MOHAWK

MADE IN THE USA

TOMAHAWK-9000

9,000 LB. CAPACITY TWO POST VEHICLE LIFT MANUAL

- ☑ INSTALLATION
- ☑ OPERATION
- ☑ MAINTENANCE
- ☑ PARTS

THANK YOU
FOR SENDING IN YOUR
WARRANTY REGISTRATION
CARD

MOHAWK SERVICE
DEPARTMENT

MOHAWK RESOURCES LTD.
65 VROOMAN AVE.
AMSTERDAM, NY 12010
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Tomahawk-2003.doc
Rev Date 5/6/2003 REV-D
Part #601-800-0XX

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 (9/21/01)

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

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

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

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

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

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

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

MOHAWK WARRANTIES

EFFECTIVE DATE: 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.

MOHAWK MODEL TOMAHAWK-9000

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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.

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.

TOMAHAWK-9000 SPECIFICATIONS

STANDARD TOMAHAWK-9000 SPECIFICATIONS (12' WIDE ASYMMETRICAL SETUP)

LIFT TYPE / TWO POST	ELECTRIC / HYDRAULIC
GROSS LIFTING CAPACITY	9,000 LBS.
PER ARM CAPACITY	2,250 LBS.
LIFTING SPEED APPROX.	45 SECONDS
LIFTING HEIGHT	71 1/2 INCH
OVERALL WIDTH	144 INCH STANDARD
WIDTH BETWEEN POST	109 INCH STANDARD
WIDTH BETWEEN LIFTING ARMS	96 INCH STANDARD
POST HEIGHT	121 INCH
OVERHEAD HYDRAULIC LINES	143 1/2 INCH
LIFTING PAD HEIGHT (MIN)	4 INCH
LIFTING PAD HEIGHT (MAX)	80 1/2 INCH
SHIPPING WEIGHT	2,250 LBS. PACKED

POWER UNIT SPECIFICATIONS

BRAND NAME	MONARCH
MODEL	M-
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	3000 P.S.I.
WORKING PRESSURE	2700 P.S.I.
RESERVOIR CAPACITY	2.5 GALLONS
HYDRAULIC FLUID MEDIUM	DEXRON III

SUGGESTED SITE SELECTION / BAY SIZE (FOR STANDARD SETUP – 12' WIDE ASYM)

WIDTH	DEPTH	HEIGHT
17 FEET	27 FEET	12 FEET MIN

NOTE

THE PLACEMENT OF THE UNIT IS DETERMINED BY THE TYPE (LENGTH, WIDTH, HEIGHT) OF VEHICLE BEING SERVICED AS WELL AS THE CLEARANCES DESIRED AROUND THE LIFT AND THE VEHICLES BEING SERVICED.

WEJ-IT ANCHOR SPECIFICATIONS

LENGTH	DRILL DEPTH	DRILL SIZE	DRILL SIZE MIN.	DRILL SIZE MAX.	TORQUE (N/A)
5 INCH	5 1/2 INCH	3/4 INCH	.775 INCH	.787 INCH	3-5 TURNS PAST HAND TIGHT

PRE-EXISTING FLOOR REQUIREMENTS

MINIMUM THICKNESS	MINIMUM COMPRESSIVE STRENGTH	MINIMUM AGING
4 1/2 INCH	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.**

TOMAHAWK-9000 PACKING LIST
***** ALSO SEE PACKING DRAWINGS IN END OF MANUAL *****

MUST BE INITIALED ON EACH LINE & SIGNED AT BOTTOM			
TOMAHAWK PARTS BOX CONTENTS: (5/2003)			
NAME	**DESCRIPTION**	**QTY**	**INITIAL**
ZZ626-M-2P	Swing Arm Assembly, Long	2	
ZZ626-N-2P	Swing Arm Assembly, Short	2	
ZZ626-I-2	Lock Sub-Assembly (Mainside)	1	
ZZ626-I-3	Lock Sub-Assembly (Offside)	1	
ZZ626-20	Lock Cover	2	
ZZ626-42	Swing Arm Pin	4	
600-690-015	Nut, Nylon Lock, 1 1/2-12 NF (Jam)	8	
025-002-035	Lifting Pad Weldment (Teeth - SYS IA)	4	
025-002-126	Height Adapter Bracket	2	
025-002-127	Height Adapter, 3"	4	
025-002-128	Height Adapter, 6"	4	
600-670-002	Wej-it Anchor, 3/4 x 5" Lg (SPADE TYPE)	12	
ZZ626-73	Line Support Angle	2	
ZZ626-Z-13	Slave Push-Pull Cable Assembly, 25' LG	1	
ZZ626-Z-14	Decal Packet	1	
ZZ626-Z-12	Fitting Bag - Tomahawk	1	
ZZ626-Z-15	Hydraulic Line Clip Parts Bag - Tomahawk	1	
ZZ626-Z-16	Lock Parts Bag - Tomahawk	1	
ZZ626-Z-18	Power Unit Assy Parts Bag - Tomahawk	1	
ZZ626-Z-19	Bleeder Valve Parts Bag - Tomahawk	1	
007-007-075	Shim Parts Bag	1	
601-800-139	Decal, "Tomahawk"	2	
ZZ626-Z-09-2	Tube Assy Kit #1 - AS LISTED BELOW	1	
Tube-Assy-29	Tube Assembly #29	1	
Tube-Assy-30	Tube Assembly #30	2	
Tube-Assy-34	Tube Assembly #34	1	
Tube-Assy-36	Tube Assembly #36	1	
Tube-Assy-37	Tube Assembly #37	4	
Tube-Assy-38	Tube Assembly #38	1	
Tube-Assy-39	Tube Assembly #39	1	
Tube-Assy-40	Tube Assembly #40	1	
Tube-Assy-43	10' Hydraulic line (Flared, One End) (PLACE IN POST)	2	
	Checked By:		

RECOMMENDED TOOL LIST

TOOL DESCRIPTION	USED IN
FLOOR LAYOUT	
25 FT TAPE MEASURE	FLOOR LAYOUT / SQUARING POST
CHALK LINE	FLOOR LAYOUT
SOAP STONE	FLOOR LAYOUT
4 FT BUBBLE LEVEL	VERIFY LEVEL ASSEMBLY
MOVING AND UNPACKING	
LIFTING DEVICE, 1.5 TON	LIFTING / MOVING HEAVY ITEMS
WRENCH & SOCKET, 1 1/8 INCH	¾ INCH PACKING BOLTS
CRESCENT WRENCH, 1 1/8 INCH	¾ INCH PACKING BOLTS
TIN SNIPS	PACKAGING BANDING
POST SETUP & DRILLING	
LIFTING DEVICE, 1.5 TON	LIFTING / MOVING HEAVY ITEMS
LEAD CORD OR AIRLINE, 100 FT LG	OPERATE ELECTRICAL/PNEUMATIC TOOLS
HAMMER DRILL	DRILLING CONCRETE
DRILL BIT, 3/4 INCH	DRILLING CONCRETE
MEDIUM HAMMER	¾ INCH WEJ-IT ANCHORS
WRENCH & SOCKET, 1 1/8 INCH	¾ INCH WEJ-IT ANCHORS
PRY BAR	MOVING HEAVY ITEMS
WRENCH & SOCKET	BACK BOARD / CYLINDER RETAINER
OVERHEAD HYDRAULIC LINES	
STEP LADDER	ASSEMBLE ELEVATED ITEMS
WRENCH	HYDRAULIC LINES
WRENCH	HYDRAULIC LINES
ASSEMBLY ATTACHMENTS	
WRENCH	5/16 INCH BOLT ASSEMBLIES
ARM INSTALLATION	
CRESENT WRENCH	TIGHTEN SWING ARM PINS
WRENCH	TIGHTEN SWING ARM PINS
MISCELLANEOUS ASSEMBLIES	
FLAT HEAD SCREWDRIVER	ACCESS ELECTRICAL CONDUIT BOX
RATCHET WRENCH	AS NEEDED
SNAP RING PLIERS	AS NEEDED
VICE GRIPS	AS NEEDED

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 FIGURES 1, 2 & 3.**

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.

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 WALKWAYS, OVERHEAD OBSTRUCTIONS, AND ABILITY TO MOVE EQUIPMENT IN THE BAY AREA. **REFER TO FIGURES 1, 2 & 3.**

REQUIREMENTS MAY VARY ON SPECIAL ORDERS.

SPECIFICATIONS

REFERENCE ALL SPECIFICATIONS PRIOR TO INSTALLING A LIFT.

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.

A 12' WIDE ASYMMETRICAL SETUP IS STANDARD FOR THIS LIFT. THIS LIFT CAN ALSO BE SET UP ASYMMETRICALLY OR SYMMETRICALLY, IN 3 DIFFERENT WIDTH SETTINGS, 10', 11', OR 12'. EVALUATE YOUR BAY SIZE AND THE TYPE OF VEHICLES YOU WISH TO LIFT TO DETERMINE WHICH SETUP YOU WISH TO USE FOR THIS LIFT. ALSO, DETERMINE WHAT SIDE OF THE LIFT WILL HAVE THE POWER UNIT AND CONTROLS, AND WHAT SIDE OF THE POST THE POWER UNIT WILL BE. THE POWER UNIT CAN ONLY BE MOUNTED TO THE MAINSIDE POST.

USING A CHALK LINE, LAYOUT THE FLOOR DIMENSIONS WHERE THE UNIT WILL BE LOCATED.. **SEE FIGURES 1,2 & 3.**

MOVE THE PACKED UNIT NEAR THE SETUP AREA AND COLLECT ALL NEEDED TOOLS (SEE RECOMMENDED TOOL LIST).

REMOVE THE POWER UNIT BOX FROM THE TOP OF THE LIFT AND SET ASIDE.

SECURE THE OVERHEAD LIFTING DEVICE TO THE MAIN SIDE POST USING STRAPS OR CHAINS. REMOVE THE PACKING BOLTS AND PACKING ANGLES THAT CONNECT THE MAINSIDE AND OFFSET POST ASSEMBLIES. SEPARATE THE POSTS.

-- WARNING --

- EACH POST WEIGHS OVER 1000 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.

CUT THE BANDING AND OPEN THE PARTS. VERIFY PARTS BOX CONTENTS. **REFER TO PARTS PACKING DRAWING SECTION IN THIS MANUAL.** IF MISSING PARTS ARE NOTED, THEY CAN BE OBTAINED BY CALLING 1-800-833-2006 OR BY CONTACTING YOUR LOCAL MOHAWK DISTRIBUTOR. EMPTY THE PARTS BOX ENOUGH TO REMOVE IT FROM ATOP THE OFFSIDE POST.

ERECT THE MAIN AND OFF SIDE POSTS TO THE UP-RIGHT POSITION. ALIGN THE POST FOOTINGS TO THE CHALK LINE LAYOUTS. PLACE THE MAINSIDE POST ON THE SIDE WHERE THE POWER UNIT AND CONTROLS WILL BE.

SECURE THE MAIN AND OFF SIDE POSTS TO THE BAY FLOOR USING THE (12) 3/4 X 5 INCH WEJ-IT ANCHORS. REFER TO THE FOLLOWING SECTION, "DRILLING THE MOUNTING HOLES" AND WEJ-IT INSTALLATION INSTRUCTIONS IN THE END OF THIS MANUAL.

-- WARNING --

FAILURE TO FOLLOW THE INSTRUCTIONS FOR DRILLING THE MOUNTING HOLES AND PROPERLY INSTALLING THE WEJ-IT ANCHORS MAY RESULT IN COLLAPSE OF THE LIFT AND/OR FATAL INJURY. THIS LIFT IS ONLY AS STRONG AS THE WEJ-ITS THAT HOLD IT TO THE CONCRETE FLOOR. ENSURE THAT THE WEJ-IT ANCHORS ARE INSTALLED PROPERLY!

-- IMPORTANT –

DRILLING THE MOUNTING HOLES

- REFERENCE ALL FIGURES PERTAINING TO DRILLING, WEJ-IT WARNINGS, AND INSTALLATION INSTRUCTIONS. **REFER TO FIGURES 4 & 5A & 5B.**
- WHEN DRILLING THE HOLES, 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.
- WHEN INSERTING THE WEJ-IT ANCHORS, INSERT THEM SO THAT THE WASHER RESTS AGAINST THE POST FOOTING. TIGHTEN THE NUT 3 TO 5 FULL TURNS PAST HAND TIGHT.
- NEVER USE AN IMPACT TOOL TO TIGHTEN THE WEJ-IT ANCHORS. USE A 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.
- MATCH DRILL SIX 3/4-INCH HOLES THRU THE BASE PLATE OF THE MAIN SIDE POST. INSERT AND TIGHTEN THE WEJ-IT ANCHOR 3-5 FULL TURNS PAST HAND TIGHT.
- INSURE THE INSIDE DIMENSIONS BETWEEN THE MAIN AND OFF SIDE POST IS STILL CORRECT.
- MATCH DRILL SIX 3/4-INCH HOLES THRU THE BASE PLATE OF THE OFF SIDE POST. INSERT AND TIGHTEN THE WEJ-IT ANCHOR 3-5 FULL TURNS PAST HAND TIGHT.

ENSURE THAT POSTS ARE SQUARE AND LEVEL. USE HORSESHOE SHAPED SHIMS AS NEEDED TO LEVEL AND SQUARE THE COLUMNS. REFER TO POST SHIMMING SECTION FURTHER ON IN THIS MANUAL. **REFER TO FIGURES 6 & 7.**

ASSEMBLE THE POWER UNIT BRACKET ASSEMBLY **AS SHOWN IN THE POWER UNIT ASSEMBLY FIGURE ZZ626-U**. ATTACH THIS TO THE MAINSIDE COLUMN WITH THE HARDWARE PROVIDED.

ATTACH THE TWO (2) LOCK ASSEMBLIES TO THE BACK OF EACH COLUMN WITH THE HARDWARE PROVIDED. **SEE FIGURES ZZ626-C-2 & D-2 AND FIGURE 16.**

ATTACH THE OVERHEAD LINE SUPPORTS TO EACH COLUMN WITH THE HARDWARE PROVIDED. **SEE FIGURES ZZ626-S-2, C-2 & D-2.**

ASSEMBLE THE HYDRAULIC LINES TO THE TOP OF THE MAINSIDE AND OFFSIDE COLUMNS, **AS SHOWN IN FIGURES ZZ626-Z-01-2 & 02-2**.

TWO 10 FOOT PIECES OF HYDRAULIC LINE AND FLARELESS FITTINGS HAVE BEEN PROVIDED FOR THE OVERHEAD LINES. THESE ARE TO BE CUT TO LENGTH (MEASURE BETWEEN OFFSIDE AND MAINSIDE UNION FITTINGS) AND ASSEMBLED IN FIELD. **REFER TO FIGURE 18.**

ENSURE THAT ALL HYDRAULIC LINE CONNECTIONS ARE TIGHT TO PREVENT LEAKAGE.

ASSEMBLE PUSH-PULL SLAVE CABLE OVERHEAD AND BETWEEN BOTH LOCK ASSEMBLY BOXES. SECURE THIS CABLE TO THE OVERHEAD HYDRAULIC LINES USING 8" WIRE TIES. **SEE FIGURE 16 & 17.** MODIFICATION OF THIS CABLE IS NECESSARY TO ACCOMMODATE VARIOUS WIDTHS AND HEIGHTS OF LIFT SETUP. **SEE FIGURE 17.**

PLACE WIRE TIE STICK-ON HOLDERS TO THE POSTS TO SECURE THE SLAVE CABLE LINES AS NEEDED. USE 8" LONG PLASTIC WIRE TIES AND WRAP LINES THRU HOLDERS.

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

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

ADD THE HYDRAULIC ADDITIVE TO THE RESERVOIR. (1.25 OUNCES) THIS IS SUPPLIED IN A PARTS BAG.

FILL THE POWER UNIT RESERVOIR WITH HYDRAULIC FLUID (NOT SUPPLIED: USE DEXRON III ATF FLUID) VERIFY FLUID LEVEL. (1/2 IN. BELOW BREATHER PORT IN THE POWER UNIT RESERVOIR WHEN BOTH CYLINDERS ARE FULLY RETRACTED)

INSTALL THE BREATHER CAP (NOT PLUG!)

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

REFER TO FIGURE 14 (ELECTRICAL SCHEMATIC) FOR WIRING OF POWER UNIT TO POWER SUPPLY.

ENGAGE THE UP BUTTON ON THE POWER UNIT AND RAISE THE CARRIAGES APPROX. 2 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 NUTS.

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

ASSEMBLE THE HEIGHT ADAPTER BRACKET TO EACH POST WITH THE HARDWARE PROVIDED. PLACE ALL HEIGHT ADAPTERS IN THE BRACKETS.

PRESS THE UP BUTTON ON THE POWER UNIT AND RAISE LIFT APPROXIMATELY ONE FOOT. ENSURE THAT LOCKS ARE FALLING INTO PLACE. CHECK LOCK RELEASE TO ENSURE BOTH SIDES ARE RELEASING PROPERLY. PRESS LOWER HANDLE TO ENSURE LOCK RELEASE ENGAGEMENT.

NOW YOU ARE READY TO PREPARE THE LIFT FOR OPERATION.

BLEEDING PROCEDURE

READ THIS PROCEDURE FULLY BEFORE STARTING AND OBSERVE ALL WARNINGS.

STEP 1: (FILL RESERVOIR)
IF NOT ALEADY DONE, REMOVE PLUG FROM POWER UNIT RESERVOIR AND DISCARD. POUR HYDRAULIC FLUID ADDITIVE (SEE P.U. PARTS BAG) INTO RESERVOIR, THEN FILL RESERVOIR WITHIN ~1/2" OF FILL PORT WITH DEXRON III HYDRAULIC FLUID AND CAP RESERVOIR WITH BREATHER CAP (NOT PLUG).

-- WARNING --

AFTER FILLING THE RESERVOIR WITH HYDRAULIC FLUID**,** ALWAYS CAP THE TANK WITH THE **BREATHER CAP (NOT PLUG!)** PROVIDED**.** CAPPING THE TANK WITH A PLUG WILL CAUSE PRESSURE BUILDUP IN THE RESERVOIR AND MAY CAUSE SERIOUS INJURY AND DAMAGE TO PERSONELL AND EQUIPMENT.

STEP 2: (FILL OFFSIDE CYLINDER & PURGE AIR)
WHILE PULLING THE DIVERTER VALVE HANDLE, PRESS THE UP BUTTON ON THE POWER UNIT TO RUN THE OFFSIDE CARRIAGE TO THE FULLY RAISED POSITION. RELEASE THE DIVERTER VALVE HANDLE AND THE UP BUTTON WHEN OFFSIDE CARRIAGE HALTS AT THE TOP.

STEP 3: (VERIFY BLEEDER VALVE ACTUATION)
GO TO THE OFFSIDE CARRIAGE AND ENSURE THAT IT IS PRESSING THE BLEEDER VALVE STEM AT THE TOP OF THE POST WHEN IT IS FULLY RAISED. **REFER TO FIGURE 8**. IF IT DOES NOT, THE BLEEDER VALVE STEM WILL NEED TO BE ADJUSTED. TO DO THIS, ADJUST THE BOLT ON THE STEM OF THE THE BLEEDER VALVE TO CONTACT THE CARRIAGE WHEN THE CARRIAGE IS FULLY RAISED. THE LIFT SHOULD RAISE FULLY, THEN LOWER SLIGHTLY AFTER IT HITS THE BLEEDER VALVE STEM. ONCE PROPERLY ENGAGING THE BLEEDER VALVE, JAM THIS BOLT WITH NUTS PROVIDED, THEN CONTINUE ON WITH THE BLEEDING PROCEDURE.

STEP 4: (PURGE AIR FROM OFFSIDE CYLINDER)
ONCE BLEEDER VALVE STEM ACTUATION IS VERIFIED, WAIT FOR 2 MINUTES, THEN PRESS THE UP BUTTON ON THE POWER UNIT FOR 2-3 SECONDS. WAIT ANOTHER 2 MINUTES, THEN PRESS THE UP BUTTON AGAIN FOR ANOTHER 2-3 SECONDS.

-- WARNING --

IF MOTOR BECOMES EXCESSIVELY HOT DURING ANY STEP IN THIS BLEEDING PROCEDURE, STOP AND WAIT FOR MOTOR TO COOL DOWN. IT THIS CONTINUES, CHECK TO ENSURE THAT FLUID IS RETURNING TO TANK DURING THE BLEEDING PROCEDURE (CHECK HYDRAULIC RETURN LINE TO “T” PORT)

-- WARNING --

LISTEN FOR THE PRESSURE RELIEF VALVE: A NOTICEABLE INCREASE IN POWER UNIT VOLUME. THIS WILL INDICATE THAT THE BLEEDER VALVE STEM IS NOT BEING ACTUATED AT THE TOP OF THE OFFSIDE POST. REFER TO STEP 3 AND SEE BLEEDER ADJUSTMENT DIAGRAM. **REFER TO FIGURE 8.**

STEP 5: (LOWER OFFSIDE)
WHILE PULLING THE DIVERTER VALVE HANDLE, PRESS THE LOWERING HANDLE ON THE POWER UNIT AND LOWER THE OFFSIDE CARRIAGE TO THE FULLY LOWERED POSITION. RELEASE BOTH HANDLES WHEN FULLY LOWERED. ADD MORE DEXRON III HYDRAULIC FLUID TO RESERVOIR UNTIL IT IS FILLED TO ~1/2” BELOW FILL PORT.

-- CAUTION --

DURING THESE STEPS, YOU MAY NEED TO ADD ADDITIONAL HYDRAULIC FLUID TO THE RESERVOIR. FILL THE TANK ONLY WHEN THE LIFT IS FULLY LOWERED. **NEVER** FILL THE RESERVOIR WHEN THE LIFT IS RAISED! (WHEN YOU LOWER THE LIFT BACK DOWN, THE FLUID MAY OVERFLOW FROM THE TANK AND SPILL).

STEP 6: (RAISE AND PURGE WHOLE SYSTEM)
NOW, PRESS THE UP BUTTON ONLY AND RAISE THE LIFT TO THE FULLY RAISED POSITION. BOTH CARRIAGES SHOULD BE RAISING EVENLY. ONCE THE OFFSIDE CARRIAGE HITS THE TOP, MAINTAIN THE UP BUTTON FOR ANOTHER 2-3 SECONDS, THEN RELEASE. WAIT 2 MINUTES, THEN PRESS THE UP BUTTON AGAIN FOR ANOTHER 2-3 SECONDS. **FULLY LOWER LIFT**, THEN RE-CHECK RESERVOIR FLUID LEVEL. FILL TO ~1/2” BELOW FILL PORT.

STEP 7: (VERIFY COMPLETION OF BLEEDING)
THE LIFT HYDRAULIC SYSTEM SHOULD NOW BE FULLY PURGED OF AIR. LOWER THE LIFT FULLY, AND RAISE THE LIFT FULLY AGAIN, AND VERIFY PROPER SYNCHRONIZATION OF BOTH CARRIAGES. IF SMOOTH UPWARD MOTION OF CARRIAGES IS NOT SEEN, THE BLEEDING PROCEDURE MAY NEED TO BE CONTINUED (REPEAT STEP 6).

POST SHIMMING

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 FIGURES 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.

ONCE LIFT IS RUNNING PROPERLY, ATTACH ALL DECALS TO LIFT. REFER TO DECAL LOCATION DRAWING AT END OF MANUAL.

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.

- 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 UNOBSTRUCTED CLEARANCE. DO NOT HIT OR RUN OVER LIFT ARMS, ADAPTERS, OR AXLE SUPPORTS. THIS COULD DAMAGE LIFT OR VEHICLE.
- 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 CARRAIGE IN THE POST. IF IT IS SLANTED TOWARDS ON SIDE OF THE POST, THE VEHICLE SHOULD BE SHIFTED.

- 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 5 SECONDS. (SEE BLEEDING PROCEDURE)
- LUBRICATE LEG CHANNELS AT SLIDE BLOCKS WITH SPRAY ON SLIP PLATE (GRAPHITE DRY-FILM LUBRICANT, GRAINGER #6Y648) ONLY AS REQUIRED TO REDUCE NOISE AND VIBRATION.

MONTHLY

- 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 SLIDE BLOCKS FOR UNUSUAL OR EXCESSIVE WEAR. (REPLACE IF NEEDED) SLIDE BLOCK SHIMS ARE AVAILABLE IF NEEDED (CONTACT MOHAWK PARTS DEPARTMENT)
- 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.**
- 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 TO 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 FIGURES 6, 7 & 10.**
DEBRIS IN POSTS (TOOLS ETC.)	CLEAN UNIT
OBSTRUCTION UNDER VEHICLE OR LIFT	REMOVE OBSTRUCTION.
RAISING UNEVEN **RULE OF THUMB: 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.
POSTS OUT OF SQUARE	VERIFY LEVEL ASSEMBLY. MAKE ANY AND ALL NECESSARY ADJUSTMENTS. **SEE FIGURES 6, 7 & 10.**
CYLINDER SHIMS	ENSURE THAT THE MAINSIDE CYLINDER FULLY COLLAPSES BY VERIFYING A GAP UNDER THE CARRIAGE WHEN FULLY LOWERED. IF THIS IN NOT HAPPENING, A WASHER MAY NEED TO BE ADDED BETWEEN THE CARRIAGE AND THE TOP OF THE CYLINDER ROD. THE MAINSIDE CYLINDER MUST FULLY COLLAPSE TO SYNCHRONIZE LIFT AT THE LOWERED POSITION.
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	
EXCESSIVE VIBRATION & SQUEALLING	POST CHANNELS NEED TO BE LUBRICATED. USE SLIP PLATE GRAPHITE DRY-FILM LUBRICANT ON INSIDE POST WHERE SLIDE BLOCKS RUB. (GRAINGER # 6Y648)
SHOP FLOOR UNEVEN	USE SPECIAL LIFT PADS. **SEE FIGURE 10 & 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	
PUSH-PULL CABLES OUT OF ADJUSTMENT	ADJUST PUSH-PULL CABLE. **SEE FIGURE 16 & 17.**
MECHANICAL LOCK HARD TO PULL	
PUSH-PULL CABLES OUT OF ADJUSTMENT	ADJUST PUSH-PULL CABLE. **SEE FIGURE 16 & 17.**
LIFT NOT RAISED OFF OF LOCKS	RAISE LIFT OFF OF LOCKS FIRST, THEN RELEASE LOCKS, THEN LOWER.

SERVICE CHART

MODEL: TOMAHAWK-9000
SERIAL NUMBER: _____
DATE OF INSTALLATION: _____

DATE	PART REPLACED / SERVICED	SERVICE COMPANY	SERVICED BY

MAINTENANCE CHART

DATE	MAINTENANCE PERFORMED	SERVICE COMPANY	SERVICED BY

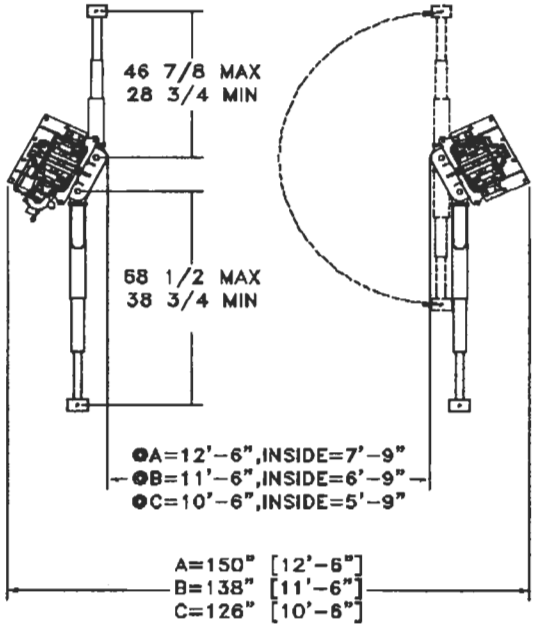
MOHAWK

TOMAHAWK-9000

FIGURES & DIAGRAMS

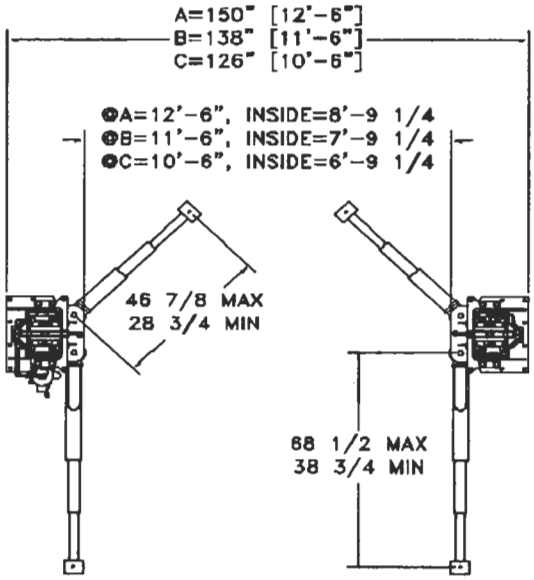
MOHAWK RESOURCES LTD.

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



ASYMMETRICAL SET-UP

REV: 9/23/2002



SYMMETRICAL SET-UP

REV: 9/23/2002

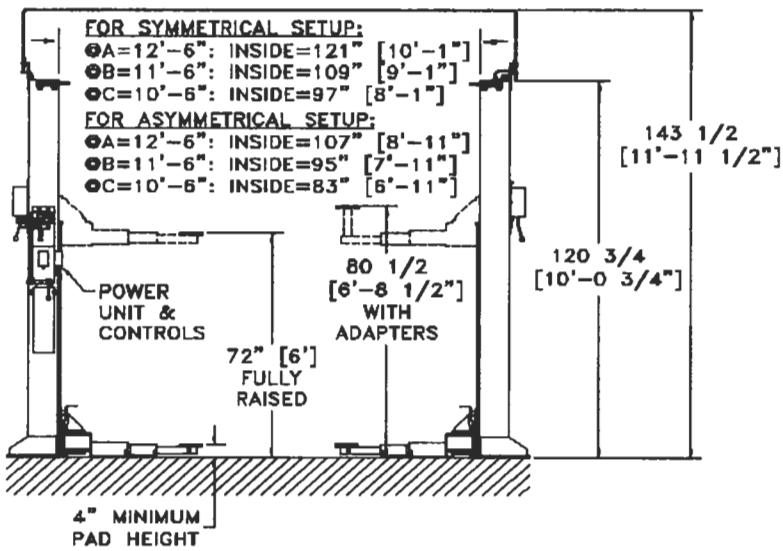


Figure 1

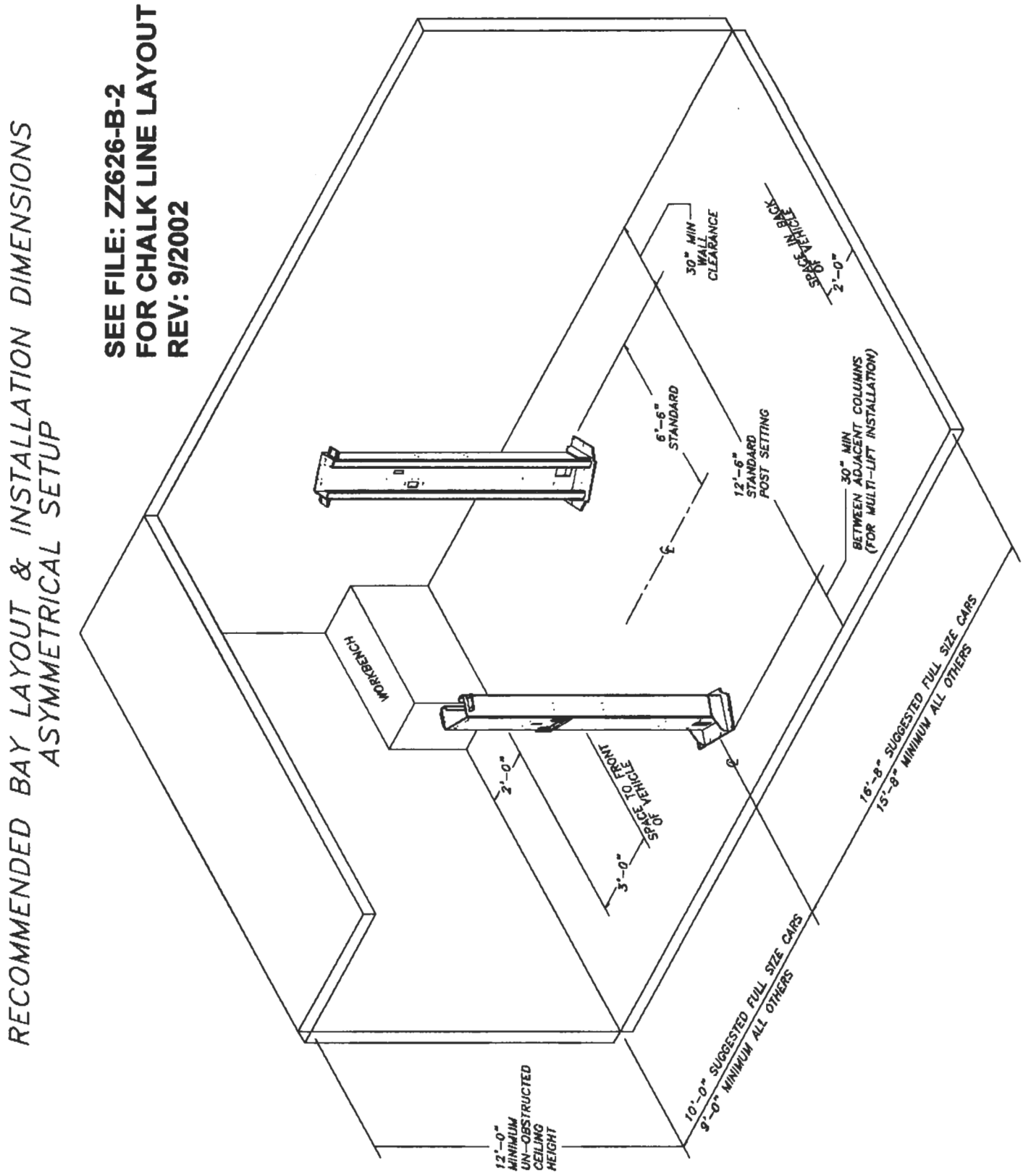

RECOMMENDED BAY LAYOUT & INSTALLATION DIMENSIONS
ASYMMETRICAL SETUP
SEE FILE: ZZ626-B-2
FOR CHALK LINE LAYOUT
REV: 9/2002
WORKBENCH
6'-6" STANDARD
12'-6" STANDARD POST SETTING
30" MIN WALL CLEARANCE
SPACE BEHIND POST
2'-0"
30" MIN BETWEEN ADJACENT COLUMNS (FOR MULTI-LIFT INSTALLATION)
2'-0"
3'-0"
SPACE TO VEHICLE FRONT
16'-8" SUGGESTED FULL SIZE CARS
15'-8" MINIMUM ALL OTHERS
10'-0" SUGGESTED FULL SIZE CARS
9'-0" MINIMUM ALL OTHERS
12'-0" MINIMUM UN-OBSTRUCTED CEILING HEIGHT

Figure 2

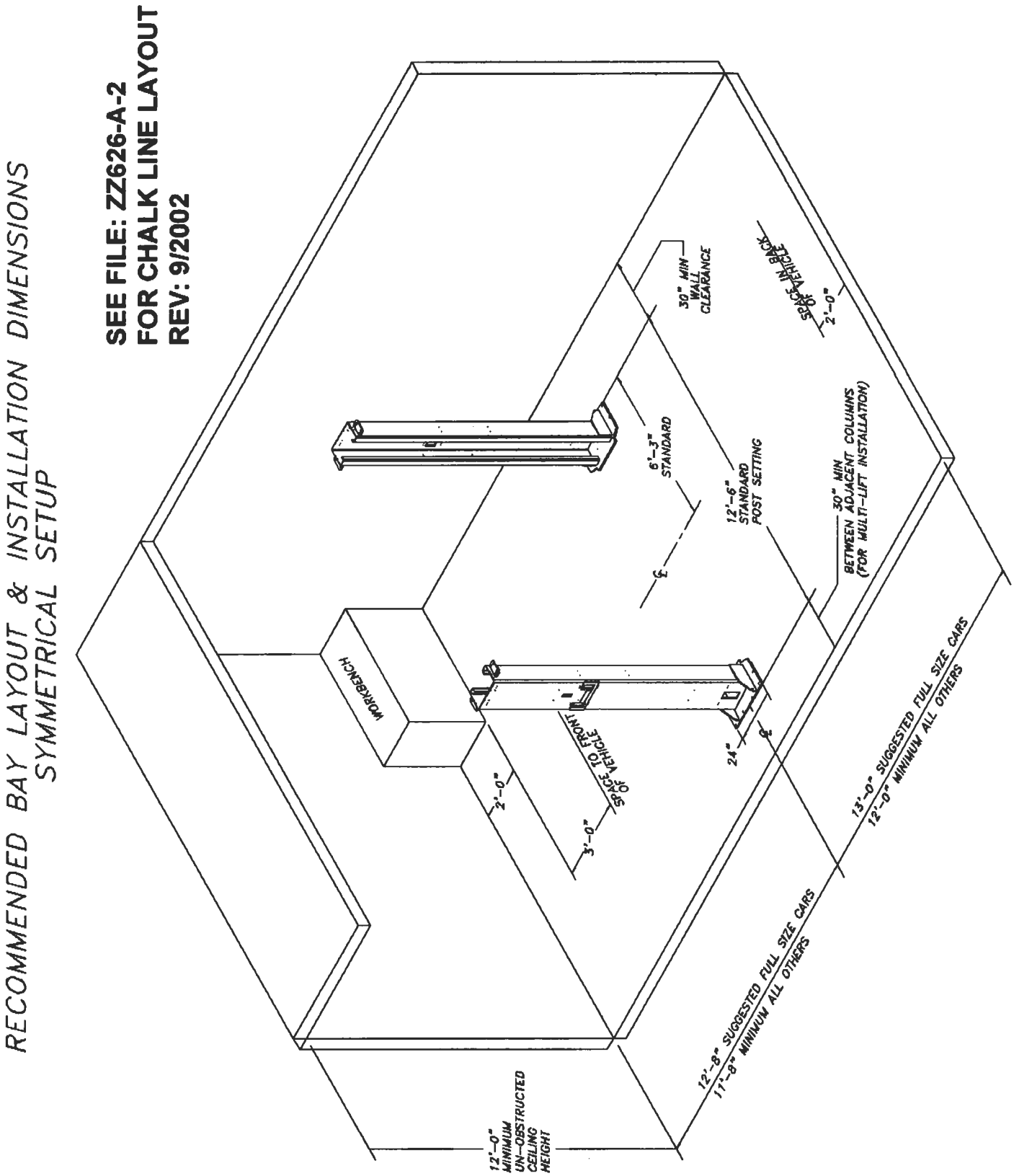

RECOMMENDED BAY LAYOUT & INSTALLATION DIMENSIONS
SYMMETRICAL SETUP
SEE FILE: ZZ626-A-2
FOR CHALK LINE LAYOUT
REV: 9/2002
30" MIN WALL CLEARANCE
SPACE IN BAY BETWEEN VEHICLE
2'-0"
6'-3" STANDARD
12'-6" STANDARD POST SETTING
30" MIN BETWEEN ADJACENT COLUMNS (FOR MULTI-LIFT INSTALLATION)
WORKBENCH
2'-0"
3'-0"
FRONT OF VEHICLE TO
24"
12'-0" MINIMUM UN-OBSTRUCTED CEILING HEIGHT
12'-8" SUGGESTED FULL SIZE CARS
11'-8" MINIMUM ALL OTHERS
13'-0" SUGGESTED FULL SIZE CARS
12'-0" MINIMUM ALL OTHERS

Figure 3

WEJ-IT INSTALLATION

DO NOT USE IMPACT WRENCH

USE HAND WRENCH ONLY

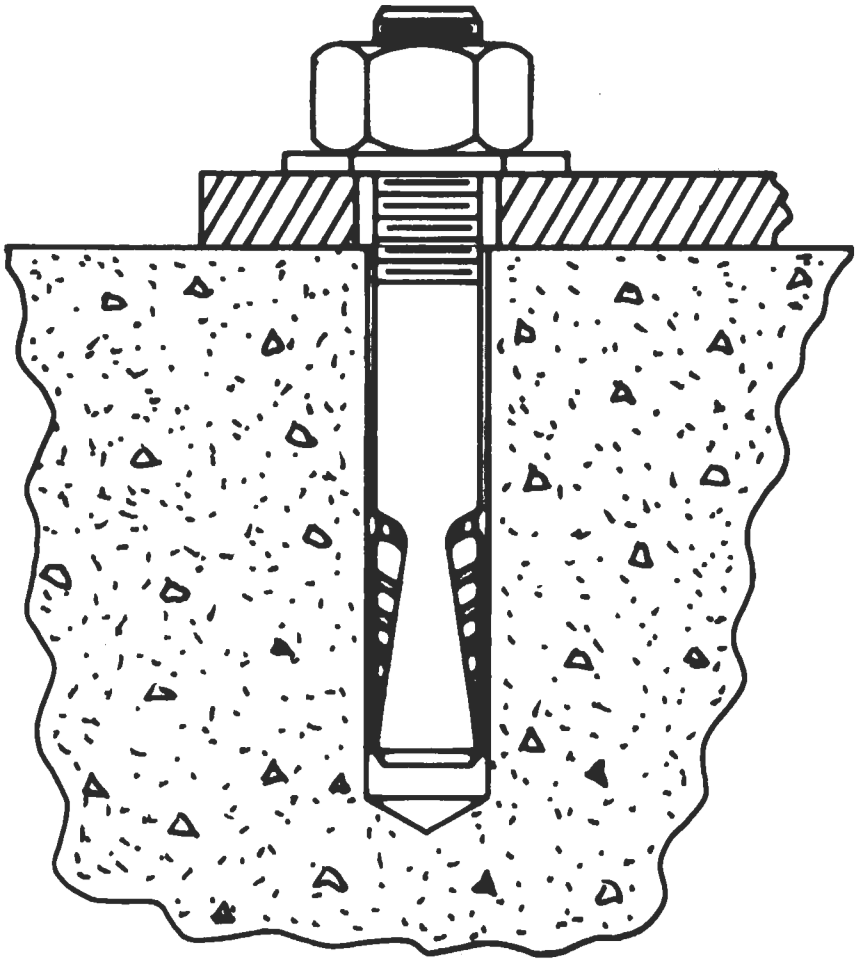


Figure 4

The Original wej-it® Wedge Anchors

Key Features/Benefits

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

USA ENGINEERED & MANUFACTURED

Specifications, Approvals and Listings

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

Maximum Tensile and Shear Capacity for Static Loads

	Limestone Aggregate			Unreinforced Stone Aggregate oncrete Zin Plated arbon Steel							Unreinforced Lightweight (Idealite)		
Anchor & Hole Size	Embed-ment (in)	2000 psi Tension (lbs)	Shear (lbs)	Embed-ment (in)	3000 psi Tension (lbs)	Shear (lbs)	5000 psi Tension (lbs)	Shear (lbs)	7000 psi Tension (lbs)	Shear (lbs)	Embed-ment (in)	5000 psi Tension (lbs)	Shear (lbs)
1/4	1 1/8	1132	1211	1 1/8	1320	1751	1760	2316	2464	2494	1 1/2	1861	1947
1/4	1 3/4	1256	1211	1 1/2	1856	1751	2473	2316	3462	2494	•	•	•
5/16	1 1/4	1308	1210	1 1/4	2057	1839	2742	2530	3939	3439	1 1/2	2493	3064
5/16	2	1181	1210	1 3/4	2389	1839	3185	2530	4459	3439	•	•	•
3/8	1 1/4	994	1223	1 1/2	2876	4286	3834	5213	5368	5658	1 3/4	3125	4289
3/8	4	1728	1223	4	3488	4286	4650	5213	6510	5658	•	•	•
1/2	1 3/4	1542	3009	2 1/4	3473	7138	5789	10748	8105	11550	2 1/4	4778	9833
1/2	6	2695	3009	5	4809	7138	8015	10748	11221	11550	•	•	•
5/8	•	•	•	3 1/2	7582	10719	12636	15583	17690	16700	2 1/2	6455	12500
5/8	•	•	•	4 3/4	9179	10719	15299	15583	21419	16700	•	•	•
3/4	•	•	•	3	11579	15537	19299	21000	27019	23103	3 1/2	17293	19050
3/4	•	•	•	7	15444	15537	25740	21000	36036	23103	•	•	•
7/8	•	•	•	4 1/2	15266	•	25444	25099	33622	28718	•	•	•
7/8	•	•	•	7	16992	•	28320	25099	39648	28718	•	•	•
1	•	•	•	5 1/2	16351	•	27252	33083	38153	35700	4 1/2	21616	31666
1	•	•	•	7	17837	•	29728	33083	41619	35700	•	•	•
Source	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, O; 1981.

Edge Distance and Spacing Requirements

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

Notes:

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

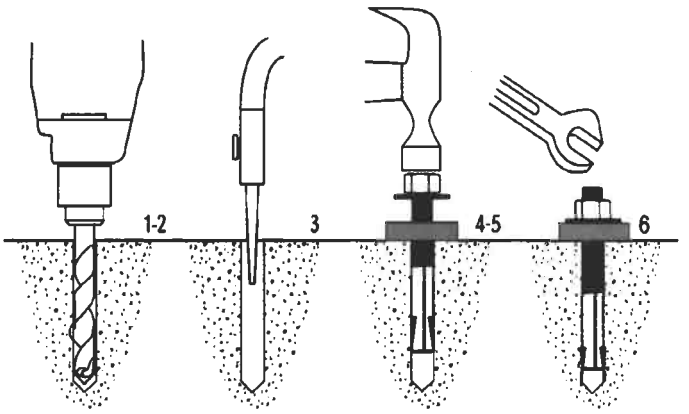
Figure 5a

Order Information

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

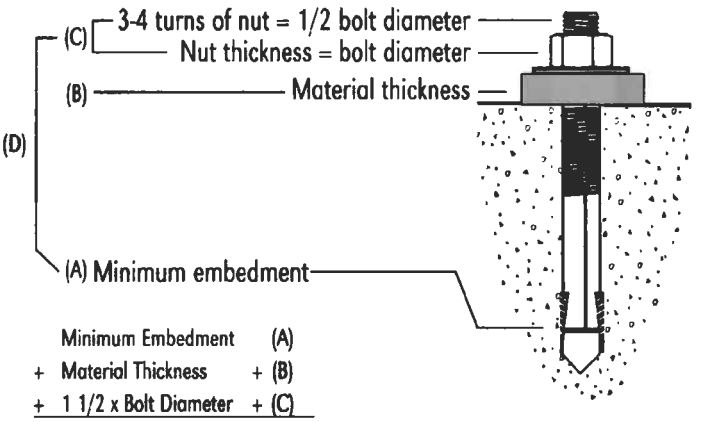
Installation Instructions - Mohawk Lifts

1. Drill the hole perpendicular to the work surface.* To assure full holding power, do not ream the hole or allow the drill to wobble.
2. Drill the hole deeper than the intended embedment of the anchor, but not closer than two anchor diameters to the bottom (opposite) surface of the concrete.
3. Clean the hole using compressed air and a nylon brush. A clean hole is necessary for proper performance.
4. 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.
5. Tap anchor into hole with a 2 ½ lb. hammer until the washer rests solidly against fixture.
6. 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)



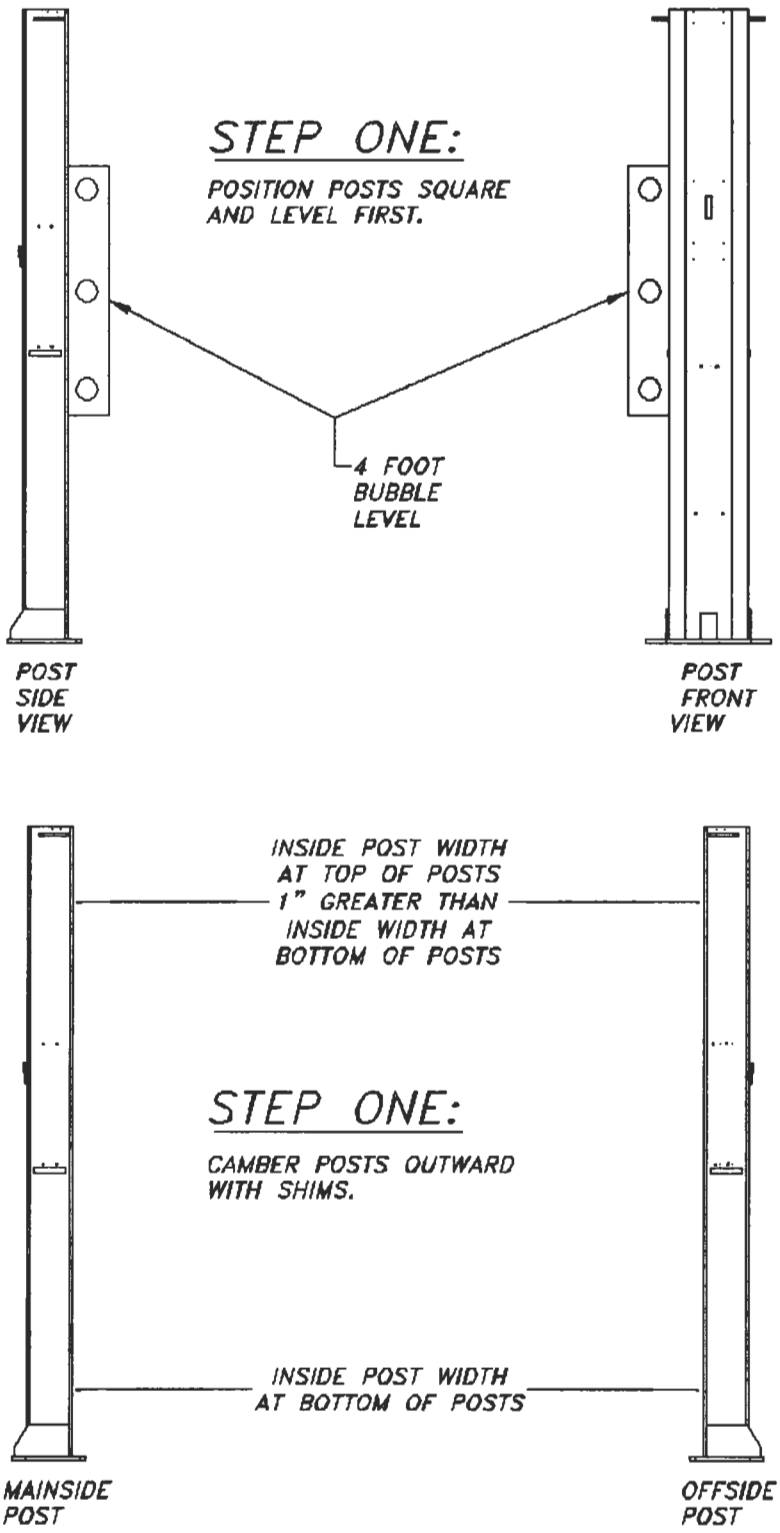
* Always wear safety glasses. Follow the drill manufacturer's safety instructions. Use only solid carbide-tipped drill bits meeting ANSI B212.15 diameter standards as listed on back cover.

Length Selection Guide



	Minimum Embedment	(A)
+	Material Thickness	+ (B)
+	1 1/2 x Bolt Diameter	+ (C)
=	Total Anchor Length	= (D)

Figure 5b



POST LEVELING AND SHIMMING

Figure 6

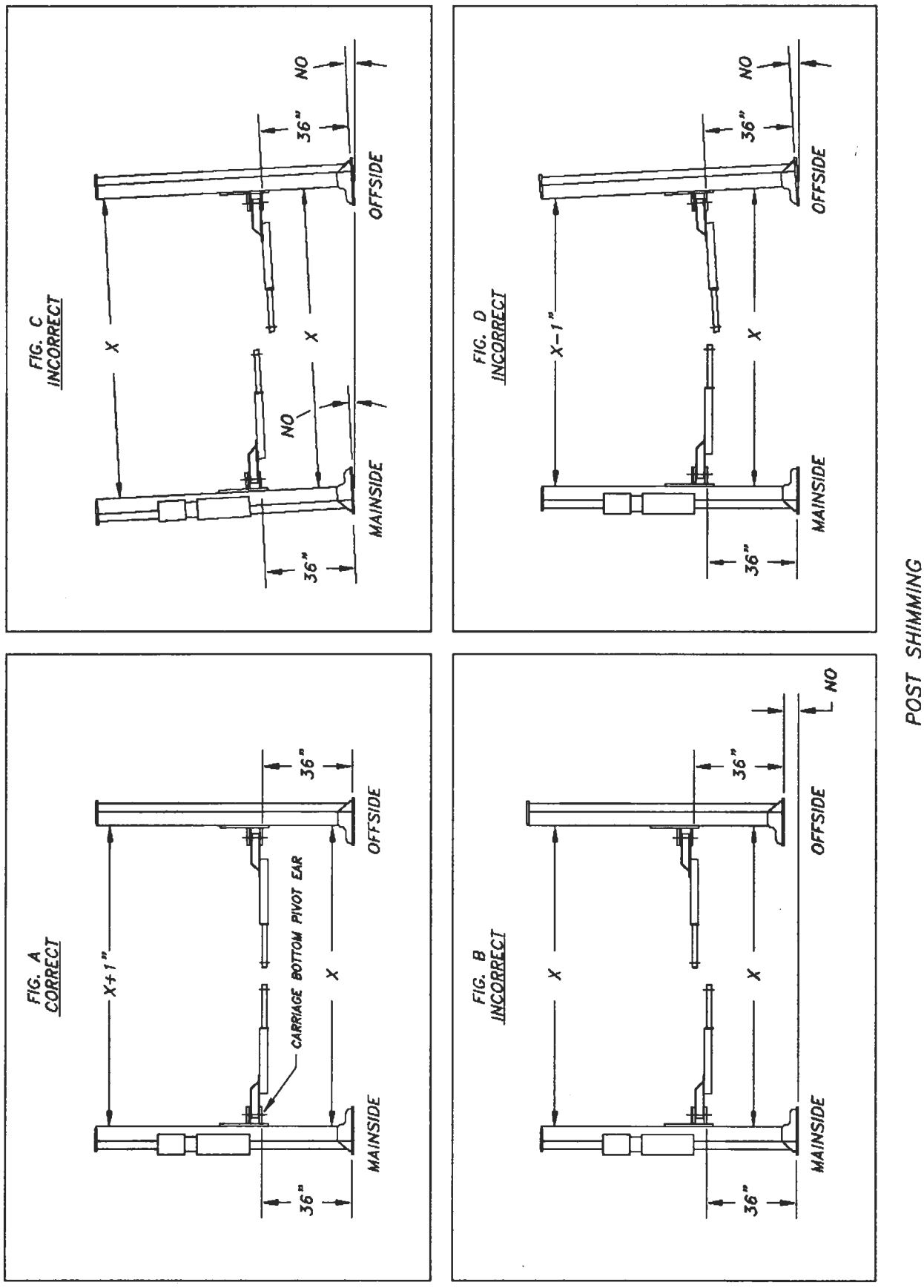


FIG. A
CORRECT
X+1"
CARRIAGE BOTTOM PIVOT EAR
X
36"
OFFSIDE
MAINSIDE
36"
FIG. B
INCORRECT
X
X
36"
NO
OFFSIDE
MAINSIDE
36"
FIG. C
INCORRECT
X
X
36"
NO
OFFSIDE
NO
MAINSIDE
36"
FIG. D
INCORRECT
X-1"
X
36"
NO
OFFSIDE
MAINSIDE
36"
POST SHIMMING

Figure 7

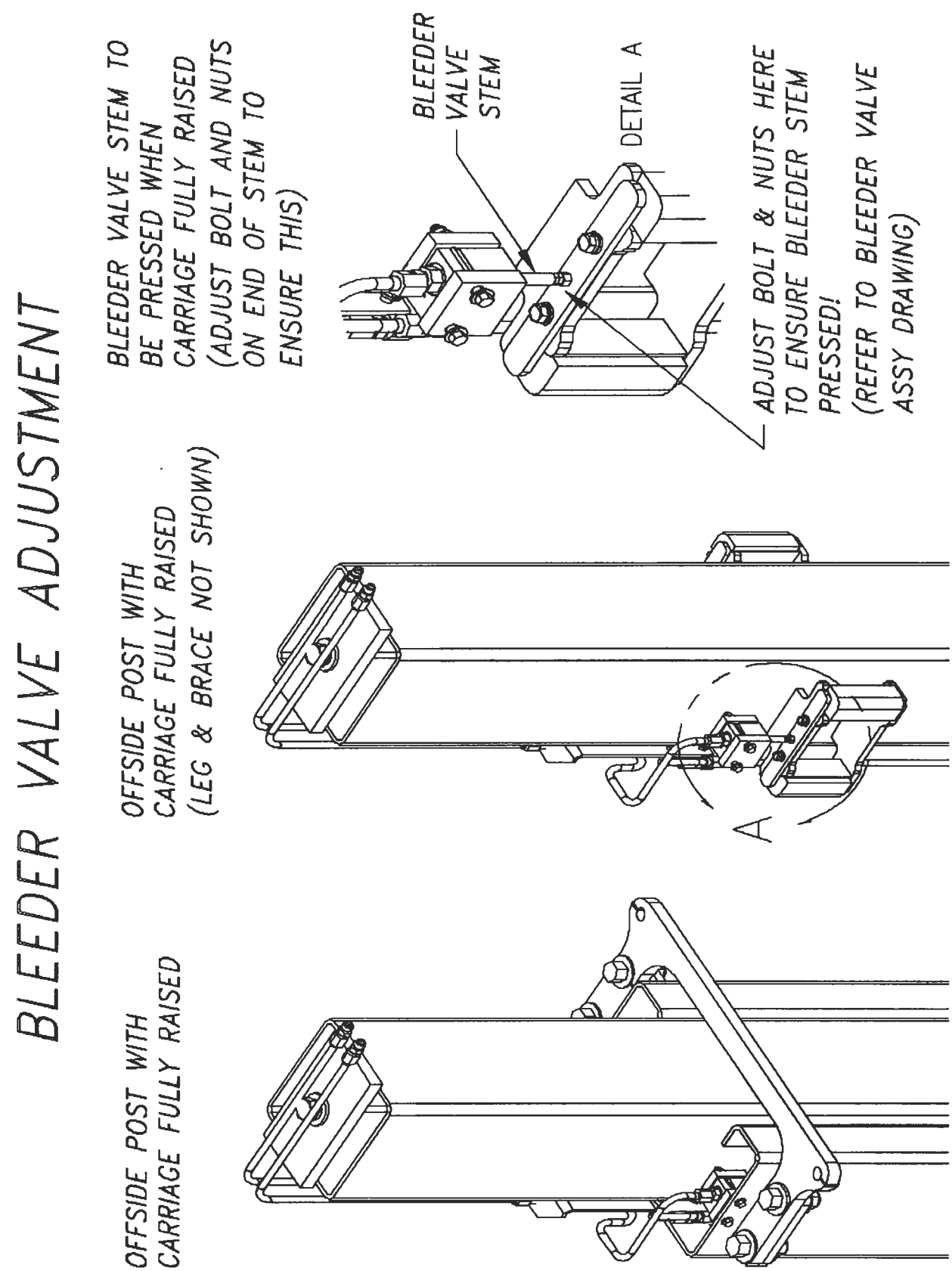

BLEEDER VALVE ADJUSTMENT
OFFSIDE POST WITH CARRIAGE FULLY RAISED
OFFSIDE POST WITH CARRIAGE FULLY RAISED (LEG & BRACE NOT SHOWN)
BLEEDER VALVE STEM TO BE PRESSED WHEN CARRIAGE FULLY RAISED (ADJUST BOLT AND NUTS ON END OF STEM TO ENSURE THIS)
BLEEDER VALVE STEM
DETAIL A
ADJUST BOLT & NUTS HERE TO ENSURE BLEEDER STEM PRESSED! (REFER TO BLEEDER VALVE ASSY DRAWING)
A

Figure 8

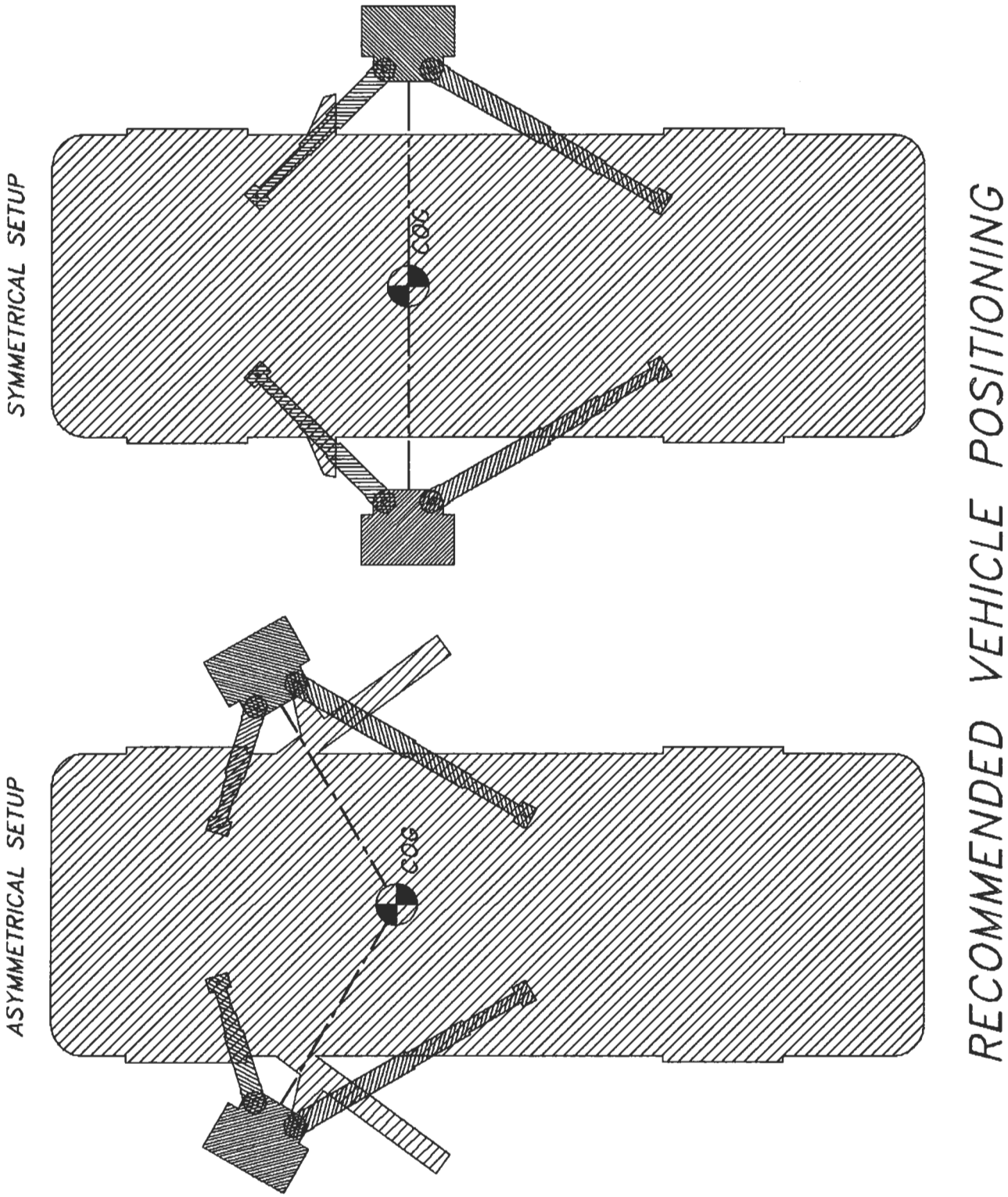

SYMMETRICAL SETUP
COG
ASYMMETRICAL SETUP
COG
RECOMMENDED VEHICLE POSITIONING
LOCATE VEHICLE CENTER OF GRAVITY (COG)
IN LINE WITH POST CENTERS AS SHOWN

Figure 9

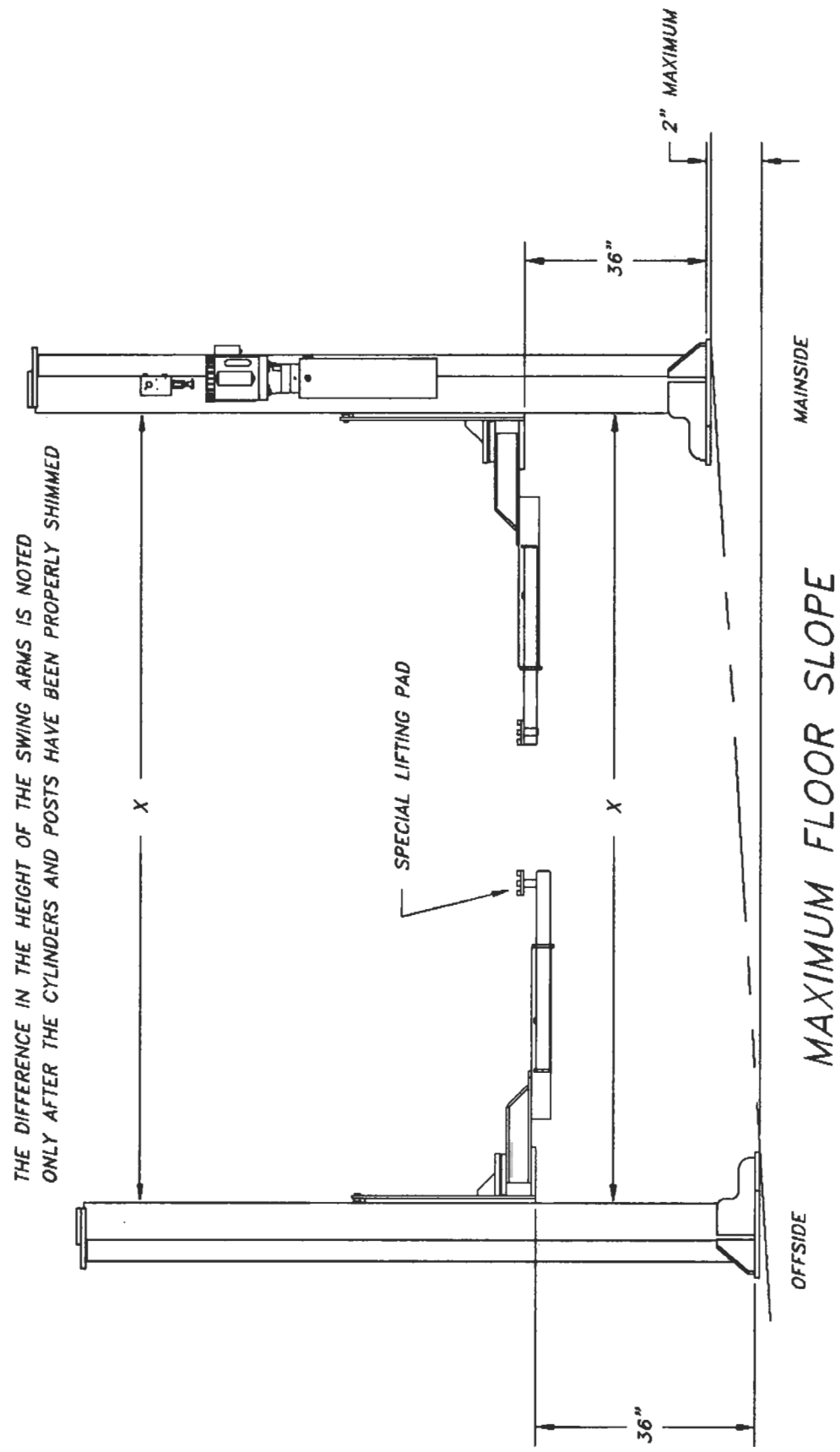

2" MAXIMUM
36"
MAINSIDE
THE DIFFERENCE IN THE HEIGHT OF THE SWING ARMS IS NOTED
ONLY AFTER THE CYLINDERS AND POSTS HAVE BEEN PROPERLY SHIMMED
X
SPECIAL LIFTING PAD
X
MAXIMUM FLOOR SLOPE
OFFSIDE
36"

Figure 10

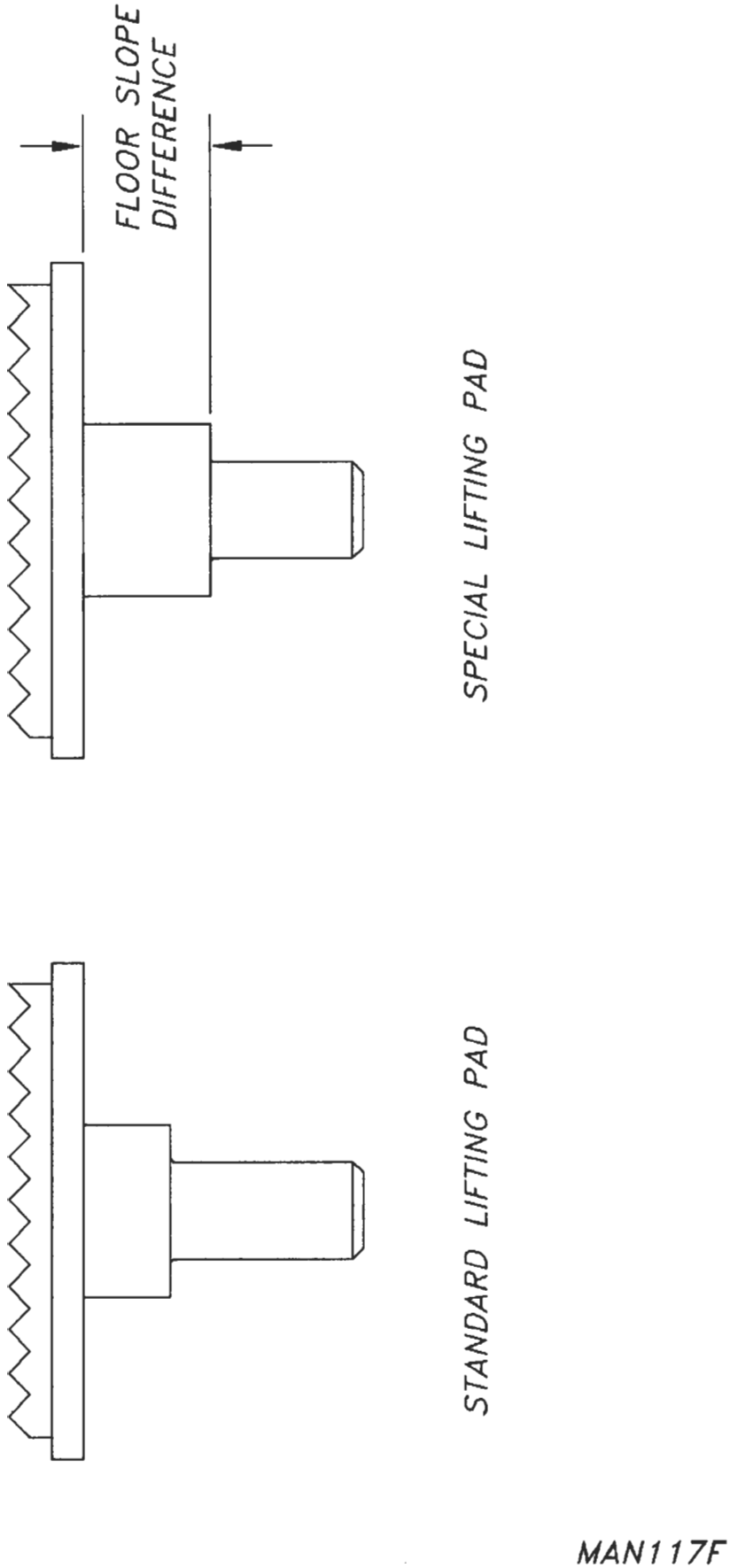
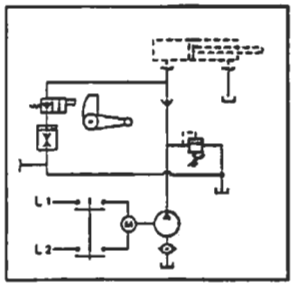

FLOOR SLOPE DIFFERENCE
SPECIAL LIFTING PAD
STANDARD LIFTING PAD
MAN117F

Figure 11

MADE FOR
MOHAWK

Dyna-Pack® **M-4509**
MOHAWK: 601-300-062



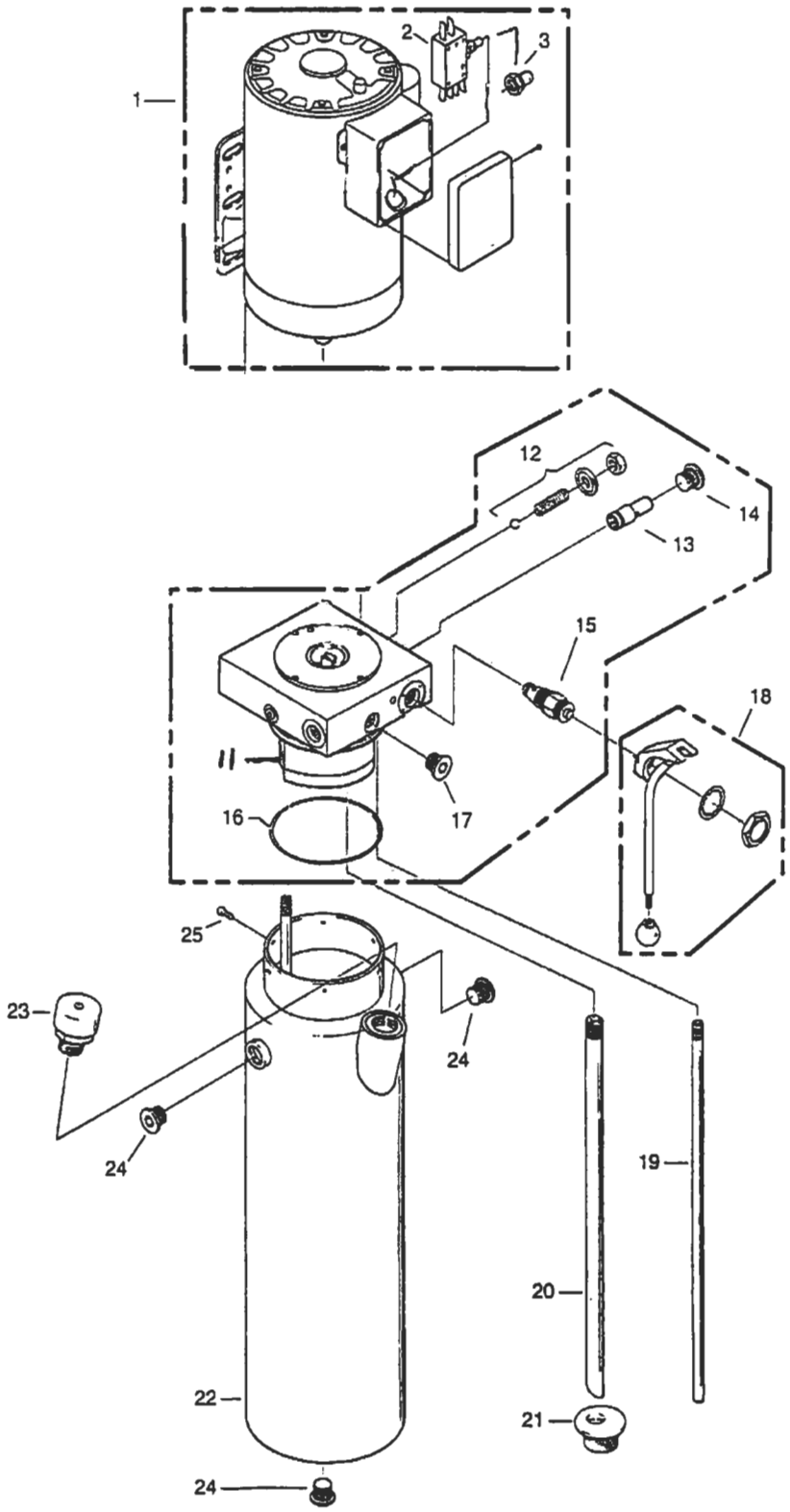


Figure 12

M-4509 / 601-300-045

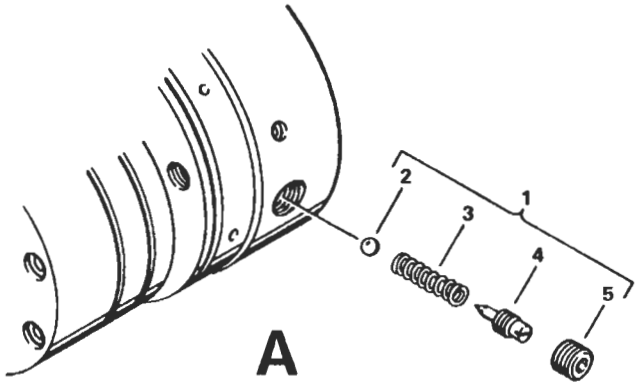
Ref. No.	Part No.	Description	No. Req.
1	08173	MOTOR, Electric, 5/8" Shaft, AC, 2 hp	1
2		• SWITCH, Limit, 25 amps, 2 pole	1
3		• BOOT, Rubber , weather proof, limit switch	1
4	00694	PLUG, Turnlock, female	1
5	07760	SCREW, Socket Head Cap 1/4-20 x 1" (used with 1605 permanent casting housing)	4
6	01139	COUPLING, 5/8" Bore 3/16" Keyway (motor side)	1
7	01603	COUPLING SPIDER, 33/64" Bore	1
8	07588	COUPLING, 10mm	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	K12171-200	PUMP	1
12	07527	• PARTS KIT, Adjustable Relief Valve	1
13	01723-2.75	• VALVE, PCFC	1
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) 458-1308
Telefax: (616) 458-1616
http://www.monarchhyd.com

CANADA:
FLUID-PACK INTERNATIONAL LIMITED
A Part of the Monarch Hydraulics Group
450 Newbold St., London, Ontario, Canada N6E 1K3
Telephone: (519) 686-5900
Telefax: (519) 686-5976

Figure 12A

RELIEF VALVE ADJUSTMENT PROCEDURE



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

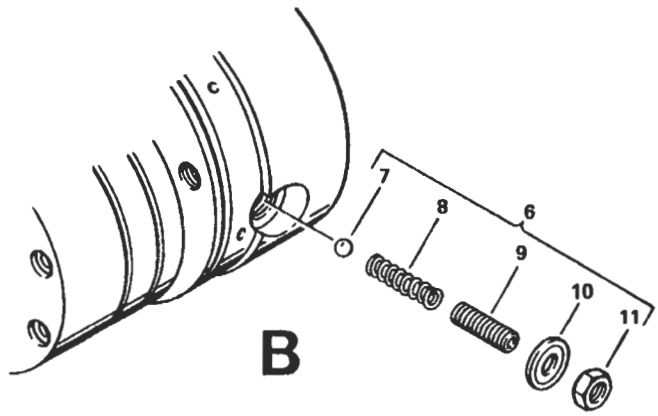
RELIEF VALVE ADJUSTMENT PROCEDURE "A" FOR UNITS MADE BEFORE APRIL 1, 1991.

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.
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

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.

3052

Figure 13

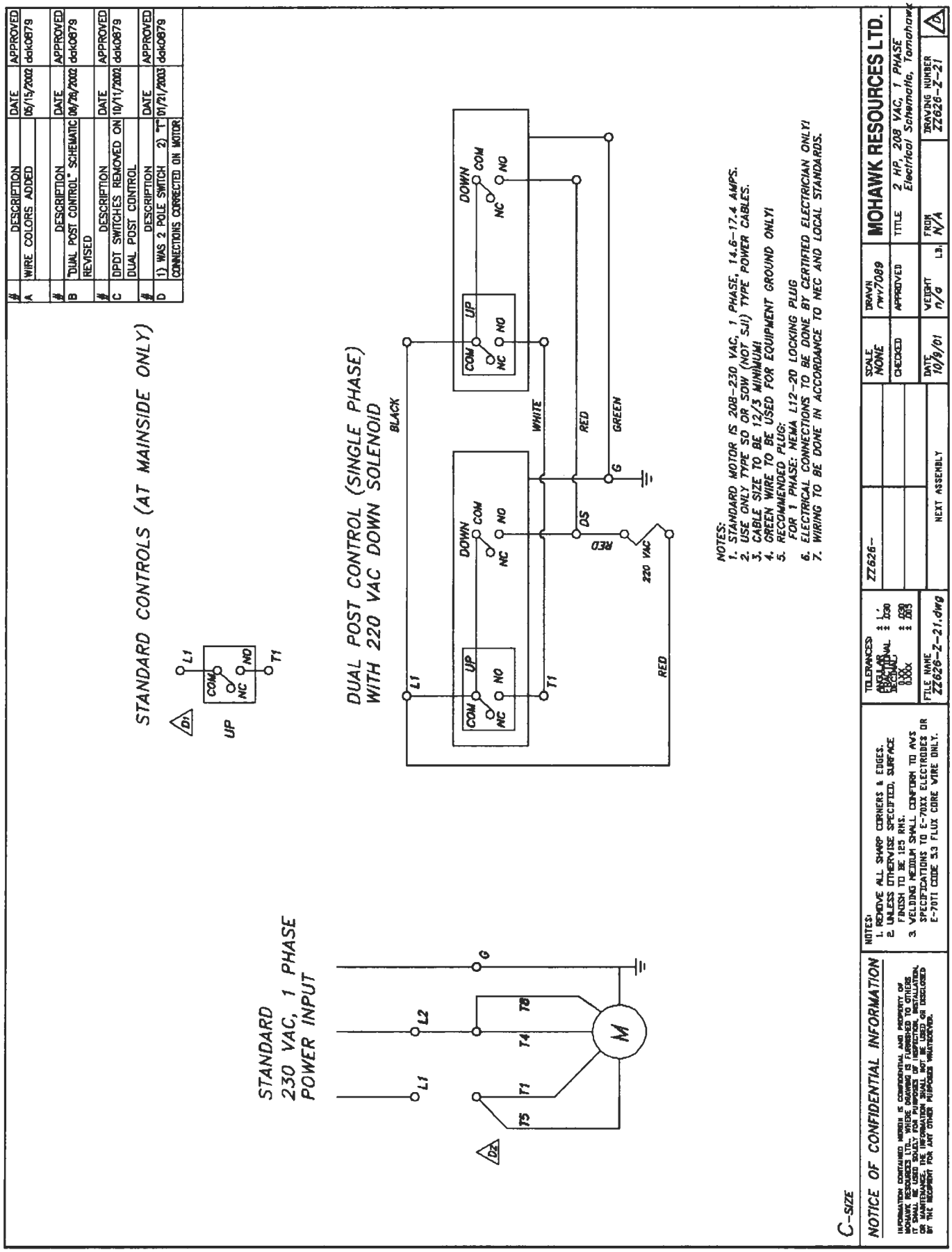
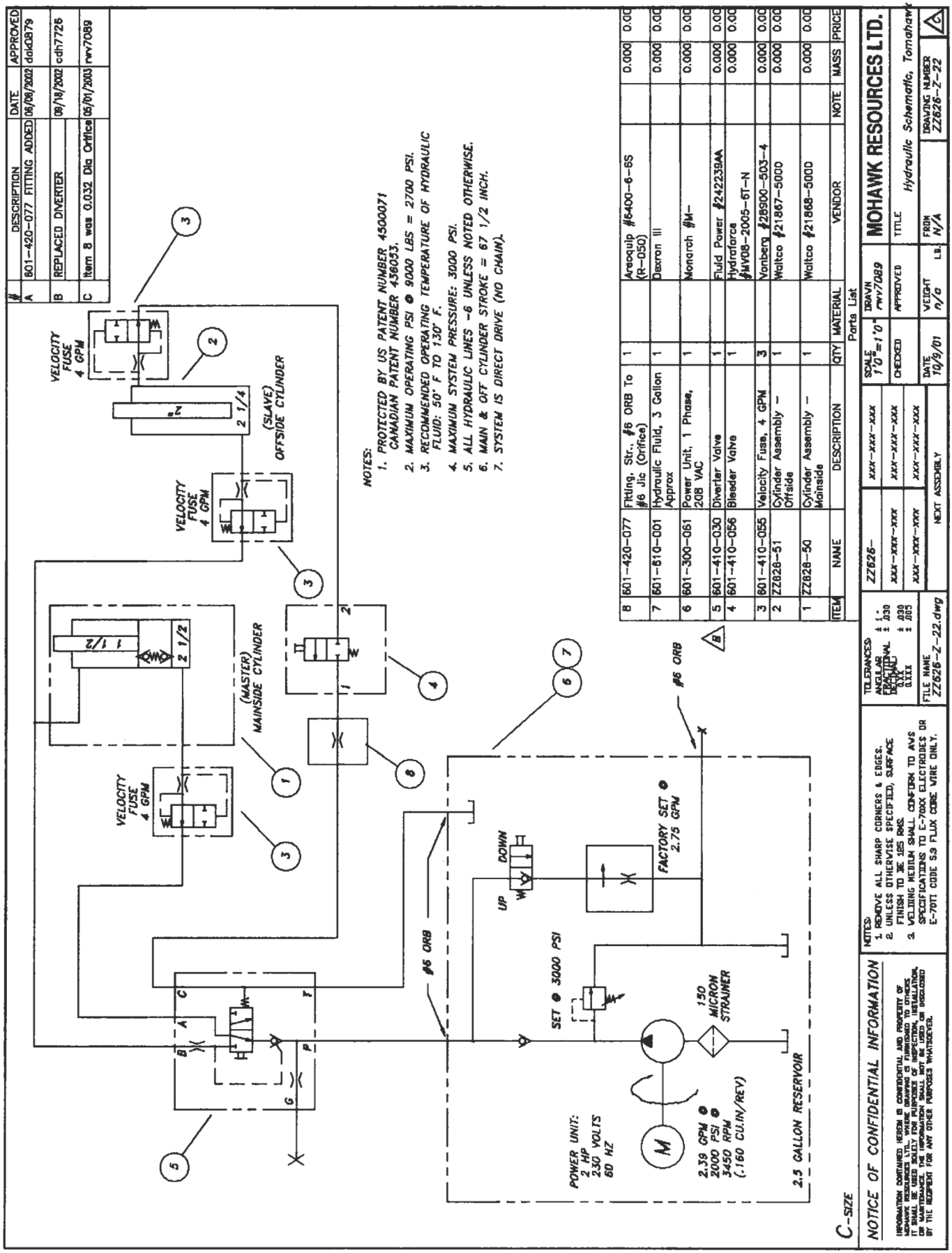

STANDARD CONTROLS (AT MAINSIDE ONLY)
L1
COM
NC
NO
T1
D1
UP
DUAL POST CONTROL (SINGLE PHASE)
WITH 220 VAC DOWN SOLENOID
BLACK
L1
COM
UP
NO
NC
T1
DOWN
COM
NO
NC
WHITE
RED
DS
RED
220 VAC
RED
G
GREEN
STANDARD
230 VAC, 1 PHASE
POWER INPUT
L1
L2
G
T5
T1
T4
T8
M
D2
NOTES:
1. STANDARD MOTOR IS 208-230 VAC, 1 PHASE, 14.6-17.4 AMPS.
2. USE ONLY TYPE SO OR SOW (NOT SJ) TYPE POWER CABLES.
3. CABLE SIZE TO BE 12/3 MINIMUM!
4. GREEN WIRE TO BE USED FOR EQUIPMENT GROUND ONLY!
5. RECOMMENDED PLUG:
FOR 1 PHASE: NEMA L12-20 LOCKING PLUG
6. ELECTRICAL CONNECTIONS TO BE DONE BY CERTIFIED ELECTRICIAN ONLY!
7. WIRING TO BE DONE IN ACCORDANCE TO NEC AND LOCAL STANDARDS.
DESCRIPTION DATE APPROVED
A WIRE COLORS ADDED 05/15/2002 dak0879
DESCRIPTION DATE APPROVED
B "DUAL POST CONTROL" SCHEMATIC REVISED 06/26/2002 dak0879
DESCRIPTION DATE APPROVED
C DPDT SWITCHES REMOVED ON DUAL POST CONTROL 10/11/2002 dak0879
DESCRIPTION DATE APPROVED
D 1) WAS 2 POLE SWITCH 2) "T" CONNECTIONS CORRECTED ON MOTOR 01/21/2003 dak0879
C-SIZE
NOTICE OF CONFIDENTIAL INFORMATION
INFORMATION CONTAINED HEREIN IS CONFIDENTIAL AND PROPERTY OF MOHAWK RESOURCES LTD., WHERE DRAWING IS FURNISHED TO OTHERS IT SHALL BE USED SOLELY FOR PURPOSES OF INSPECTION, INSTALLATION, OR MAINTENANCE. THE INFORMATION SHALL NOT BE USED OR DISCLOSED BY THE RECIPIENT FOR ANY OTHER PURPOSES WHATSOEVER.
NOTES:
1. REMOVE ALL SHARP CORNERS & EDGES.
2. UNLESS OTHERWISE SPECIFIED, SURFACE FINISH TO BE 125 RMS.
3. WELDING MEDIUM SHALL CONFORM TO AWS SPECIFICATIONS TO E-70XX ELECTRODES OR E-7011 CODE 5.3 FLUX CORE WIRE ONLY.
TOLERANCES
ANGULAR ±1°
FRACTIONAL ±1/64
DECIMAL
.XX ±.030
.XXX ±.005
FILE NAME Z2626-Z-21.dwg
Z2626-
NEXT ASSEMBLY
SCALE NONE
DATE 10/9/01
DRAWN rwv7089
CHECKED
APPROVED
WEIGHT n/a LB.
MOHAWK RESOURCES LTD.
TITLE 2 HP, 208 VAC, 1 PHASE Electrical Schematic, Tomahawk
FROM N/A
DRAWING NUMBER Z2626-Z-21
D

Figure 14



#	DESCRIPTION	DATE	APPROVED
A	601-420-077 FITTING ADDED	06/08/2002	dak0879
B	REPLACED DIVERTER	08/18/2002	cdh7726
C	Item 8 was 0.032 Dia Orifice	05/01/2003	rwv7089

ITEM	NAME	DESCRIPTION	QTY	MATERIAL	VENDOR	NOTE	MASS	PRICE
8	601-420-077	Fitting, Str., #6 ORB To #6 Jic (Orifice)	1		Aeroquip #6400-6-6S (R-050)		0.000	0.00
7	601-610-001	Hydraulic Fluid, 3 Gallon Approx	1		Dexron III		0.000	0.00
6	601-300-061	Power Unit, 1 Phase, 208 VAC	1		Monarch #M-		0.000	0.00
5	601-410-030	Diverter Valve	1		Fluid Power #242239AA		0.000	0.00
4	601-410-056	Bleeder Valve	1		Hydraforce #HV08-2005-6T-N		0.000	0.00
3	601-410-055	Velocity Fuse, 4 GPM	3		Vanberg #28900-503-4		0.000	0.00
2	ZZ626-51	Cylinder Assembly -- Offside	1		Waltco #21867-5000		0.000	0.00
1	ZZ626-50	Cylinder Assembly -- Mainside	1		Waltco #21868-5000		0.000	0.00

Parts List

ZZ626-	XXX-XXX-XXX	SCALE 10"=1'-0"	DRAWN rwv7089
XXX-XXX-XXX	XXX-XXX-XXX	CHECKED	APPROVED
XXX-XXX-XXX	XXX-XXX-XXX	DATE 10/9/01	WEIGHT n/a LB.
NEXT ASSEMBLY		FILE NAME ZZ626-Z-22.dwg	FROM N/A

TOLERANCES: ANGULAR ± 1°; FRACTIONAL ± .030; DECIMAL .XX ± .030; .XXX ± .005

NOTES:
1. REMOVE ALL SHARP CORNERS & EDGES.
2. UNLESS OTHERWISE SPECIFIED, SURFACE FINISH TO BE 125 RMS.
3. WELDING MEDIUM SHALL CONFORM TO AWS SPECIFICATIONS TO E-7XXX ELECTRODES OR E-70T1 CODE 5.9 FLUX CORE WIRE ONLY.

Figure 15

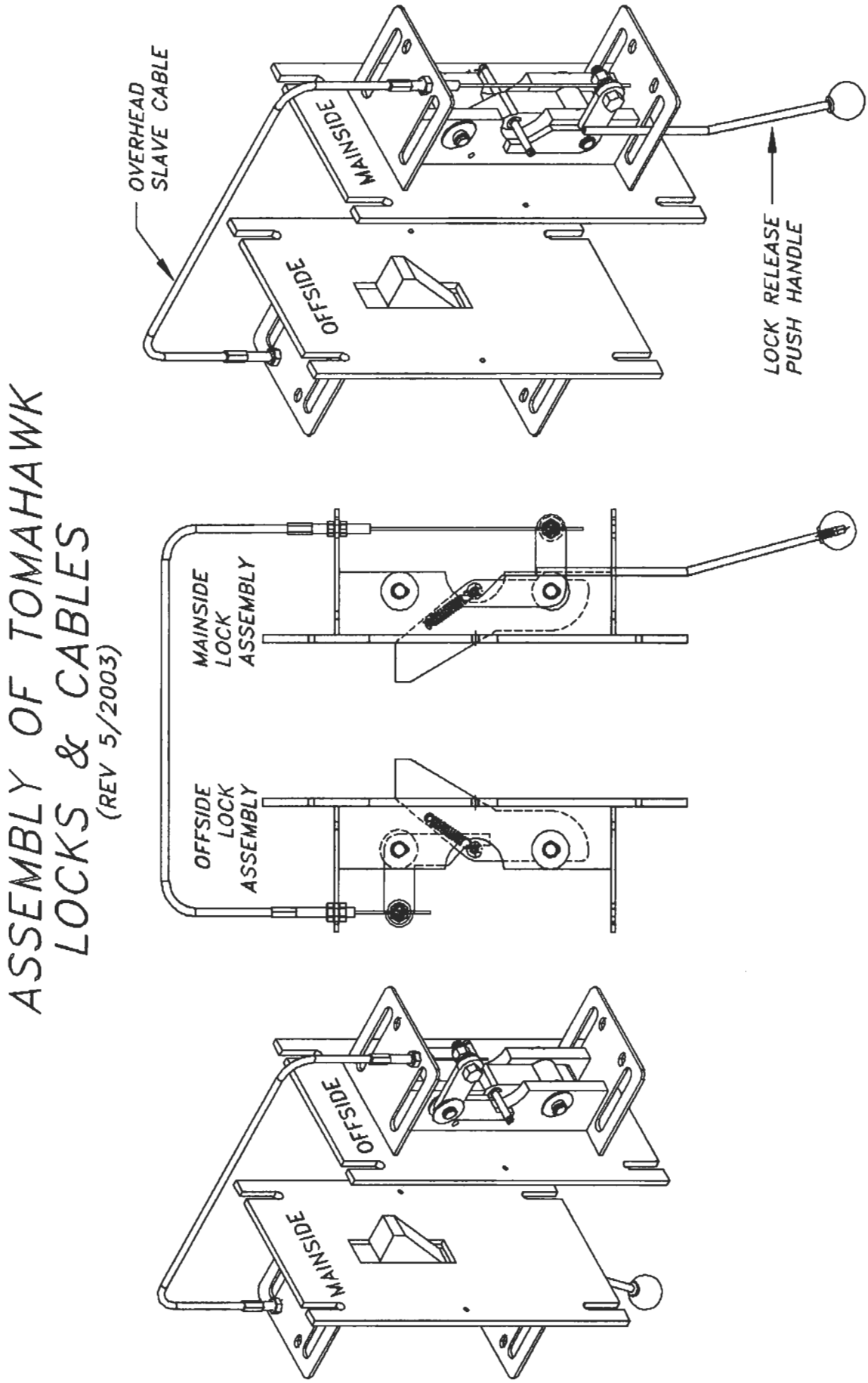
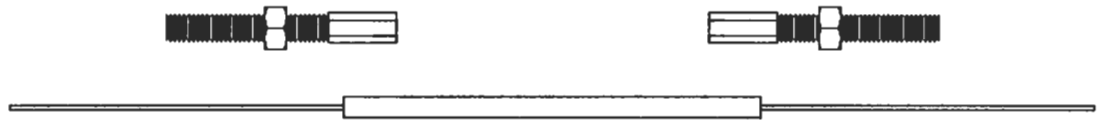

ASSEMBLY OF TOMAHAWK
LOCKS & CABLES
(REV 5/2003)
OVERHEAD
SLAVE CABLE
MAINSIDE
OFFSIDE
LOCK RELEASE
PUSH HANDLE
MAINSIDE
LOCK
ASSEMBLY
OFFSIDE
LOCK
ASSEMBLY
OFFSIDE
MAINSIDE

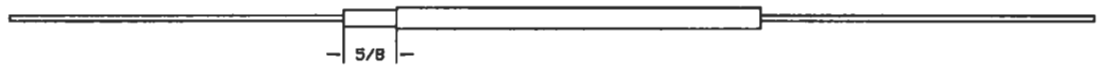
Figure 16

SLAVE CABLE MODIFICATION INSTRUCTIONS:

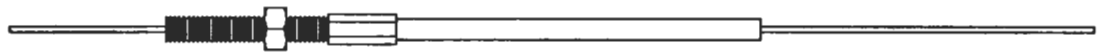
STEP 1:
GATHER PARTS; (1) SLEEVED CABLE & (2) THREADED ENDS



STEP 2:
STRIP 5/8" OF BLACK PLASTIC AWAY FROM ONE END OF CABLE SLEEVE.
(CUT BLACK PLASTIC WITH A RAZOR OR KNIFE AND PEAL AWAY)
FEED WIRE CABLE THRU CABLE SLEEVE.



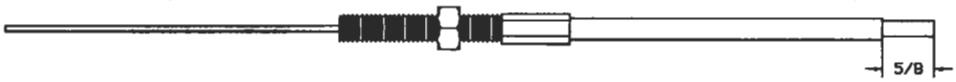
STEP 3:
PRESS THREADED CONNECTOR OVER STRIPED END OF SLEEVE, TURNING COUNTER-CLOCKWISE WHILE PRESSING. (USE GLUE OR ADHESIVE AS NEEDED)



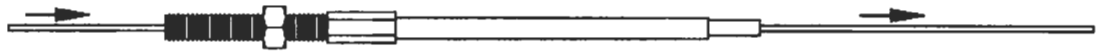
STEP 4:
CONNECT THIS THREADED END TO TOP OF MAINSIDE LOCK BOX AS SHOWN IN LOCK ASSEMBLY DIAGRAM. ROUTE SLEEVING WITH HYDRAULIC LINES, ADDING WIRE TIES AS NEEDED. MARK OTHER END OF SLEEVING AT TOP OF OFFSIDE LOCK BOX.

STEP 5:
PULL CABLE THRU SLEEVING TOWARDS MAINSIDE UNTIL A FEW FEET OF CABLE ARE EXPOSED AT MAINSIDE END. CUT OFFSIDE END OF SLEEVING AT MARK (FROM STEP 4).
AVOID CUTTING INNER CABLE !!

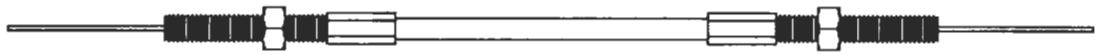
STEP 6:
STRIP 5/8" OF BLACK PLASTIC AWAY FROM SLAVE END OF CABLE SLEEVE.
(CUT BLACK PLASTIC WITH A RAZOR OR KNIFE AND PEAL AWAY)



STEP 7:
PUSH CABLE BACK THRU SLEEVING UNTIL THERE IS EVEN EXPOSURE OF CABLE AT BOTH ENDS.



STEP 8:
PRESS THREADED CONNECTOR OVER OFFSIDE STRIPED END OF SLEEVE, TURNING COUNTER-CLOCKWISE WHILE PRESSING. (USE GLUE OR ADHESIVE AS NEEDED)



STEP 9:
CONNECT REMAINING THREADED END TO TOP OF OFFSIDE LOCK BOX AS SHOWN IN LOCK ASSEMBLY DIAGRAM.

STEP 10:
ENSURE THAT BOTH LOCKS ARE ENGAGED (LIFT IS ON LOCKS). PULL CABLES THRU CROSSDRILLED BOLTS AS SHOWN IN LOCK ASSEMBLY DIAGRAM. TIGHTEN NUTS AGAINST CABLES. ADJUST AS NECCESARY. TRIM EXCESSIVE CABLE WHEN LOCK RELEASES ARE TESTED AND FUCTION PROPERLY.

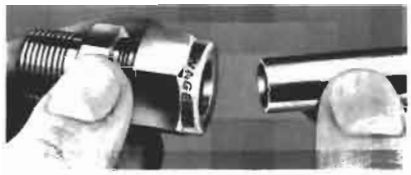
Figure 17

Installation Instructions

Swagelok tube fittings 1 in. or 25 mm and Under

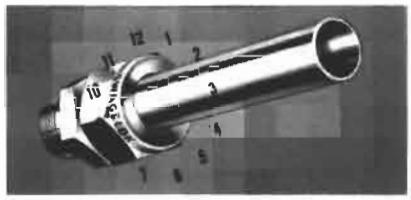
Swagelok tube fittings come to you completely assembled, finger-tight and are ready for immediate use. Disassembly before use is unnecessary and can result in dirt or foreign material getting into fitting and causing leaks.

Swagelok tube fittings are installed in three (3) easy steps:



Step 1

Simply insert the tubing into the Swagelok tube fitting. ***Make sure that the tubing rests firmly on the shoulder of the fitting and that the nut is finger-tight.***



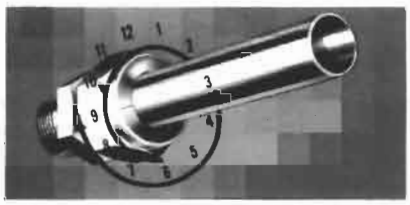
Step 2

Before tightening the Swagelok nut, scribe the nut at the 6 o'clock position.

High Pressure Applications or High-Safety-Factor Systems

Due to variations in tubing diameters, a common starting point is desirable. Using a wrench, tighten the nut to SNUG position. Snug is determined by tightening the nut until the tubing will not rotate freely (by hand) in the fitting. (If tube rotation is not possible, tighten the nut approximately 1/8 turn from the finger-tight position.) At this point, scribe the nut at the 6 o'clock position and tighten the nut 1 1/4 turns.[1] The fitting will now hold pressures well above the rated working pressure of the tubing.

Note: A Swagelok Hydraulic Swaging Unit must be used for assembly of Swagelok tube fittings onto 1 1/4, 1 1/2, 2 in., 28, 30, 32, and 38 mm outside diameter steel and stainless steel tubing (see page 55).



Step 3

Hold the fitting body steady with a backup wrench and tighten the nut 1 1/4 turns.[1] Watch the scribe mark, make one complete revolution and continue to the 9 o'clock position.

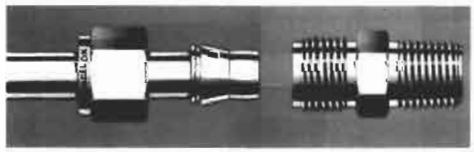
By scribing the nut at the 6 o'clock position as it appears to you, there will be no doubt as to the starting position. When the nut is tightened 1 1/4 turns to the 9 o'clock position, you can easily see that the fitting has been properly tightened.

Use of the gap inspection gage (1 1/4 turns from finger-tight) ensures sufficient pull-up.

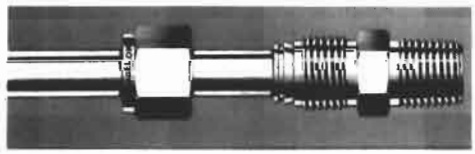
[1]For 1/16, 1/8, 3/16 in., 2, 3, and 4 mm size tube fittings, only 3/4 turn from finger-tight is necessary.

Retightening Instructions

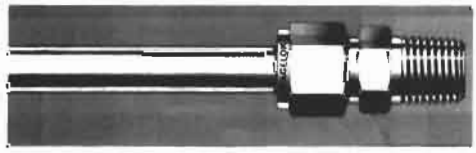
Connections can be disconnected and retightened many times.
The same reliable leak-proof seal can be obtained every time the connection is remade.



1. Fitting shown in the disconnected position.



2. Insert tubing with preswaged ferrules into fitting body until front ferrule seats.



3. Tighten nut by hand. Rotate nut to the original position with a wrench. *An increase in resistance will be encountered at the original position.* Then tighten slightly with the wrench. Smaller tube sizes will take less tightening to reach the original position, while larger tube sizes will require more tightening. The wall thickness will also have an effect on tightening.

Figure 18

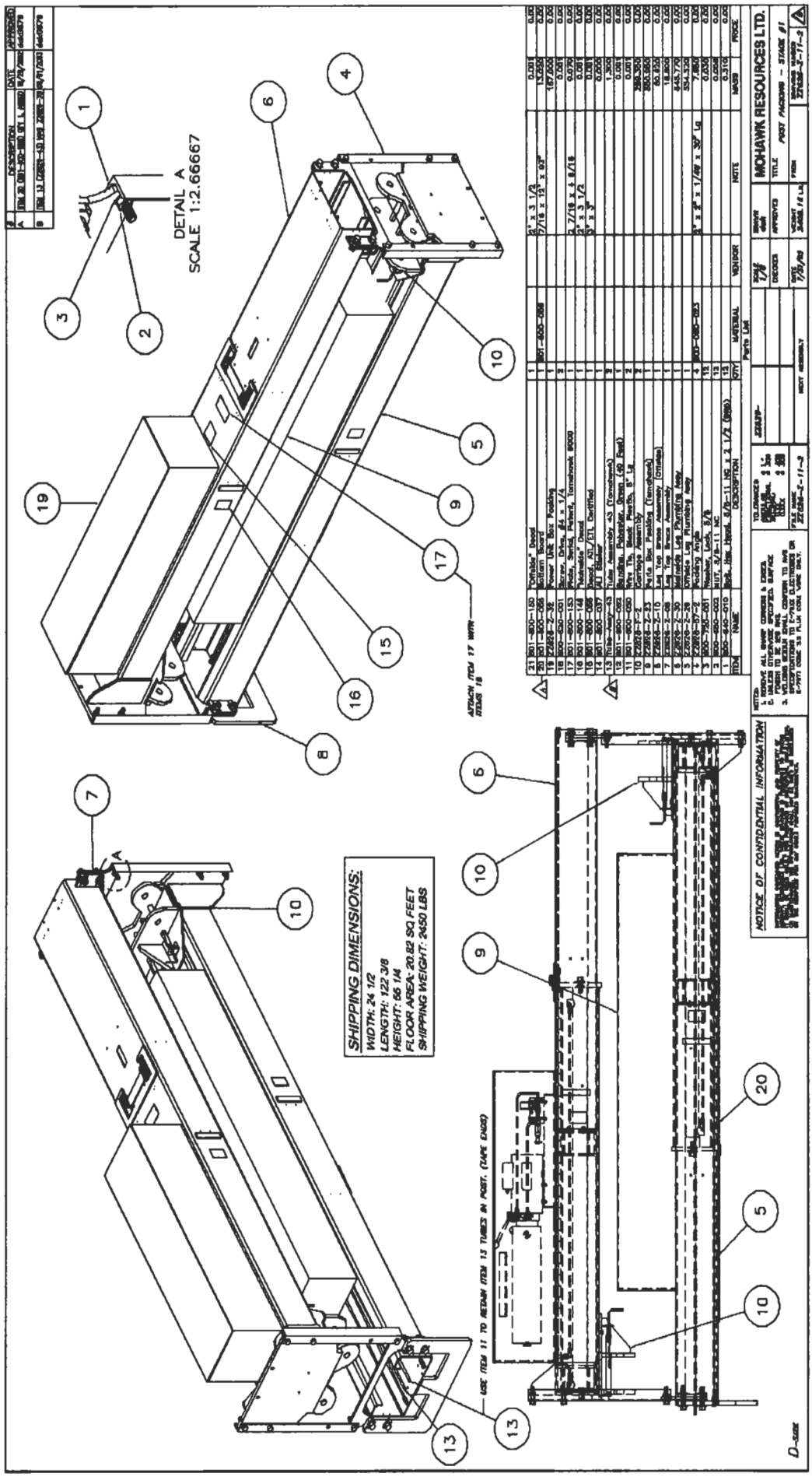
MOHAWK

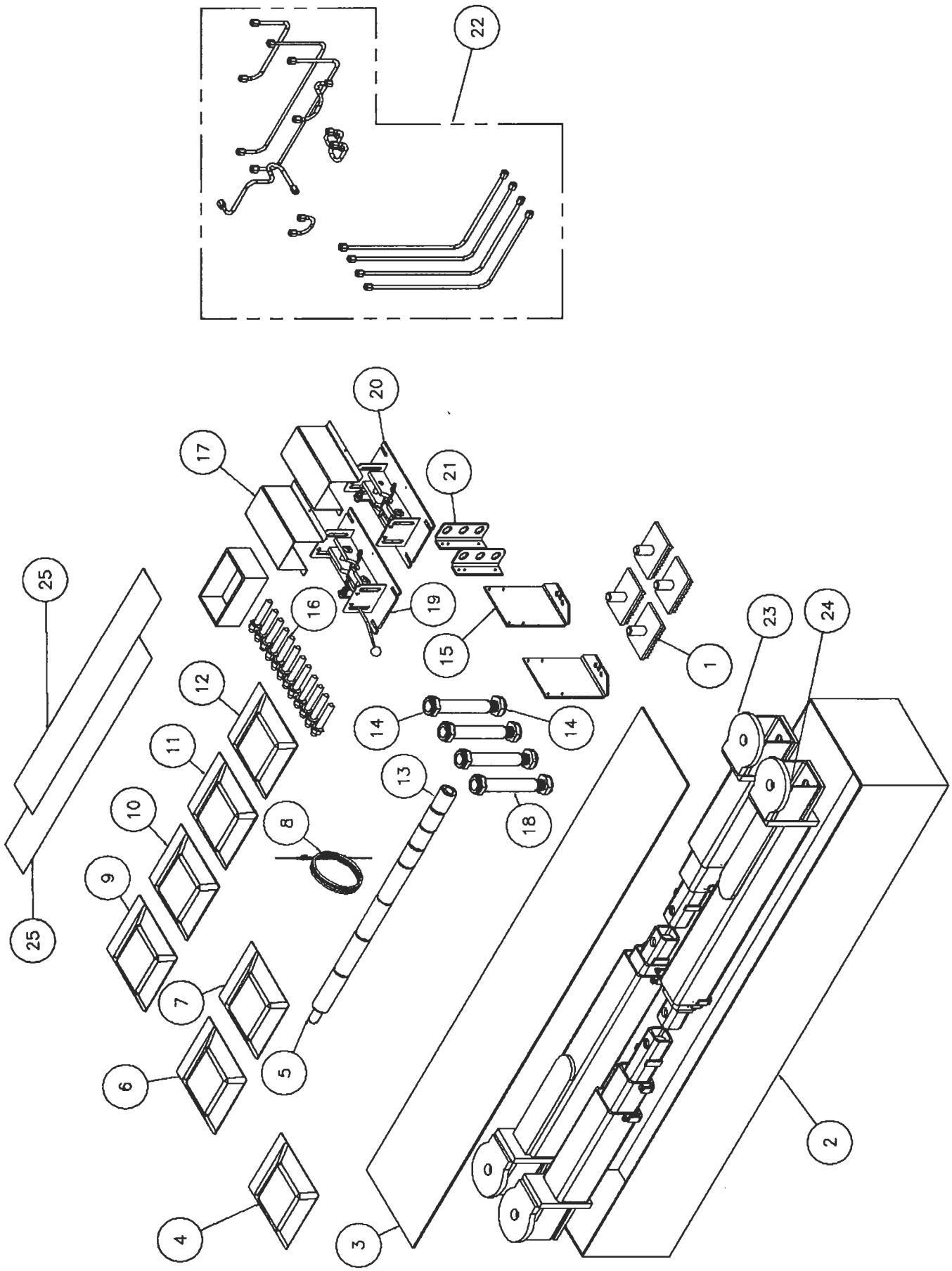
TOMAHAWK-9000

PACKING 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.

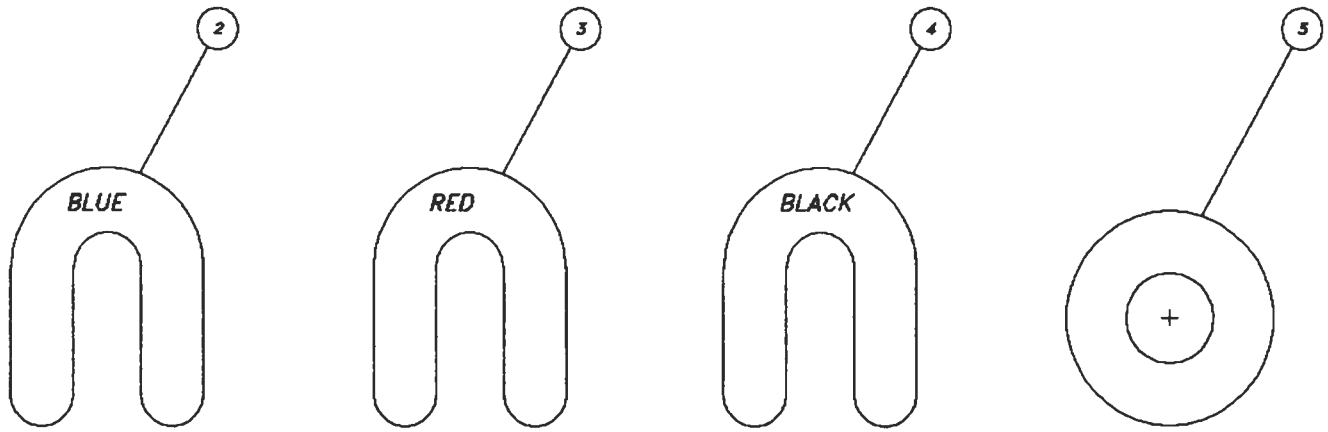

DETAIL A
SCALE 1:2.66667
SHIPPING DIMENSIONS:
WIDTH: 24 1/2
LENGTH: 122 3/8
HEIGHT: 55 1/4
FLOOR AREA: 20.82 SQ FEET
SHIPPING WEIGHT: 2450 LBS
USE ITEM 11 TO RETAIN ITEM 13 TIMES IN POST. (TAPE ENDS)
NOTICE OF CONFIDENTIAL INFORMATION
MOHAWK RESOURCES LTD.
POST PACKING - STAGE #1


22
20
17
21
25
16
19
15
1
23
24
12
14
14
11
13
10
8
18
9
7
6
5
4
3
2
25

Parts Box Packing, ZZ626-Z-23

ITEM	NAME	DESCRIPTION	QTY
1	025-002-035	Lifting Pad Weldment (Teeth)	4
2	601-600-053	Box, 14" Wide x 78" Long x 12" High	1
3	ZZ626-440	Cardboard, 13" x 77" (or Scrap)	1
4	ZZ626-Z-14	Decal Packet - Tomahawk	1
5	025-002-128	Height Adapter, 6"	4
6	ZZ626-Z-15	Hydraulic Line Clip Parts Bag - Tomahawk	1
7	007-007-075	Shim Parts Bag	1
8	ZZ626-Z-13	Slave Push-Pull Cable Assembly	1
9	ZZ626-Z-12	Fitting Bag - Tomahawk	1
10	ZZ626-Z-18	Power Unit Assy Parts Bag - Tomahawk	1
11	ZZ626-Z-19	Bleeder Valve Parts Bag - Tomahawk	1
12	ZZ626-Z-16	Lock Parts Bag - Tomahawk	1
13	025-002-127	Height Adapter, 3"	4
14	600-690-015	Nut, Nylon Lock, 1 1/2-12 NF (Jam)	8
15	ZZ626-73	Line Support Angle	2
16	600-670-002	Wej-it Anchor, 3/4 x 5" Lg	12
17	ZZ626-20	Lock Cover	2
18	ZZ626-42	Swing Arm Pin	4
19	ZZ626-I-2	Lock Sub-Assembly (Mainside)	1
20	ZZ626-I-3	Lock Sub-Assembly (Offside)	1
21	025-002-126	Height Adapter Bracket	2
22	ZZ626-Z-09-2	Tube Assy Kit #1 - For Shipping Assy	1
23	ZZ626-N-2P	Swing Arm Assembly, Short	2
24	ZZ626-M-2P	Swing Arm Assembly, Long	2
25	601-800-139	Decal, "Tomahawk", 5" x 36"	2

REV.	DESCRIPTION	DATE	BY	APP'D.
B	ITEM 5 (600-710-010) ADDED	1/02	dak	



PLACE ITEMS 2, 3, & 4 INTO ITEM 1 AND SEAL SHUT.

ITEM	PART NUMBER	DESCRIPTION	QTY
A 5	600-710-010	WASHER, FLAT, 1"	4
4	600-740-003	SHIM, HORSESHOE, PLASTIC, BLACK, 1/4 THK	8
3	600-740-002	SHIM, HORSESHOE, PLASTIC, RED, 1/8 THK	8
2	600-740-001	SHIM, HORSESHOE, PLASTIC, BLUE, 1/16 THK	8
1	601-600-022	BAG, ZIP-LOK, TRANSPARENT .002 x 9" x 12"	1

C-SIZE

NOTES:
1. REMOVE ALL SHARP CORNERS & EDGES.
2. UNLESS OTHERWISE SPECIFIED, SURFACE FINISH TO BE 125 RMS.
3. WELDING MEDIUM SHALL CONFORM TO AWS SPECIFICATIONS TO E-70XX ELECTRODES OR E-70T1 CODE 5.3 FLUX CORE WIRE ONLY.

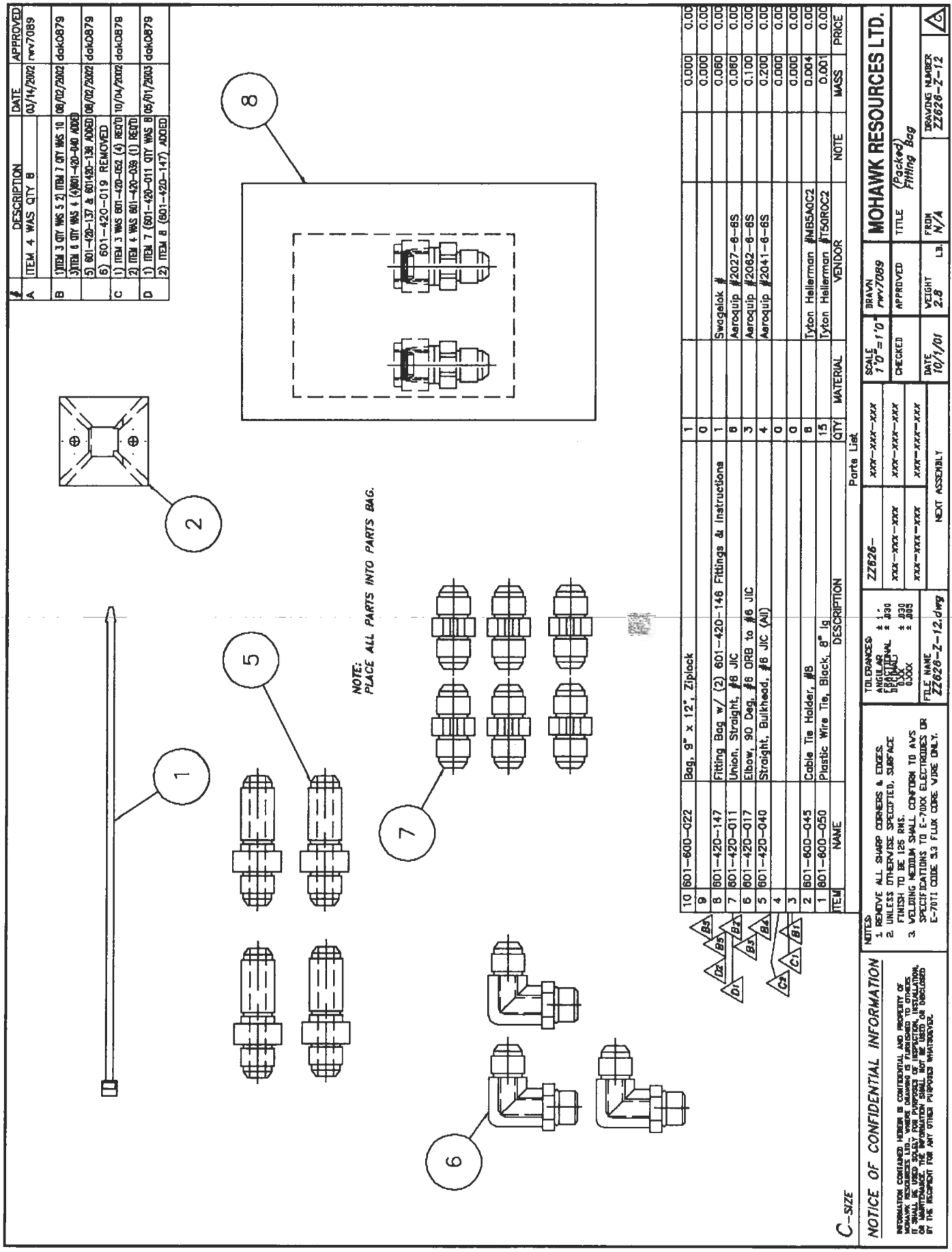
TOLERANCES:
ANGULAR ± 1°
FRACTIONAL ± .030
DECIMAL:
0.XX ± .030
0.XXX ± .005

FILE NAME B07075

015-000-014	
009-010-073	012-012-056
006-000-045	007-007-043

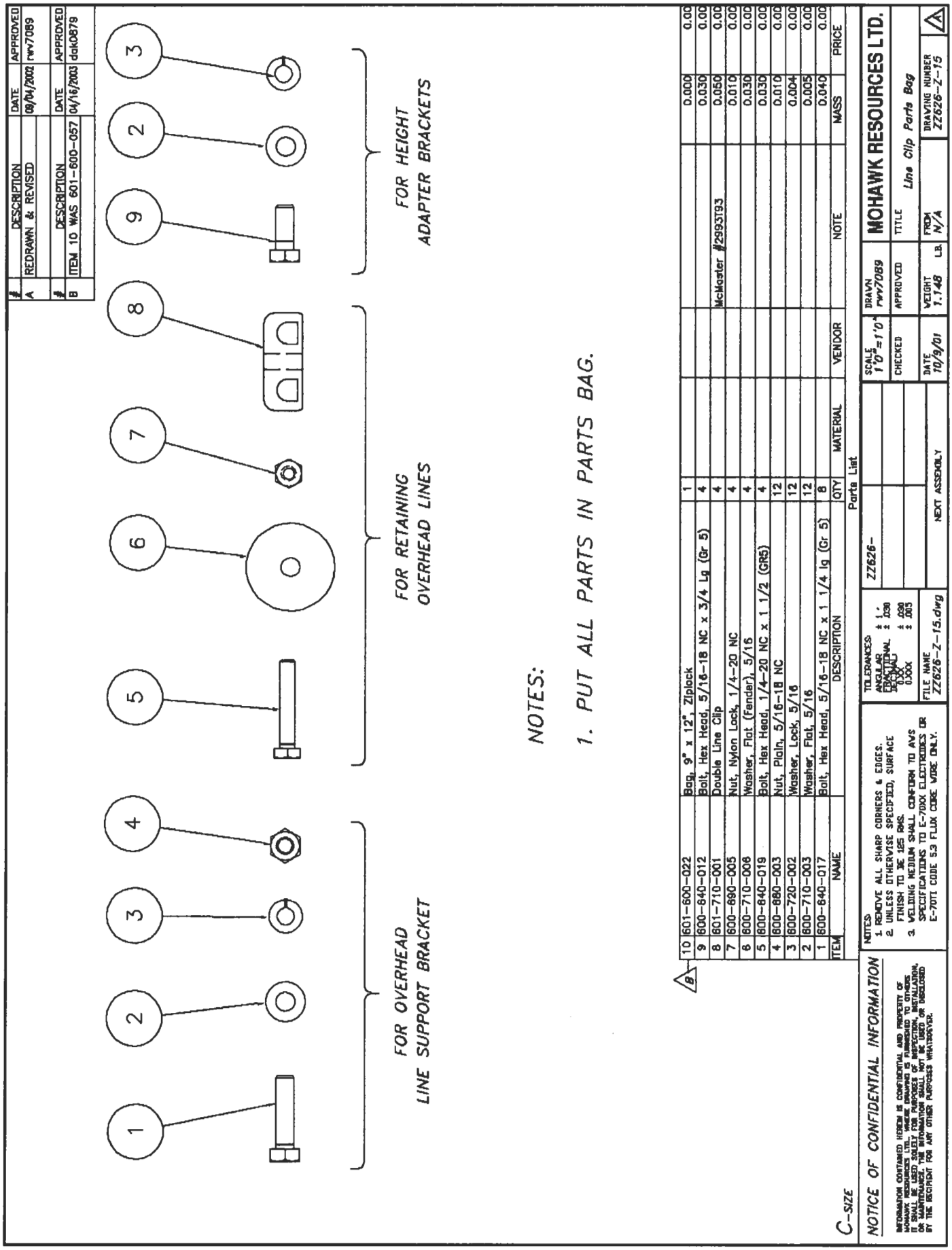
NEXT ASSEMBLY

SCALE NONE	DRAWN dak	MOHAWK RESOURCES LTD.	
CHECKED RV	APPROVED	TITLE BAG/ SHIMS	
DATE 3/95	WEIGHT .85 LB.	FROM	DRAWING NUMBER 007-007-075 A

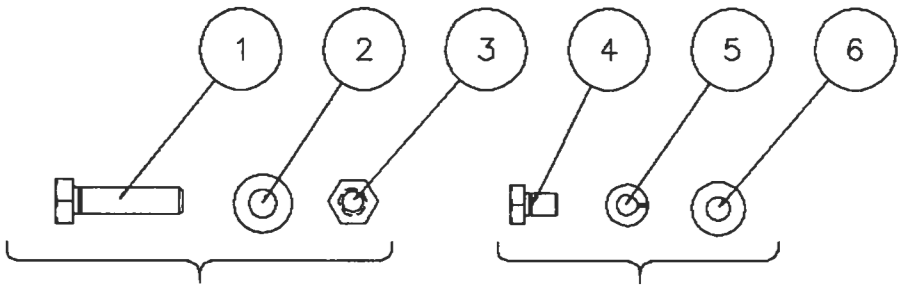


#	DESCRIPTION	DATE	APPROVED
A	ITEM 4 WAS QTY 8	03/14/2002	rwv7089
B	1)ITEM 3 QTY WAS 5 2) ITEM 7 QTY WAS 10 3)ITEM 6 QTY WAS 4 (4)601-420-040 ADDED	06/02/2002	dak0879
	5) 601-420-137 & 601420-138 ADDED	06/02/2002	dak0879
	6) 601-420-019 REMOVED		
C	1) ITEM 3 WAS 601-420-052 (4) RQTD 2) ITEM 4 WAS 601-420-039 (1) RQTD	10/04/2002	dak0879
D	1) ITEM 7 (601-420-011 QTY WAS 8 2) ITEM 8 (601-420-147) ADDED	05/01/2003	dak0879

ITEM	NAME	DESCRIPTION	QTY	MATERIAL	VENDOR	NOTE	MASS	PRICE
10	601-600-022	Bag, 9" x 12", Ziplock	1				0.000	0.00
9			0				0.000	0.00
8	601-420-147	Fitting Bag w/ (2) 601-420-146 Fittings & Instructions	1				0.060	0.00
7	601-420-011	Union, Straight, #8 JIC	8		Swagelok #		0.060	0.00
6	601-420-017	Elbow, 90 Deg, #8 ORB to #8 JIC	3		Aeroquip #2027-8-8S		0.080	0.00
5	601-420-040	Straight, Bulkhead, #8 JIC (All)	4		Aeroquip #2062-8-8S		0.100	0.00
4			0		Aeroquip #2041-8-8S		0.200	0.00
3			0				0.000	0.00
2	601-600-045	Cable Tie Holder, #8	8		Tyton Hellerman #NB5A0C2		0.000	0.00
1	601-600-050	Plastic Wire Tie, Black, 8" lg	15		Tyton Hellerman #T50R0C2		0.004	0.00
							0.001	0.00


FOR OVERHEAD
LINE SUPPORT BRACKET
FOR RETAINING
OVERHEAD LINES
FOR HEIGHT
ADAPTER BRACKETS
NOTES:
1. PUT ALL PARTS IN PARTS BAG.
Parts List
ITEM NAME DESCRIPTION QTY MATERIAL VENDOR NOTE MASS PRICE
10 601-600-022 Bag, 9" x 12", Ziplock 1 0.000 0.00
9 600-840-012 Bolt, Hex Head, 5/16-18 NC x 3/4 Lg (Gr 5) 4 0.030 0.00
8 601-710-001 Double Line Clip 4 McMaster #2993793 0.050 0.00
7 600-690-005 Nut, Nylon Lock, 1/4-20 NC 4 0.010 0.00
6 600-710-008 Washer, Flat (Fender), 5/16 4 0.030 0.00
5 600-840-019 Bolt, Hex Head, 1/4-20 NC x 1 1/2 (GR5) 4 0.030 0.00
4 600-880-003 Nut, Plain, 5/16-18 NC 12 0.010 0.00
3 600-720-002 Washer, Lock, 5/16 12 0.004 0.00
2 600-710-003 Washer, Flat, 5/16 12 0.005 0.00
1 600-640-017 Bolt, Hex Head, 5/16-18 NC x 1 1/4 lg (Gr 5) 8 0.040 0.00
NOTICES
1. REMOVE ALL SHARP CORNERS & EDGES.
2. UNLESS OTHERWISE SPECIFIED, SURFACE FINISH TO BE 125 RMS.
3. WELDING MEDIUM SHALL CONFORM TO AWS SPECIFICATIONS TO E-70XX ELECTRODES OR E-70T1 CODE 5.3 FLUX CORE WIRE ONLY.
TOLERANCES
ANGULAR ± 1°
DECIMAL .XX ± .030
.XXX ± .005
FILE NAME ZZ626-Z-15.dwg
ZZ626-
NEXT ASSEMBLY
SCALE 10"=1'0
DRAWN rwv7089
CHECKED
APPROVED
DATE 10/9/01
WEIGHT 1.148 LB.
MOHAWK RESOURCES LTD.
TITLE Line Clip Parts Bag
FROM N/A
DRAWING NUMBER ZZ626-Z-15
A
C-SIZE
NOTICE OF CONFIDENTIAL INFORMATION
INFORMATION CONTAINED HEREIN IS CONFIDENTIAL AND PROPERTY OF MOHAWK RESOURCES LTD. AND IS LOANED FOR REFERENCE, INSPECTION, IT SHALL BE USED SOLELY FOR PURPOSES OF INSPECTION, INSTALLATION, OR MAINTENANCE. THE INFORMATION SHALL NOT BE USED OR DISCLOSED BY THE RECIPIENT FOR ANY OTHER PURPOSES WHATSOEVER.
DESCRIPTION DATE APPROVED
A REDRAWN & REVISED 08/04/2002 rwv7089
DESCRIPTION DATE APPROVED
B ITEM 10 WAS 601-600-057 04/16/2003 dak0879

#	DESCRIPTION	DATE	APPROVED
A	ITEMS 10-17 ADDED	11/09/2001	dak0879
B	ITEM 8 EYELET REMOVED (WAS 600-850-015)	12/26/2001	rwv7089
C	1) 600-850-014 QTY WAS 1 2) 600-720-009 (4) REMOVED	01/14/2002	dak0879
	3) 600-680-013 (2) REMOVED 4) 600-710-013 (8) REMOVED	01/14/2002	dak0879
	5) 600-600-005 (4) REMOVED	01/14/2002	dak0879
D	(4) 600-640-080, (4) 600-710-007, (2) 600-850-014 REMOVED	03/20/2002	dak0879
	AND ITEM 9 WAS 600-690-018		RV
E	600-690-005 & 600-710-009 REMOVED	06/06/2002	dak0879



FOR ATTACHING LOCK ASSEMBLY TO POST

FOR ATTACHING LOCK COVER TO LOCK ASSEMBLY

NOTES:

1. PLACE ALL PARTS INTO PARTS BAG (ITEM 7).

ITEM	NAME	DESCRIPTION	QTY	MATERIAL	VENDOR	NOTE	MASS	PRICE
7	601-600-057	Bag, 6 5/8" x 5 7/8", Ziplock	1				0.000	0.00
6	600-710-004	Washer, Flat, 1/4	4				0.005	0.00
5	600-720-007	Washer, Lock, 1/4	4				0.002	0.00
4	600-640-039	Bolt, Hex Head, 1/4-20 NC x 3/8 Lg (Gr 5)	4				0.010	0.00
3	600-690-001	Nut, Nylon Lock, 5/16-18 NC	8				0.010	0.00
2	600-710-003	Washer, Flat, 5/16	16				0.005	0.00
1	600-640-017	Bolt, Hex Head, 5/16-18 NC x 1 1/4 lg (Gr 5)	8				0.040	0.00

Parts List

C-SIZE

NOTES:
1. REMOVE ALL SHARP CORNERS & EDGES.
2. UNLESS OTHERWISE SPECIFIED, SURFACE FINISH TO BE 125 RMS.
3. WELDING MEDIUM SHALL CONFORM TO AWS SPECIFICATIONS TO E-70XX ELECTRODES OR E-70T1 CODE 5.3 FLUX CORE WIRE ONLY.

TOLERANCES:
ANGULAR ± 1°
FRACTIONAL ± .030
DECIMAL
0.XX ± .030
0.XXX ± .005

FILE NAME ZZ626-Z-16.dwg

ZZ626-

NEXT ASSEMBLY

SCALE 1'0"=1'0" | DRAWN dak0879 | CHECKED | APPROVED

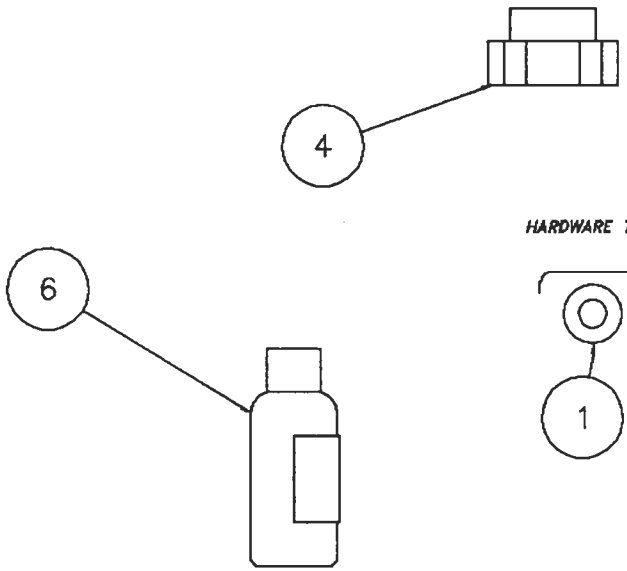
DATE 10/9/01 | WEIGHT .55 LB.

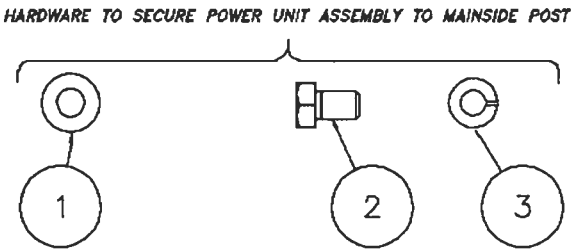
MOHAWK RESOURCES LTD.

TITLE Lock Parts Bag

FROM N/A | DRAWING NUMBER ZZ626-Z-16 | E

#	DESCRIPTION	DATE	APPROVED
A	(4) 600-640-012, (6) 600-690-001, (1) 007-007-174 REMOVED	03/20/2002	dak0879
	AND 600-710-003 QTY WAS (8)		RV
B	ZZ626-Z-33 ADDED	08/02/2002	dak0879
#	DESCRIPTION	DATE	APPROVED
c	ITEM 5 WAS 601-600-022	04/16/2003	dak0879





NOTES:

1. PLACE ALL PARTS INTO PARTS BAG.

ITEM	NAME	DESCRIPTION	QTY	MATERIAL	VENDOR	NOTE	MASS	PRICE
6	ZZ626-Z-33	Hydraulic Additive Fluid Assembly	1				0.085	0.00
5	601-800-057	Bag, 6 5/8" x 5 7/8", Ziplock	1				0.000	0.00
4	601-310-005	Breather Cap	1		MONARCH #01143		0.020	0.00
3	600-720-002	Washer, Lock, 5/16	4				0.004	0.00
2	600-640-053	Bolt, Hex Head, 5/16-18 NC x 1/2 Lg (Gr 5)	4				0.020	0.00
1	600-710-003	Washer, Flat, 5/16	4				0.005	0.00

Parts List

C-SIZE

NOTES:
1. REMOVE ALL SHARP CORNERS & EDGES.
2. UNLESS OTHERWISE SPECIFIED, SURFACE FINISH TO BE 125 RMS.
3. WELDING MEDIUM SHALL CONFORM TO AWS SPECIFICATIONS TO E-70XX ELECTRODES OR E-70T1 CODE 5.3 FLUX CORE WIRE ONLY.

TOLERANCES: ANGULAR ± 1°, FRACTIONAL ± .030, DECIMAL 0.XX ± .030, 0.XXX ± .005

FILE NAME: ZZ626-Z-18.dwg

ZZ626-

NEXT ASSEMBLY

SCALE: 1'0"=1'0" | DRAWN: dak0879 | CHECKED | APPROVED

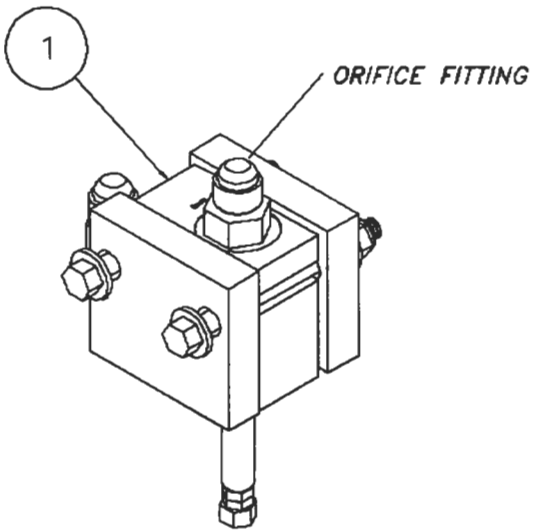
DATE: 10/9/01 | WEIGHT: .2 LB. | FROM: N/A

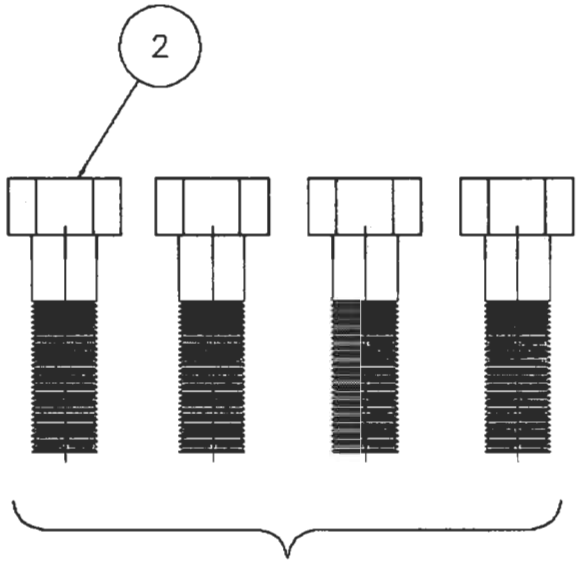
MOHAWK RESOURCES LTD.

TITLE: Power Unit Ass'y Parts Bag

DRAWING NUMBER: ZZ626-Z-18 C

#	DESCRIPTION	DATE	APPROVED
A	601-420-017 & 601-420-019 REMOVED	11/09/2001	dak0879
B	PARTS BAG REVISED & REDRAWN	06/02/2002	dak0879
C	Item 2 Added (600-640-003)	10/17/2002	rwv7089





USED TO REPLACE LONG BOLTS ON TOP LEG PACKING BRACKET

NOTES:

1. PLACE ALL PARTS INTO PARTS BAG (ITEM 3).

ITEM	NAME	DESCRIPTION	QTY	MATERIAL	VENDOR	NOTE	MASS	PRICE
3	601-600-022	Bag, 8" x 12", Ziplock	1				0.000	0.00
2	600-640-003	Bolt, Hex Head, 3/4-16 NF x 2 1/2" (GR5)	4				0.500	0.00
1	ZZ626-W-2	Bleeder Valve Assembly	1				2.020	0.00

Parts List

C-SIZE

NOTICE OF CONFIDENTIAL INFORMATION

NOTES:
1. REMOVE ALL SHARP CORNERS & EDGES.
2. UNLESS OTHERWISE SPECIFIED, SURFACE FINISH TO BE 125 RMS.
3. WELDING MEDIUM SHALL CONFORM TO AWS SPECIFICATIONS TO E-70XX ELECTRODES OR E-70T1 CODE 5.3 FLUX CORE WIRE ONLY.

TOLERANCES:
ANGULAR ± 1°
FRACTIONAL ± .030
DECIMAL:
0.XX ± .030
0.XXX ± .005

FILE NAME: ZZ626-Z-19.dwg

ZZ626-

NEXT ASSEMBLY

SCALE: 1"0"=1'0" | DRAWN: dak0879 | CHECKED | APPROVED | DATE: 10/9/01 | WEIGHT: 2.5 LB.

MOHAWK RESOURCES LTD.

TITLE: Bleeder Parts Bag

FROM: N/A | DRAWING NUMBER: ZZ626-Z-19 | C

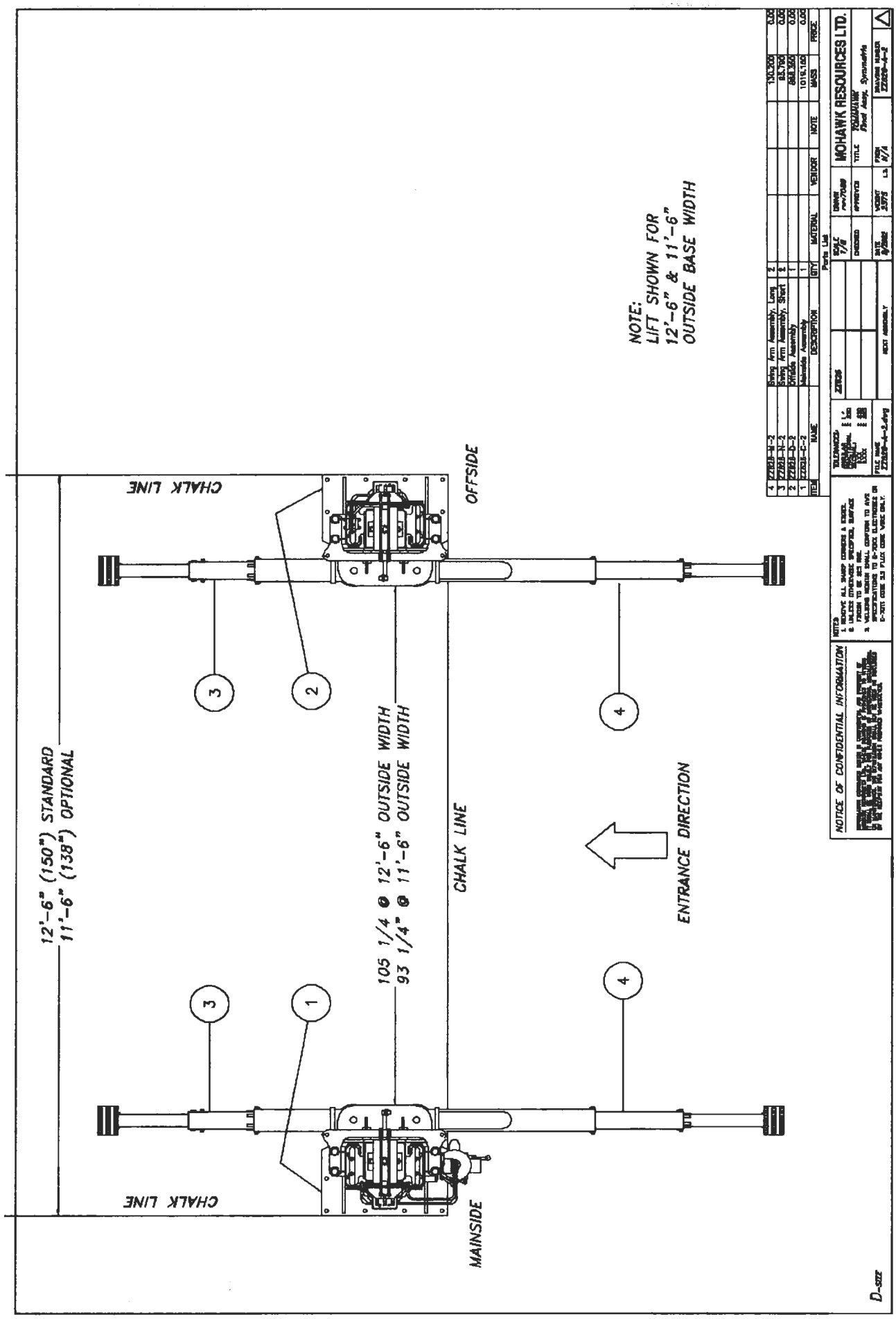
MOHAWK

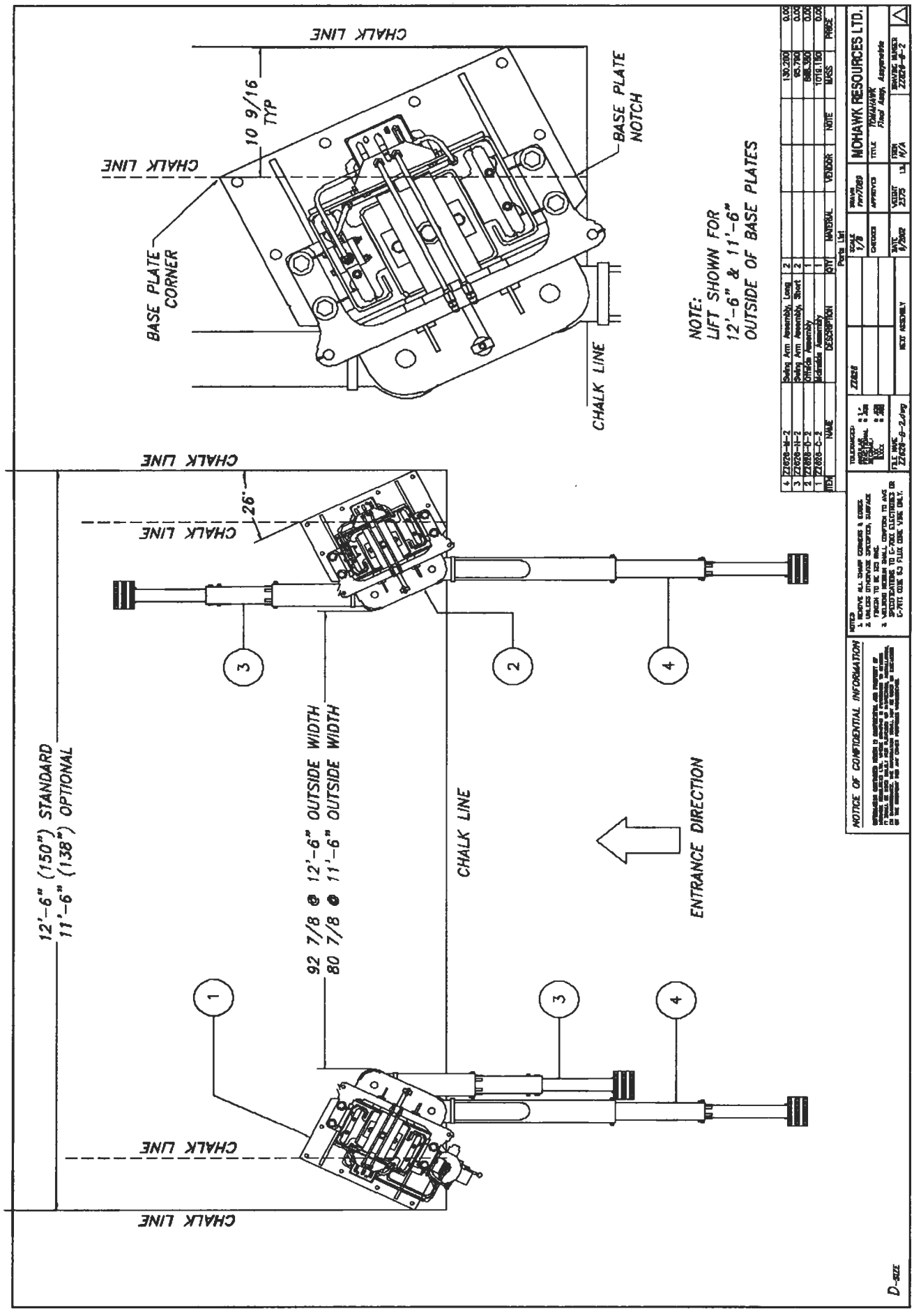
TOMAHAWK-9000

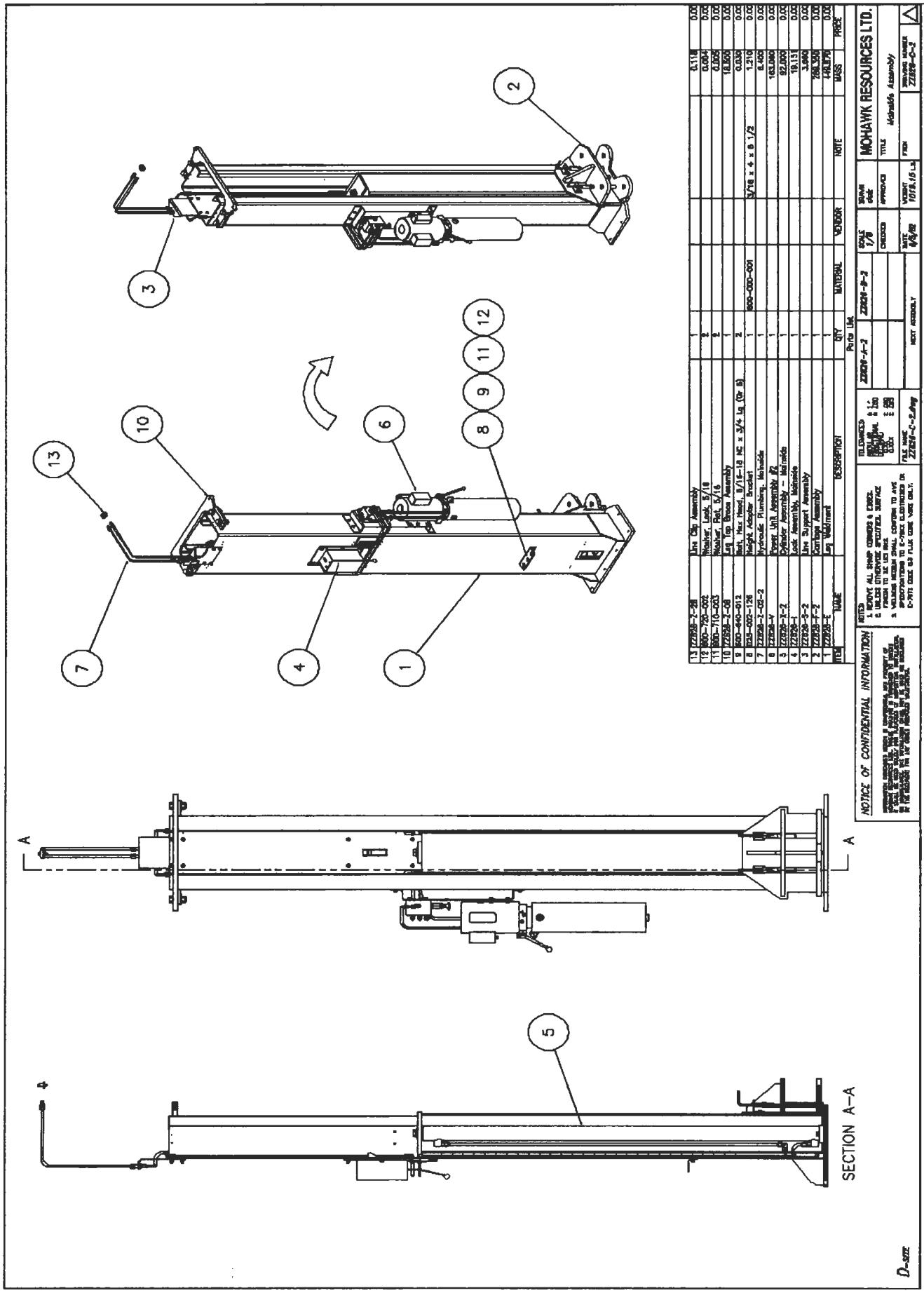
PARTS & ASSEMBLY DIAGRAMS

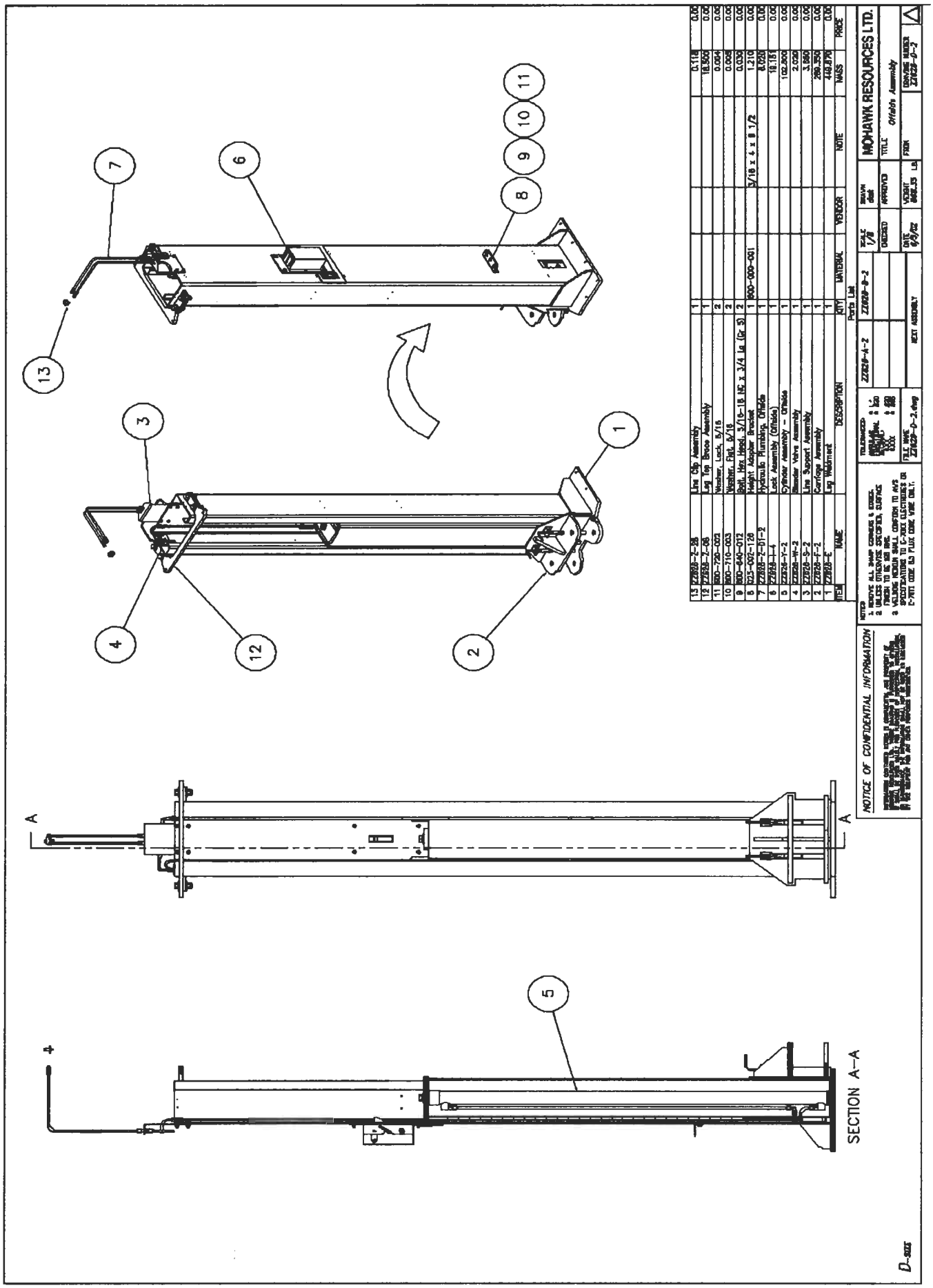
MOHAWK RESOURCES LTD.

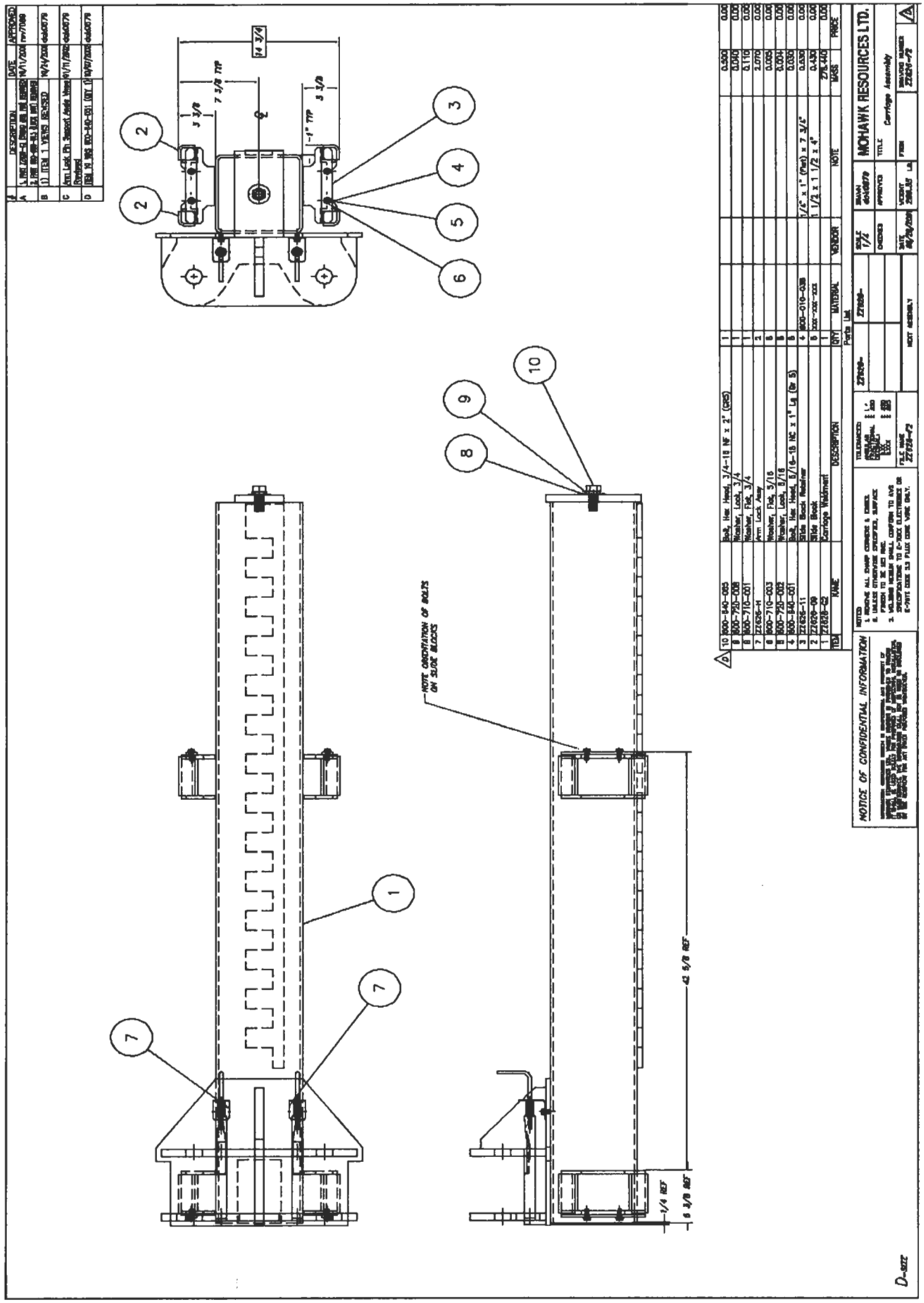
65 VROOMAN AVE.
AMSTERDAM, NY 12010
TOLL FREE: 1-800-833-2006
LOCAL: 1-518-842-1431
FAX: 1-518-842-1289
INTERNET: WWW.MOHAWKLIFTS.COM
E-MAIN: SERVICE@MOHAWKLIFTS.

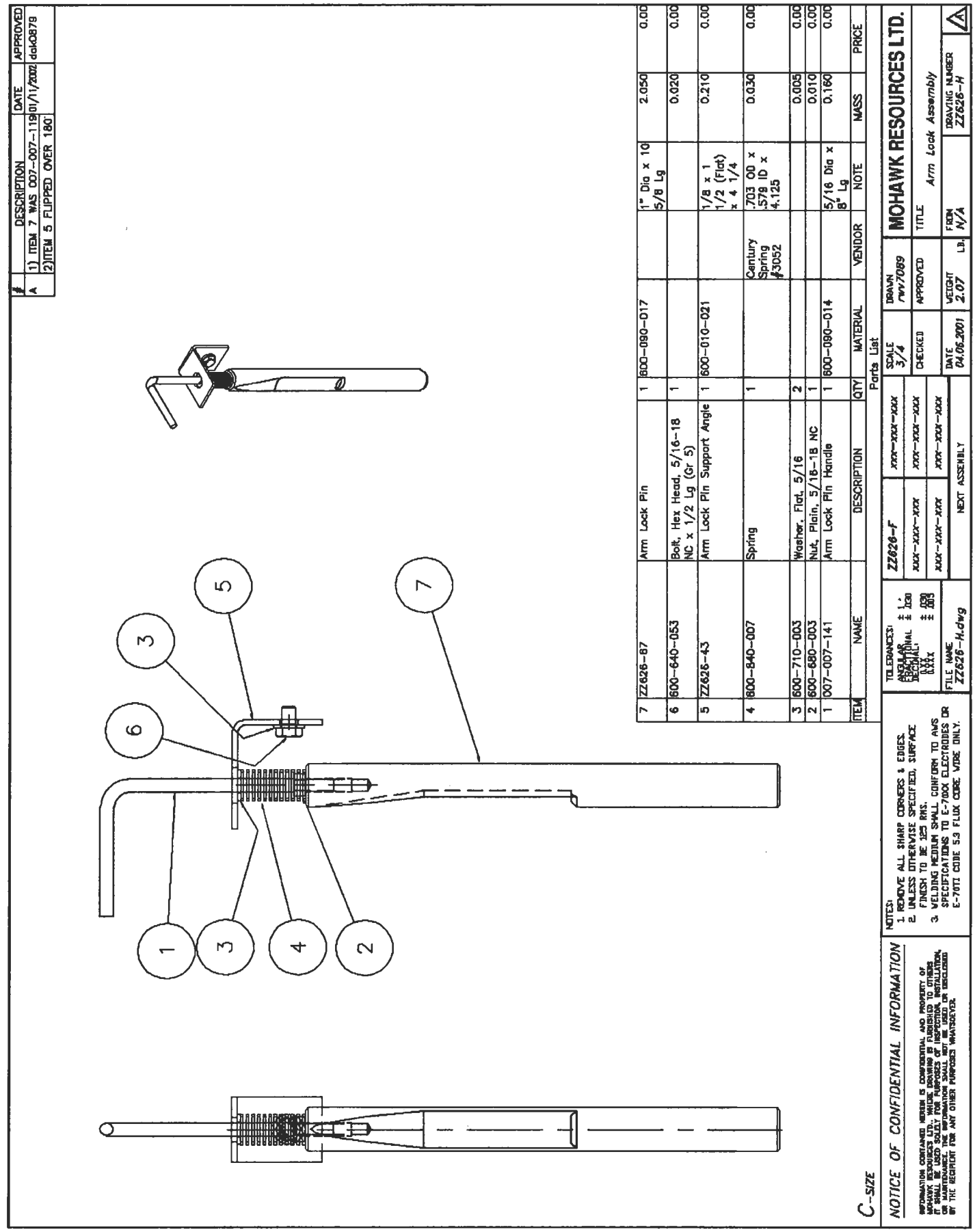

NOTE:
LIFT SHOWN FOR
12'-6" & 11'-6"
OUTSIDE BASE WIDTH
OFFSIDE
CHALK LINE
12'-6" (150") STANDARD
11'-6" (138") OPTIONAL
105 1/4 @ 12'-6" OUTSIDE WIDTH
93 1/4" @ 11'-6" OUTSIDE WIDTH
CHALK LINE
ENTRANCE DIRECTION
CHALK LINE
MAINSIDE
MOHAWK RESOURCES LTD.
NOTICE OF CONFIDENTIAL INFORMATION

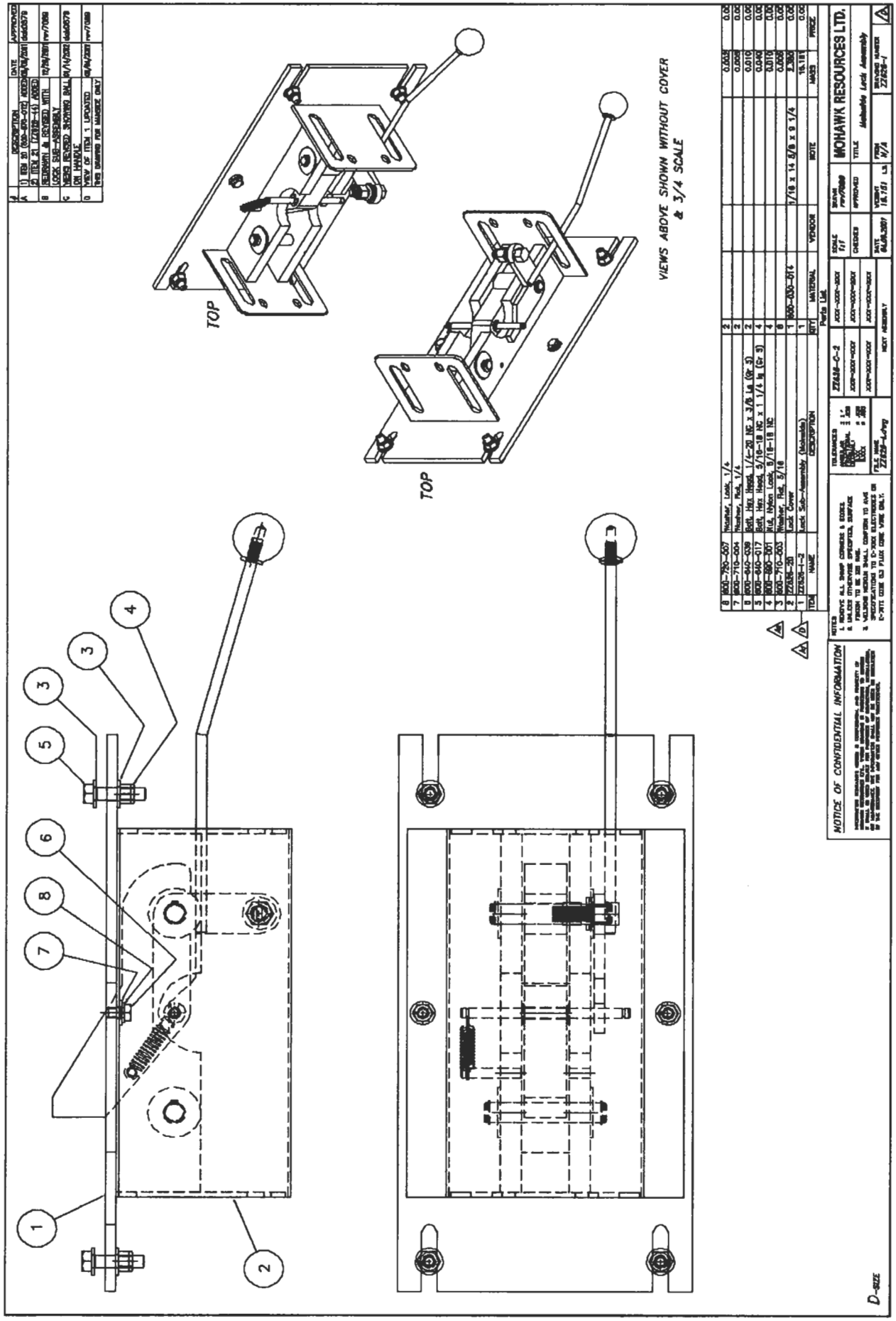

CHALK LINE
10 9/16 TYP
BASE PLATE NOTCH
BASE PLATE CORNER
CHALK LINE
NOTE:
LIFT SHOWN FOR
12'-6" & 11'-6"
OUTSIDE OF BASE PLATES
26'
12'-6" (150") STANDARD
11'-6" (138") OPTIONAL
92 7/8 @ 12'-6" OUTSIDE WIDTH
80 7/8 @ 11'-6" OUTSIDE WIDTH
CHALK LINE
ENTRANCE DIRECTION
1
2
3
4
NOTICE OF CONFIDENTIAL INFORMATION
MOHAWK RESOURCES LTD.
TOMAHAWK
Fixed Alloy, Augerstyle
D-SIZE

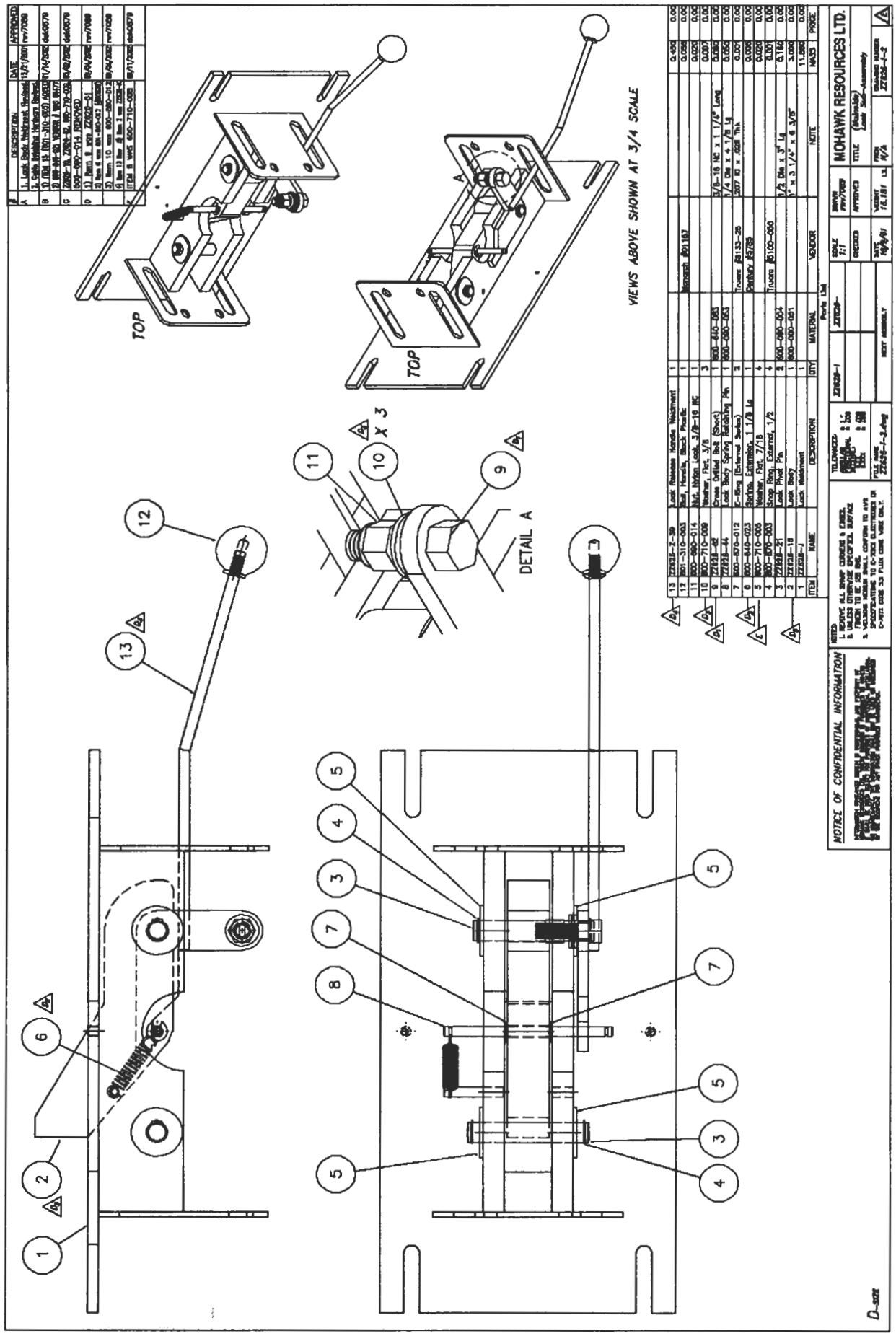

SECTION A-A
MOHAWK RESOURCES LTD.
NOTICE OF CONFIDENTIAL INFORMATION

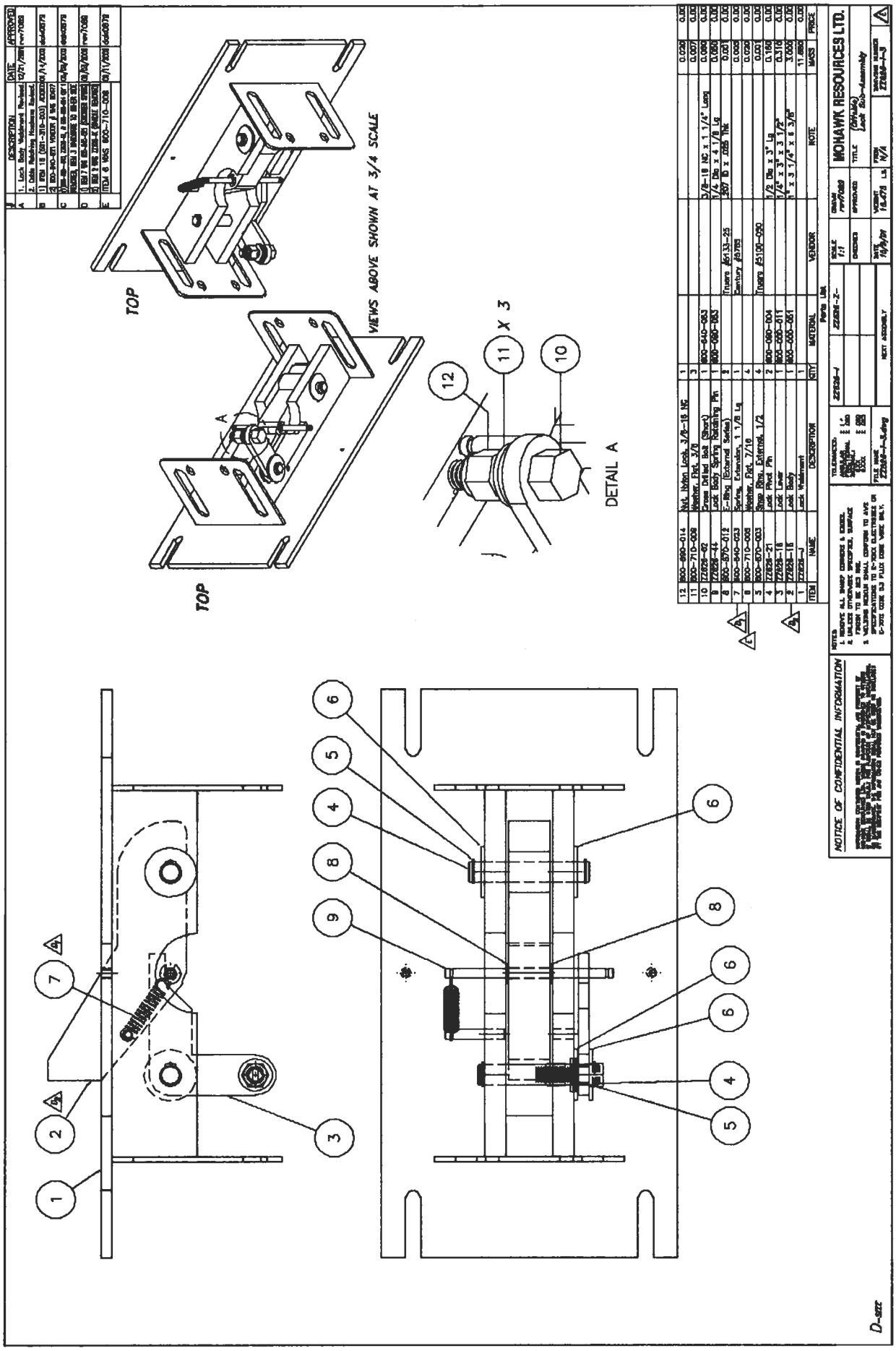

SECTION A–A
NOTICE OF CONFIDENTIAL INFORMATION
MOHAWK RESOURCES LTD.
Parts List

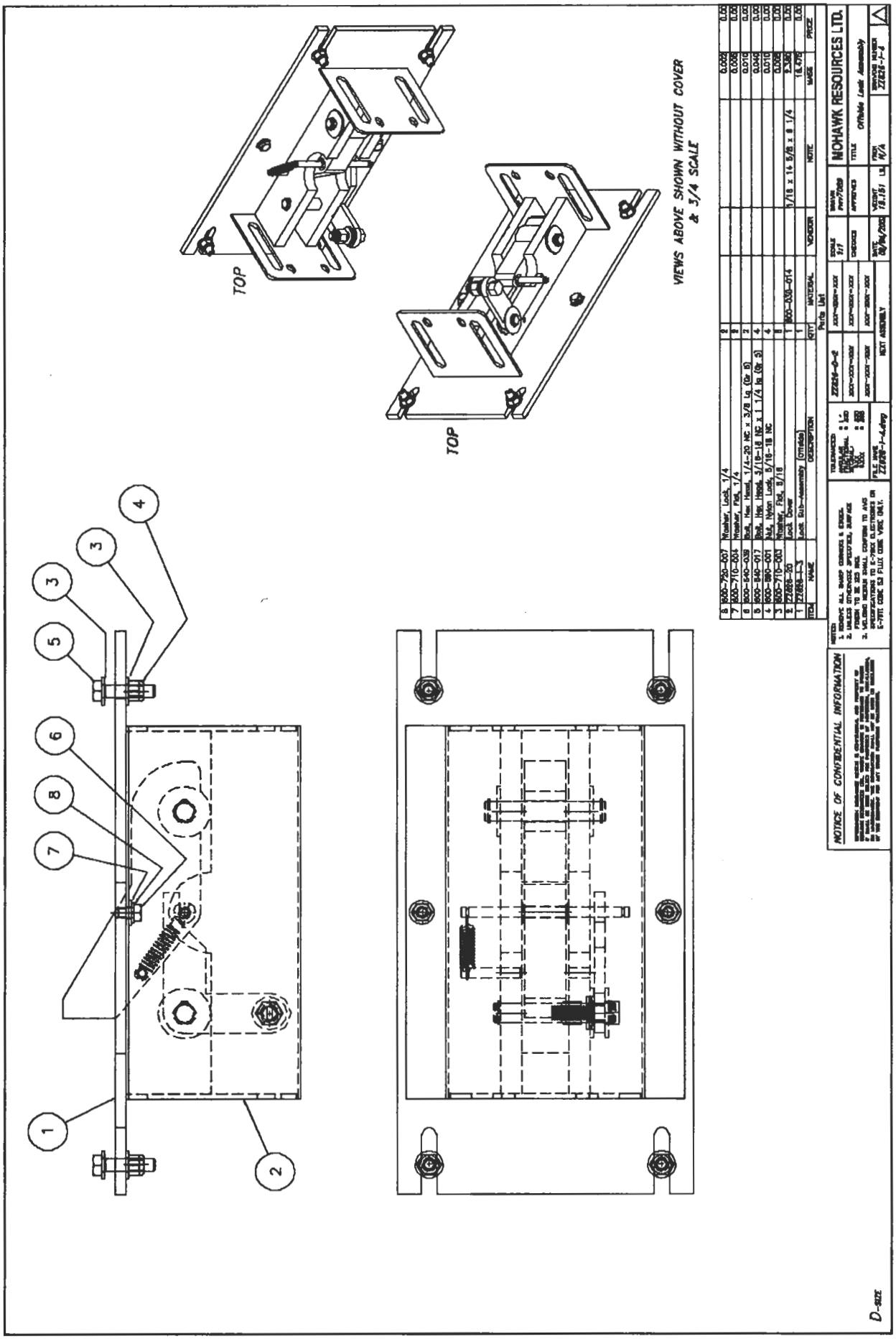

MOHAWK RESOURCES LTD.
Carriage Assembly
NOTICE OF CONFIDENTIAL INFORMATION
NOTE ORIENTATION OF BOLTS ON SLIDE BLOCKS
42 5/8 REF
1/4 REF
6 5/8 REF
D-SIZE

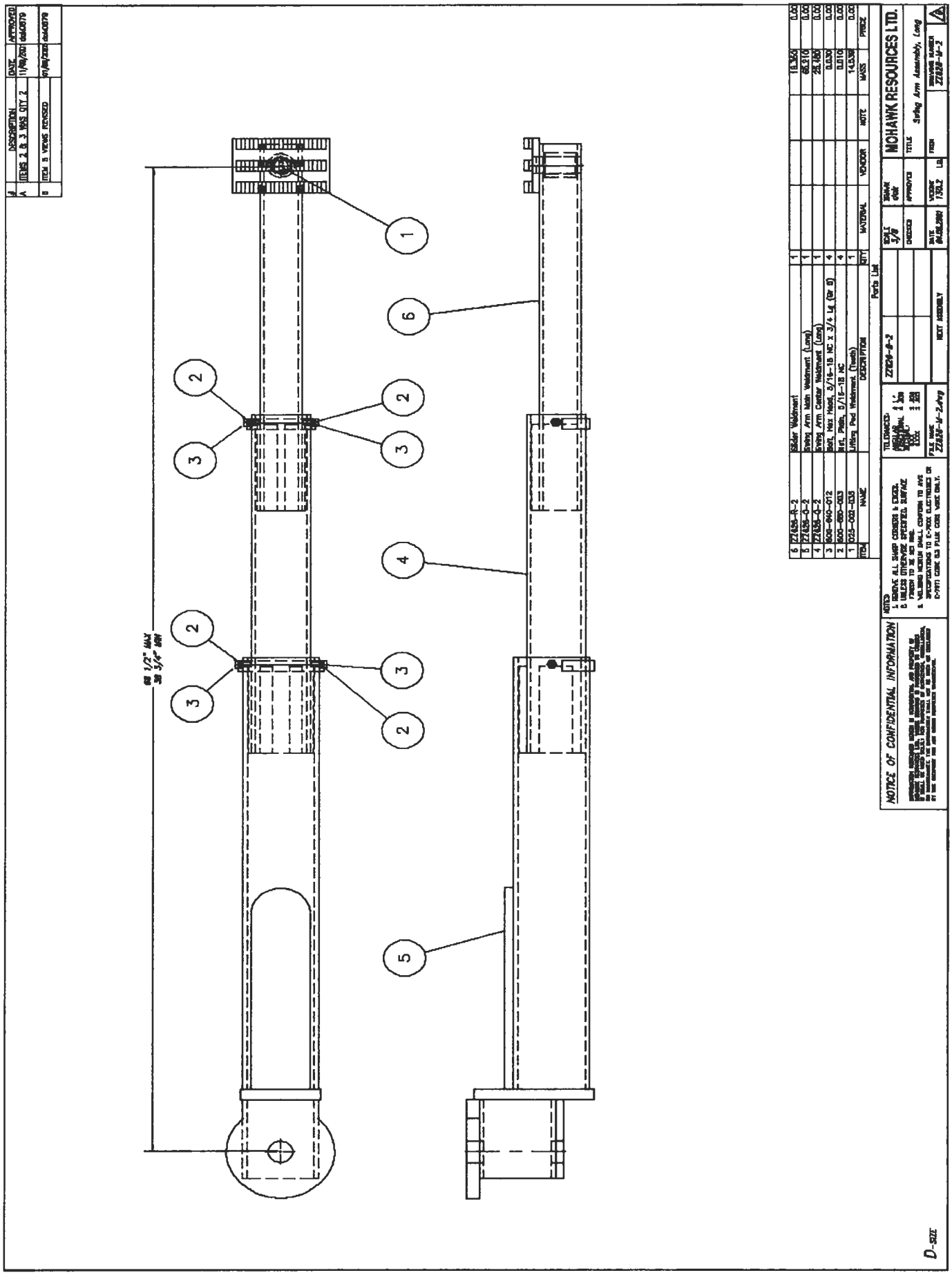

#
DESCRIPTION
DATE
APPROVED
A
1) ITEM 7 WAS 007-007-119
01/11/2002
daK0879
2)ITEM 5 FLIPPED OVER 180°
1
2
3
4
5
6
7
ITEM
NAME
DESCRIPTION
QTY
MATERIAL
VENDOR
NOTE
MASS
PRICE
7 ZZ626-87 Arm Lock Pin 1 600-090-017 1" Dia x 10 5/8 Lg 2.050 0.00
6 600-640-053 Bolt, Hex Head, 5/16-18 NC x 1/2 Lg (Gr 5) 1 0.020 0.00
5 ZZ626-43 Arm Lock Pin Support Angle 1 600-010-021 1/8 x 1 1/2 (Flat) x 4 1/4 0.210 0.00
4 600-840-007 Spring 1 Century Spring #3052 .703 OD x .578 ID x 4.125 0.030 0.00
3 600-710-003 Washer, Flat, 5/16 2 0.005 0.00
2 600-680-003 Nut, Plain, 5/16-18 NC 1 0.010 0.00
1 007-007-141 Arm Lock Pin Handle 1 600-090-014 5/16 Dia x 8" Lg 0.160 0.00
Parts List
C-SIZE
NOTICE OF CONFIDENTIAL INFORMATION
INFORMATION CONTAINED HEREIN IS CONFIDENTIAL AND PROPERTY OF MOHAWK RESOURCES LTD. AND IS LOANED SUBJECT TO RETURN UPON DEMAND. IT SHALL BE USED SOLELY FOR PURPOSES OF INSPECTION, INSTALLATION, OR MAINTENANCE. THE INFORMATION SHALL NOT BE USED OR DISCLOSED BY THE RECIPIENT FOR ANY OTHER PURPOSES WHATSOEVER.
NOTES:
1. REMOVE ALL SHARP CORNERS & EDGES.
2. UNLESS OTHERWISE SPECIFIED, SURFACE FINISH TO BE 125 RMS.
3. WELDING MEDIUM SHALL CONFORM TO AWS SPECIFICATIONS TO E-7000 ELECTRODES OR E-7011 CODE 5.3 FLUX CORE WIRE ONLY.
TOLERANCES:
ANGULAR ± 1°
FRACTIONAL ± 1/64
DECIMAL:
XXX ± .020
XXXX ± .005
FILE NAME
ZZ626-H.dwg
ZZ626-F
xxx-xxx-xxx
xxx-xxx-xxx
xxx-xxx-xxx
xxx-xxx-xxx
xxx-xxx-xxx
NEXT ASSEMBLY
SCALE 3/4
DRAWN rwv7089
CHECKED
APPROVED
DATE 04.06.2001
WEIGHT 2.07 LB.
MOHAWK RESOURCES LTD.
TITLE Arm Lock Assembly
FSCM N/A
DRAWING NUMBER ZZ626-H
A

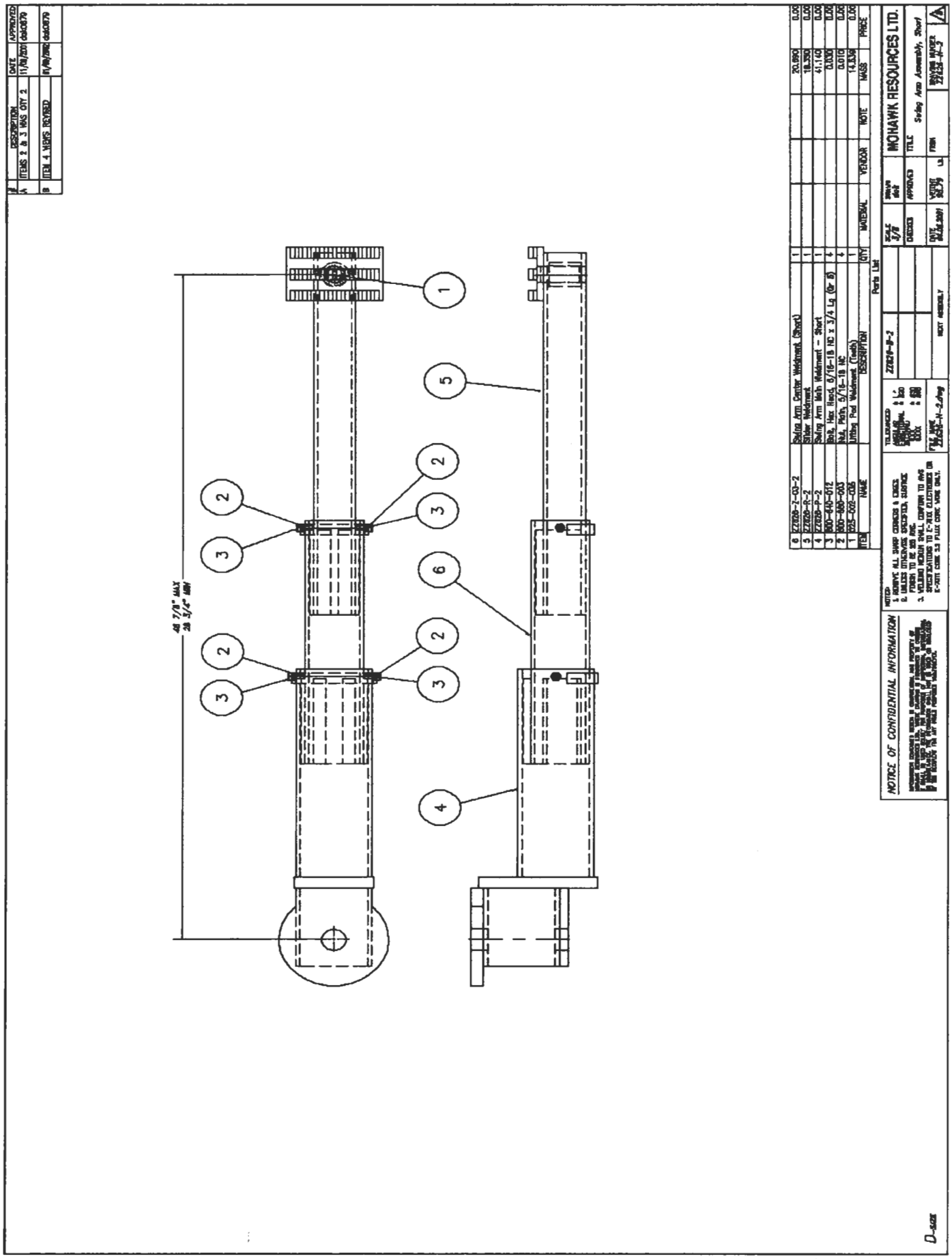

TOP
TOP
VIEWS ABOVE SHOWN WITHOUT COVER
& 3/4 SCALE
NOTICE OF CONFIDENTIAL INFORMATION
MOHAWK RESOURCES LTD.
Assembly Lock Assembly
D-SIZE

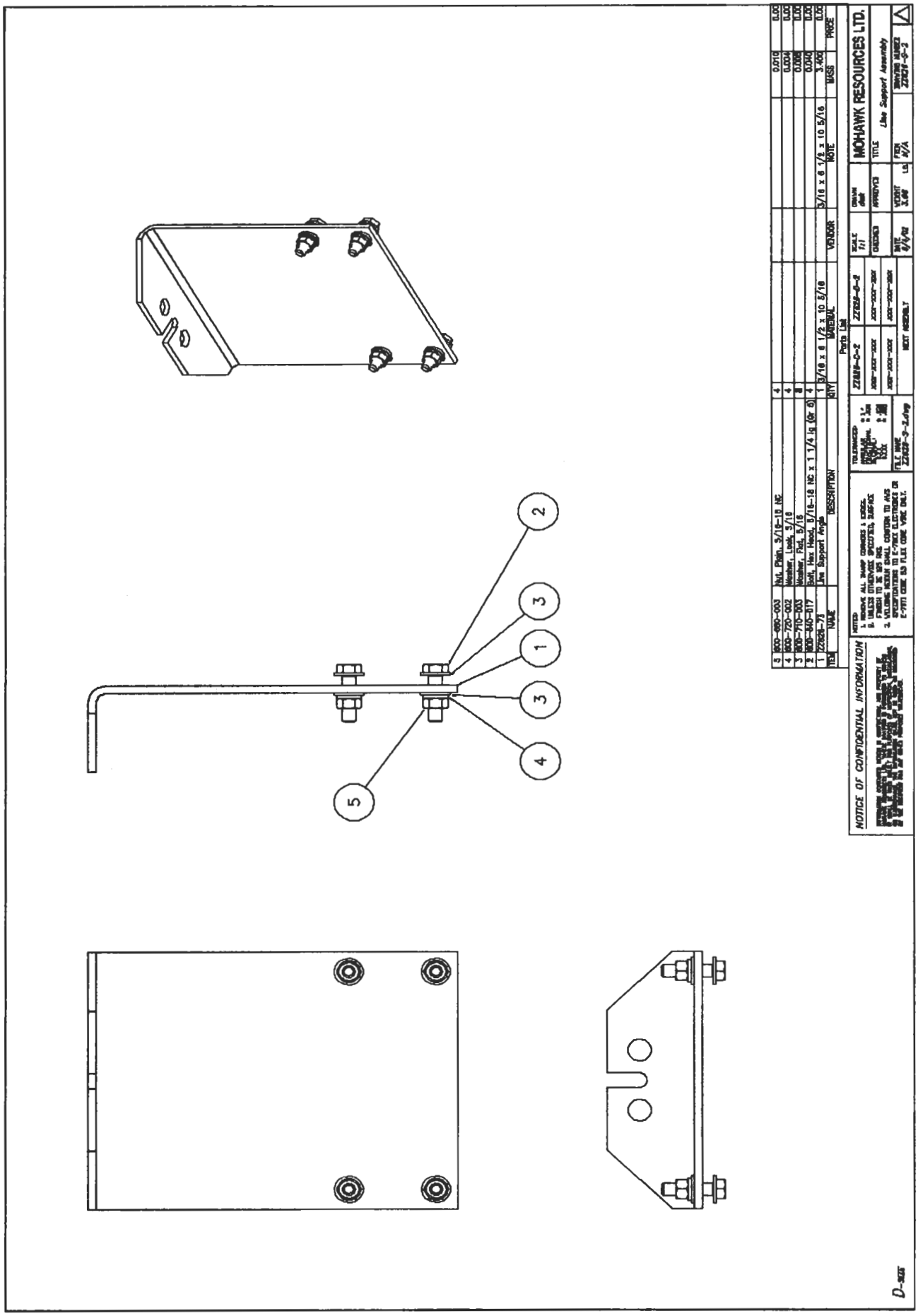

TOP
TOP
VIEWS ABOVE SHOWN AT 3/4 SCALE
DETAIL A
MOHAWK RESOURCES LTD.
NOTICE OF CONFIDENTIAL INFORMATION

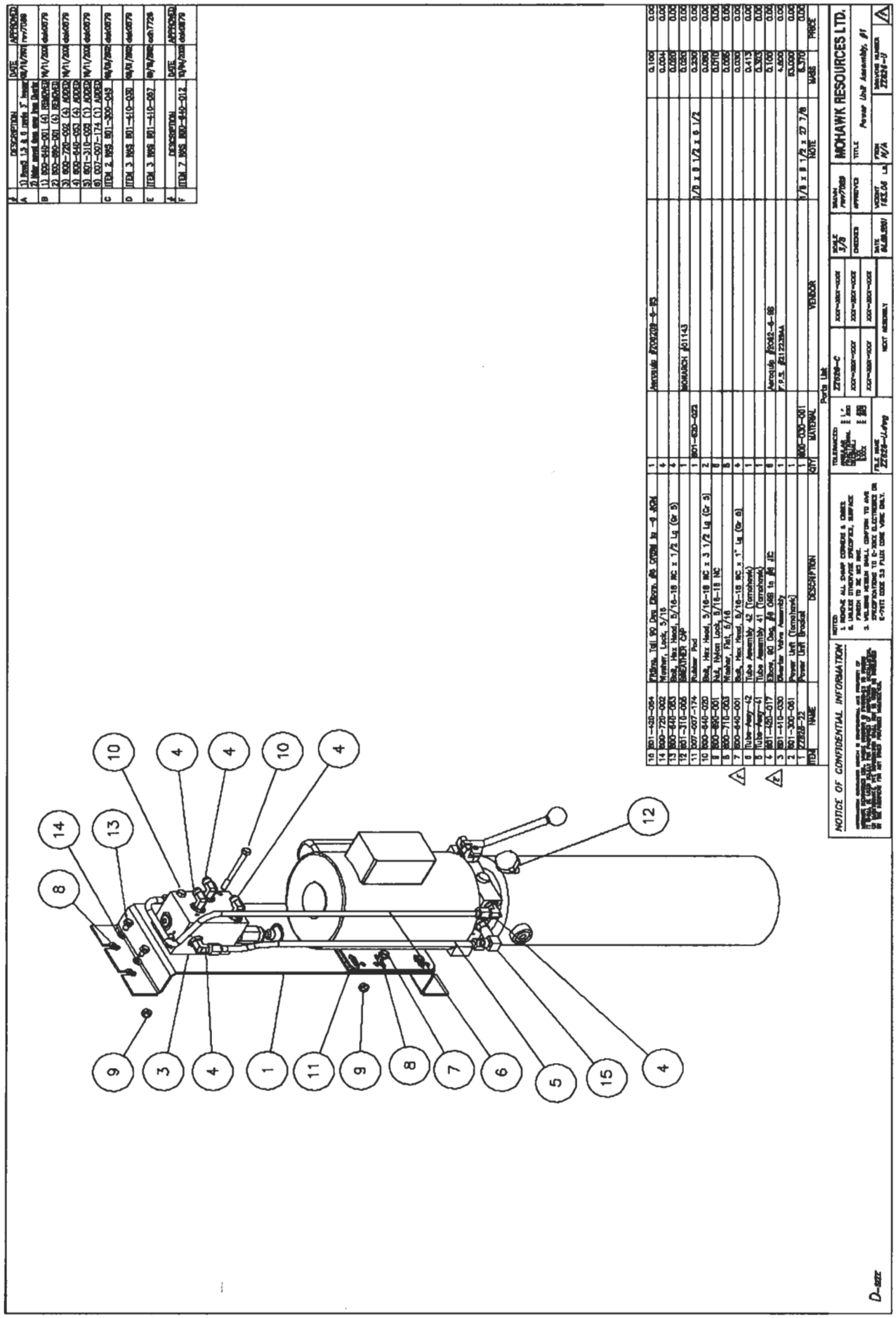

VIEWS ABOVE SHOWN AT 3/4 SCALE
TOP
TOP
DETAIL A
11 X 3
MOHAWK RESOURCES LTD.
NOTICE OF CONFIDENTIAL INFORMATION

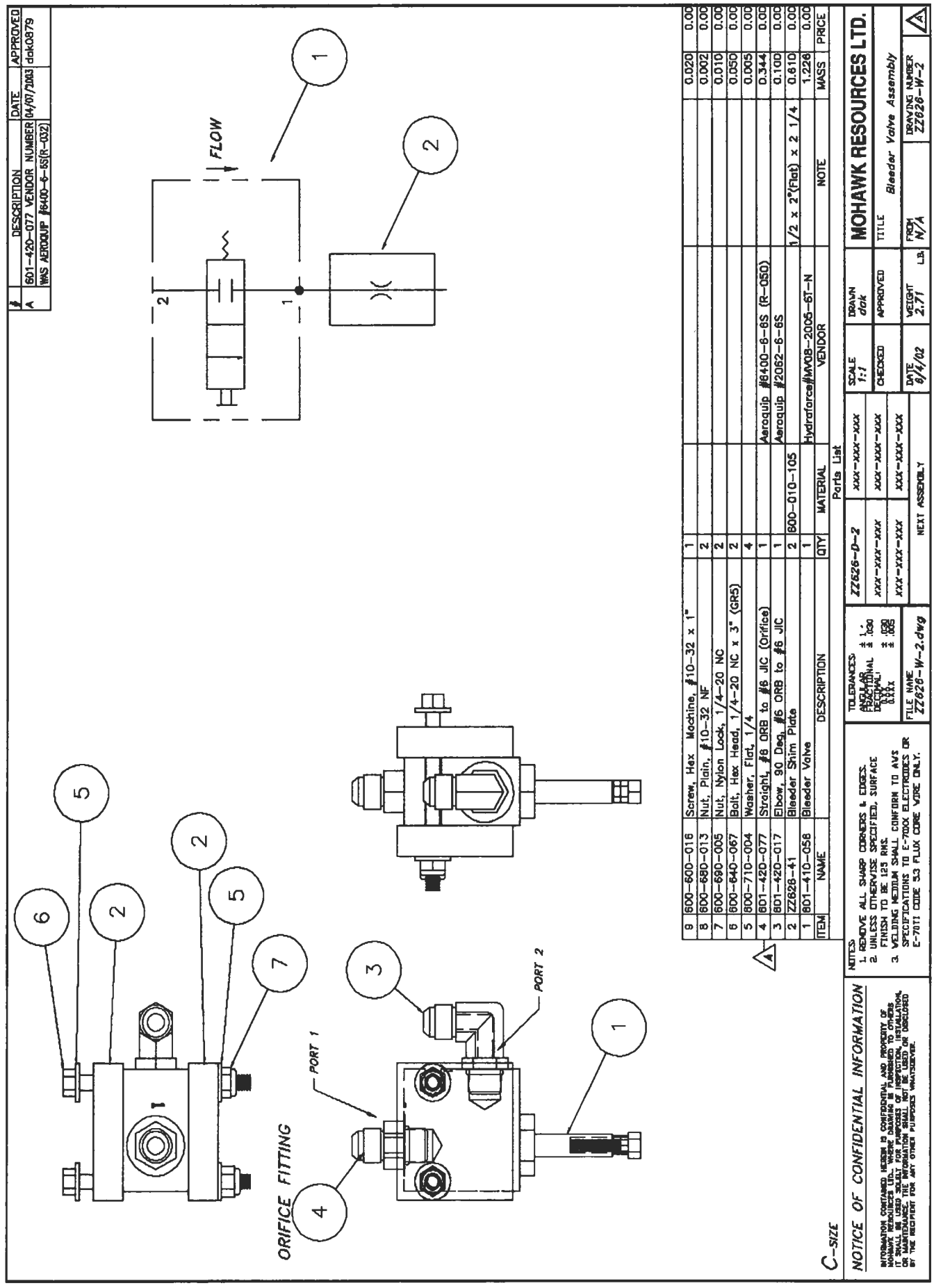

TOP
TOP
VIEWS ABOVE SHOWN WITHOUT COVER
& 3/4 SCALE
NOTICE OF CONFIDENTIAL INFORMATION
MOHAWK RESOURCES LTD.
Offshore Leak Assembly
D-size

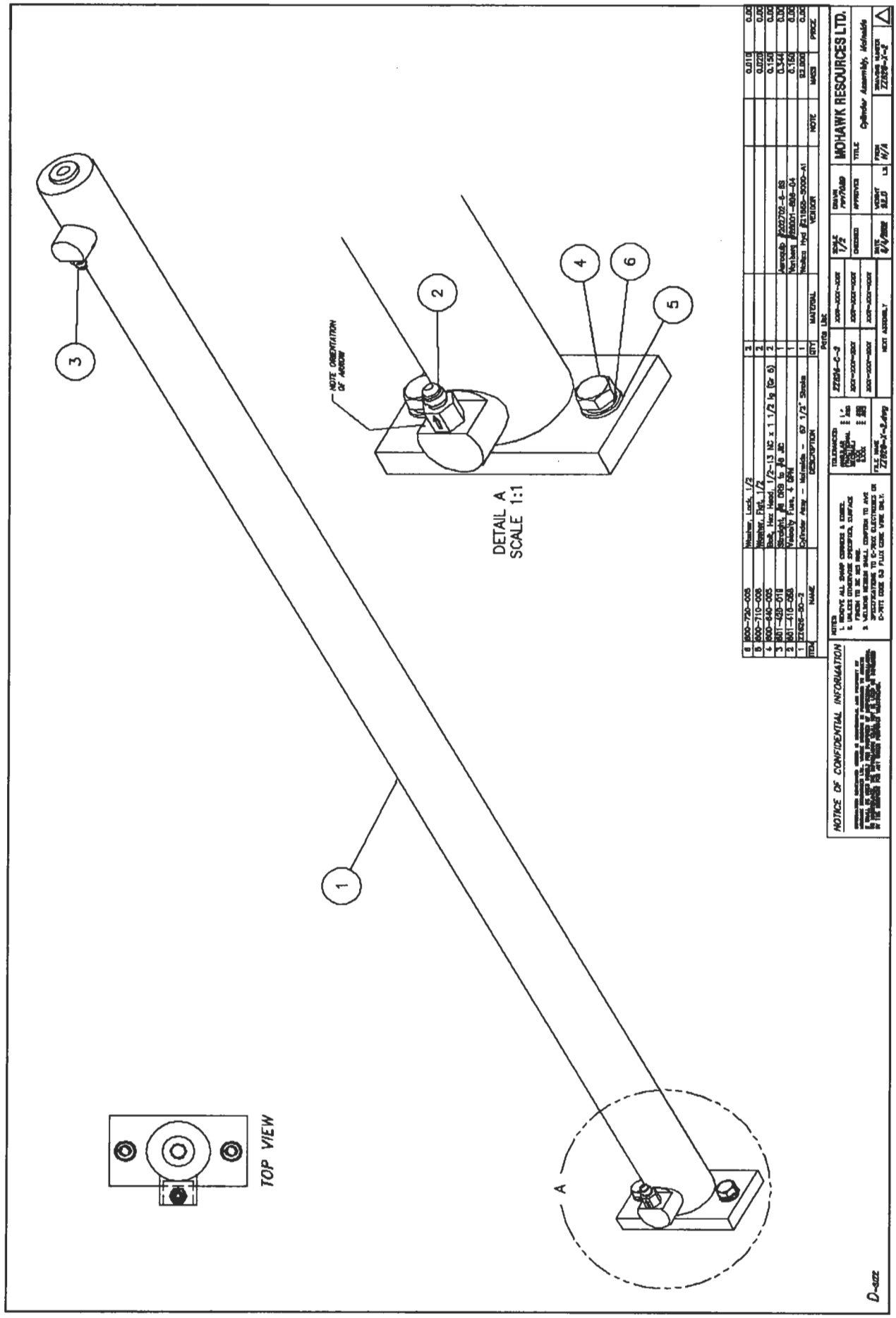

MOHAWK RESOURCES LTD.
Spring Arm Assembly, Long
ZZ039-A-2
NOTICE OF CONFIDENTIAL INFORMATION
D-SIZE

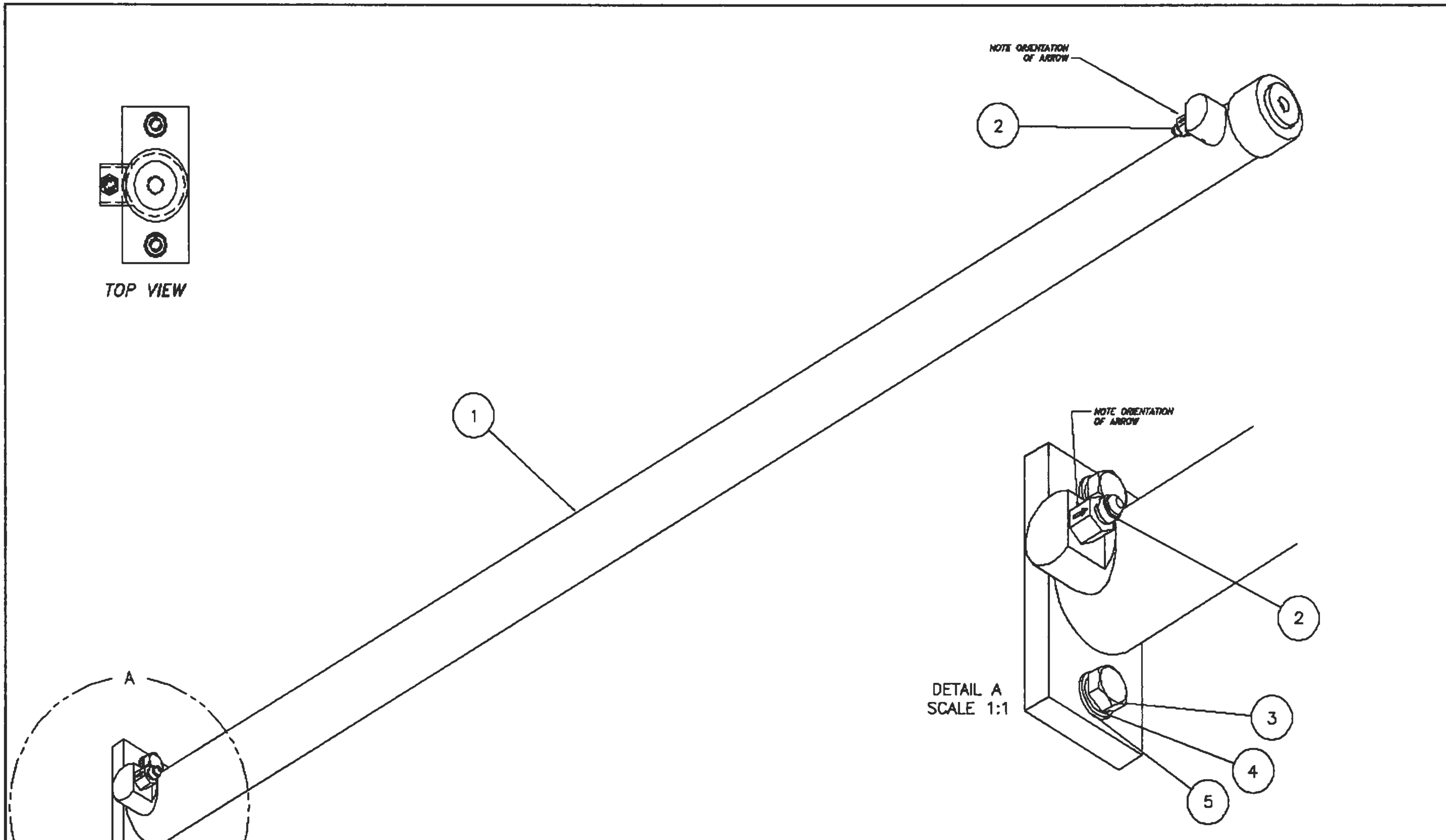

REVISIONS
| DESCRIPTION | DATE | APPROVED
A | ITEMS 2 & 3 WAS QTY 2. | 11/Nov/2001 | dddddddd
B | ITEM 4 WAS REVISED | 01/Feb/2002 | dddddddd
Parts List
ITEM | NAME | DESCRIPTION | QTY | MATERIAL | VENDOR | NOTE | MASS | PRICE
6 | ZZ02B-J-00-2 | Swing Arm Center Weldment (Short) | 1 | | | | 20.860 | 0.00
5 | ZZ02B-R-2 | Slider Weldment | 1 | | | | 18.350 | 0.00
4 | ZZ02B-P-2 | Swing Arm Main Weldment - Short | 1 | | | | 41.140 | 0.00
3 | 800-640-012 | Bolt, Hex Head, 5/16-18 NC x 3/4 Lg (Gr 8) | 4 | | | | 0.000 | 0.00
2 | 800-400-003 | Nut, Palin, 5/16-18 NC | 4 | | | | 0.010 | 0.00
1 | 825-002-006 | Lifting Pad Weldment (Teeth) | 1 | | | | 14.530 | 0.00
NOTICE OF CONFIDENTIAL INFORMATION
NOTES:
1. REMOVE ALL SHARP CORNERS & EDGES.
2. UNLESS OTHERWISE SPECIFIED, SURFACE FINISH TO BE 125 RMS.
3. WELD ACCORDING TO AWS SPECIFICATIONS USING E-70XX ELECTRODES OR E-70XX CORE 3.2 FLUX CORE WIRE ONLY.
TOLERANCES
ZZ02B-P-2
NEXT ASSEMBLY
SCALE 1/8
DRAWN
CHECKED
APPROVED
DATE
MATERIAL
FINISH
MOHAWK RESOURCES LTD.
TITLE: Swing Arm Assembly, Short
DRAWING NUMBER ZZ02B-P-2
SIZE D
SHEET 1 OF 1
48 7/8" MAX
38 3/4" MIN


Parts List
MOHAWK RESOURCES LTD.
Line Support Assembly
NOTICE OF CONFIDENTIAL INFORMATION


MOHAWK RESOURCES LTD.
Power Unit Assembly, #1
NOTICE OF CONFIDENTIAL INFORMATION
Parts List
VENDOR
MATERIAL
DESCRIPTION
NAME
ITEM
Power Unit Bracket
Power Unit (Tomahawk)
Tube Assembly 41 (Tomahawk)
Tube Assembly 42 (Tomahawk)
Mesher, Flat, 5/16
Nut, Nylon Lock, 5/16-18 NC
Bolt, Hex Head, 5/16-18 NC x 3 1/2 Lg (Gr 5)
Rubber Pad
BRAKEMEN CAP
Mesher, Lock, 5/16
Bolt, Hex Head, 5/16-18 NC x 1 1/2 Lg (Gr 5)
Fitting, Tail 90 Deg. Elbow, #8 Small to -4 ADH


FLOW
ORIFICE FITTING
PORT 1
PORT 2
C-SIZE
NOTICE OF CONFIDENTIAL INFORMATION
NOTES
1. REMOVE ALL SHARP CORNERS & EDGES.
2. UNLESS OTHERWISE SPECIFIED, SURFACE FINISH TO BE 125 RMS.
3. WELDING MEDIUM SHALL CONFORM TO AWS SPECIFICATIONS TO E-7000 ELECTRODES OR E-7011 CODE 53 FLUX CORE WIRE ONLY.
TOLERANCES
ANGULAR ± 1.0°
FRACTIONAL ± .030
DECIMAL
.XX ± .010
.XXX ± .005
FILE NAME
ZZ626-W-2.dwg
ZZ626-D-2
XXX-XXX-XXX
XXX-XXX-XXX
XXX-XXX-XXX
XXX-XXX-XXX
NEXT ASSEMBLY
SCALE 1:1
DRAWN dak
CHECKED
APPROVED
DATE 8/4/02
WEIGHT 2.71 LB.
MOHAWK RESOURCES LTD.
TITLE Bleeder Valve Assembly
FROM N/A
DRAWING NUMBER ZZ626-W-2
A
Parts List
ITEM NAME DESCRIPTION QTY MATERIAL VENDOR NOTE MASS PRICE
9 600-600-016 Screw, Hex Machine, #10-32 x 1" 1 0.020 0.00
8 600-680-013 Nut, Plain, #10-32 NF 2 0.002 0.00
7 600-690-005 Nut, Nylon Lock, 1/4-20 NC 2 0.010 0.00
6 600-640-067 Bolt, Hex Head, 1/4-20 NC x 3" (GR5) 2 0.050 0.00
5 600-710-004 Washer, Flat, 1/4 4 0.005 0.00
4 601-420-077 Straight, #8 ORB to #6 JIC (Orifice) 1 Aeroquip #6400-6-6S (R-050) 0.344 0.00
3 601-420-017 Elbow, 90 Deg, #6 ORB to #6 JIC 1 Aeroquip #2062-6-6S 0.100 0.00
2 ZZ626-41 Bleeder Shim Plate 2 600-010-105 1/2 x 2"(Flat) x 2 1/4 0.610 0.00
1 601-410-058 Bleeder Valve 1 Hydraforce#MV08-2005-6T-N 1.226 0.00
A 601-420-077 VENDOR NUMBER 04/07/2003 dak0879
WAS AEROQUIP #6400-6-6S(R-032)
DESCRIPTION DATE APPROVED


DETAIL A
SCALE 1:1
TOP VIEW
NOTE ORIENTATION OF ARROW
MOHAWK RESOURCES LTD.
NOTICE OF CONFIDENTIAL INFORMATION



ITEM	NAME	DESCRIPTION	QTY	MATERIAL	VENDOR	NOTE	MASS	PRICE
5	800-710-008	Washer, Flat, 1/2	2				0.020	0.00
4	800-720-008	Washer, Lock, 1/2	2				0.010	0.00
3	800-640-005	Bolt, Hex Head, 1/2-13 NC x 1 1/2 lg (Gr 5)	2				0.150	0.00
2	801-410-008	Velocity Fuse, 4 GPM	2		Vonberg #28001-808-04		0.150	0.00
1	ZZ626-B1-2	Cylinder Assy - Offside - 67 1/2 Stroke	1		Waltco Hyd #21867-5000-C1		102.000	0.00

Parts List

NOTICE OF CONFIDENTIAL INFORMATION

NOTES
1. REMOVE ALL SHARP CORNERS & EDGES.
2. UNLESS OTHERWISE SPECIFIED, SURFACE FINISH TO BE 125 RMS.
3. WELDING MEDIUM SHALL CONFORM TO AWS SPECIFICATIONS TO E-70XX ELECTRODES OR E-70T1 CORE 3.5 FLUX CORE WIRE ONLY.

TOLERANCES: ANGULAR, FRACTIONAL, DECIMAL

ZZ626-D-2

FILE NAME ZZ626-Y-2.dwg

NEXT ASSEMBLY

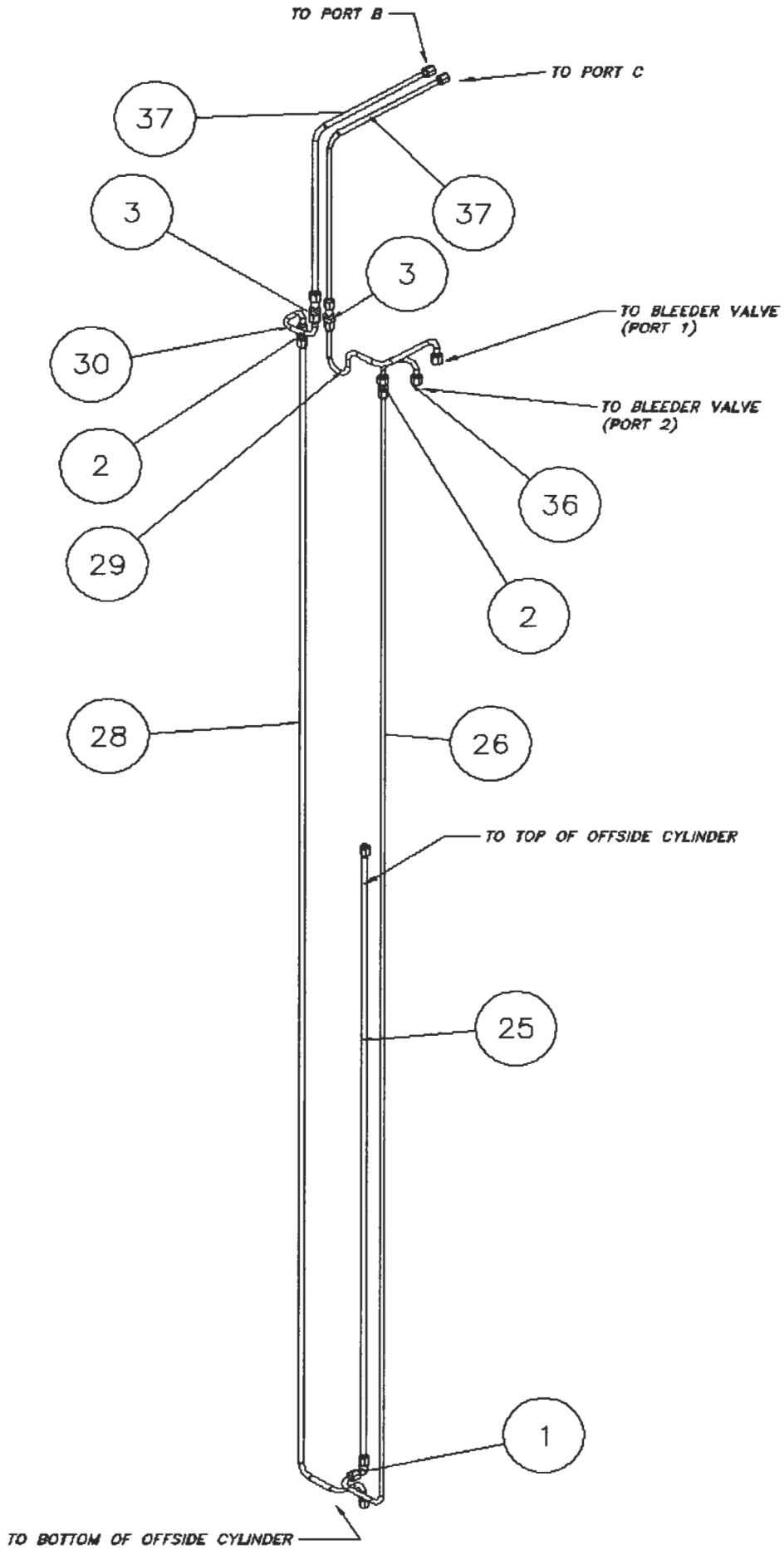
SCALE 1/2 | DRAWN dak | CHECKED | APPROVED | DATE 6/4/02 | WEIGHT 102.6 LB

MOHAWK RESOURCES LTD.

TITLE Cylinder Assembly, Offside

FROM N/A

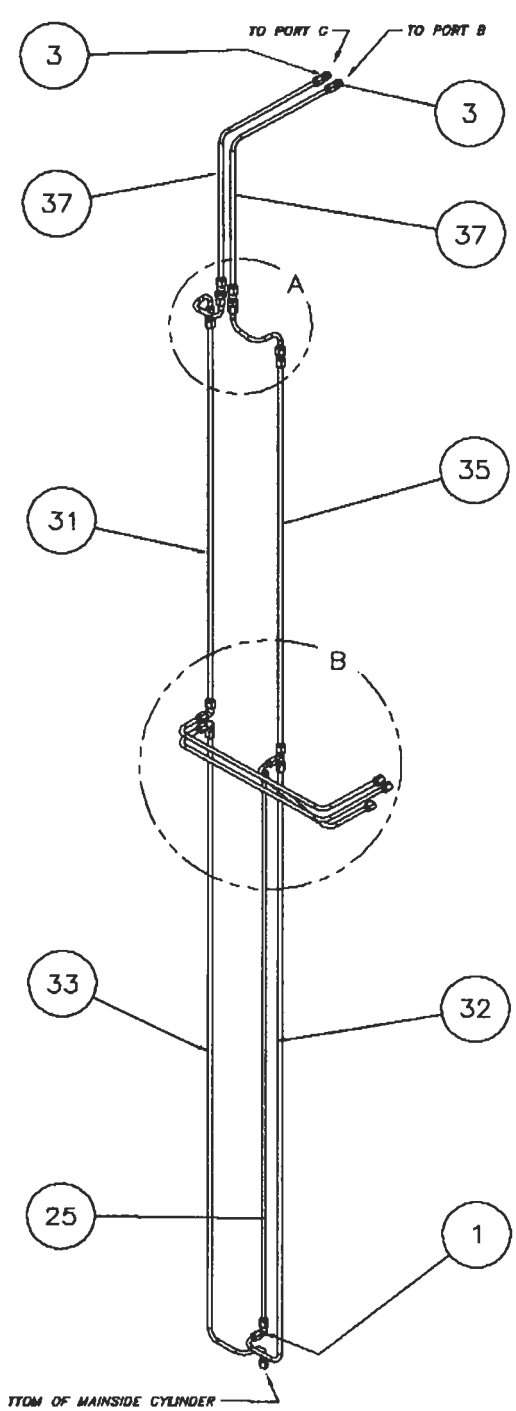
DRAWING NUMBER ZZ626-Y-2

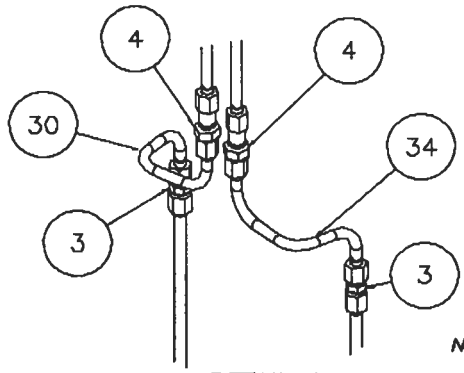


OFFSIDE PLUMBING (ZZ626-Z-01-2)

Offside Hydraulic Plumbing, ZZ626-Z-01-2

ITEM	NAME	DESCRIPTION	QTY
1	601-420-052	Elbow, 90 Deg, #6 JIC	1
2	601-420-011	Union, Straight, #6 JIC	2
3	601-420-040	Straight, Bulkhead, #6 JIC (All)	2
25	Tube-Assy-25	Tube Assembly 25 (Tomahawk)	1
26	Tube-Assy-26	Tube Assembly 26 (Tomahawk)	1
28	Tube-Assy-28	Tube Assembly 28 (Tomahawk)	1
29	Tube-Assy-29	Tube Assembly 29 (Tomahawk)	1
30	Tube-Assy-30	Tube Assembly 30 (Tomahawk)	1
36	Tube-Assy-36	Tube Assembly 36 (Tomahawk)	1
37	Tube-Assy-37	Tube Assembly 37 (Tomahawk)	2



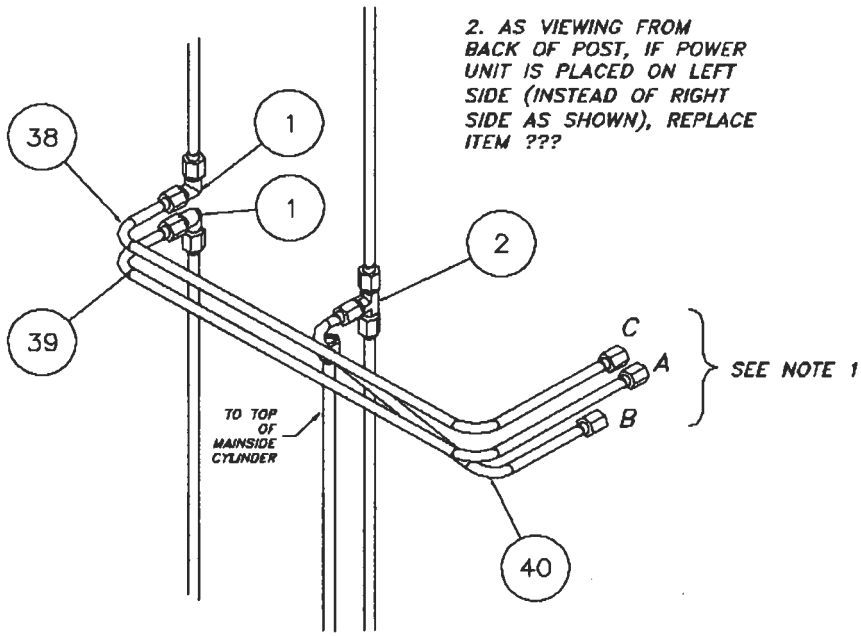


DETAIL A
SCALE 1:2.56

NOTES:

1. CONNECT "A", "B" AND "C" TO PORTS ON DIVERTER VALVE.

2. AS VIEWING FROM BACK OF POST, IF POWER UNIT IS PLACED ON LEFT SIDE (INSTEAD OF RIGHT SIDE AS SHOWN), REPLACE ITEM ???



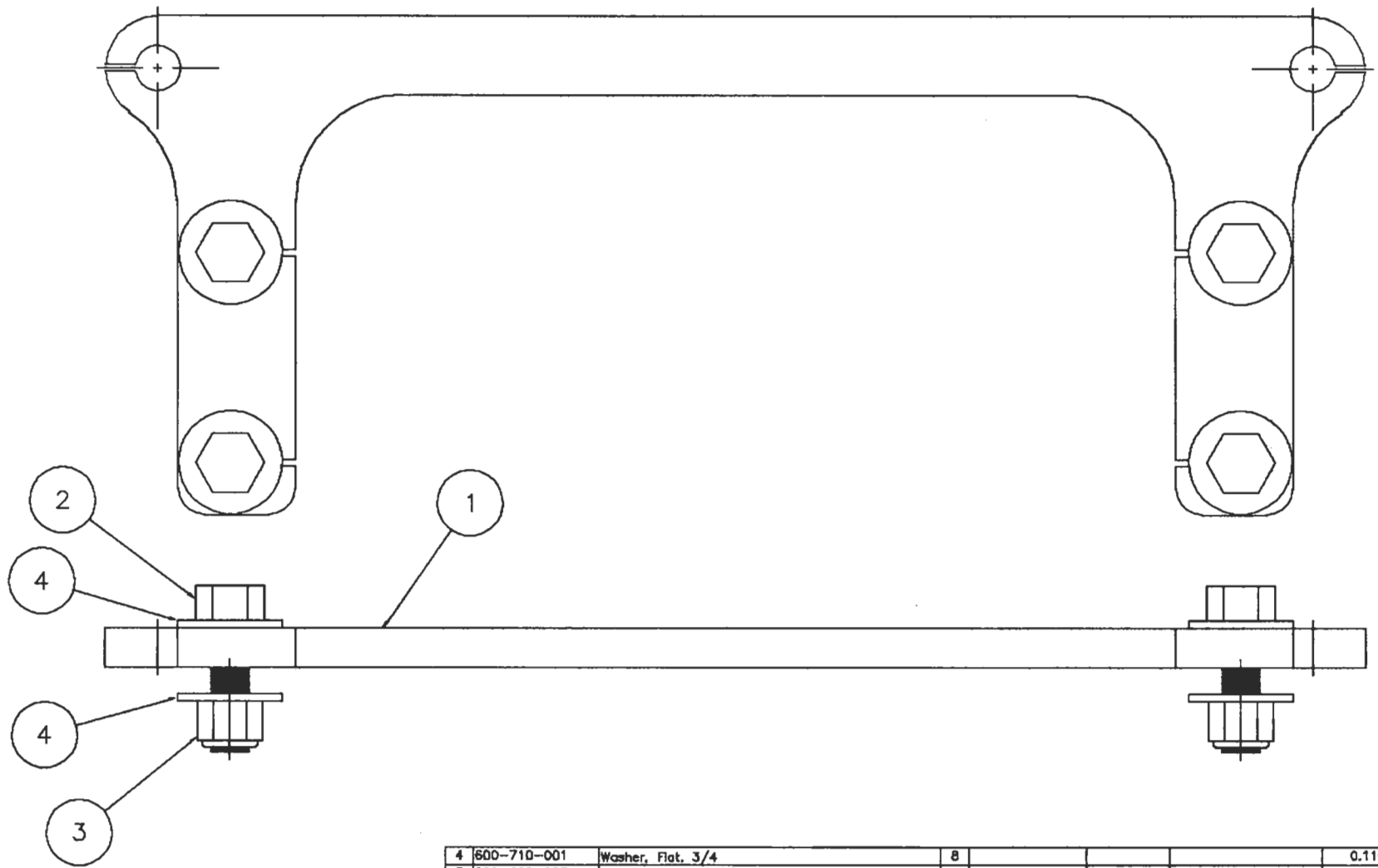
DETAIL B
SCALE 1:2.56

Mainside Plumbing (ZZ626-Z-02-2)

Mainside Plumbing (ZZ626-Z-02-2)

ITEM	NAME	DESCRIPTION	QTY
1	601-420-052	Elbow, 90 Deg, #6 JIC	3
2	601-420-039	Tee, #6 JIC (All)	1
3	601-420-011	Union, Straight, #6 JIC	4
4	601-420-040	Straight, Bulkhead, #6 JIC (All)	2
25	Tube-Assy-25	Tube Assembly 25 (Tomahawk)	1
30	Tube-Assy-30	Tube Assembly 30 (Tomahawk)	1
31	Tube-Assy-31	Tube Assembly 31 (Tomahawk)	1
32	Tube-Assy-32	Tube Assembly 32 (Tomahawk)	1
33	Tube-Assy-33	Tube Assembly 33 (Tomahawk)	1
34	Tube-Assy-34	Tube Assembly 34 (Tomahawk)	1
35	Tube-Assy-35	Tube Assembly 35 (Tomahawk)	1
37	Tube-Assy-37	Tube Assembly 37 (Tomahawk)	2
38	Tube-Assy-38	Tube Assembly 38 (Tomahawk)	1
39	Tube-Assy-39	Tube Assembly 39 (Tomahawk)	1
40	Tube-Assy-40	Tube Assembly 40 (Tomahawk)	1

#	DESCRIPTION	DATE	APPROVED
A	ITEM 1 WAS 1/2 THICK	12/28/2001	rwv7089



ITEM	NAME	DESCRIPTION	QTY	MATERIAL	VENDOR	NOTE	MASS	PRICE
4	600-710-001	Washer, Flat, 3/4	8				0.110	0.00
3	600-690-003	Nut, Nylon Lock, 3/4-16 NF	4				0.140	0.00
2	600-640-003	Bolt, Hex Head, 3/4-16 NF x 2 1/2" (GR5)	4				0.500	0.00
1	ZZ626-56	Leg Top Brace	1	600-000-041		3/4" x 9 1/2 X 24"	15.000	0.00

Parts List

C-SIZE

NOTES:
1. REMOVE ALL SHARP CORNERS & EDGES.
2. UNLESS OTHERWISE SPECIFIED, SURFACE FINISH TO BE 125 RMS.
3. WELDING MEDIUM SHALL CONFORM TO AWS SPECIFICATIONS TO E-70XX ELECTRODES OR E-7071 CODE 5.3 FLUX CORE WIRE ONLY.

TOLERANCES:
ANGULAR ± 1°
FRACTIONAL ± .030
DECIMAL:
0.XX ± .030
0.XXX ± .005

FILE NAME: ZZ626-Z-08.dwg

ZZ626-C	ZZ626-D
XXX-XXX-XXX	XXX-XXX-XXX
XXX-XXX-XXX	XXX-XXX-XXX

NEXT ASSEMBLY

SCALE: 1:1
DRAWN: rwv7089
CHECKED:
APPROVED:
DATE: 8/17/01
WEIGHT: 18.5 LB.

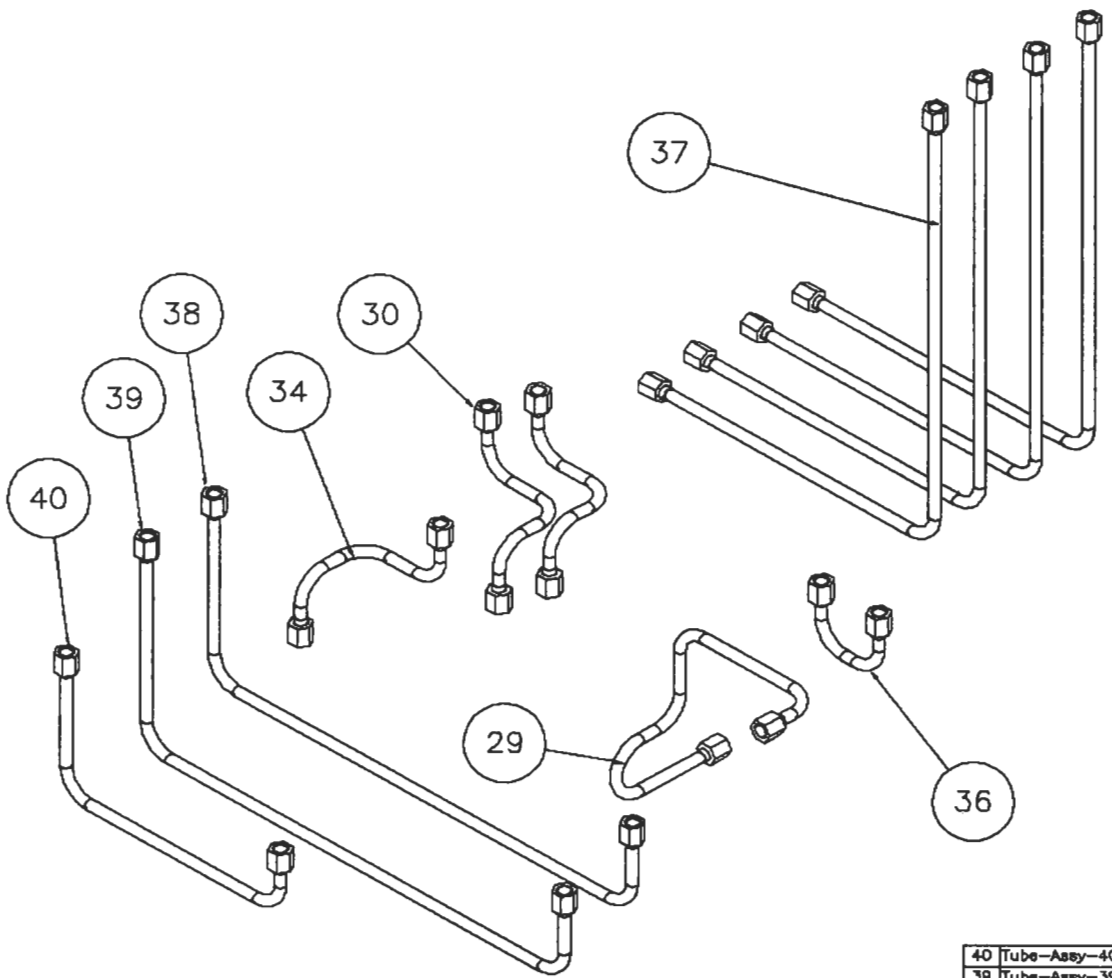
MOHAWK RESOURCES LTD.

TITLE: Leg Top Brace Assembly

FROM: N/A

DRAWING NUMBER: ZZ626-Z-08 A

#	DESCRIPTION	DATE	APPROVED
A	TUBE-ASSY-38, 39, & 40 ADDED	10/08/2002	dak0879



NOTES:

1. LABEL ALL LINES WITH PART NUMBER. (I.E. "TUBE-ASSY-01")
2. BUNDLE ALL LINES TOGETHER WITH WIRE TIES.
3. ENSURE PLASTIC DUST CAPS ON ENDS OF ALL LINES.

ITEM	NAME	DESCRIPTION	QTY	MATERIAL	VENDOR	NOTE	MASS	PRICE
40	Tube-Assy-40	Tube Assembly 40 (Tomahawk)	1				0.257	0.00
39	Tube-Assy-39	Tube Assembly 39 (Tomahawk)	1				0.382	0.00
38	Tube-Assy-38	Tube Assembly 38 (Tomahawk)	1				0.372	0.00
37	Tube-Assy-37	Tube Assembly 37 (Tomahawk)	4				0.384	0.00
36	Tube-Assy-36	Tube Assembly 36 (Tomahawk)	1				0.159	0.00
34	Tube-Assy-34	Tube Assembly 34 (Tomahawk)	1				0.187	0.00
30	Tube-Assy-30	Tube Assembly 30 (Tomahawk)	2				0.144	0.00
29	Tube-Assy-29	Tube Assembly 29 (Tomahawk)	1				0.262	0.00
1	601-600-050	Plastic Wire Tie, 8", Black	6				0.010	0.00

Parts List

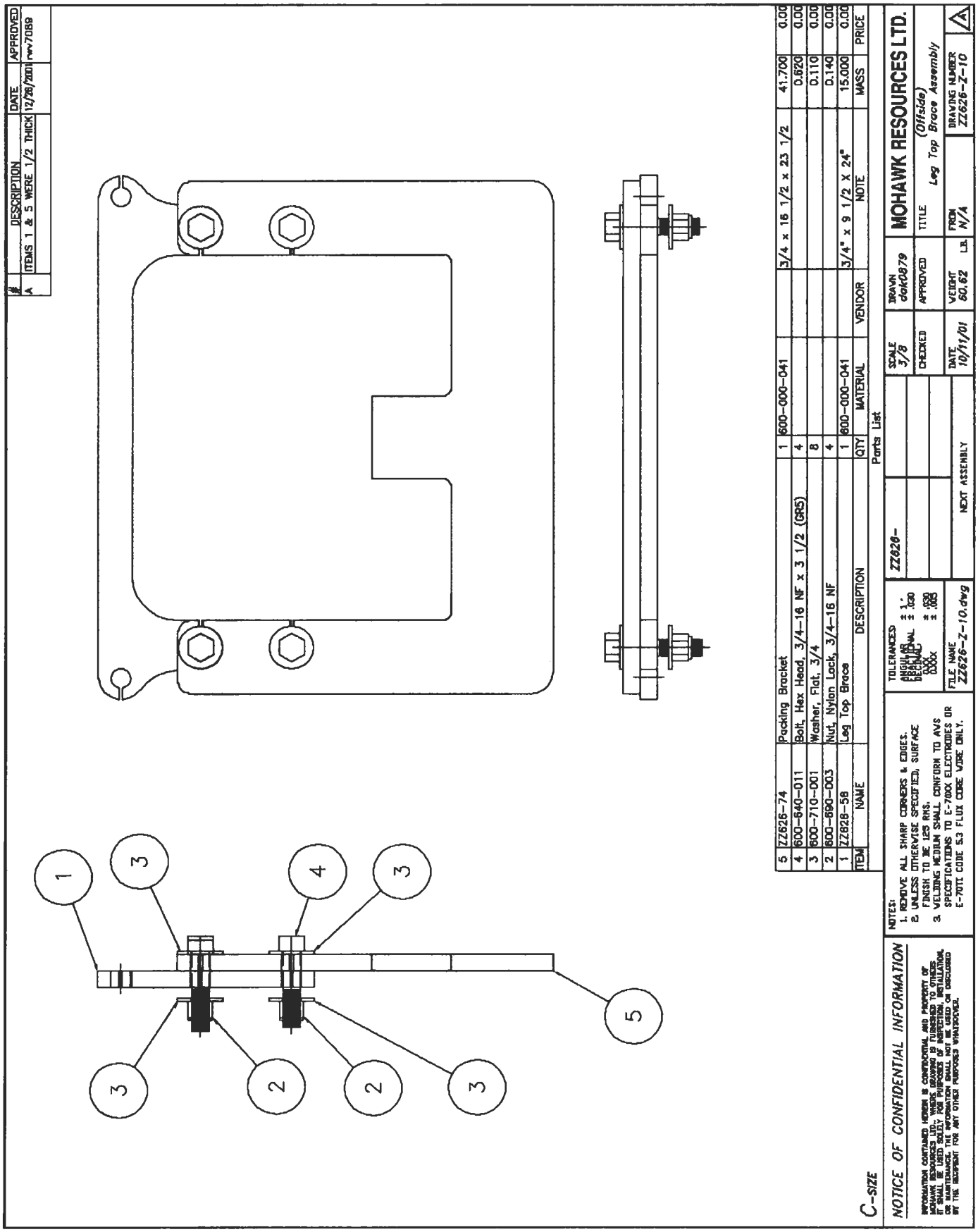
C-SIZE

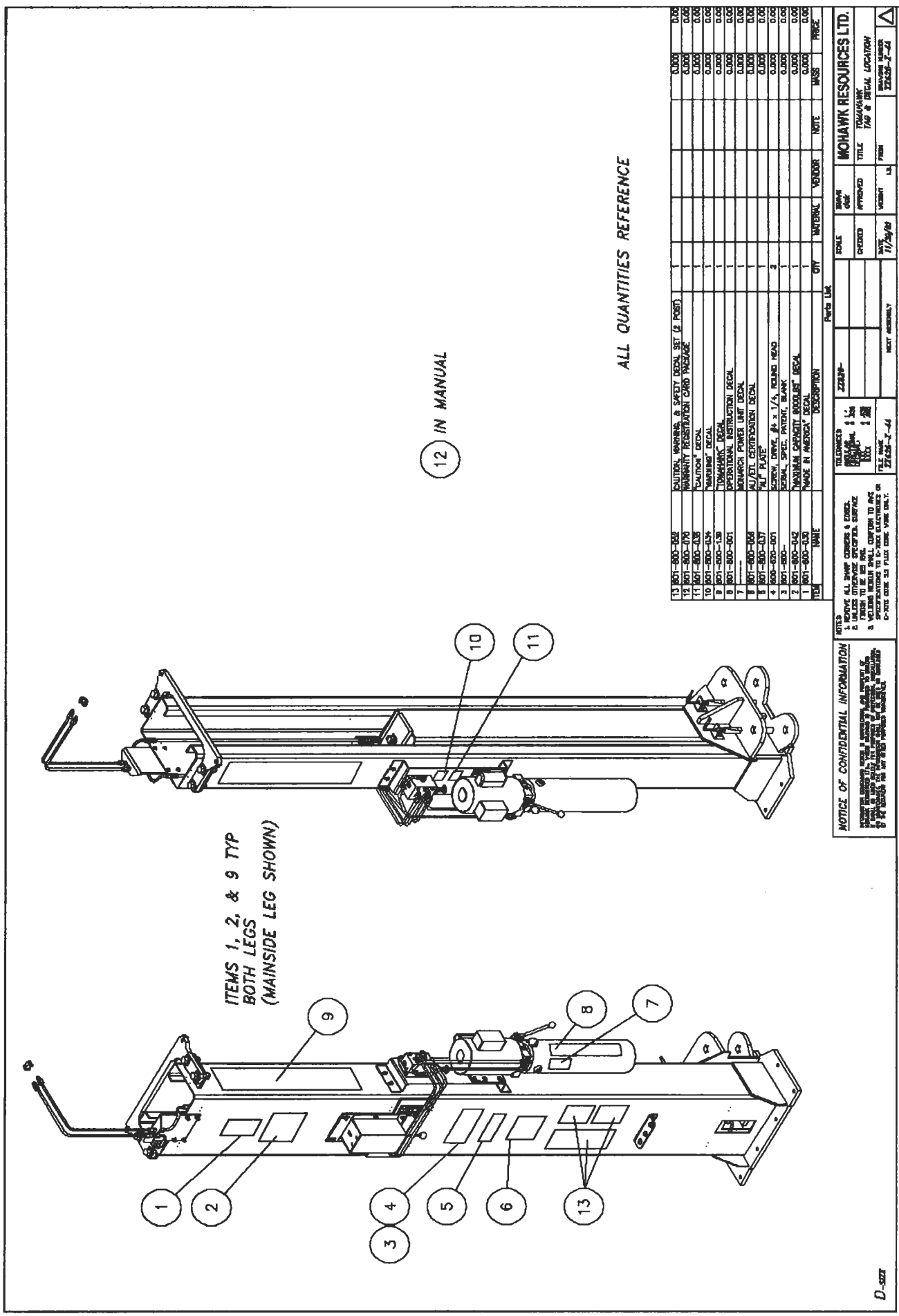
NOTES:
1. REMOVE ALL SHARP CORNERS & EDGES.
2. UNLESS OTHERWISE SPECIFIED, SURFACE FINISH TO BE 125 RMS.
3. WELDING MEDIUM SHALL CONFORM TO AWS SPECIFICATIONS TO E-70XX ELECTRODES OR E-70T1 CODE 5.3 FLUX CORE WIRE ONLY.

TOLERANCES:
ANGULAR ± 1°
FRACTIONAL ± .030
DECIMAL:
0.XX ± .030
0.XXX ± .005

FILE NAME: ZZ626-Z-09-2.dwg

ZZ626-	XXX-XXX-XXX	SCALE 1'0"=1'0"	DRAWN rwv7089	MOHAWK RESOURCES LTD.
XXX-XXX-XXX	XXX-XXX-XXX	CHECKED	APPROVED	TITLE (For Shipping Assembly) Tubing Assembly Kit #1
XXX-XXX-XXX	XXX-XXX-XXX	DATE 9/17/01	WEIGHT 2.5 LB.	FROM N/A
NEXT ASSEMBLY				DRAWING NUMBER ZZ626-Z-09-2 A


#
DESCRIPTION
DATE
APPROVED
A
ITEMS 1 & 5 WERE 1/2 THICK
12/28/2001
rev7089
1
2
3
4
5
3
2
2
3
3
C-SIZE
NOTICE OF CONFIDENTIAL INFORMATION
INFORMATION CONTAINED HEREIN IS CONFIDENTIAL AND PROPERTY OF MOHAWK RESOURCES LTD., WHERE DRAWING IS FURNISHED TO OTHERS IT SHALL BE USED SOLELY FOR PURPOSES OF INSPECTION, INSTALLATION, OR MAINTENANCE. THE INFORMATION SHALL NOT BE USED OR DISCLOSED BY THE RECIPIENT FOR ANY OTHER PURPOSES WHATSOEVER.
NOTES:
1. REMOVE ALL SHARP CORNERS & EDGES.
2. UNLESS OTHERWISE SPECIFIED, SURFACE FINISH TO BE 125 RMS.
3. WELDING MEDIUM SHALL CONFORM TO AWS SPECIFICATIONS TO E-7000 ELECTRODES OR E-70T1 CODE 5.3 FLUX CORE WIRE ONLY.
TOLERANCES
ANGULAR ± 1/2°
FRACTIONAL ± 1/64
DECIMAL
XXX ± .030
XXXX ± .005
FILE NAME
ZZ626-Z-10.dwg
ZZ626-
NEXT ASSEMBLY
SCALE
3/8
DRAWN
dak0879
CHECKED
APPROVED
DATE
10/11/01
WEIGHT
60.62
LB.
MOHAWK RESOURCES LTD.
TITLE
(Offside)
Leg Top Brace Assembly
FROM
N/A
DRAWING NUMBER
ZZ626-Z-10
Parts List
ITEM
NAME
DESCRIPTION
QTY
MATERIAL
VENDOR
NOTE
MASS
PRICE
5 ZZ626-74 Packing Bracket 1 600-000-041 3/4 x 16 1/2 x 23 1/2 41.700 0.00
4 600-640-011 Bolt, Hex Head, 3/4-16 NF x 3 1/2 (GR5) 4 0.620 0.00
3 600-710-001 Washer, Flat, 3/4 8 0.110 0.00
2 800-690-003 Nut, Nylon Lock, 3/4-16 NF 4 0.140 0.00
1 ZZ828-58 Leg Top Brace 1 600-000-041 3/4" x 9 1/2 X 24" 15.000 0.00



ITEM	PART NUMBER	DESCRIPTION	QTY	MATERIAL	VENDOR	NOTE	MASS	PRICE
13	801-800-052	CAUTION, WARNING, & SAFETY DECAL SET (2 POST)	1				0.000	0.00
12	801-800-070	WARRANTY REGISTRATION CARD PACKAGE	1				0.000	0.00
11	801-800-038	"CAUTION" DECAL	1				0.000	0.00
10	801-800-034	"WARNING" DECAL	1				0.000	0.00
9	801-800-139	TOMAHAWK" DECAL	1				0.000	0.00
8	801-800-001	OPERATIONAL INSTRUCTION DECAL	1				0.000	0.00
7	------	MONARCH POWER UNIT DECAL	1				0.000	0.00
6	801-800-058	AU/ETL CERTIFICATION DECAL	1				0.000	0.00
5	801-800-037	"AU" PLATE"	1				0.000	0.00
4	600-030-001	SCREW, DRIVE, #8 x 1/4, ROUND HEAD	2				0.000	0.00
3	801-800-	SERIAL, SPEC. PATENT, BLANK	1				0.000	0.00
2	801-800-042	"MAXIMUM CAPACITY 9000LBS" DECAL	1				0.000	0.00
1	801-800-030	"MADE IN AMERICA" DECAL	1				0.000	0.00

Parts List

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)	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.

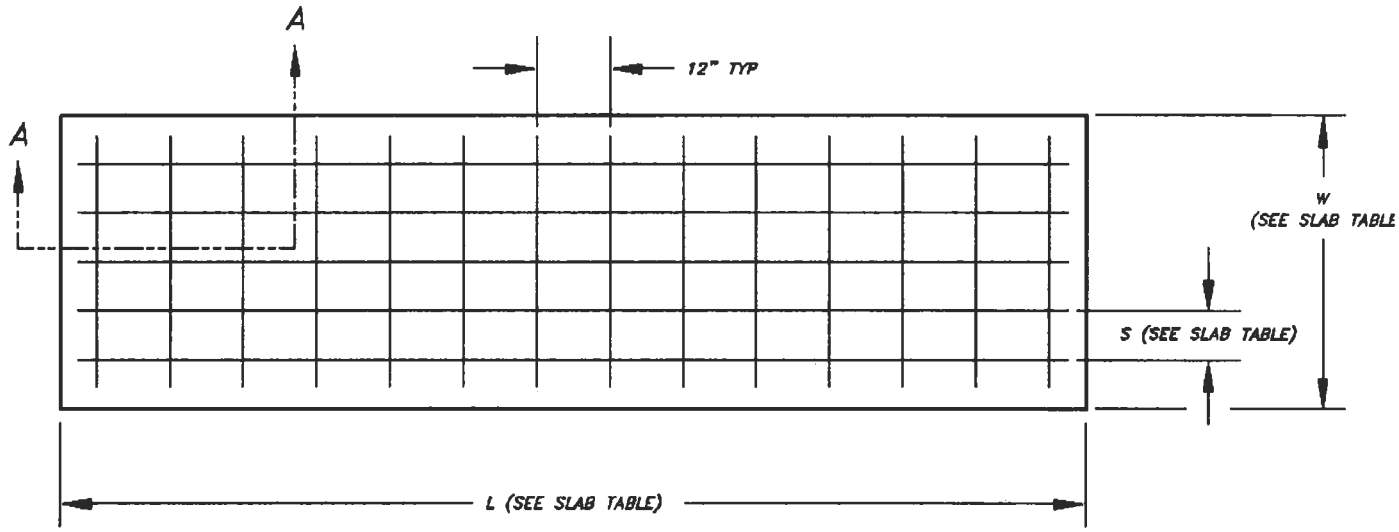
** See Subframe Installation Instructions

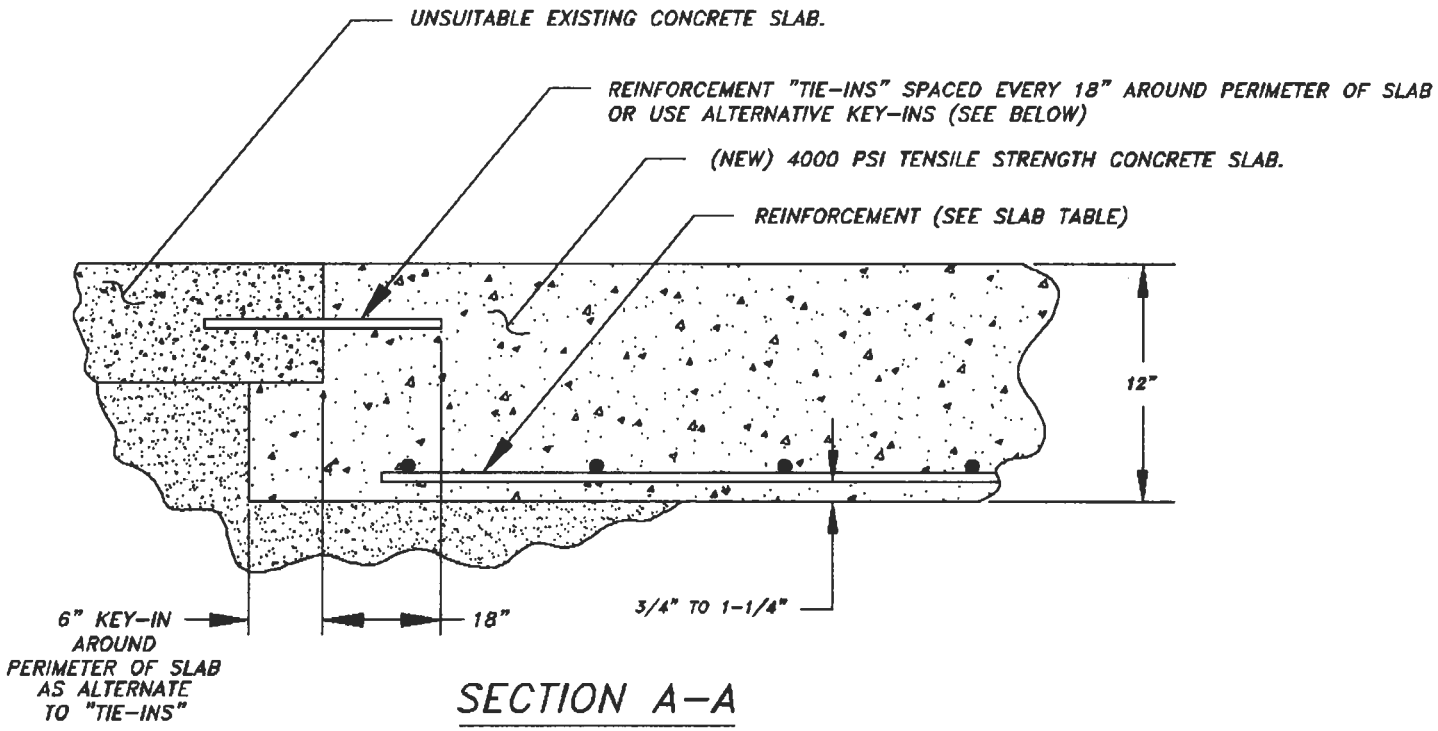
*** No Reinforcement Required (4 x 4 Wire Mesh Recommended)

**** Four Separate Slabs Formed at each Post.

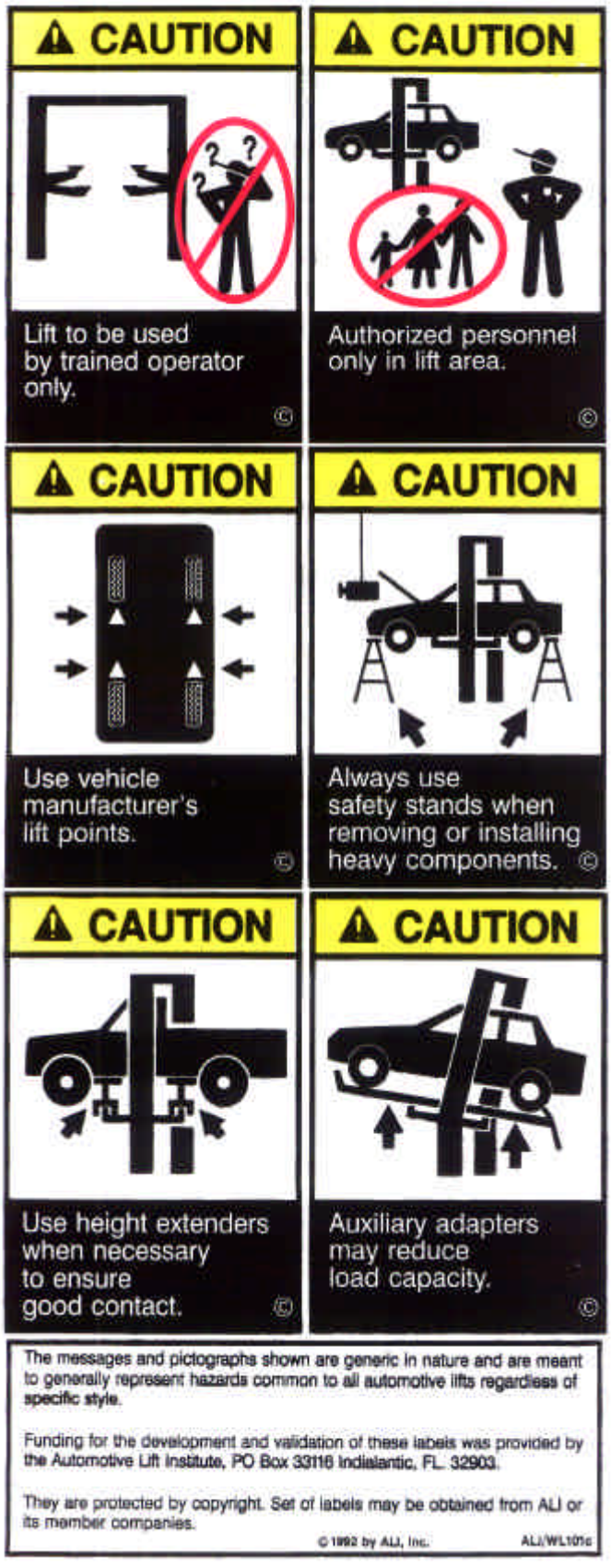
NEW RECOMMENDED SLAB DESIGN FOR 2-POST LIFTS

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





SECTION A-A


⚠ CAUTION
Lift to be used by trained operator only.
⚠ CAUTION
Authorized personnel only in lift area.
⚠ CAUTION
Use vehicle manufacturer's lift points.
⚠ CAUTION
Always use safety stands when removing or installing heavy components.
⚠ CAUTION
Use height extenders when necessary to ensure good contact.
⚠ CAUTION
Auxiliary adapters may reduce load capacity.
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.
They are protected by copyright. Set of labels may be obtained from ALI or its member companies.
© 1992 by ALI, Inc.
ALI/WL101c


⚠ WARNING
Clear area if vehicle is in danger of falling.
⚠ WARNING
Position vehicle with center of gravity midway between adapters.
⚠ WARNING
Remain clear of lift when raising or lowering vehicle.
⚠ WARNING
Avoid excessive rocking of vehicle while on lift.
⚠ WARNING
Do not override self-closing lift controls.
⚠ WARNING
Keep feet clear of lift while lowering.
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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© 1992 by ALI, Inc.
ALI/WL101w

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/WL101a

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.

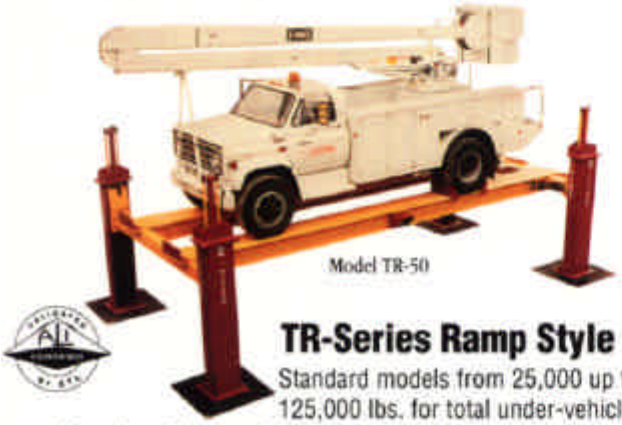
Model System I

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