

handling. Easy disconnect shall consist of hand operable quick disconnect or standard hand tool operable disconnects in that order of preference.

A5.8.10. Mounting.

A5.8.10.1. General. Equipment configuration shall preclude improper mounting.

A5.8.10.2. Tools. Items maintained at the organizational level shall be replaceable using only common hand tools.

A5.8.10.3. Removal. Replaceable items should be removable along a straight or slightly curved line, rather than through an angle.

A5.8.10.4. Limit stops. Limit stops shall be provided on drawers. Drawers shall be self-locking in the retracted and extended positions. The limit stop design shall permit convenient overriding of stops for drawer removal.

A5.8.11. Covers or panels. Removal of any replaceable item shall require opening or removing a minimum number of covers or panels.

A5.8.12. Conductors.

A5.8.12.1. Cable clamps. Unless wiring ducts or conduits are used, mechanically (not adhesively) mounted cable clamps shall be provided to ensure correct routing of electrical cables within and between equipment items to ensure that cables do not hinder or obstruct equipment maintenance, to facilitate the mating of cables with their associated equipment items, and to prevent chafing due to contact with adjacent structure. All clamps shall be visible when equipment is installed.

A5.8.12.2. Cable routing. Cable routing shall not obstruct visual or physical access to equipment for storage, operation, or maintenance.

A5.8.12.3. Access. Cables shall be routed so as to be accessible for inspection and maintenance.

A5.8.12.4. Susceptibility to abuse. Cables shall be routed or protected to preclude mechanical damage and abuse, including damage by doors, lids, use as steps or hand holds, or being bent or twisted sharply or repeatedly.

A5.8.12.5. Identification. Cables shall be labeled to indicate the equipment to which they belong and the connectors with which they mate.

A5.8.13. Fuses and circuit breakers.

A5.8.13.1. General. A positive indication shall be provided to reveal that a fuse or circuit breaker has opened a circuit.

A5.8.13.2. Replacement and resetting. Fuses shall be readily accessible for removal and replacement. No other components shall require removal in order to gain access to fuses. No special tools shall be required for fuse replacement unless required by safety considerations. When resetting of circuit breakers is permissible, and is required for system operation during a mission, the breakers shall be located within reach of the operator when standing at the control panel.

A5.8.13.3. Markings. Equipment served by the fuse or circuit breaker shall be labeled. Labeling of fuses and circuit breakers shall be legible in the anticipated ambient illumination range for the operator's location.

A5.8.13.4. Circuit breaker controls. Toggle bat and legend switch actuated circuit breakers may be used to control electrical power. Push-pull type breakers shall not be used as power switches.

A5.8.14. Drain valves. Drain valves shall be readily accessible and hand-operable by the full range of user personnel wearing either Arctic or NBC garments.

A5.8.15. Filters. Fuel and oil filters shall be located in accessible positions for inspection and replacement and shall not require the removal of other parts.

A5.8.16. Adjustment and access. Components requiring adjustment or replacement, such as fuel injectors and fan belts, shall be as accessible as possible.

A5.9. Labeling

A5.9.1. General

A5.9.1.1. Application. Labels, legends, placards, signs, markings, or a combination of these shall be provided whenever personnel must identify items (except where it is obvious to the observer what an item is and what he or she is to do with it) or follow procedures.

A5.9.1.2. Label characteristics. Label characteristics shall be consistent with required accuracy of identification, time available for recognition or other responses, distance at which the labels must be read, illuminant level and color, criticality of the function labeled, and label design practices used elsewhere on the TMWSS.

A5.9.2. Orientation and location

A5.9.2.1. Orientation. Labels and information thereon should be oriented horizontally so that they may be read from left to right. Vertical orientation may be used only when labels are not critical for personnel safety or performance and where space is limited. When used, vertical labels shall read from top to bottom.

A5.9.2.2. Location. Labels shall be placed on or very near the items which they identify, so as to eliminate confusion with other items and labels. Labels shall be located so as not to obscure any other information needed by the operator.

A5.9.3. Standardization. Labels shall be located consistently throughout the system.

A5.9.4. Contents

A5.9.4.1. Equipment functions. Labels should primarily describe the functions of equipment items. Nomenclature may be described as a secondary consideration.

A5.9.4.2. Irrelevant information. Trade names and other irrelevant information shall not appear on labels or placards.

A5.9.5. Qualities

A5.9.5.1. Brevity. Labels shall be unambiguous and as concise as possible without distorting the intended meaning or information. Redundancy shall be minimized. Where a general function is obvious, only the specific function shall be identified (e.g., "rpm" rather than "engine rpm").

A5.9.5.2. Familiarity. Words should be familiar to the operator. For specific users (e.g., maintainers), common technical terms may be used even though they may be unfamiliar to nonusers. Abstract symbols (e.g., squares and Greek letters) shall be used only when they have an accepted meaning to all intended readers. Common, meaningful symbols (e.g., % and +) may be used.

A5.9.5.3. Visibility and legibility. Labels and placards shall be easy to read accurately from the operational reading distances and in the anticipated vibration and illumination environments.

A5.9.5.4. Access. Item labels shall not be covered or obscured by other items.

A5.9.5.5. Label life. Labels shall be mounted so as to minimize wear or obscurement by grease, grime, or dirt, and shall remain legible for the overhaul interval of the labeled equipment.

A5.9.5.6. Contrast and background. Label color shall contrast with the equipment background.

A5.9.6. Design of label characters.

A5.9.6.1. Black characters. Where the ambient illuminance will be above 10 lux (0.9 ft-c), black characters shall be provided on a light background.

A5.9.6.2. Style. Sans serif block letter fonts having the size ratios specified herein shall be used. *Examples of acceptable commercial fonts* are Futura medium, Futura tempo bold, Futura demibold, Airport semibold, Vogue medium, Lining Gothic No. 66, and Alternate Gothic No. 8.

A5.9.6.3. Capital vs lower case.

A5.9.6.3.1. Labels. Labels shall be printed in all capitals, except where lower case letters or punctuation marks are indigenous to the item being identified.

A5.9.6.3.2. Legends. Legends shall be printed in all capitals, without periods or commas.

A5.9.6.3.3. Placards. Instructional placards may use capitals and lower case (sentence case) when the message exceeds two lines; however, for short, instructional material, all-capitals are preferred. All-capital material (consisting of a larger cap for the initial letter in a paragraph, line of instruction, or procedural step) may be used.

A5.9.6.3.4. Signs. Signs shall consist of all-capitals, except when the sign is instructional and involves several lines of extended sentences, in which case sentence case may be used.

A5.9.6.4. Letter width. The width of letters should be $3/5$ of the height, except for "M" and "W", which shall be $4/5$ of the height, and "I," which shall be one stroke wide.

A5.9.6.5. Numeral width. The width of numerals shall preferably be $3/5$ of the height, except for "4," which shall be one stroke width wider, and "1," which shall be one stroke wide.

A5.9.6.6. Wide characters. Where wide characters are required, e.g., for curved surfaces or for column alignment of numbers, the basic height-to-width ratio may be increased to as much as 1:1.

A5.9.6.7. Stroke width, normal. For black characters on a white (or light) background, the stroke width shall be $1/6$ to $1/7$ of the height.

A5.9.6.8. Character spacing. The minimum space between characters shall be one stroke width.

A5.9.6.9. Word spacing. Space between words shall be not less than the width of one character.

A5.9.6.10. Line spacing. The minimum space between lines shall be one-half character height.

A5.9.6.11. Size vs luminance. The height of letters and numerals shall conform to Table V.

A5.9.6.12. Character height and viewing distance. See Table VI.

TABLE VI. Label size versus luminance

MARKINGS	HEIGHT ¹	
	<=3.5 cd/m ² (1 ft—L)	>3.5 cd/m ² (1 ft—L)
Critical markings with position fixed (e.g., safety or emergency instructions)	4—8 mm 0.16 - 0.31 in)	2.5—5 mm (0.10 - 0.20 in)
Noncritical markings (e.g., identification labels, routine instructions, or markings required only for familiarization)	1.3—5 mm (0.05—0.20 in)	1.3—5 mm (0.05—0.20 in)

¹ Values assume a 710 mm (28 in.) viewing distance. For other distances, multiply the above values by D/710 mm (D/28 in.).

A5.10. Hazards and safety.

A5.10.1. General. Design shall reflect the safety related human engineering criteria below as well as in other sections of this standard.

A5.10.2. General workspace hazards.

A5.10.2.1. Obstructions. Areas where operation, storage, or maintenance is performed shall be free of obstructions which could cause injury to personnel, either through accidental contact with the obstruction or because the obstruction requires an awkward or dangerous body position.

A5.10.2.2. Handles. Handles on equipment shall be recessed whenever practicable, to eliminate projections on the surface. If handles cannot be recessed, they shall be configured, located, and oriented to preclude injuring personnel or entangling their clothing or equipment.

A5.10.2.3. Thermal contact hazards. Equipment which, in normal operation, exposes personnel to surface temperatures greater or less than those shown below, shall be appropriately guarded. Surface temperatures induced by climatic environment are exempt from this requirement.

Exposure	Temperature limits		
	Metal	Glass	Plastic or wood
Momentary contact	60° C	68° C	85° C

Prolonged contact or handling	(140° F) 49° C	(154° F) 59° C	(185° F) 69° C
Momentary or prolonged contact or handling	(120° F) 0° C	(138° F) 0° C	(156° F) 0° C
	(32° F)	(32° F)	(32° F)

A5.10.3. General equipment-related hazards.

A5.10.3.1. Access. Equipment items shall be so located and mounted that access to them can be achieved without danger to personnel from electrical, thermal, mechanical, or other hazards.

A5.10.3.2. Edge rounding. Where applicable, all exposed edges and corners shall be rounded to a radius not less than 0.75 mm (.03 in). Sharp edges and corners that can present a personal safety hazard or cause equipment damage during usage shall be suitably protected or rounded to a radius not less than 13 mm (.05 in).

A5.10.4. Electrical, mechanical, fluid, toxic, and radiation hazards.

A5.10.4.1. Electrical hazards.

A5.10.4.1.1. Insulation of tools. Tools and test leads to be used on or near energized electrical components shall be adequately insulated.

A5.10.4.1.2. Plugs and receptacles. Plugs and receptacle configurations shall preclude inserting a plug of one voltage rating into a receptacle of another rating.

A5.10.4.1.3. Voltage exposure. All hot contacts shall be socket contacts.

A5.10.4.1.4. Dangerous voltage or current. Guards, grounding, interlocks, and warning placards shall be provided to minimize exposing personnel to dangerous voltages or currents.

A5.10.4.1.5. Ground potential. Equipment shall be designed so that all external parts will be at ground potential.

A5.10.4.1.6. Electrically-operated hand tools. Electrically operated hand-held power tools shall be designed with three-wire power cords with one wire at ground potential and shall have exposed surfaces which are either non-conducting or are electrically connected to the ground wire. Exposed surfaces include cases, grips, handles, switches, triggers, chucks, and other surfaces which are capable of being contacted during operation. Portable tools which are protected by an approved system of double insulation or its equivalent may be used without a ground wire when approved by the procuring activity.

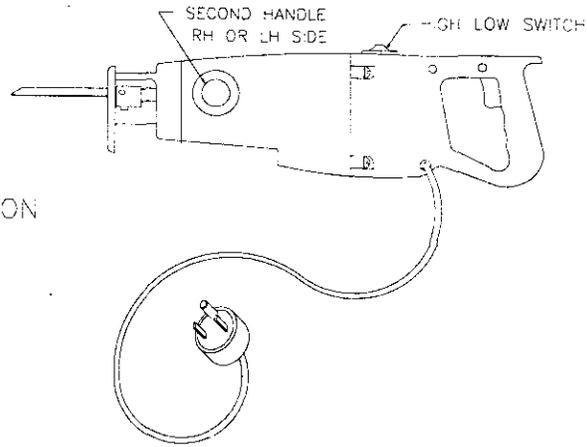
A5.10.4.1.7. Batteries. Batteries that have ratings greater than 25 amp hours shall have terminal guarding to prevent inadvertent short-circuit. Such guarding shall also prevent short-circuiting the battery in spite of clearly improper but possible acts by personnel, such as placing tools across terminals.

A5.10.4.2. Mechanical hazards. A guard shall be provided on all moving parts of machinery and power transmission equipment, including pulleys, belts, gears, and blades, on which personnel may become injured or entangled.

A5.10.4.3. Toxic hazards. Personnel shall not be exposed to the concentrations of toxic substances in excess of the limits specified in Occupational Safety and Health (OSH) standards.

NOTICE OF REVISION (NOR) THIS REVISION DESCRIBED BELOW HAS BEEN AUTHORIZED FOR THE DOCUMENT LISTED		1. DATE (YYYYMMDD) 990129	<i>Form Approved</i> OMB No. 0704-0188
<small>The public reporting burden for this collection of information is estimated to average 2 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports (0704-0188), 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number. PLEASE DO NOT RETURN YOUR COMPLETED FORM TO THIS ADDRESS. RETURN COMPLETED FORM TO THE GOVERNMENT ISSUING CONTRACTING OFFICER FOR THE CONTRACT/PROCURING ACTIVITY NUMBER LISTED IN ITEM 2 OF THIS FORM.</small>			2. PROCURING ACTIVITY NO.
			3. DODAAC
4. ORIGINATOR		b. ADDRESS (Street, City, State, Zip Code)	5. CAGE CODE
a. TYPED NAME (First, Middle Initial, Last) LARRY MCFARLAND		HQ, ARDEC, AMSTA-AR-EST-W ROCK ISLAND, IL 61299-7300	59678
			7. CAGE CODE
			8. DOCUMENT NO. 04A048201
9. TITLE OF DOCUMENT SAW, RECIPROCATING		10. REVISION LETTER	
		a. CURRENT	b. NEW
11. ECP NO. K9E			
12. CONFIGURATION ITEM (OR SYSTEM) TO WHICH ECP APPLIES TRAILER MOUNTED WELD SHOP SET (TMWSS)			
13. DESCRIPTION OF REVISION			
<p>THIS ECP ADDS 04A048201, SAW, RECIPROCATING, DRAWING TO THE LIST OF COMPONENTS</p> <p>(SEE ATTACHED)</p>			
14. THIS SECTION FOR GOVERNMENT USE ONLY			
a. (X one)		(1) Existing document supplemented by this NOR may be used in manufacture.	
		(2) Revised document must be received before manufacturer may incorporate this change.	
		(3) Custodian of master document shall make above revision and furnish revised document.	
b. ACTIVITY AUTHORIZED TO APPROVE CHANGE FOR GOVERNMENT		c. TYPED NAME (First, Middle Initial, Last)	
d. TITLE	e. SIGNATURE		f. DATE SIGNED (YYYYMMDD)
15.a. ACTIVITY ACCOMPLISHING REVISION	b. REVISION COMPLETED (Signature)		c. DATE SIGNED (YYYYMMDD)

APPLICATION		REVISIONS			
NEXT ASSY	USED ON	LTR	DESCRIPTION	DATE	APPROVED
			CAD MAINTAINED. CHANGES SHALL BE INCORPORATED BY THE DESIGN ACTIVITY.		



NOTES:

- APPLICABLE STANDARDS/SPECIFICATION
 A- MIL-STD-100E
 B- NEMA 5-15
- MATERIAL:
- PROTECTIVE FINISH: OPTIONAL
- COLOR: OPTIONAL
- SALIENT CHARACTERISTICS
 A- THE SAW SHALL PROVIDE 1-1/8" STROKES IN DUAL RANGES OF 0-1700 TO 1-2400 STROKES PER MINUTE, 115V @ 6 AMPS
 B- THE SAW SHALL HAVE A TRIGGER LOCK WITH A QUICK RELEASE & BE PROVIDED WITH TOOLS FOR SECURING BLADES.
 C- THE ELECTRIC CORD SHALL BE A 3 CONDUCTOR WITH A 3-PRONG PLUG THAT FITS A NEMA 5-15 RECEPTICAL.
- SUGGESTED SOURCE(S) LISTED ON A VENDOR ITEM DRAWING ARE NOT INTENDED TO REPRESENT THE ONLY SOURCE(S) FOR THE ITEM.
- THE IMAGE PROVIDED IS FOR PURPOSES OF ILLUSTRATION ONLY AND NOT INTENDED TO BE RESTRICTIVE. FEATURES NOT SPECIFIED HEREIN MAY VARY.
- IDENTIFICATION OF THE SUGGESTED SOURCE(S) OF SUPPLY HEREON IS NOT TO BE CONSTRUED AS A GUARANTEE OF PRESENT OR CONTINUED AVAILABILITY AS A SOURCE OF SUPPLY FOR THE ITEM(S).

SUGGESTED SOURCE OF SUPPLY				
PART NO.	VENDOR	ADDRESS	CAGE CODE	VENDOR PART NO.
5130007200654	MCMaster CARR	CHICAGO, IL 1-630-833-0300		39875A21
	GRANGER	DAVENPORT, IA 319-309-6015		3110KG
			STOCK NO. 1N601	

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VENDOR ITEM DRAWING

PART NO. 04A048201

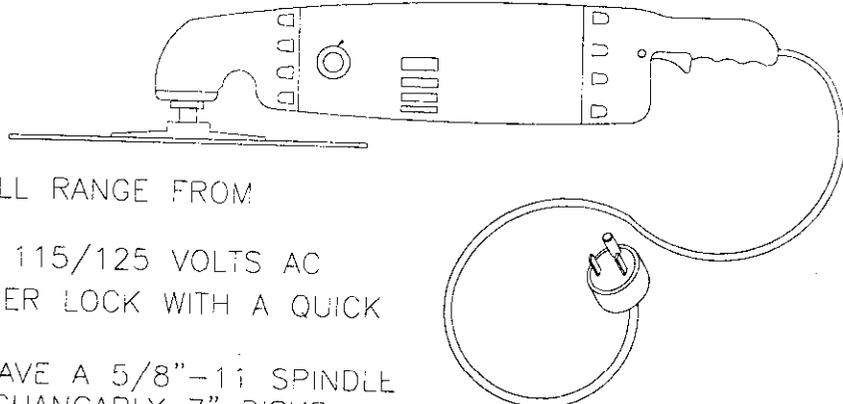
UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES TOLERANCES ON 2 PLACE 3 PLACE	CONTRACT NUMBER		DEPARTMENT OF THE ARMY U.S. ARMY ARMAMENT RESEARCH, DEVELOPMENT AND ENGINEERING CENTER ROCK ISLAND, ILLINOIS 61299-7300		
	CONTRACTOR		RECIPROCATING SAW		
	DRAWN BY L.C.MCFARLAND	DATE 98-04-10			
	CHECKER		ENGINEER	SIZE	CAGE CODE
	DRAWING APPROVAL STEVE MARRIOTT		A	59678	04A048201
MAT. ENGR	DESIGN APPROVAL BOB RIEDL		SCALE	UNIT WT.	SHEET

NOTICE OF REVISION (NOR) THIS REVISION DESCRIBED BELOW HAS BEEN AUTHORIZED FOR THE DOCUMENT LISTED		1. DATE (YYYYMMDD) 990129	Form Approved OMB No. 0704-0188
<p>The public reporting burden for this collection of information is estimated to average 2 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports (0704-0188), 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.</p> <p>PLEASE DO NOT RETURN YOUR COMPLETED FORM TO THIS ADDRESS. RETURN COMPLETED FORM TO THE GOVERNMENT ISSUING CONTRACTING OFFICER FOR THE CONTRACT/PROCURING ACTIVITY NUMBER LISTED IN ITEM 2 OF THIS FORM.</p>		2. PROCURING ACTIVITY NO.	
		3. DODAAC	
4. ORIGINATOR		5. CAGE CODE	6. NOR NO.
a. TYPED NAME (First, Middle Initial, Last) LARRY MCFARLAND	b. ADDRESS (Street, City, State, Zip Code) HQ, ARDEC, AMSTA-AR-EST-W ROCK ISLAND, IL 61299-7300	59678	003
		7. CAGE CODE	8. DOCUMENT NO. 04A048202
9. TITLE OF DOCUMENT SANDER, VERTICAL		10. REVISION LETTER	
		a. CURRENT	b. NEW
11. ECP NO. K9E		12. CONFIGURATION ITEM (OR SYSTEM) TO WHICH ECP APPLIES TRAILER MOUNTED WELD SHOP SET (TMWSS)	
13. DESCRIPTION OF REVISION THIS ECP ADDS 04A048202, SANDER, VERTICAL DRAWING TO THE LIST OF COMPONENTS (SEE ATTACHED)			
14. THIS SECTION FOR GOVERNMENT USE ONLY			
a. (X one)	<input type="checkbox"/> (1) Existing document supplemented by this NOR may be used in manufacture. <input type="checkbox"/> (2) Revised document must be received before manufacturer may incorporate this change. <input type="checkbox"/> (3) Custodian of master document shall make above revision and furnish revised document.		
b. ACTIVITY AUTHORIZED TO APPROVE CHANGE FOR GOVERNMENT		c. TYPED NAME (First, Middle Initial, Last)	
d. TITLE	e. SIGNATURE	f. DATE SIGNED (YYYYMMDD)	
15.a. ACTIVITY ACCOMPLISHING REVISION	b. REVISION COMPLETED (Signature)	c. DATE SIGNED (YYYYMMDD)	

APPLICATION		REVISIONS			
NEXT ASSY	USED ON	LTR	DESCRIPTION	DATE	APPROVED
			CAD MAINTAINED. CHANGES SHALL BE INCORPORATED BY THE DESIGN ACTIVITY.		

NOTES:

1. APPLICABLE STANDARDS/SPECIFICATION
A- MIL-STD-100E
2. MATERIAL:OPTIONAL
3. PROTECTIVE FINISH:OPTIONAL
4. COLOR:OPTIONAL
5. SALIENT CHARACTERISTICS



- A- THE SANDER RPM SHALL RANGE FROM
0 - 5000
- B- THE MOTOR SHALL BE 115/125 VOLTS AC
- C- FURNISHED WITH TRIGGER LOCK WITH A QUICK RELEASE.
- D- THE GRINDER SHALL HAVE A 5/8"-11 SPINDLE THAT SUPPORTS INTERCHANGABLY 7" DISKS.
- E- THE SANDER SHALL HAVE A 3-POSITION HANDLE.
- F- THE POWER CORD PLUG SHALL FIT THE STANDARD NEMA 5-15 RECEPTICAL.

6. SUGGESTED SOURCE(S) LISTED ON A VENDOR ITEM DRAWING ARE NOT INTENDED TO REPRESENT THE ONLY SOURCE(S) FOR THE ITEM.
7. THE IMAGE PROVIDED IS NOT INTENDED TO BE RESTRICTIVE. FEATURES NOT SPECIFIED HEREIN MAY VARY.
8. IDENTIFICATION OF THE SUGGESTED SOURCE(S) OF SUPPLY HEREON IS NOT TO BE CONSTRUED AS A GUARANTEE OF PRESENT OR CONTINUED AVAILABILITY AS A SOURCE OF SUPPLY FOR THE ITEM(S).

SUGGESTED SOURCE OF SUPPLY				
PART NO.	VENDOR	ADDRESS	CAGE CODE	VENDOR PART NO.
530005969728	MCMaster CARR	CHICAGO, IL 1-630-833-0300		4395A13
	GRANGER	DAVENPORT, IA 319-309-6015		STOCK NO. 6W337

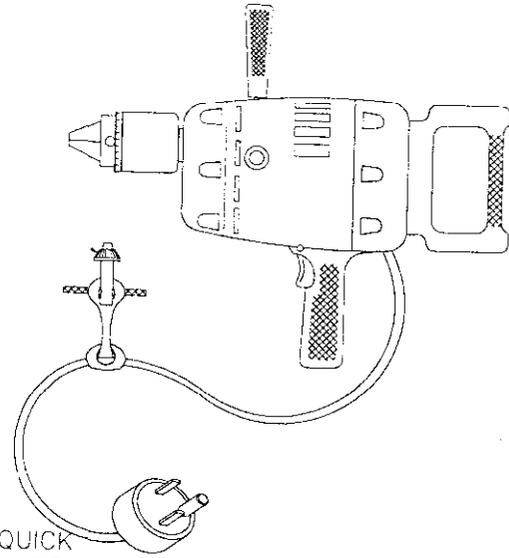
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VENDOR ITEM DRAWING

PART NO. 04A048202

UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES TOLERANCES ON 2 PLACE 3 PLACE	CONTRACT NUMBER		DEPARTMENT OF THE ARMY U.S. ARMY ARMAMENT RESEARCH, DEVELOPMENT AND ENGINEERING CENTER ROCK ISLAND, ILLINOIS 61299-7300			
	CONTRACTOR					
	DRAWN BY L.C.MCFARLAND		DATE 98-04-10	SANDER, VERTICAL		
	CHECKER		ENGINEER			
MATL ENCR	DRAWING APPROVAL STEVE MARRIOTT		SIZE A	CAGE CODE 59678	04A048202	
	DESIGN APPROVAL BOB RIEDL		SCALE	UNIT WT	SHEET	

NOTICE OF REVISION (NOR) THIS REVISION DESCRIBED BELOW HAS BEEN AUTHORIZED FOR THE DOCUMENT LISTED		1. DATE (YYYYMMDD) 990129	Form Approved OMB No. 0704-0188
<small>The public reporting burden for this collection of information is estimated to average 2 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports (0704-0188), 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.</small> PLEASE DO NOT RETURN YOUR COMPLETED FORM TO THIS ADDRESS. RETURN COMPLETED FORM TO THE GOVERNMENT ISSUING CONTRACTING OFFICER FOR THE CONTRACT/PROCURING ACTIVITY NUMBER LISTED IN ITEM 2 OF THIS FORM.		2. PROCURING ACTIVITY NO.	
4. ORIGINATOR		3. DODAAC	
a. TYPED NAME (First, Middle Initial, Last) LARRY MCFARLAND	b. ADDRESS (Street, City, State, Zip Code) HQ, ARDEC, AMSTA-AR-EST-W ROCK ISLAND, IL 61299-7300	5. CAGE CODE 59678	6. NOR NO. 004
9. TITLE OF DOCUMENT DRILL, ELECTRIC		7. CAGE CODE	8. DOCUMENT NO. 04A048203
		11. ECP NO. K9E	
12. CONFIGURATION ITEM (OR SYSTEM) TO WHICH ECP APPLIES TRAILER MOUNTED WELD SHOP SET (TMWSS)		10. REVISION LETTER a. CURRENT b. NEW	
13. DESCRIPTION OF REVISION THIS ECP ADDS 04A048203, DRILL, ELECTRIC DRAWING TO THE LIST OF COMPONENTS (SEE ATTACHED)			
14. THIS SECTION FOR GOVERNMENT USE ONLY			
a. (X one)	(1) Existing document supplemented by this NOR may be used in manufacture. (2) Revised document must be received before manufacturer may incorporate this change. (3) Custodian of master document shall make above revision and furnish revised document.		
b. ACTIVITY AUTHORIZED TO APPROVE CHANGE FOR GOVERNMENT		c. TYPED NAME (First, Middle Initial, Last)	
d. TITLE	e. SIGNATURE	f. DATE SIGNED (YYYYMMDD)	
15.a. ACTIVITY ACCOMPLISHING REVISION	b. REVISION COMPLETED (Signature)	c. DATE SIGNED (YYYYMMDD)	

APPLICATION		REVISIONS			
NEXT ASSY	USED ON	LTR	DESCRIPTION	DATE	APPROVED
			CAD MAINTAINED: CHANGES SHALL BE INCORPORATED BY THE DESIGN ACTIVITY.		



NOTES:

1. APPLICABLE STANDARDS/SPECIFICATION
A- MIL-STD-100E
2. MATERIAL:OPTIONAL
3. PROTECTIVE FINISH: OPTIONAL
4. COLOR:OPTIONAL
5. SALIENT CHARACTERISTICS
A-THE DRILL SHALL HAVE A RANGE OF RPM FROM 0 TO 500 AND BE REVERSABLE.
B-THE MOTOR SHALL BE 120 VOLTS, AND 6 AMP AC
C- THE DRILL SHALL HAVE A TRIGGER LOCK WITH A QUICK RELEASE & PROVIDE A CHUCK KEY FOR SECURING DRILLS.
D- THE ELECTRIC CORD SHALL BE A 3 CONDUCTOR WITH A 3 PRONG PLUG THAT FITS A NEMA 5-15 RECEPTICAL.
E- THE DRILL SHALL BE FURNISHED WITH A JACOBS TYPE CHUCK AND A 3-POSITION AUXILIARY HANDLE AS SHOWN.
6. SUGGESTED SOURCE(S) LISTED ON A VENDOR ITEM DRAWING ARE NOT INTENDED TO REPRESENT THE ONLY SOURCE(S) FOR THE ITEM.
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SUGGESTED SOURCE OF SUPPLY				
PART NO.	VENDOR	ADDRESS	CAGE CODE	VENDOR PART NO.
5130000884949	MCMASTER CARR	CHICAGO, IL 1-630-833-0300		3134A21
	GRANGER	DAVENPORT, IA 309-391-6015		STOCK NO. 6Z329

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VENDOR ITEM DRAWING

PART NO. 04A048203

DEPARTMENT OF THE ARMY
U.S. ARMY ARMAMENT RESEARCH,
DEVELOPMENT AND ENGINEERING CENTER
ROCK ISLAND, ILLINOIS 61299-7300

ELECTRIC DRILL 1/2" CAP

UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES TOLERANCES ON 2 PLACE 3 PLACE	CONTRACT NUMBER		DRAWN BY L.C.MCFARLAND DATE 98-04-10	
	CONTRACTOR			
MATERIAL ENCR	DRAWING APPROVAL STEVE MARRIOTT		SIZE A	CAGE CODE 59678
	DESIGN APPROVAL BOB RIEDL		SCALE	UNIT WT
			SHEET	

04A048203

NOTICE OF REVISION (NOR)
THIS REVISION DESCRIBED BELOW HAS BEEN AUTHORIZED FOR THE DOCUMENT LISTED

1. DATE
 (YYYYMMDD)
 990129

Form Approved
 OMB No. 0704-0188

The public reporting burden for this collection of information is estimated to average 2 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports (0704-0188), 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.

2. PROCURING
 ACTIVITY NO.

PLEASE DO NOT RETURN YOUR COMPLETED FORM TO THIS ADDRESS. RETURN COMPLETED FORM TO THE GOVERNMENT ISSUING CONTRACTING OFFICER FOR THE CONTRACT/PROCURING ACTIVITY NUMBER LISTED IN ITEM 2 OF THIS FORM.

3. DODAAC

4. ORIGINATOR
 a. TYPED NAME (First, Middle Initial, Last)
 LARRY MCFARLAND

b. ADDRESS (Street, City, State, Zip Code)
 HQ, ARDEC, AMSTA-AR-EST-W
 ROCK ISLAND, IL 61299-7300

5. CAGE CODE
 59678

6. NOR NO.
 005

7. CAGE CODE

8. DOCUMENT NO.
 04A048204

9. TITLE OF DOCUMENT
 HAMMER, SCALING

10. REVISION LETTER

a. CURRENT

b. NEW

11. ECP NO.
 K9E

12. CONFIGURATION ITEM (OR SYSTEM) TO WHICH ECP APPLIES
 TRAILER MOUNTED WELD SHOP SET (TMWSS)

13. DESCRIPTION OF REVISION

THIS ECP ADDS 04A048204, HAMMER, SCALING DRAWING TO THE LIST OF COMPONENTS
 (SEE ATTACHED)

4. THIS SECTION FOR GOVERNMENT USE ONLY

- (X one)
- (1) Existing document supplemented by this NOR may be used in manufacture.
 - (2) Revised document must be received before manufacturer may incorporate this change.
 - (3) Custodian of master document shall make above revision and furnish revised document.

ACTIVITY AUTHORIZED TO APPROVE CHANGE FOR GOVERNMENT

c. TYPED NAME (First, Middle Initial, Last)

TITLE

e. SIGNATURE

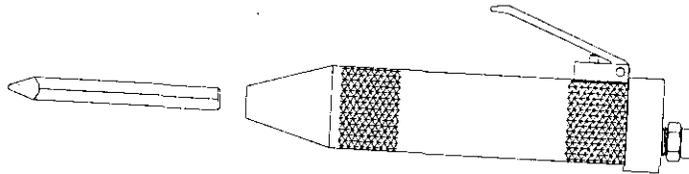
f. DATE SIGNED
 (YYYYMMDD)

a. ACTIVITY ACCOMPLISHING REVISION

b. REVISION COMPLETED (Signature)

c. DATE SIGNED
 (YYYYMMDD)

APPLICATION		REVISIONS			
NEXT ASSY	USED ON	LTR	DESCRIPTION	DATE	APPROVED
			CAD MAINTAINED. CHANGES SHALL BE INCORPORATED BY THE DESIGN ACTIVITY.		



NOTES:

1. APPLICABLE STANDARDS/SPECIFICATIONS
 A MIL-STD-100
 B ANSI Z87.1-1979
2. MATERIAL: OPTIONAL
3. PROTECTIVE FINISH: OPTIONAL
4. COLOR: OPTIONAL
5. SALIENT CHARACTERISTICS
 A- SHALL BE CAPABLE OF 6000 3/8" STROKES PER MINUTE AT AN AIR PRESSURE OF 80 PSI AND 5.3 SCFM
 B- SHALL BE FURNISHED WITH (1) FLAT CHISEL & (1) ROUTING CHISEL
6. SUGGESTED SOURCE(S) LISTED ON A VENDOR ITEM DRAWING ARE NOT INTENDED TO REPRESENT THE ONLY SOURCE(S) FOR THE ITEM.
7. THE IMAGE PROVIDED IS NOT INTENDED TO BE RESTRICTIVE. FEATURES NOT SHOWN MAY VARY.
7. IDENTIFICATION OF THE SUGGESTED SOURCE(S) OF SUPPLY HEREON IS NOT TO BE CONSTRUED AS A GUARANTEE OF PRESENT OR CONTINUED AVAILABILITY AS A SOURCE OF SUPPLY FOR THE ITEM(S).

SUGGESTED SOURCE OF SUPPLY				
PART NO.	VENDOR	ADDRESS	CAGE CODE	VENDOR PART NO.
	MCMASTER CARR	CHICAGO, IL 1-630-8330300		6022A13
	GRANGER	DAVENPORT, IA 319-391-6015		STOCK NO. 6Z833

DISTRIBUTION STATEMENT A. APPROVED FOR PUBLIC RELEASE; DISTRIBUTION IS UNLIMITED.

VENDOR ITEM DRAWING

PART NO. 04A048204

UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES TOLERANCES ON 2 PLACE 3 PLACE	CONTRACT NUMBER		DEPARTMENT OF THE ARMY U.S. ARMY ARMAMENT RESEARCH, DEVELOPMENT AND ENGINEERING CENTER ROCK ISLAND, ILLINOIS 61299-7300		
	CONTRACTOR				
	DRAWN BY L.C.MCFARLAND	DATE 98-04-10	HAMMER, SCALING, PNEU		
	CHECKER	ENG.NEER			
	DRAWING APPROVAL STEVE MARRIOTT		SIZE A	CAGE CODE 59678	04A048204
	DESIGN APPROVAL BOB RIEDL		SCALE	UNIT WT	SHEET

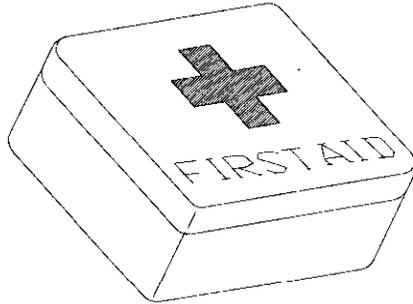
MATL ENGR

NOTICE OF REVISION (NOR) THIS REVISION DESCRIBED BELOW HAS BEEN AUTHORIZED FOR THE DOCUMENT LISTED		1. DATE (YYYYMMDD) 990129	Form Approved OMB No. 0704-0188
<small>The public reporting burden for this collection of information is estimated to average 2 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports (0704-0188), 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.</small> PLEASE DO NOT RETURN YOUR COMPLETED FORM TO THIS ADDRESS. RETURN COMPLETED FORM TO THE GOVERNMENT ISSUING CONTRACTING OFFICER FOR THE CONTRACT/PROCURING ACTIVITY NUMBER LISTED IN ITEM 2 OF THIS FORM.		2. PROCURING ACTIVITY NO.	
4. ORIGINATOR		3. DODAAC	
a. TYPED NAME (First, Middle Initial, Last) LARRY MCFARLAND	b. ADDRESS (Street, City, State, Zip Code) HQ, ARDEC, AMSTA-AR-EST-W ROCK ISLAND, IL 61299-7300	5. CAGE CODE 59678	6. NOR NO. 006
9. TITLE OF DOCUMENT FIRST AID KIT		7. CAGE CODE	8. DOCUMENT NO. 04A048307
12. CONFIGURATION ITEM (OR SYSTEM) TO WHICH ECP APPLIES TRAILER MOUNTED WELD SHOP SET (TMWSS)		10. REVISION LETTER	
		a. CURRENT	b. NEW
13. DESCRIPTION OF REVISION		11. ECP NO. K9E	
THIS ECP ADDS 04A048307, FIRST AID KIT DRAWING TO THE LIST OF COMPONENTS (SEE ATTACHED)			
14. THIS SECTION FOR GOVERNMENT USE ONLY			
a. (X one)	(1) Existing document supplemented by this NOR may be used in manufacture. (2) Revised document must be received before manufacturer may incorporate this change. (3) Custodian of master document shall make above revision and furnish revised document.		
b. ACTIVITY AUTHORIZED TO APPROVE CHANGE FOR GOVERNMENT		c. TYPED NAME (First, Middle Initial, Last)	
d. TITLE	e. SIGNATURE	f. DATE SIGNED (YYYYMMDD)	
5.a. ACTIVITY ACCOMPLISHING REVISION	b. REVISION COMPLETED (Signature)	c. DATE SIGNED (YYYYMMDD)	

APPLICATION	
NEXT ASSY	USED ON

REVISIONS			
LTR	DESCRIPTION	DATE	APPROVED

CAD MAINTAINED. CHANGES SHALL BE INCORPORATED BY THE DESIGN ACTIVITY.



FIRST AID KIT CONTENTS	
QTY	NAMED ITEM
64	1"X3-1/2" ADHESIVE BANDAGES
6	2-1/4X3-1/2" ADHESIVE BANDAGES
4	2" COMPRESSES
1	4" COMPRESS
2	2"X6YDS GAUZE BANDAGES
2	1"X2-1/2 YDS ADHESIVE TAPE
2	TUBES BURN CREME
2	3/4 OZ BURN SPRAY
20	IODINE SWABS
4	EYE DRESSING PADS
50	ANTISEPTIC SWABS
1	BOTTLE EYE WASH SOLUTION
4	EYE DRESSINGS
1	EYE DRESSING KIT
10	AMONIA INHALANTS
1	SCISSORS
1	4 OZ BORIC ACID EYE WASH
1	FIRST AID BOOKLET

NOTES:

1. APPLICABLE STANDARDS/SPECIFICATION
A- MIL-STD-100E
2. MATERIAL:
3. PROTECTIVE FINISH:
4. COLOR:
5. SALIENT CHARACTERISTICS

A- THE FIRST AID KIT SHALL PROVIDE SUPPLIES FOR TREATING INJURIES OCCURING DURING WELDING OPERATIONS INCLUDING FIRST AID SUPPLIES ASSOCIATED WITH CUTS, BURNS, AND EYE INJURY. (SEE LIST OF CONTENTS)

B- KIT SHALL BE WATERPROOF, CLEARLY MARKED FIRST AID AND BE ACCOMPANIED BY INSRUCTIONS.

6. SUGGESTED SOURCE(S) LISTED ON A VENDOR ITEM DRAWING ARE NOT INTENDED TO REPRESENT THE ONLY SOURCE(S) FOR THE ITEM.
7. THE IMAGE PROVIDED IS NOT INTENDED TO BE RESTRICTIVE. FEATURES NOT SHOWN MAY VARY.
8. IDENTIFICATION OF THE SUGGESTED SOURCE(S) OF SUPPLY HEREON IS NOT TO BE CONSTRUED AS A GUARANTEE OF PRESENT OR CONTINUED AVAILABILITY AS A SOURCE OF SUPPLY FOR THE ITEM(S).

SUGGESTED SOURCE OF SUPPLY				
PART NO.	VENDOR	ADDRESS	CAGE CODE	VENDOR PART NO.
	MCMASTER CARR	CHICAGO, IL 1-630-0833-0300		9132T11
	S.J. SMITH	3707 W RIVER DRIVE DAVENPORT, IA		35-024K

DISTRIBUTION STATEMENT A. APPROVED FOR PUBLIC RELEASE; DISTRIBUTION IS UNLIMITED.

VENDOR ITEM DRAWING

PART NO. 04A08307

UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES TOLERANCES ON 2 PLACE 3 PLACE	CONTRACT NUMBER CONTRACTOR		DEPARTMENT OF THE ARMY U.S. ARMY ARMAMENT RESEARCH, DEVELOPMENT AND ENGINEERING CENTER ROCK ISLAND, ILLINOIS 61299-7300			
	DRAWN BY L.C.MCFARLAND	DATE 98-04-10				FIRST AID KIT
	CHECKER	ENGINEER	DRAWING APPROVAL STEVE MARROTT	SIZE A	CAGE CODE 59678	
	MATL ENGR	DESIGN APPROVAL BOB REDL	SCALE	UNIT WT	SHEET	

NOTICE OF REVISION (NOR)
THIS REVISION DESCRIBED BELOW HAS BEEN AUTHORIZED FOR THE DOCUMENT LISTED

1. DATE
 (YYYYMMDD)
 990129

Form Approved
 OMB No. 0704-0188

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2. PROCURING
 ACTIVITY NO.

3. DODAAC

4. ORIGINATOR

a. TYPED NAME (First, Middle Initial, Last)
 LARRY MCFARLAND

b. ADDRESS (Street, City, State, Zip Code)
 HQ, ARDEC, AMSTA-AR-EST-W
 ROCK ISLAND, IL 61299-7300

5. CAGE CODE
 59678

7. CAGE CODE

6. NOR NO.
 007

8. DOCUMENT NO.
 04A048311

9. TITLE OF DOCUMENT
 WELD CURTAINS

10. REVISION LETTER

a. CURRENT

b. NEW

11. ECP NO.
 K9E

12. CONFIGURATION ITEM (OR SYSTEM) TO WHICH ECP APPLIES
 TRAILER MOUNTED WELD SHOP SET (TMWSS)

13. DESCRIPTION OF REVISION

THIS ECP ADDS 04A048311, WELD CURTAINS DRAWING TO THE LIST OF COMPONENTS
 (SEE ATTACHED)

14. THIS SECTION FOR GOVERNMENT USE ONLY

- a. (X one)
- (1) Existing document supplemented by this NOR may be used in manufacture.
 - (2) Revised document must be received before manufacturer may incorporate this change.
 - (3) Custodian of master document shall make above revision and furnish revised document.

b. ACTIVITY AUTHORIZED TO APPROVE CHANGE FOR GOVERNMENT

c. TYPED NAME (First, Middle Initial, Last)

d. TITLE

e. SIGNATURE

f. DATE SIGNED
 (YYYYMMDD)

15.a. ACTIVITY ACCOMPLISHING REVISION

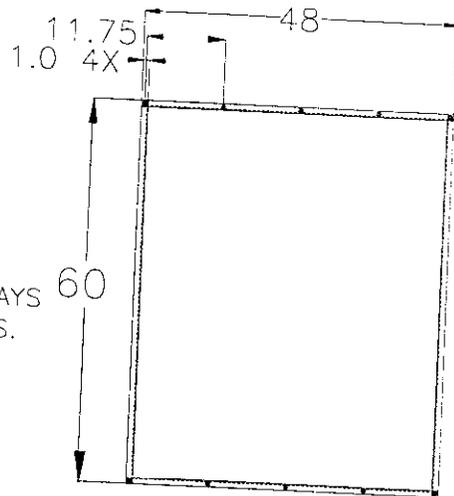
b. REVISION COMPLETED (Signature)

c. DATE SIGNED
 (YYYYMMDD)

APPLICATION		REVISIONS			
NEXT ASSY	USED ON	LTR	DESCRIPTION	DATE	APPROVED
			CAD MAINTAINED. CHANGES SHALL BE INCORPORATED BY THE DESIGN ACTIVITY.		

NOTES:

1. APPLICABLE STANDARDS/SPECIFICATION
A- MIL-STD-100E
2. MATERIAL: VINYL
3. PROTECTIVE FINISH: OPTIONAL
4. COLOR: SEMI-TRANSPARENT GRAY COLOR.
5. SALIENT CHARACTERISTICS
 - A- THE CURTAINS SHALL BE OPAQUE TO UNTRAVIOLET RAYS AND SHALL NOT SUPPORT COMBUSTION FROM SPARKS.
 - B- SHALL BE DOUBLED ON EDGES, SIZED TO COMPLY WITH THE 6 FT X 4 FT SIZE.
 - D- GROMMETS SHALL BE INSTALLED ACROSS BOTH 48" SPANS, SPACED APPR. 12" C-C.
 - E- SHALL BE FOLDABLE TO A REDUCED SIZE OF NOT MORE THAN 14" X 14" X 10" HIGH
 - F- HEMS SHALL BE BONDED OR SEWN IN A MANNER THAT HOLDS THE CORNERS FLAT.
6. SUGGESTED SOURCE(S) LISTED ON A VENDOR ITEM DRAWING ARE NOT INTENDED TO REPRESENT THE ONLY SOURCE(S) FOR THE ITEM.
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SUGGESTED SOURCE OF SUPPLY				
PART NO.	VENDOR	ADDRESS	CAGE CODE	VENDOR PART NO.
	MCMaster CARR	CHICAGO, IL 1-630-833-0300		54655T6
	S.J. SMITH	3707 W RIVER DRIVE DAVENPORT, IA		20SVGY

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VENDOR ITEM DRAWING

PART NO. 04A048311

PMIC	CONTRACT NUMBER		DEPARTMENT OF THE ARMY U.S. ARMY ARMAMENT RESEARCH, DEVELOPMENT AND ENGINEERING CENTER ROCK ISLAND, ILLINOIS 61299-7300		
	CONTRACTOR				
UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES TOLERANCES ON 2 PLACE 3 PLACE	DRAWN BY L.C. MCFARLAND	DATE 98-04-10	WELD CURTAINS (4 EACH)		
	CHECKER	ENGINEER			
MATERIAL ENGR	DRAWING APPROVAL STEVE MARRIOTT		SIZE A	CAGE CODE 59678	04A048311
	DESIGN APPROVAL BOB RIEDL		SCALE	UNIT WT	SHEET