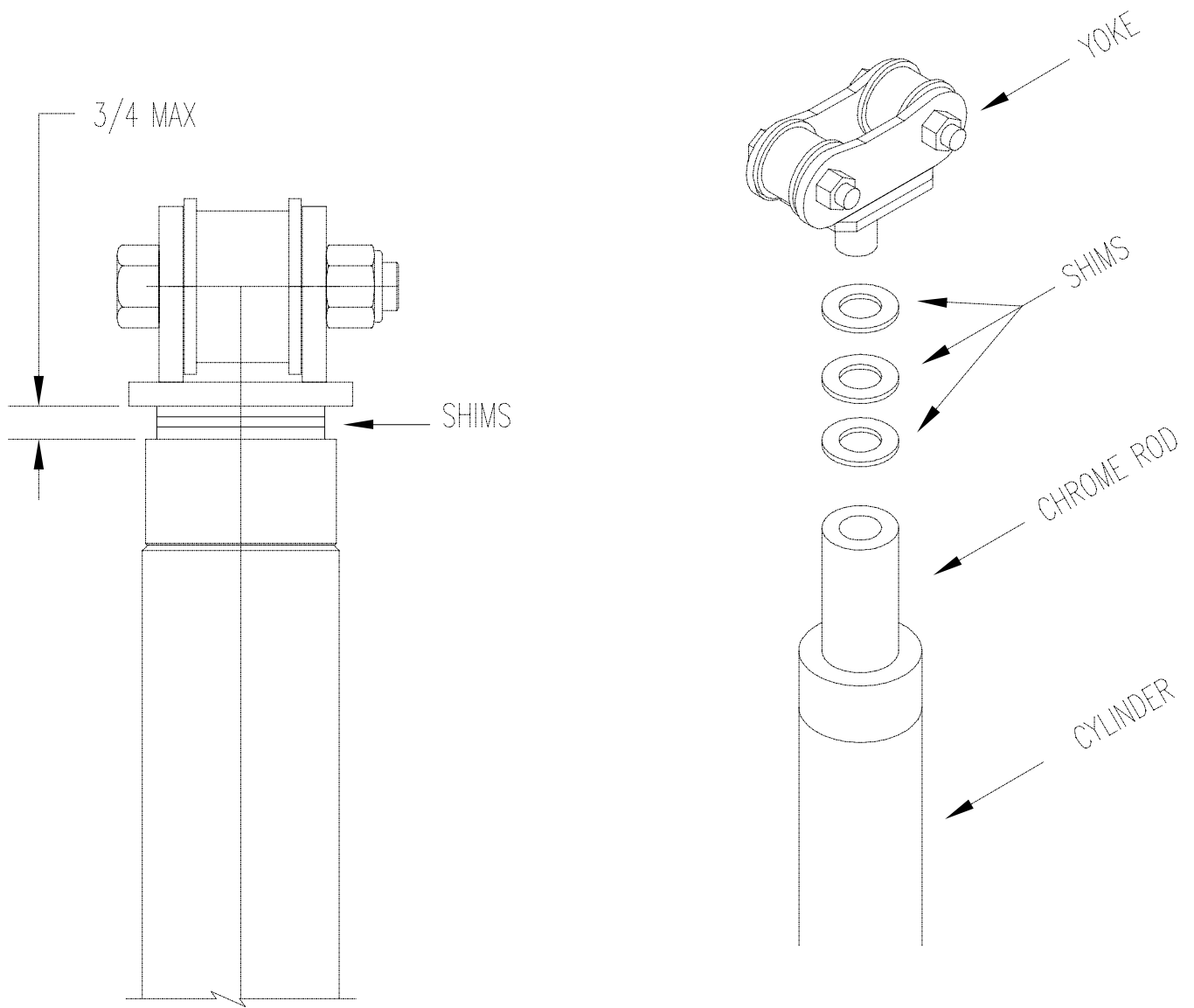


Figure 7



CYLINDER SHIMS

MAN117D

Figure 8

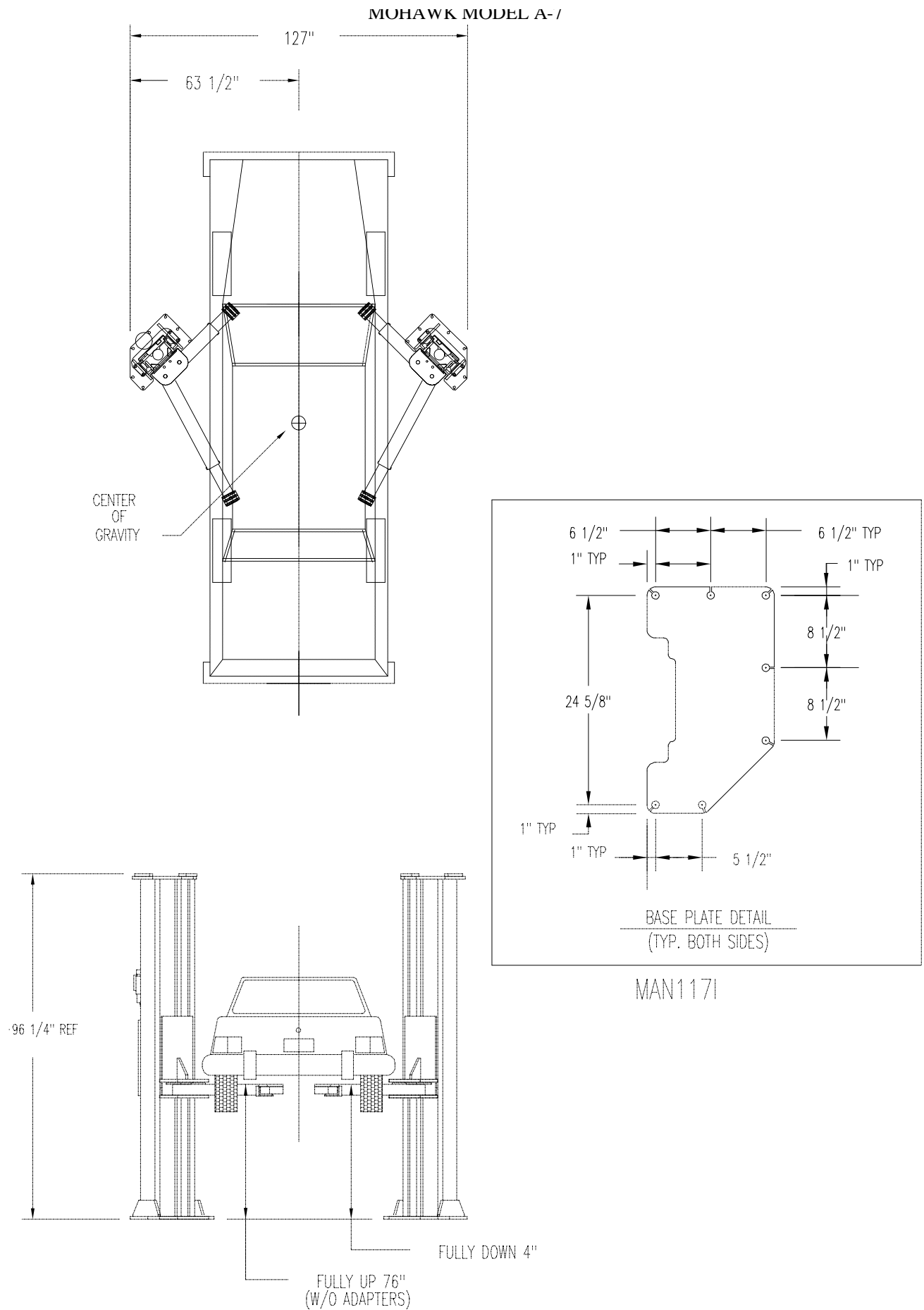


Figure 9

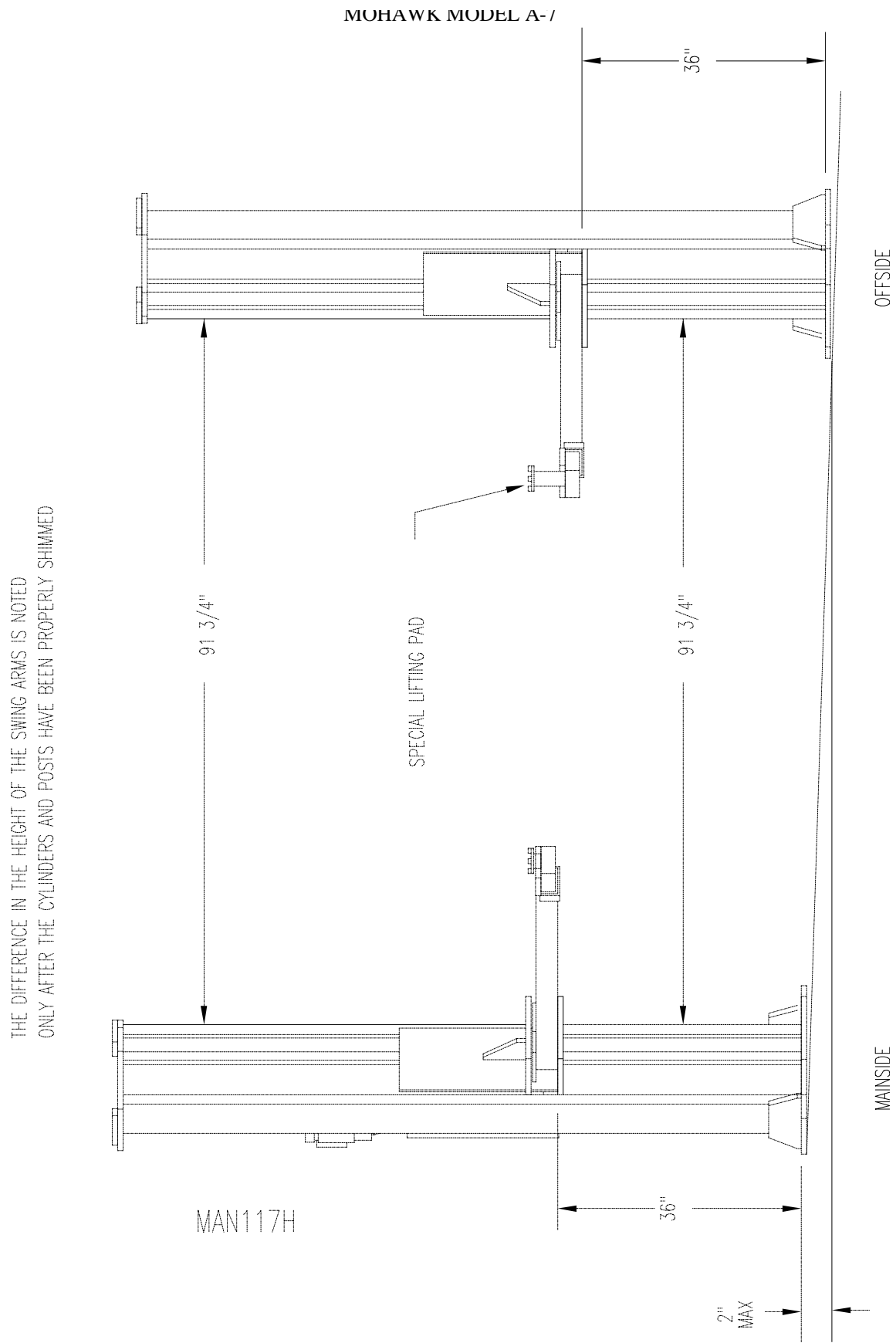
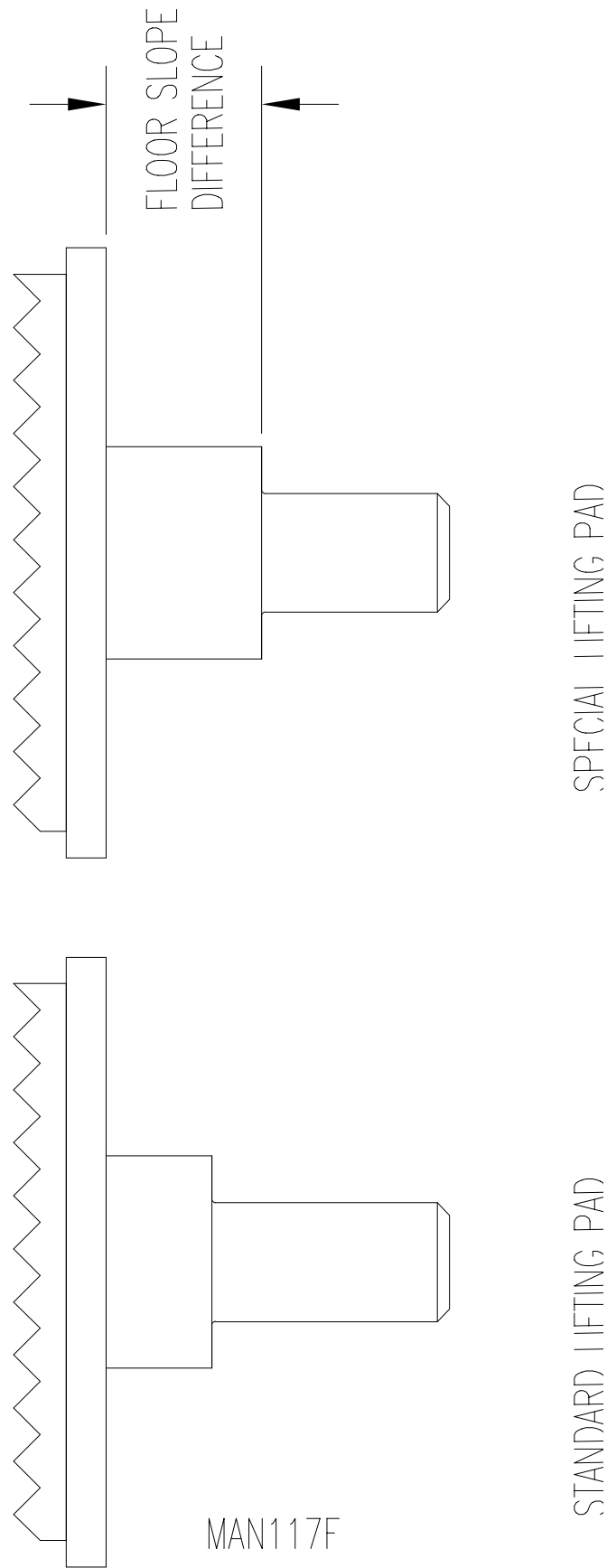


Figure 10



MAN117F

Figure 11



MADE FOR
MOHAWK

Dyna-Pack® **M-4509**
MOHAWK: **601-300-045**

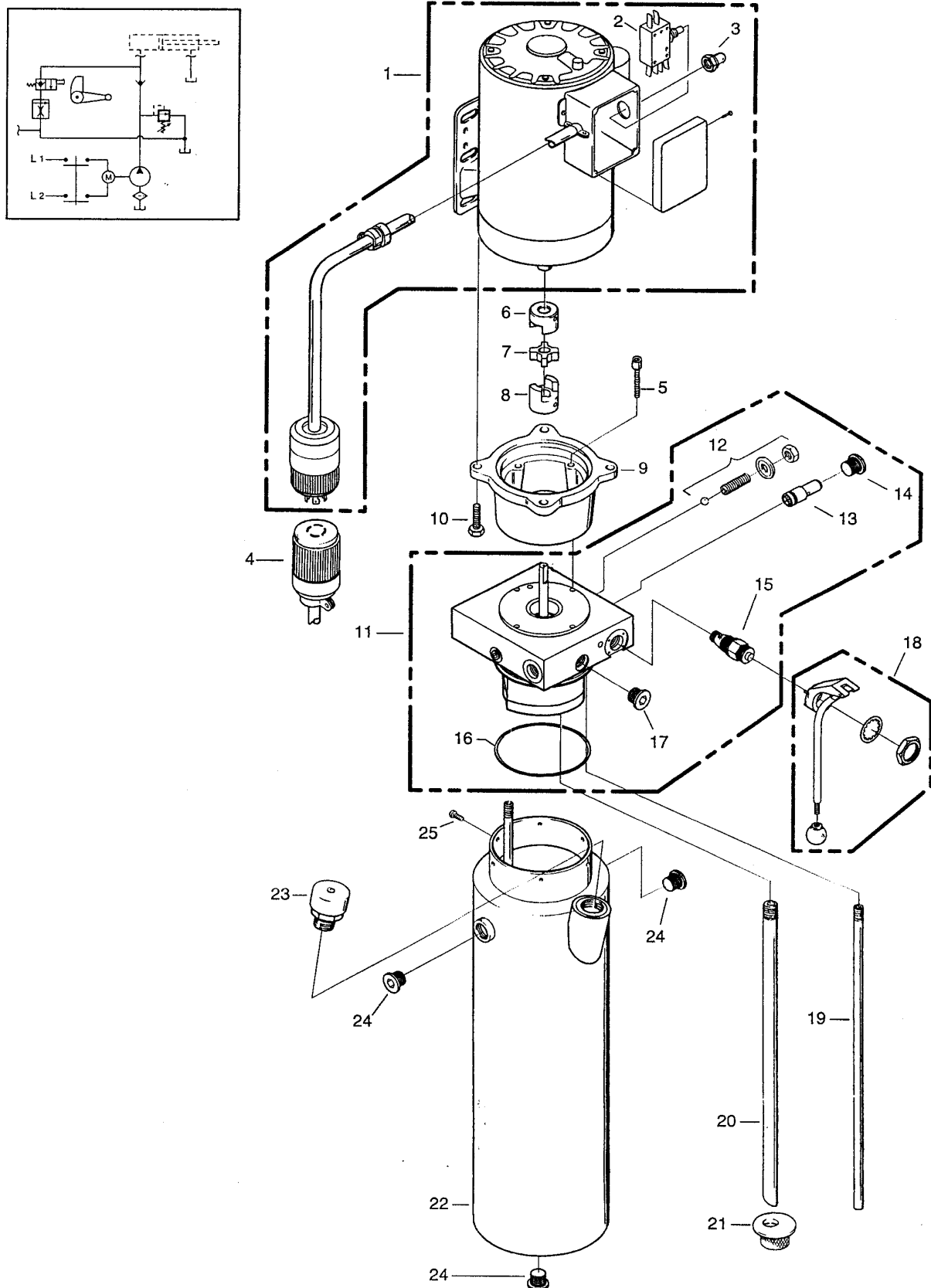


Figure 12

M-4509/601-300-045

Ref. No.	Part No.	Description	No. Req.
1	08177	MOTOR, Electric, 5/8" Shaft, AC, 2 hp	1
	13000	• SWITCH, Limit, 25 amps, 2 pole	1
3	03230	• BOOT, Rubber, weather proof, limit switch (used with 13000)	1
4	00694	PLUG, Turnlock, female	1
5	07760	SCREW, Socket Head Cap 1/4-20 x 1" (used with 1605 permanent casting housing)	4
6	01139	COUPLING, 5/8" Bore 3/16" Keyway (motor side)	1
7	01603	COUPLING SPIDER, 33/64" Bore	1
8	01189	COUPLING, 1/2" Bore	1
9	01605	HOUSING, Pump/Motor Adapter (2-5/32" long)	1
10	07817	SCREW, Hex Head Cap 3/8-16 x 7/8"	4
11	12036	PUMP ASSEMBLY	1
12	07527	• PARTS KIT, Adjustable Relief Valve	1
13	01723-2.75	• VALVE, PCFC	1

Ref. No.	Part No.	Description	No. Req.
14	03274	• PLUG	1
15	10802	• VALVE, Manual	1
16	02352	• O-RING, Industrial (3-5/8" x 3-7/8" x 1/8")	1
17	03276	• PLUG, 9/16-18 (#6 SAE)	1
18	10803	HANDLE, Assembly	1
19	01479-21.00	TUBE, Return 1/8 NPT Plastic	1
20	01459-18.00	TUBE, Filter Suction 3/8 NPT Plastic	1
21	01134	SCREEN, Filter (suction)	1
22	04882	RESERVOIR, Vertical	1
23	01143	PLUG, Vent (plastic)	1
24	03276	PLUG, 9/16-18 (#6 SAE)	3
25	07703	SCREW, Thread Forming 10-24 x 3/8"	6



U.S.A.:
MONARCH HYDRAULICS, INC.
P.O. Box 1764, Grand Rapids, MI 49501-1764, U.S.A.
1363 Michigan St NE, Grand Rapids, MI 49503, U.S.A.
Telephone: (616) 458-1306
Telefax: (616) 458-1816
<http://www.monarchhyd.com>

Form No. 2361-98

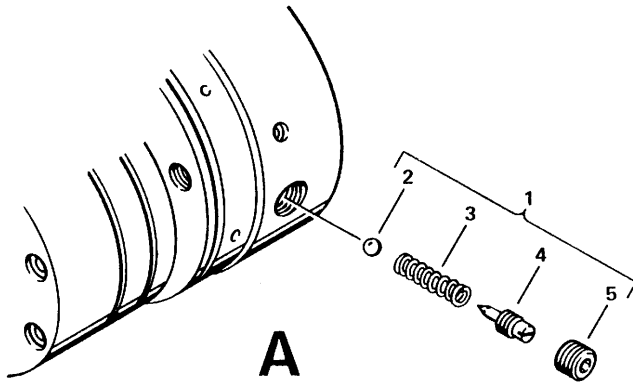
CANADA:
FLUID-PACK INTERNATIONAL LIMITED
A Part of the Monarch Hydraulics Group
460 Newbold St., London, Ontario, Canada N6E 1K3
Telephone: (519) 686-5900
Telefax: (519) 686-8976

Litho in U.S.A.

Figure 12A



RELIEF VALVE ADJUSTMENT PROCEDURE



RELIEF VALVE ADJUSTMENT PROCEDURE "A"
FOR UNITS MADE BEFORE APRIL 1, 1991.

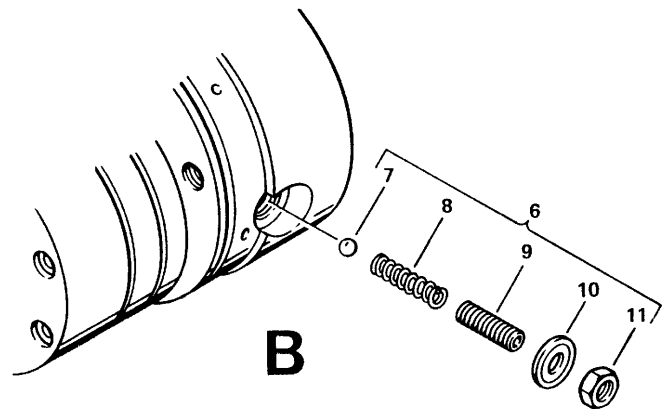
1. REMOVE FLUSH PLUG.
2. TURN SCREW CLOCKWISE TO INCREASE PRESSURE.
3. TURN SCREW COUNTER-CLOCKWISE TO DECREASE PRESSURE.

NOTE

OUTLET PORT FLOW MUST BE BLOCKED TO
MAKE RELIEF VALVE OPERATE WHILE
ADJUSTING.

4. REINSTALL FLUSH PLUG.

Ref. No.	Part No.	Description	No. Req.
1	02222	PARTS KIT, Relief Valve	1
2	00012	• BALL, 1/4" DIA., chrome, steel	1
3	02221	• SPRING, Relief Valve (Std.)	1
	00147	• SPRING, Relief Valve, 2,500 PSI & up (opt.)	1
4	07640	• SCREW, Adjusting Relief, 3/8-16	1
5	02350	• PLUG, Pipe, Flush 1/4 NPTF	1



RELIEF VALVE ADJUSTMENT PROCEDURE "B"
FOR UNITS MADE AFTER APRIL 1, 1991.

1. LOOSEN JAM NUT.
2. TURN SCREW CLOCKWISE TO INCREASE PRESSURE.
3. TURN SCREW COUNTER-CLOCKWISE TO DECREASE PRESSURE.

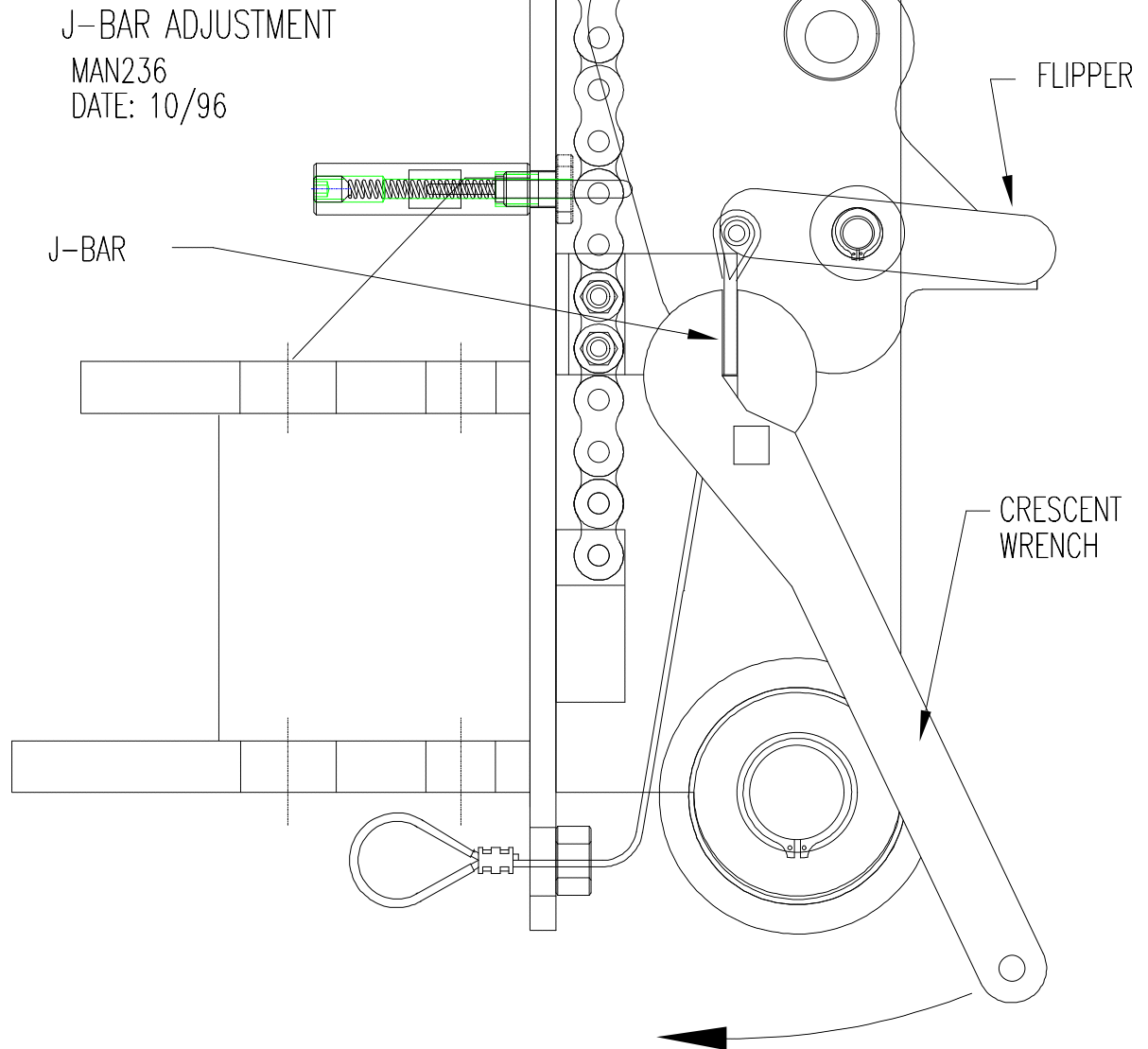
NOTE

OUTLET PORT FLOW MUST BE BLOCKED TO
MAKE RELIEF VALVE OPERATE WHILE
ADJUSTING.

4. TIGHTEN JAM NUT.

Ref. No.	Part No.	Description	No. Req.
6	03766	PARTS KIT, Relief Valve	1
7	00012	• BALL, 1/4" DIA., chrome, steel	1
8	02221	• SPRING, Relief Valve (Std.)	1
	00147	• SPRING, Relief Valve, 2,500 PSI & up (opt.)	1
9	00387	• SCREW, Socket Set, 3/8-16, oval point	1
10	03874	• SEAL, Washer	1
11	07891	• NUT, Hex, jam, 3/8-16	1

Figure 13



IF LOCK SHOULD RE-ENGAGE DURING DESCENT,
PERFORM THE FOLLOWING:

- 1) LOCATE CRESCENT WRENCH AS SHOWN.
- 2) PULL WRENCH TOWARD YOU TO ADJUST J-BAR INTO PROPER POSITION.
- 3) THE CABLE END OF THE FLIPPER IS TO BE SLIGHTLY LOWER THAN THE OPPOSITE END.
- 4) THIS PROCEDURE TO BE PERFORMED WITH A VEHICLE ON THE UNIT.

Figure 14

MOHAWK

MODEL A-7

PARTS MANUAL



MOHAWK RESOURCES LTD.

65 VROOMAN AVE.

AMSTERDAM, NY 12010

TOLL FREE: 1-800-833-2006

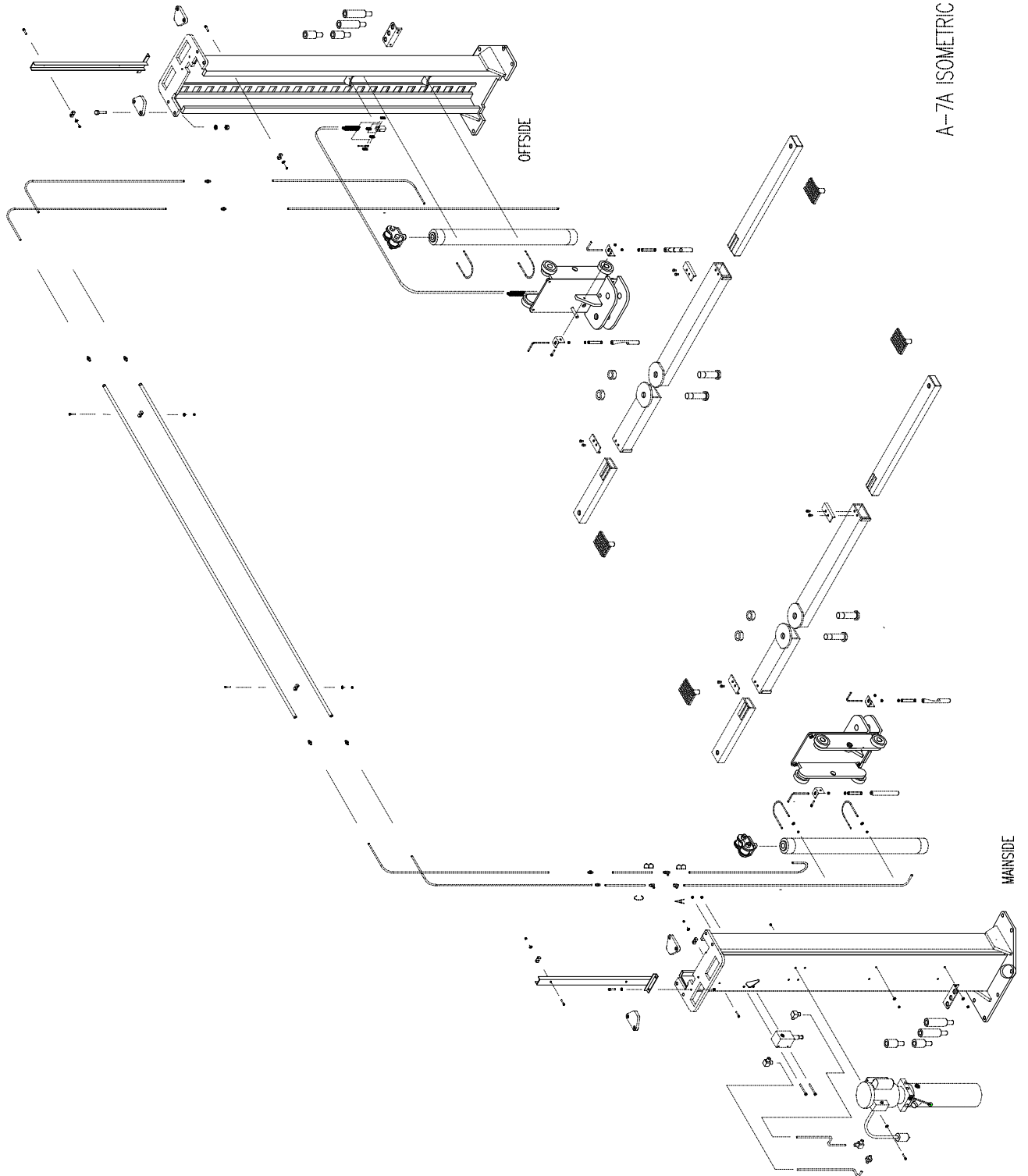
LOCAL: 1-518-842-1431

FAX: 1-518-842-1289

INTERNET: WWW.MOHAWKLIFTS.COM

E-MAIN: SERVICE@MOHAWKLIFTS.

MAN120
REV A 2/99



A-7A ISOMETRIC FINAL ASSEMBLY

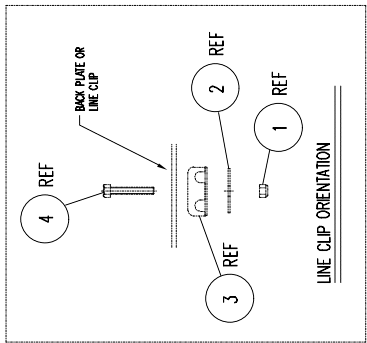
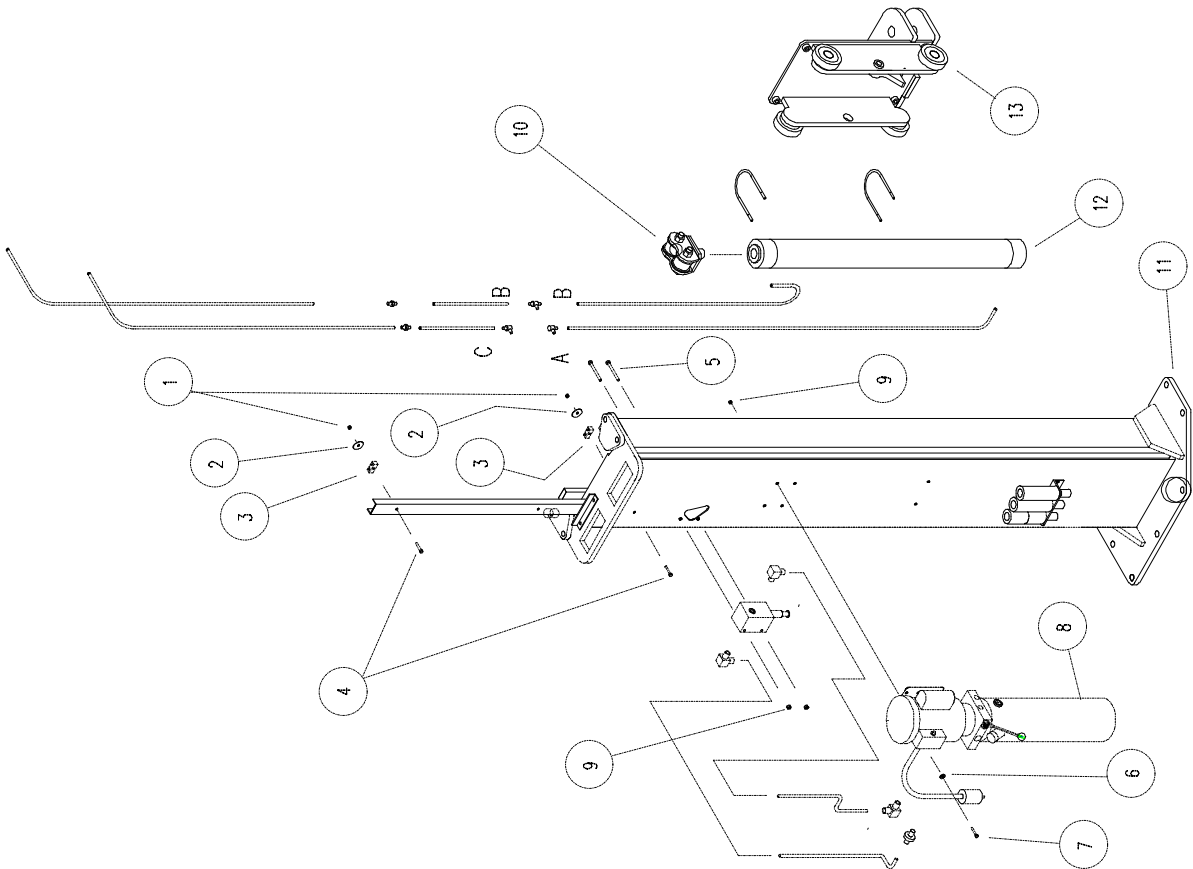
FILE: MAN120
DATE: 7/98

MAN120-A

REV B 10/01

SEE MANUAL DRAWINGS BELOW FOR FURTHER INFORMATION

- MAN120 A-7A FINAL ISOMETRIC ASSEMBLY
- MAN120-B A-7A OFFSIDE ASSEMBLY
- MAN122 CARRIAGE ASSEMBLY
- MAN123 LATCH BODY ASSEMBLY
- MAN126 CARRIAGE/SWING ARMS/SLIDERS/LIFTING PAIDS
- MAN127 LEG WELDMENTS/LINE SUPPORTS/CARRIAGE STOPS
- MAN128 TAG & DECAL LOCATION
- MAN131 BAG #1/ SMALL PARTS & BAG #2/ SHIMS
- MAN132 PARTS BOX & CONTENTS
- MAN101 HYDRAULIC SYSTEM
- MAN104 YOKE ASSEMBLY
- MAN105 HEIGHT ADAPTER BRACKETS/CYLINDER RETAINERS
- MAN109 MAINSIDE CYLINDER ASSEMBLY
- MAN110 OFFSIDE CYLINDER ASSEMBLY
- MAN233 SPRING PLUNGER ASSEMBLY
- MAN235 DIVERTER VALVE ASSEMBLY



ITEM	PART NUMBER	DESCRIPTION
1	MAN120	CARRIAGE/SWING ARMS/SLIDERS/LIFTING PAIDS
2	607-010-004	CARRIAGE ASSEMBLY
3	607-007-001	MAINSIDE CYLINDER ASSEMBLY
4	MAN127	LEG WELDMENT/LINE SUPPORT/CARRIAGE STOPS
5	608-000-001	YOKE ASSEMBLY
6	608-000-001	HYDRAULIC SYSTEM
7	MAN101	YOKE ASSEMBLY
8	600-640-001	BOLT, 5/16-18 NC x 1"
9	600-710-003	WASHER FLAT, 5/16
10	600-640-000	BOLT, 5/16-18 NC x 3 1/2
11	600-640-019	BOLT, 1/4-20 NC x 1 1/2
12	601-710-001	DOUBLE LINE CLIP
13	600-710-008	WASHER FLAT (FENDER) 5/16 Ø x 1 1/2 OD
14	600-690-005	NUT LOCK, 1/4-20 NC
QTY		

A-7A MAINSIDE ASSEMBLY

FILE: MAN120-A

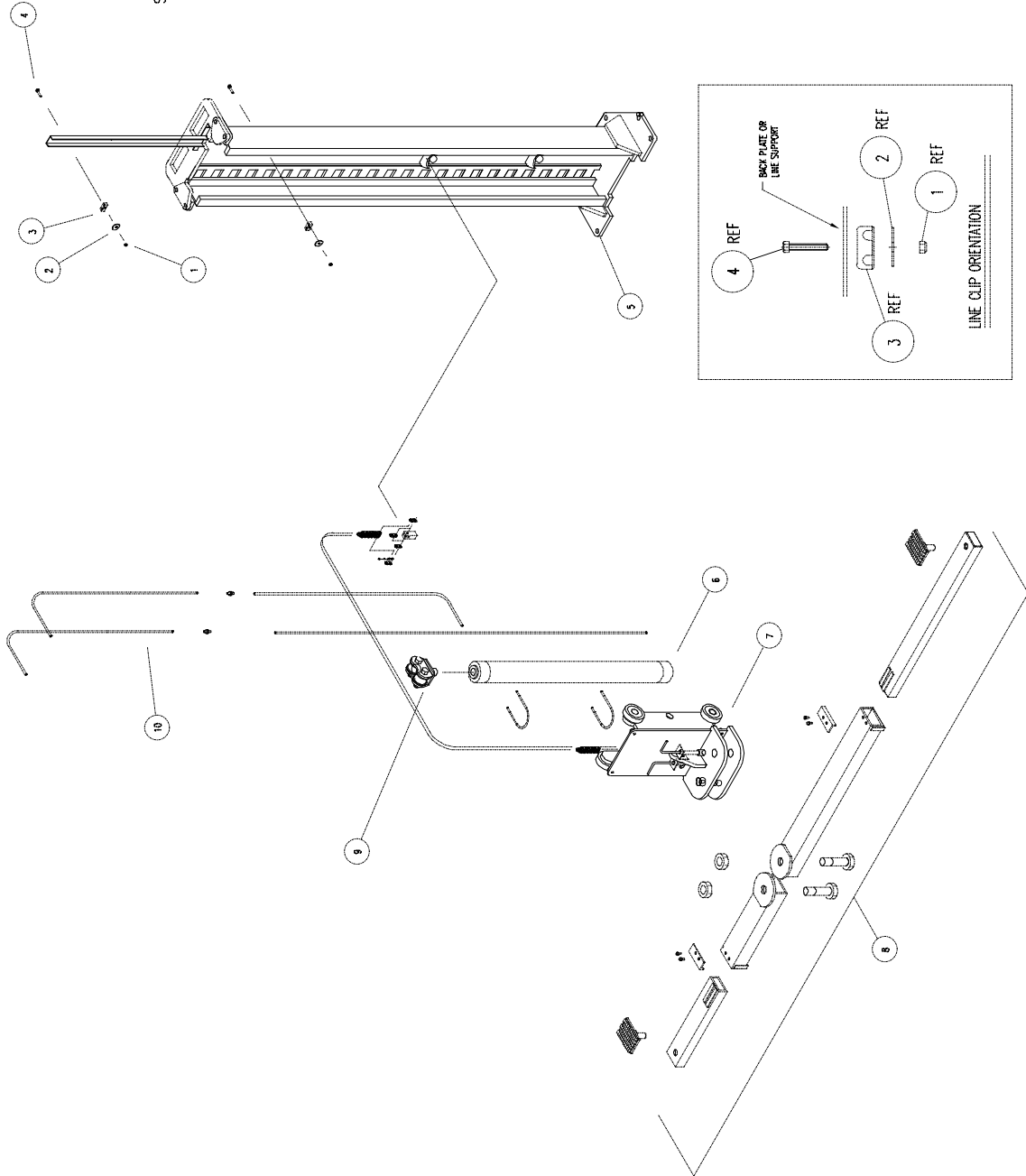
DATE: 7/98

MAN120-B

REV B 10/01

SEE MANUAL DRAWINGS BELOW FOR FURTHER INFORMATION

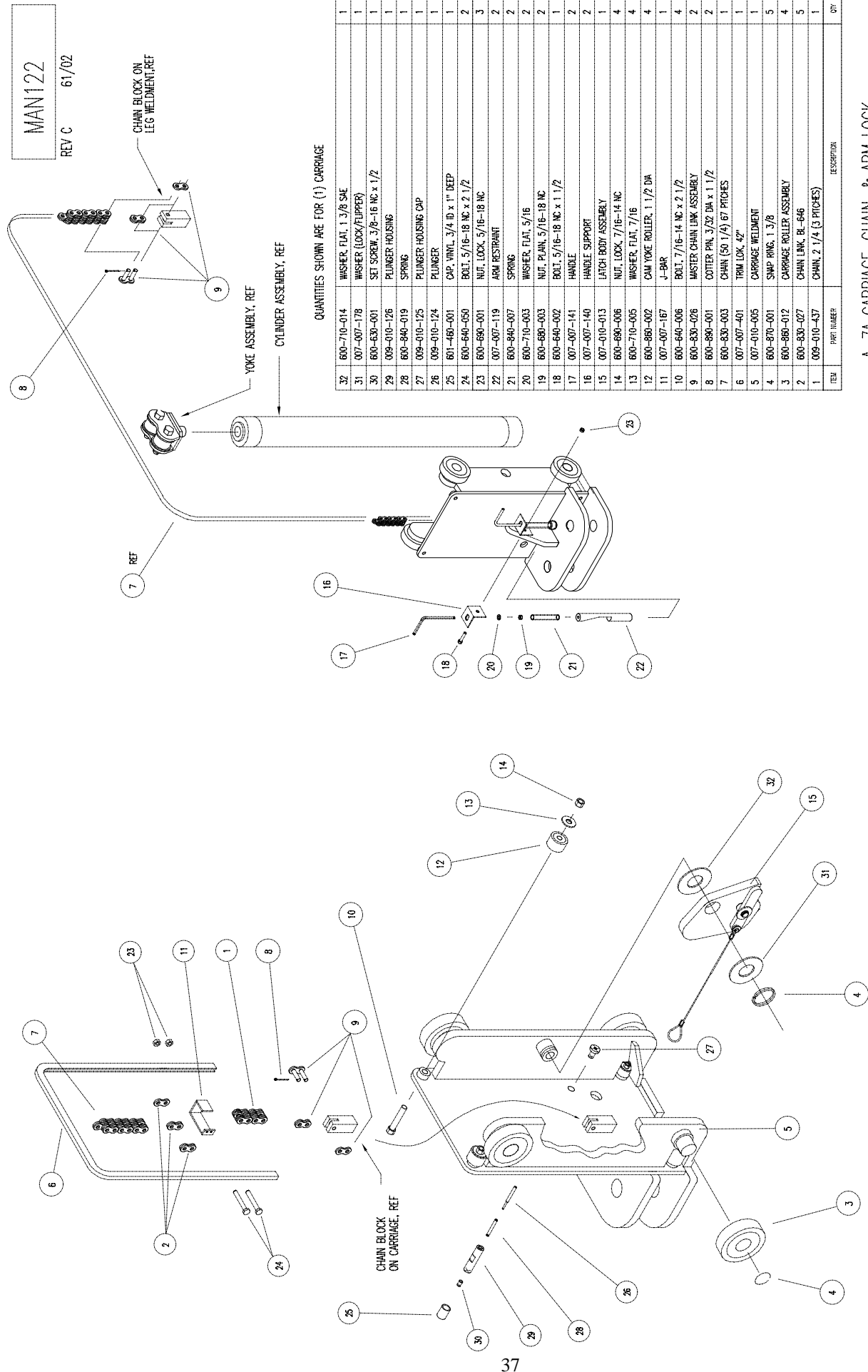
- MAN120 A-7A FINAL ISOMETRIC ASSEMBLY
 MAN120-A A-7A MAINSIDE ASSEMBLY
 MAN122 CARRIAGE ASSEMBLY
 MAN123 LATCH BODY ASSEMBLY
 MAN126 CARRIAGE/SHING ARMS/SLIDERS/LIFTING PADS
 MAN127 LEG WELDMENTS/LINE SUPPORTS/CARRIAGE STOPS
 MAN128 TAG & DECAL LOCATION
 MAN131 BAG #1 / SMALL PARTS & BAG #2 / SHIMS
 MAN132 PARTS BOX & CONTENTS
 MAN101 HYDRAULIC SYSTEM
 MAN104 YOKE ASSEMBLY
 MAN105 HEIGHT ADAPTER BRACKETS/CYLINDER RETAINERS
 MAN108 MAINSIDE CYLINDER ASSEMBLY
 MAN110 OFFSIDE CYLINDER ASSEMBLY
 MAN235 SPRING PLUNGER ASSEMBLY
 MAN235 DIVERTER VALVE ASSEMBLY



ITEM	PART NUMBER	DESCRIPTION
10	MAN101	HYDRAULIC SYSTEM
9	506-006-001	YOKE ASSEMBLY
8	MAN126	CARRIAGE/SHING ARMS/SLIDERS/LIFTING PADS
7	607-016-004	CARRIAGE ASSEMBLY
6	607-007-002	OFFSIDE CYLINDER ASSEMBLY
5	MAN127	LEG WELDMENT/LINE SUPPORT/CARRIAGE STOPS
4	600-646-019	BOLT, 1/4"-20 NC x 1 1/2"
3	601-710-001	DOUBLE LINE CLIP
2	600-710-006	WASHER, FLAT (FENDER) 5/16" B x 1 1/2" OD
1	600-686-005	NUT, LOCK, 1/4"-20 NC
QTY		

A-7A OFFSIDE ASSEMBLY

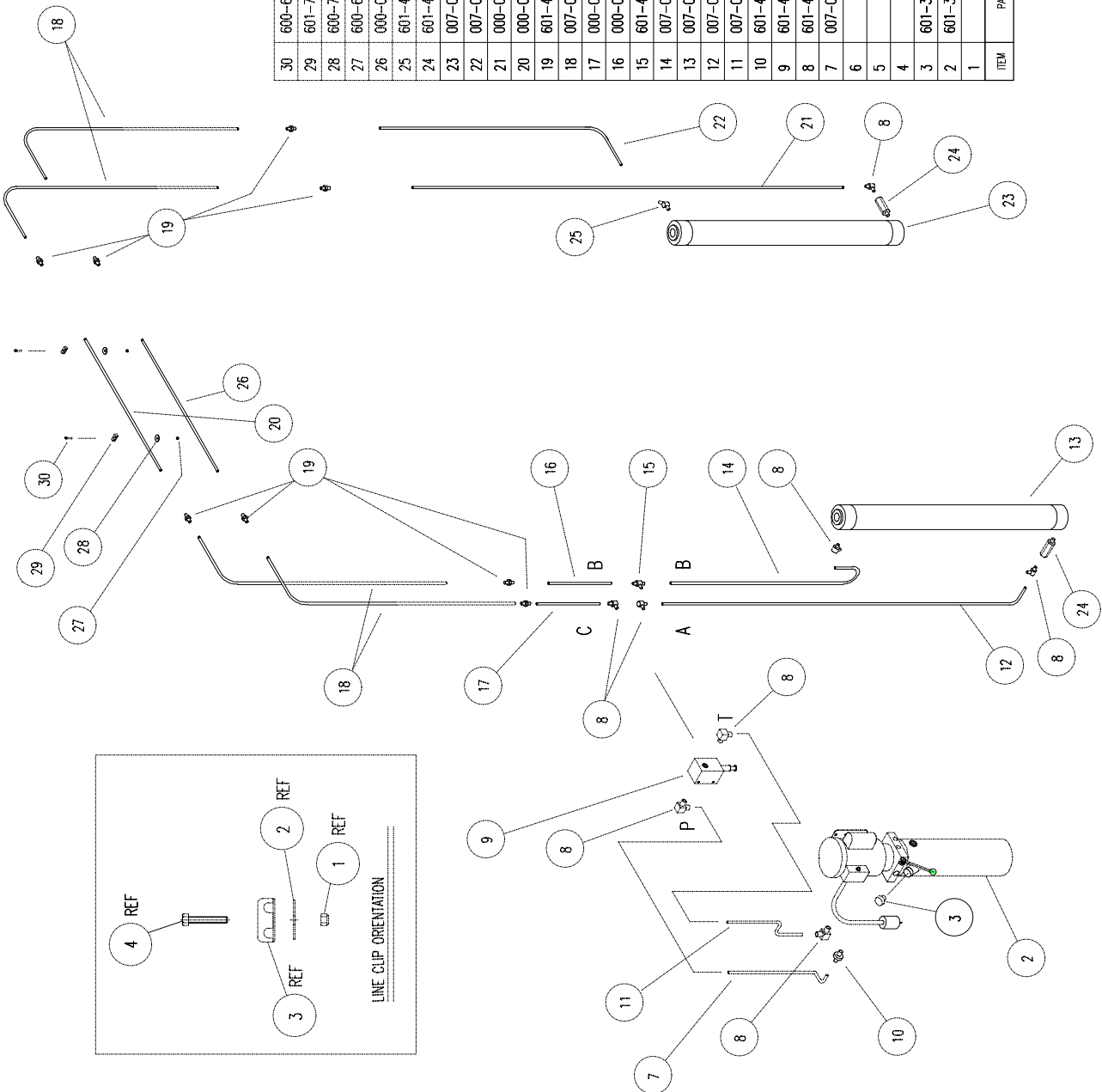
FILE: MAN120-B
 DATE: 7/98



A-7A CARRIAGE, CHAIN, & ARM LOCK

MAN101

REV C 10/01



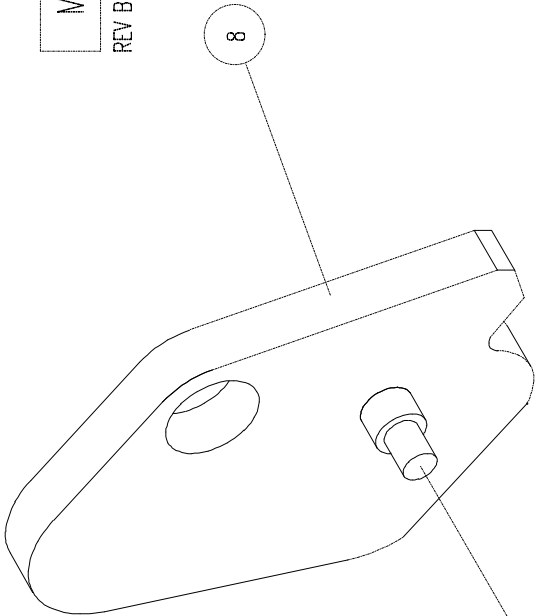
ITEM	PART NUMBER	DESCRIPTION	QTY
30	600-640-019	BOLT, 1/4-20 NC x 1 1/2, HEX HEAD CAP	2
29	601-710-001	DOUBLE LINE CLIP	2
28	600-710-006	WASHER, FLAT (FENDER) 5/16 ID x 1 1/2 OD	2
27	600-690-005	NUT, LOCK, 1/4-20 NC	2
26	000-001-013	TUBING ASSEMBLY, 85 7/8"	1
25	601-420-061	ELBOW, 45°, #6 ORB TO #6 JIC	1
24	601-410-031	VELOCITY FUSE, 4 GPM	2
23	007-007-002	CYLINDER ASSEMBLY, OFFSIDE	1
22	007-007-031	TUBING ASSEMBLY, 45 1/4"	1
21	000-001-015	TUBING ASSEMBLY, 86"	1
20	000-001-014	TUBING ASSEMBLY, 84 3/8"	1
19	601-420-011	STRAIGHT UNION, #6 JIC TO #6 JIC	8
18	007-007-020	TUBING ASSEMBLY, 64"	4
17	000-001-019	TUBING ASSEMBLY, 9 1/2"	1
16	000-001-018	TUBING ASSEMBLY, 12"	1
15	601-420-046	TEE, BRANCH, #6 ORB TO #6 JIC TO #6 JIC	1
14	007-007-050	TUBING ASSEMBLY, 43"	1
13	007-007-001	CYLINDER ASSEMBLY, MAINSIDE	1
12	007-007-051	TUBING ASSEMBLY, 74"	1
11	007-007-084	TUBING ASSEMBLY, 20 3/4"	1
10	601-420-019	STRAIGHT, #6 ORB TO #6 JIC	1
9	601-410-030	DIVERTER VALVE	1
8	601-420-017	ELBOW, 90°, #6 ORB TO #6 JIC	8
7	007-007-083	TUBING ASSEMBLY, 24 3/4"	1
6			
5			
4			
3	601-310-005	BREATHER CAP	1
2	601-300-045	POWER UNIT	1
1			

A-7 HYDRAULIC SYSTEM

FILE: MAN101
DATE: 6/95

MAN123

REV B 6/99



TWO (2) LATCH BODY ASSEMBLIES PER LIFT

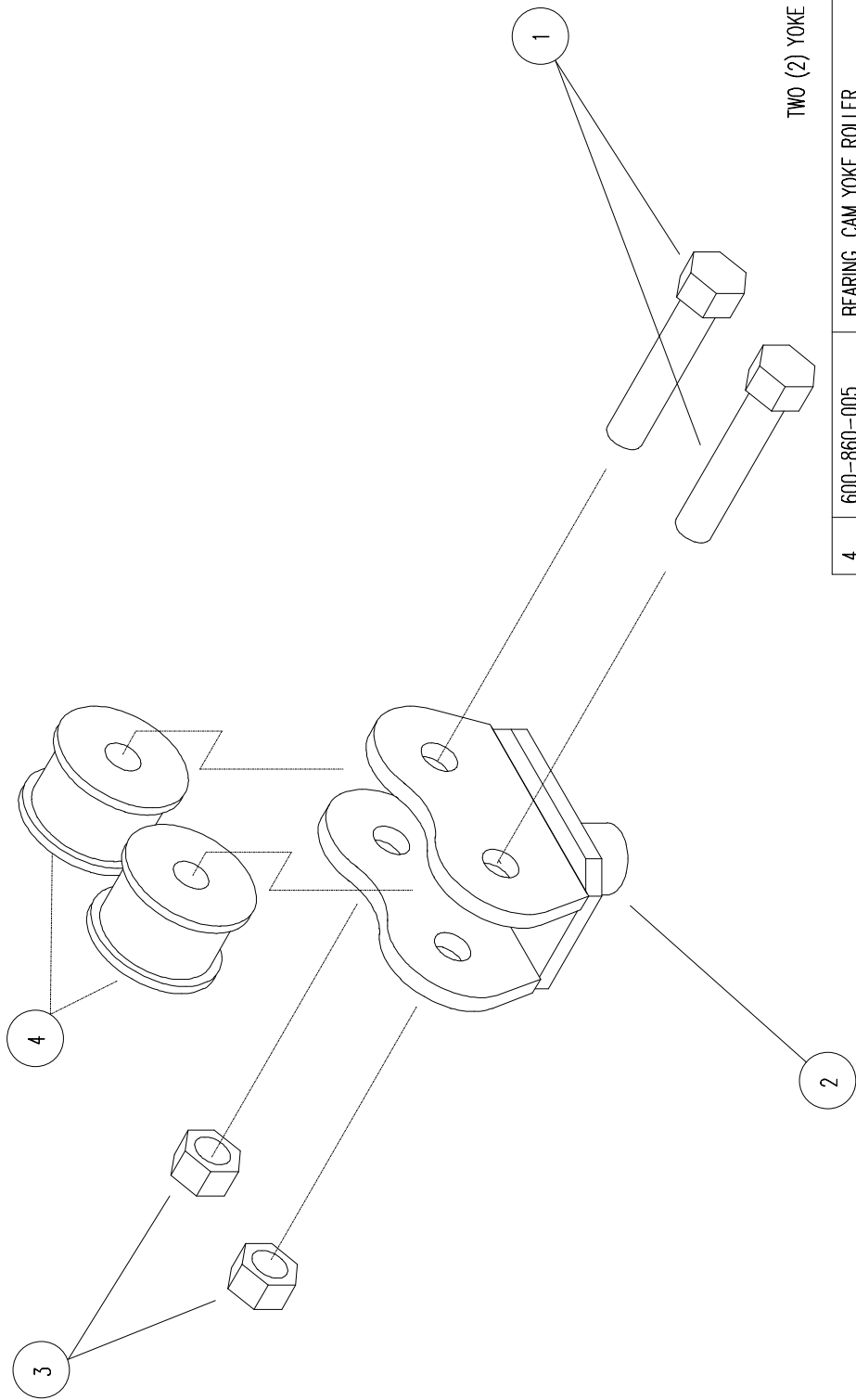
ITEM	PART NUMBER	DESCRIPTION	QTY
9	600-710-008	WASHER, FLAT, 1/2	1
8	009-010-067	LATCH BODY WELDMENT	1
7	600-890-002	COTTER PIN, 3/32 x 1/2	1
6	600-880-001	CLEVIS PIN, 7/8 LG	1
5	007-007-147	FLIPPER	1
4	007-007-046	SAFETY RELEASE CABLE ASSEMBLY	1
3	600-710-004	WASHER, FLAT, 1/4	1
2	600-870-003	SNAP RING, 1/2	1
1	600-710-005	WASHER, FLAT, 7/16	1

A-7A LATCH BODY ASSEMBLY

(007-010-013)

FILE: MAN123

DATE: 7/98



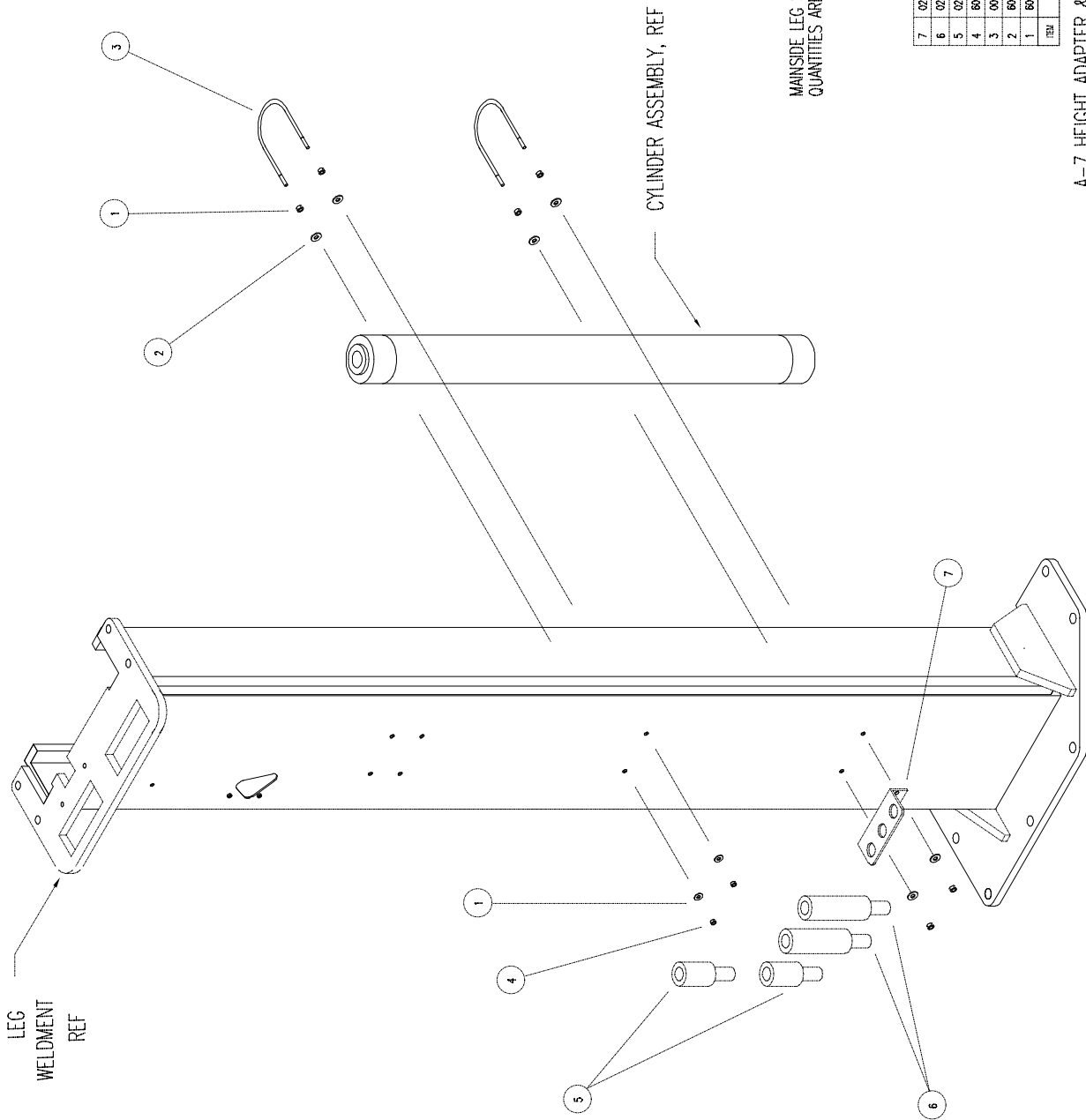
4	600-860-005	BEARING, CAM YOKE ROLLER	2	2
3	600-690-003	NUT, LOCK, 3/4-16 NF	2	2
2	006-000-012	YOKE WELDMENT	1	1
1	006-000-139	BOLT, 3/4-16 NF x 3 3/4 (MACHINED)	2	2
ITEM	PART NUMBER	DESCRIPTION	QTY	

A-7 YOKE ASSEMBLY
(006-000-021)

FILE: MAN104
DATE: 5/96

MAN105

REV A 2/99

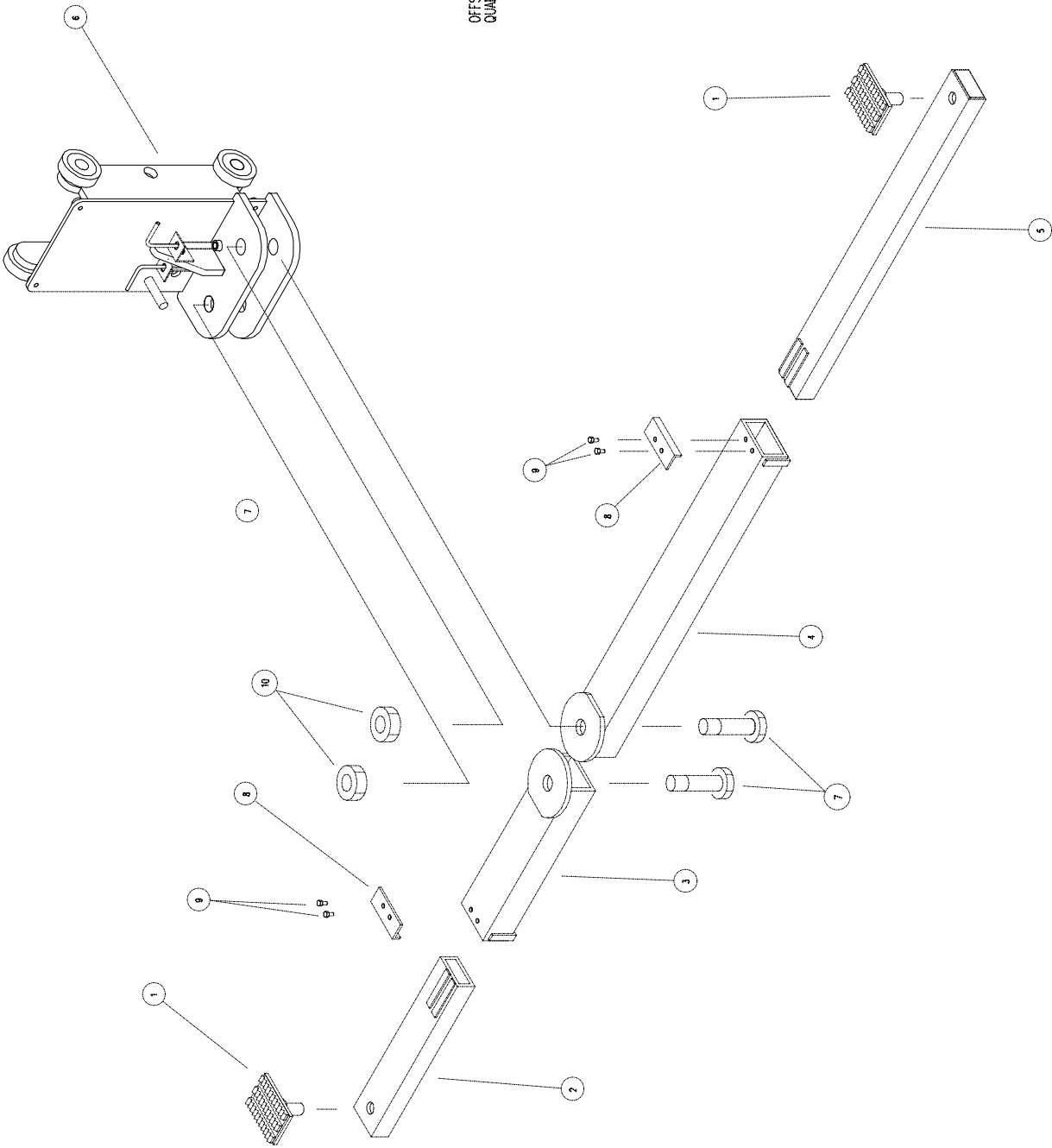


ITEM	PART NUMBER	DESCRIPTION	QTY
7	025-002-126	HEIGHT ADAPTER BRACKET	1
6	025-002-128	HEIGHT ADAPTER, 6"	2
5	025-002-127	HEIGHT ADAPTER, 3"	2
4	600-680-005	NUT, LOCK, 1/4-20 NC	4
3	007-007-121	CYLINDER CLAMP	2
2	600-680-006	NUT, PLAIN, 1/4-20 NC	4
1	600-710-004	WASHER, FLAT, 1/4	8

A-7 HEIGHT ADAPTER & BRACKET/ CYLINDER CLAMPS

FILE: MAN105
DATE: 5/96

MAN126



OFFSIDE CARRIAGE SHOWN
QUANTITIES ARE THE SAME FOR THE MAINSIDE

ITEM	PART NUMBER	DESCRIPTION	QTY
10	800-890-015	REF. LOCK (MM), 1 1/2-12 NF	2
9	800-800-004	SCREW, SELF TAPPING, 5/16-24 NF x 5/8	4
8	007-007-130	SLIDER ARM STOP	2
7	007-010-103	SWING ARM PIN	2
6	007-010-004	CARRIAGE ASSEMBLY	REF
5	007-007-017	SLIDER (LONG)	1
4	007-007-015	SWING ARM (LONG)	1
3	007-007-076	SWING ARM (SHORT)	1
2	007-007-077	SLIDER (SHORT)	1
1	007-007-036	LIFTING PAD	2
			GT

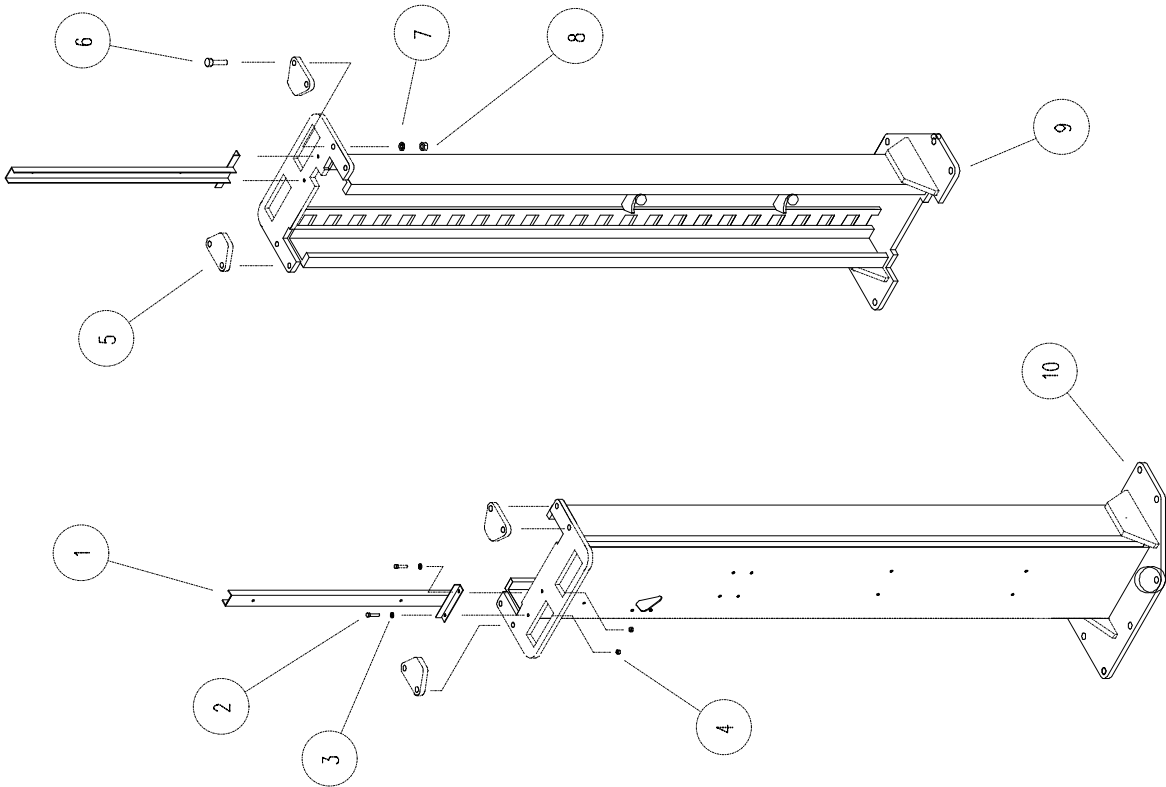
A-7A CARRIAGE/SWING ARMS/SLIDERS/LIFTING PADS

FILE: MAN126
DATE: 7/98

MAN127

REV A 2/99

MOHAWK MODEL A-/



ITEM	PART NUMBER	DESCRIPTION	QTY
10	007-010-007	MAINSIDE LEG WELDMENT	1
9	007-010-008	OFFSIDE LEG WELDMENT	1
8	600-680-002	NUT, PLAIN, 5/8-11 NC	8
7	600-720-001	WASHER, LOCK, 5/8	8
6	600-640-010	BOLT, 5/8-11 NC x 2 1/2	8
5	009-001-141	CARRIAGE STOP	4
4	600-690-005	NUT, LOCK, 1/4-20 NC	4
3	600-710-004	WASHER, FLAT, 1/4	4
2	600-640-019	BOLT, 1/4-20 NC x 1 1/2	4
1	007-007-033	LINE SUPPORT	2

A-7A LEG WELDMENT/LINE SUPPORTS/CARRIAGE STOPS

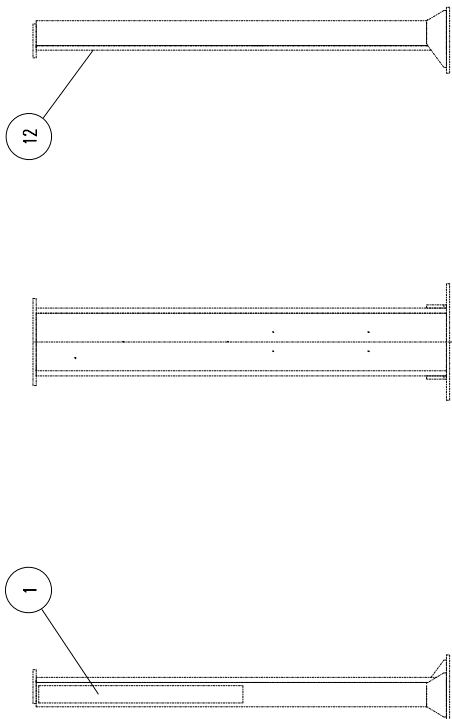
FILE: MAN127
DATE: 7/98

MAN128

REV-B 7/99

NOTES:

1. PLACE ITEM 9 IN POSITION SHOWN & MATCH DRILL (2) 3/32 DIA HOLES THRU BACK PLATE.
2. ITEMS 1 WILL BE PLACED ON SAME SIDE (MANSIDE & OFFSIDE) OF LEG AT THE ANGLED SIDE OF BASE PLATE.
3. LOCATE ITEM 9 AT 72" FROM FLOOR, CENTERED ON BACKPLATE.



OFFSIDE VIEWS

MOHAWK RESOURCES LTD.
P.O. Box 118, Windsor, Ontario, Canada N9A 6P4
Phone: (519) 841-1111, (800) 833-2088
Fax: (519) 841-1112

MODEL # _____ A-7A SERIAL # _____ 7,000 lbs.

THIS EQUIPMENT IS PROTECTED BY
U.S. PATENT #4500071
CANADIAN PATENT #158553

MONARCH

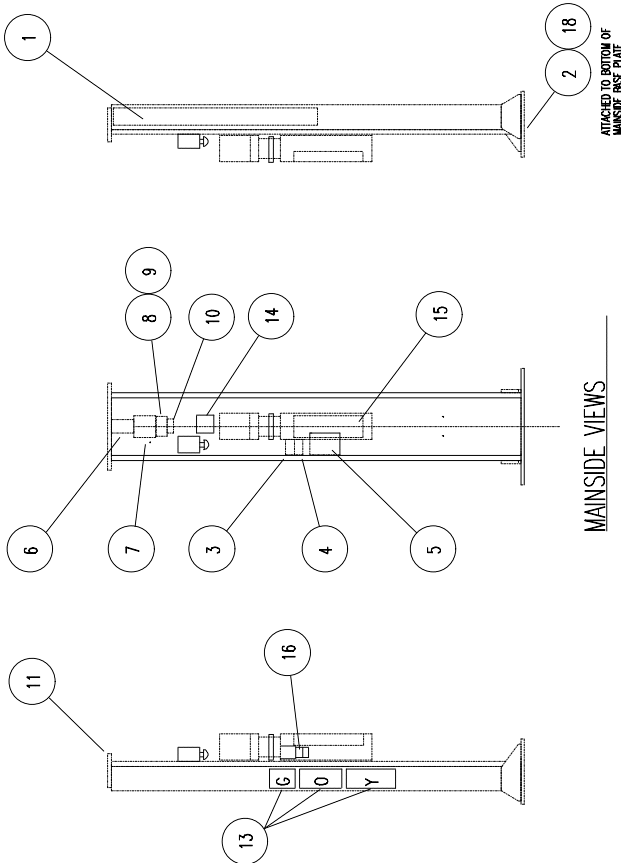
DINA _____ MODEL _____ PACK _____

SERIAL _____ G _____ M _____

MONARCH HYDRAULICS

(MOHAWK SERIAL TAG)

(MONARCH POWER UNIT DECAL)



MAINSIDE VIEWS

ATTACHED TO BOTTOM OF
MAINSIDE BASE PLATE

18	601-800-116	PACKING LIST ENVELOPE, 5 1/2 x 7 1/2	1
17	601-800-109	DECAL, WARNING, 2 1/2 x 6 1/2	2
16	----	DECAL, MONARCH POWER UNIT	1
15	601-800-001	OPERATIONAL INSTRUCTION DECAL	1
14	601-800-056	DECAL, ETI/AUI CERTIFIED, 3" x 3"	1
13	601-800-032	CAUTION, WARNING, SAFETY DECAL, 4" x 20 3/4"	1
12	007-007-041	OFFSIDE LEG ASSEMBLY	REF
11	007-007-040	MAINSIDE LEG ASSEMBLY	REF
10	009-010-037	"AUI" PLATE, 1 1/2 x 3 1/4	1
9	601-800-105	SERIAL, SPEC. PLATE, 2 7/16 x 4 9/16	1
8	601-800-001	SCREW, TORQ, #4 x 1/4	2
7	601-800-041	MAXIMUM CAPACITY 7000 LBS DECAL, 5" x 5"	1
6	601-800-030	"MADE IN AMERICA" DECAL, 3 1/8 x 5 3/16	1
5	601-800-036	"WARNING", A-7 DECAL, 5" x 7"	1
4	601-800-034	"WARNING" DECAL, 2" x 3 1/2"	1
3	601-800-035	"WARNING" DECAL, 2" x 3 1/2"	1
2	601-800-115	WARRANTY CARD, 4" x 5 1/2"	1
1	601-800-061	"MONARCH" DECAL, 6 3/8 x 41 3/4	2
ITEM	PART NUMBER	DESCRIPTION	QTY

A-7A TAG & DECAL LOCATIONS

FILE: MAN128
DATE: 7/98

MAN109

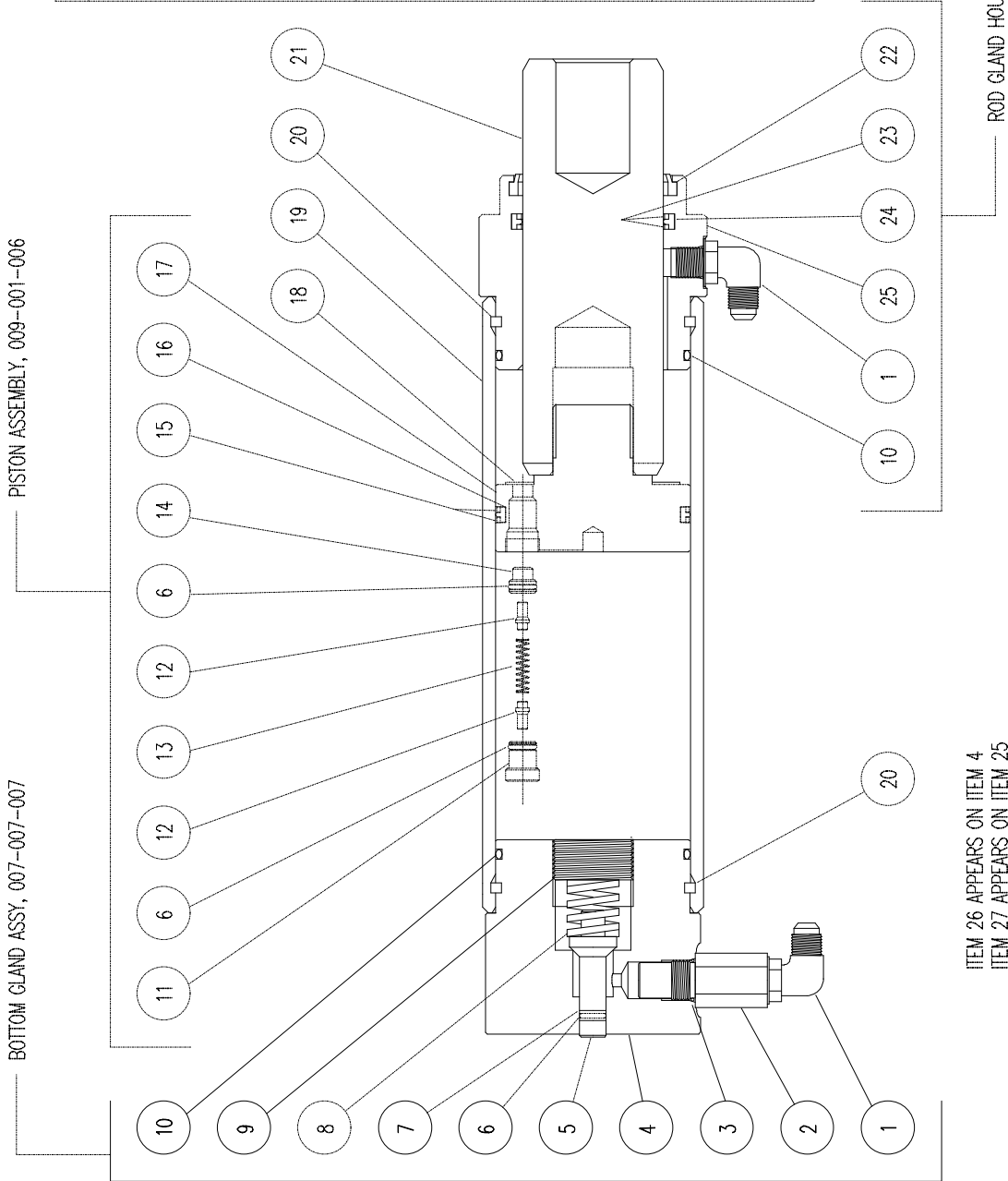
REV A 7/25/01

ITEM	PART NUMBER	DESCRIPTION	QTY
1	601-420-017	FITTING, 90 ELBOW	2
2	601-410-031	VELOCITY FUSE -4	1
3	601-030-008	O-RING	REF
4	007-007-110	BOTTOM GLAND	1
5	009-010-113	INLET SPOOL	1
6	601-030-002	O-RING	3
7	601-060-003	BACK-UP RING	2
8	600-840-002	SPRING	1
9	007-007-145	SET SCREW	1
10	601-030-003	O-RING	2
11	009-001-153	RETAINER	1
12	009-001-152	SPOOL	2
13	600-840-008	SPRING	1
14	009-001-151	INSERT	1
15	601-060-013	BACK-UP RING	2
16	601-010-005	PISTON T-SEAL	1
17	009-001-108	PISTON	1
18	007-007-143	WASHER	1
19	009-001-104	BARREL	1
20	025-002-132	SPIN KEY	2
21	009-001-105	ROD	1
22	601-020-003	WIPER	1
23	601-060-007	BACK-UP RING	2
24	601-000-003	ROD T-SEAL	1
25	015-000-109	ROD GLAND	1
26	601-800-021	DECAL, CAUTION	1
27	601-800-022	DECAL, PATENT	1

A-7

MAINSIDE CYLINDER ASSEMBLY

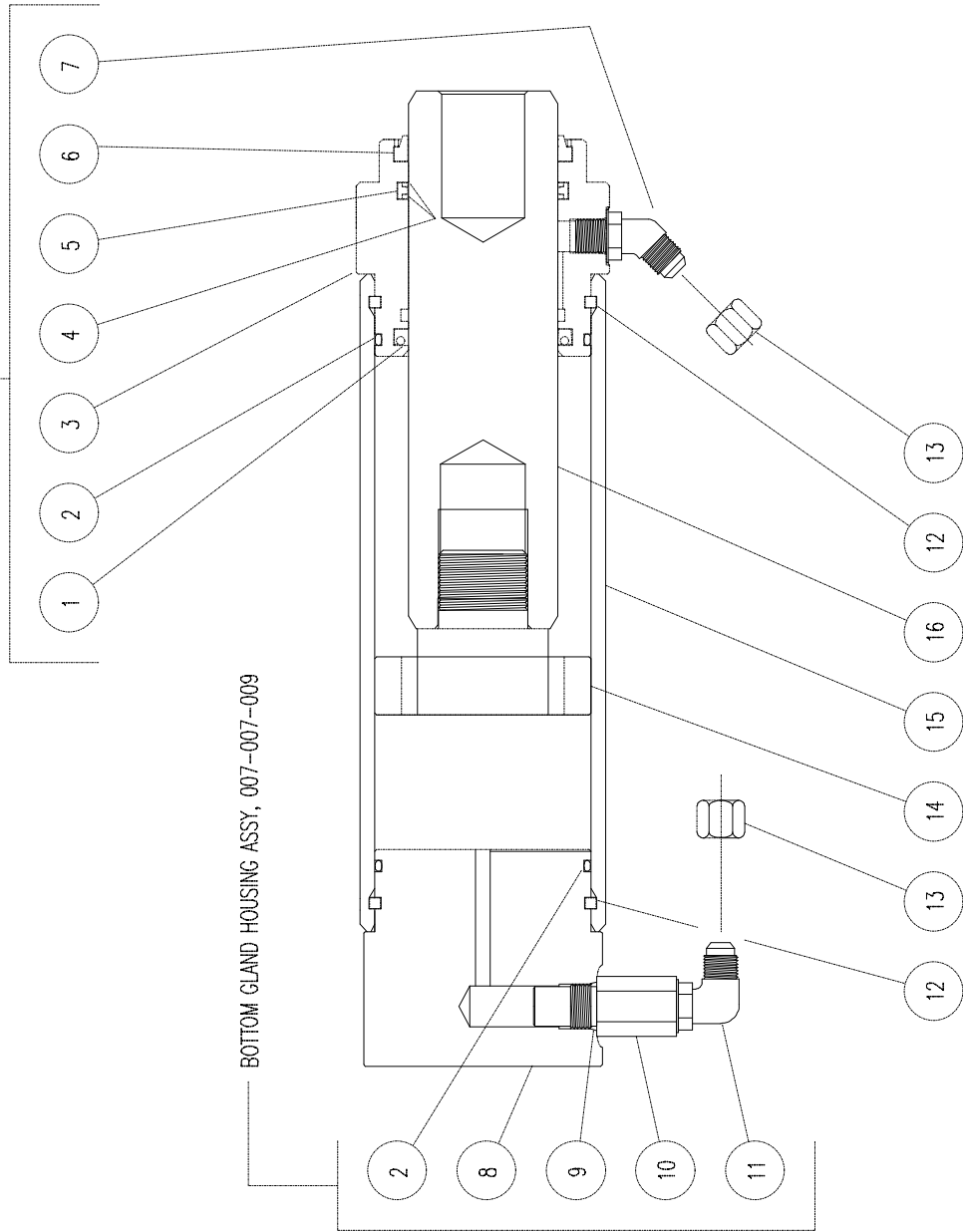
(007-007-001)



ROD GLAND HOUSING ASSY, 007-007-008

MAN110

REV-A 10/01



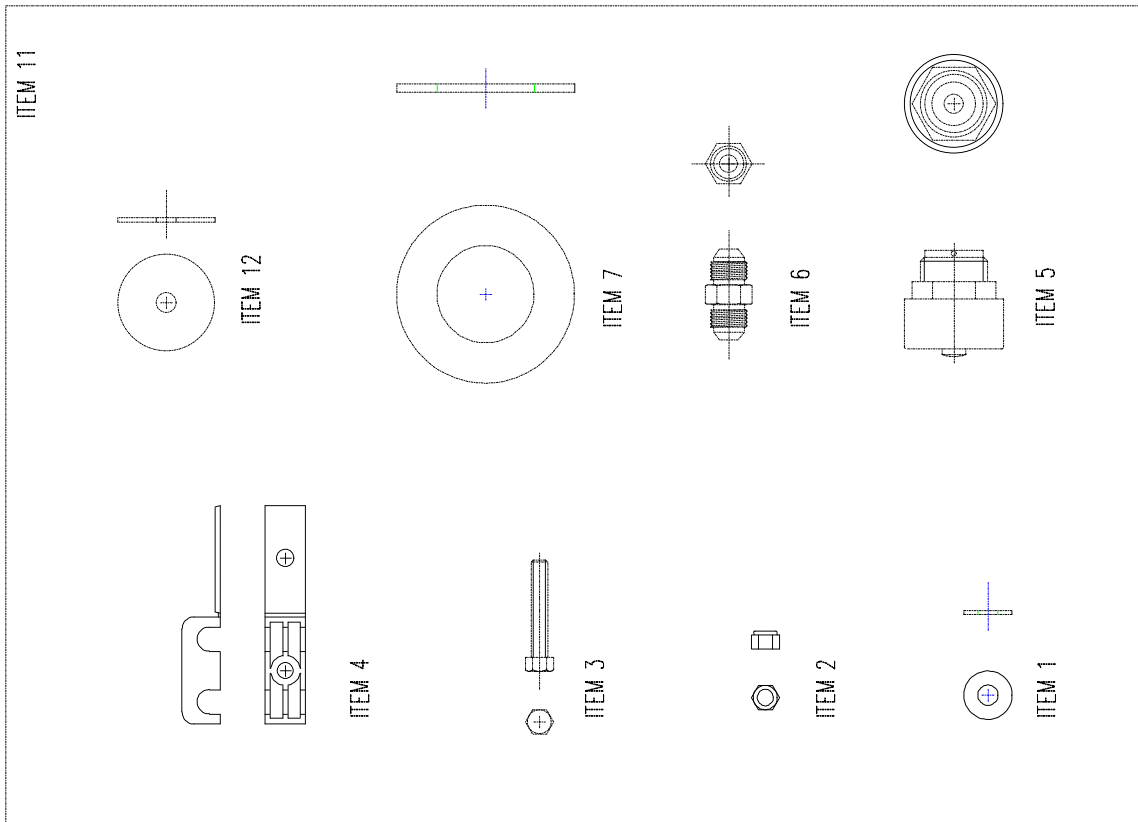
ITEM	PART NUMBER	DESCRIPTION	QTY
1	601-040-001	POLY-PAK SEAL	1
2	601-030-003	O-RING	2
3	015-000-110	ROD GLAND	1
4	601-060-006	BACK-UP RING	2
5	601-000-002	ROD T-SEAL	1
6	601-020-002	ROD WIPER	1
7	601-420-061	FITTING, 45 ELBOW	1
8	007-007-108	BOTTOM GLAND	1
9	601-030-008	O-RING	1
10	601-410-031	VELOCITY FUSE -4	1
11	601-420-017	FITTING, 90 ELBOW	1
12	025-002-132	SPIN KEY	2
13	601-420-001	CAP NUT	2
14	007-007-101	PISTON	1
15	009-001-104	BARREL	1
16	007-007-128	ROD	1

MOHAWK MODEL A-7

A-7
OFFSIDE CYLINDER ASSEMBLY
(007-007-002)

FILE: MAN110
DATE 5/96

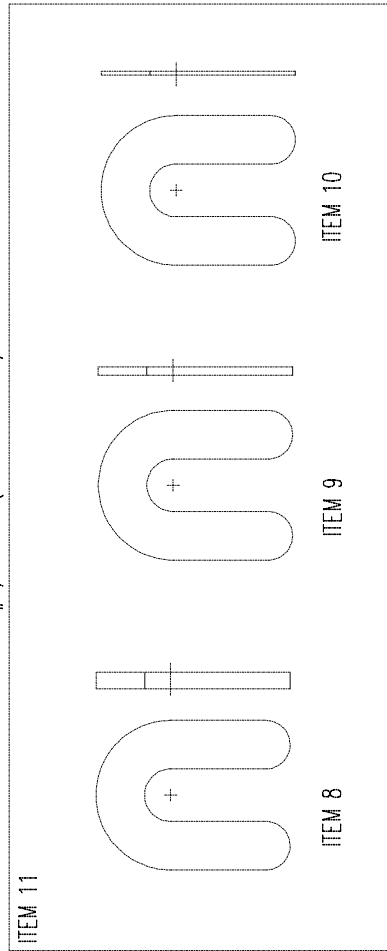
BAG #1/ SMALL PARTS (007-010-014)



MAN131

REV A 10/01

BAG #2/ SHIMS (007-007-075)

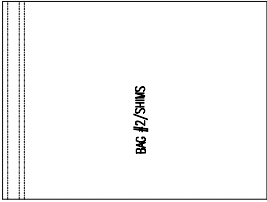


ITEMS 1 THRU 7 = BAG #1/SMALL PARTS
ITEMS 8 THRU 11 = BAG #2/SHIMS

ITEM	PART NUMBER	DESCRIPTION	QTY
12	600-710-006	WASHER, FLAT (FENDER) 5/16 ID x 1 1/2 OD	4
11	601-600-022	BAG, ZIP-LOK, TRANSPARENT, 9" x 12"	2
10	600-740-001	SHIM, HORSESHOE, PLASTIC, BLUE, 1/16" THK	8
9	600-740-002	SHIM, HORSESHOE, PLASTIC, RED, 1/8" THK	8
8	600-740-003	SHIM, HORSESHOE, PLASTIC, BLACK, 1/4" THK	8
7	600-710-014	WASHER, FLAT, 1 3/8 SAE	8
6	601-420-011	UNION, #6 JC TO #6 JC	4
5	601-310-005	BRACKET, CUP	1
4	601-710-001	DOUBLE LINE CLIP	4
3	600-640-019	BOLT, 1/4-20 NC x 1 1/2, HEX HEAD C/P	8
2	600-690-005	NUT, LOCK, 1/4-20 NC	8
1	600-710-004	WASHER, FLAT, 1/4	4

BAG #1/SMALL PARTS & BAG #2/SHIMS

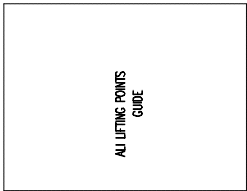
FILE: MAN131
DATE: 7/98



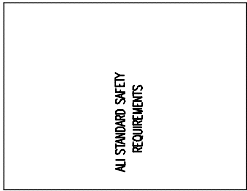
ITEM 21



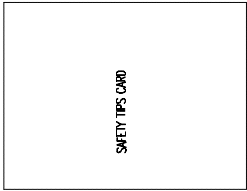
ITEM 10



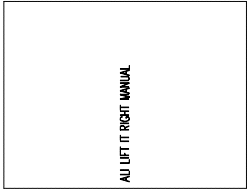
ITEM 17



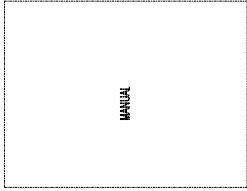
ITEM 16



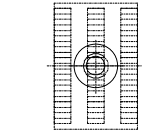
ITEM 15



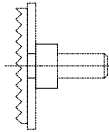
ITEM 14



ITEM 2



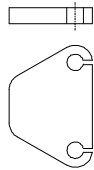
ITEM 6



ITEM 7



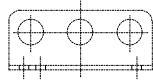
ITEM 13



ITEM 20



ITEM 5



ITEM 11



ITEM 12



ITEM 4



ITEM 3



ITEM 8



ITEM 9

BREAKDOWN OF ITEM 2

ITEM	PART NUMBER	DESCRIPTION	QTY
21	007-007-075	BAG #2/SHIMS	1
20	600-600-015	NUT, LOCK, 1 1/2-12 NF (AM)	4
19	601-600-106	MANUAL, A-7	1
18	601-600-115	WARRANTY CARD, 4" x 5 1/2"	1
17	601-600-092	ALL LIFTING POINTS GUIDE	1
16	601-600-007	ALL STANDARD SAFETY REQUIREMENTS	1
15	601-600-008	SAFETY TIPS CARD	1
14	601-600-003	SAFETY MANUAL, ALL LIFT IT RIGHT	1
13	009-001-141	CORNER STOP	4
12	600-670-008	WEL-IT, 3/4 x 5 1/2"	14
11	601-170-003	CONNECTOR, 4 PRONG, NEMA J11-20R	1
10	007-010-014	BAG #1/SMALL PARTS	1
9	025-002-128	HEIGHT ADAPTER, 6"	4
8	025-002-127	HEIGHT ADAPTER, 3"	4
7	007-007-006	LIFTING PAD WELDMENT	4
6	007-010-103	SWING ARM PIN, 1 1/2 DIA x 6 3/4	4
5	025-002-126	HEIGHT ADAPTER BRACKET	2
4	601-630-001	PAINT, SPRAY, RED	1
3	601-630-002	PAINT, SPRAY, YELLOW	1
2	007-010-016	MANUAL ASSEMBLY	1
1	600-600-000	BOX, CORRUGATED	1

A-7A PARTS BOX & CONTENTS

FILE: MAN132
DATE: 7/98

MAN235
REV A 1/98

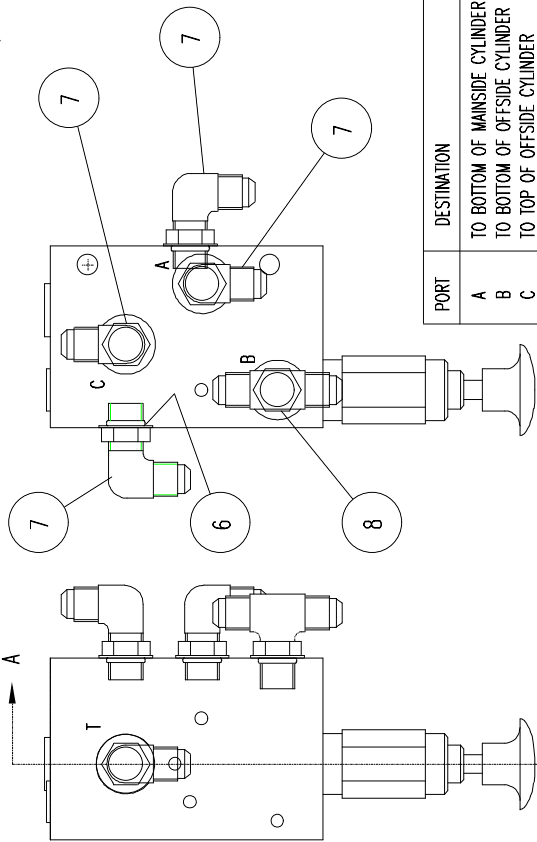
LEFT SIDE VIEW:

FRONT VIEW:

(SECTION A-A)

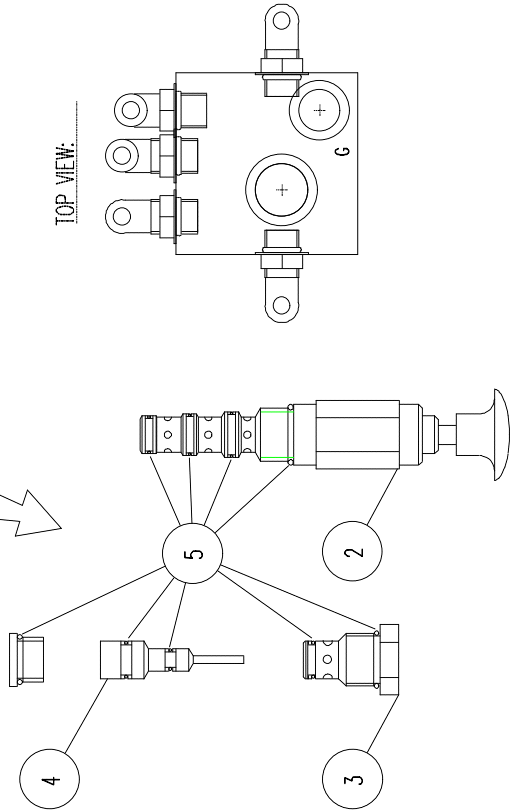
RIGHT SIDE VIEW:

BACK VIEW:



PORT	DESTINATION
A	TO BOTTOM OF MAINSIDE CYLINDER
B	TO BOTTOM OF OFFSIDE CYLINDER
C	TO TOP OF OFFSIDE CYLINDER
P	TO PUMP PRESSURE PORT
T	TO TANK (RESERVOIR)

TOP VIEW:

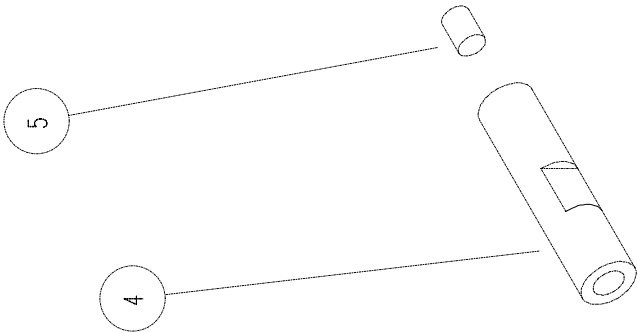


ITEM	PART NUMBER	DESCRIPTION	QTY
8	601-420-046	FITTING, TEE BRANCH, #6 JIC/ #6 ORB	1
7	601-420-017	FITTING, ELBOW, 90, #6 ORB TO #6 JIC	4
6	601-030-017	O-RING	5
5	212239ASK	SEAL REPAIR KIT	1
4	282247AA	PILOT PISTON ASSY	1
3	CV10-20-0-N-05	CHECK VALVE	1
2	MP10-42K-0-N	MANUAL PULL VALVE	1
1	601-410-030	DIVERTER VALVE	1

DIVERTER VALVE ASSEMBLY

FILE: MAN235
DATE 4/96

MAN233



ONE (1) PLUNGER ASSEMBLY PER CARRIAGE
FOR SYSTEM 1A, SEE MAN222 FOR ASSEMBLY
FOR A-7A, SEE MAN122 FOR ASSEMBLY

5	600-630-001	SET SCREW, 3/8-16 NC x 1/2"	(1)	REF
4	009-010-126	PLUNGER HOUSING	(1)	REF
3	600-840-019	SPRING	(1)	REF
2	009-010-124	PLUNGER	(1)	REF
1	009-010-125	PLUNGER HOUSING CAP	(1)	REF
ITEM	PART NUMBER	DESCRIPTION	QTY	

SPRING PLUNGER ASSEMBLY
(009-010-066)

FILE: MAN233
DATE 4/96

MOHAWK

NEW SLAB RECOMMENDATIONS



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)	I 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.

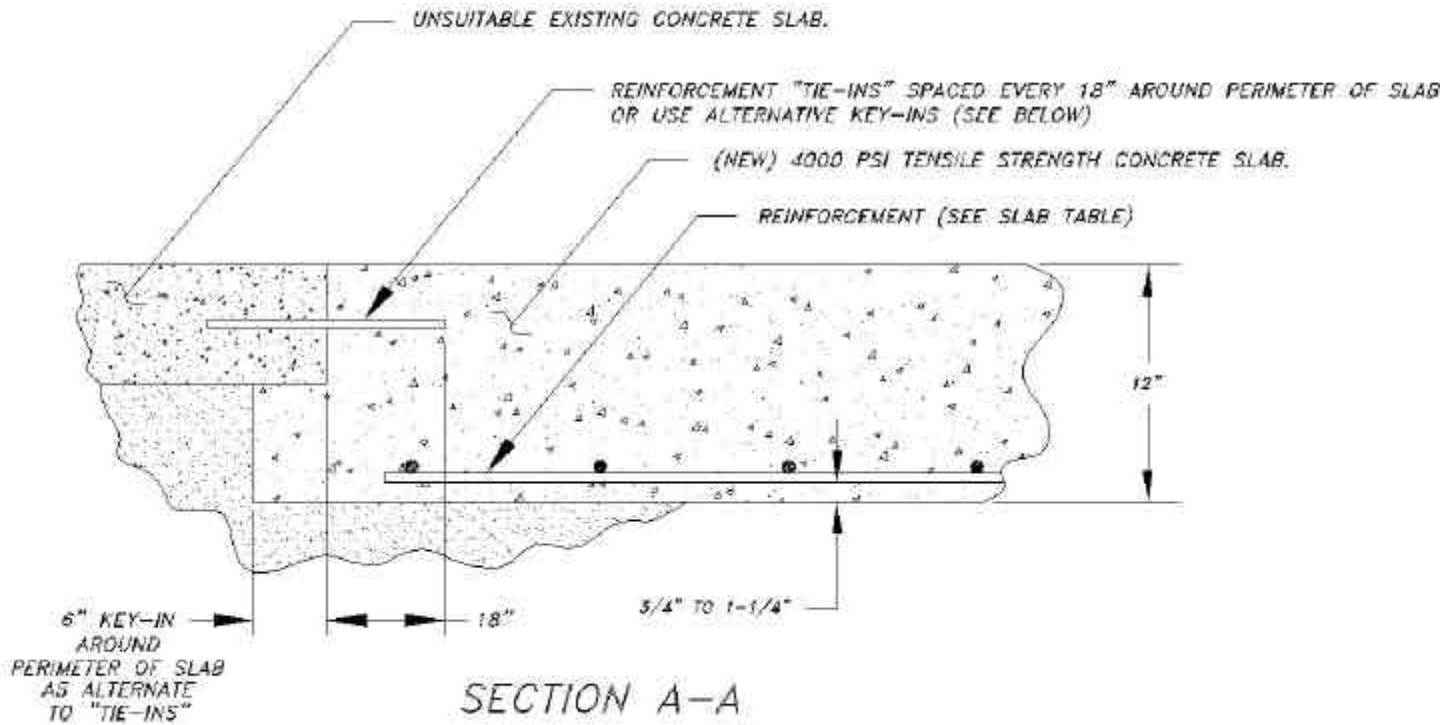
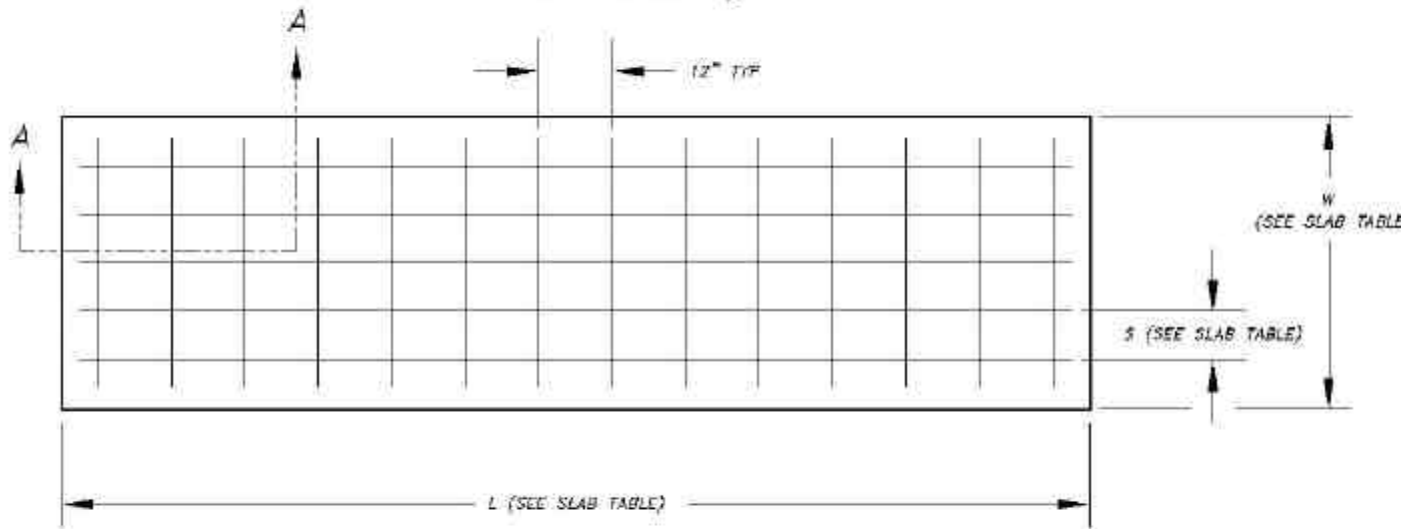
** See Subframe Installation Instructions

*** 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

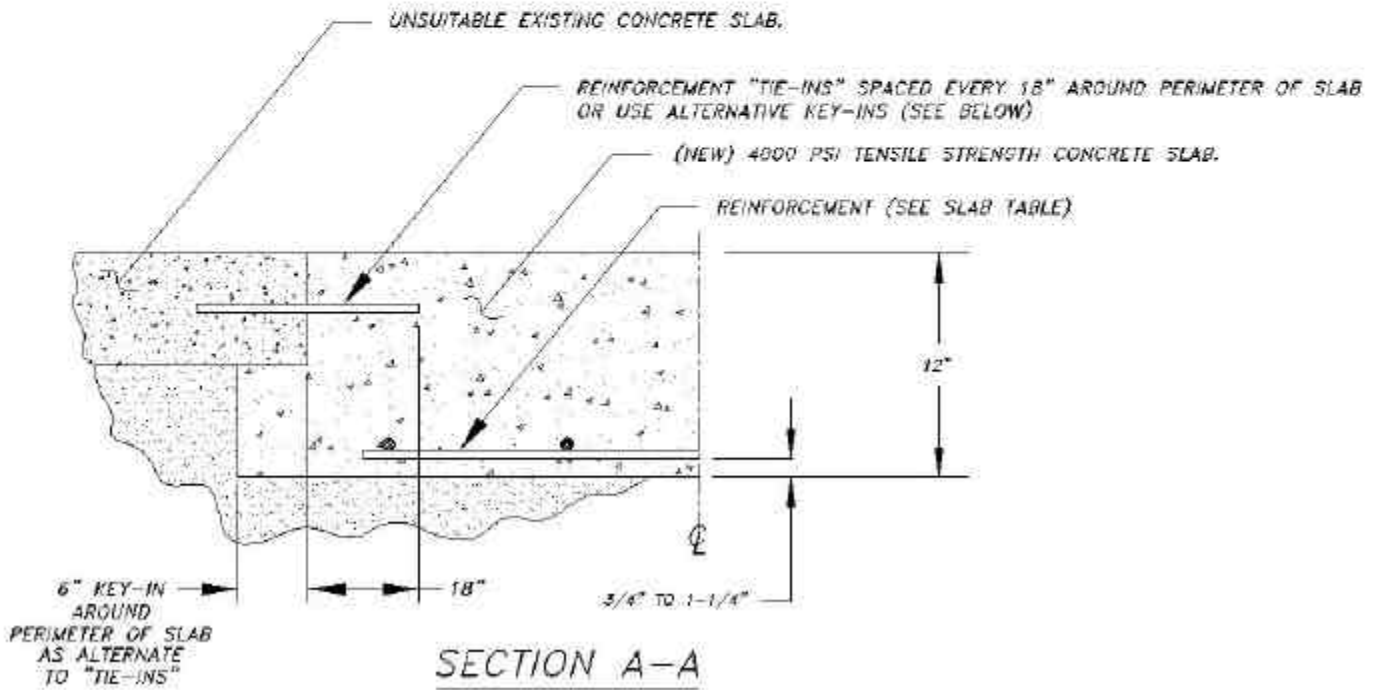
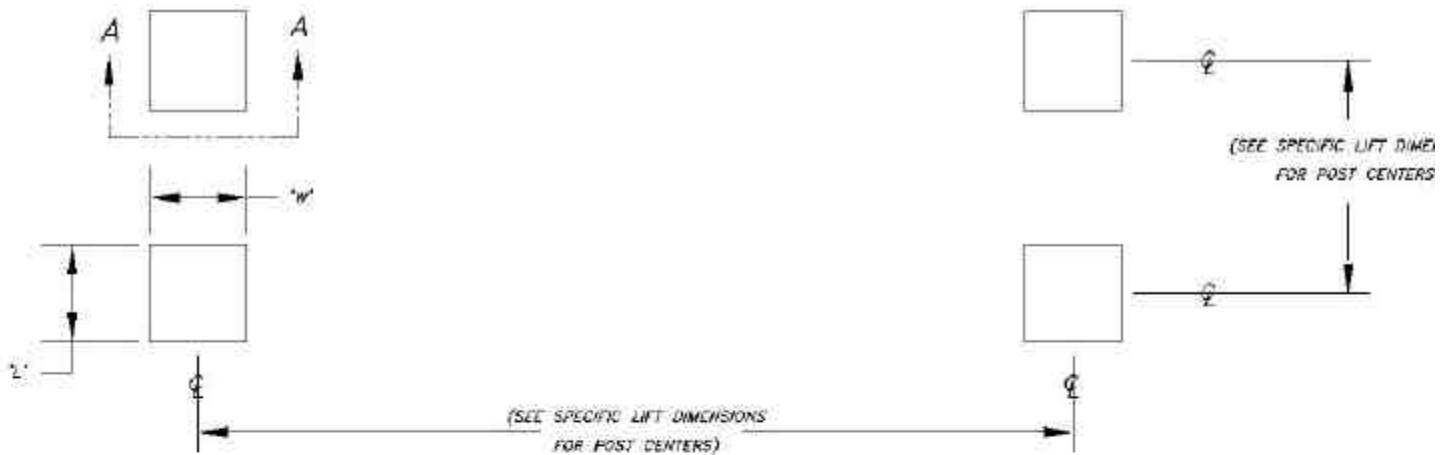













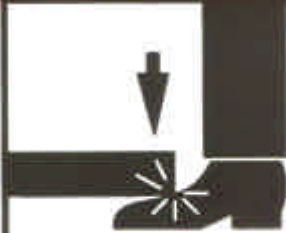
NEW RECOMMENDED SLAB DESIGN FOR 4-POST LIFTS

FILE: MAN089

DATE: 10/00

REV DATE: 10/00



<p>⚠ CAUTION</p>  <p>Lift to be used by trained operator only.</p>	<p>⚠ CAUTION</p>  <p>Authorized personnel only in lift area.</p>	<p>⚠ WARNING</p>  <p>Clear area if vehicle is in danger of falling.</p>	<p>⚠ WARNING</p>  <p>Position vehicle with center of gravity midway between adapters.</p>
<p>⚠ CAUTION</p>  <p>Use vehicle manufacturer's lift points.</p>	<p>⚠ CAUTION</p>  <p>Always use safety stands when removing or installing heavy components.</p>	<p>⚠ WARNING</p>  <p>Remain clear of lift when raising or lowering vehicle.</p>	<p>⚠ WARNING</p>  <p>Avoid excessive rocking of vehicle while on lift.</p>
<p>⚠ CAUTION</p>  <p>Use height extenders when necessary to ensure good contact.</p>	<p>⚠ CAUTION</p>  <p>Auxiliary adapters may reduce load capacity.</p>	<p>⚠ WARNING</p>  <p>Do not override self-closing lift controls.</p>	<p>⚠ WARNING</p>  <p>Keep feet clear of lift while lowering.</p>
<p>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.</p> <p>Funding for the development and validation of these labels was provided by the Automotive Lift Institute, PO Box 33116 Indialantic, FL 32903.</p> <p>They are protected by copyright. Set of labels may be obtained from ALI or its member companies.</p> <p>© 1992 by ALI, Inc. ALI/WL101c</p>		<p>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.</p> <p>Funding for the development and validation of these labels was provided by the Automotive Lift Institute, PO Box 33116 Indialantic, FL 32903.</p> <p>They are protected by copyright. Set of labels may be obtained from ALI or its member companies.</p> <p>© 1992 by ALI, Inc. ALI/WL101w</p>	

<p>SAFETY INSTRUCTIONS</p>  <p>Read operating and safety manuals before using lift.</p>	<p>SAFETY INSTRUCTIONS</p>  <p>Proper maintenance and inspection is necessary for safe operation.</p>
<p>SAFETY INSTRUCTIONS</p>  <p>Do not operate a damaged lift.</p>	<p>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</p> <p>Funding for the development and validation of these labels was provided by the Automotive Lift Institute, PO Box 33116 Indialantic, FL 32903</p> <p>They are protected by copyright Set of labels may be obtained from ALI or its member companies</p> <p>© 1992 by ALI, Inc. ALI/WL101a</p>

MOHAWK.

Because Quality Lasts Forever.



Model USL-6000

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



Model A-7

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

Model System I

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



Model LMF-12, TP-15, TP-18, TP-26 & TP-30

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



Model LMF-12



Model TR-50

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

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