

STRAIGHT FROM THE **HEARTLAND**

2020 - 2021



FERTILIZER KNIVES CATALOG

800-798-1968

SHIELDAG.COM



Quality Agricultural Equipment

Manufacturers of:

V-Blades • Sweeps • Chisels & Spikes • Disc Blades • Drill Discs & Hoe Drill Points
Related Tillage & Planting Hardware • Fertilizer Knives • Shanks • Coulter Blades • Crop Savers
Precision Planting Equipment • Conservation Ripper Points • Strip Till Points • Fertilizer Row Units

Distributors of:

Belted Grain & Fertilizer Conveyors • Salt & Material Handling Conveyors • Seed Handling Equipment
Round Baler Belting • Milo Guards & Crop Savers

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Warranty

Shield Agricultural Equipment (ShieldAg) and Acra-Plant warrant our products to be free of defects in materials and workmanship for a period of 180 days after the date of end user (consumer) purchase from the dealer. The warranty for whole goods equipment shall be exactly the warranty offered on these products by the original equipment manufacturer, and their individual warranties shall replace this warranty. This warranty does not apply to item(s), equipment or component parts that are found to have been subject to abuse or inadequate maintenance, that have been altered in any way or that have been used beyond their advertised capacity, rating or intended use. This warranty shall be for the repair or replacement of the defective item(s) at the sole discretion of Shield Agricultural Equipment. Any warranty replacement or repairs shall be subject to pro-rated consumer usage deductions as outlined below. Any warranty on tillage items expires after 1/2" of edge wear has occurred. Chrome products are warranted for defects in material and workmanship only, and the pro-rating system and 1/2" edge wear rule does not apply to chrome products. Chrome products are not guaranteed for use in rocky or frozen ground. This warranty does not extend to labor incurred in removal or replacement of any item(s). ShieldAg shall not be liable for incidental or consequential damages arising out of the use or inability to use the item(s) for any purpose whatsoever.

Execution of consumer rights for warranty repair or replacement:

1. Consumer must provide the dealer with evidence of date of purchase of the item(s) to be considered for warranty. This evidence shall be in the form of a copy of the invoice or bill of sale for the item(s) and this evidence shall accompany the item(s) alleged to be defective.
2. The dealer shall provide ShieldAg with #1, above, and with a copy of the ShieldAg invoice to the dealer for the same item(s).
3. The ShieldAg Territory Manager or the dealer shall complete a ShieldAg Returned Goods Authorization (RGA) for the item(s) alleged to be defective. It is the dealer's responsibility to return the item(s) to ShieldAg at the dealer's expense; however, the Territory Manager may elect to return the item(s) to ShieldAg via our truck. Extension of this courtesy does not constitute the final decision to authorize warranty replacement or repair for the item(s).
4. Upon receipt of the item(s) alleged to be defective and the RGA, the ShieldAg engineering department will inspect the item(s). The engineering department will have sole discretion to authorize warranty replacement or repair.
5. ShieldAg engineering department shall assign the pro-rated wear factors to all item(s) subject to a warranty claim. Since the range of item(s) varies widely, the assignment of pro-rated wear factor deductions shall be done in good faith, working with the ShieldAg Territory Manager, the dealer and the consumer. In general, warranty will be pro-rated for wear up to 1/2" of edge wear on the item(s). Any warranty on tillage items expires after 1/2" of edge wear has occurred. The pro-rating system and 1/2" edge wear rule does not apply to chrome products.
6. ShieldAg will at its sole discretion replace or repair the item(s) found to be defective, less the pro-rated wear factors. ShieldAg will return the item(s) that have been repaired or replaced to the dealer including free return transportation via the mode of our choice.

Notes on Implied Warranties and Limitations

There is no implied warranty of merchantability or fitness for a particular purpose. Some states do not allow limitations on implied warranties of merchantability or fitness for a particular purpose, so this limitation may not apply in a given state. Some states do not allow the exclusion or limitation of incidental or consequential damages, so this limitation may not apply in a given state.

Shipments & Returns

This "Shipments and Returns Policy" outlines the rights and obligations of Shield Agricultural Equipment (ShieldAg) dealers with regards to discrepancies in shipments and returns of unsold items to ShieldAg.

Shipments

ShieldAg must be informed of any shortages in shipments within ten (10) days of the arrival of that shipment or shipments at the dealer or end user (in the case of drop-shipments from ShieldAg to the end user). Shortages for truck shipments via LTL, UPS or other common carrier should be forwarded to the carrier for adjustment via freight claim. Shortages deemed by ShieldAg corporate office or our Territory Managers to be our responsibility will be corrected through a credit on the account of the dealer or through replacement of the item(s) that were missing from the shipment. It is the sole responsibility of the dealer to count the item(s) received on shipments and to make appropriate claims for shortages within ten (10) days of the receipt of the item(s).

Execution of dealer rights for shipments:

1. Dealer shall provide ShieldAg with a copy of the ShieldAg packing slip (pick list) highlighting the item(s) that were alleged to be missing. A copy of the packing slip is to be faxed or mailed to ShieldAg within ten (10) days of the receipt of the shipment.
2. The ShieldAg Territory Manager may at our discretion be asked to visit the dealer and examine the shipment and shortage prior to extending credit or replacing the items.
3. ShieldAg will at its sole discretion replace the missing item(s) or credit the dealer account for the net dealer cost of the item(s) found to be missing. If replaced, ShieldAg will replace the missing item(s) to the dealer including free return transportation via the mode of our choice.

Returns

ShieldAg does not have any types of oral or written agreements, contracts or arrangements of any type, between ShieldAg and our dealers or distributors that provide for the rights and obligations of the parties with respect to the purchase or sale of equipment or repair parts, beyond the standard obligations created by purchase orders and acceptance of same, for ShieldAg parts. ShieldAg therefore does not fall under any state's "buy back" laws. ShieldAg will not allow returns for any items purchased as "special order" or non-standard as modified for a custom application. ShieldAg will accept the return of standard-stocked new item(s) originally purchased into dealer or distributor stock from ShieldAg for a period of two (2) years from the date of original purchase from ShieldAg. All items returned must be current to the stream of commerce and not deemed to be obsolete. Returned item(s) in new and merchantable condition shall be subject to a thirty percent (30%) restocking charge. Any item(s) requiring rework, repackaging or repainting will be accepted only with a revised (and increased) restock charge after inspection at ShieldAg.

Execution of dealer or distributor rights for returned goods:

1. Dealer or distributor shall provide ShieldAg with a copy of the original invoice for the item(s) to be returned and a written explanation of the reason for return.
2. The ShieldAg inside salesperson or territory manager will work with the dealer or distributor to complete a ShieldAg Returned Materials Authorization (RMA), also known in the industry as an RGA (Returned Goods Authorization) for the item(s) to be returned. Upon inspection of the original invoice and the written explanation for return, the ShieldAg Inside salesperson or territory manager will authorize return of the item(s) for inspection and subsequent credit. It is the dealer's responsibility to return the item(s) to ShieldAg at the dealer's expense. Receipt of items does not constitute the final decision to extend returned goods credit for the item(s).
3. Upon receipt of the item(s) and the completed RMA (RGA), ShieldAg will inspect the items for merchantability and general condition. Credit on account will only be applied after the items have been inspected and accepted. Credit against the dealer or distributor account receivable will be applied less the thirty percent (30%) restocking charge. There will be no cash refunds for returned items. The ShieldAg territory manager or inside salesperson will communicate (to the dealer or distributor) acceptance (or rejection) of the returned goods and the final credit amount.
4. This Policy dated 12/01/2020 supersedes all previous written or oral Returned Goods policies.

INDEX TO SHIELD FERTILIZER KNIVES

Pages	Description
1-20	DF-1PM (Deep Furrow)
21-46	K-2T Upright
47-54	K-4T Front Swept
55-76	Liquid, Slim and Backswept
77-90	Strip Till Points
91-102	Chisel Plow
103	AcraPlant Quick-Change



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ShieldAg 800-798-1968 www.shieldag.com

SHIELDAG FERTILIZER KNIVES



All DF deep furrow knives are supplied with the DF1PM improved casting
 DF-1PM/ST series knives are designed for strip till applications
 For heavy-duty strip till applications, see the section of ST-series strip till points

STANDARD DF-1PM Deep Furrow Knives, 1/2" X 2-1/2" X 16" Tall

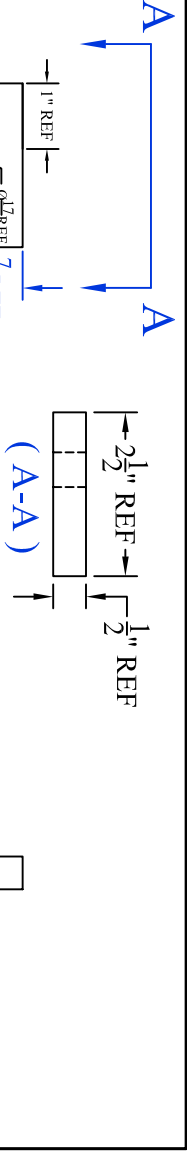
Drawings for knives following this page are in the order shown in this table

Part #	Description	DRAWING	Weight
DF-1PM	Single 3/8" NH3 tube	yes	7.2
DF-1PM/O	Single 3/8" open end tube	yes	7.2
DF-1PM/1/2A	Single 1/2" NH3 tube	yes	7.3
DF-1PM/3/4DA	3/8" NH3 & 3/4" vapor tube	yes	7.8
DF-1PM/DA	3/8" NH3 & 3/8" open end tubes	yes	7.6
DF-1PM/DA/O	Dual open end 3/8" tubes	yes	7.6
DF-1PM/2DA	3/8" NH3 & 1/2" open end tubes	yes	7.8
DF-1PM/1/2A/3/4DA	1/2" NH3 & 3/4" open end tubes		8.2
DF-1PM/1/2A/1/2DA	1/2" NH3 & 1/2" open end tubes		7.9
DF-1PM/1/2A/3/8DA	1/2" FRONT NH3 & 3/8" REAR open end tubes		7.8
DF-1PM/DA/3/4	3/8" NH3 & 3/8" open end tubes and 3/4 vapor tube		8.4
DF-1PM/112DA	3/8" NH3 & 1-1/2" dry tubes, conventional	yes	9.6
DF-1PM/112DAR	3/8" NH3 & 1-1/2" dry tube, conventional, dry tube BENT RIGHT		9.6
DF-1PM/112	Knife with 1-1/2" dry tube only, conventional		9.5
DF-1PM/112DA/HF	SUB TO DF-1PM/ST/112DA		
DF-1PM/112DA/3/4	3/8" NH3, 3/4" Vapor & 1-1/2" dry tubes, conventional	yes	10.6
DF-1PMDATS	Dual App tube saver, 3/8" drilled front tube, no rear tube	yes	7.0
DF-1PM/WOT	No tube with single tube saver	yes	6.8
DF-1PM/WOTS	No tube, no tube saver	yes	6.7
DF-1PM/ST	Single 3/8" NH3 tube with Strip till protection STRIP TILL	yes	10.3
DF-1PM/ST/DA/TB-18	3/8" NH3, TB-18 tubes, with Strip till protection STRIP TILL	yes	10.6
DF-1PM/ST/3/4DA	3/8" NH3 & 3/4" open end tubes and strip till protection STRIP TILL	yes	11.1
DF-1PM/ST/DA/3/4	3/8" NH3 X 3/4 vapor X 3/8" (TB-18) and strip till protection STRIP TILL	yes	11.9
DF-1PM/ST/DA/1/2	3/8" NH3 X 3/8" (TB-18) X 1/2 vapor and strip till protection STRIP TILL		11.7
DF-1PM/ST/112	1-1/2" dry tube only, Strip Till protection STRIP TILL	yes	13.4
DF-1PM/ST/112DA	3/8" NH3 & 1-1/2" dry tubes, Strip Till protection STRIP TILL	yes	13.6
DF-1PM/ST/1/2A/112DA	1/2" NH3 & 1-1/2" dry tubes, Strip Till protection STRIP TILL		13.7

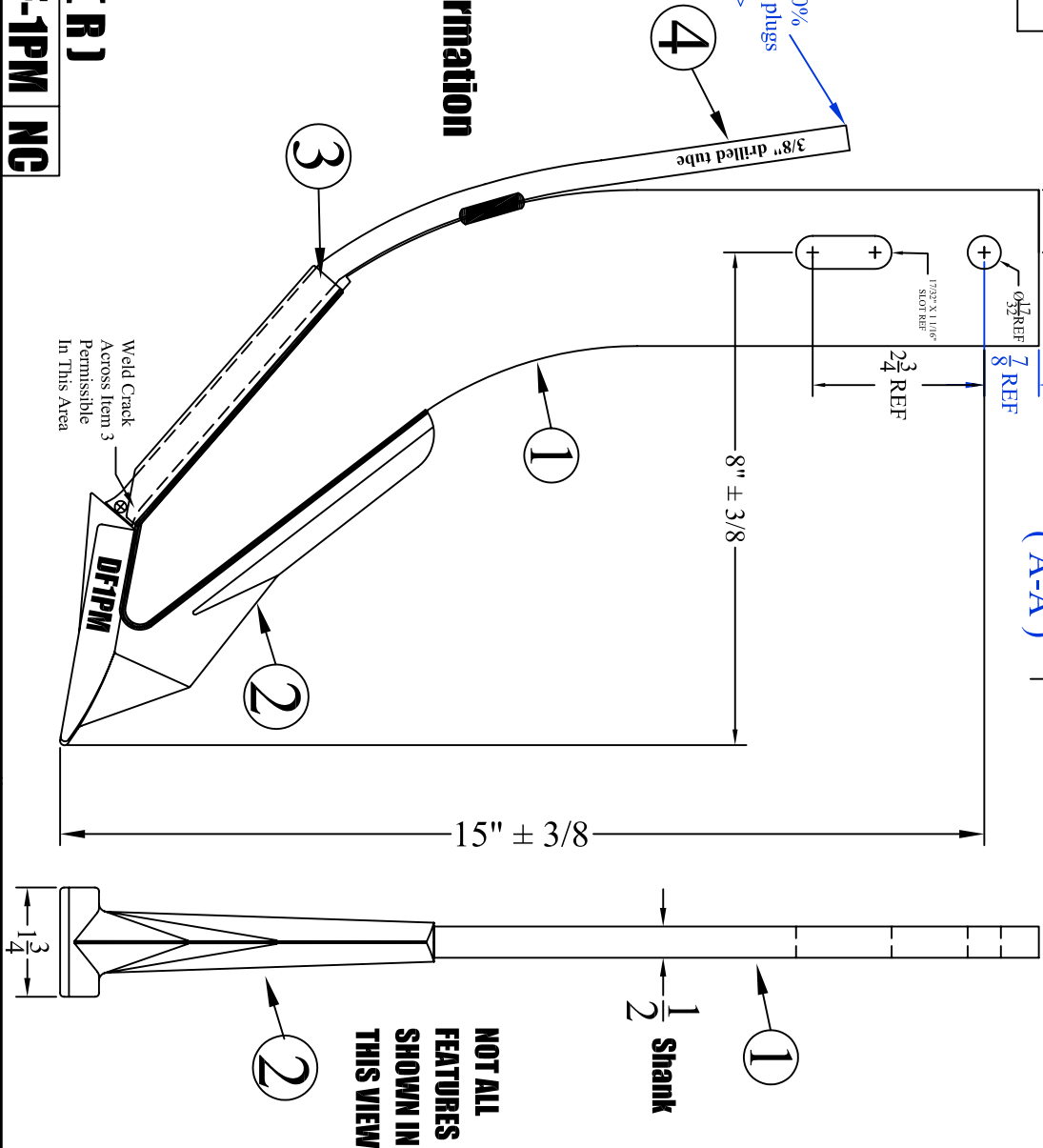
Part #	Replacement Parts for Deep Furrow Knives	Weight
DF1PM	Knife point	1.65
DNC-200	Single tube saver	0.35
DNC-202	Dual tube saver	0.56
TB-2/DF	3/8" tube drilled	0.30
TB-2/O	3/8" tube open end	0.30
TB-4/O	3/8" tube open end	0.30
K2TB1/2A	1/2" tube drilled	0.53
K2TB1/2A/O	1/2" tube open end	0.53
K2TBDA3/4	3/4" tube open end	0.74
K4TB112DA	1-1/2" dry tube	0.75
K4T1/2DAS	Knife strap for adding secondary tubes	0.06
KTWS-01	4-segment chrome extension for knife front	0.34

NOTE: Special Configurations available for ANY Shield knife

ITEM #	QUAN.	PART #	DESCRIPTION
1	1	K4T-B	KNIFE BLANK, K4T/DF1
2	1	DF1PM	2008 POINT
3	1	DNC-200	KNIFE TUBE SAVER, SINGLE
4	1	TB-2/DF	KNIFE TUBE, DF-1, 3/8", DRILLED



Air check 100%
to clear paint plugs
< KC >



NOT ALL
FEATURES
SHOWN IN
THIS VIEW

DRAWING FOR MARKETING PURPOSES
(R) Designation for REDACTED DRAWING
To remove proprietary manufacturing information

< KC > Key Characteristic

DF-1PM NC

REV.	BY	DATE	DESCRIPTION	TOLERANCE UNLESS OTHERWISE NOTED	DRAWN BY: SHORES	DATE: 4/15/10	REV. NC
-	-	-	-	0/0 +/- 1/16			
-	-	-	-	0.00 +/- .020			
-	-	-	-	0.000 +/- .010			
-	-	-	-	0.0000 +/- .001			
REV.	BY	DATE	DESCRIPTION	ANGLE +/- 2	CHECKED BY: _	DATE: _	

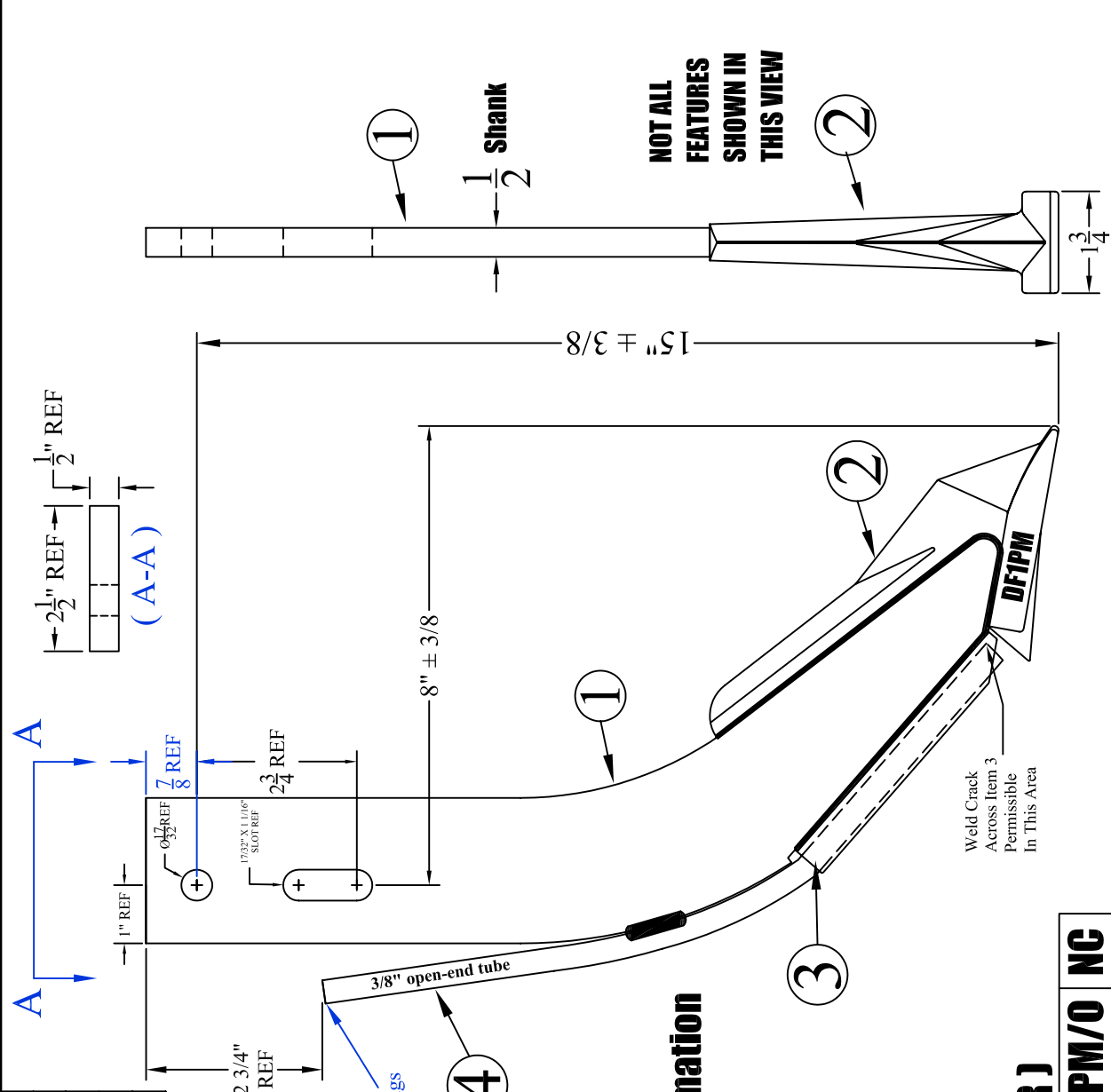
DESCRIPTION	MATERIAL	PART NO.
KNIFE, DF-1PM 2008 POINT, 3/8 DRILLED TUBE	WELDMENT	DF-1PM (R)

ITEM #	QUAN.	PART #	DESCRIPTION
1	1	K4T-B	KNIFE BLANK, K4T/DF1
2	1	DF1PM	2008 POINT
3	1	DNC-200	KNIFE TUBE SAVER, SINGLE
4	1	TB-4/O	KNIFE TUBE, DF-1, 3/8" OPEN END

DRAWING FOR MARKETING PURPOSES

(R) Designation for REDACTED DRAWING

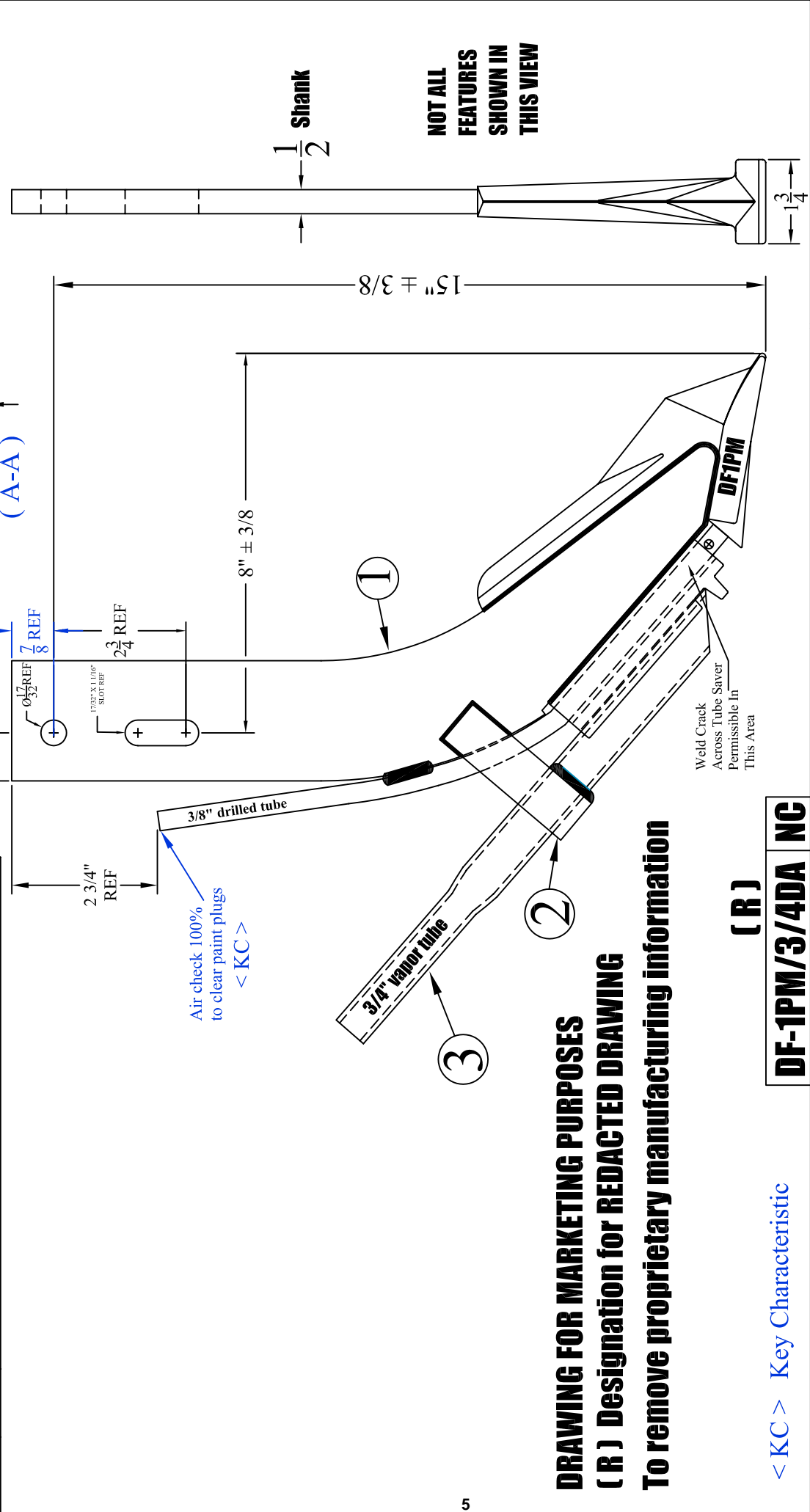
To remove proprietary manufacturing information



<-KC> Key Characteristic

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				AGRICULTURAL EQUIPMENT	
				DRAWN BY: SHORES	DATE: 4/15/10
				CHECKED BY: _	DATE: _
				PART NO. DF-1PM/O (R)	REV. NC
DESCRIPTION				MATERIAL	
KNIFE, DF-1PM 2008 POINT, 3/8 TUBE, Open end				WELDMENT	
REV.	BY	DATE	DESCRIPTION		
-	-	-	-		
-	-	-	-		
-	-	-	-		
-	-	-	-		

ITEM #	QUAN.	PART #	DESCRIPTION
1	1	DF-1PMDATS	KNIFE,DF-PM,SUBASSEMBLY w/DA TUBE SAVER
2	1	K4T1/2DAS	KNIFE STRAP, 1/8 x 1 x 6"
3	1	K2TBDA3/4	KNIFE TUBE, K-2T, 3/4" DA



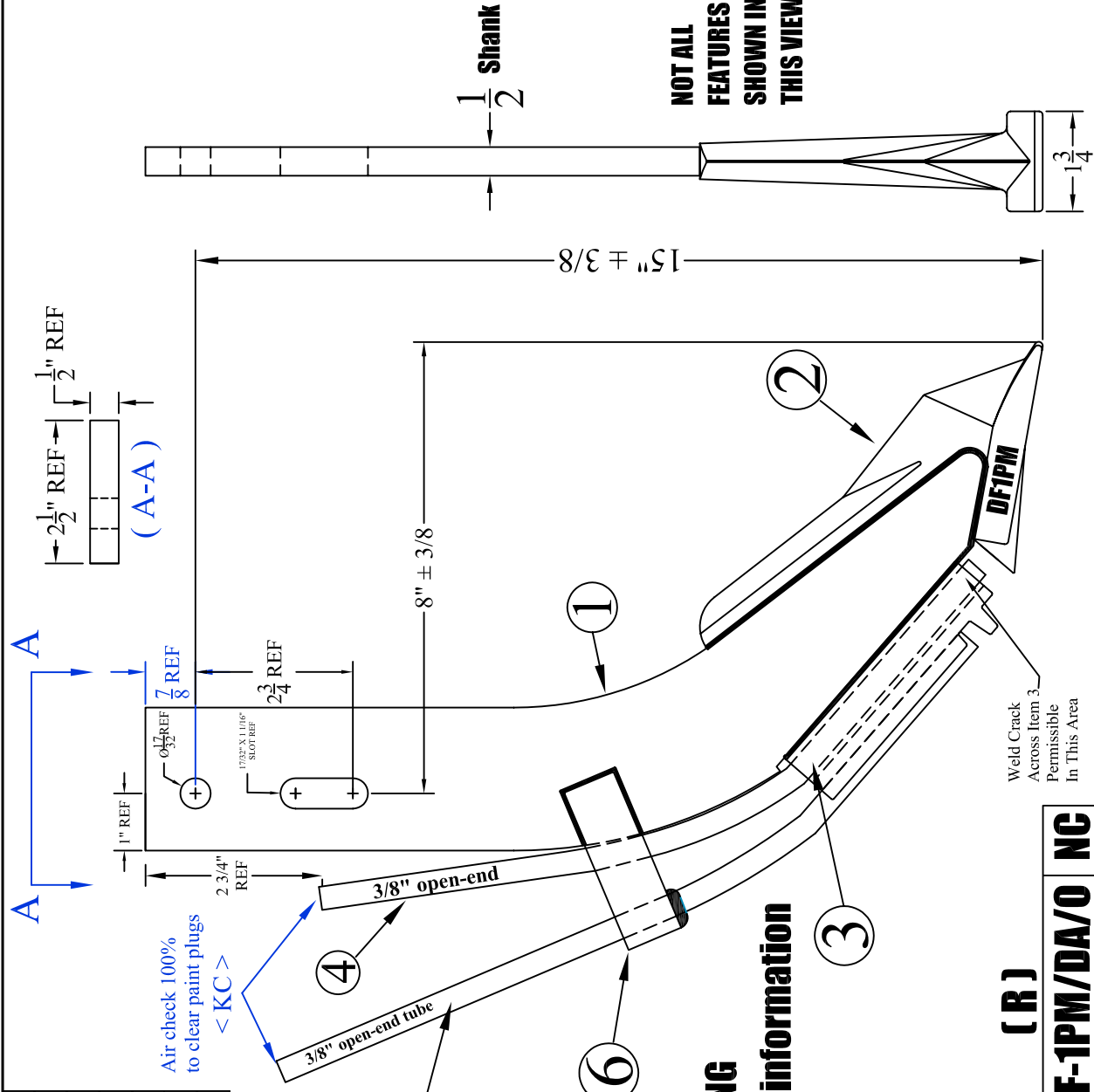
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< KC > Key Characteristic

DF-1PM/3/4DA NC

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DRAWN BY: SHORES		DATE: 4/15/10	
CHECKED BY: _		DATE: _	
DESCRIPTION	PART NO.		REV.
	KNIFE, DF-1PM, 3/8" drilled x 3/4" Vapor tubes		NC
MATERIAL		WELDMENT	
REV.	BY	DATE	DESCRIPTION
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-

ITEM #	QUAN.	PART #	DESCRIPTION
1	1	K4T-B	KNIFE BLANK, DF-1/K-4T
2	1	DF1PM	2008 POINT
3	1	DNC-202	KNIFE TUBE SAVER, DOUBLE
4	1	TB-4/O	KNIFE TUBE, OPEN END
5	1	TB-4/O	KNIFE TUBE, OPEN END
6	1	K4T1/2DAS	KNIFE STRAP, 1/8 x 1 x 6"

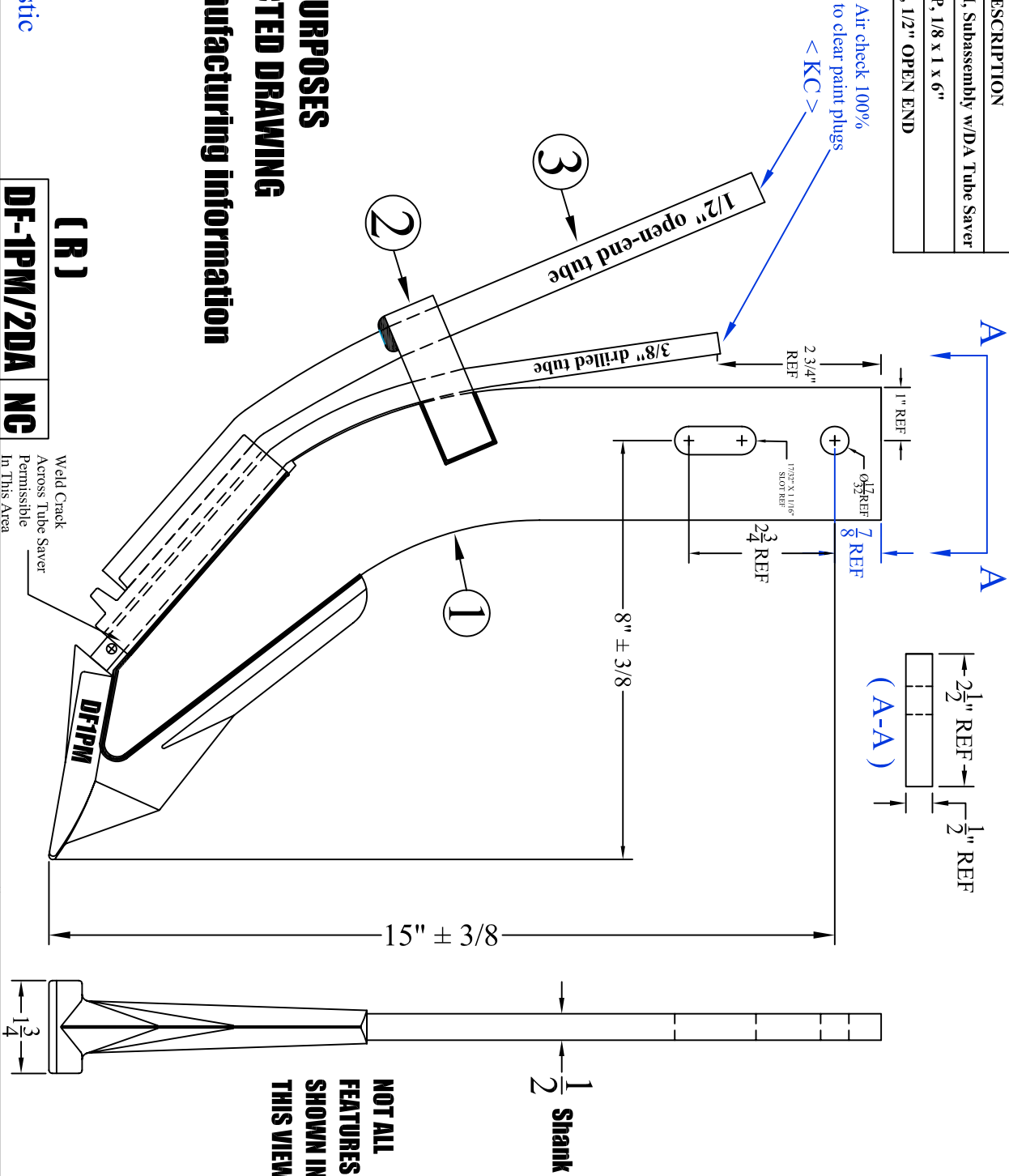
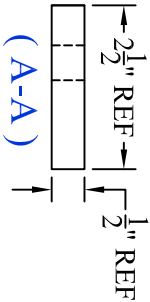


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TOLERANCE UNLESS OTHERWISE NOTED			
			0/0 +/- 1/16
			0.00 +/- .020
			0.000 +/- .010
			0.0000 +/- .001
			ANGLE +/- 2
REV.	BY	DATE	DESCRIPTION
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
DESCRIPTION KNIFE, DF-1PM, dual 3/8" open-end tubes			
MATERIAL WELDMENT			PART NO. DF-1PM/DA/O (R)
DRAWN BY: SHORES			DATE: 4/15/10
CHECKED BY: -			DATE: -
REV. NC			AGRICULTURAL EQUIPMENT

ITEM #	QUAN.	PART #	DESCRIPTION
1	1	DF-1PMDATS	Knife, DF-1PM, Subassembly w/DA Tube Saver
2	1	K4TI/2DAS	KNIFE STRAP, 1/8 x 1 x 6"
3	1	K2TBI/2A/O	KNIFE TUBE, 1/2" OPEN END



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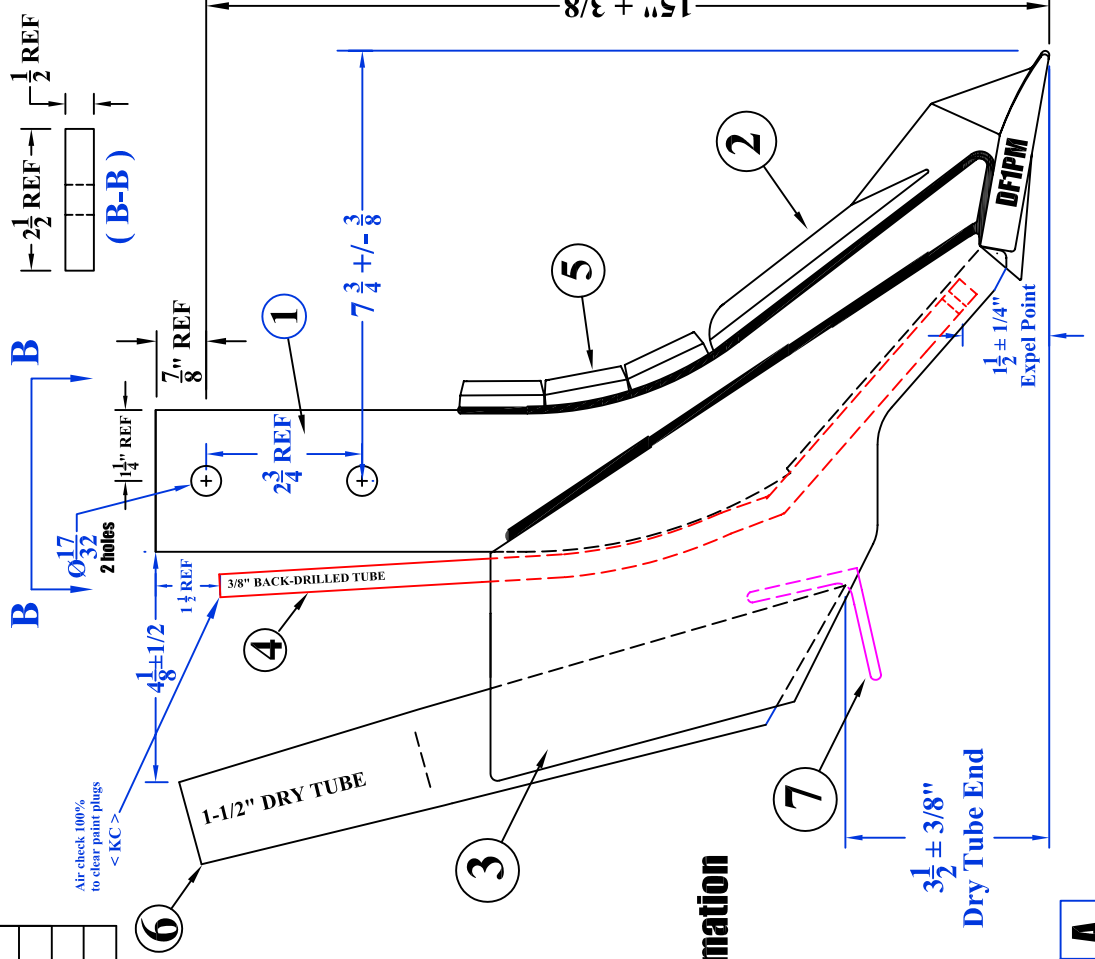
(R)
DF-1PM/2DA
NG

Weld Crack
Across Tube Saver
Permissible
In This Area

REV.	BY	DATE	DESCRIPTION	TOLERANCE UNLESS OTHERWISE NOTED	DRAWN BY: SHORES	DATE: 4/15/10
-	-	-	-	0/0 +/- 1/16		
-	-	-	-	0.00 +/- .020		
-	-	-	-	0.000 +/- .010		
-	-	-	-	0.0000 +/- .001		
ANG	+	-	2			
DESCRIPTION	KNIFE, DF-1PM, 3/8" drilled X 1/2" open-end tubes			MATERIAL WELDMENT		
REV.	BY	DATE	DESCRIPTION	SHIELD	CHECKED BY: _	DATE: _
DESCRIPTION	KNIFE, DF-1PM, 3/8" drilled X 1/2" open-end tubes			PART NO. DF-1PM/2DA (R)		
REV.	BY	DATE	DESCRIPTION	SHIELD	CHECKED BY: _	DATE: _
DESCRIPTION	KNIFE, DF-1PM, 3/8" drilled X 1/2" open-end tubes			PART NO. DF-1PM/2DA (R)		

ITEM #	QUAN.	PART #	DESCRIPTION
1	1	K4T-BST	BLANK, 1/2 X 2-1/2 Two-hole
2	1	DFIPM	DFIPM CASTING
3	2	K4TTARS-3	SIDE PLATE FOR STD LENGTH KNIFE
4	1	TB-4E	KNIFE TUBE, 3/8" back-drilled
5	.75	KTWS-01	SHANK GUARD, CASTING
6	1	K4TB112DA	KNIFE TUBE, 3/8" back-drilled
7	1	ST23175B	1.5" DRY BAFFLE

NO HARD METAL APPLICATION ON THIS KNIFE



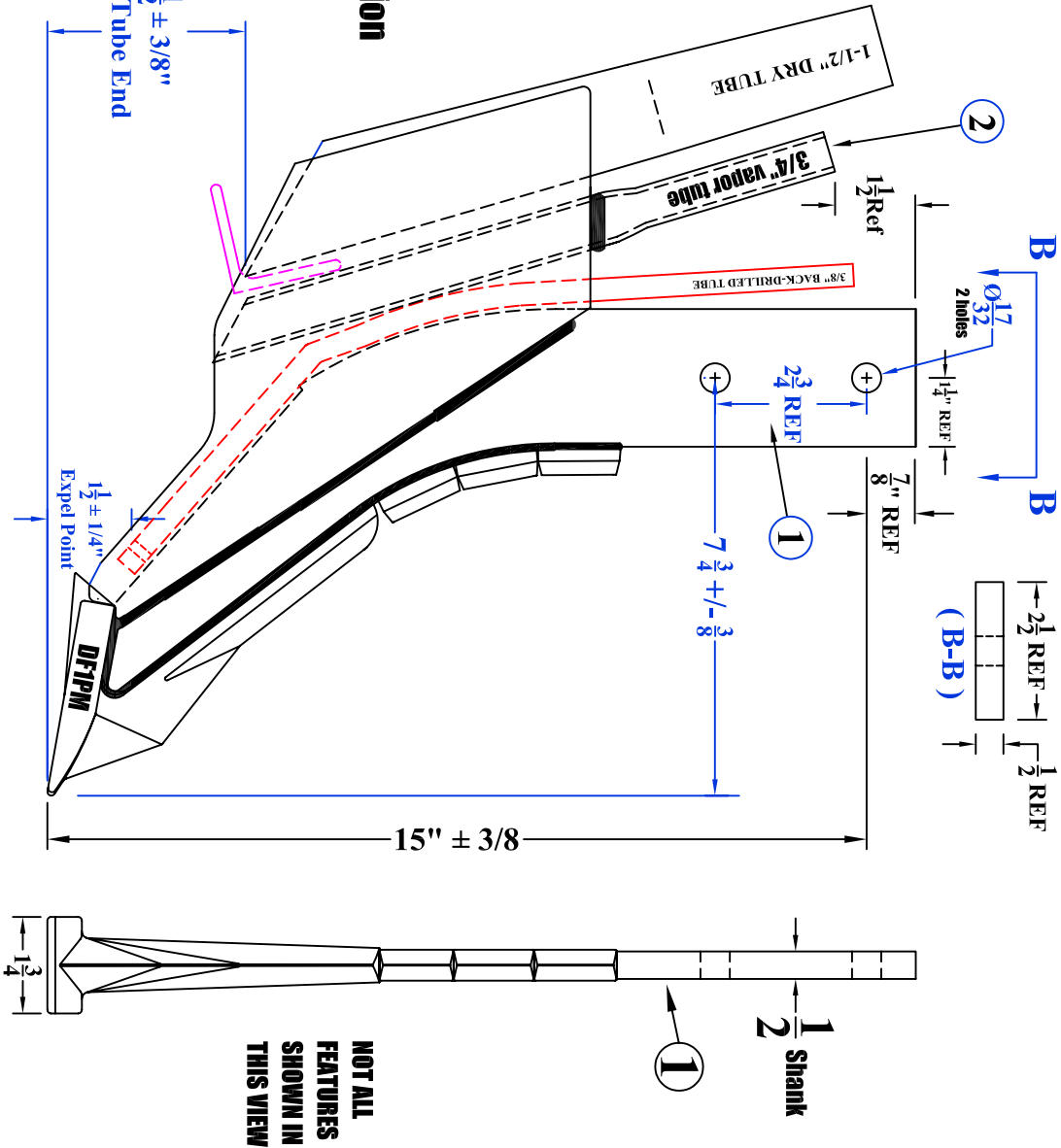
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< KC > Key Characteristic **DF-1PM/112DA** **A**

DESCRIPTION			MATERIAL		WELDMENT		PART NO.		REV.		
DF knife with 3/8" back-drilled NH3 tube & 1-1/2" Dry Tube							DF-1PM/112DA (R)		A		
REV.	BY	DATE	DESCRIPTION			<div>TOLERANCE UNLESS OTHERWISE NOTED</div> <div>0/0 +/- 1/16</div> <div>0.00 +/- .020</div> <div>0.000 +/- .005</div> <div>0.0000 +/- .001</div> <div>ANGLE +/- 2</div>					
						DRAWN BY: SHORES		DATE: 11/15/09			
						CHECKED BY: _		DATE: _			

ITEM #	QUN.	PART #	DESCRIPTION
1	1	DF-1PM/112DA	DF knife, 3/8" NH3 & 1-1/2" dry tubes
2	1	K2TBD A3/4	3/4" Vapor tube

NO HARD METAL APPLICATION ON THIS KNIFE



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< KC > Key Characteristic

DF-1PM/112DA/3/4 A

REV.	BY	DATE	DESCRIPTION	TOLERANCE UNLESS OTHERWISE NOTED	DRAWN BY: SHORES	CHECKED BY: -	DATE: 11/15/09
-	-	-	-	0/0 +/- 1/16			
-	-	-	-	0.00 +/- .020			
-	-	-	-	0.000 +/- .005			
-	-	-	-	0.0000 +/- .001			
-	-	-	-	ANGLE +/- 2			

SHIELD
AGRICULTURAL EQUIPMENT

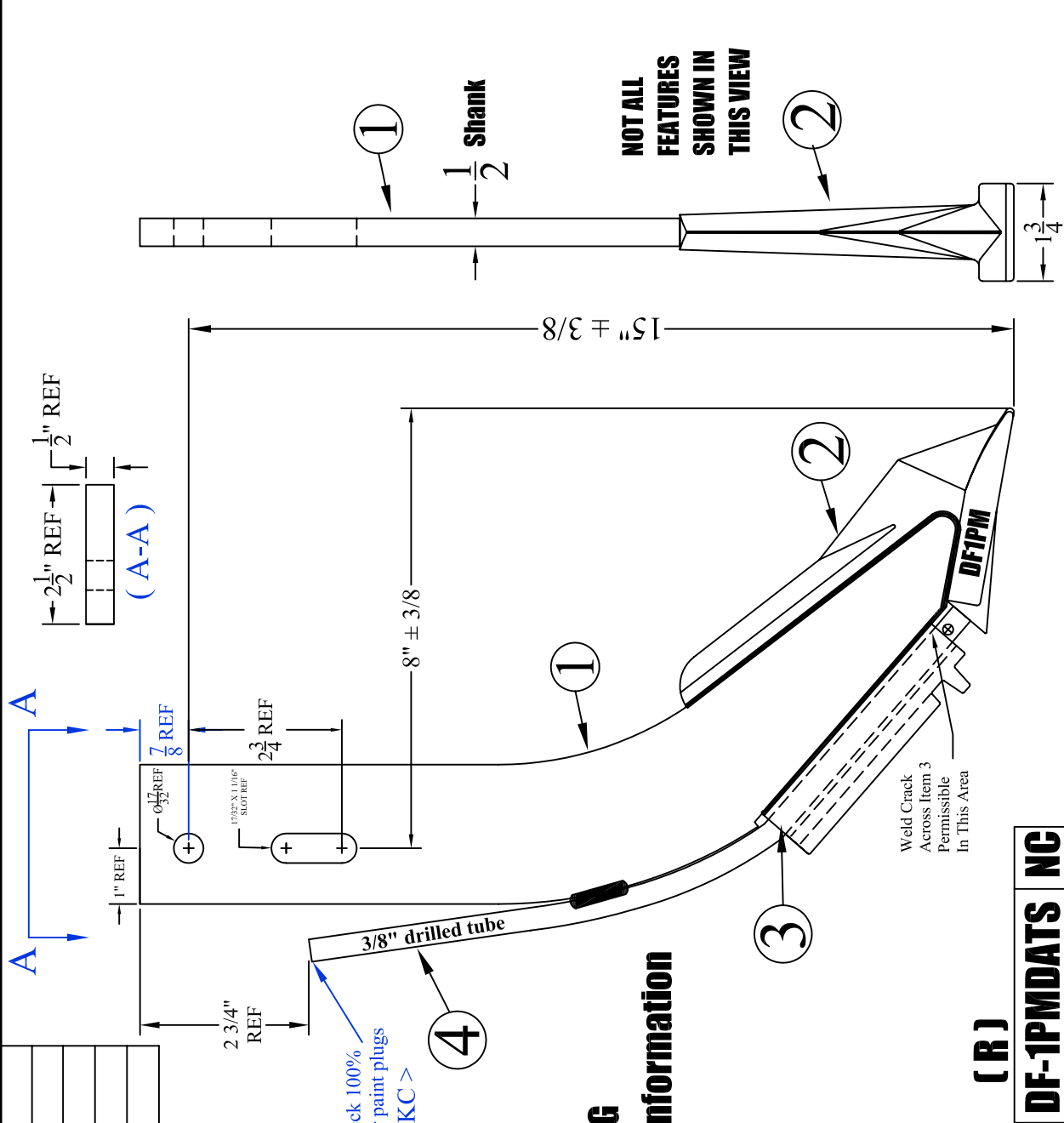
DESCRIPTION	MATERIAL	PART NO.	REV.
DF knife with 3/8" back-drilled NH3 tube, 3/4 vapor & 1-1/2" Dry Tube	WELDMENT	DF-1PM/112DA/3/4 (R)	A

ITEM #	QUAN.	PART #	DESCRIPTION
1	1	K4T-B	KNIFE BLANK, K4T/DF1
2	1	DF1PM	2008 POINT
3	1	DNC-202	KNIFE TUBE SAVER, DOUBLE
4	1	TB-4	KNIFE TUBE, K-4T KNIFE

DRAWING FOR MARKETING PURPOSES

(R) Designation for REDACTED DRAWING

To remove proprietary manufacturing information



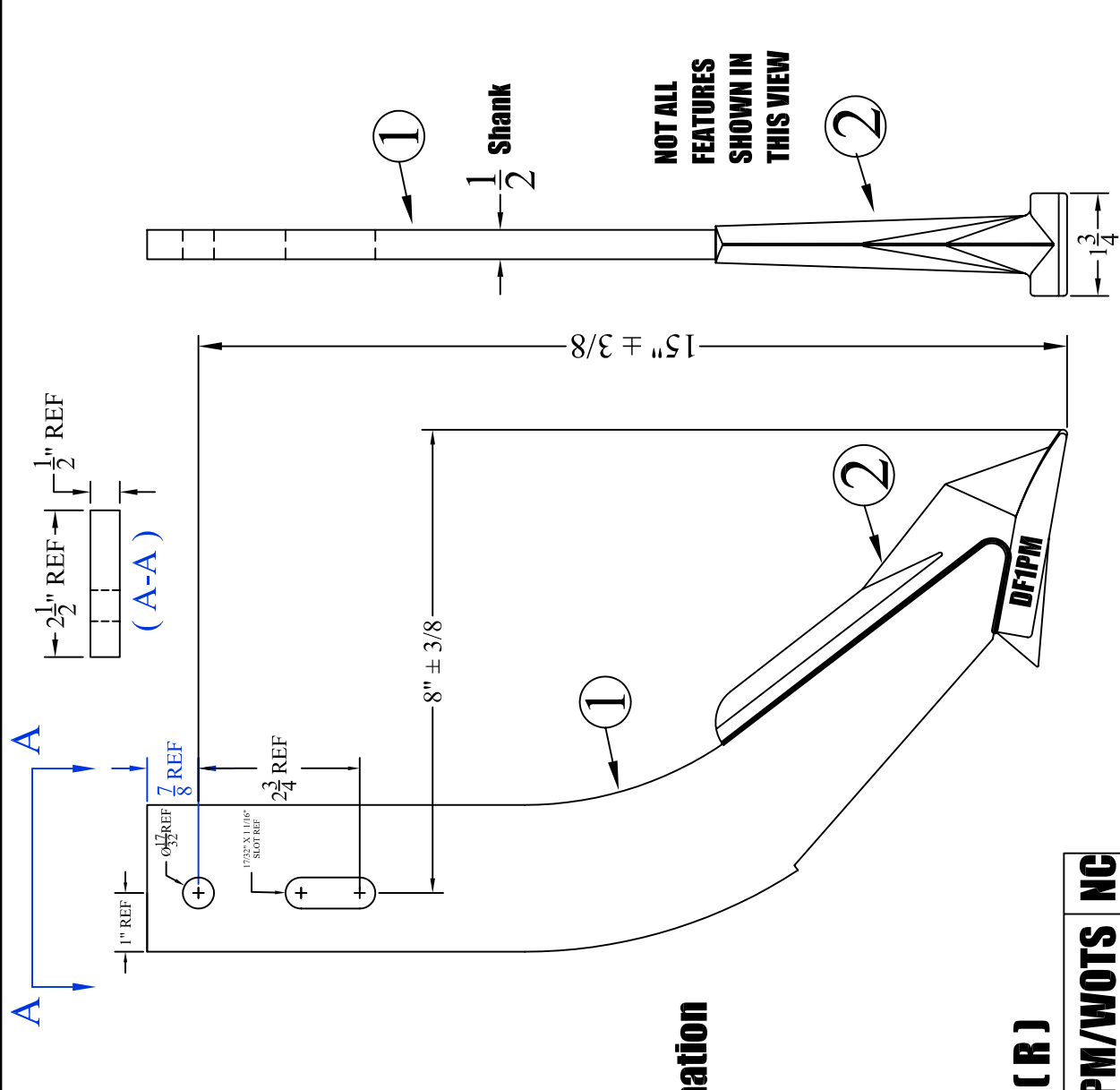
<-KC> Key Characteristic

DF-1PMDATS NC

TOLERANCE UNLESS OTHERWISE NOTED			
REV.	BY	DATE	DESCRIPTION
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
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PART NO.			REV.
DF-1PMDATS (R)			NC

ITEM #	QUAN.	PART #	DESCRIPTION
1	1	K4T-B	KNIFE BLANK, K4T/DF1
2	1	DF1PM	2008 POINT

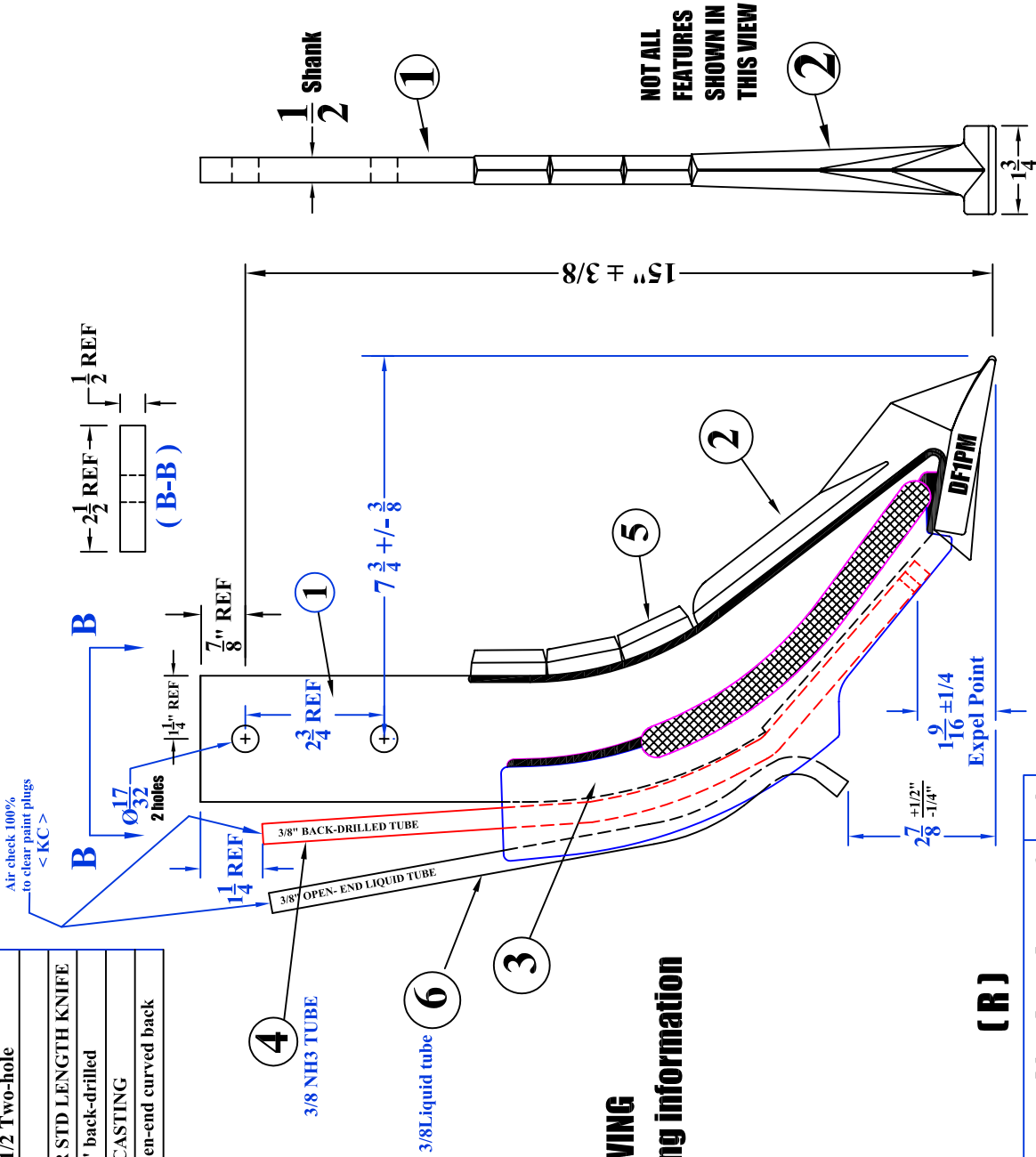
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TOLERANCE UNLESS OTHERWISE NOTED			
			0/0 +/- 1/16
			0.00 +/- .020
			0.000 +/- .010
			0.0000 +/- .001
			ANGLE +/- 2
SHIELD			
AGRICULTURAL EQUIPMENT			
DRAWN BY: SHORES		DATE: 4/15/10	
CHECKED BY: _		DATE: _	
PART NO.		REV.	
DF-1PM/WOTS (R)		NC	
DESCRIPTION		MATERIAL	
KNIFE, DF-1PM 2008 POINT, without tube saver, NO TUBE		WELDMENT	
REV.	BY	DATE	DESCRIPTION
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-

ITEM #	QUAN.	PART #	DESCRIPTION
1	1	K4T-BST	BLANK, 1/2 X 2-1/2 Two-hole
2	1	DF1PM	DF1PM CASTING
3	2	K4TTARS-2	SIDE PLATE FOR STD LENGTH KNIFE
4	1	TB-4E	KNIFE TUBE, 3/8" back-drilled
5	.75	KTWS-01	SHANK GUARD, CASTING
6	1	TB-18	Liquid tube 3/8" open-end curved back

DRAWING FOR MARKETING PURPOSES
(R) Designation for REDACTED DRAWING
To remove proprietary manufacturing information



< KC > Key Characteristic

DF-1PM/ST/DA/TB-18 NC

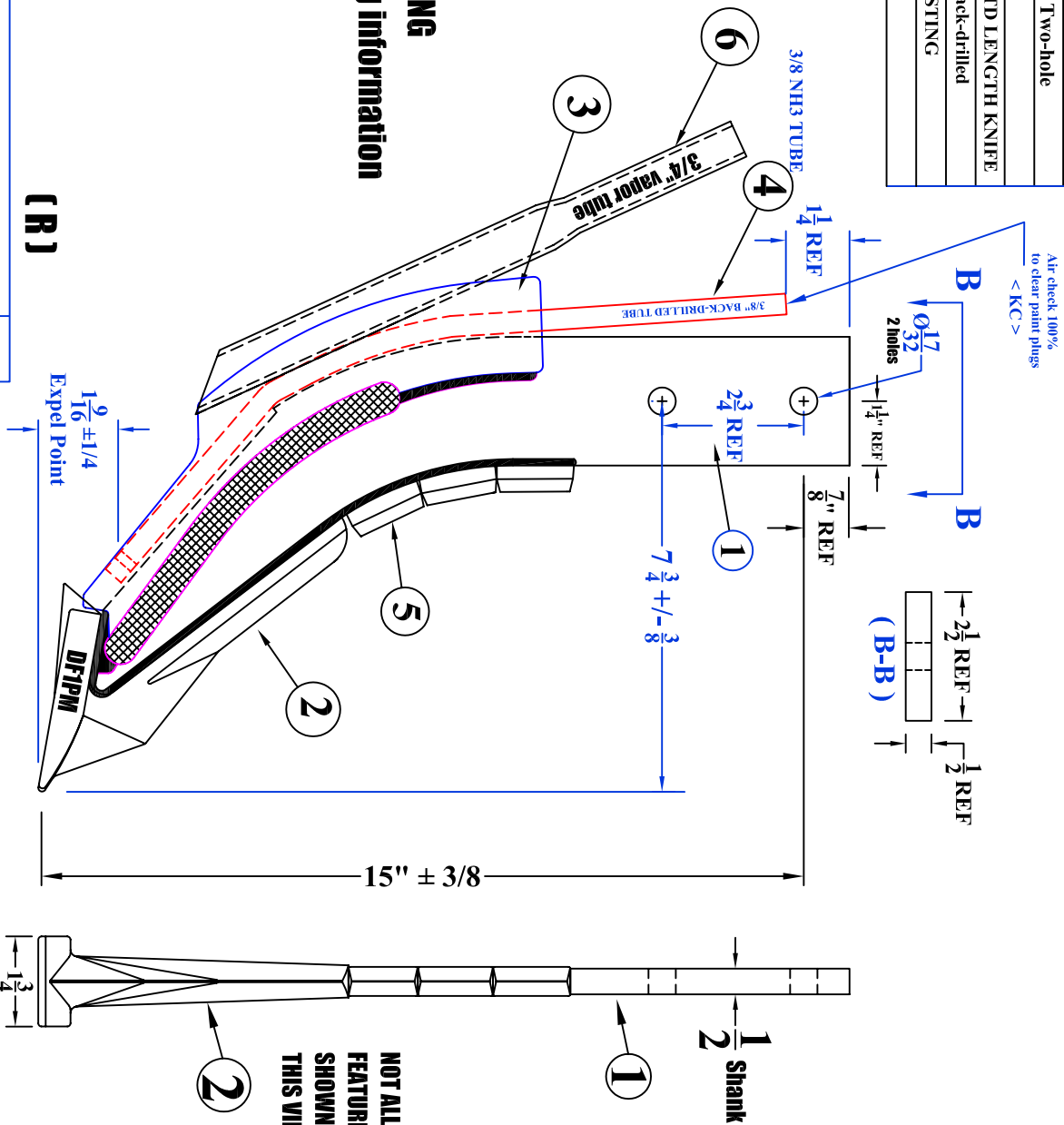
REV.	BY	DATE	DESCRIPTION
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-	-	-	-
-	-	-	-

TOLERANCE UNLESS OTHERWISE NOTED
0/0 +/- 1/16
0.00 +/- .020
0.000 +/- .005
0.0000 +/- .001
ANGLE +/- 2

SHIELD AGRICULTURAL EQUIPMENT	DRAWN BY: SHORES	DATE: 11/15/09
	CHECKED BY: -	DATE: -

DESCRIPTION	MATERIAL	WELDMENT	PART NO.	REV.
DF Strip Till knife with 3/8" back-drilled NH3 tube & 3/8" liquid tube			DF-1PM/ST/DA/TB-18 (R)	NC

ITEM #	QUAN.	PART #	DESCRIPTION
1	1	K4T-BST	BLANK, 1/2 X 2-1/2 Two-hole
2	1	DF1PM	DF1PM CASTING
3	2	K4TTARS-2	SIDE PLATE FOR STD LENGTH KNIFE
4	1	TR-4E	KNIFE TUBE, 3/8" back-drilled
5	.75	KTWS-01	SHANK GUARD, CASTING
5	1	K2TBDAS/4	3/4" Vapor tube



DRAWING FOR MARKETING PURPOSES
(R) Designation for REDACTED DRAWING
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< KC > Key Characteristic

DF-1PM/ST/3/4DA NC

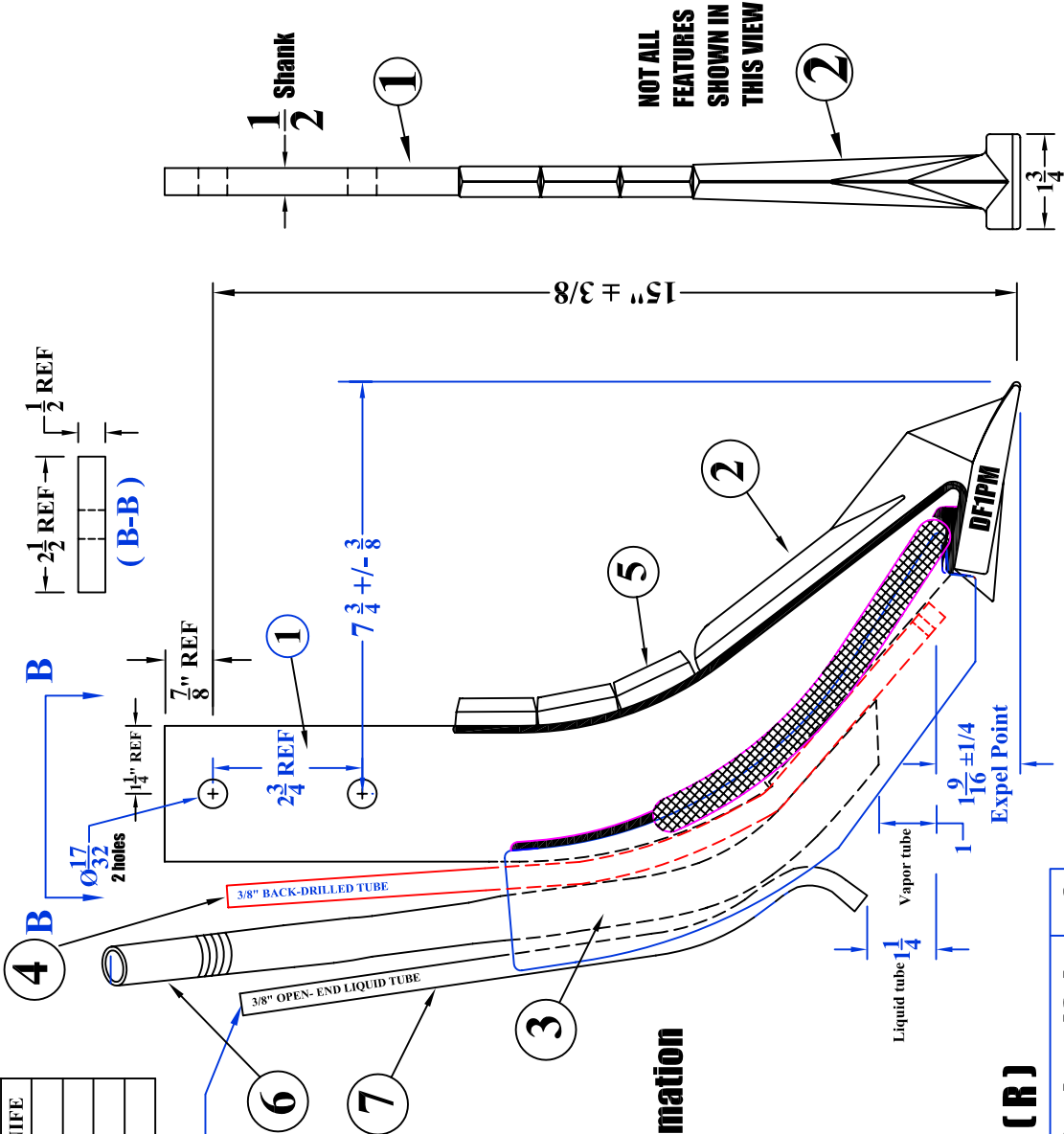
REV.	BY	DATE	DESCRIPTION	TOLERANCE UNLESS OTHERWISE NOTED	DRAWN BY: SHORES	CHECKED BY: -	DATE: 11/15/09	PART NO. DF-1PM/ST/3/4DA (R)	REV. NC
-	-	-	-	0/0 +/- 1/16					
-	-	-	-	0.00 +/- .020					
-	-	-	-	0.000 +/- .005					
-	-	-	-	0.0000 +/- .001					
-	-	-	-	ANGLE +/- 2					

SHIELD
 AGRICULTURAL EQUIPMENT

NOT ALL
 FEATURES
 SHOWN IN
 THIS VIEW

ITEM #	QUAN.	PART #	DESCRIPTION
1	1	K4T-BST	Blank, 1/2 X 2-1/2, Two-hole
2	1	DF1PM	DF1PM Casting
3	2	K4TTARS	SIDE PLATE FOR STD LENGTH KNIFE
4	1	TB-4E	KNIFE TUBE, 3/8" back-drilled
5	.75	KTWS-01	SHANK GUARD, CASTING
6	1	N239996	3/4" vapor tube, special
7	1	TB-18	3/8" Open-end tube, curved back

3 tubes
Air check 100%
to clear paint plugs
< KC >



DRAWING FOR MARKETING PURPOSES
(R) Designation for REDACTED DRAWING
To remove proprietary manufacturing information

< KC > Key Characteristic

DF-1PM/ST/DA/3/4 NC

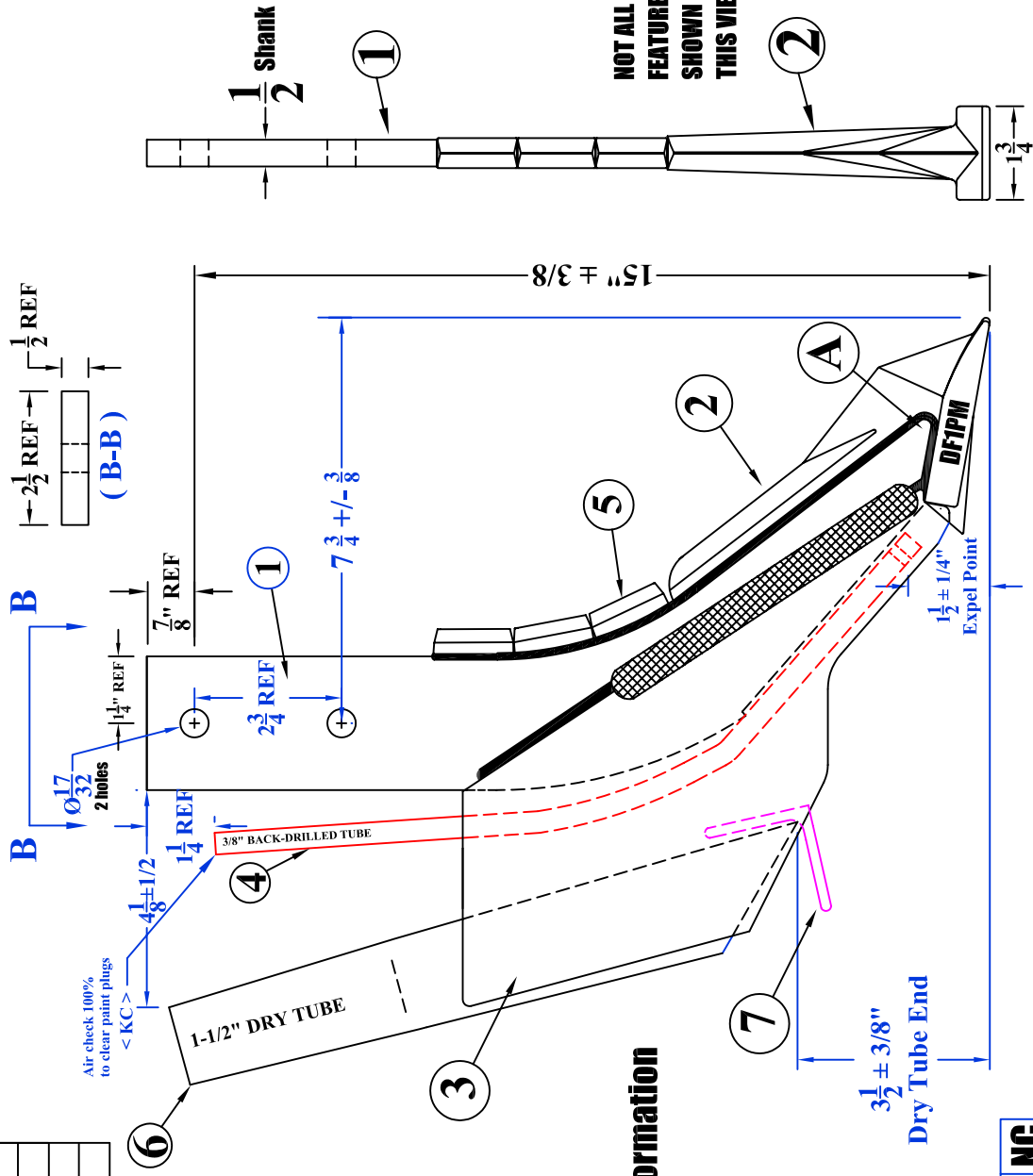
TOLERANCE UNLESS OTHERWISE NOTED			
			0/0 +/- 1/16
			0.00 +/- .020
			0.000 +/- .005
			0.0000 +/- .001
			ANGLE +/- 2
REV.	BY	DATE	DESCRIPTION
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
DESCRIPTION			
DF Strip Till knife with 3/8" X 3/4 X 3/8" tubes			
PART NO.			REV.
DF-1PM/ST/DA/3/4 (R)			NC
MATERIAL		WELDMENT	

SHIELD
AGRICULTURAL EQUIPMENT

DRAWN BY:	SHORES	DATE:	11/15/09
CHECKED BY:	-	DATE:	-

ITEM #	QUAN.	PART #	DESCRIPTION
1	1	K4T-BST	BLANK, 1/2 X 2-1/2 Two-hole
2	1	DFIPM	DFIPM CASTING
3	2	K4TTARS-3	SIDE PLATE FOR STD LENGTH KNIFE
4	1	TB-4E	KNIFE TUBE, 3/8" back-drilled
5	.75	KTWS-01	SHANK GUARD, CASTING
6	1	K4TB112DA	KNIFE TUBE, 3/8" back-drilled
7	1	ST23175B	1.5" DRY BAFFLE

DRAWING FOR MARKETING PURPOSES
(R) Designation for REDACTED DRAWING
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< KC > Key Characteristic **DF-1PM/ST/112DA NC** **(R)**

TOLERANCE UNLESS OTHERWISE NOTED			
0/0 +/- 1/16			
0.00 +/- .020			
0.000 +/- .005			
0.0000 +/- .001			
ANGLE +/- 2			
REV.	BY	DATE	DESCRIPTION
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
DESCRIPTION			REVISION
DF Strip Till knife with 3/8" back-drilled NH3 tube & 1-1/2" Dry Tube			NC
MATERIAL			REV.
WELDMENT			NC
PART NO.			REV.
DF-1PM/ST/112DA (R)			NC
DRAWN BY:		DATE:	REV.
SHORES		11/15/09	NC
CHECKED BY:		DATE:	REV.
-		-	NC

SHIELD
 AGRICULTURAL EQUIPMENT

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ShieldAg 800-798-1968 www.shieldag.com

K-2T**K-2T/PLSPL****K-2T/3/4DA**

STANDARD K-2T Upright 1/2" X 2-1/2" X 16" tall Knives

Drawings for knives following this page are in the order shown in this table

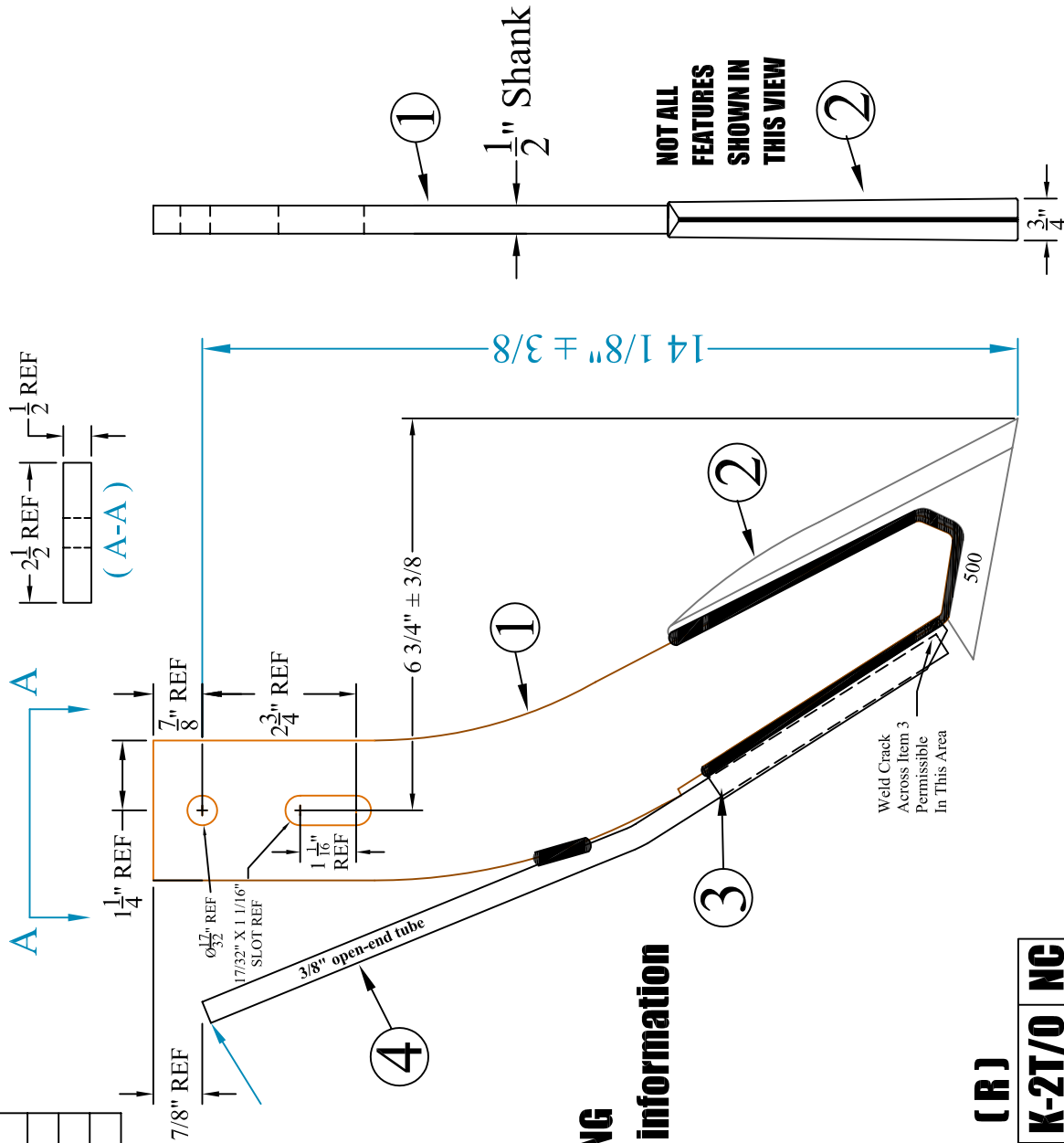
Part #	Description	DRAWING	Weight
K-2T	Single 3/8" NH3 tube	YES	6.2
K-2T/O	Single 3/8" open end tube	YES	6.2
K-2T/1/2A	Single 1/2" NH3 tube	YES	6.4
K-2T/1/2A/O	Single 1/2" open end tube	YES	6.4
K-2T/1/2A/PLSPL	Single 1/2" NH3 tube with sealer	YES	7.1
K-2T/1/2DA	3/8" NH3 & 1/2" open end tubes	YES	7.1
K-2T/1/2DA/PLSPL	3/8" NH3 & 1/2" open end tubes with sealer		7.8
K-2T/1/2A/1/2DA	1/2" NH3 & 1/2" open end tubes		7.1
K-2T/1/2A1/2DA/PLSPL	1/2" NH3 & 1/2" open end tubes with sealer		7.8
K-2T/1/2A/3/4DA	1/2" NH3 tube with 3/4 vapor tube	YES	7.2
K-2T/1/2A/3/4DA/PLSPL	1/2" NH3 tube with 3/4 vapor tube and sealer	YES	7.8
K-2T/1/2A/PLSPL/LOWER	Single 1/2" NH3 tube with sealer lower position		7.8
K-2T/1/2A/O/3/4DA	1/2" open end tube with 3/4 vapor	YES	7.2
K-2T/1/2A/O/3/4DA/PLSPL	1/2" open end tube with 3/4 vapor and sealer	YES	7.8
K-2T/3/4DA	3/8" NH3 & 3/4" open end tubes	YES	7.2
K-2T/O/3/4DA	3/8" OPEN & 3/4" open end tubes	YES	7.2
K-2T/3/4DA/PLSPL	3/8" NH3 & 3/4" open end tubes with sealer	YES	7.8
K-2T/O/3/4DA/PLSPL	3/8" OPEN & 3/4" open end tubes with sealer	YES	7.8
K-2T/O/112DA	3/8" open end tube with 1-1/2" dry tube	YES	8.6
K-2T/O/112DA/3/4	3/8" open end tube with 1-1/2" dry tube and 3/4 vapor on back		9.0
K-2T/O/1/2DA/O	3/8" open and 1/2" open tubes		7.1
K-2T/O/1/2DA/O/3/4DA	3/8" open and 1/2" open tubes and 3/4 vapor tube		7.6
K-2T/DA	3/8" NH3 & 3/8" open end tubes	YES	7.0
K-2T/DA/O	3/8" and 3/8" open end tubes	YES	7.0
K-2T/DA/3/4	3/8" NH3 & 3/8" open and 3/4" vapor	YES	7.6
K-2T/DA/O/3/4	Dual 3/8" and 3/8" open end tubes and 3/4 vapor		7.6
K-2T/DA/1/2	3/8" NH3 & 3/8" open and 1/2" vapor	YES	7.2
K-2T/DA/PLSPL	3/8" NH3 & 3/8" open end tubes with sealer		7.7
K-2T/O/PLSPL	Single 3/8" OPEN tube with sealer	YES	7.0
K-2T/PLSPL	Single 3/8" NH3 tube with sealer	YES	7.0
K-2TDATS	Dual app tube saver and single 3/8" drilled tube	YES	6.4
K-2TDATS/O	Dual app tube saver and single 3/8" open-end tube	YES	6.4
K-2T/WOT	Single tube saver and NO TUBE	YES	6.0

Part #	Replacement Parts for K-2T Knives	Weight
500	Knife point	1.00
DNC-200	Single tube saver	0.35
DNC-202	Dual tube saver	0.56
TB-3	3/8" tube drilled	0.30
TB-2/O	3/8" tube open end	0.30
K2TB1/2A	1/2" tube drilled	0.53
K2TB1/2A/O	1/2" tube open end	0.53
K2TBDA3/4	3/4" tube open end	0.74
SPL-4NEW	Sealer, will fit single & dual app tubes to 1/2"	0.60
SPL-4DANew	Sealer, will fit 3/4" dual application	0.80
K4T1/2DAS	Knife strap for adding secondary tubes	0.06
KTWS-01	4-segment chrome extension for knife front	0.34

SHIELDAG Will CUSTOMIZE any K-2T knife for STRIP TILL Application
SPECIAL SEALER PLATES AND SEALER POSITIONS AVAILABLE !!

ITEM #	QUAN.	PART #	DESCRIPTION
1	1	K2T-B	KNIFE BLANK, K2T
2	1	500	KNIFE POINT, K-2T
3	1	DNC-200	KNIFE TUBE SAVER
4	1	TB-2/O	KNIFE TUBE, K-2T, OPEN END

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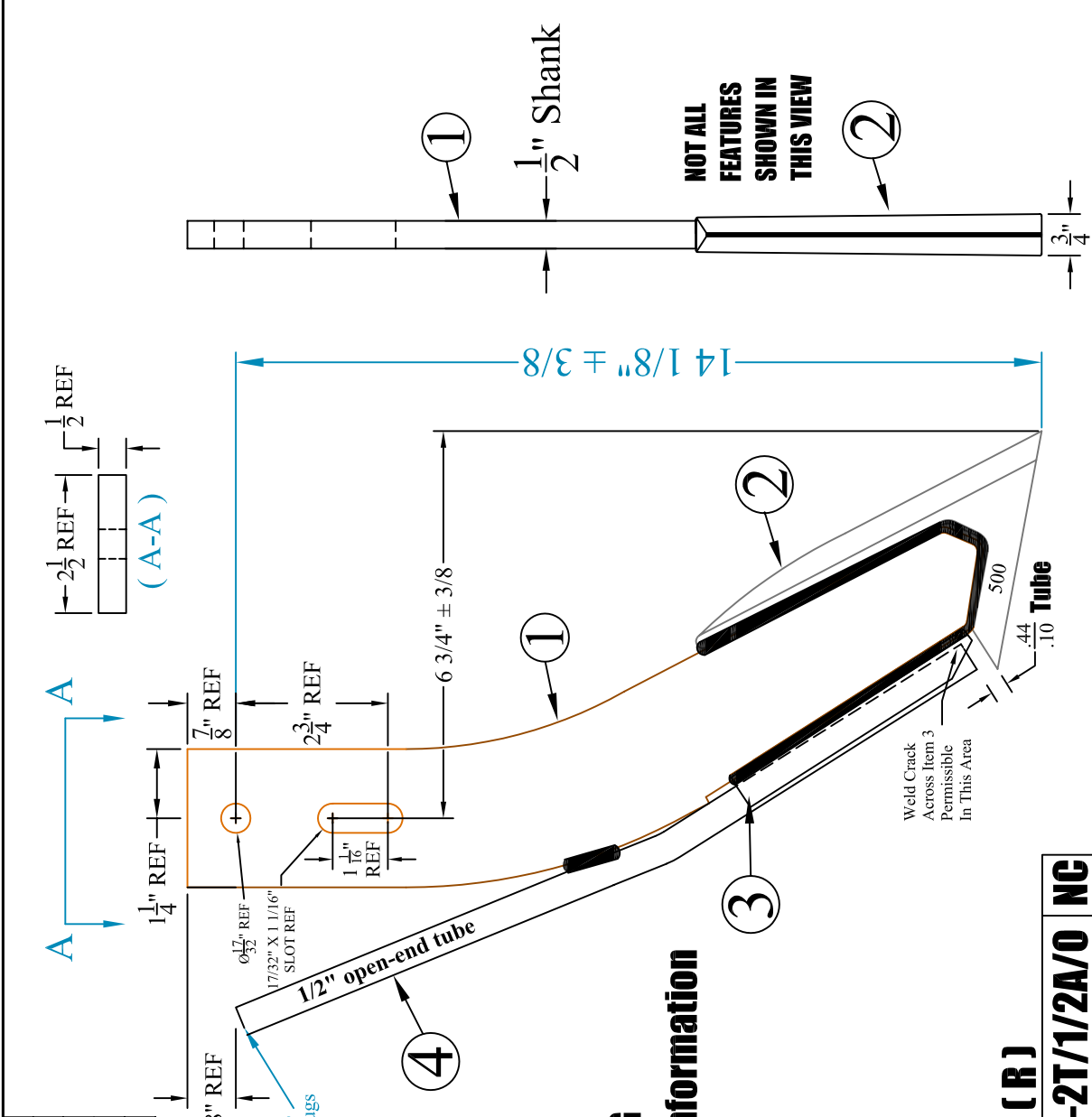


(R)

K-2T/O NC

<div><div>SHIELD</div><div>AGRICULTURAL EQUIPMENT</div><div><div>DRAWN BY: SHORES</div><div>CHECKED BY: _</div><div>DATE: 4/15/10</div><div>DATE: _</div></div></div>				TOLERANCE UNLESS OTHERWISE NOTED		PART NO. K-2T/O (R)		REV. NC	
				0/0 +/- 1/16					
				0.00 +/- .020					
				0.000 +/- .010					
0.0000 +/- .001		ANGLE +/- 2							

ITEM #	QUAN.	PART #	DESCRIPTION
1	1	K2T-B	KNIFE BLANK, K2T
2	1	500	KNIFE POINT, K-2T
3	1	DNC-200	KNIFE TUBE SAVER
4	1	K2TB1/2A/O	KNIFE TUBE, K-2T, 1/2" OPEN END

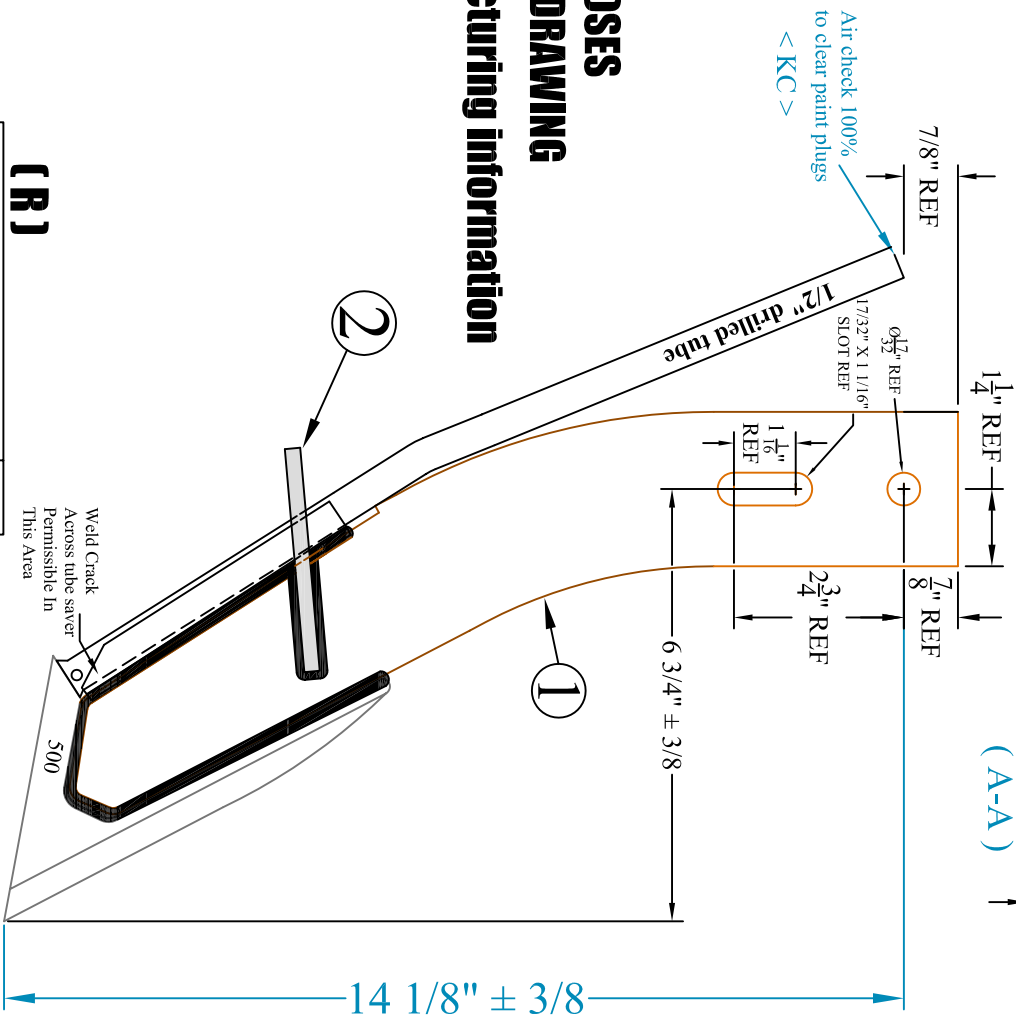
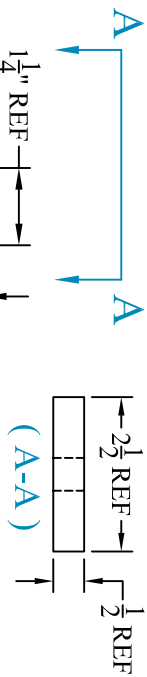


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(R) Designation for REDACTED DRAWING
To remove proprietary manufacturing information

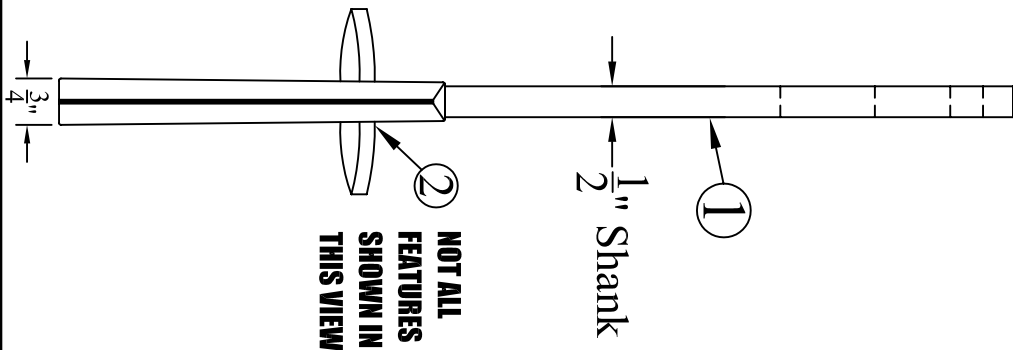
(R)
K-2T/1/2A/O NC

TOLERANCE UNLESS OTHERWISE NOTED			
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			0.00 +/- .020
			0.000 +/- .010
			0.0000 +/- .001
			ANGLE +/- .2
SHIELD			
AGRICULTURAL EQUIPMENT			
DRAWN BY: SHORES		DATE: 4/15/10	
CHECKED BY: -		DATE: -	
PART NO. K-2T/1/2A/O (R)		REV. NC	
DESCRIPTION KNIFE, K-2T, 1/2" OPEN-END TUBE		MATERIAL WELDMENT	
REV.	BY	DATE	
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-

ITEM #	QUAN.	PART #	DESCRIPTION
1	1	K2T/1/2A	KNIFE, K-2T, 1/2" crimp/drilled tube
2	1	SPL-4NEW	KNIFE SEALER, PLAIN

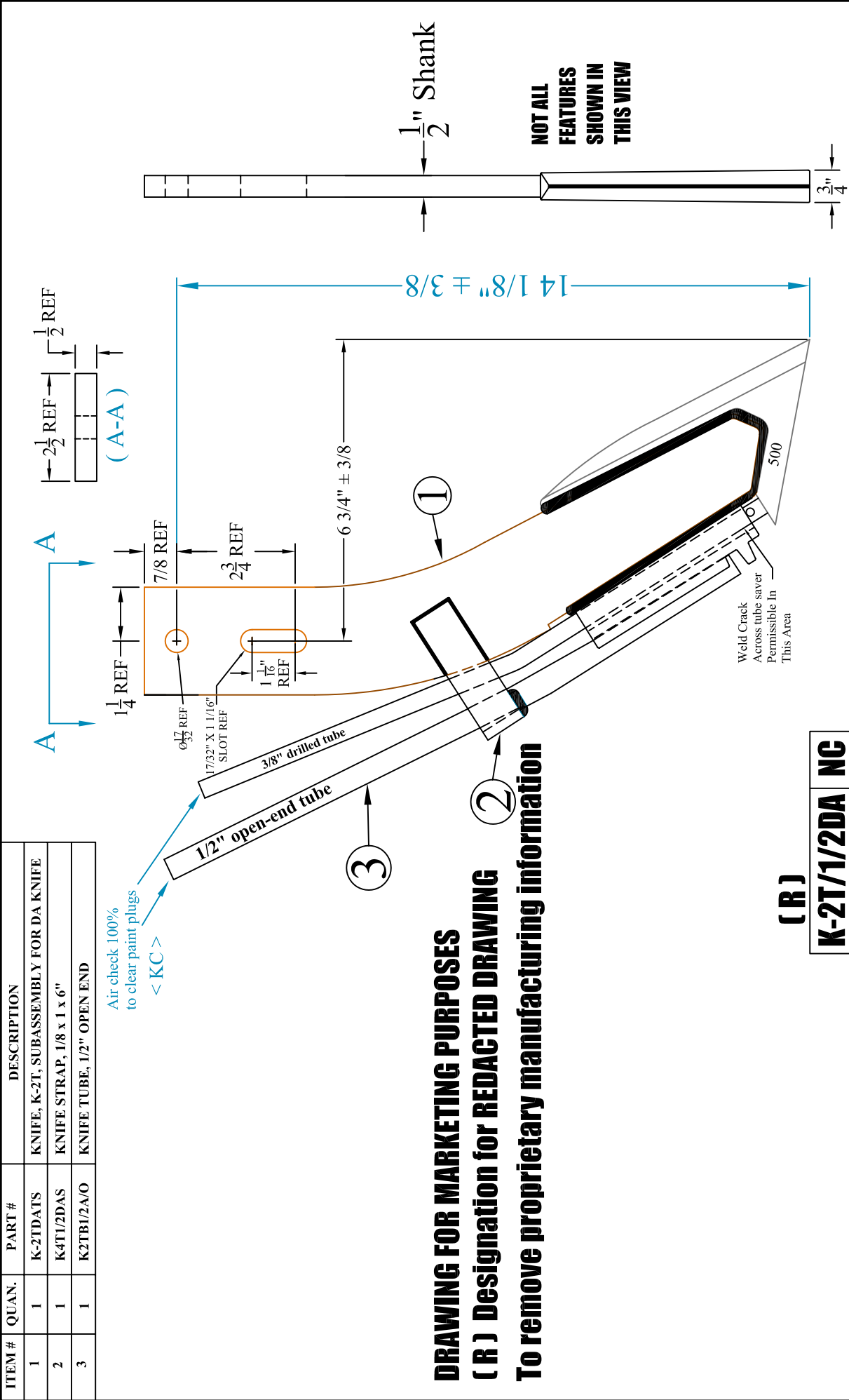


(R)
K-2T/1/2A/PLSPL NG



DRAWING FOR MARKETING PURPOSES
(R) Designation for REDACTED DRAWING
To remove proprietary manufacturing information

REV.	BY	DATE	DESCRIPTION	TOLERANCE UNLESS OTHERWISE NOTED	DRAWN BY:	DATE:	CHECKED BY:	DATE:	REV.
-	-	-	-	0/0 +/- 1/16	SHORES	4/15/10	-	-	NG
-	-	-	-	0.00 +/- .020					
-	-	-	-	0.000 +/- .010					
-	-	-	-	0.0000 +/- .001					
-	-	-	-	ANGLE +/- 2					
DESCRIPTION				MATERIAL		PART NO.		REV.	
KNIFE, K-2T, 1/2" drilled tube w/plain sealer				WELDMENT		K-2T/1/2A/PLSPL (R)		NG	

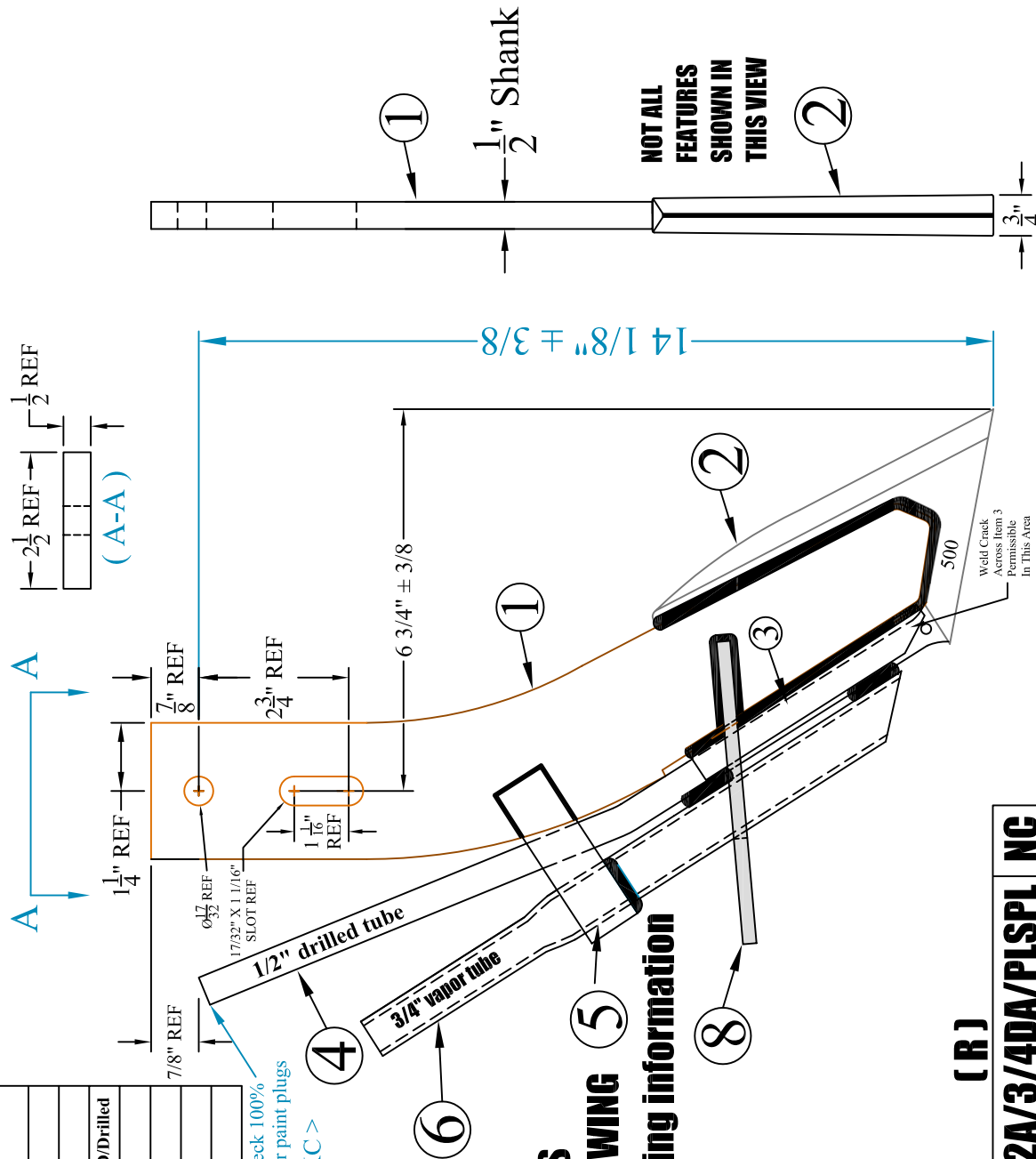


TOLERANCE UNLESS OTHERWISE NOTED				SHIELD	
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0.00 +/- .020				DRAWN BY: SHORES	DATE: 4/15/10
0.000 +/- .010				CHECKED BY: _	DATE: _
ANGLE +/- 2				PART NO.	REV.
DESCRIPTION				K-2T/1/2DA (R)	
KNIFE, K-2T, 3/8" Drilled X 1/2" Open End Tubes				WELDMENT	

ITEM #	QUAN.	PART #	DESCRIPTION
1	1	K2T-B	KNIFE BLANK, K-2T
2	1	500	KNIFE POINT, K-2T
3	1	DNC-200	KNIFE TUBE SAVER
4	1	K2TB1/2A	KNIFE TUBE, K-2T, 1/2" CRIMPED/Drilled
5	1	K4T1/2DAS	KNIFE STRAP
6	1	K2TBDA3/4	3/4" VAPOR TUBE
7	2	KSPCR	KNIFE TUBE SPACER 1/4 X 3/4
8	1	SPL-4DANEW	KNIFE SEALER, PLAIN

Air check 100%
to clear paint plugs
< KC >

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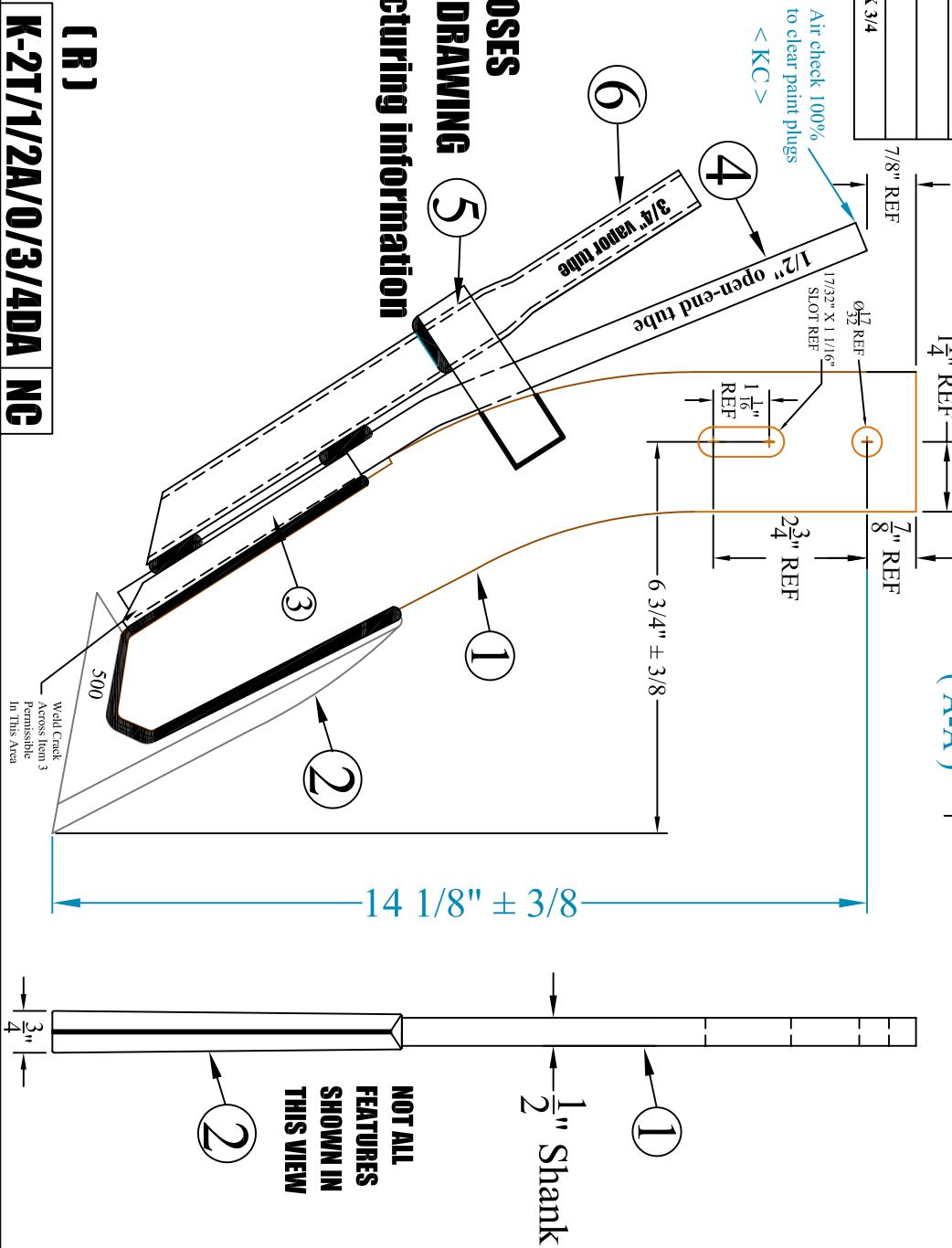
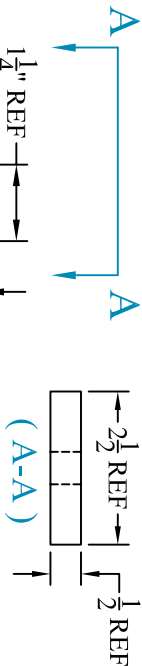
(R)

< KC > Key Characteristic

K-2T/1/2A/3/4DA/PLSPL NC

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ITEM #	QUAN.	PART #	DESCRIPTION
1	1	K2T-B	KNIFE BLANK, K-2T
2	1	500	KNIFE POINT, K-2T
3	1	DNC-200	KNIFE TUBE SAVER
4	1	K2TB1/2A/O	KNIFE TUBE, K-2T, 1/2" OPEN-END
5	1	K4T1/2DAS	KNIFE STRAP
6	1	K2TBDA3/4	3/4" VAPOR TUBE
7	2	KSPCR	KNIFE TUBE SPACER 1/4 X 3/4



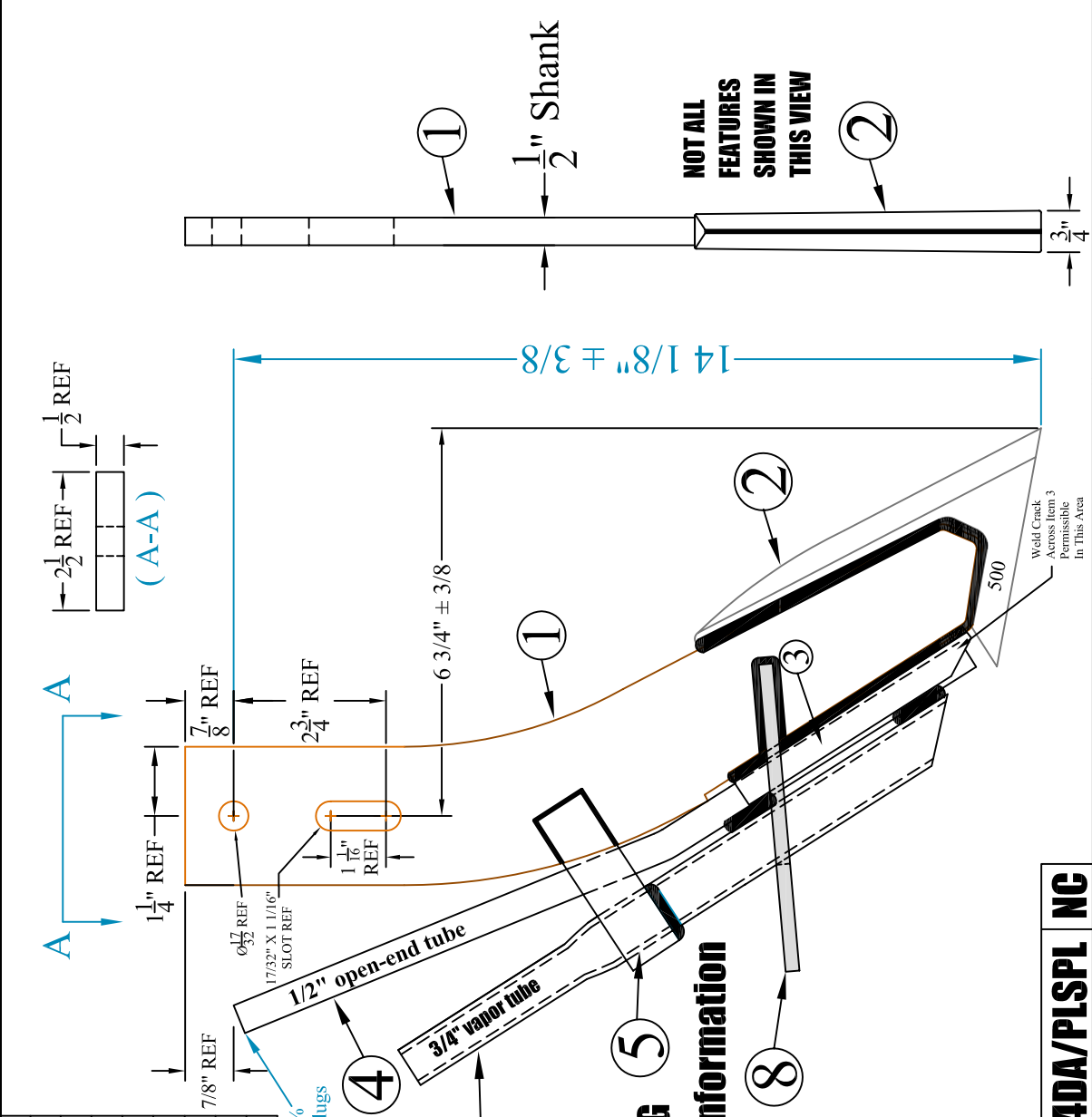
**DRAWING FOR MARKETING PURPOSES
(R) Designation for REDACTED DRAWING**
To remove proprietary manufacturing information

< KC > Key Characteristic

-	-	-	-	DESCRIPTION	MATERIAL	REV.
-	-	-	-	KNIFE, K-2T, 1/2" open-end & 3/4" vapor tube	WELDMENT	NC
-	-	-	-	REV.	BY	DATE
-	-	-	-	DESCRIPTION	DATE	
-	-	-	-	TOLERANCE UNLESS OTHERWISE NOTED		
-	-	-	-	0.00 +/- .1/16		
-	-	-	-	0.00 +/- .020		
-	-	-	-	0.000 +/- .010		
-	-	-	-	0.0000 +/- .001		
-	-	-	-	ANGLE +/- 2		
-	-	-	-	Weld Crack Across Item 3 Permissible In This Area		
-	-	-	-	SHIELD AGRICULTURAL EQUIPMENT		
-	-	-	-	DRAWN BY: SHORES	DATE: 4/15/10	
-	-	-	-	CHECKED BY: _	DATE: _	
-	-	-	-	PART NO. K-2T/1/2A/O/3/4DA (R)		

ITEM #	QUAN.	PART #	DESCRIPTION
1	1	K2T-B	KNIFE BLANK, K-2T
2	1	500	KNIFE POINT, K-2T
3	1	DNC-200	KNIFE TUBE SAVER
4	1	K2TB1/2A/O	KNIFE TUBE, K-2T, 1/2" OPEN-END
5	1	K4TI/2DAS	KNIFE STRAP
6	1	K2TBD3/4	3/4" VAPOR TUBE
7	2	KSPCR	KNIFE TUBE SPACER 1/4 X 3/4
8	1	SPL-4DANEW	KNIFE SEALER, PLAIN

Air check 100%
to clear paint plugs
< KC >



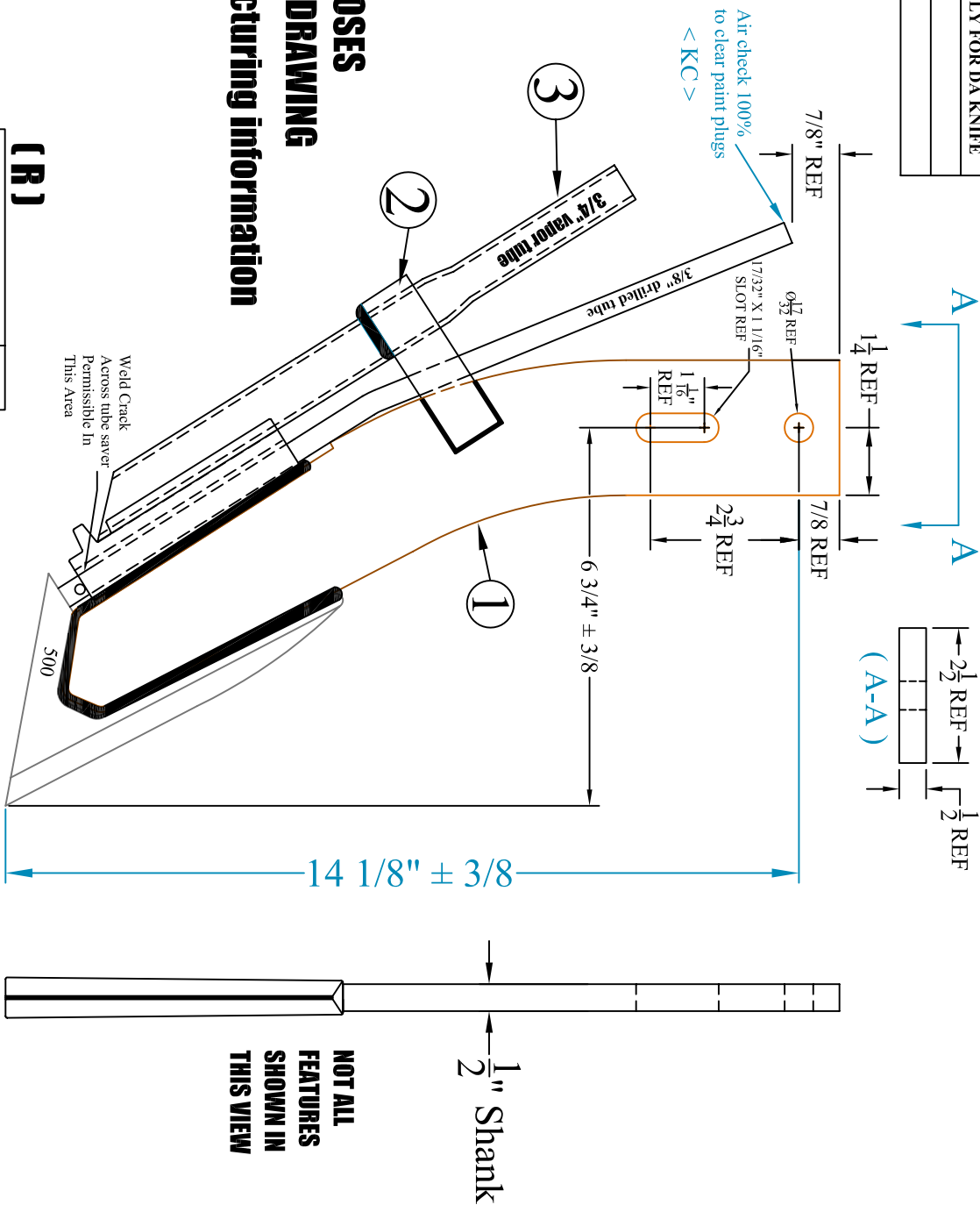
DRAWING FOR MARKETING PURPOSES
(R) Designation for REDACTED DRAWING
To remove proprietary manufacturing information

(R)

< KC > Key Characteristic	K-2T/1/2A/0/3/4DA/PLSPL	NC
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<div> <div> <div>TOLERANCE UNLESS OTHERWISE NOTED</div> <div> <div>0/0 +/- 1/16</div> <div>0.00 +/- .020</div> <div>0.000 +/- .010</div> <div>0.0000 +/- .001</div> <div>ANGLE +/- 2</div> </div> </div> <div> <div>SHIELD</div> <div>AGRICULTURAL EQUIPMENT</div> </div> </div>			
DRAWN BY: SHORES		DATE: 4/15/10	
CHECKED BY: -		DATE: -	
PART NO. K-2T/1/2A/0/3/4DA/PLSPL (R)		REV. NC	
DESCRIPTION KNIFE, K-2T, 1/2" open-end & 3/4" w/SEALER		MATERIAL WELDMENT	
REV.	BY	DATE	DESCRIPTION
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-

ITEM #	QUAN.	PART #	DESCRIPTION
1	1	K-2TDAYS	KNIFE, K-2T, SUBASSEMBLY FOR DA KNIFE
2	1	K4T1/2DAS	KNIFE STRAP, 1/8 x 1 x 6"
3	1	K2TBDAS/4	KNIFE TUBE 3/4" Vapor



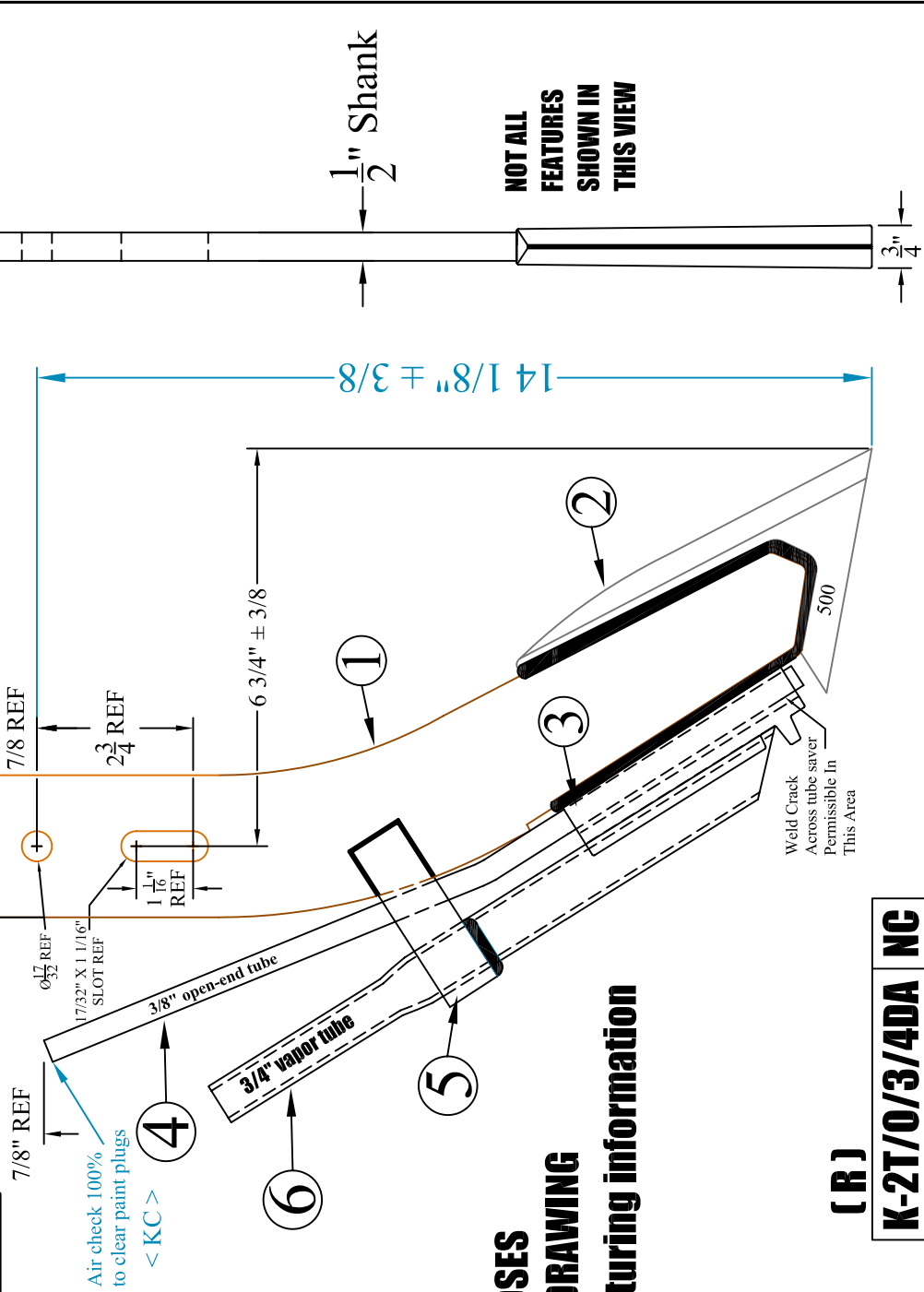
DRAWING FOR MARKETING PURPOSES
(R) Designation for REDACTED DRAWING
To remove proprietary manufacturing information

(R)

K-2T/3/4DA NC

REV.	BY	DATE	DESCRIPTION	TOLERANCE UNLESS OTHERWISE NOTED	DRAWN BY:	DATE:	CHECKED BY:	DATE:	REV.
-	-	-	-	0/0 +/- 1/16	SHORES	4/15/10	-	-	NC
-	-	-	-	0.00 +/- .020					
-	-	-	-	0.000 +/- .010					
-	-	-	-	0.0000 +/- .001					
-	-	-	-	ANGLE +/- 2					
DESCRIPTION				MATERIAL		PART NO.		REV.	
KNIFE, K-2T, 3/8" DRILLED X 3/4" VAPOR TUBES				WELDMENT		K-2T/3/4DA (R)			

ITEM #	QUAN.	PART #	DESCRIPTION
1	1	K2T-B	KNIFE BLANK, K2T
2	1	500	KNIFE POINT, K-2T
3	1	DNC-202	KNIFE TUBE SAVER, DOUBLE
4	1	TB-2/O	KNIFE TUBE, K-2T, Open-end
5	1	K4T1/2DAS	KNIFE STRAP, 1/8 x 1 x 6"
6	1	K2TBDA3/4	KNIFE TUBE 3/4" Vapor

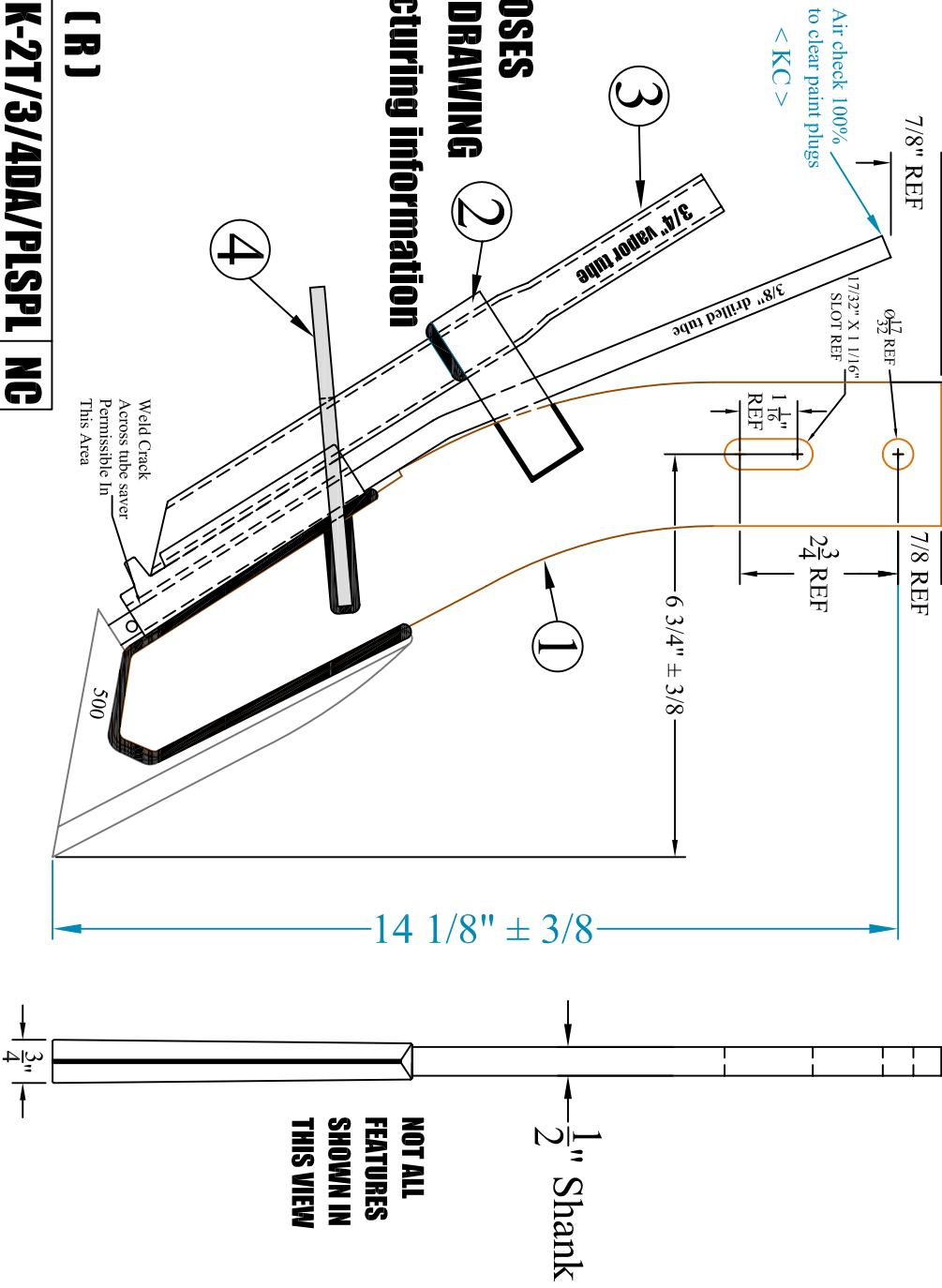
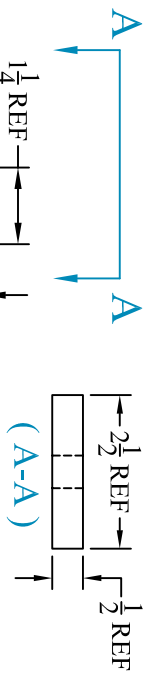


DRAWING FOR MARKETING PURPOSES
(R) Designation for REDACTED DRAWING
To remove proprietary manufacturing information

(R)
K-2T/O/3/4DA NC

				TOLERANCE UNLESS OTHERWISE NOTED		SHIELD AGRICULTURAL EQUIPMENT		
-	-	-	-			DRAWN BY: SHORES	DATE: 4/15/10	
-	-	-	-			CHECKED BY: _	DATE: _	
-	-	-	-					
-	-	-	-					
-	-	-	-					
REV.	BY	DATE	DESCRIPTION					REV.
			KNIFE, K-2T, 3/8" open-end X 3/4" VAPOR TUBES				PART NO. K-2T/O/3/4DA (R)	
			MATERIAL WELDMENT				REV. NC	

ITEM #	QUN.	PART #	DESCRIPTION
1	1	K-2TDATS	KNIFE, K-2T, SUBASSEMBLY FOR DA KNIFE
2	1	K4T1/2DAS	KNIFE STRAP, 1/8 x 1 x 6"
3	1	K2TBD3/4	KNIFE TUBE 3/4" VAPOR
4	1	SPL-4DANEW	KNIFE SEALER, PLAIN



DRAWING FOR MARKETING PURPOSES
(R) Designation for REDACTED DRAWING
To remove proprietary manufacturing information

< KC > Key Characteristic

K-2T/3/4DA/PLSPL NC

REV.	BY	DATE	DESCRIPTION	TOLERANCE UNLESS OTHERWISE NOTED	SHIELD
-	-	-	-	0.00 +/- .1/16	AGRICULTURAL EQUIPMENT
-	-	-	-	0.00 +/- .020	
-	-	-	-	0.000 +/- .010	
-	-	-	-	0.0000 +/- .001	
-	-	-	-	ANGLE +/- 2	
DRAWN BY:	CHECKED BY:	DATE:	PART NO.	REV.	
SHORES	-	4/15/10	K-2T/3/4DA/PLSPL (R)	NC	

KNIFE, K-2T, 3/8" DRILLED X 3/4" W/SEALER

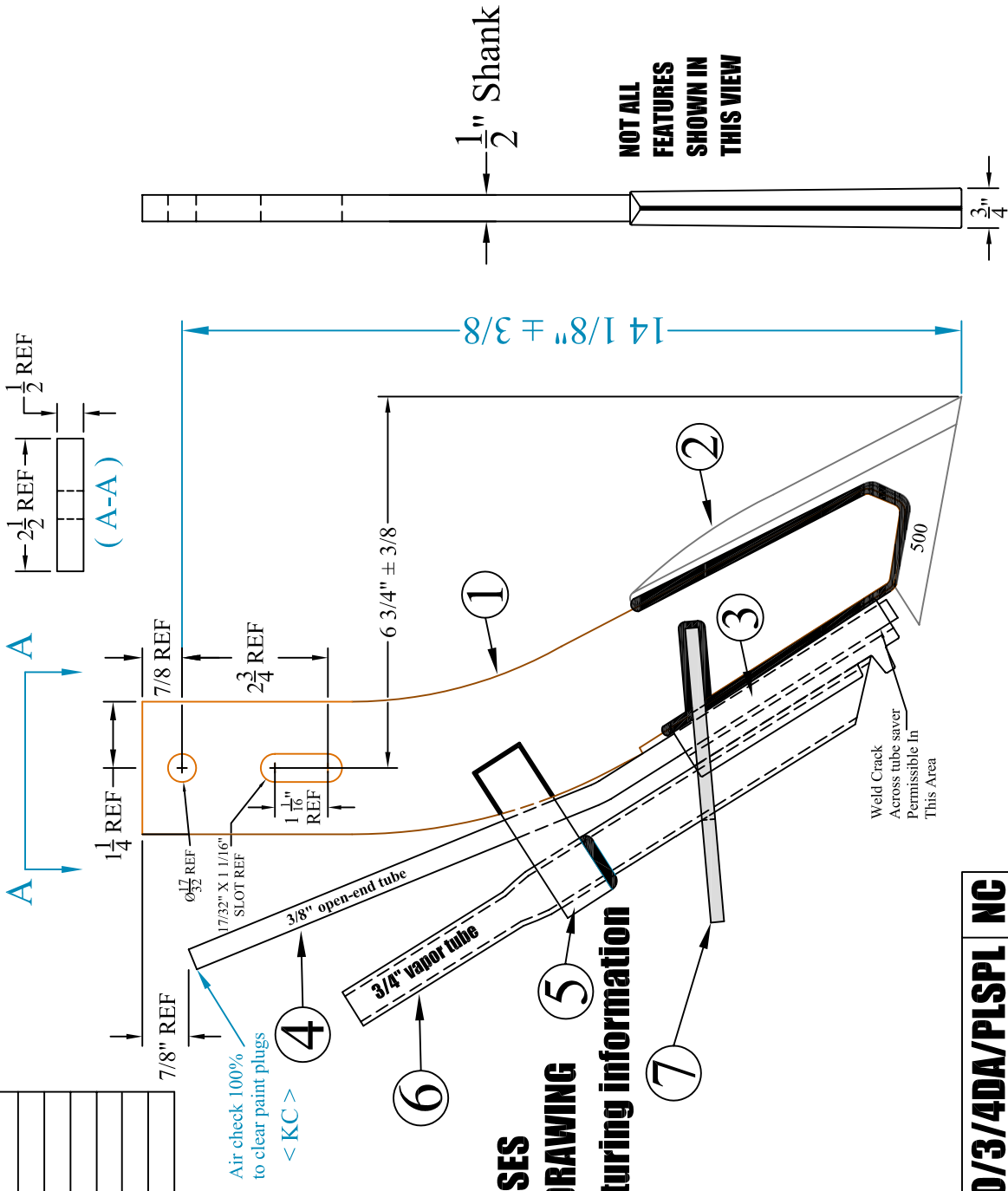
WELDMENT

ITEM #	QUAN.	PART #	DESCRIPTION
1	1	K2T-B	KNIFE BLANK, K2T
2	1	500	KNIFE POINT, K-2T
3	1	DNC-202	KNIFE TUBE SAVER, DOUBLE
4	1	TB-2/O	KNIFE TUBE, K-2T, Open-end
5	1	K4T1/2DAS	KNIFE STRAP, 1/8 x 1 x 6"
6	1	K2TBD43/4	KNIFE TUBE 3/4" Vapor
7	1	SPL-4DANEW	KNIFE SEALER, PLAIN

DRAWING FOR MARKETING PURPOSES

(R) Designation for REDACTED DRAWING

To remove proprietary manufacturing information



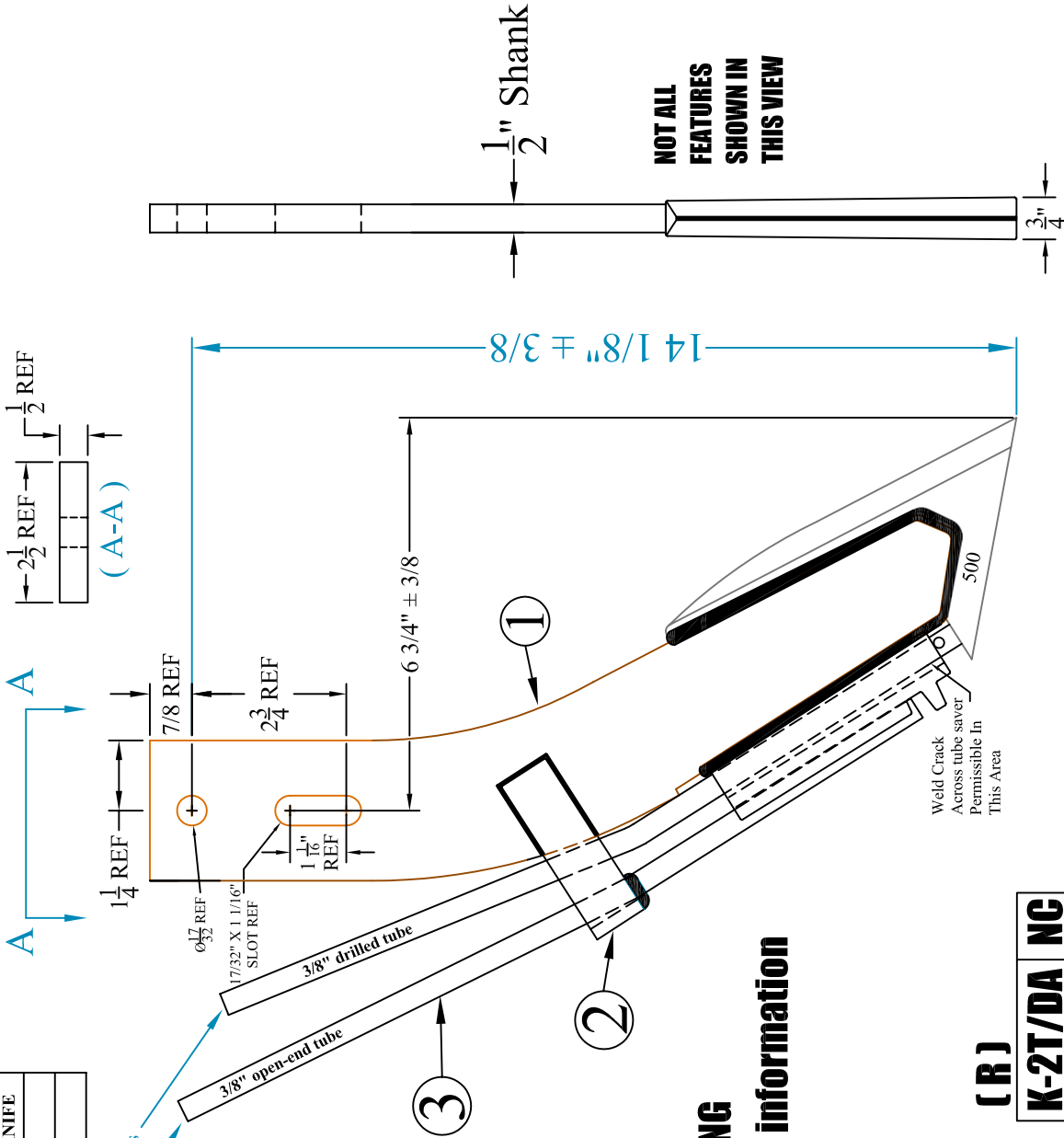
(R)

< KC > Key Characteristic K-2T/O/3/4DA/PLSPL NC

<div> <div> <div>SHIELD</div> <div>AGRICULTURAL EQUIPMENT</div> </div> <div> <div>DRAWN BY: SHORES</div> <div>CHECKED BY: _</div> </div> <div> <div>DATE: 4/15/10</div> <div>DATE: _</div> </div> </div>		<div> <div>TOLERANCE UNLESS OTHERWISE NOTED</div> <div> <div>0/0 +/- 1/16</div> <div>0.00 +/- .020</div> <div>0.000 +/- .010</div> <div>0.0000 +/- .001</div> <div>ANGLE +/- 2</div> </div> </div>		<div> <div>REV. NC</div> <div> <div>PART NO. K-2T/O/3/4DA/PLSPL (R)</div> <div>WELDMENT</div> </div> </div>	
		DESCRIPTION	KNIFE, K-2T, 3/8" open-end X 3/4" w/SEALER	MATERIAL	
REV.	BY	DATE	DESCRIPTION		
-	-	-	-		
-	-	-	-		
-	-	-	-		
-	-	-	-		

ITEM #	QUAN.	PART #	DESCRIPTION
1	1	K-2TDATS	KNIFE, K-2T, SUBASSEMBLY FOR DA KNIFE.
2	1	K4TI/2DAS	KNIFE STRAP, 1/8 x 1 x 6"
3	1	TB-2/O	KNIFE TUBE, 3/8" OPEN END

Air check 100%
to clear paint plugs
< KC >

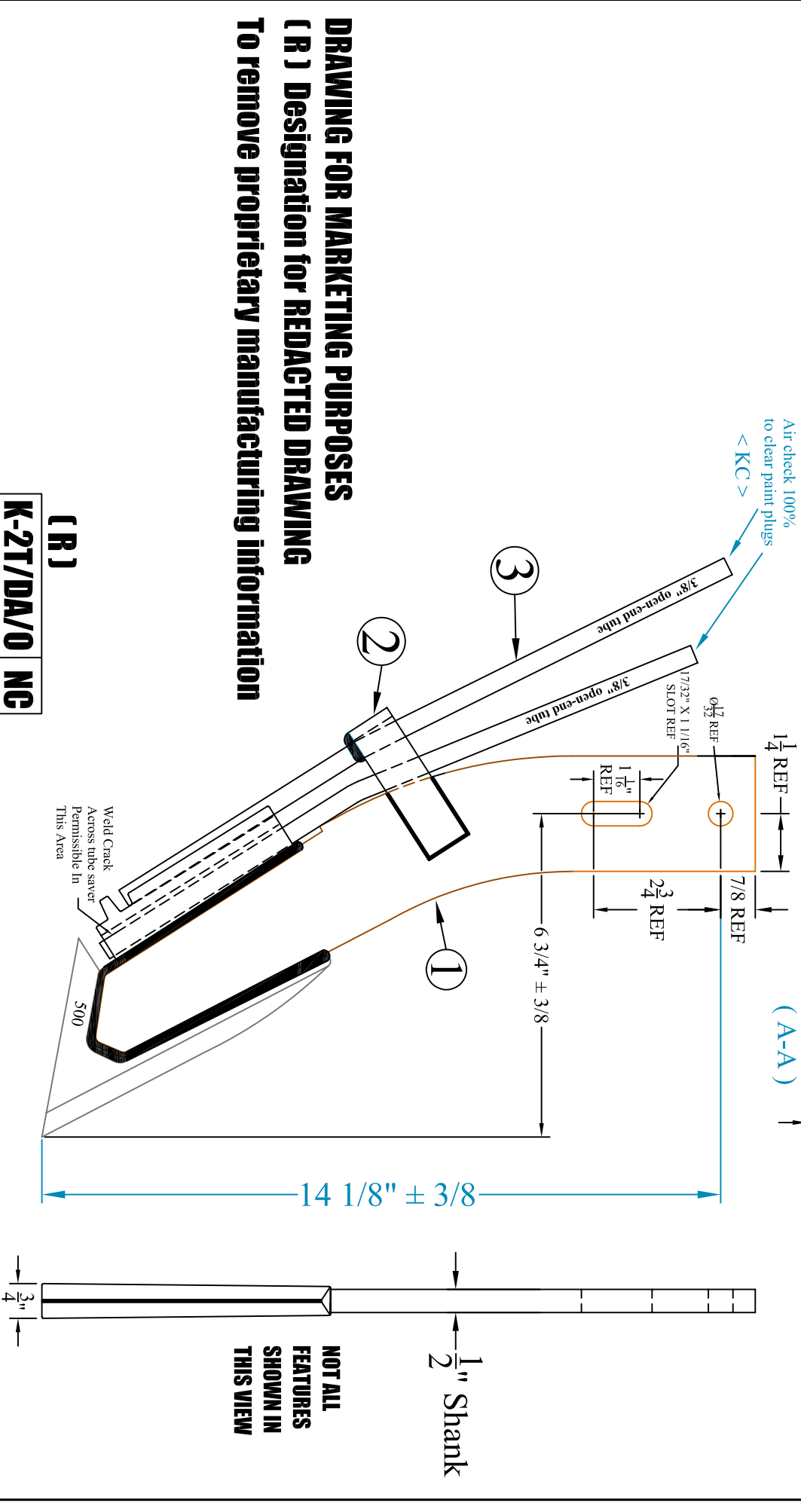


DRAWING FOR MARKETING PURPOSES
(R) Designation for REDACTED DRAWING
To remove proprietary manufacturing information

(R)
K-2T/DA NC

<div><div>TOLERANCE UNLESS OTHERWISE NOTED</div><div>0/0 +/- 1/16</div><div>0.00 +/- .020</div><div>0.000 +/- .010</div><div>0.0000 +/- .001</div><div>ANGLE +/- 2</div></div>				<div><div>SHIELD</div><div>AGRICULTURAL EQUIPMENT</div></div>			
				DRAWN BY: SHORES		DATE: 4/15/10	
				CHECKED BY: -		DATE: -	
DESCRIPTION				PART NO.		REV.	
				K-2T/DA (R)		NC	
				MATERIAL		WELDMENT	
				KNIFE, K-2T, 3/8" Drilled X 3/8" Open End Tubes			
REV.	BY	DATE	DESCRIPTION				
-	-	-	-				
-	-	-	-				
-	-	-	-				
-	-	-	-				

ITEM #	QUAN.	PART #	DESCRIPTION
1	1	K-2T/DA/0	KNIFE, K-2T, Open-end sub for DA knife
2	1	K-4T1/2DAS	KNIFE STRAP, 1/8 x 1 x 6"
3	1	TB-2/O	KNIFE TUBE, 3/8" OPEN END



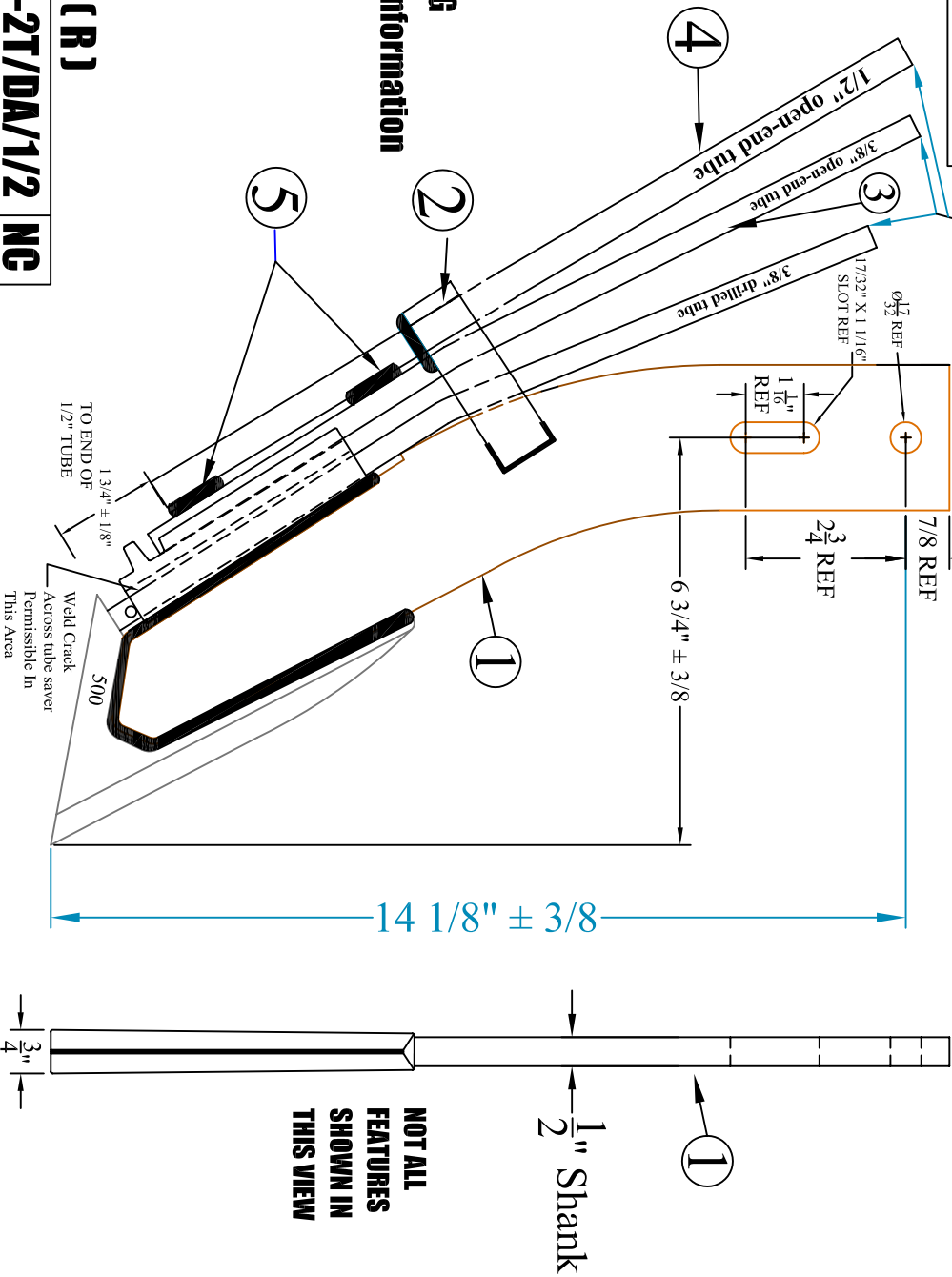
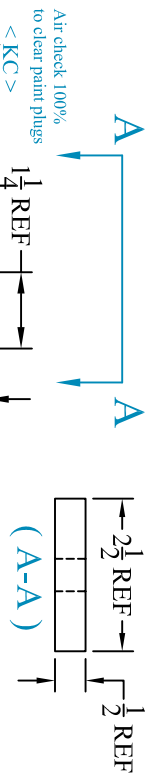
DRAWING FOR MARKETING PURPOSES

(R) Designation for REDACTED DRAWING

To remove proprietary manufacturing information

-	-	-	-	TOLERANCE UNLESS OTHERWISE NOTED	0/0 +/- 1/16	SHIELD AGRICULTURAL EQUIPMENT DRAWN BY: SHORES DATE: 4/15/10 CHECKED BY: DATE:	PART NO.	REV.
-	-	-	-	0.00 +/- .020			K-2T/DA/0 (R)	NG
-	-	-	-	0.000 +/- .010				
-	-	-	-	0.0000 +/- .001				
REV.	BY	DATE	DESCRIPTION	ANGLE +/- 2				
DESCRIPTION KNIFE, K-2T, 3/8" Open-end X 3/8" Open End Tubes MATERIAL WELDMENT								

ITEM #	QUAN.	PART #	DESCRIPTION
1	1	K-2TDATS	KNIFE, K-2T, SUBASSEMBLY FOR DA KNIFE
2	1	K4T1/2DAS	KNIFE STRAP, 1/8 x 1 x 6"
3	1	TR-2/O	KNIFE TUBE, 3/8" OPEN END
4	1	K2TB1/2A/O	1/2" Open-end tube
5	2	KSPCR	KNIFE TUBE SPACER 1/4 X 3/4



NOT ALL
FEATURES
SHOWN IN
THIS VIEW

1/2" Shank

DRAWING FOR MARKETING PURPOSES (R) Designation for REDACTED DRAWING To remove proprietary manufacturing information

Ag Dip Black Paint
Per Customer Specifications

< KC > Key Characteristic

K-2T/DA/1/2 NG

REV.	BY	DATE	DESCRIPTION	TOLERANCE UNLESS OTHERWISE NOTED	DRAWN BY:	DATE:	CHECKED BY:	DATE:	REV.
-	-	-	-	0/0 +/- 1/16	SHORES	4/15/10	-	-	NG
-	-	-	-	0.00 +/- .020					
-	-	-	-	0.000 +/- .010					
-	-	-	-	0.0000 +/- .001					
-	-	-	-	ANGLE +/- 2					

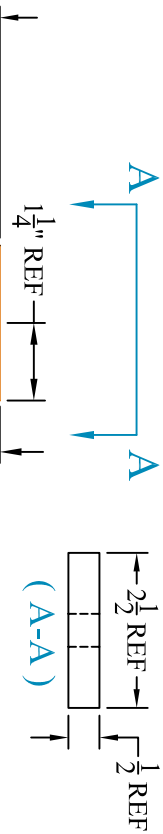
DESCRIPTION KNIFE, K-2T, 3/8" Drilled X 3/8" Open End X 1/2" Open End tubes

MATERIAL WELDMENT

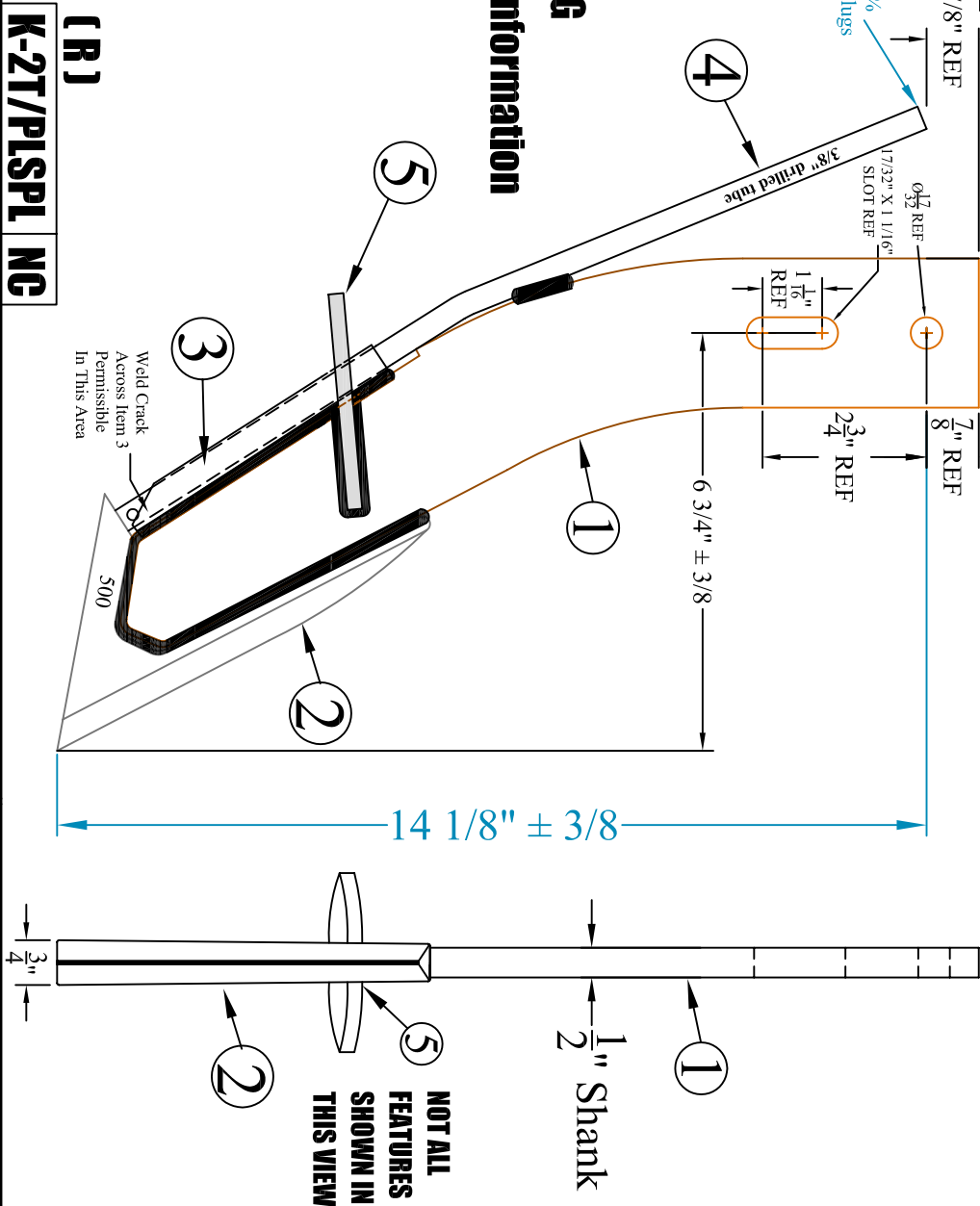
PART NO. K-2T/DA/1/2 (R)

REV.

ITEM #	QUAN.	PART #	DESCRIPTION
1	1	K2T-B	KNIFE BLANK, K-2T
2	1	500	KNIFE POINT, K-2T
3	1	DNC-200	KNIFE TUBE SAVER
4	1	TB-3	KNIFE TUBE, K-2T, Drilled
5	1	SPL-4NEW	KNIFE SEALER, PLAIN



DRAWING FOR MARKETING PURPOSES
(R) Designation for REDACTED DRAWING
To remove proprietary manufacturing information



< KC > Key Characteristic

(R)
K-2T/PLSP1 NC

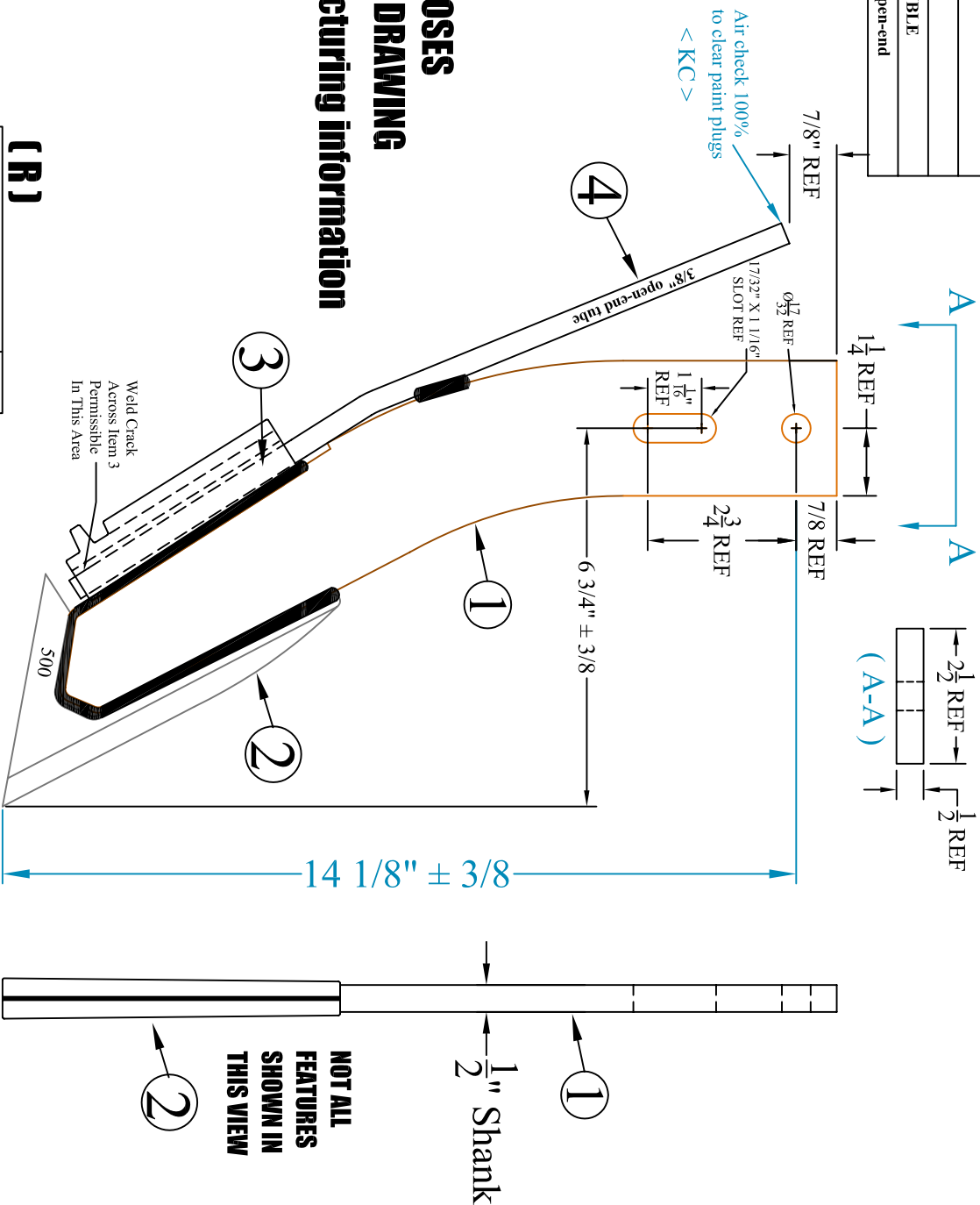
REV.	BY	DATE	DESCRIPTION	TOLERANCE UNLESS OTHERWISE NOTED	DRAWN BY:	DATE:	CHECKED BY:	DATE:
-	-	-	-	0/0 +/- 1/16	SHORES	4/15/10	-	-
-	-	-	-	0.00 +/- .020				
-	-	-	-	0.000 +/- .010				
-	-	-	-	0.0000 +/- .001				
REV.	BY	DATE	DESCRIPTION	ANGLE +/- 2				

DESCRIPTION	MATERIAL	REV.
KNIFE, K-2T, 3/8" DRILLED TUBE W/SEALER	WELDMENT	K-2T/PLSP1 (R) NC

SHIELD
 AGRICULTURAL EQUIPMENT

**NOT ALL
 FEATURES
 SHOWN IN
 THIS VIEW**

ITEM #	QUAN.	PART #	DESCRIPTION
1	1	K2T-B	KNIFE BLANK, K2T
2	1	500	KNIFE POINT, K-2T
3	1	DNC-202	KNIFE TUBE SAVER, DOUBLE
4	1	TB-2/O	KNIFE TUBE, K-2T, 3/8" Open-end



< KC > Key Characteristic

[R]

K-2TDATS/O NC

TOLERANCE UNLESS OTHERWISE NOTED

-	-	-
-	-	-
-	-	-
-	-	-
-	-	-
REV.	BY	DATE

0.00 +/- .010
0.000 +/- .001
ANGLE +/- 2

SHIELD
AGRICULTURAL EQUIPMENT

DRAWN BY: SHORES
DATE: 4/15/10

CHECKED BY: -
DATE: -

DESCRIPTION: KNIFE, K-2T, SUBASSEMBLY FOR DA KNIFE, open-end tube
PART NO.: K-2TDATS/O [R]
REV.: NC

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ShieldAg 800-798-1968 www.shieldag.com

K-4T**K-4T/3/4DA**

SHIELDAG FRONT SWEEP KNIVES

STANDARD K-4T Forward Swept 1/2" X 2-1/2" X 16" tall knives

Drawings for knives following this page are in the order shown in this table

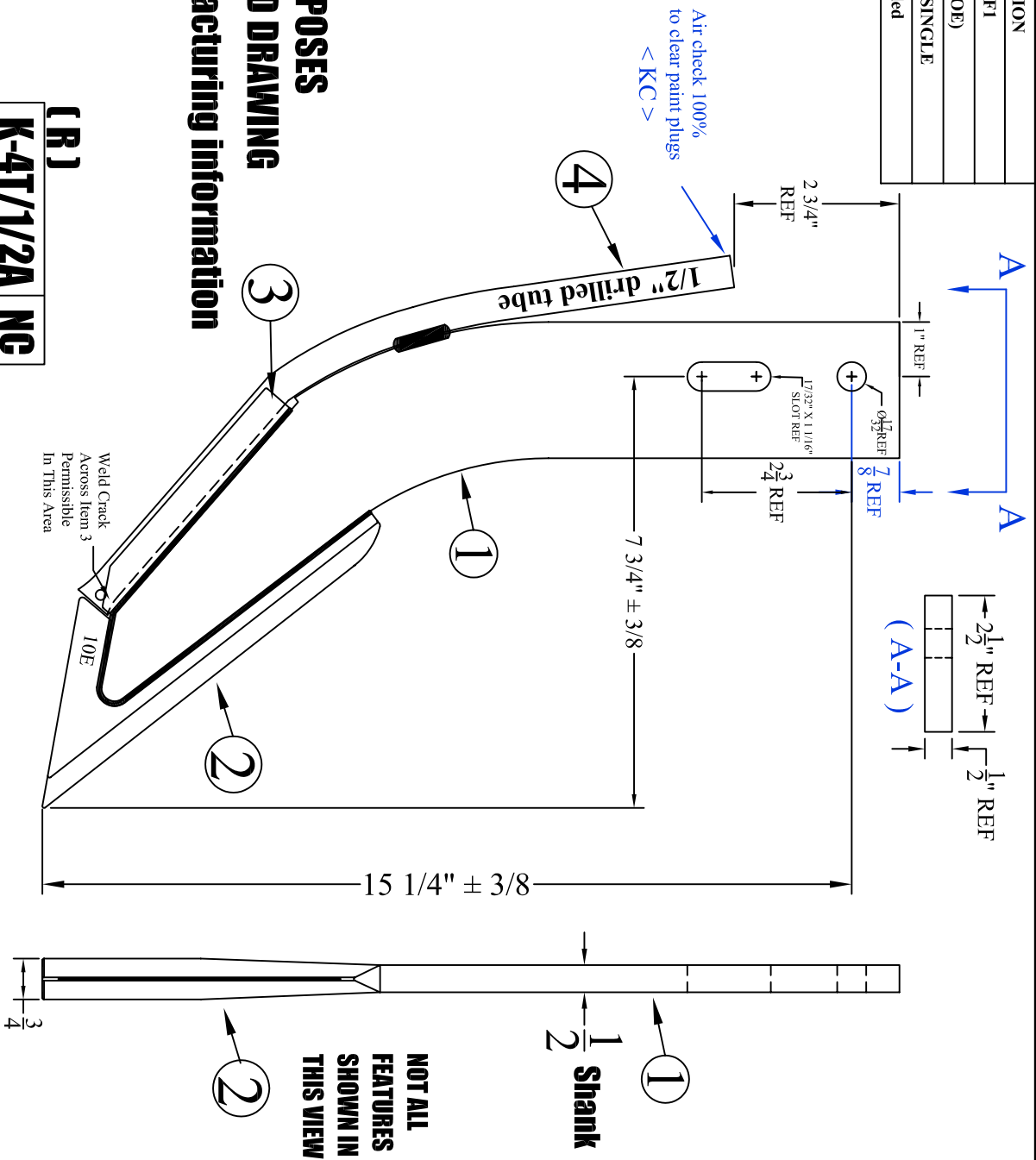
Part #	Description	DRAWING	Weight
K-4T	Single 3/8" NH3 tube	YES	6.6
K-4T/O	Single 3/8" open end tube	YES	6.6
K-4T/1/2A	Single 1/2" NH3 tube	YES	6.7
K-4T/1/2	Single 1/2" Open End tube		6.7
K-4T/1/2A/1/2DA	1/2" NH3 and 1/2" Open end tubes		7.2
K-4T/1/2/HFSPL	Single 1/2" Open End tube, hardfaced sealer		7.6
K-4T/1/2A/HFSPL	Single 1/2" NH3 tube, hardfaced sealer		7.6
K-4T/1/2A/PLSPL	Single 1/2" NH3 tube with plain sealer		7.5
K-4T/1/2DA	3/8" NH3 & 1/2" open end tubes		7.4
K-4T/1/2DA/HFSPL	3/8" NH3 & 1/2" open end tubes and hardfaced sealer		7.9
K-4T/3/4DA	3/8" NH3 & 3/4" open end tubes	YES	7.4
K-4T/3/4DA/PLSPL	3/8" NH3 & 3/4" open end tubes and plain sealer		7.9
K-4T/3/4DA/HFSPL	3/8" NH3 & 3/4" open end tubes and hardfaced sealer		8.0
K-4T/1/2A/3/4DA	1/2" NH3 & 3/4" vapor tubes		7.6
K-4T/DA	3/8" NH3 & 3/8" open end tubes	YES	7.2
K-4T/DA/O	Dual 3/8" open end tubes		7.2
K-4T/DA/HFSPL	3/8" NH3 & 3/8" open end tubes with hardfaced sealer		7.7
K-4T/DA/PLSPL	3/8" NH3 & 3/8" open end tubes with plain sealer		7.6
K-4T/HFSPL	Single 3/8" tube with hardfaced sealer		7.4
K-4T/O/112DA	K-4T Strip Till with 3/8O & 1-1/2" dry tubes STRIP TILL		8.4
K-4T/O/112DA/HF	K-4T Strip Till with 3/8O & 1-1/2" dry tubes STRIP TILL XTRA hardmetal		8.6
K-4T/O/112DA/HF/3/4	Strip till with 3/8OX3/4VX1-1/2 dry STRIP TILL XTRA hardmetal		9.3
K-4T/112	K-4T Strip Till with 1-1/2" dry tube only STRIP TILL w/o hard metal		8.2
K-4T/O/114DA	K-4T Strip Till with 3/8O & 1-1/4" dry tubes CONVENTIONAL		7.8
K-4T/PLSPL	Single 3/8" tube with plain sealer	YES	7.3
K-4TDATS	Knife shank with dual app tube saver and 3/8" NH3 tube	YES	6.7

Part #	Replacement Parts for K-4T Knives	Weight
IOE	Knife point	0.92
DNC-200	Single tube saver	0.35
DNC-202	Dual tube saver	0.56
TB-4	3/8" tube drilled	0.30
TB-4/O	3/8" tube open end	0.30
TB-2/O	3/8" tube open end	0.30
K4TB1/2	1/2" tube open end	0.53
K2TB1/2A	1/2" tube drilled	0.53
K4TB.5DA	1/2" tube open end	0.53
K2TBDA3/4	3/4" tube open end	0.74
SPL-4/HF	Hardfaced sealer, will fit single & dual app tubes to 1/2"	0.80
SPL-4NEW	Plain sealer, will fit single & dual app tubes to 1/2"	0.60
K4T1/2DAS	Knife strap for adding secondary tubes	0.06
KTWS-01	4-segment chrome extension for knife front	0.34

NEED A SPECIAL KNIFE FOR YOUR APPLICATION ? WE CAN DO IT !!

OUR CATALOG IS AVAILABLE ON LINE AT WWW.SHIELDAG.COM

ITEM #	QUAN.	PART #	DESCRIPTION
1	1	K4T-B	KNIFE BLANK, K4T/DE1
2	1	10E	KNIFE POINT, K-4T (10E)
3	1	DNC-200	KNIFE TUBE SAVER, SINGLE
4	1	K4TB1/2A	KNIFE TUBE, 1/2" drilled



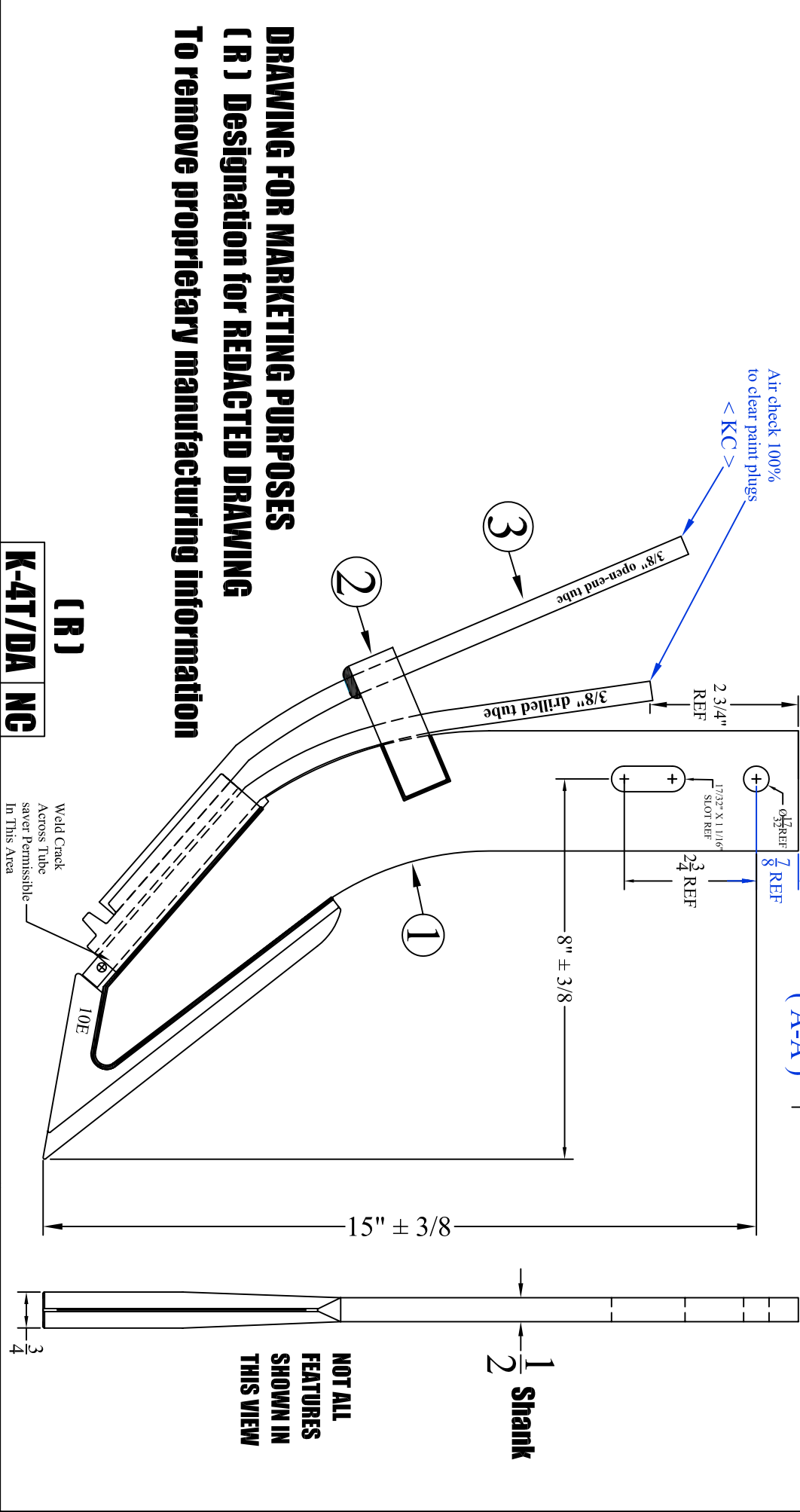
DRAWING FOR MARKETING PURPOSES
(R) Designation for REDACTED DRAWING
To remove proprietary manufacturing information

< KC > Key Characteristic

(R)
K-4T/1/2A NC

-	-	-	-	TOLERANCE UNLESS OTHERWISE NOTED	SHIELD AGRICULTURAL EQUIPMENT DRAWN BY: SHORES DATE: 4/15/10 CHECKED BY: _ DATE: _
-	-	-	-	0.00 +/- 1/16	
-	-	-	-	0.00 +/- .020	
-	-	-	-	0.000 +/- .010	
-	-	-	-	0.0000 +/- .001	
REV.	BY	DATE	DESCRIPTION	ANGLE +/- 2	
DESCRIPTION	KNIFE, K-4T, 1/2" DRILLED TUBE			MATERIAL	WELDMENT
PART NO.			K-4T/1/2A (R)		
REV.			NC		

ITEM #	QUN.	PART #	DESCRIPTION
1	1	K-4TDATS	Knife, K-4T, Subassembly w/D A Tube Saver
2	1	K4TI/2DAS	KNIFE STRAP, 1/8 x 1 x 6"
3	1	TB-4/O	KNIFE TUBE, OPEN END

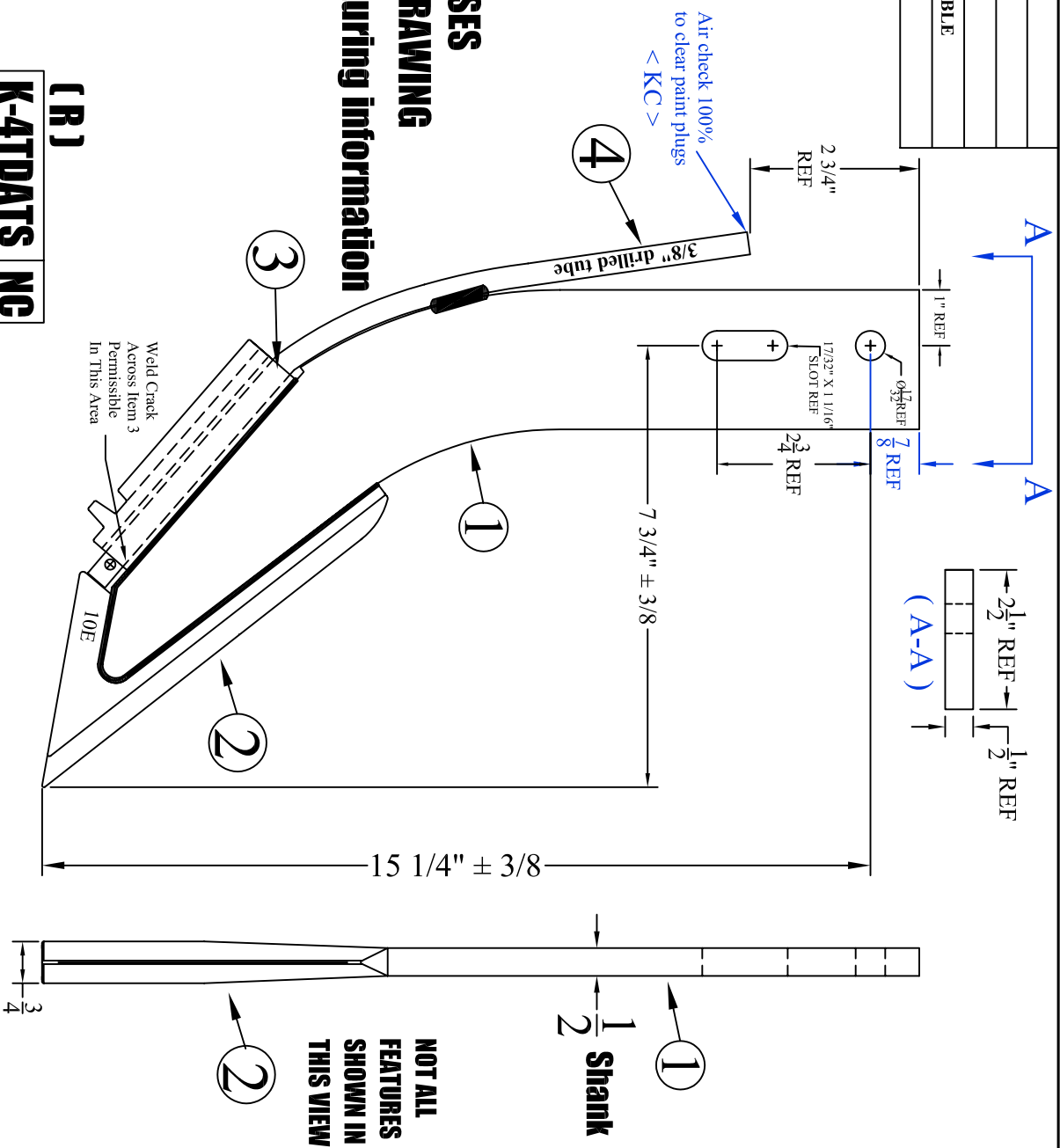


DRAWING FOR MARKETING PURPOSES
(R) Designation for REDACTED DRAWING
To remove proprietary manufacturing information

(R)
K-4T/DA NC

REV.	BY	DATE	DESCRIPTION	TOLERANCE UNLESS OTHERWISE NOTED	DRAWN BY:	CHECKED BY:	DATE:	PART NO.	REV.
-	-	-	-	0/0 +/- 1/16	SHORES	-	4/15/10	K-4T/DA (R)	NC
-	-	-	-	0.00 +/- .020					
-	-	-	-	0.000 +/- .010					
-	-	-	-	0.0000 +/- .001					
-	-	-	-	ANGLE +/- 2					

ITEM #	QUAN.	PART #	DESCRIPTION
1	1	K-4T-B	KNIFE BLANK, K-4T/DF1
2	1	10E	KNIFE POINT, K-4T (10E)
3	1	DNC-202	KNIFE TUBE SAVER, DOUBLE
4	1	TB-4	KNIFE TUBE, K-4T KNIFE



DRAWING FOR MARKETING PURPOSES
(R) Designation for REDACTED DRAWING
To remove proprietary manufacturing information

<-KC> Key Characteristic

(R)
K-4TDATE NC

REV.	BY	DATE	DESCRIPTION	MATERIAL	WELDMENT	PART NO.	REV.
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-
DESCRIPTION	KNIFE, K-4T, SUBASSEMBLY W/DA TUBE SAVER						K-4TDATE (R)
				SHIELD		K-4TDATE (R)	
				AGRICULTURAL EQUIPMENT		DATE: 4/15/10	
				DRAWN BY: SHORES		DATE: 4/15/10	
				CHECKED BY: -		DATE: -	



K-4TS



K-4TSBS

Widest selection of narrow profile knives in the industry !!

Standard length "slim" knives, knives for coulter injection rigs

"high-speed" knives for standard applicators

Drawings for knives following this page are in the order shown in this table

Part #	Description	DRAWING	Weight
K-4TS	Single 3/8" NH3 tube	YES	5.5
K-4TS/O	Single 3/8" open-end tube	YES	5.5
K-4TS/1/2A	Single 1/2" NH3 tube	YES	5.6
K-4TS/1/2A/PLSPL	Single 1/2" NH3 tube with sealer	YES	5.9
K-4TS/1/2DA	Dual 3/8" NH3 & 1/2" open end tubes		6.5
K-4TS/3/4DA	Dual 3/8" NH3 & 3/4" open end tubes	YES	6.6
K-4TS/DA	Dual 3/8" NH3 & 3/8" open end tubes	YES	6.4
K-4TS/DA/PLSPL	Dual 3/8" NH3 & 3/8" open end tubes with sealer		6.8
K-4TS/HFSPL	Single 3/8" NH3 tube with hardfaced sealer		6.0
K-4TS/PLSPL	Single 3/8" NH3 tube with sealer	YES	5.9
K-4TS/PLSPL/LOWER	Single 3/8" NH3 tube with sealer lower position		5.9

Knives designed specifically for coulter injection rigs, lengths vary

Part #	Description	DRAWING	Weight
K-336070147BB	Boron Steel thin knife for DMI coulter rigs	YES	4.2
K-336070147BBST	Boron Steel thin knife for DMI coulter rigs with SURFA SHIELD	YES	4.6
K-5S	Thin Chrome knife for coulter injection systems	YES	4.8
K-5SB	Boron Steel thin knife for coulter injection rigs	YES	4.0
K-5SBSST	Boron Steel knife with SURFA SHIELD	YES	4.4
K-5SB/HF	Boron Steel thin knife for coulter injection rigs, hardfaced	YES	4.2
K-5SHDWREKIT	Hardware kit for thin knives, includes cushion	YES	1.0

Slim (5/16" thick) high speed 13" tall knives for high speed NH3 and liquid applicators

Part #	Description	DRAWING	Weight
K-6S	Slim (high speed) knife with 3/8" NH3 tube	YES	5.5
K-6S/DA	Slim (high speed) knife with dual 3/8" tubes	YES	6.0
K-6S/3/4DA	Slim (high speed) knife with 3/8" NH3 tube and 3/4 vapor tube	YES	6.4
K-6S/DA/3/4DA	Slim (high speed) knife with dual 3/8" tubes and 3/4 vapor tube	YES	6.9

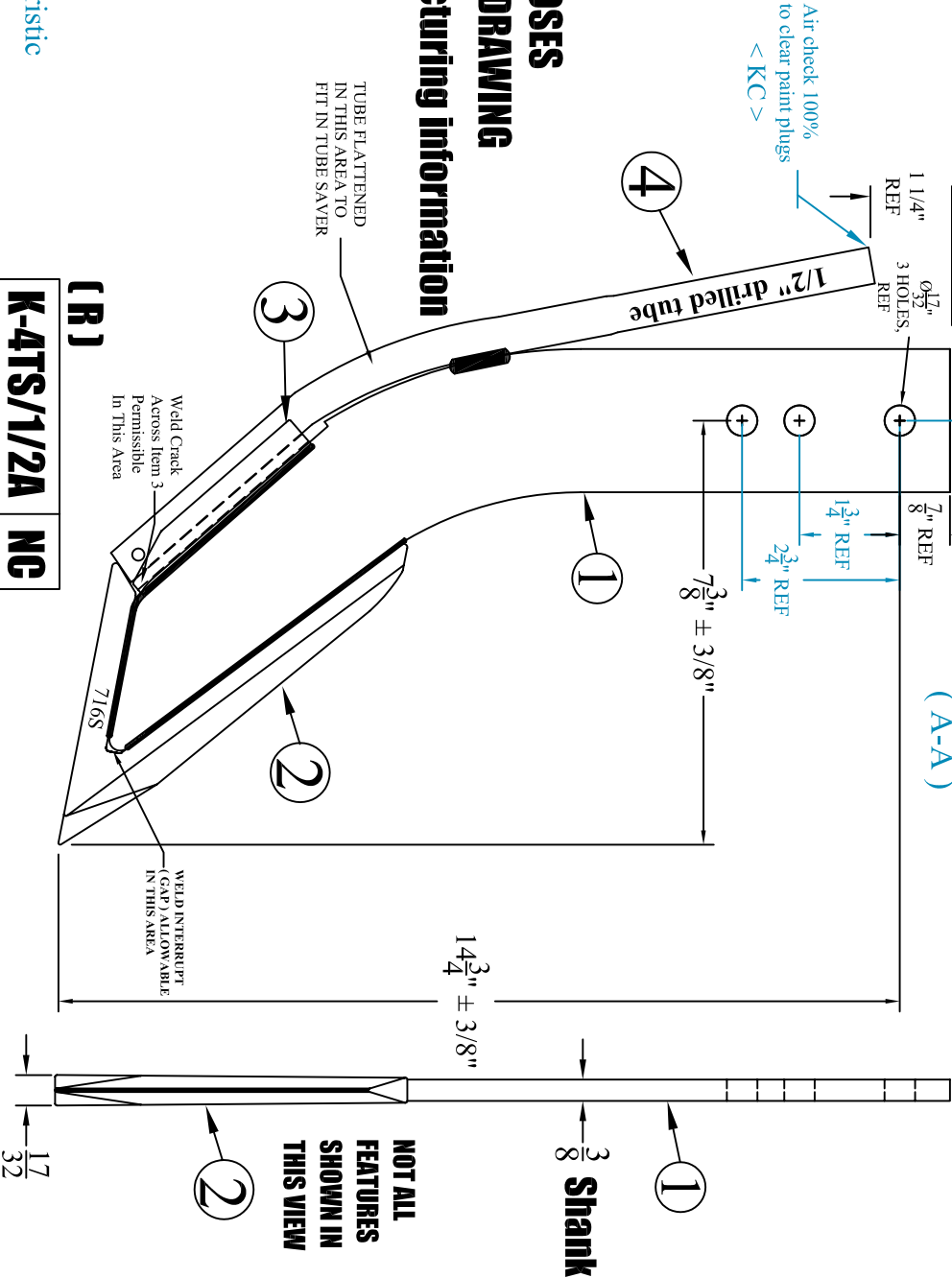
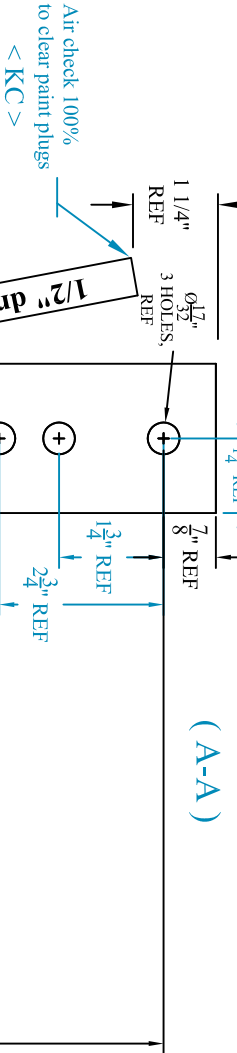
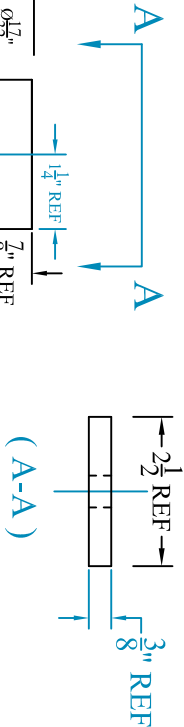
SEE OUR FERTILIZER CATALOG FOR HIGH SPEED PACKER WHEEL ASSEMBLIES DESIGNED TO ADAPT TO CONVENTIONAL RIGS !!

Part #	Replacement Parts for K-4TS "Slim" Knives	Weight
716SM	Knife point	0.73
100S	Single tube saver	0.22
100DS	Dual tube saver	0.35
K4STB	3/8" tube drilled	0.30
K4STB1/2A	1/2" tube drilled	0.50
K4TB.5DA	1/2" tube open end	0.50
K2TBDA3/4	3/4" tube open end	0.70
TB-2/O	3/8" tube open end	0.30
SPL-4SNEW	Plain sealer	0.50
SPL-4S/HF	Hardfaced sealer	0.60

K-4TSBS "Slim" Backswept Knives

Part #	Description	DRAWING	Weight
K-4TSBS	14" Tall 3/8" Backswept knife with 3/8" Tube		3.8
K-4TSBSS	14" Tall 3/8" Backswept knife with 3/8" StainlessTube		3.8
K-4TSBS/BORON	Forged 14" Tall 3/8" Backswept knife with 3/8" Tube	YES	3.5
K-4TSBS/BSST	Forged 14" Tall 3/8" Backswept knife with 3/8" Tube with SURFA SHIELD	YES	3.6
K-4TSBSS/1/2A	14" Tall 3/8" Backswept knife with 1/2" StainlessTube, open end		3.9
K-4TTSBS	17" Tall 3/8" Backswept knife with 3/8" Tube		5.0
K-4TTSBSS	17" Tall 3/8" Backswept knife with 3/8" Stainless Tube		5.0
K-4TTSBSS/1/2A	17" Tall 3/8" Backswept knife with 1/2" Stainless Tube		5.1

ITEM #	QUAN.	PART #	DESCRIPTION
1	1	K4TS-B	KNIFE BLANK, K-4TS
2	1	716SM	KNIFE POINT, K-4SLIM, 2009
3	1	100S	KNIFE TUBE SAVER, SLIM
4	1	K4STB/2A	KNIFE TUBE, K-4TS, 1/2" DRILLED



DRAWING FOR MARKETING PURPOSES
(R) Designation for REDACTED DRAWING
To remove proprietary manufacturing information

< KC > Key Characteristic

K-4TS/1/2A NC

-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
REV.	BY	DATE	

DESCRIPTION	MATERIAL	PART NO.	REV.
K4 SLIM 3/8" KNIFE WITH 1/2" DRILLED TUBE	Weldment	K-4TS/1/2A (R)	NC

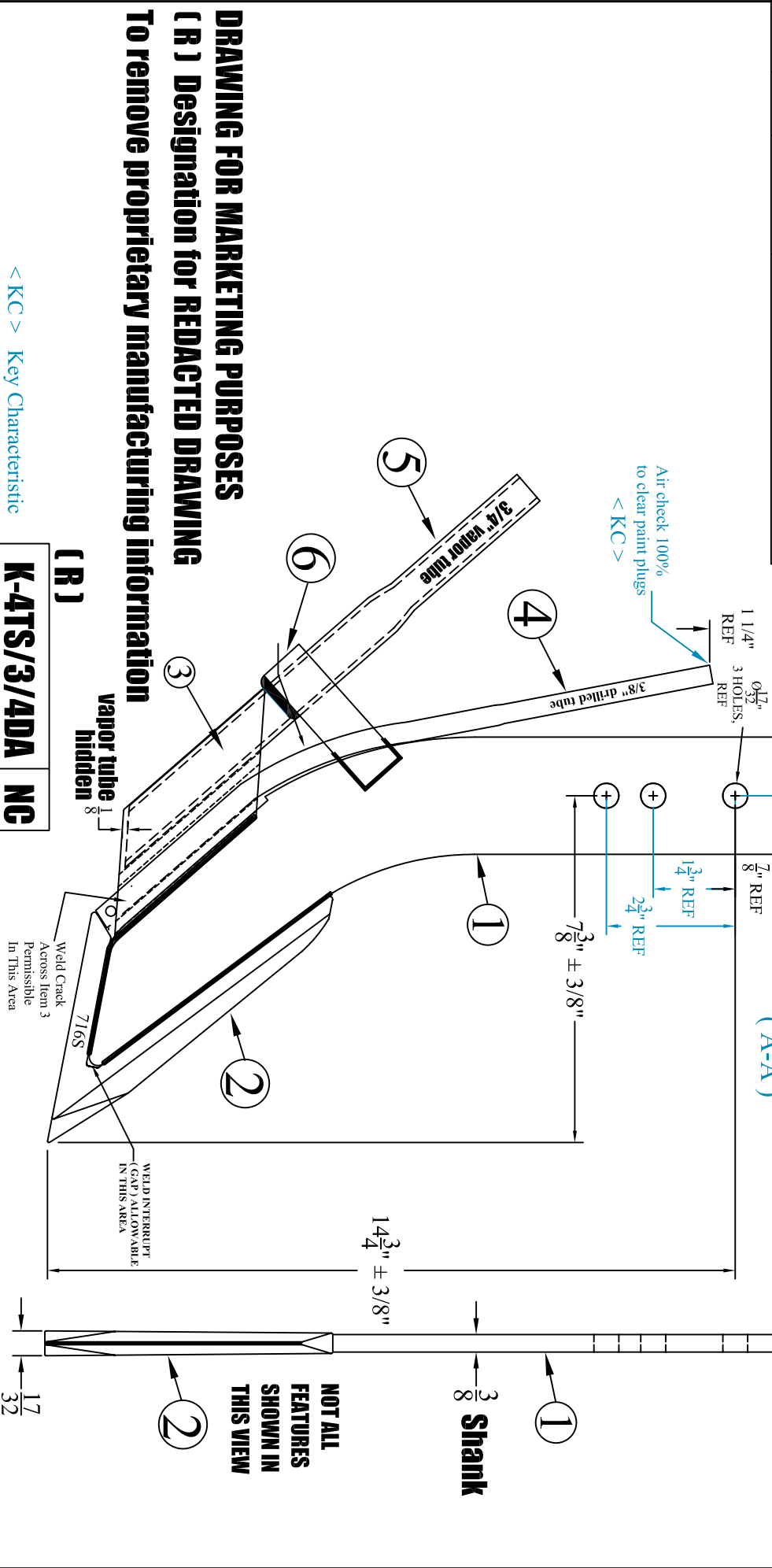
SHIELD
 AGRICULTURAL EQUIPMENT

DRAWN BY:	DATE:
SHORES	05/15/10
CHECKED BY:	DATE:
-	-

TOLERANCE UNLESS OTHERWISE NOTED
0/0 +/- 1/16
0.00 +/- .020
0.000 +/- .005
0.0000 +/- .001
ANGLE +/- 2

NOT ALL
 FEATURES
 SHOWN IN
 THIS VIEW

ITEM #	QUAN.	PART #	DESCRIPTION
1	1	K4TS-B	KNIFE BLANK, K-4TS
2	1	716SM	KNIFE POINT, K-4SLIM, 2009
3	1	100DS	DUAL TUBE SAVER, SLIM
4	1	K4STB	KNIFE TUBE, K-4TS, 3/8" DRILLED
5	1	K2TBDA3/4	3/4" VAPOR TUBE
6	1	K4TI/2DAS	KNIFE STRAP



REV.	BY	DATE	DESCRIPTION	MATERIAL	PART NO.	REV.
1	-	-	-	Weldment	K-4TS/3/4DA (R)	NC
2	-	-	-			
3	-	-	-			
4	-	-	-			
5	-	-	-			
6	-	-	-			

ITEM #		QUAN.	PART #	DESCRIPTION	
1		1	TF-145	SLIM CHROME COULTER KNIFE CASTING A532 3M	
2		1	K4BSTB/0	3/8" OPEN END TUBE	

13"

THIS IS A CASTING
1/2" THICK

1

2

K4BSTB/0

3/4" LONG
WELDS, BOTH
SIDES

1/4
1/4

5/16

NOTE: 1ST TIME
INSTALLATION ON
SHIELDAG KSC-531002
LIQUID COULTER
REQUIRES
K-5SHDWREKIT SHIM &
CUSHION SET

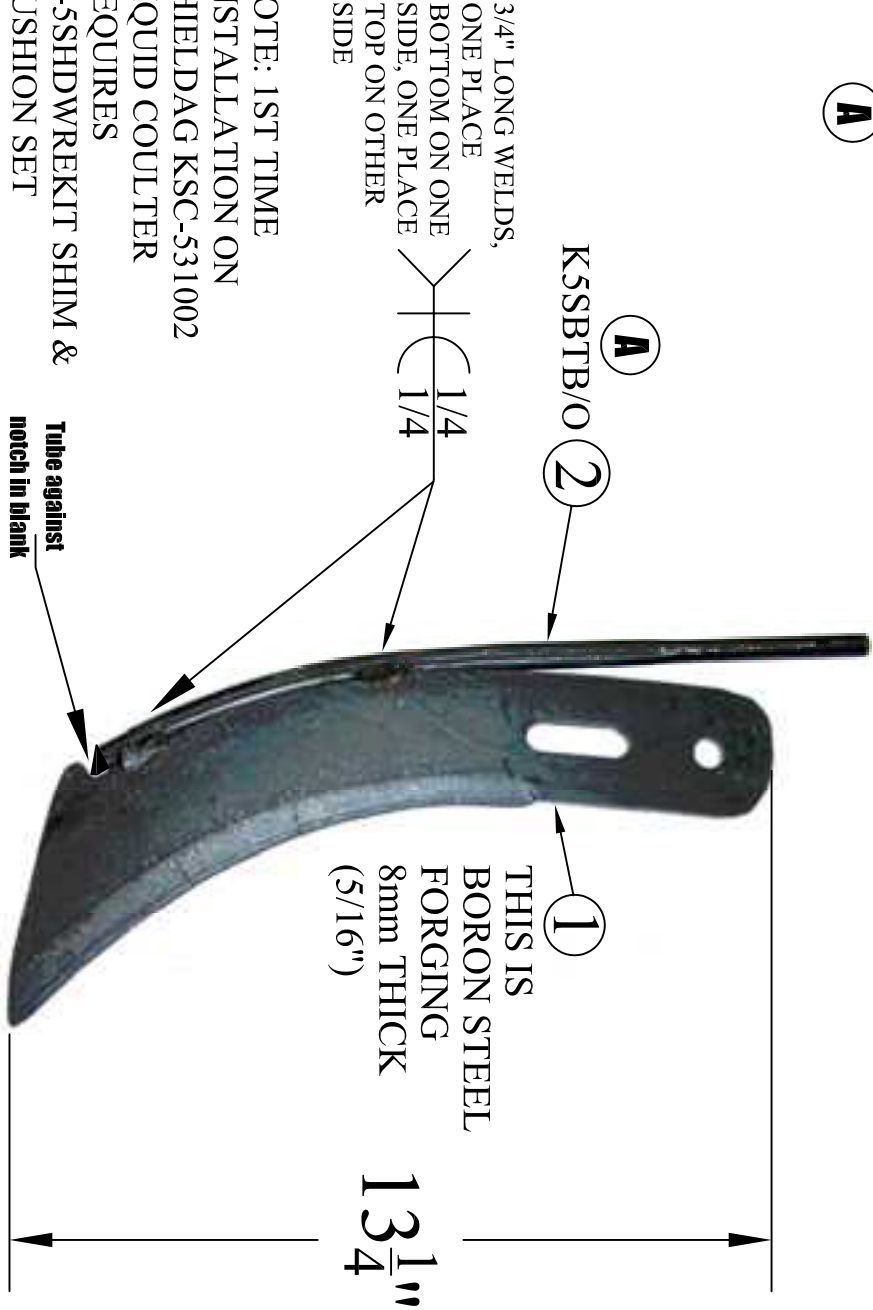
NOTE: CASTING TO
BE WARMED TO
70-120° F PRIOR TO
WELDING
DO NOT WELD ON
COLD CASTING

TOLERANCE UNLESS OTHERWISE NOTED		SHIELD AGRICULTURAL EQUIPMENT	
0/0 +/- 1/32		DRAWN BY: SHORES	DATE: 02/26/09
0.00 +/- .020		CHECKED BY: -	DATE: -
0.000 +/- .005		PART NO. K-5S	
0.0000 +/- .001		REV. -	
ANGLE +/- 1/2			

DESCRIPTION		CHROME CARBIDE LIQUID KNIFE		MATERIAL	
REV.	BY	DATE	DESCRIPTION		
-	-	-			
-	-	-			
-	-	-			
-	-	-			

ITEM #	QUAN.	PART #	DESCRIPTION
1	1	K-5S/BORON	BORON STEEL KNIFE BLANK
2	1	K5SBTB/O	3/8" OPEN END TUBE

A



K-5SB A

SHIELD

AGRICULTURAL EQUIPMENT

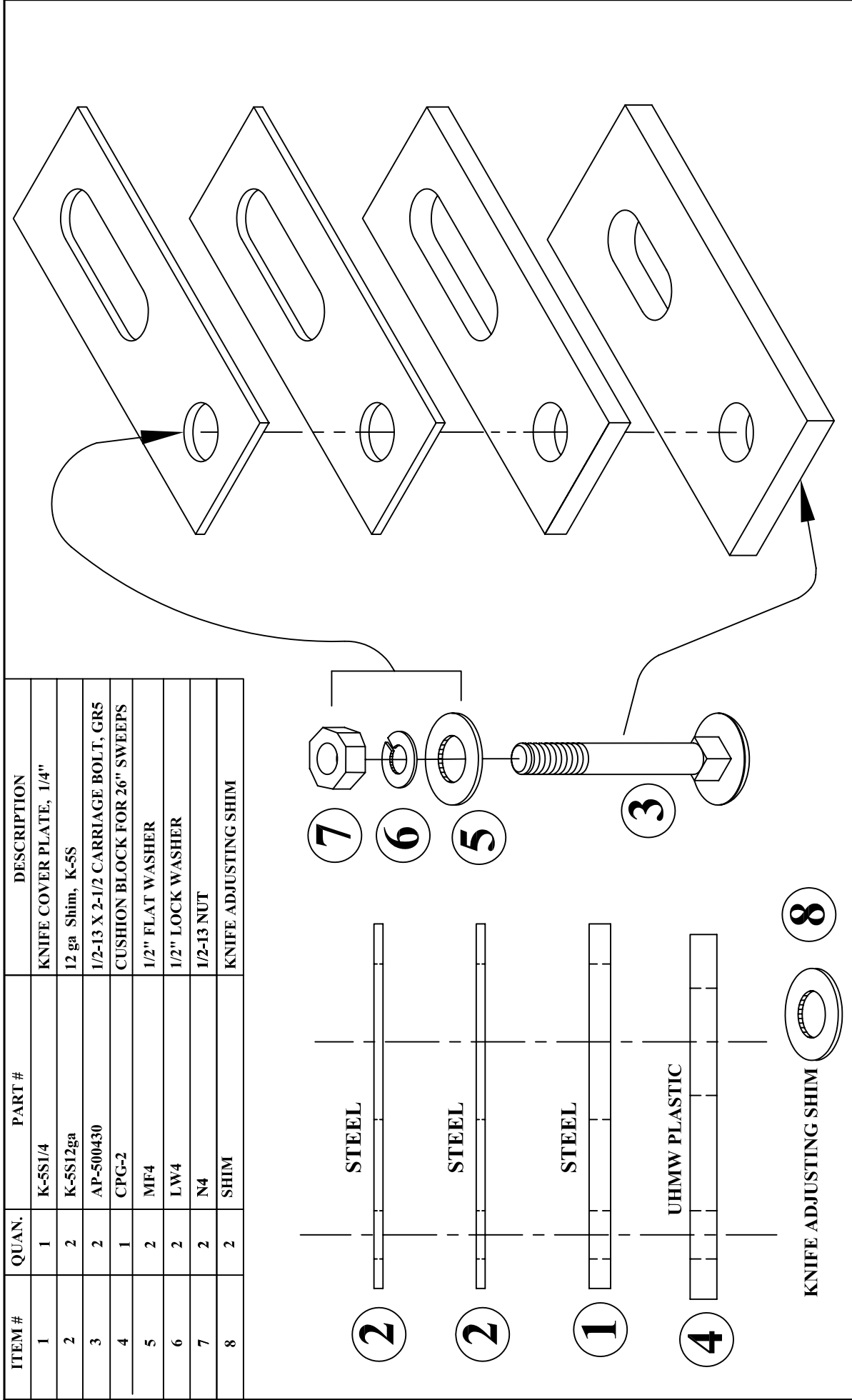
DRAWN BY: SHORES DATE: 02/26/09

CHECKED BY: _ DATE: _

DESCRIPTION **BORON STEEL LIQUID KNIFE** MATERIAL **WELDMENT** PART NO. **K-5SB** REV. **A**

REV.	BY	DATE	DESCRIPTION
-	-	-	-
-	-	-	-
-	-	-	-
A	MB	06/22/10	Changed tube to K5SBTB/O part number

TOLERANCE UNLESS OTHERWISE NOTED
0/0 +/- 1/16
0.00 +/- .020
0.000 +/- .005
0.0000 +/- .001
ANGLE +/- 2



ITEM #		QUAN.	PART #	DESCRIPTION
1		1	K-5S1/4	KNIFE COVER PLATE, 1/4"
2		2	K-5S12ga	12 ga Shim, K-5S
3		2	AP-500430	1/2-13 X 2-1/2 CARRIAGE BOLT, GR5
4		1	CPG-2	CUSHION BLOCK FOR 26" SWEEPS
5		2	MF4	1/2" FLAT WASHER
6		2	LW4	1/2" LOCK WASHER
7		2	N4	1/2-13 NUT
8		2	SHIM	KNIFE ADJUSTING SHIM

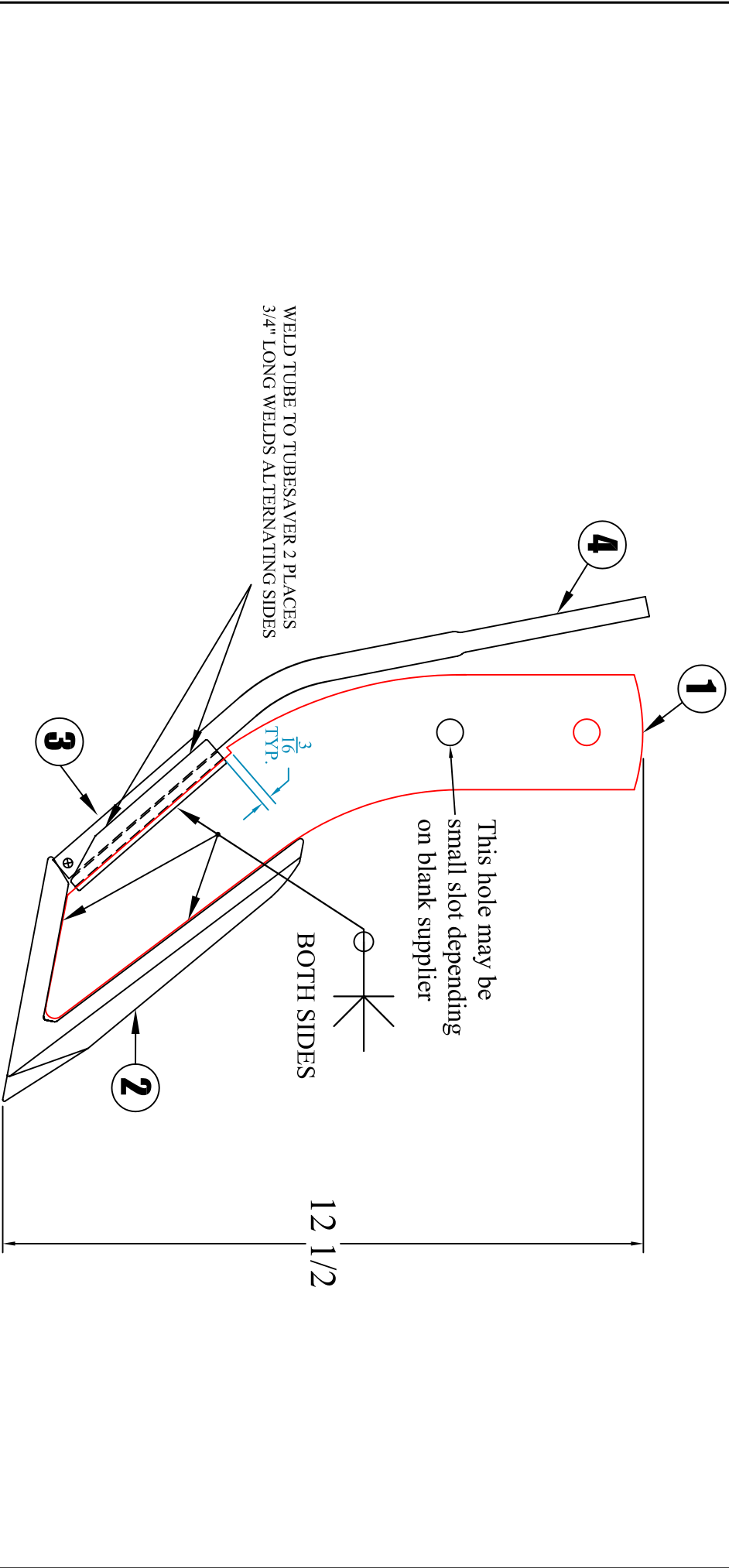
REV.		BY	DATE	DESCRIPTION
NC	AL		05-19-08	Release For Production
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-

TOLERANCE UNLESS OTHERWISE NOTED	
0/0 +/-	1/32
0.00 +/-	.020
0.000 +/-	.005
0.0000 +/-	.001
ANGLE +/-	1/2

SHIELD AGRICULTURAL EQUIPMENT	
DRAWN BY: ALINK	DATE: 05-19-08
CHECKED BY: -	DATE: -

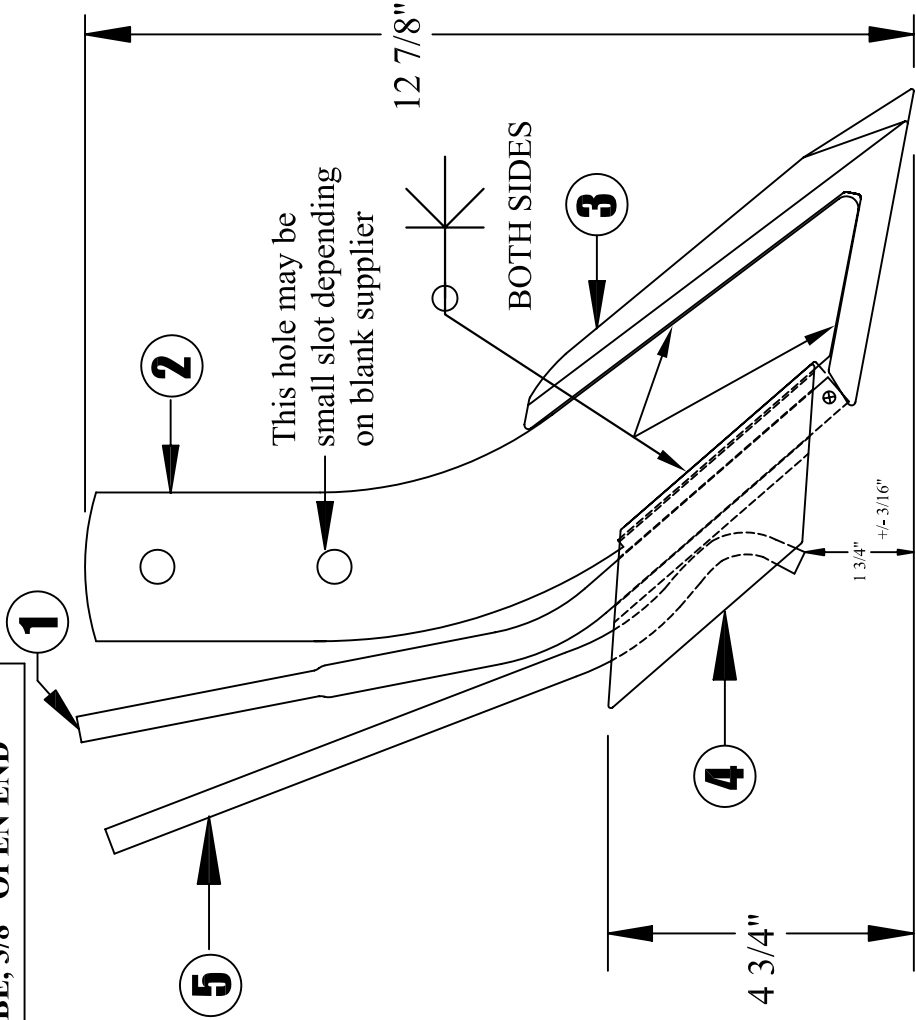
DESCRIPTION		MATERIAL	ASSEMBLY
HARDWARE KIT, K5S			
REV. NC		K-5SHDWREKIT	

ITEM #	QUAN.	PART #	DESCRIPTION
1	1	K6SB	BORON STEEL BLANK, 8mm
2	1	716SM	CHROME CARBIDE POINT
3	1	100S	TUBESAVER
4	1	K4STB	KNIFE TUBE



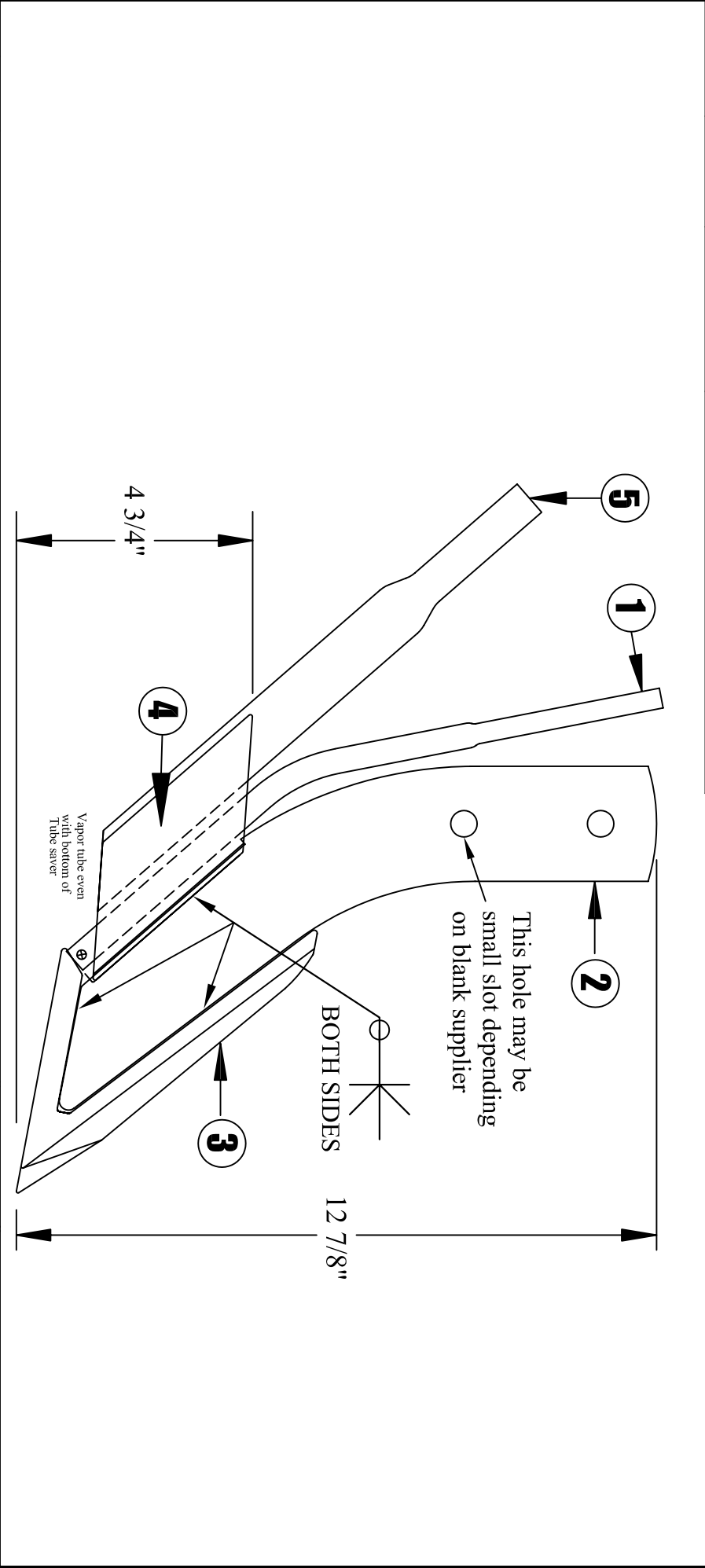
REV.	BY	DATE	DESCRIPTION	TOLERANCE UNLESS OTHERWISE NOTED	DRAWN BY: ALBRIGHT	DATE: 4/2/09
-	-	-	-	0.0 +/- 1/32		
-	-	-	-	0.00 +/- .020		
-	-	-	-	0.000 +/- .005		
-	-	-	-	0.0000 +/- .001		
REV.	BY	DATE	DESCRIPTION	ANGLE +/- 1/2	CHECKED BY: -	DATE: -
DESCRIPTION				PART NO. K-6S		
SLIM BORON KNIFE FOR HIGH SPEED				MATERIAL WELDMENT		
				REV. NG		

ITEM #	QUAN.	PART #	DESCRIPTION
1	1	K4STB	KNIFE TUBE
2	1	K6SB	5/16" BORON STEEL BLANK
3	1	716SM	CHROM CARBIDE POINT
4	1	100DS	TUBE SAVER
5	1	TB-18	KNIFE TUBE, 3/8" OPEN END



<div><div>TOLERANCE UNLESS OTHERWISE NOTED</div><div>0/0 +/- 1/32</div><div>0.00 +/- .020</div><div>0.000 +/- .005</div><div>0.0000 +/- .001</div><div>ANGLE +/- 1/2</div></div>				<div>SHIELD</div> <div>AGRICULTURAL EQUIPMENT</div>			
				DRAWN BY: SHORES		DATE: 12/1/09	
				CHECKED BY: _		DATE: _	
				PART NO.		REV.	
DESCRIPTION		MATERIAL		K-6S/DA		NC	
SLIM KNIFE WITH DUAL 3/8" TUBES				WELDMENT			
REV.	BY	DATE	DESCRIPTION				
-	-	-	-				
-	-	-	-				
-	-	-	-				
-	-	-	-				

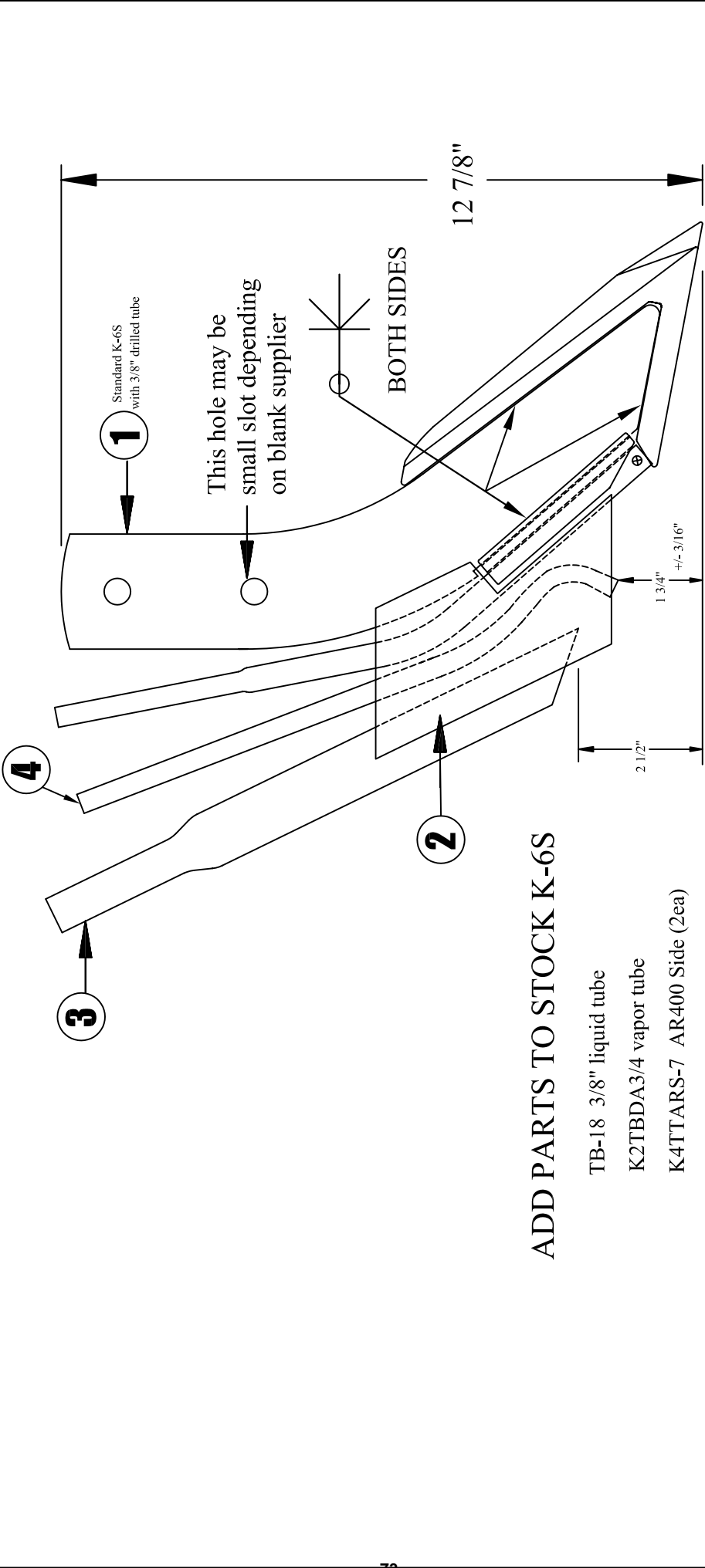
ITEM #	QUAN.	PART #	DESCRIPTION
1	1	K4STB	KNIFE TUBE
2	1	K6SB	BORON STEEL BLANK, 5/16"
3	1	716SM	CHROME CARBIDE POINT
4	1	100DS	TUBE SAVER
5	1	K2TBD A3/4	3/4" VAPOR TUBE



REV.	BY	DATE	DESCRIPTION	TOLERANCE UNLESS OTHERWISE NOTED	DRAWN BY:	CHECKED BY:	DATE:	REV.
-	-	-	-	0/0 +/- 1/32	SHORES	-	12/1/09	NC
-	-	-	-	0.00 +/- .020				
-	-	-	-	0.000 +/- .005				
-	-	-	-	0.0000 +/- .001				
-	-	-	-	ANGLE +/- 1/2				
DESCRIPTION				MATERIAL				
SLIM KNIFE WITH 3/8" DRILLED TUBE AND 3/4 VAPOR TUBE				WELDMENT				
DESCRIPTION				PART NO.				
				K-6S/3/4DA				

SHIELD
AGRICULTURAL EQUIPMENT

ITEM #	QUAN.	PART #	DESCRIPTION
1	1	K-6S	SLIM BORON KNIFE FOR HIGH SPEED
2	2	K4TTARS-7	TUBESAVER
3	1	K2TBDA3/4	3/4" VAPOR TUBE
4	1	TB-18	KNIFE TUBE 3/8" OPEN END



				<div>TOLERANCE UNLESS OTHERWISE NOTED</div> <div>0/0 +/- 1/32</div> <div>0.00 +/- .020</div> <div>0.000 +/- .005</div> <div>0.0000 +/- .001</div> <div>ANGLE +/- 1/2</div>		<div>SHIELD</div> <div>AGRICULTURAL EQUIPMENT</div>	
DRAWN BY:		SHORES		DATE:		12/1/09	
CHECKED BY:		-		DATE:		-	
				</			

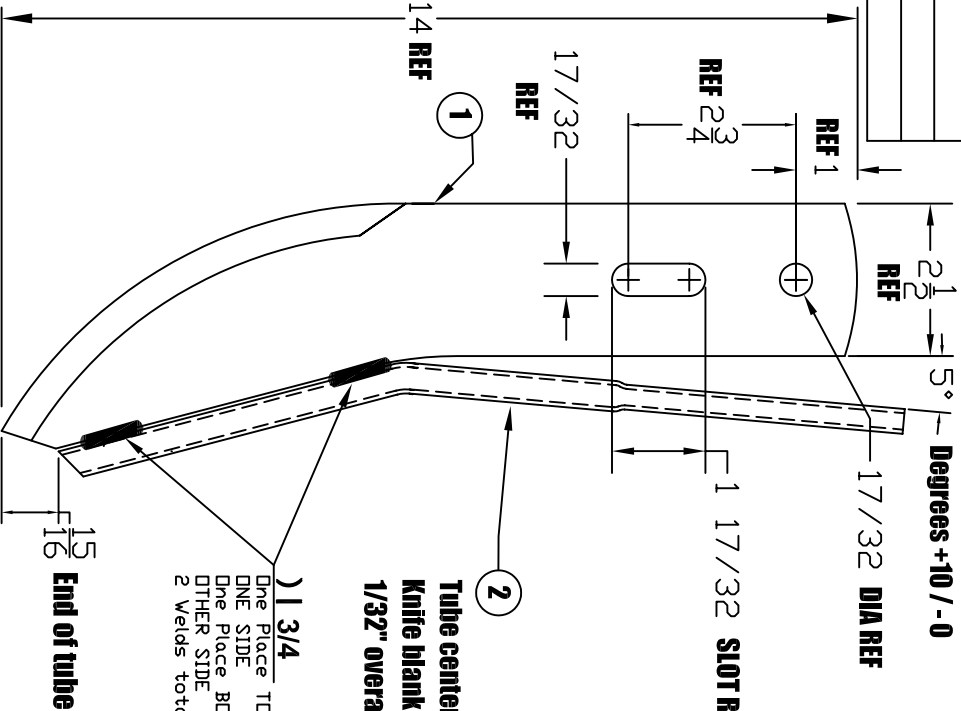
SHIELD
AGRICULTURAL EQUIPMENT

ITEM #	QUAN.	PART #	DESCRIPTION
1	1	K4BS-BORON	Knife blank, Boron Steel
2	1	K4BSTB/O	Knife tube 3/8" open end

5/16 K 2-1/2
Boron Steel Blank

Blank heat-treated to Rc 40--50

Knife straight within 1/16"
Overall after welding



-	-	-	TOLERANCE UNLESS OTHERWISE NOTED	<div> K-4TSBS/BORON NC </div>
-	-	-	0/0 +/- 1/16	
-	-	-	0.00 +/- .020	
-	-	-	0.000 +/- .005	
-	-	-	0.0000 +/- .001	
REV.	BY	DATE	DESCRIPTION	ANGLE +/- 2

DESCRIPTION	MATERIAL	PART NO.	REV.
Backswcpt knife w/ 3/8" open-end tube	WELDMENT	K-4TSBS/BORON	NC

SHIELD
AGRICULTURAL EQUIPMENT

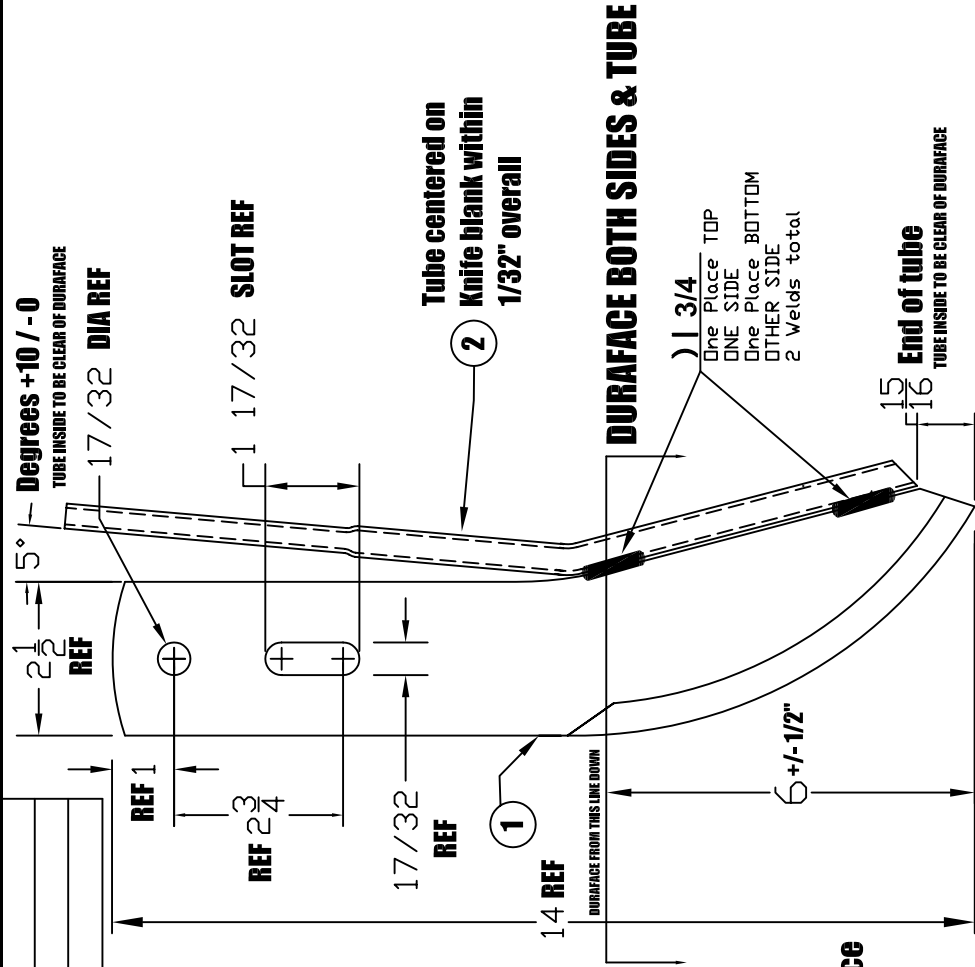
DRAWN BY: ALBRIGHT
CHECKED BY:
DATE: 06/23/10
DATE:

ITEM #	QUAN.	PART #	DESCRIPTION
1	1	K4BS-BORON	Knife blank, Boron Steel
2	1	K4BSTB/O	Knife tube 3/8" open end

5/16 X 2-1/2 **Boron Steel Blank**

Knife straight within 1/16"
overall after duraface

KNIFE SHANK HARDNESS AFTER DURAFACE
RC 35--50 checked in area outside of duraface



K-4TSBS/BSST		NC
SHIELD		AGRICULTURAL EQUIPMENT
DRAWN BY: ALBRIGHT		DATE: 06/23/10
CHECKED BY: _		DATE: _
PART NO. K-4TSBS/BSST		REV. NC
TOLERANCE UNLESS OTHERWISE NOTED		
0/0 +/- 1/16		
0.00 +/- .020		
0.000 +/- .005		
0.0000 +/- .001		
ANGLE +/- 2		
DESCRIPTION		
Backswept knife w/ 3/8" open-end tube, durafaced		
MATERIAL WELDMENT		

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ShieldAg 800-798-1968 www.shieldag.com



ShieldAg's ST-series Strip Till Points

Designed specifically for 8-12" working depths
Acts as a subsoiler point to alleviate compaction
Knife tubes will deliver NH₃, liquid and acid programs
Dry tubes are available in 1-1/4", 1-1/2" and 1-3/4" diameter
Creates the optimum berm desired by strip-till farmers
Available in 16" and 18" lengths

ShieldAg's ST-16, the Strip Till Point of choice for side-mount rigs

Drawings for knives following this page are in the order shown in this table

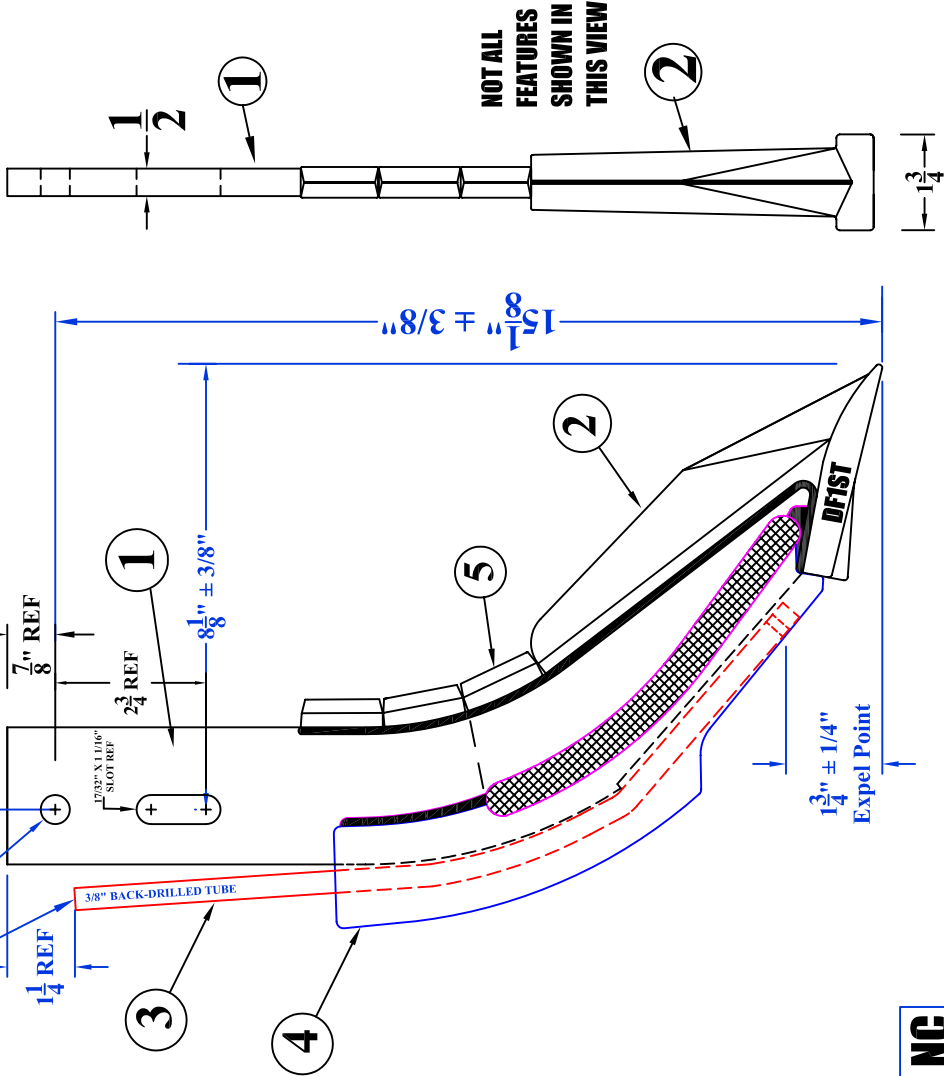
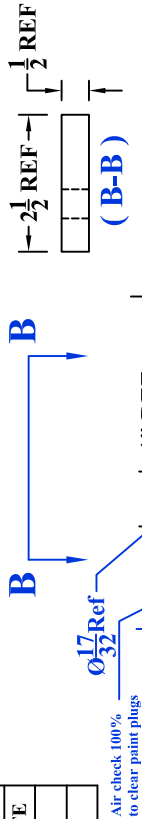
Part #	Description	DRAWING	Weight
ST-16 REV A	16" Strip Till point with 3/8 tube and strip till protection dual round punch	YES	10.6
ST-16 REV NC	16" Strip Till point with 3/8 tube and strip till protection hole & slot punch	YES	10.6
ST-16DA	16" Strip Till point with dual 3/8 tubes and strip till protection	YES	10.9
ST-16/3/4DA	16" Point with 3/8 and 3/4 (vapor) tubes and strip till protection	YES	11.4
ST-16/1/2A	16" Point with 1/2" tube and strip till protection		10.8
ST-16/1/2DA	16" Point with 3/8 and 1/2" tubes and strip till protection		11.1
ST-16/112	16" Point with 1-1/2" dry tube and strip till protection	YES	13.7
ST-16/112DA REV A	16" Point with 3/8 and 1-1/2" tubes and strip till protection dual round punch	YES	14.0
ST-16/112DA REV NC	16" Point with 3/8 and 1-1/2" tubes and strip till protection hole & slot punch	YES	14.0
ST-16/112DA/1/2	16" Point with 3/8 and 1/2 and 1-1/2" tubes and strip till protection		14.4
ST-16/112DA/3/4	16" Point with 3/8, 3/4 and 1-1/2" tubes and strip till protection		15.1
ST-16/112DA/HF	16" Point with 3/8 and 1-1/2" tubes and strip till protection, hardfaced		14.6
ST-16/114	16" Point with 1-1/4" dry tube and strip till protection		13.6
ST-16/114/114	16" Point with dual 1-1/4" dry tube and strip till protection		15.4
ST-16/114DA	16" Point with 3/8 and 1-1/4" dry tubes and strip till protection		13.8
ST-16/DA/3/4	16" Strip Till point with 3/8 X 3/4 X 3/8 (TB-18) and strip till protection	YES	11.6
ST-16/5/8S	16" Point with 5/8" stainless tube and strip till protection		11.2
ST-16DA/1/2DA	16" Point with 3/8, 1/2 and 3/8 tubes and strip till protection		11.6
ST-16EX	SUB TO ST-16WII/WOT		
ST-16KL	16" Point liquid using 3/8" TB-18, ships loose for custom applications		10.6
ST-16WII	16" Point with 3/8 tube, special side plates and strip till protection	YES	10.9
ST-16WII/DA	16" Point with dual 3/8 tubes, special sides and strip till protection	YES	11.2
ST-16WII/WOT	16" Point with NO TUBE, special sides and strip till protection, EXACTRIX		11.0
ST-16WOT	16" Point with strip till protection and NO TUBE	YES	10.4
ST-16WOT/WOTS	16" Point with NO TUBE, NO protection, for CUSTOM applications		10.0
ST-18	18" Strip Till point with 3/8 tube and strip till protection	YES	11.0
ST-18/112DA	18" Point with 3/8 and 1-1/2" tubes and strip till protection		14.4
ST-18WII/WOT	18" Point with strip till protection and NO TUBE FOR EXACTRIX		11.4
ST-18/WOT	18" Point with strip till protection and NO TUBE		10.8
ST-18/WOTS	18" Point with strip till protection and NO TUBE, NO TUBE SAVER		10.2
ST-18DA	18" Strip Till point with dual 3/8 tubes and strip till protection		11.2
ST-18DASS	18" Strip Till point with dual 3/8" stainless tubes and strip till protection		11.2

Part #	Replacement Parts for ST-series	Weight
TB-18	Phos (liquid) rear eject tube (bent back)	0.20
TB-2/O	3/8" tube open end	0.30
K2TB1/2A	1/2" tube drilled	0.53
K2TBDA3/4	3/4" tube open end	0.74
K4TB112DA	1-1/2" dry tube	0.75
TB-4E	Replacement 3/8" back-drilled tube	0.40
TB-4EN	Replacement 3/8" tube, NOT DRILLED, for custom applications	0.40
ST-16/18Hdwrekit	Knife cover plate kit complete, including knife bolts	0.50
DF1ST	Point casting only	2.84
KTWS-01	4-segment chrome extension for knife front	0.34
K4TTARS	Strip till protection plate for ST-16WII/WOT and series	0.80
K4TTARS-2	Strip till protection plate for ST-16 standard series	0.60
K4TTARS-3	Strip till protection plate for ST-series with dry tubes	1.40

ST-series strip till points are sold only through exclusive distributorships and territories, call us for details

ITEM #	QUAN.	PART #	DESCRIPTION
1	1	K4T-B	Blank, 1/2 X 2-1/2, DF-IPM
2	1	DF1ST	STRIP TILL POINT, CASTING
3	2	K4TTARS-2	SIDE PLATE FOR STD LENGTH KNIFE
4	1	TB-4E	KNIFE TUBE, 3/8" back-drilled
5	.75	KTWS-01	SHANK GUARD, CASTING

REVISION NC USES HOLE-AND-SLOT BLANK



DRAWING FOR MARKETING PURPOSES
(R) Designation for REDACTED DRAWING
To remove proprietary manufacturing information

Ag Dip Black Paint
Per Customer Specifications

< KC > Key Characteristic

(R)
ST-16 NC

<div><div>TOLERANCE UNLESS OTHERWISE NOTED</div><div><div>0/0 +/- 1/16</div><div>0.00 +/- .020</div><div>0.000 +/- .005</div><div>0.0000 +/- .001</div><div>ANGLE +/- 2</div></div></div>				<div>SHIELD</div> <div>AGRICULTURAL EQUIPMENT</div>		<div>DRAWN BY: A LINK</div> <div>DATE: 08/09/07</div>	
				<div>CHECKED BY: _</div> <div>DATE: _</div>			
DESCRIPTION				MATERIAL		REV.	
STRIP TILL POINT with 3/8" back-drilled NH3 tube				WELDMENT		NC	
REV.	BY	DATE	DESCRIPTION				
-	-	-	-				
-	-	-	-				
-	-	-	-				

ITEM #	QUAN.	PART #	DESCRIPTION
1	1	K4T-BST	Blank, 1/2 X 2-1/2, Two-hole
2	1	DFIST	STRIP TILL POINT, CASTING
3	2	K4TTARS-2	SIDE PLATE FOR STD LENGTH KNIFE
4	1	TB-4E	KNIFE TUBE, 3/8" back-drilled
5	.75	KTWS-01	SHANK GUARD, CASTING
6	1	K2TBDA3/4	3/4" VAPOR TUBE

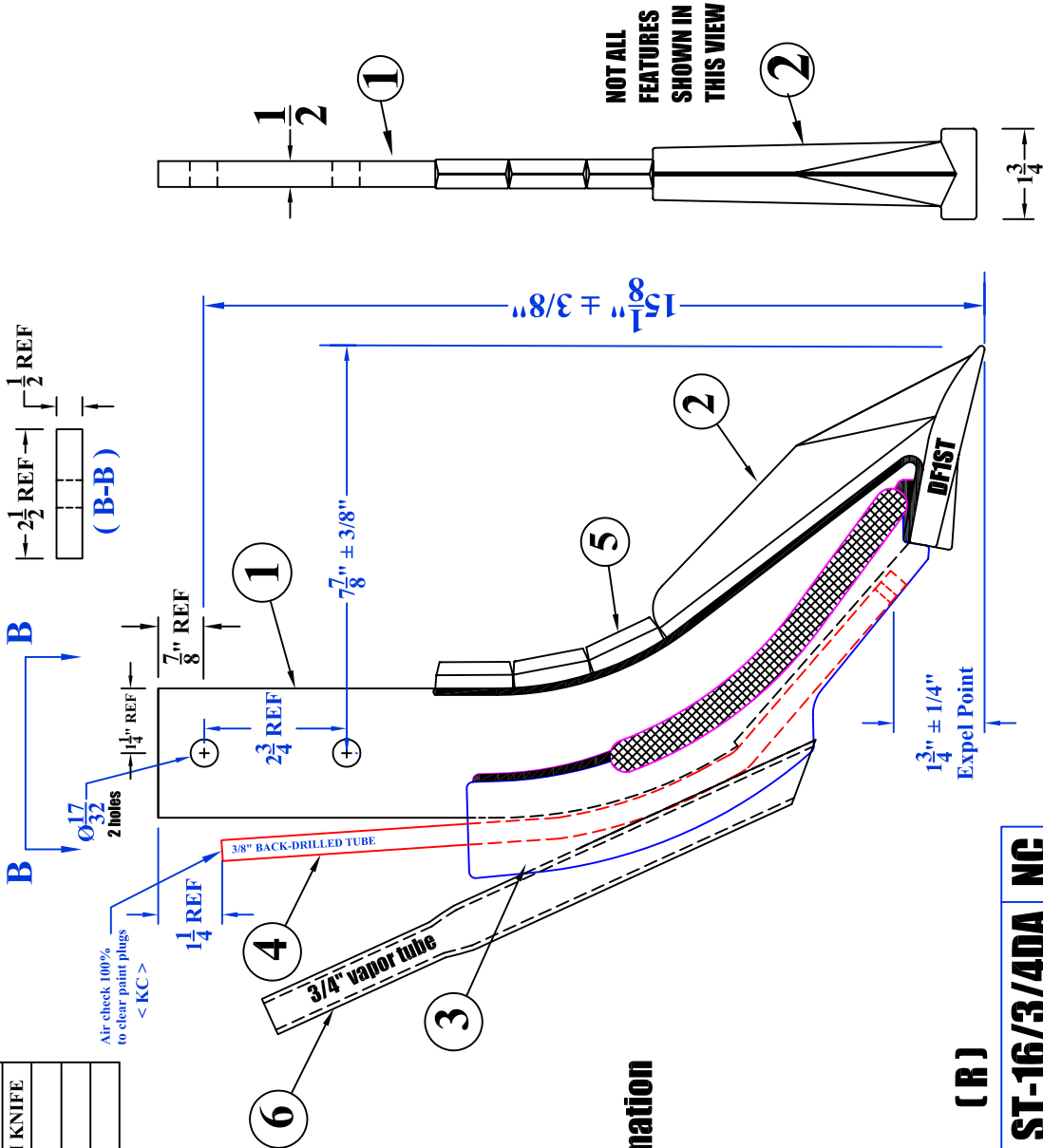
DRAWING FOR MARKETING PURPOSES
(R) Designation for REDACTED DRAWING
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Ag Dip Black Paint
Per Customer Specifications

< KC > Key Characteristic

ST-16/3/4DA NC

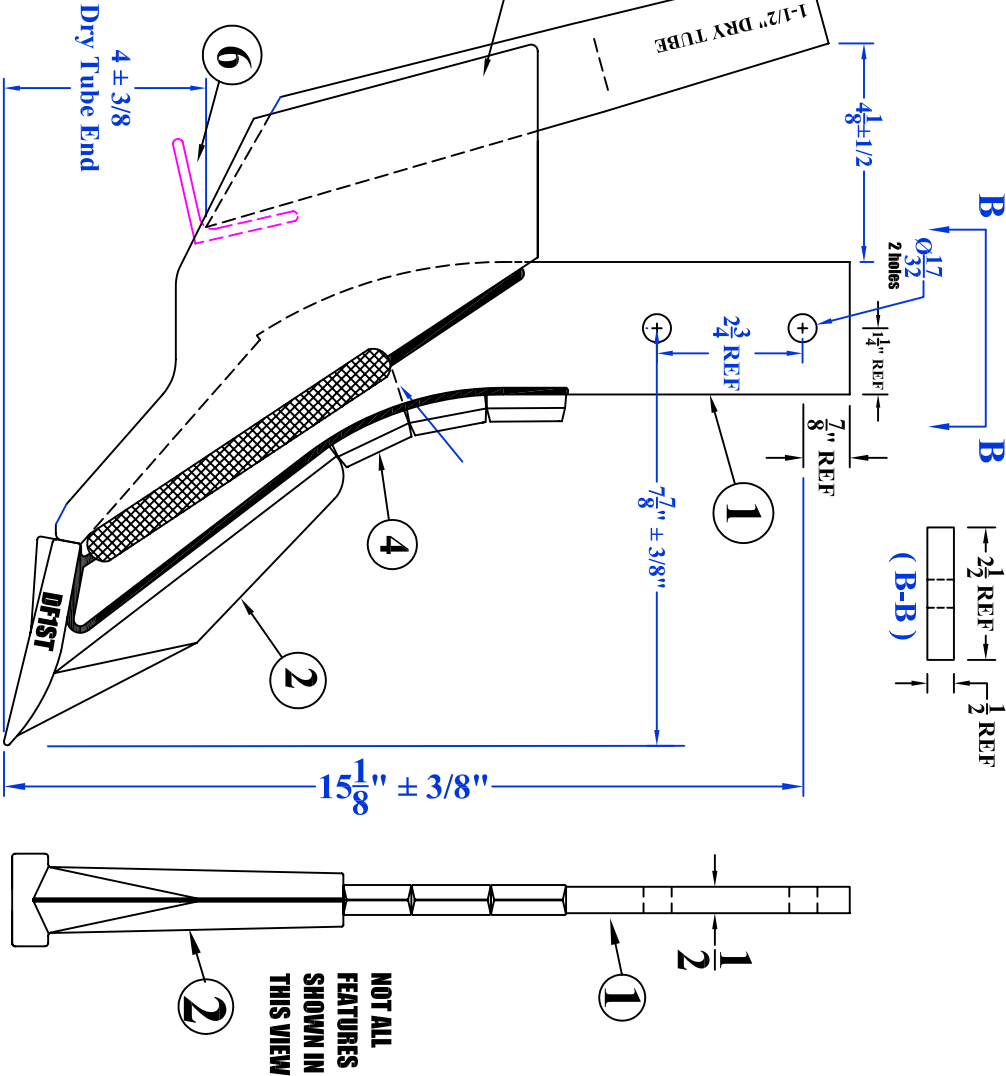
(R)



<div> <div>TOLERANCE UNLESS OTHERWISE NOTED</div> <div> <div>0/0 +/- 1/16</div> <div>0.00 +/- .020</div> <div>0.000 +/- .005</div> <div>0.0000 +/- .001</div> <div>ANGLE +/- 2</div> </div> </div>				<div> <div>SHIELD</div> <div>AGRICULTURAL EQUIPMENT</div> </div>	
				<div> <div>DRAWN BY: A LINK</div> <div>CHECKED BY: -</div> </div>	<div> <div>DATE: 08/09/07</div> <div>DATE: -</div> </div>
<div> <div>DESCRIPTION</div> <div>STRIP TILL POINT with 3/8" back-drilled NH3 tube & 3/4" Vapor Tube</div> </div>				<div> <div>PART NO.</div> <div>ST-16/3/4DA (R)</div> </div>	<div> <div>REV.</div> <div>NC</div> </div>

ITEM #	QUAN.	PART #	DESCRIPTION
1	1	K4T-BST	Blank, 1/2 X 2-1/2, Two-hole
2	1	DF1ST	STRIP TILL POINT, CASTING
3	2	K4TTARS-3	SIDE PLATE FOR STD LENGTH KNIFE
4	.75	KTW5-01	SHANK GUARD, CASTING
5	1	K4TB112DA	DEEP FURROW 1.5" DRY FEET TUBE
6	1	ST2317SB	1.5" DRY BAFFLE

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(R)
ST-16/112 REV A

Ag Dip Black Paint
Per Customer Specifications

< KC > Key Characteristic

-	-	-	-	TOLERANCE UNLESS OTHERWISE NOTED	<div> <div>SHIELD</div> <div>AGRICULTURAL EQUIPMENT</div> <div> <div>DRAWN BY: SHORES</div> <div>DATE: 05/24/10</div> </div> <div> <div>CHECKED BY: _</div> <div>DATE: _</div> </div> </div>
-	-	-	-	0.0 +/- 1/16	
-	-	-	-	0.00 +/- .020	
-	-	-	-	0.000 +/- .005	
-	-	-	-	0.0000 +/- .001	
REV.	BY	DATE	DESCRIPTION	ANGLE +/- 2	

DESCRIPTION	MATERIAL	PART NO.	REV.
SHIELD AG STRIP TILL POINT & 1-1/2" Dry Tube	WELDMENT	ST-16/112 (R)	A

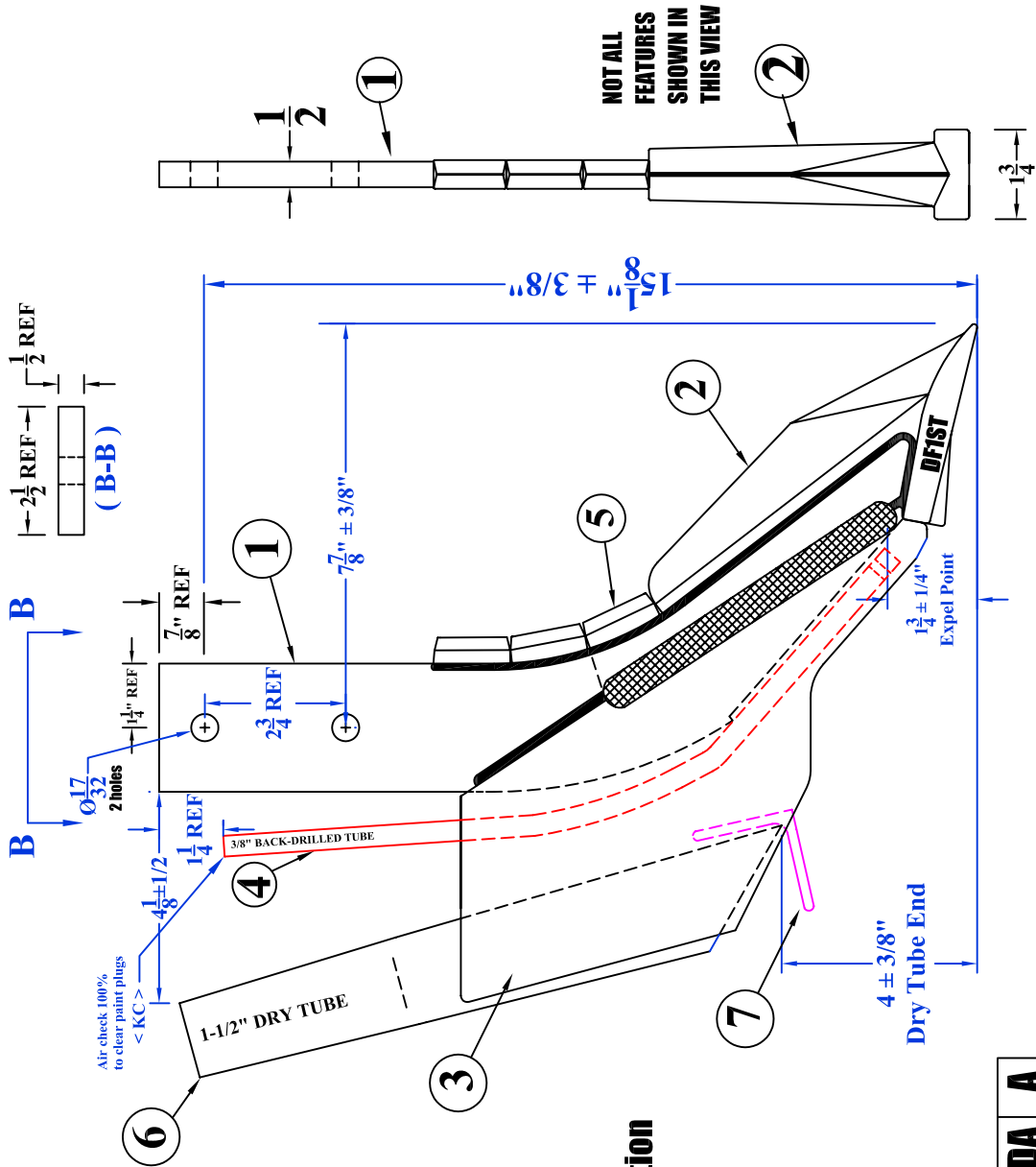
ITEM #	QUAN.	PART #	DESCRIPTION
1	1	K4T-BST	Blank, 1/2 X 2-1/2, Two-hole
2	1	DF1ST	STRIP TILL POINT, CASTING
3	2	K4TTARS-3	SIDE PLATE FOR STD LENGTH KNIFE
4	1	TB-4E	KNIFE TUBE, 3/8" back-drilled
5	.75	KTWS-01	SHANK GUARD, CASTING
6	1	K4TB112DA	DEEP FURROW 1.5" DRY FERT TUBE
7	1	ST23175B	1.5" DRY BAFFLE

DRAWING FOR MARKETING PURPOSES
(R) Designation for REDACTED DRAWING
To remove proprietary manufacturing information

Ag Dip Black Paint
Per Customer Specifications

< KC > Key Characteristic

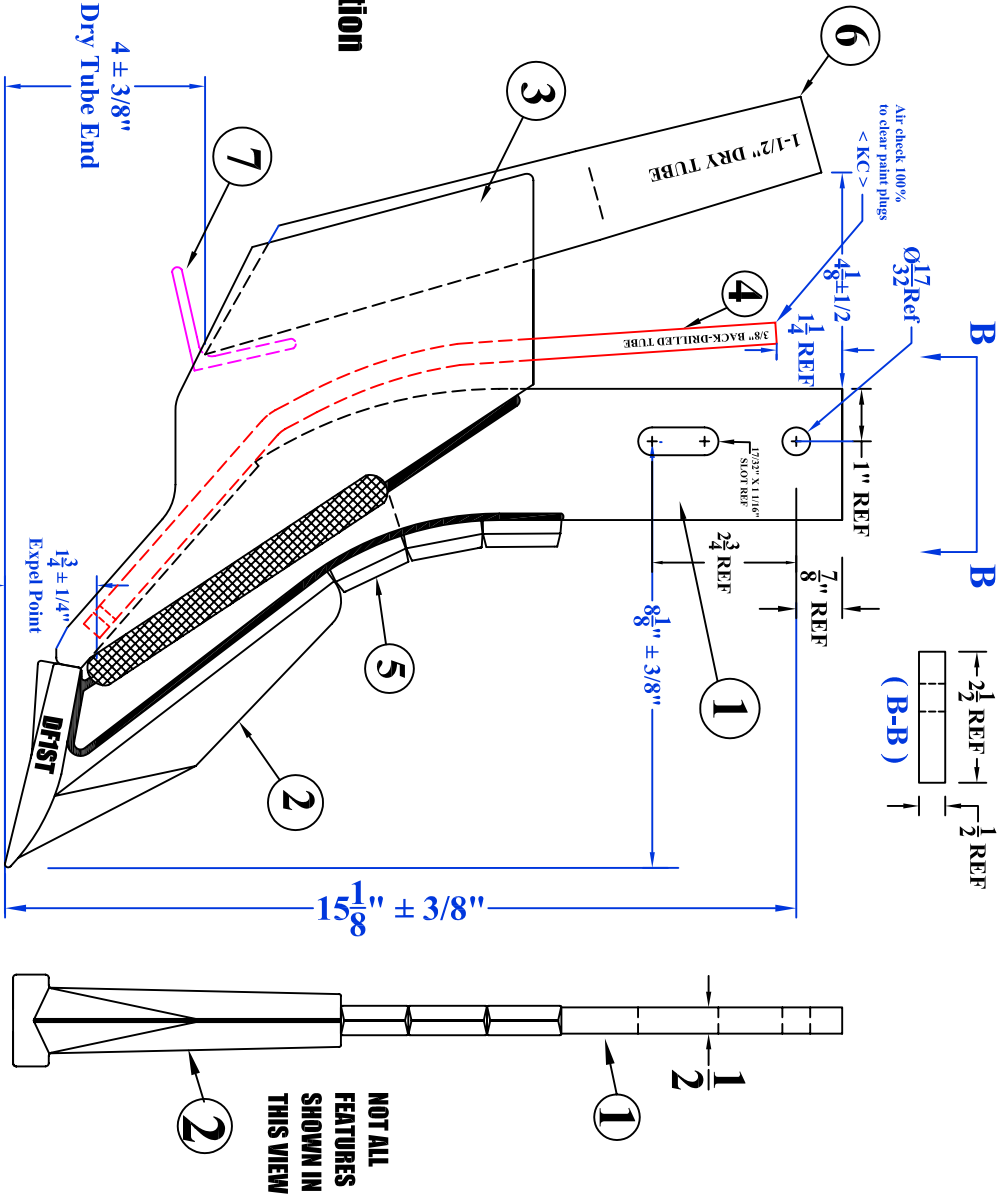
(R)
ST-16/112DA A



			TOLERANCE UNLESS OTHERWISE NOTED		SHIELD AGRICULTURAL EQUIPMENT	
				0/0 +/- 1/16	DRAWN BY: SHORES	DATE: 05/24/10
				0.00 +/- .020	CHECKED BY: -	DATE: -
				0.000 +/- .005		
				0.0000 +/- .001		
				ANGLE +/- 2		

ITEM #	QUAN.	PART #	DESCRIPTION
1	1	K4T-B	Blank, 1/2 X 2-1/2, DE-1PM
2	1	DF1ST	STRIP TILL POINT, CASTING
3	2	K4TTARS.3	SIDE PLATE FOR STD LENGTH KNIFE
4	1	TB-4E	KNIFE TUBE, 3/8" back-drilled
5	.75	KTWS-01	SHANK GUARD, CASTING
6	1	K4TB112DA	DEEP FURROW 1.5" DRY FERT TUBE
7	1	ST23175B	1.5" DRY BAFELE

REVISION NC USES HOLE-AND-SLOT BLANK



DRAWING FOR MARKETING PURPOSES
(R) Designation for REDACTED DRAWING
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Ag Dip Black Paint
Per Customer Specifications

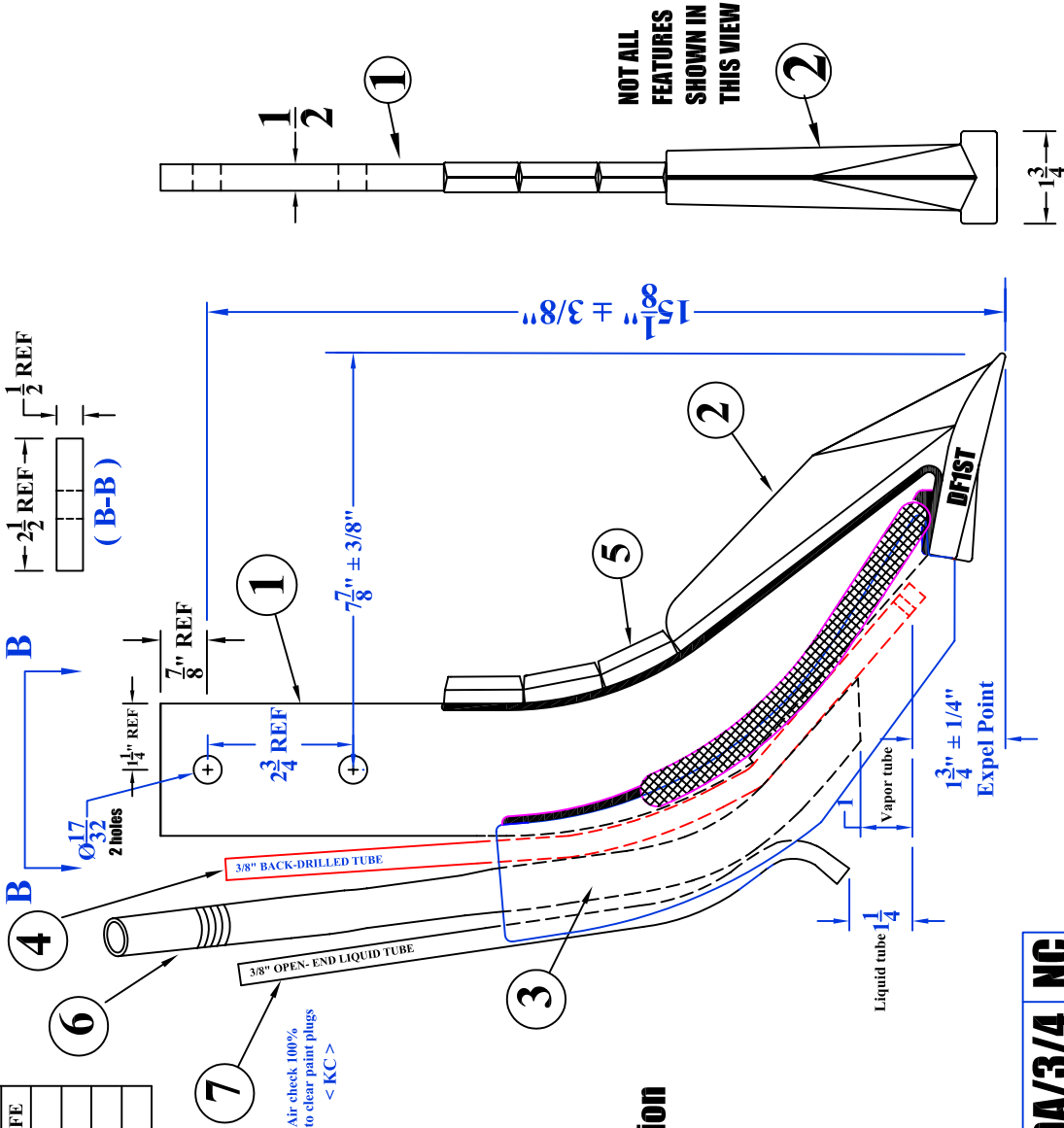
< KC > Key Characteristic

(R)	ST-16/112DA	NC
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-	-	-	<div> <div>TOLERANCE UNLESS OTHERWISE NOTED</div> <div> <div>0/0 +/- 1/16</div> <div>0.00 +/- .020</div> <div>0.000 +/- .005</div> <div>0.0000 +/- .001</div> <div>ANGLE +/- 2</div> </div> </div> <div> <div>SHIELD</div> <div>AGRICULTURAL EQUIPMENT</div> <div> <div>DRAWN BY: SHORES</div> <div>CHECKED BY: _</div> </div> <div> <div>DATE: 05/24/10</div> <div>DATE: _</div> </div> </div>
-	-	-	
-	-	-	
-	-	-	
-	-	-	
REV.	BY	DATE	DESCRIPTION

DESCRIPTION	MATERIAL	PART NO.	REV.
STRIP TILL POINT with 3/8" back-drilled NH3 tube & 1-1/2" Dry Tube	WELDMENT	ST-16/112DA (R)	NC

ITEM #	QUAN.	PART #	DESCRIPTION
1	1	K4T-BST	Blank, 1/2 X 2-1/2, Two-hole
2	1	DF1ST	STRIP TILL POINT, CASTING
3	2	K4TTARS	SIDE PLATE FOR STD LENGTH KNIFE
4	1	TB-4E	KNIFE TUBE, 3/8" back-drilled
5	.75	KTWS-01	SHANK GUARD, CASTING
6	1	N239996	3/4" vapor tube, special
7	1	TB-18	3/8" Open-end tube, curved back



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Ag Dip Black Paint
Per Customer Specifications

< KC > Key Characteristic

(R)

ST-16/DA/3/4 NC

<div> <div>TOLERANCE UNLESS OTHERWISE NOTED</div> <div> <div>0/0 +/- 1/16</div> <div>0.00 +/- .020</div> <div>0.000 +/- .005</div> <div>0.0000 +/- .001</div> <div>ANGLE +/- 2</div> </div> </div>				<div> <div>SHIELD</div> <div>AGRICULTURAL EQUIPMENT</div> </div>	
				DRAWN BY: MB	DATE: 06/01/10
				CHECKED BY: -	DATE: -
				PART NO.	REV.
				ST-16/DA/3/4 (R)	
				NC	

DESCRIPTION	MATERIAL	WELDMENT
STRIP TILL POINT w/3/8" X 3/4 X 3/8" tubes		

REV.	BY	DATE	DESCRIPTION
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-

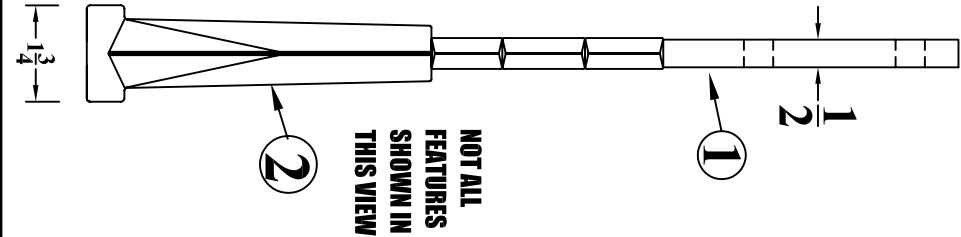
ITEM #	QUAN.	PART #	DESCRIPTION
1	1	K4T-BST	Blank, 1/2 X 2-1/2, Two-hole
2	1	DF1ST	STRIP TILL POINT, CASTING
3	2	K4TTARS	SIDE PLATE FOR STD LENGTH KNIFE
4	1	TB-4E	KNIFE TUBE, 3/8" back-drilled
5	.75	KTWS-01	SHANK GUARD, CASTING

DRAWING FOR MARKETING PURPOSES
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Ag Dip Black Paint
Per Customer Specifications

< KC > Key Characteristic

(R)
ST-16WIL NC



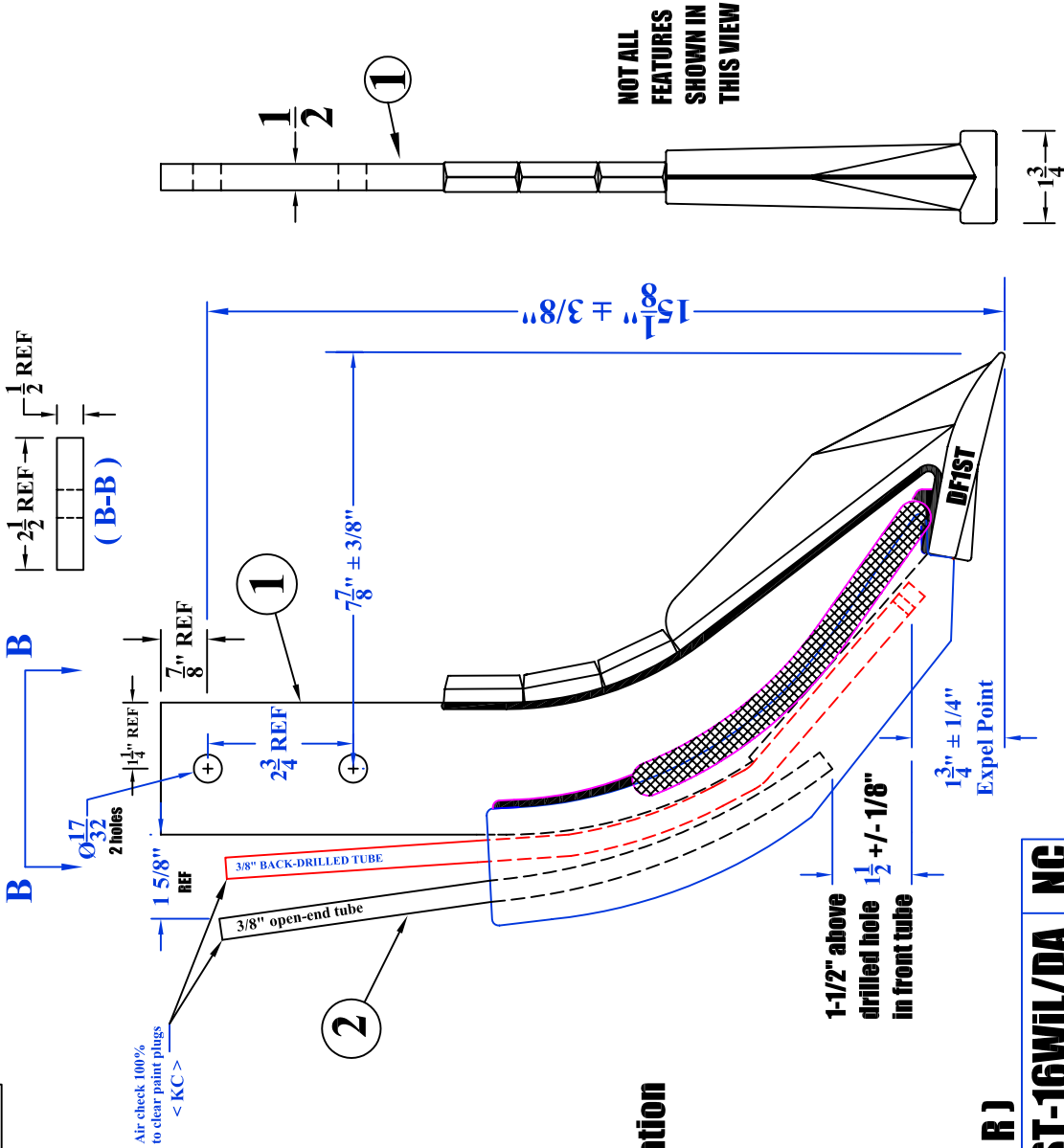
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-	-	-	-	0.00 +/- 1/16	
-	-	-	-	0.00 +/- .020	
-	-	-	-	0.000 +/- .005	
-	-	-	-	0.0000 +/- .001	
REV.	BY	DATE	DESCRIPTION	ANGLE +/- 2	

DESCRIPTION	MATERIAL	REV.
STRIP TILL POINT with 3/8" back-drilled NH3 tube	WELDMENT	NC

ITEM #	QUAN.	PART #	DESCRIPTION
1	1	ST-16WIL	Strip Till Point with 3/8" back-drilled tube
2	1	TB-4/O	3/8" Open-end tube

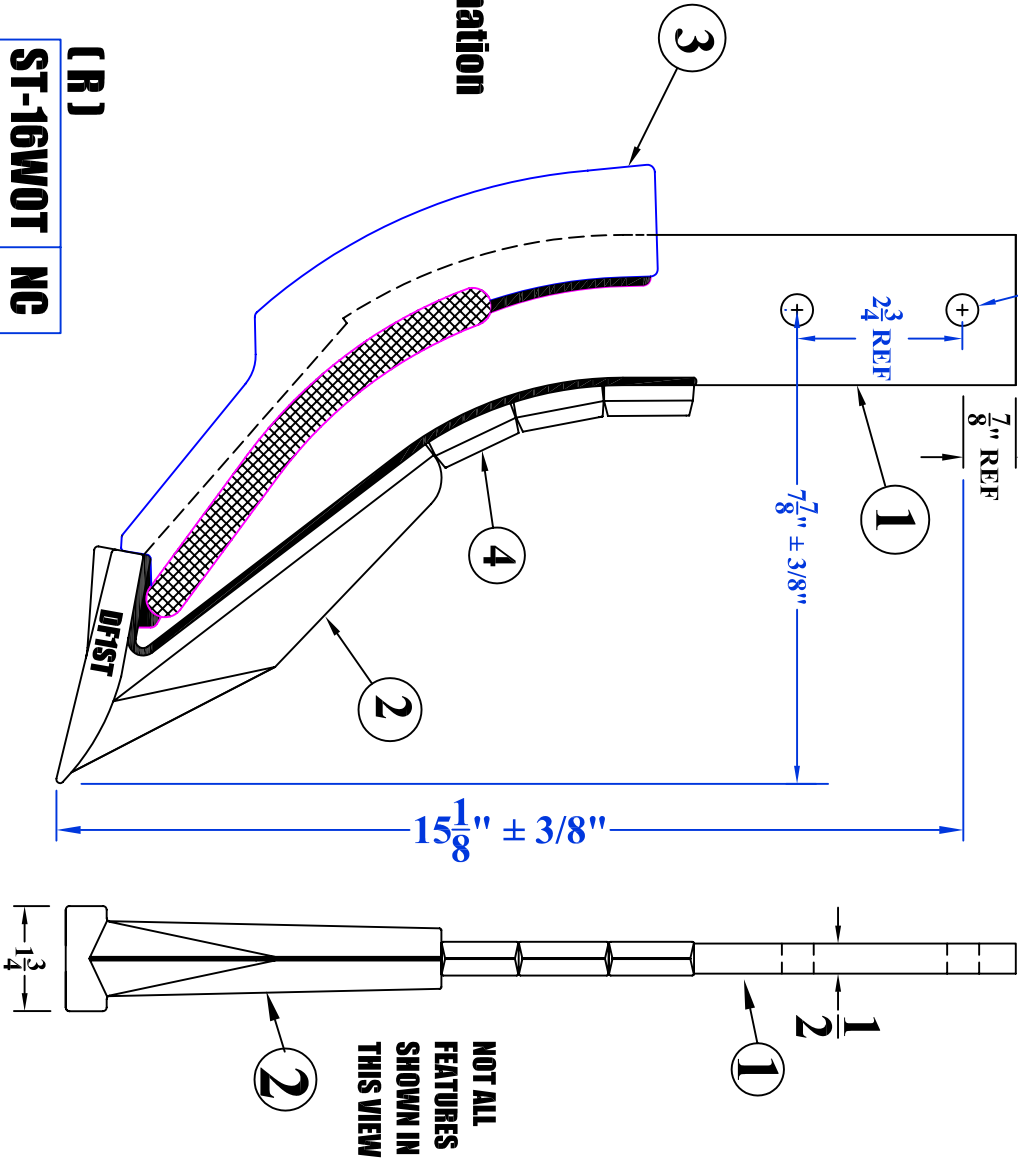
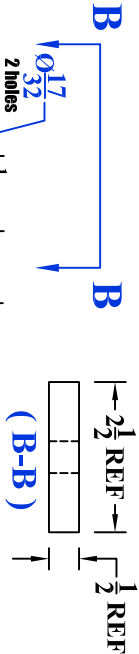
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(R) Designation for REDACTED DRAWING
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DO NOT REPAINT
 < KC > Key Characteristic



<div> <div>SHIELD</div> <div>AGRICULTURAL EQUIPMENT</div> </div>				TOLERANCE UNLESS OTHERWISE NOTED 0/0 +/- 1/16 0.00 +/- .020 0.000 +/- .005 0.0000 +/- .001 ANGLE +/- 2		
				DRAWN BY: A LINK DATE: 08/09/07 CHECKED BY: _____ DATE: _____		
				PART NO. ST-16WIL/DA (R) REV. NC		
DESCRIPTION STRIP TILL POINT with 3/8" back-drilled NH3 tube & 3/8" Open-end tube			MATERIAL WELDMENT			
REV.	BY	DATE				
-	-	-				
-	-	-				
-	-	-				

ITEM #	QUAN.	PART #	DESCRIPTION
1	1	K4T-BST	Blank, 1/2 X 2-1/2, Two-hole
2	1	DF1ST	STRIP TILL POINT, CASTING
3	2	K4TTARS-2	SIDE PLATE FOR STD LENGTH KNIFE
4	.75	KTWS-01	SHANK GUARD, CASTING



(R)

ST-16WOT NC

Ag Dip Black Paint
Per Customer Specifications

DRAWING FOR MARKETING PURPOSES
(R) Designation for REDACTED DRAWING
To remove proprietary manufacturing information

-	-	-	-	TOLERANCE UNLESS OTHERWISE NOTED	<div>SHIELD</div> <div>AGRICULTURAL EQUIPMENT</div> <div>DRAWN BY: SHORES DATE: 05/24/10</div> <div>CHECKED BY: DATE: </div>
-	-	-	-	0/0 +/- 1/16	
-	-	-	-	0.00 +/- .020	
-	-	-	-	0.000 +/- .005	
REV.	BY	DATE	DESCRIPTION	ANGLE +/- 2	

DESCRIPTION	MATERIAL	PART NO.	REV.
SHIELD AG STRIP TILL POINT w/o tube	WELDMENT	ST-16WOT (R)	NC

ITEM #	QUAN.	PART #	DESCRIPTION
1	1	K4TE-B	Blank, 1/2 X 2-1/2, Two-hole, TALL
2	1	DFIST	STRIP TILL POINT, CASTING
3	2	K4TTARS-2	SIDE PLATE FOR STD LENGTH KNIFE
4	1	TB-4E	KNIFE TUBE, 3/8" back-drilled
5	.75	KTWS-01	SHANK GUARD, CASTING

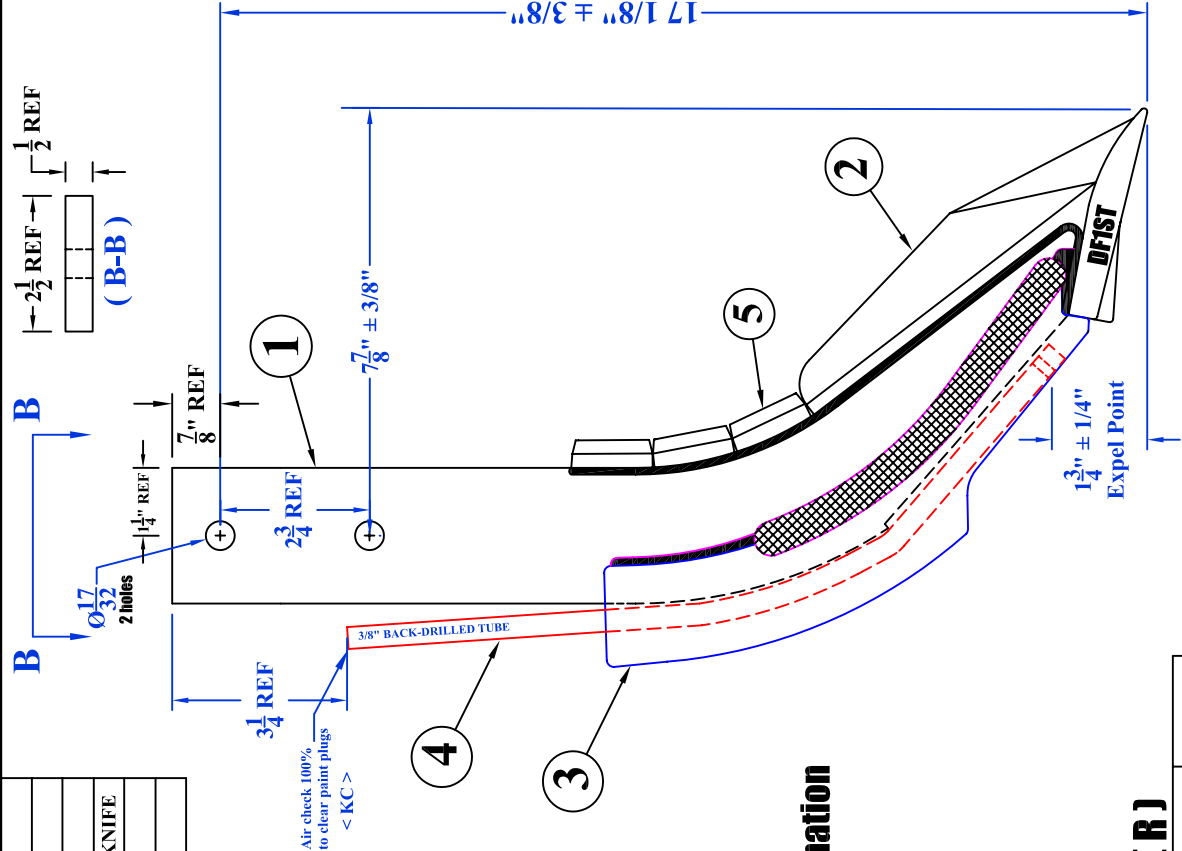
DRAWING FOR MARKETING PURPOSES
(R) Designation for REDACTED DRAWING
To remove proprietary manufacturing information

Ag Dip Black Paint
Per Customer Specifications

< KC > Key Characteristic

(R)

ST-18 REVA



SHIELD
AGRICULTURAL EQUIPMENT

DRAWN BY: SHORES	DATE: 05/24/10
CHECKED BY: _	DATE: _

DESCRIPTION	MATERIAL	REV.
SHIELD AG TALL STRIP TILL POINT, TALL	WELDMET	A

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ShieldAg 800-798-1968 www.shieldag.com

SHIELDAG Fertilizer knives for Chisel Plows



**CPK-1, the heaviest-duty
Chisel Plow Knife available**

**CPK-1E, enhanced
to handle more trash**



Chisel Plow Knives

Drawings for knives following this page are in the order shown in this table

Part #	Description	Drawing	Weight
CPK-1	Single 3/8" NH3 tube	YES	5.8
CPK-1/1/2A	Single 1/2" NH3 tube	YES	6.0
CPK-1E	Single 3/8" NH3 tube w/ trash guard	YES	6.1
CPK-1E/1/2A	Single 1/2" NH3 tube w/ trash guard	YES	6.3
CPK-1E/DA	Dual 3/8" NH3 & 3/8" open end tubes w/ trash guard	YES	6.5
CPK-1/1/2A/1/2DA	Dual 1/2" NH3 & 1/2" open end tubes		6.7
CPK-1E/1/2DA	Dual 3/8" NH3 & 1/2" tubes w/trash guard	YES	6.7
CPK-1/1/2DA	SUB TO CPK-1E/1/2DA		
CPK-1/DA	SUB TO CPK-1E/DA		
CPK-1E/3/4DA	3/8" NH3 tube and 3/4" Vapor tube w/trash guard	YES	7.3
CPK-1LD	Single 3/8" NH3 tube w/center-mount tube stiffener	YES	6.1
CPK-1LD/1/2A	Single 1/2" NH3 tube w/center-mount tube stiffener	YES	6.3
CPK-1M	Single 3/8" Micronutrient tube		6.0
CPK-1S	Single 3/8" Stainless NH3 tube		5.8
CPK-1/WOT	Chisel knife with no tubes	YES	5.6

Part #	Replacement Parts for Chisel Plow Knives	Weight
CPK1P	Knife point	1.73
TB-CPK1	3/8" tube crimped/drilled	0.30
TB-CPK1/1/2A	1/2" tube crimped/drilled	0.53
CPK1E	trash guard	0.06

SHIELDAG Offers the WIDEST SELECTION of Chisel Plow Knives in the Industry !!

Your customer can also add ShieldAg Sweep/Chisel tubes to standard chisels and sweeps !!

Part #	Description	Weight
TA-1	Center Mount Chisel/Sweep tube	0.65
TA-2	Side Mount Chisel/Sweep tube	0.68
TA-3	Side Mount 12" Chisel Plow and Cultivator Sweep tube	0.69



TA-1



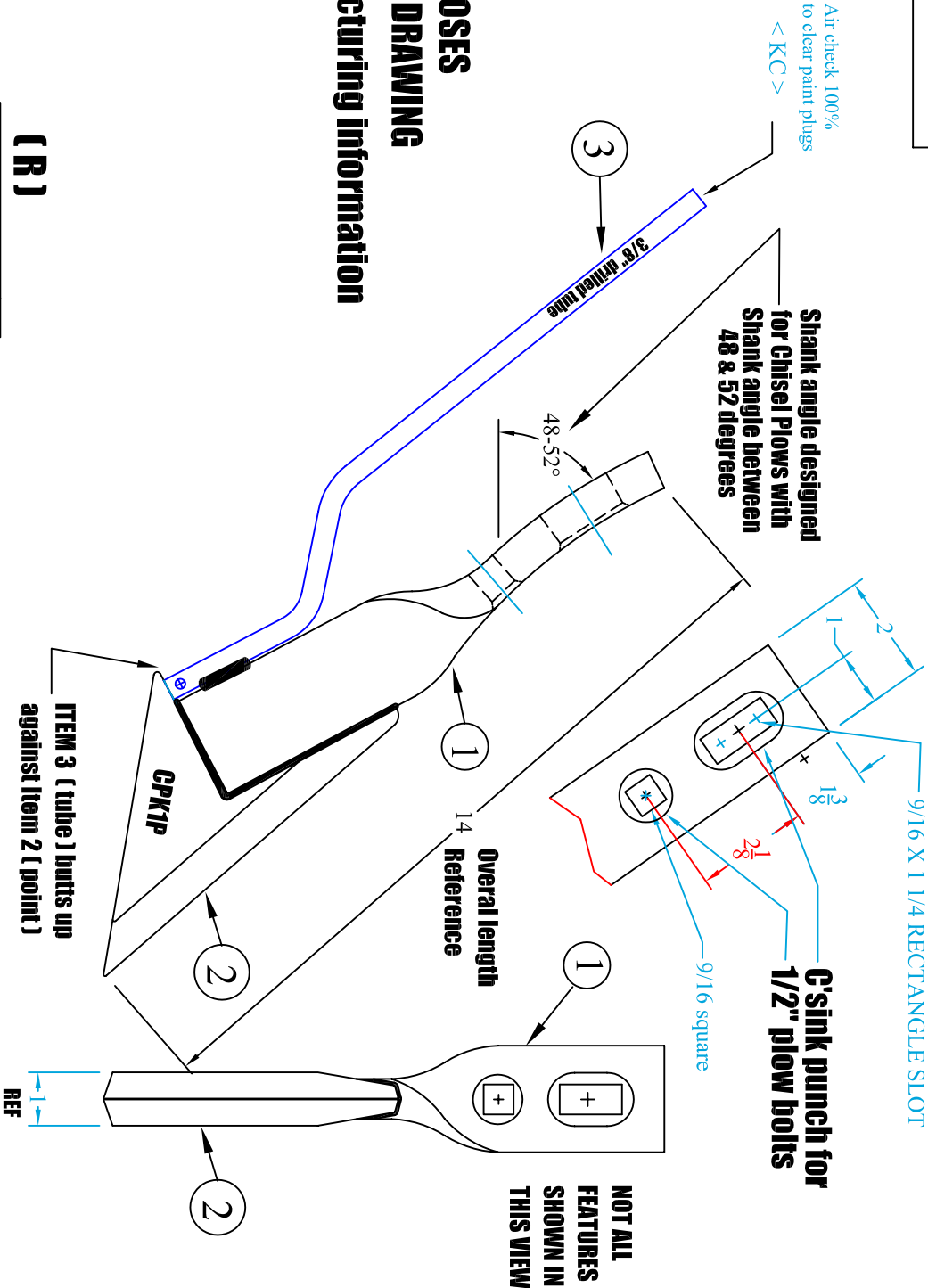
TA-2



TA-3

ITEM #	QUAN.	PART #	DESCRIPTION
1	1	CPK1-B	KNIFE BLANK, Chisel Plow, 3/4 X 2"
2	1	CPK1P	KNIFE POINT, Chisel Plow
3	1	TB-CPK1	KNIFE TUBE, 3/8" drilled

All dimensions in this view are for REFERENCE ONLY



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(R) Designation for REDACTED DRAWING
To remove proprietary manufacturing information

Ag Dip Black Paint
Per Customer Specifications

< KC > Key Characteristic

(R)	CPK-1	A
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REV.	BY	DATE	DESCRIPTION	TOLERANCE UNLESS OTHERWISE NOTED	DRAWN BY:	DATE:	CHECKED BY:	DATE:	PART NO.	REV.
-	-	-	-	0/0 +/- 1/16	ALBRIGHT	3/26/09	-	-	CPK-1 (R)	A
-	-	-	-	0.00 +/- .020						
-	-	-	-	0.000 +/- .005						
-	-	-	-	0.0000 +/- .001						
-	-	-	-	ANGLE +/- 2						

SHIELD
AGRICULTURAL EQUIPMENT

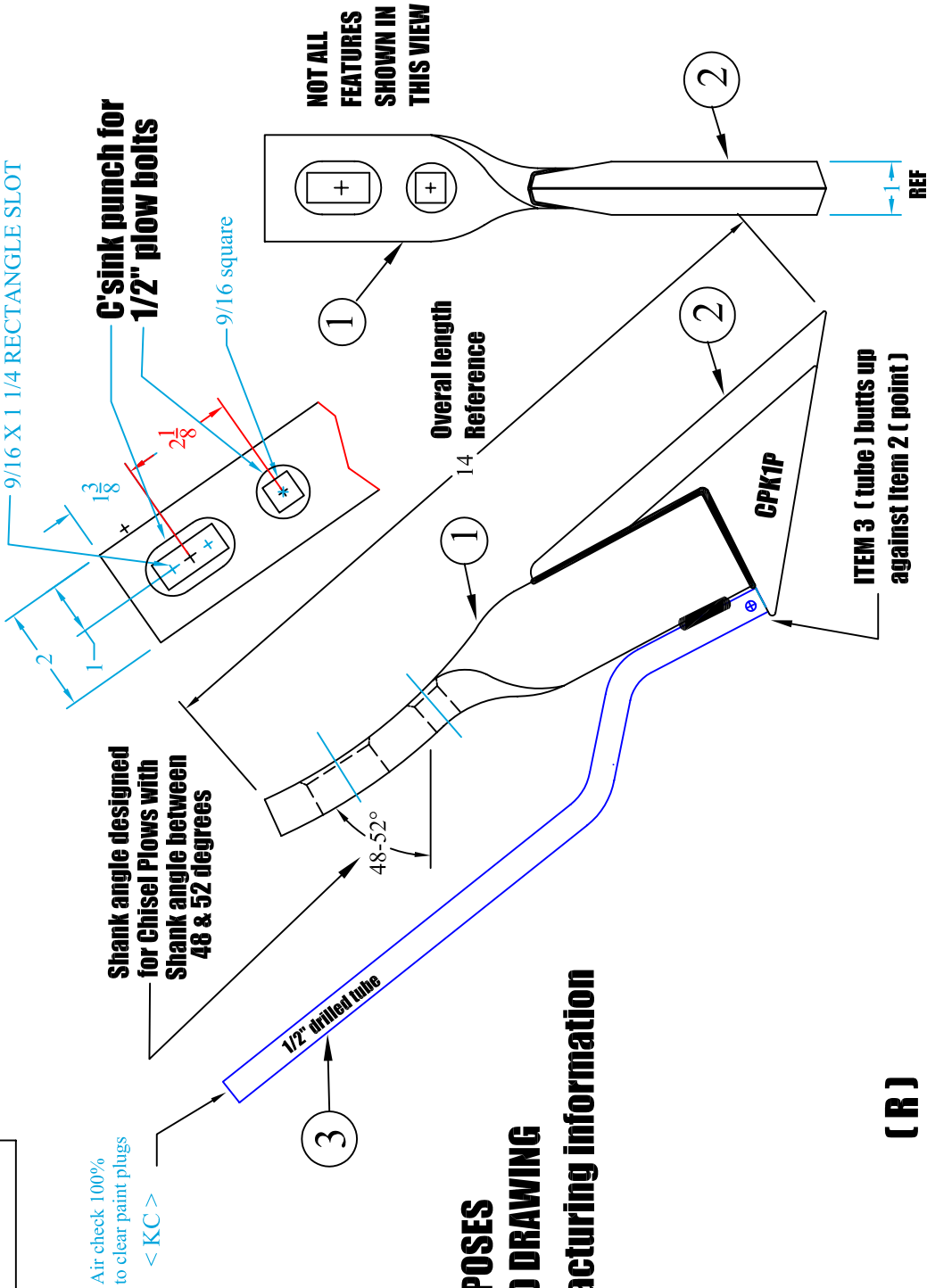
DESCRIPTION
Chisel knife w/ 3/8 drilled tube

MATERIAL
Weldment

ITEM #	QUAN.	PART #	DESCRIPTION
1	1	CPK1-B	KNIFE BLANK, Chisel Plow, 3/4 X 2"
2	1	CPK1P	KNIFE POINT, Chisel Plow
3	1	TB-CPK1/1/2A	KNIFE TUBE, 1/2" drilled

All dimensions in this view are for REFERENCE ONLY

9/16 X 1 1/4 RECTANGLE SLOT



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(R)

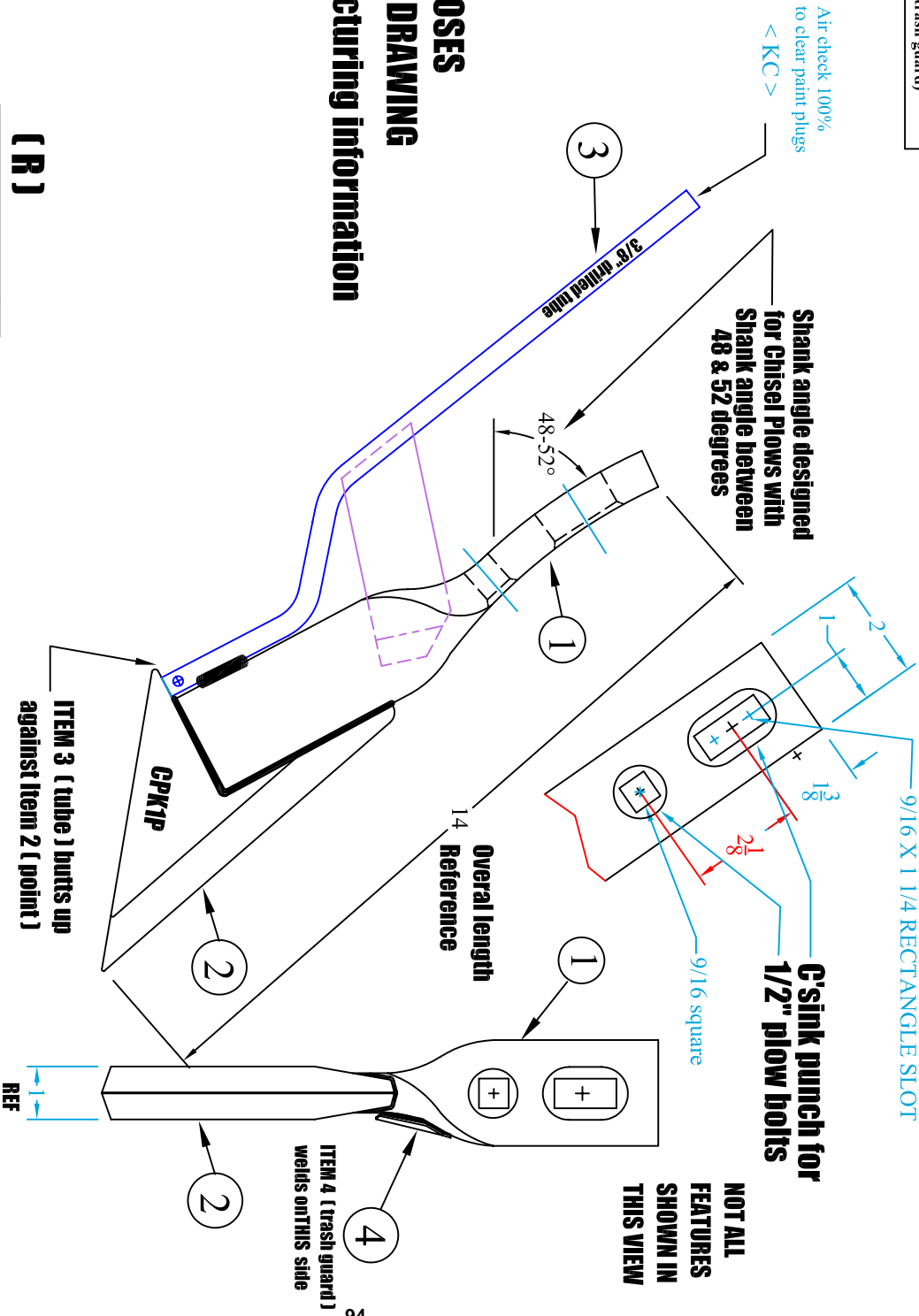
< KC > Key Characteristic

CPK-1/1/2A A

TOLERANCE UNLESS OTHERWISE NOTED				SHIELD AGRICULTURAL EQUIPMENT	
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-	-	-	-	CHECKED BY: -	DATE: -
-	-	-	-	PART NO. CPK-1/1/2A (R)	
REV.	BY	DATE	DESCRIPTION	REV. A	

ITEM #	QUAN.	PART #	DESCRIPTION
1	1	CPK1-B	KNIFE BLANK, Chisel Plow, 3/4 X 2"
2	1	CPK1P	KNIFE POINT, Chisel Plow
3	1	TB-CPK1	KNIFE TUBE, 3/8" drilled
4	1	CPK1E	Tube saver enhancement (trash guard)

All dimensions in this view are for REFERENCE ONLY



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< KC > Key Characteristic

(R)	
CPK-1E	A

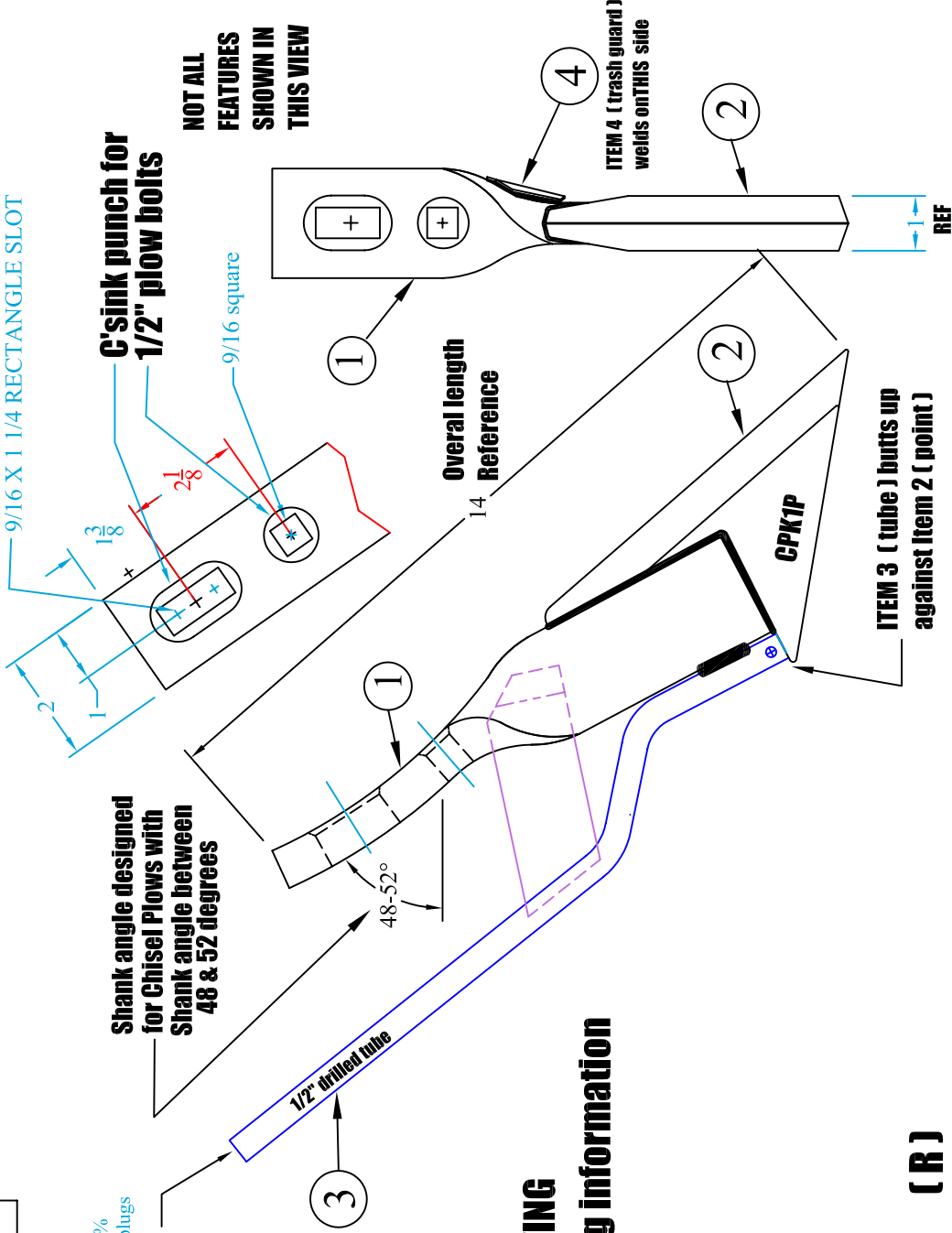
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-	-	-	-	0/0 +/- 1/16				
-	-	-	-	0.00 +/- .020				
-	-	-	-	0.000 +/- .005				
-	-	-	-	0.0000 +/- .001				
ANG	-	-	-	ANGLE +/- 2				

SHIELD
AGRICULTURAL EQUIPMENT

DESCRIPTION	MATERIAL	PART NO.	REV.
Chisel knife w/ 3/8 drilled tube & trash guard	Weldment	CPK-1E (R)	A

ITEM #	QUAN.	PART #	DESCRIPTION
1	1	CPK1-B	KNIFE BLANK, Chisel Plow, 3/4 X 2"
2	1	CPK1P	KNIFE POINT, Chisel Plow
3	1	TB-CPK1/1/2A	KNIFE TUBE, 1/2" drilled
4	1	CPK1E	Tube saver enhancement (trash guard)

All dimensions in this view are for REFERENCE ONLY
 9/16 X 1 1/4 RECTANGLE SLOT



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(R)

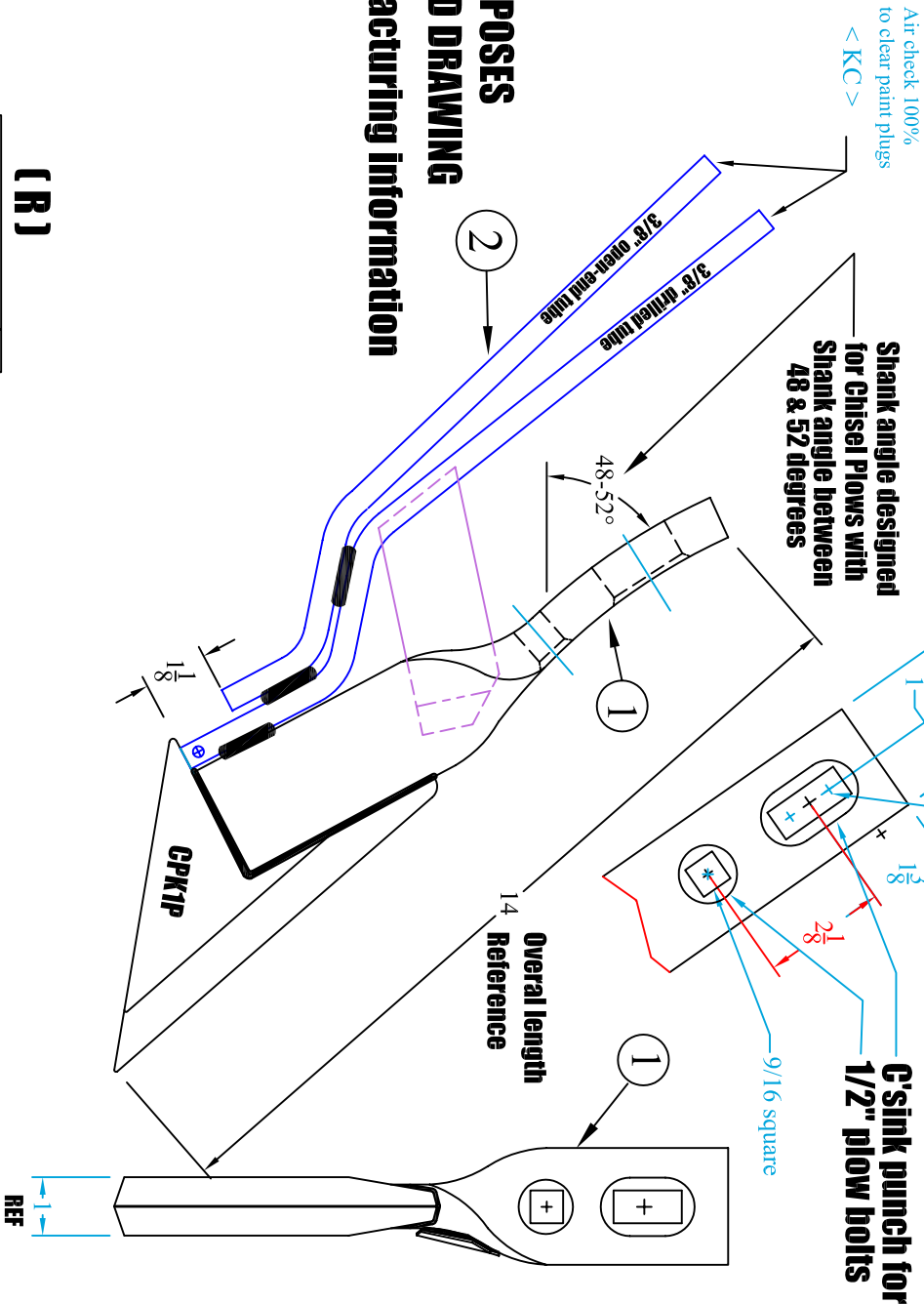
< KC > Key Characteristic

CPK-1E/1/2A A

TOLERANCE UNLESS OTHERWISE NOTED				SHIELD AGRICULTURAL EQUIPMENT	
				DRAWN BY: ALBRIGHT	DATE: 3/26/09
				CHECKED BY: -	DATE: -
REV.	BY	DATE	DESCRIPTION	PART NO. CPK-1E/1/2A (R)	
				REV. A	

ITEM #	QUAN.	PART #	DESCRIPTION
1	1	CPK-1E	Chisel Knife with 3/8" drilled tube & trash guard
2	1	TB-CPK1	KNIFE TUBE, 3/8" shop modify saw off 1-1/8"
3	2	KSPCR	KNIFE TUBE SPACER 1/4 X 3/4

All dimensions in this view are for REFERENCE ONLY



NOT ALL
FEATURES
SHOWN IN
THIS VIEW

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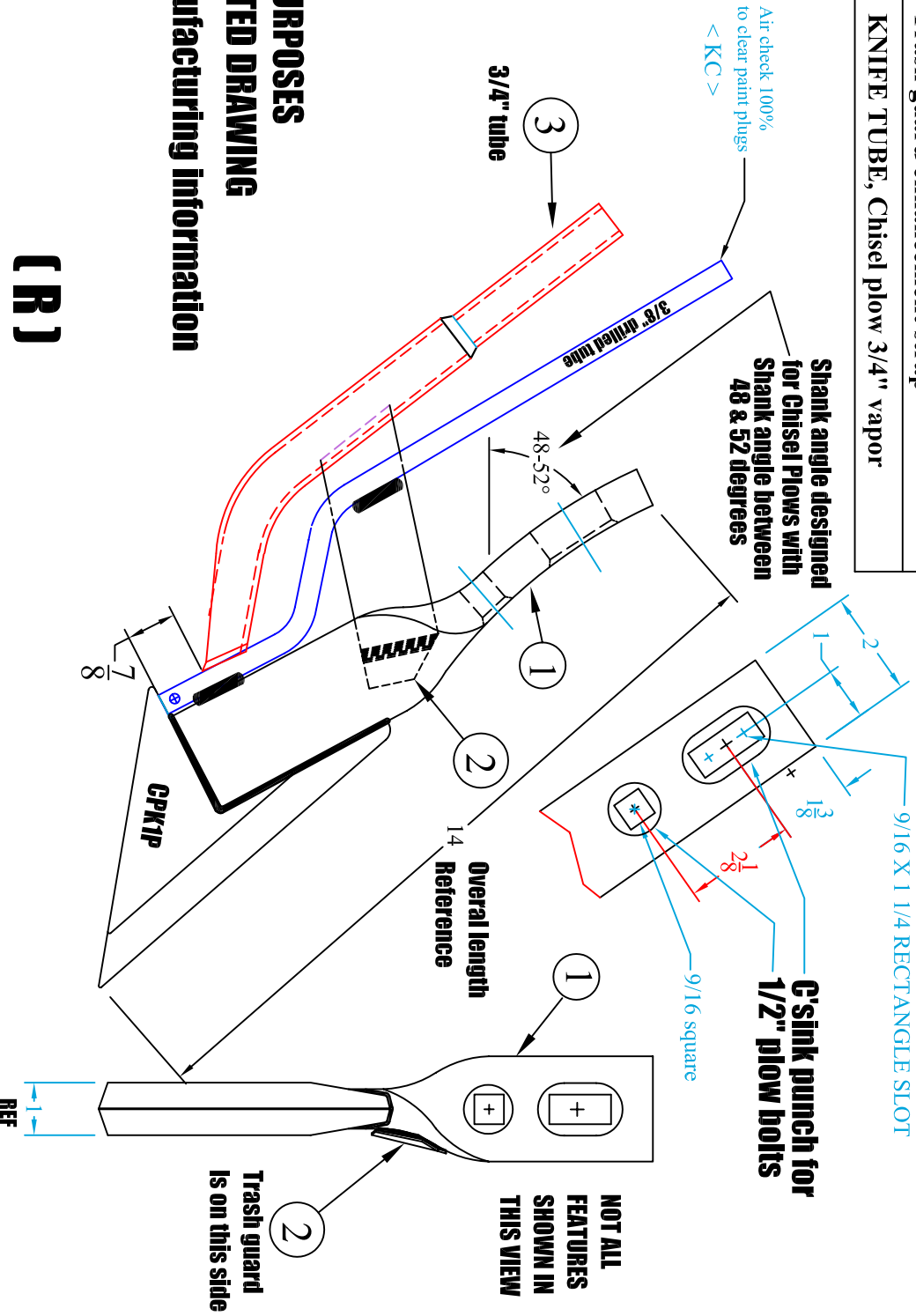
(R)
CPK-1E/DA A

REV.	BY	DATE	DESCRIPTION	TOLERANCE UNLESS OTHERWISE NOTED	DRAWN BY:	DATE:	CHECKED BY:	DATE:
-	-	-	-	0/0 +/- 1/16	MB	06/05/10	-	-
-	-	-	-	0.00 +/- .020				
-	-	-	-	0.000 +/- .005				
				0.0000 +/- .001				
				ANGLE +/- 2				

DESCRIPTION	MATERIAL	PART NO.	REV.
Chisel knife w/ 3/8 drilled tube, 3/8" open tube & trash guard	Weldment	CPK-1E/DA (R)	A

ITEM #	QUAN.	PART #	DESCRIPTION
1	1	CPK-1	Chisel Plow knife, 3/8" NH3 tube
2	1	CPK1E	Trash guard enhancement strap
3	1	CPK1-VTB	KNIFE TUBE, Chisel plow 3/4" vapor

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Ag Dip Black Paint
Per Customer Specifications

(R)

CPK-1E/3/4DA B

-	-	-	-	TOLERANCE UNLESS OTHERWISE NOTED	SHIELD AGRICULTURAL EQUIPMENT		
-	-	-	-	0/0 +/- 1/16			
-	-	-	-	0.00 +/- .020			
B	MB	7/25/12	REVISED AND REDRAWN	0.000 +/- .005			
REV.	BY	DATE	DESCRIPTION	0.0000 +/- .001	SHIELD AGRICULTURAL EQUIPMENT		
DESCRIPTION				ANGLE +/- 2			
Chisel knife w/ 3/8 drilled tube, trash guard and 3/4" vapor tube					PART NO.	CPK-1E/3/4DA (R)	REV. B

ITEM #	QUAN.	PART #	DESCRIPTION
1	1	CPK1-B	KNIFE BLANK, Chisel Plow, 3/4 X 2"
2	1	CPK1P	KNIFE POINT, Chisel Plow
3	1	TB-CPK1	KNIFE TUBE, 3/8" drilled
4	1	CPK1LD	Enhancement L&D chisel knives

All dimensions in this view are for REFERENCE ONLY

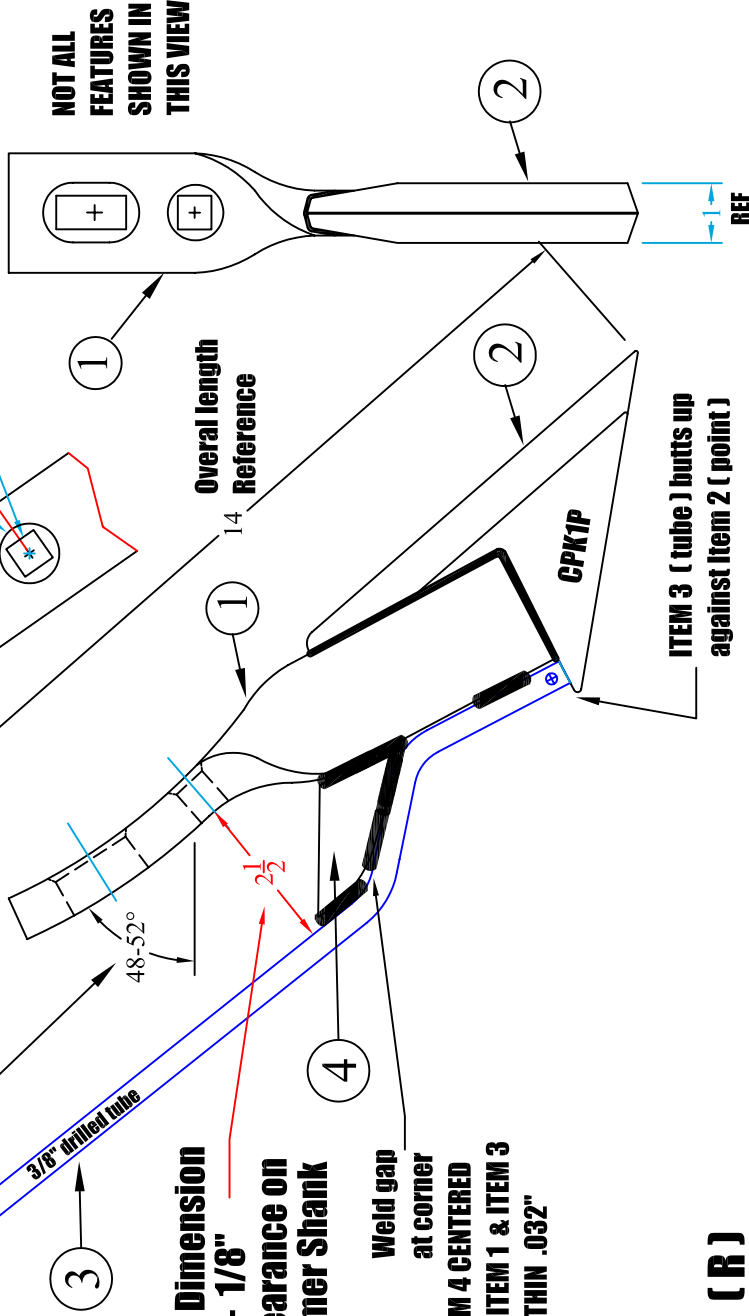
9/16 X 1 1/4 RECTANGLE SLOT

Air check 100%
to clear paint plugs
< KC >

Shank angle designed
for Chisel Plows with
Shank angle between
48 & 52 degrees

C'sink punch for
1/2" plow bolts

9/16 square



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[R]

< KC > Key Characteristic

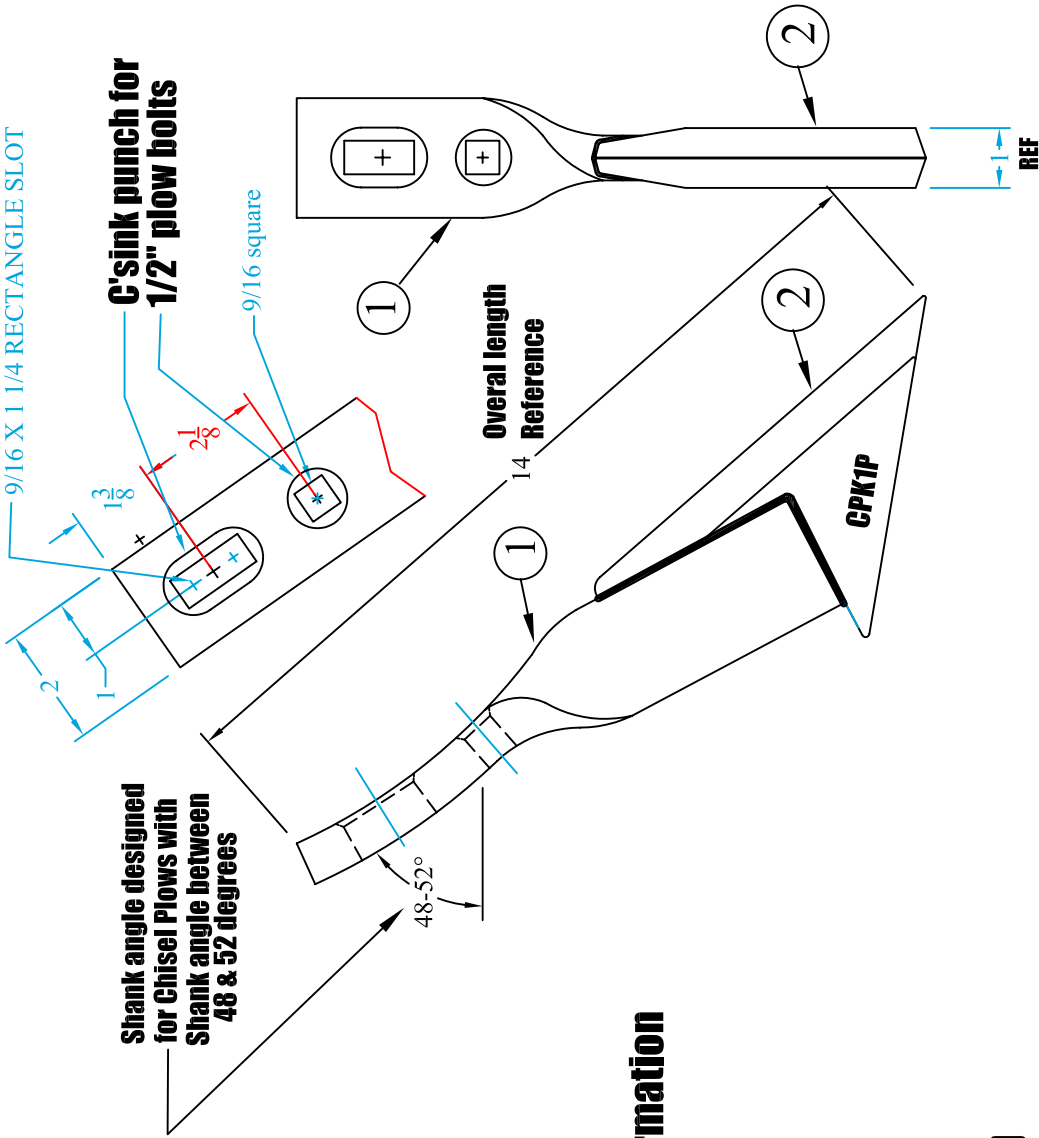
CPK-1LD A

TOLERANCE UNLESS OTHERWISE NOTED			
			0/0 +/- 1/16
			0.00 +/- .020
			0.000 +/- .005
			0.0000 +/- .001
			ANGLE +/- 2
REV.	BY	DATE	DESCRIPTION
-	-	-	-
-	-	-	-
-	-	-	-
<div> <div>SHIELD</div> <div>AGRICULTURAL EQUIPMENT</div> </div>			
DRAWN BY: ALBRIGHT		DATE: 3/26/09	
CHECKED BY: -		DATE: -	
PART NO. CPK-1LD (R)			REV. A
Chisel knife w/ 3/8 drilled tube & LD Enhancement			
MATERIAL Weldment			

ITEM #	QUAN.	PART #	DESCRIPTION
1	1	CPK1-B	KNIFE BLANK, Chisel Plow, 3/4 X 2"
2	1	CPK1P	KNIFE POINT, Chisel Plow

All dimensions in this view are for REFERENCE ONLY

9/16 X 1 1/4 RECTANGLE SLOT



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(R)
CPK-1/WOT A

TOLERANCE UNLESS OTHERWISE NOTED				SHIELD AGRICULTURAL EQUIPMENT	
				DRAWN BY: ALBRIGHT	DATE: 3/26/09
				CHECKED BY: -	DATE: -
				PART NO. CPK-1/WOT (R)	
				REV. A	
DESCRIPTION		MATERIAL		Weldment	
		CPK-1/WOT A			
REV.	BY	DATE	DESCRIPTION		
-	-	-	-		
-	-	-	-		
-	-	-	-		

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ShieldAg 800-798-1968 www.shieldag.com

Acra-Plant replaceable-point quick change fertilizer knives



AVAILABLE NOW IN STRIP TILL CONFIGURATIONS

Item	Description	Weight
AP-700000	Acra Knife Shank with 3/8" NH3 tube and AP-700041 Standard Point	7.67
AP-700010	Acra Knife Shank w/ 3/8" NH3 tube (.408" OD, for 3/8" NH3 hose), no point	4.60
AP-700010V	Acra Knife Shank w/ 3/8" NH3 tube and 3/4" Vapor Tube, no point	5.40
AP-700011	Acra Knife Shank without tube (bare shank), no point	4.50
AP-700011STE	Acra ST-shank with 3/8" back-drilled tube STRIP TILL	8.80
AP-700011XBE	Acra ST-shank without tube. STRIP TILL	8.60
AP-700020	3/8" NH3 tube (.408" OD) crimped and drilled	0.50
AP-700021	3/8" Liquid tube (.408" OD) open end	0.50
AP-700022	1/2" Liquid tube (.569"OD) open end	0.60
AP-700023	3/8" NH3 tube (.408" OD) and Clip Rings for 1/2" large plastic tube	0.60
AP-700025	1/2" NH3 tube (.569" OD) crimped and drilled	0.60
AP-700041	STANDARD ACRA KNIFE POINT w/PIN	2.53
AP-700042	ACRA SUPER WING POINT w/PIN	2.78
AP-700042-ST	STRIP TILL POINT w/PIN	4.00
AP-700044	ACRA CLOSER POINT w/PIN	3.83
AP-700200	Acra Knife shank with 3/8" NH3 tube and AP-700042 Super Wing Point	7.92
AP-700400	Acra Knife shank with 3/8" NH3 tube and AP-700044 Sealer Point	8.50
AP-702000	Acra Knife shank with 3/8" NH3 tube and 3/8" Liquid tube (dual app)	5.10
AP-702000S	Acra Knife shank with 3/8" NH3 and 3/8" STAINLESS Liquid tubes (dual app)	5.10
AP-702010	Acra Knife shank with 3/8" NH3 and 1/2" Liquid tubes (dual app)	5.40
AP-702110	Acra Knife shank with 3/8" NH3 and Clip Rings for 1/2" large plastic hose (dual app)	4.80
AP-702510	Acra Knife shank with single 1/2" NH3 tube (.569" OD), crimped and drilled	4.70
AP-702610	Acra Knife shank with single 1/2" liquid tube (.569" OD), open end	4.70
K2TBDA3/4	3/4" Vapor tube (Raven)	0.74



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