

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

ShieldAg warrants 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 ShieldAg. 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. This warranty gives dealers and consumers specific rights. There may be other rights that vary from state to state.

Shipments & Returns

This “Shipments and Returns Policy” outlines the rights and obligations of 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 will accept the return of new item(s) originally purchased into dealer stock from ShieldAg for a period of one (1) year from the date of original purchase from ShieldAg. Any acceptance of new item(s) older than one (1) year shall be subject to individual negotiation by the Territory Manager and corporate management of ShieldAg. ShieldAg reserves the right to refuse or accept returned merchandise. All items returned must be current to the stream of commerce in the geography where originally sold to the dealer and not deemed to be obsolete due to acts of nature or naturally occurring changes in consumer preference. All new items returned shall be in merchantable condition and shall not require repackaging, rework or repainting. Returned item(s) shall be subject to a twenty percent (20%) restocking charge. Returned item(s) shall **not** be accepted unless authorized in advance and in writing according to the “Execution of dealer rights for returned goods” outlined below.

Execution of dealer rights for returned goods:

1. Dealer 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 Territory Manager or the dealer shall complete a ShieldAg Returned Goods Authorization (RGA) for the item(s) to be returned. Upon inspection of the original invoice and the written explanation for return, the 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; however, the Territory Manager may elect to return the items(s) to ShieldAg via our truck. Extension of this courtesy does not constitute the final decision to extend return credit for the item(s).
3. Upon receipt of the item(s) and the 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 account receivable will be applied **less** the twenty percent (20%) restocking charge. There will be **no cash refunds** for returned items. The Territory Manager will communicate (to the dealer) acceptance (or rejection) of the returned goods and the final credit amount.

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

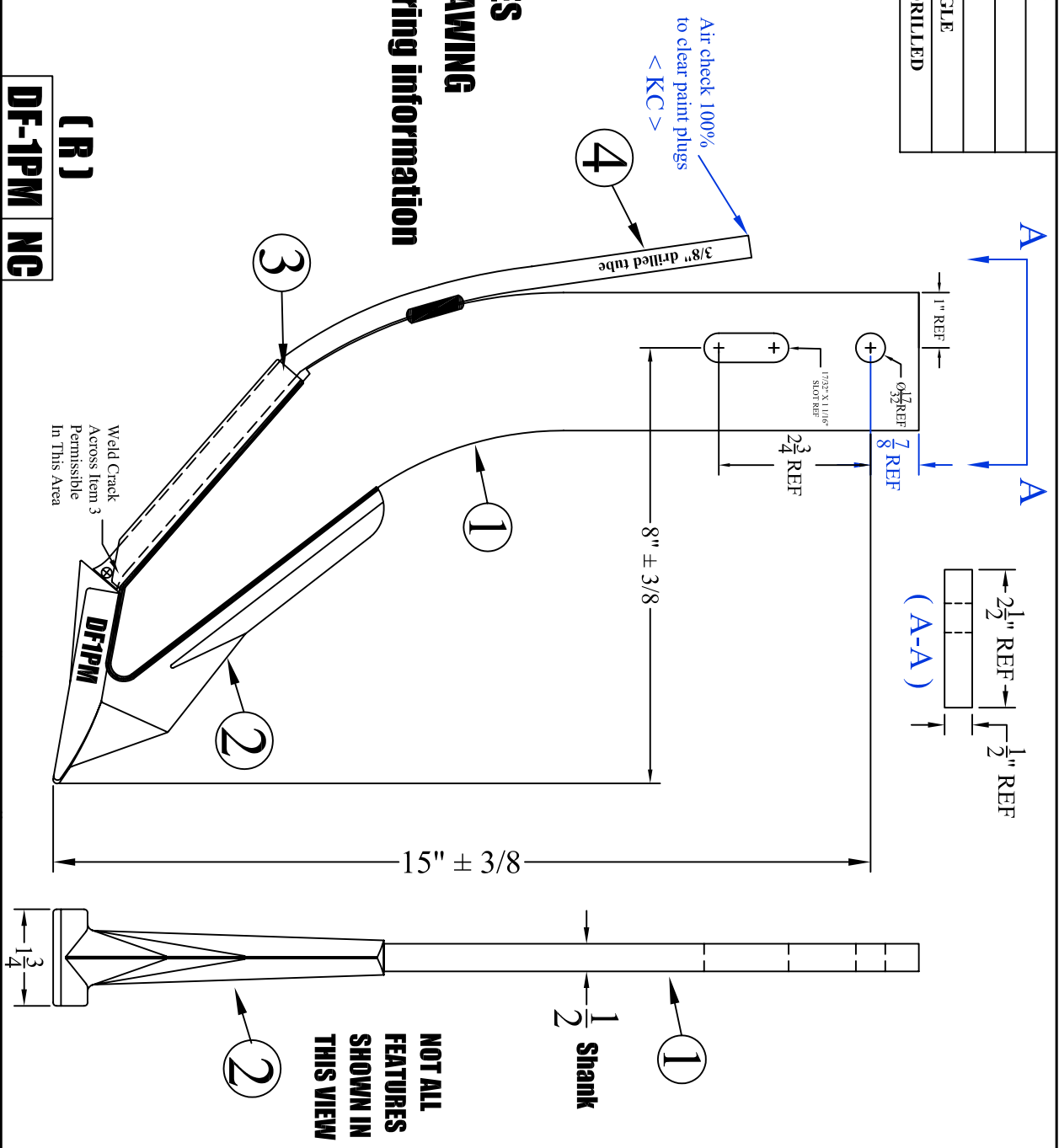
Part #	Description	DRAWING	Weight	
DF-1PM	Single 3/8" NH3 tube	yes	7.2	
DF-1PM/O	Single 3/8" open end tube	yes	7.2	
DF-1PM/1/2A	Single 1/2" NH3 tube	yes	7.3	
DF-1PM/3/4DA	3/8" NH3 & 3/4" vapor tube	yes	7.8	
DF-1PM/DA	3/8" NH3 & 3/8" open end tubes	yes	7.6	
DF-1PM/DA/O	Dual open end 3/8" tubes	yes	7.6	
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

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



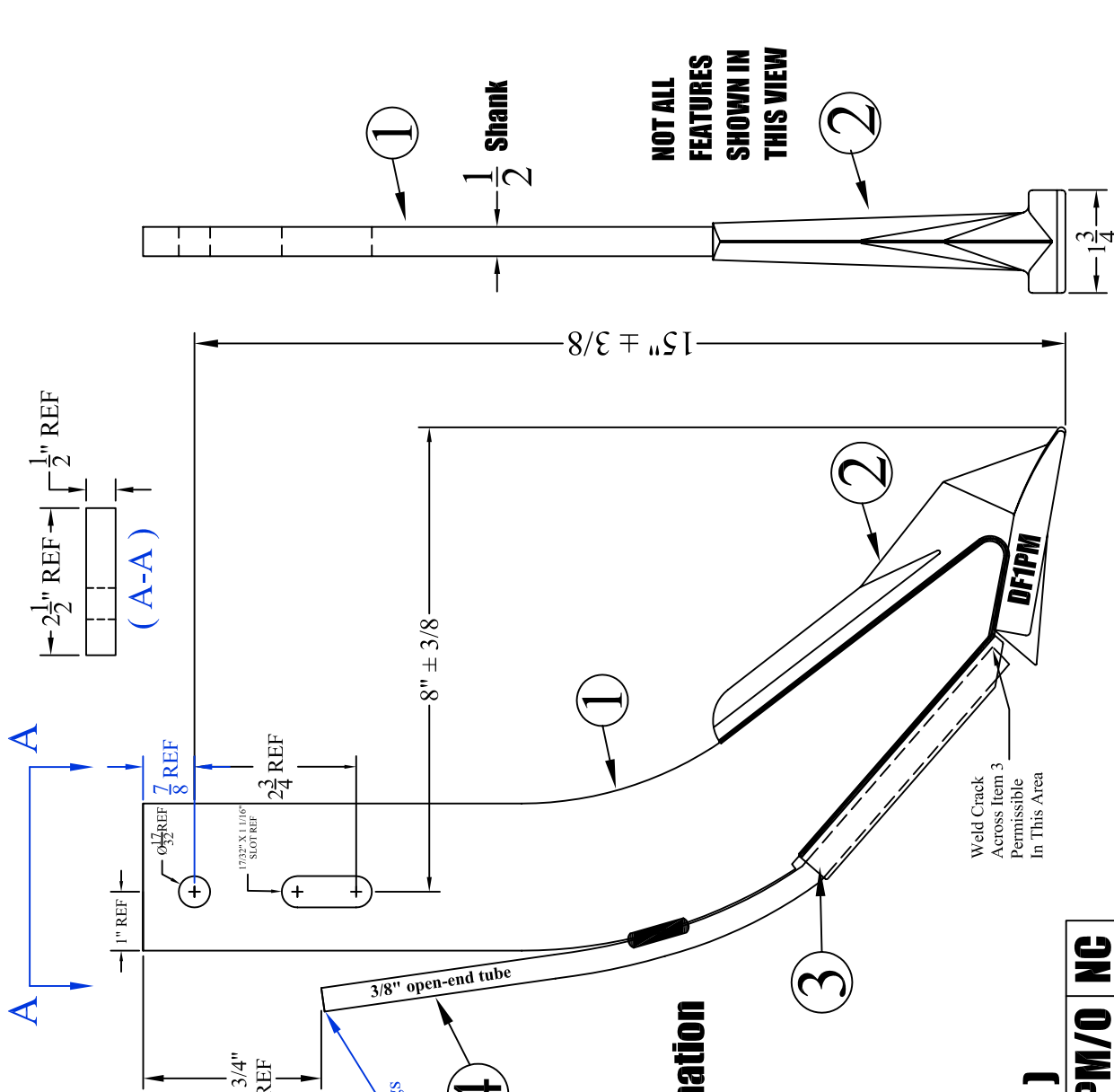
(R)
DF-1PM NC

< KC > Key Characteristic

REV.	BY	DATE	DESCRIPTION	MATERIAL	PART NO.	REV.
-	-	-	-	-	-	-
-	-	-	-	-	-	-
-	-	-	-	-	-	-
-	-	-	-	-	-	-
-	-	-	-	-	-	-
DESCRIPTION				KNIFE, DF-1PM 2008 POINT, 3/8 DRILLED TUBE	WELDMENT	DF-1PM (R)
TOLERANCE UNLESS OTHERWISE NOTED				0/0 +/- 1/16	DRAWN BY: SHORES DATE: 4/15/10	
				0.00 +/- .020	CHECKED BY: DATE:	
				0.000 +/- .010	AGRICULTURAL EQUIPMENT	
				0.0000 +/- .001	SHIELD	
				ANGLE +/- 2	DATE: 4/15/10	
					DATE:	

NOT ALL FEATURES SHOWN IN THIS VIEW

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

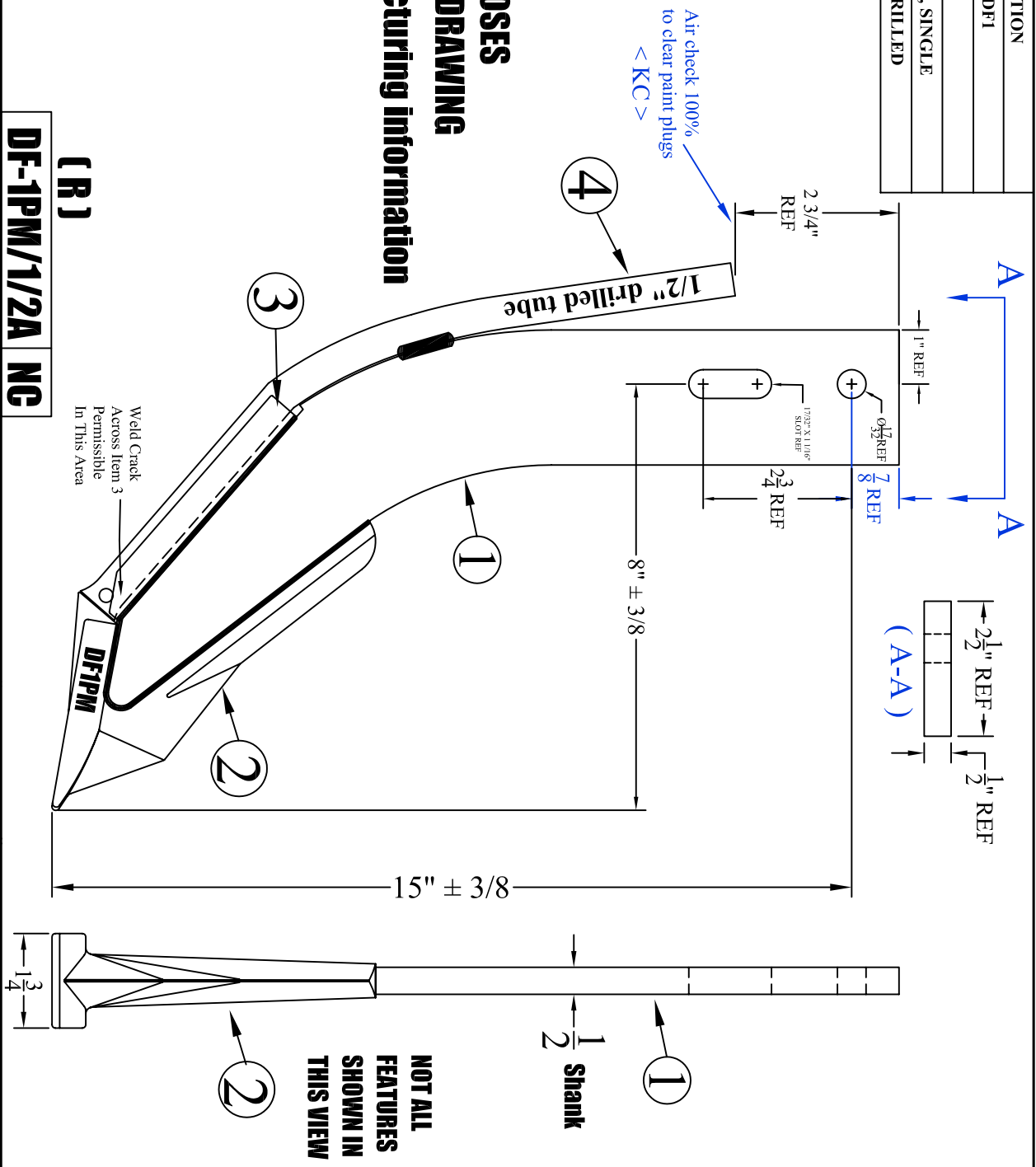
(R)
DF-1PM/O NC

<-KC> Key Characteristic

REV.	BY	DATE	DESCRIPTION	MATERIAL	WELDMENT	PART NO.	REV.
-	-	-	-	-	-	DF-1PM/O (R)	NC
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-
TOLERANCE UNLESS OTHERWISE NOTED				SHIELD AGRICULTURAL EQUIPMENT			
0/0 +/- 1/16				DRAWN BY: SHORES DATE: 4/15/10			
0.00 +/- .020				CHECKED BY: DATE: -			
0.000 +/- .010				PART NO. DF-1PM/O (R)			
0.0000 +/- .001				REV. NC			
ANGLE +/- 2				DATE: -			

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	K4TB1/2A	KNIFE TUBE, 1/2", DRILLED

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



< KC > Key Characteristic

DF-1PM/1/2A NC

REV.	BY	DATE	DESCRIPTION	MATERIAL	PART NO.	REV.
-	-	-	-	WELDMENT	DF-1PM/1/2A (R)	NC
DESCRIPTION				KNIFE, DF-1PM 2008 POINT, 1/2 DRILLED TUBE		

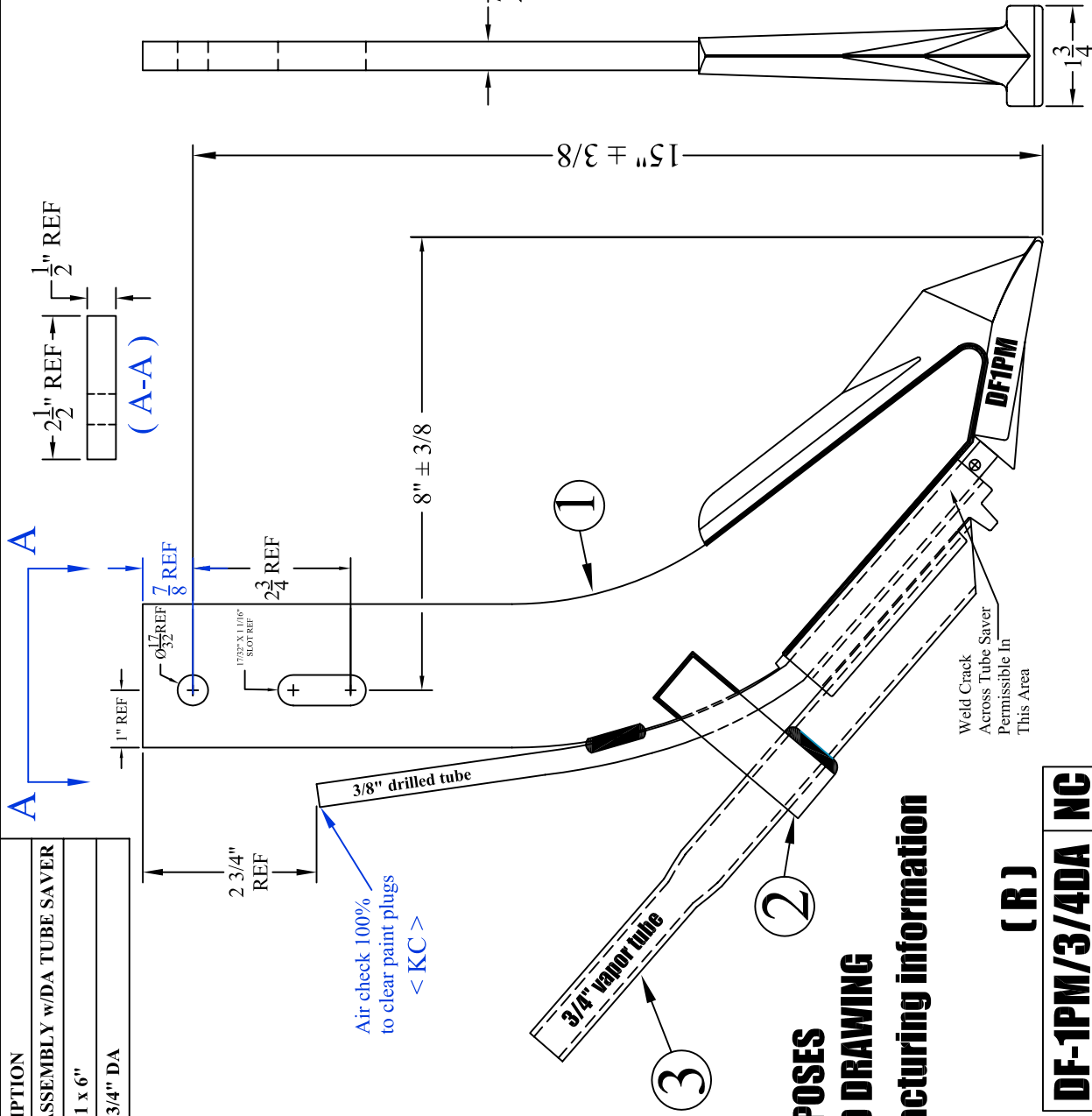
TOLERANCE UNLESS OTHERWISE NOTED	
0/0 +/-	1/16
0.00 +/-	.020
0.000 +/-	.010
0.0000 +/-	.001
ANGLE +/-	2

DRAWN BY:	SHORES	DATE:	4/15/10
CHECKED BY:		DATE:	

SHIELD	
AGRICULTURAL EQUIPMENT	

NOT ALL FEATURES SHOWN IN THIS VIEW

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



DRAWING FOR MARKETING PURPOSES
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To remove proprietary manufacturing information

(R)
DF-1PM/3/4DA NC

< KC > Key Characteristic

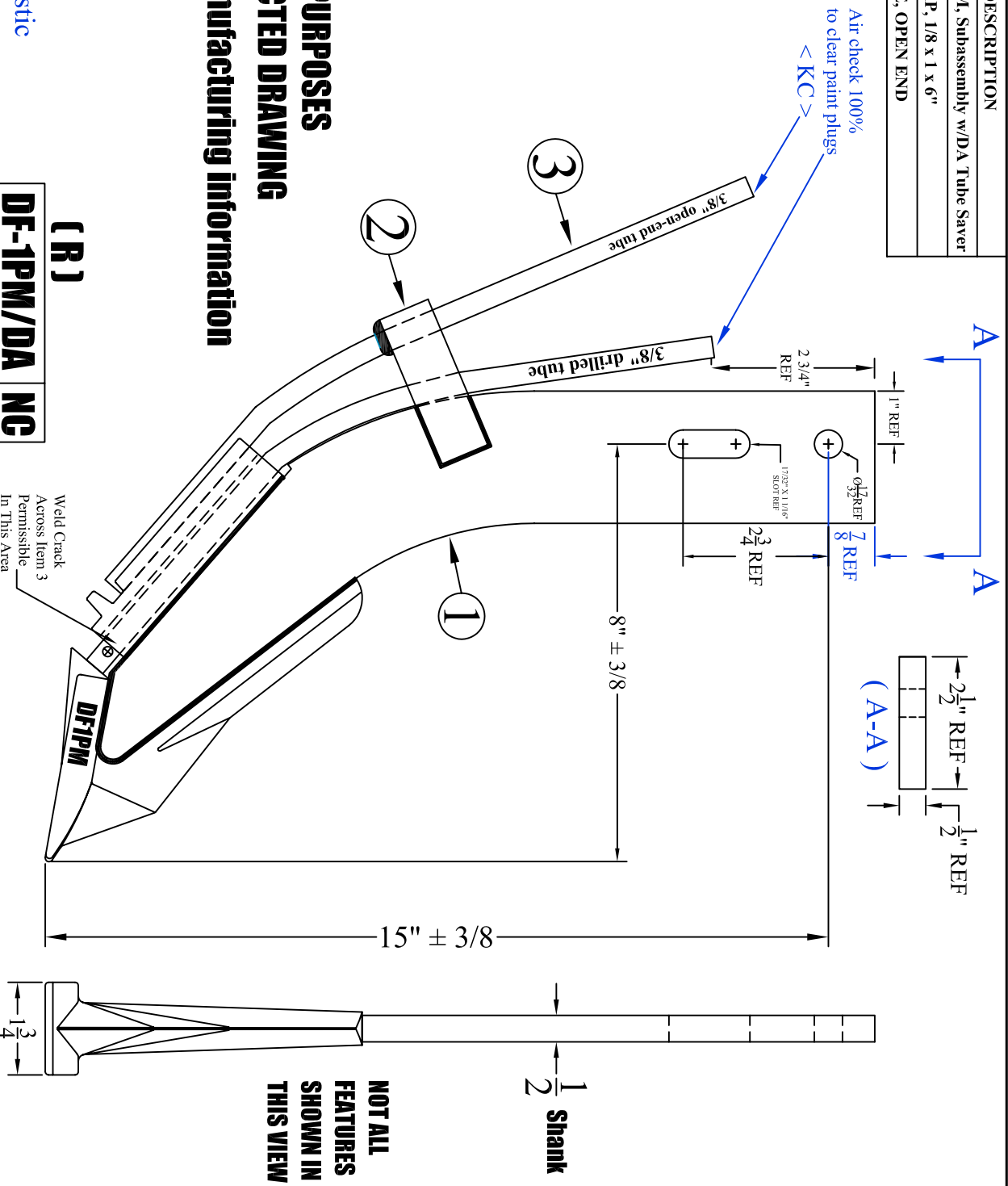
REV.	BY	DATE	DESCRIPTION
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-

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: -

DESCRIPTION: **KNIFE, DF-1PM, 3/8" drilled x 3/4" Vapor tubes**
MATERIAL: **WELDMENT**
PART NO.: **DF-1PM/3/4DA (R)**
REV.: **NC**

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	TB-4/O	KNIFE TUBE, OPEN END



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

< KC > Key Characteristic

(R)
DF-1PM/DA NG

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

TOLERANCE UNLESS OTHERWISE NOTED
0/0 +/- 1/16
0.00 +/- .020
0.0000 +/- .010
0.0000 +/- .001
ANGLE +/- 2

SHIELD
 AGRICULTURAL EQUIPMENT

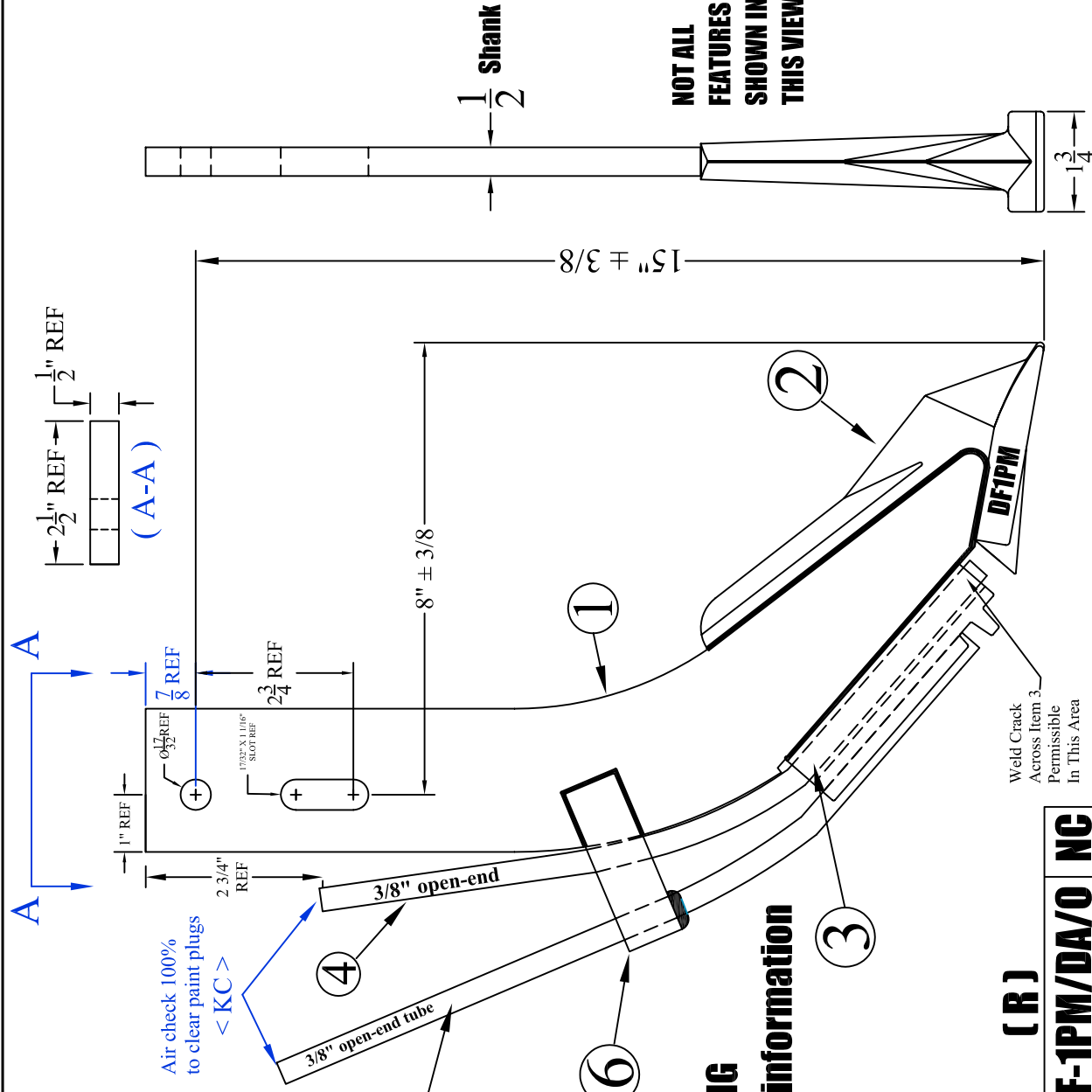
DRAWN BY: **SHORES** DATE: **4/15/10**

CHECKED BY: _____ DATE: _____

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"

Item 4 and 5 are the same tube

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

(R)

DF-1PM/DA/O NC

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: _____

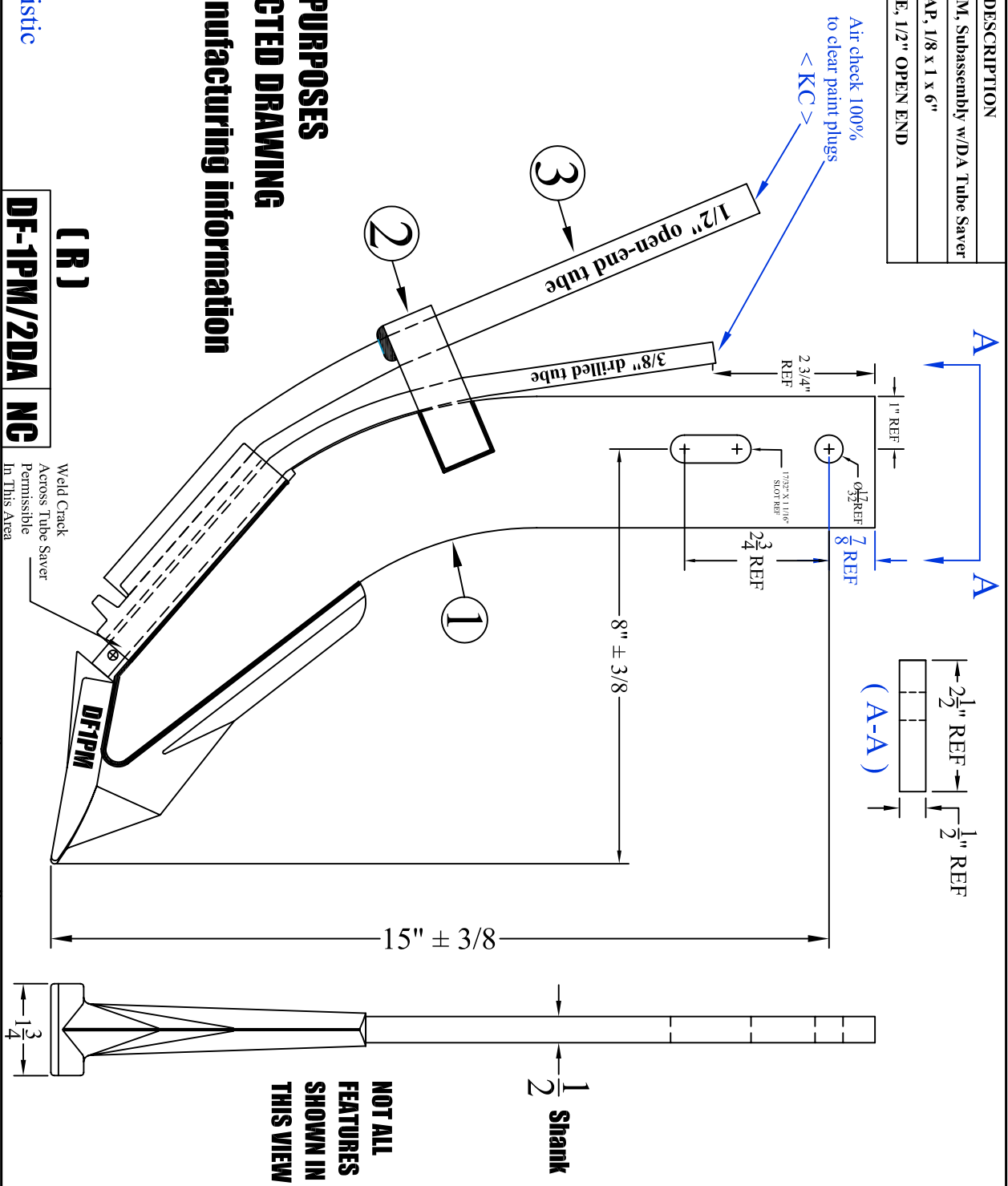
PART NO. **DF-1PM/DA/O (R)** REV. **NC**

DESCRIPTION

KNIFE, DF-1PM, dual 3/8" open-end tubes

MATERIAL **WELDMENT**

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) Designation for REDACTED DRAWING
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< KC > Key Characteristic

(R)
DF-1PM/2DA NG

Weld Crack
 Across Tube Saver
 Permissible
 In This Area

**NOT ALL
 FEATURES
 SHOWN IN
 THIS VIEW**

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

TOLERANCE UNLESS OTHERWISE NOTED	
0/0 +/-	1/16
0.00 +/-	.020
0.000 +/-	.010
0.0000 +/-	.001
ANGLE +/-	2

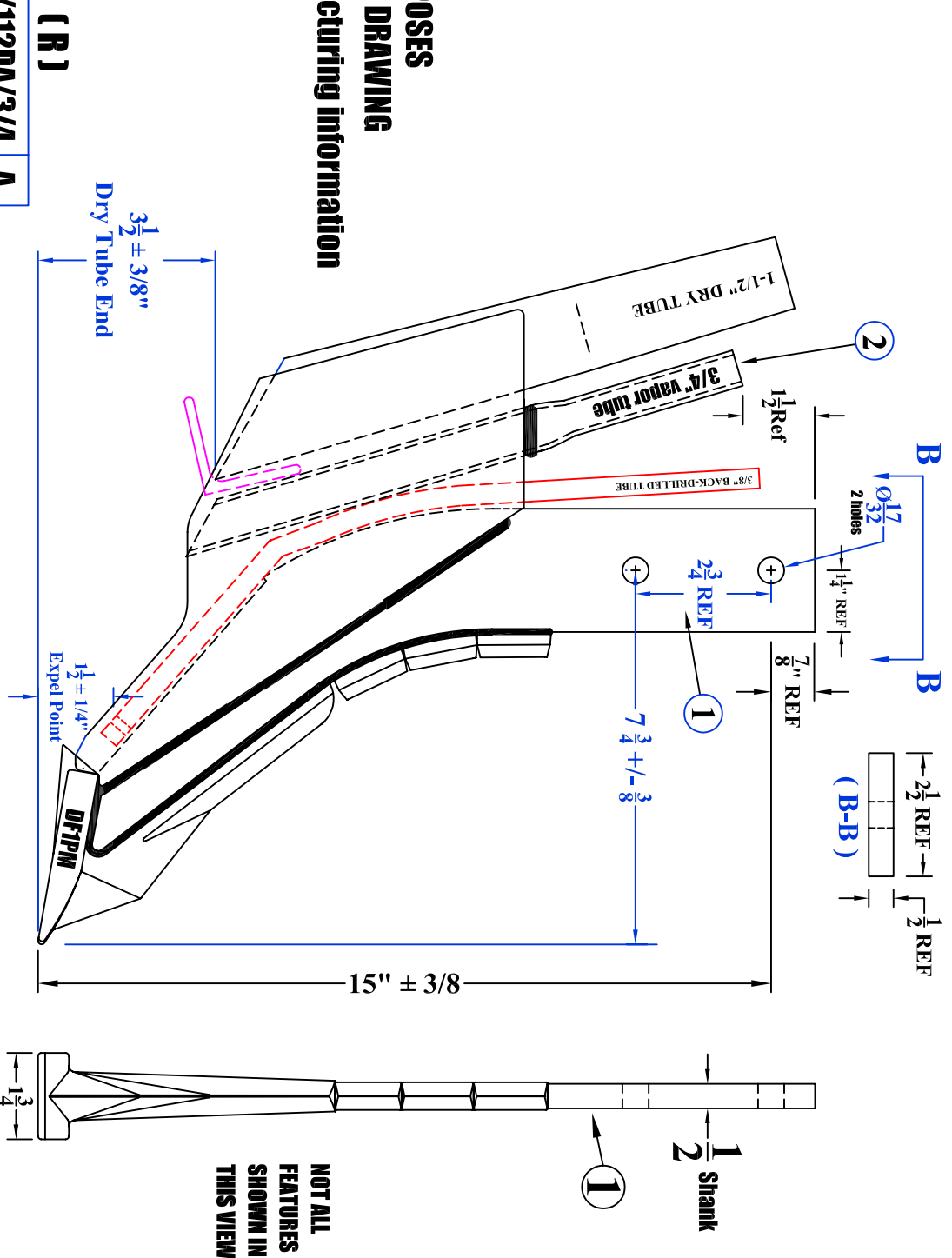
SHIELD
 AGRICULTURAL EQUIPMENT

DRAWN BY: **SHORES** DATE: **4/15/10**

CHECKED BY: _____ DATE: _____

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

NO HARD METAL APPLICATION ON THIS KNIFE



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(R) Designation for REDACTED DRAWING
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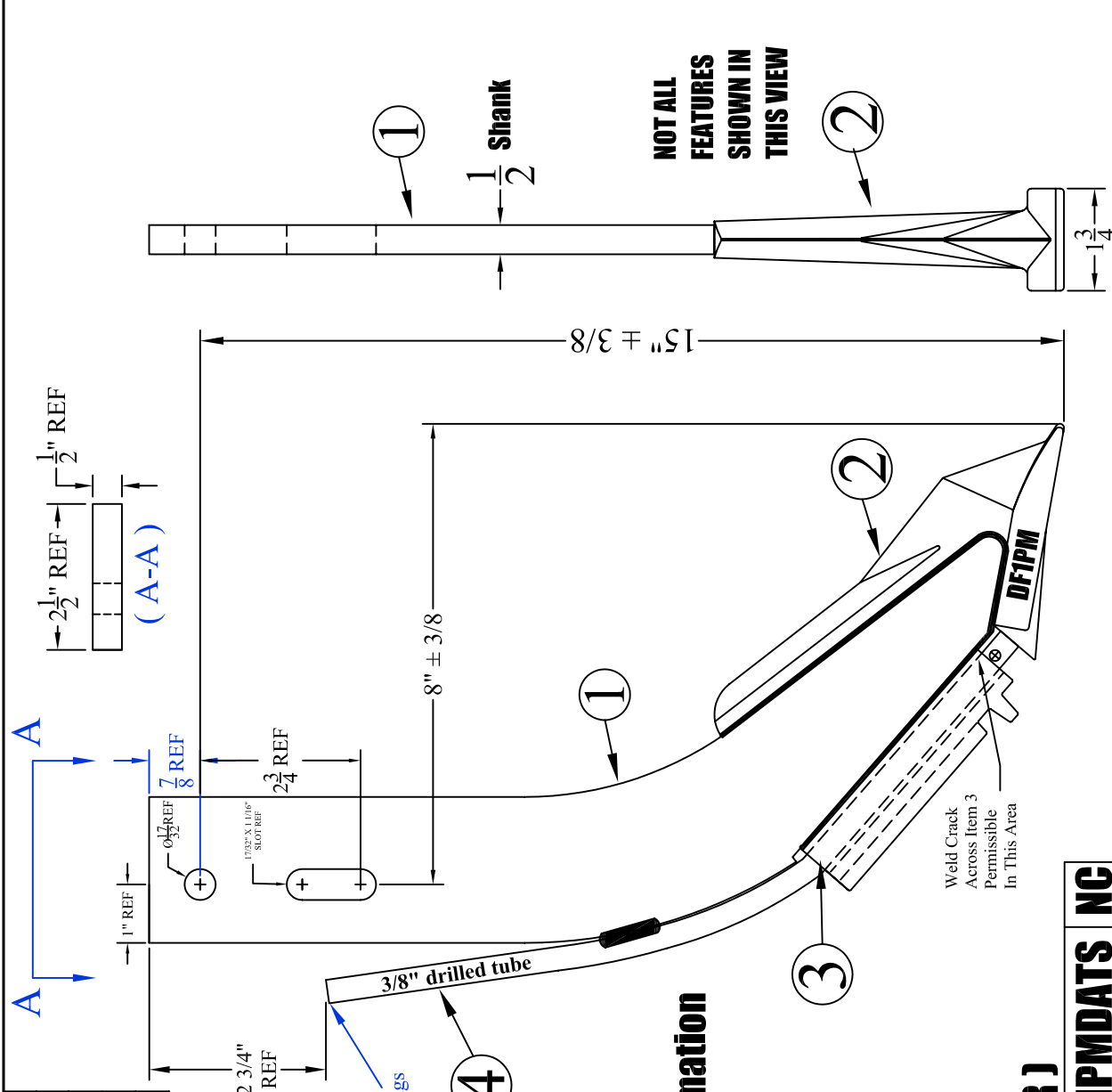
< KC > Key Characteristic **DF-1PM/112DA/3/4 A**

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

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

SHIELD
AGRICULTURAL EQUIPMENT

ITEM #	QUAN.	PART #	DESCRIPTION
1	1	K4T-B	KNIFE BLANK, K4T/DFI
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
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(R)
DF-1PMDATS NC

<-KC> Key Characteristic

REV.	BY	DATE	DESCRIPTION	MATERIAL	WELDMENT	PART NO.	REV.
-	-	-	-	-	-	DF-1PMDATS (R)	NC
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-
DF-1PMDATS NC	KNIFE, DF-1PM, SUBASSEMBLY W/DA TUBE SAVER	WELDMENT					

TOLERANCE UNLESS OTHERWISE NOTED	0/0 +/- 1/16
	0.00 +/- .020
	0.000 +/- .010
	0.0000 +/- .001
	ANGLE +/- 2

SHIELD
 AGRICULTURAL EQUIPMENT

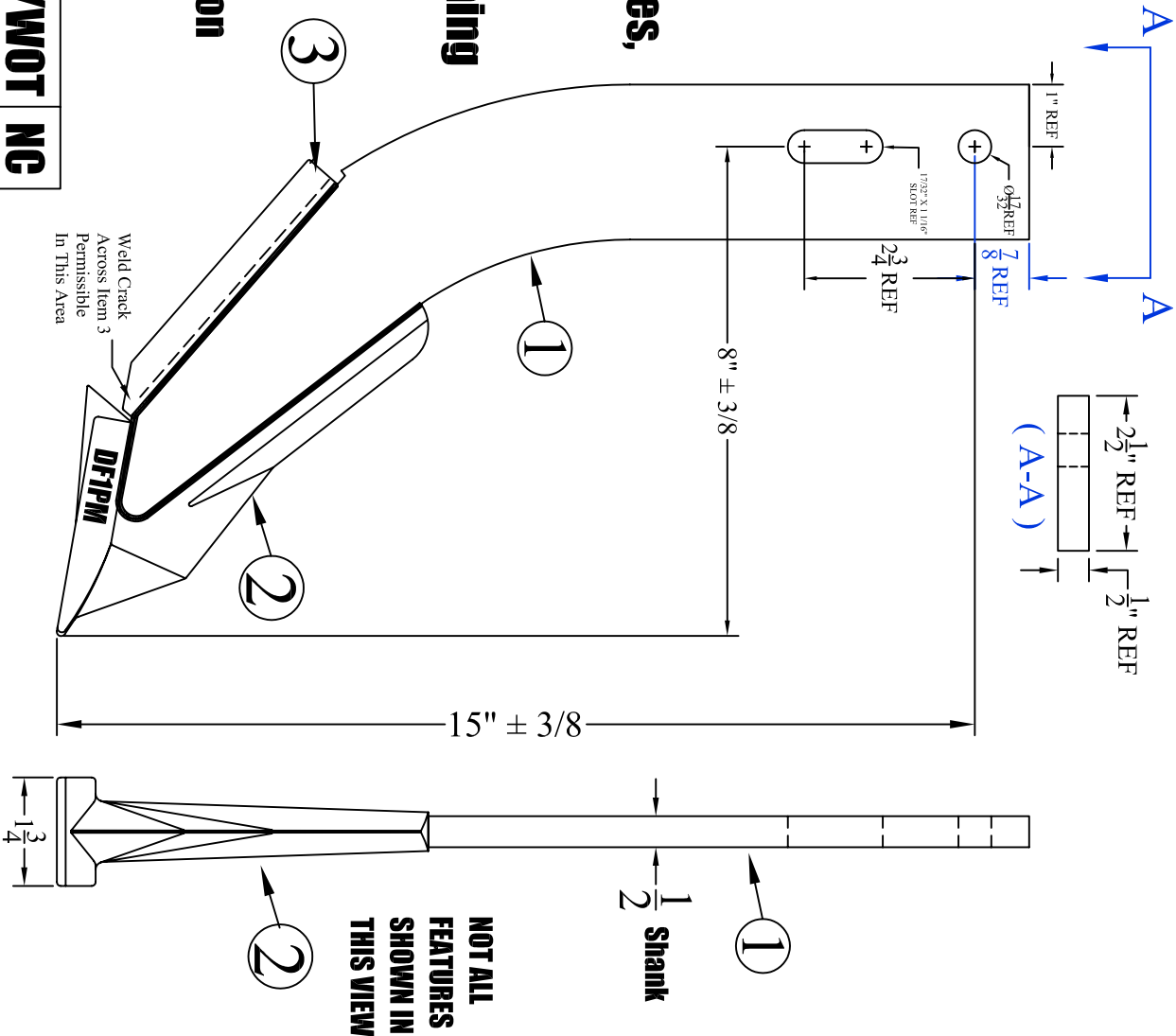
DRAWN BY: **SHORES** DATE: **4/15/10**

CHECKED BY: **DATE: -**

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

NOTE:
If Customer is installing tubes,
1/2" tubes must be
flattened slightly to fit.
3/8" tubes fit without flattening

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



(R)
DF-1PM/WOT NC

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

TOLERANCE UNLESS OTHERWISE NOTED	
0/0 +/-	1/16
0.00 +/-	.020
0.000 +/-	.010
0.0000 +/-	.001
ANGLE +/-	2

DRAWN BY: SHORES	DATE: 4/15/10
CHECKED BY: _	DATE: _

DESCRIPTION
KNIFE, DF-1PM 2008 POINT, with tube saver, NO TUBE

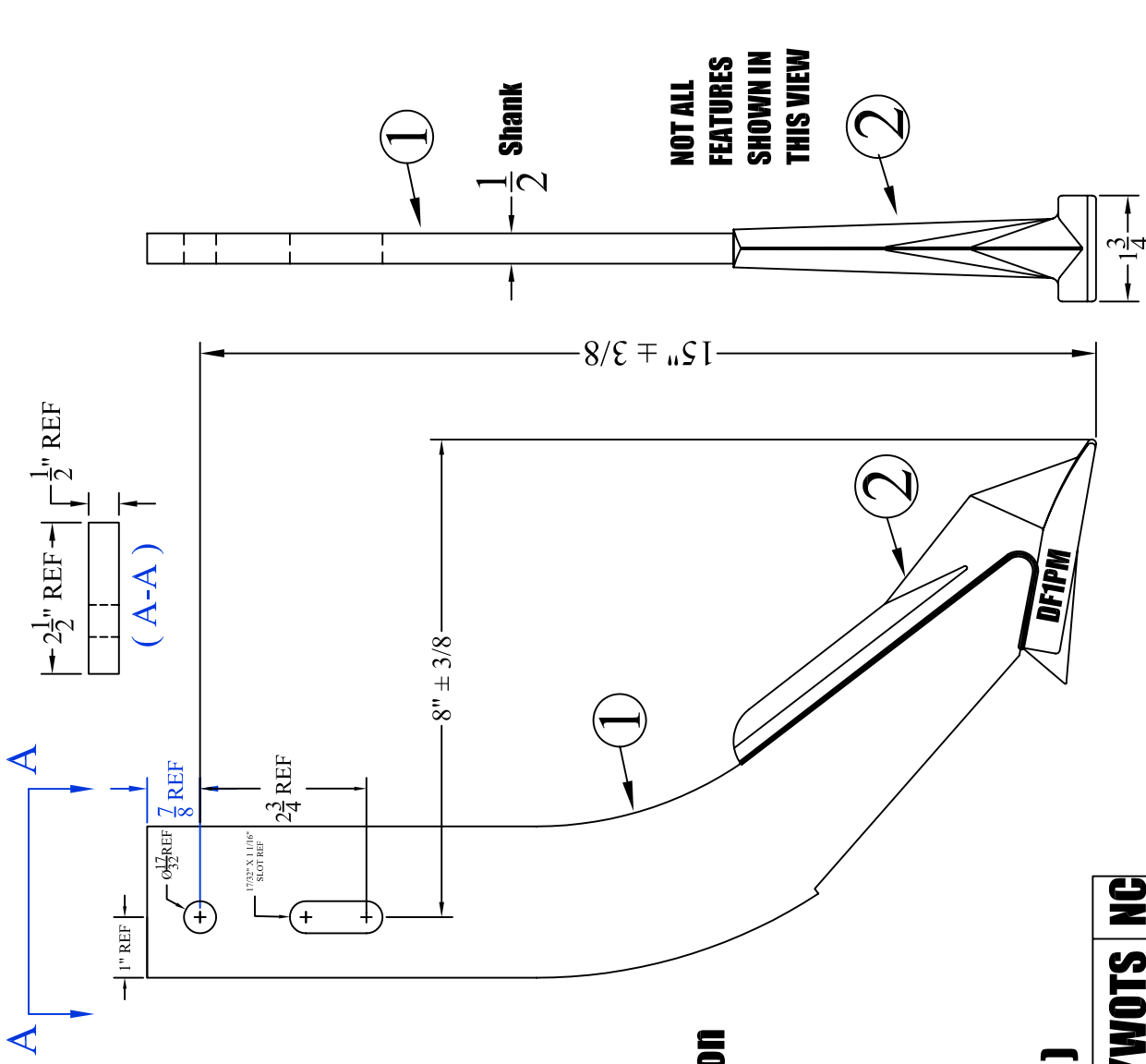
MATERIAL
WELDMENT

PART NO.
DF-1PM/WOT (R)

NOT ALL FEATURES SHOWN IN THIS VIEW

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

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



(R)

DF-1PM/WOTS NC

SHIELD
 AGRICULTURAL EQUIPMENT

DRAWN BY: **SHORES** DATE: **4/15/10**
 CHECKED BY: **_** DATE: **_**

PART NO. **DF-1PM/WOTS (R)** REV. **NC**

TOLERANCE UNLESS OTHERWISE NOTED

0/0 +/-	1/16
0.00 +/-	.020
0.000 +/-	.010
0.0000 +/-	.001
ANGLE +/-	2

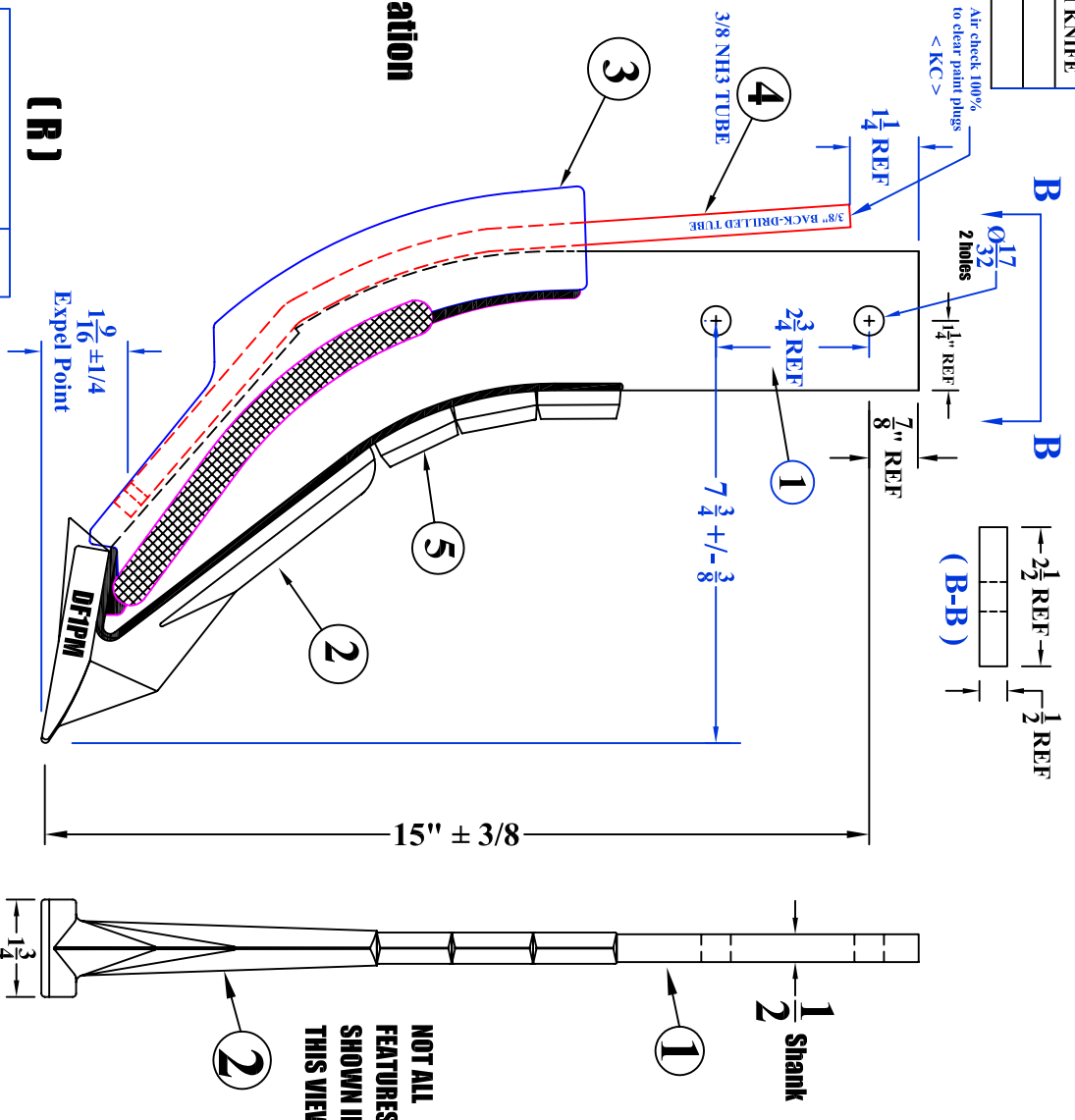
REV.	BY	DATE	DESCRIPTION
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-

DESCRIPTION
KNIFE, DF-1PM 2008 POINT, without tube saver, NO TUBE

MATERIAL **WELDMENT**

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

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



DF-1PM/ST NG

< KC > Key Characteristic

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

DESCRIPTION
DF Strip Till knife with 3/8" back-drilled NH3 tube

MATERIAL
WELDMENT

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

SHIELD
AGRICULTURAL EQUIPMENT

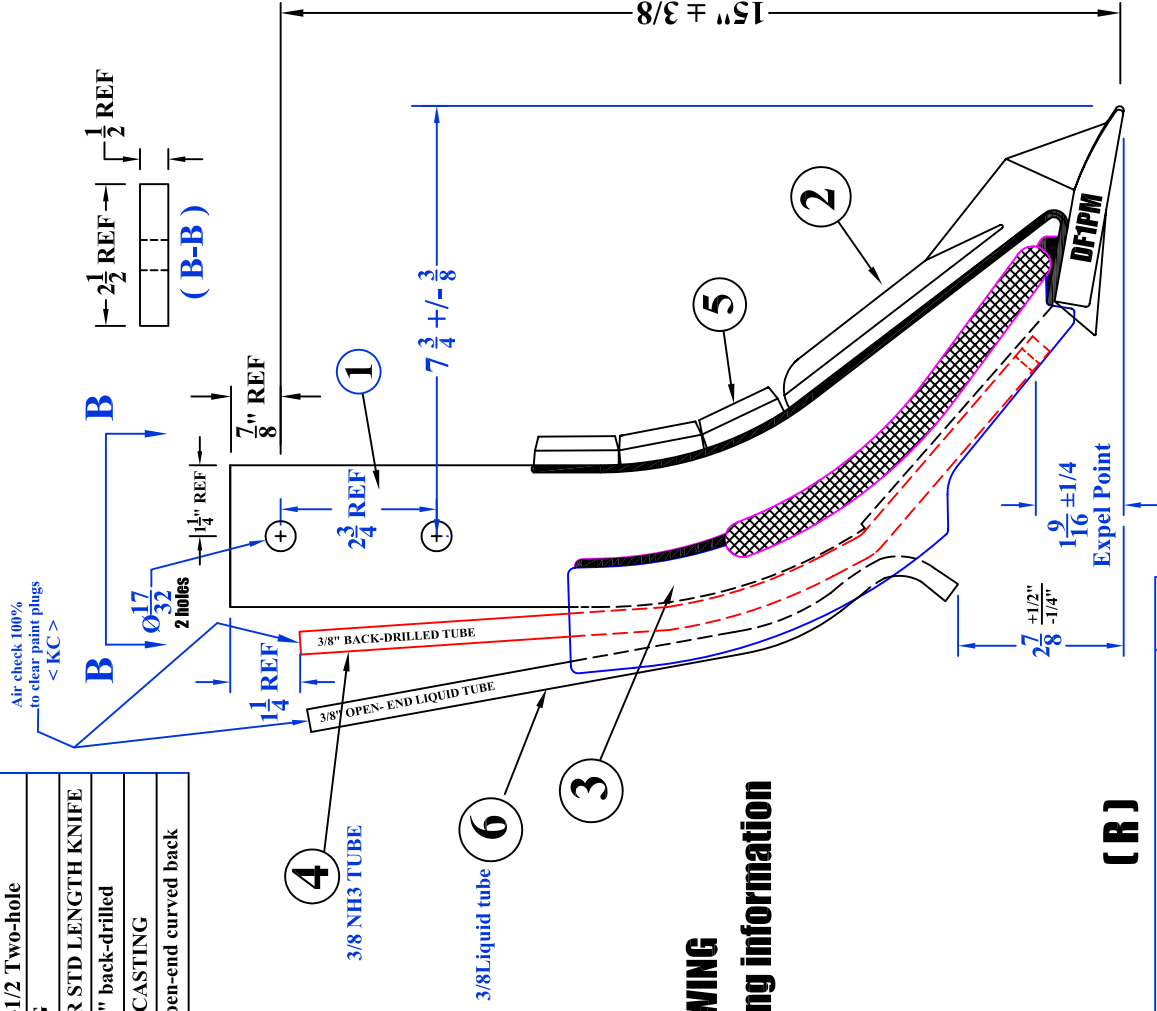
DRAWN BY: **SHORES** DATE: **11/15/09**

CHECKED BY: _____ DATE: _____

PART NO.
DF-1PM/ST (R)

REV.
NG

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**

(R)

< KC > Key Characteristic

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

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

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

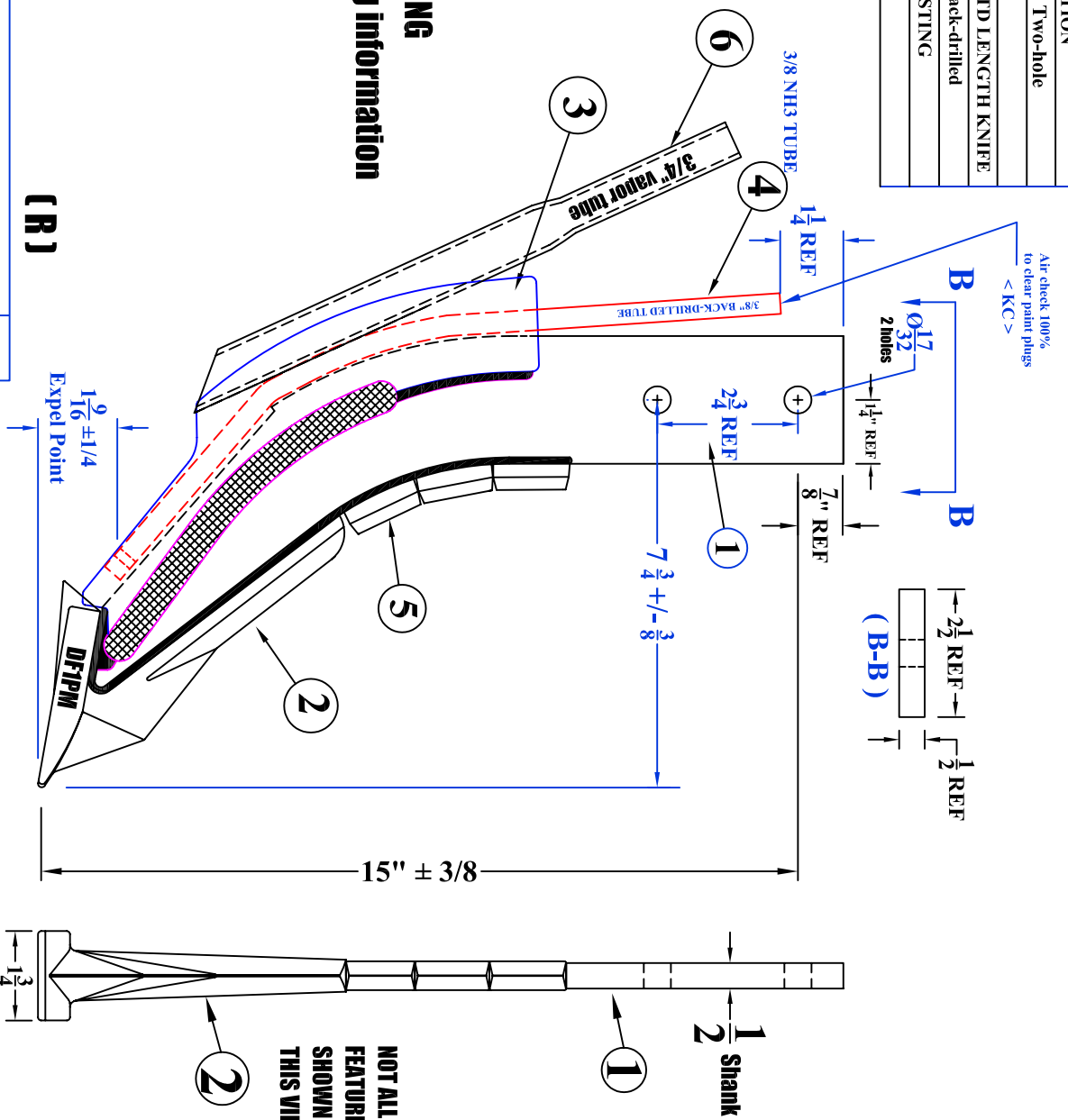
SHIELD
AGRICULTURAL EQUIPMENT

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

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

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
5	1	K2TBDAS34	3/4" Vapor tube

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



< KC > Key Characteristic

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

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

DESCRIPTION **DF Strip till knife with 3/8" back-drilled NH3 tube & 3/4" Vapor tube**

MATERIAL **WELDMENT**

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**

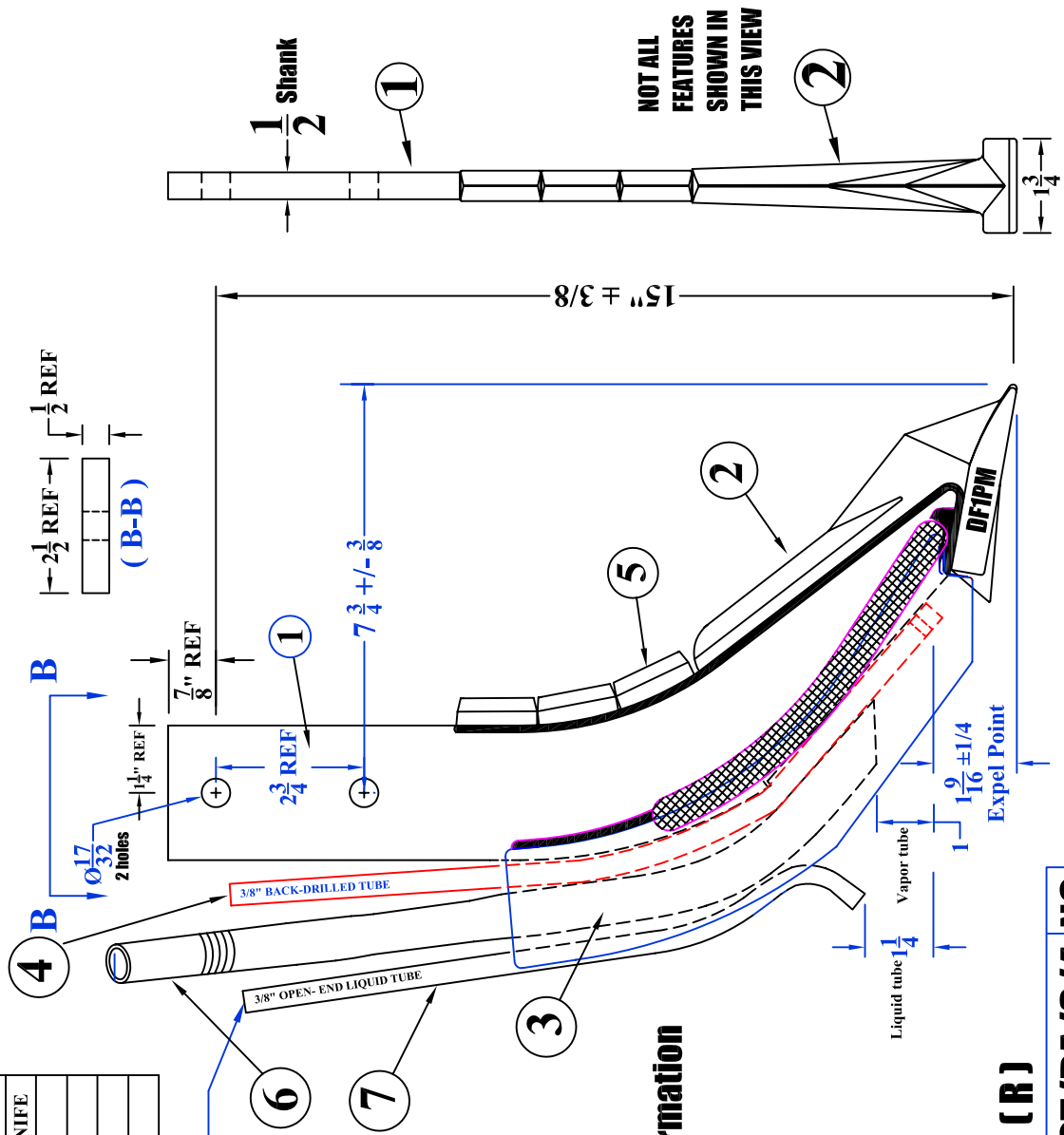
CHECKED BY: _____ DATE: _____

PART NO. **DF-1PM/ST/3/4DA (R)**

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

(R)

< KC > Key Characteristic

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

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

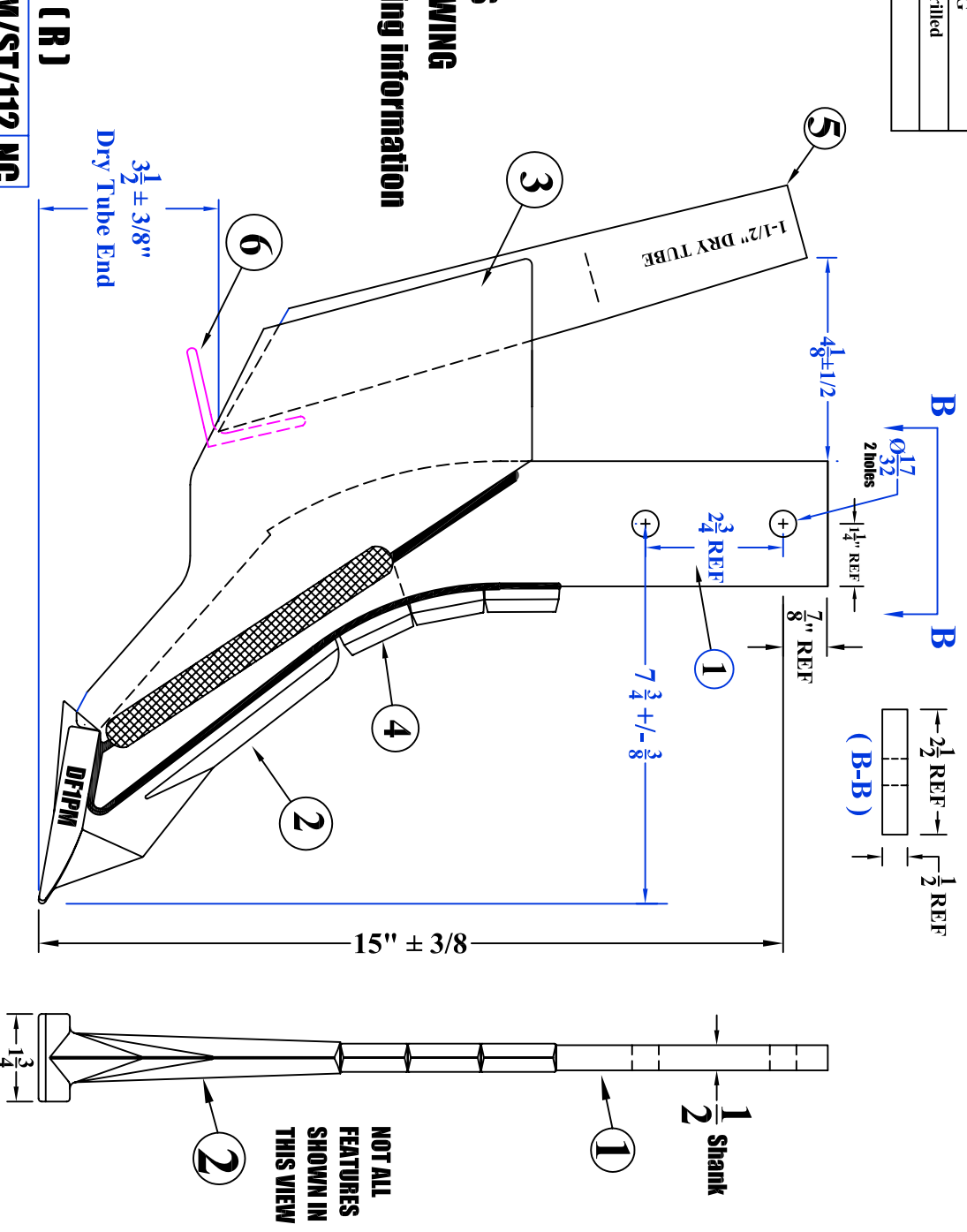
SHIELD
AGRICULTURAL EQUIPMENT

DRAWN BY: **SHORES** DATE: **11/15/09**
 CHECKED BY: _____ DATE: _____

DESCRIPTION	MATERIAL	WELDMENT	PART NO.	REV.
DF Strip Till knife with 3/8" X 3/4 X 3/8" tubes			DF-1PM/ST/DA/3/4 (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-3	SIDE PLATE FOR STD LENGTH KNIFE
4	.75	KTWS-01	SHANK GUARD, CASTING
5	1	K4TB112DA	KNIFE TUBE, 3/8" back-drilled
6	1	ST23175B	1.5" DRY BAFFLE

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



< KC > Key Characteristic **DF-1PM/ST/112 NC**

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

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

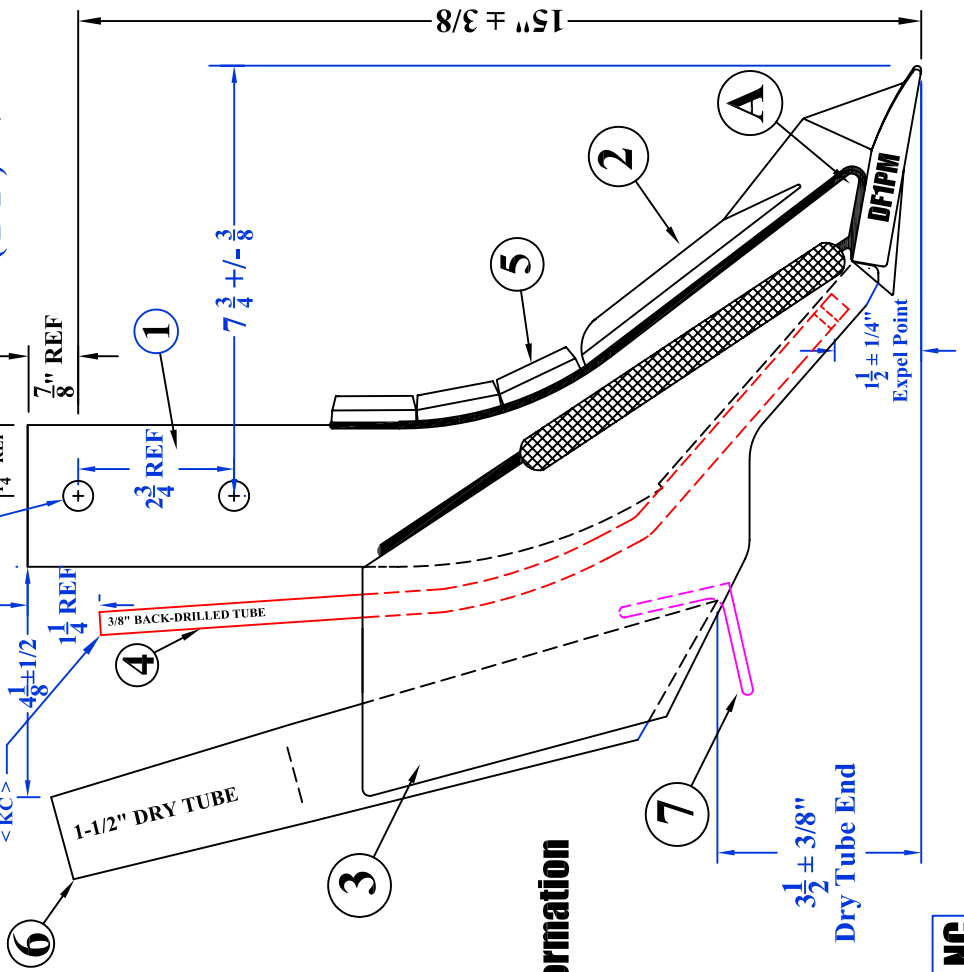
SHIELD
 AGRICULTURAL EQUIPMENT

DRAWN BY: **SHORES** DATE: **11/15/09**

CHECKED BY: DATE:

DESCRIPTION	MATERIAL	PART NO.	REV.
DF Strip Till knife with 1-1/2" Dry Tube	WELDMENT	DF-1PM/ST/112 (R)	NC

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
 To remove proprietary manufacturing information**

< KC > Key Characteristic **DF-1PM/ST/112DA NC** (R)

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

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	REVISION
DF Strip Till knife with 3/8" back-drilled NH3 tube & 1-1/2" Dry Tube	WELDMENT	NC
	PART NO.	DF-1PM/ST/112DA (R)

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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

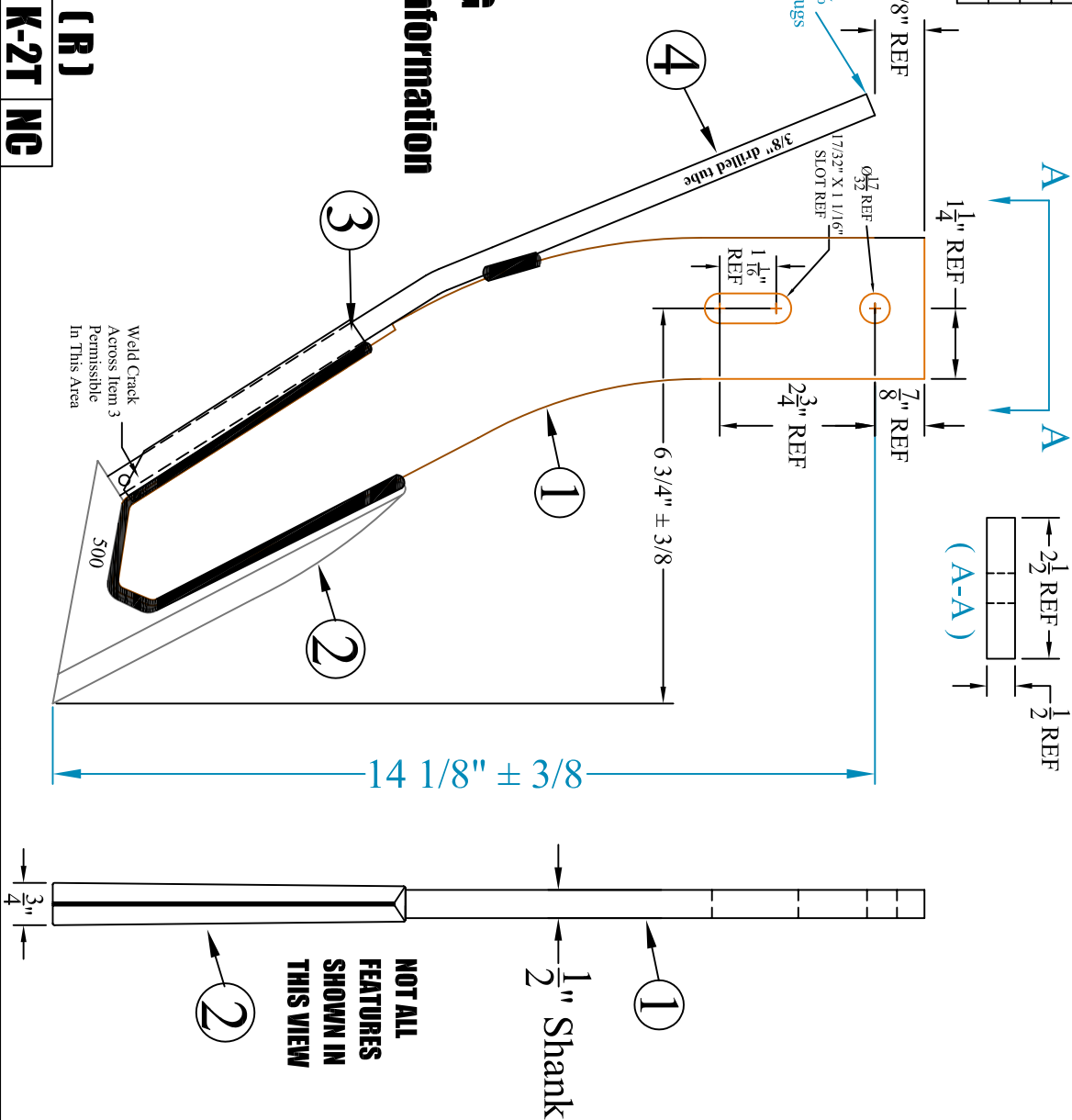
Drawings for knives following this page are in the order shown in this table

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/1/2A/1/2DA/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-4DANNEW	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, 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



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

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-	-	-	-
REV.	BY	DATE	

TOLERANCE UNLESS OTHERWISE NOTED

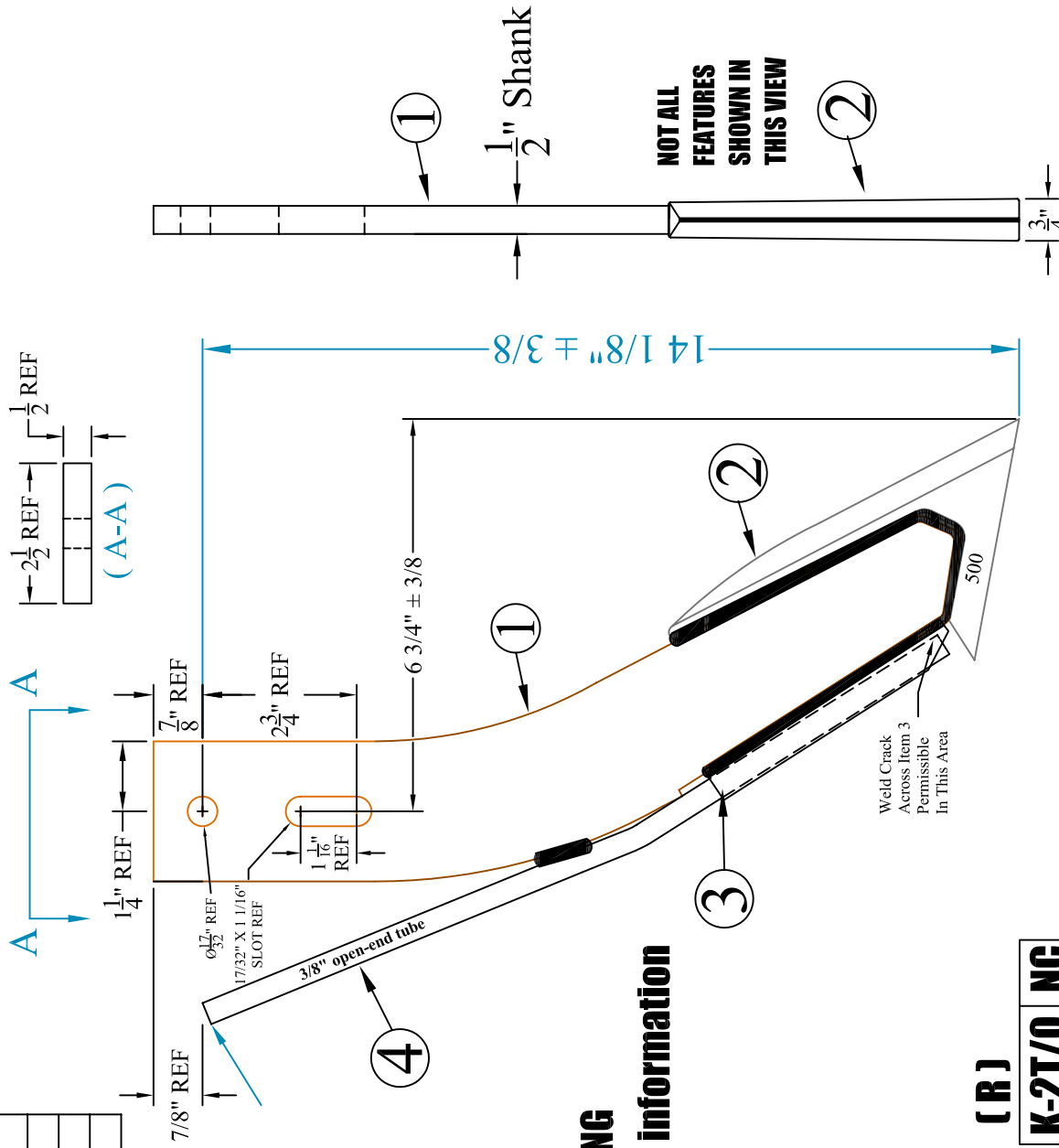
0/0 +/-	1/16
0.00 +/-	.020
0.000 +/-	.010
0.0000 +/-	.001
ANGLE +/-	2

SHIELD	
AGRICULTURAL EQUIPMENT	
DRAWN BY: SHORES	DATE: 4/15/10
CHECKED BY: _____	DATE: _____

DESCRIPTION	KNIFE, K-2T, 3/8" DRILLED TUBE	MATERIAL	WELDMENT
PART NO.	K-2T (R)	REV.	NG

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

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



**(R)
 K-2T/O NC**

TOLERANCE UNLESS OTHERWISE NOTED
0/0 +/- 1/16
0.00 +/- .020
0.000 +/- .010
0.0000 +/- .001
ANGLE +/- 2

SHIELD
 AGRICULTURAL EQUIPMENT

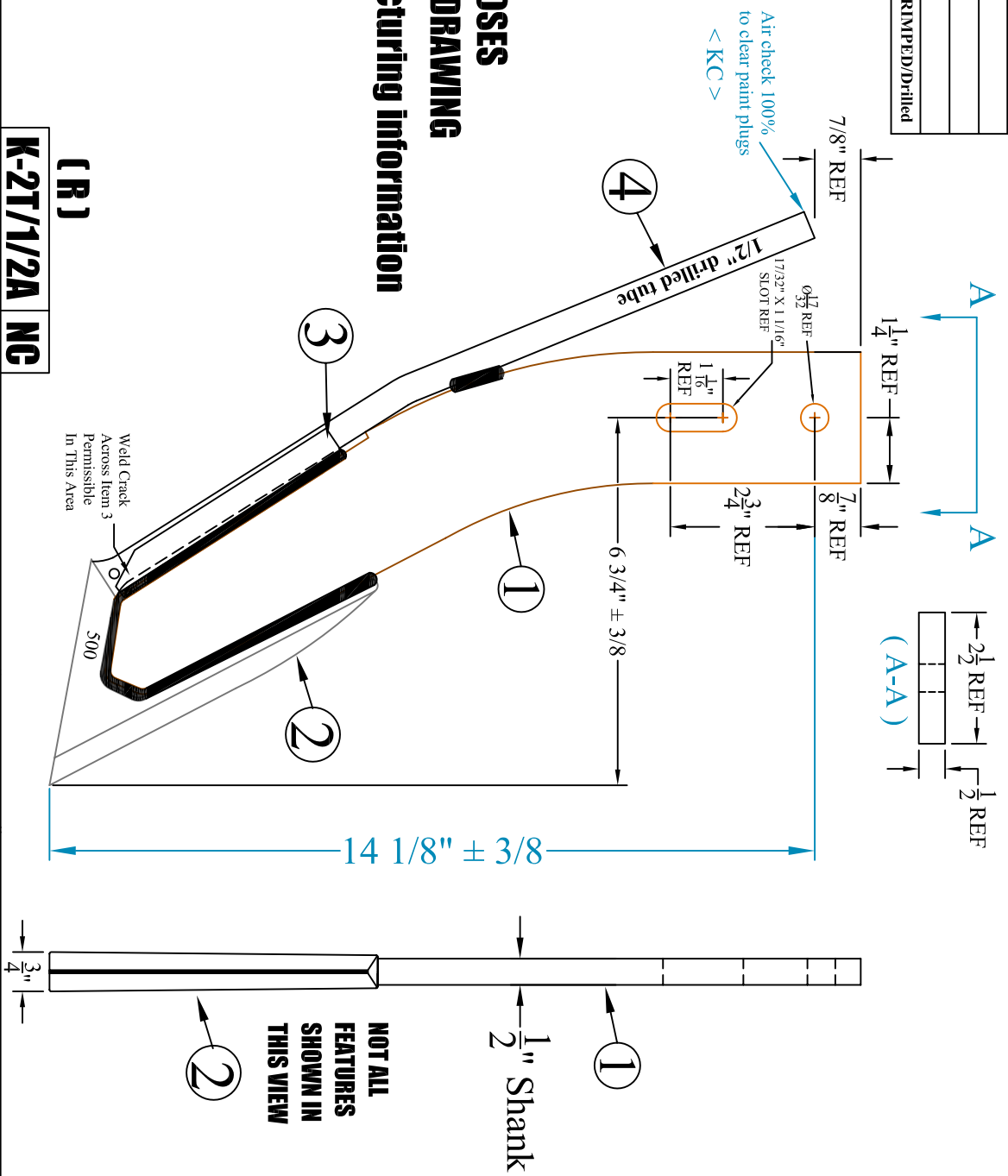
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CHECKED BY: _	DATE: _

PART NO.	REV.
K-2T/O (R)	NC

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

DESCRIPTION **KNIFE, K-2T, 3/8" OPEN-END TUBE** MATERIAL **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	K2TBI/2A	KNIFE TUBE, K-2T, 1/2" CRIMPED/Drilled



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

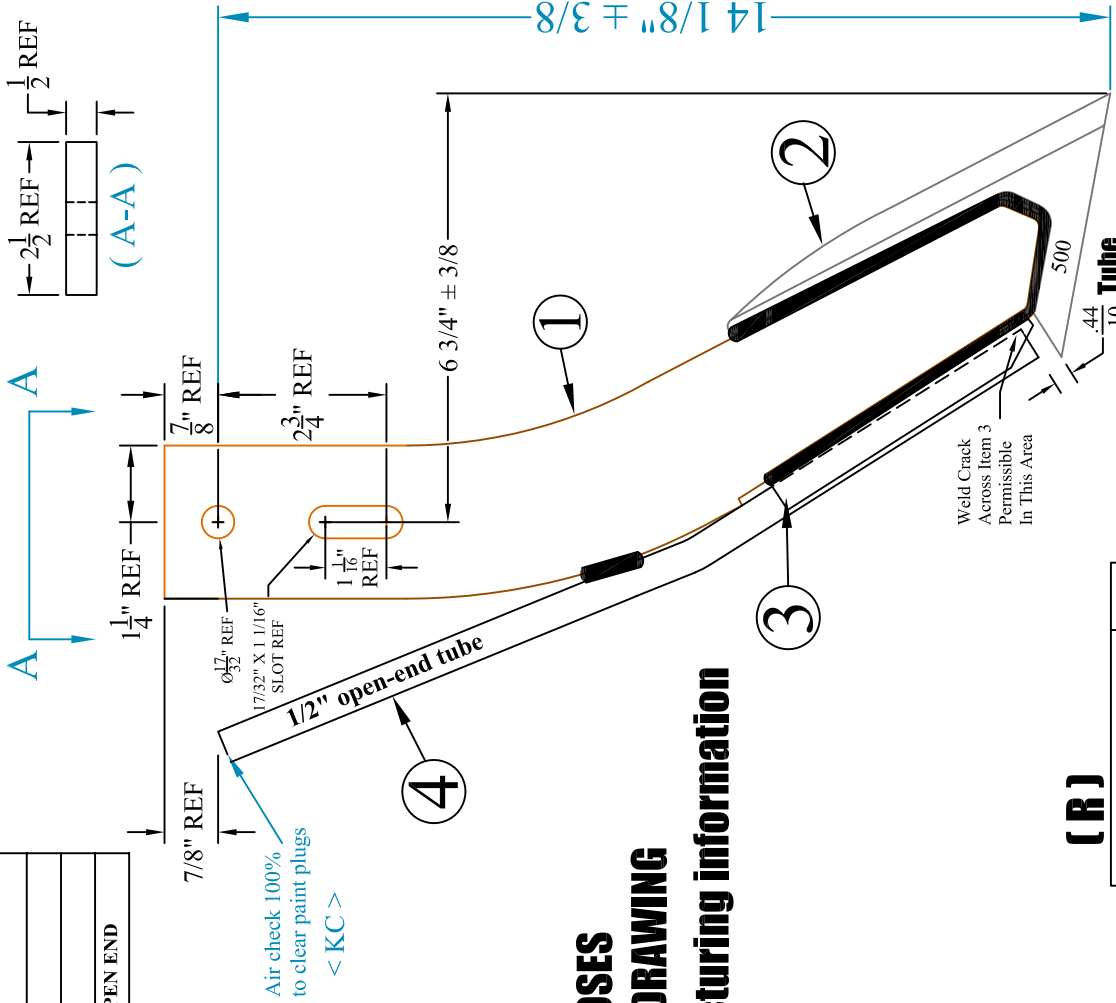
(R)
K-2T/1/2A NG

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

SHIELD AGRICULTURAL EQUIPMENT	
DRAWN BY: SHORES	DATE: 4/15/10
CHECKED BY: -	DATE: -

DESCRIPTION	KNIFE, K-2T, 1/2" DRILLED TUBE	MATERIAL	WELDMENT	PART NO.	K-2T/1/2A (R)	REV.	NG
-------------	--------------------------------	----------	----------	----------	-----------------	------	----

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



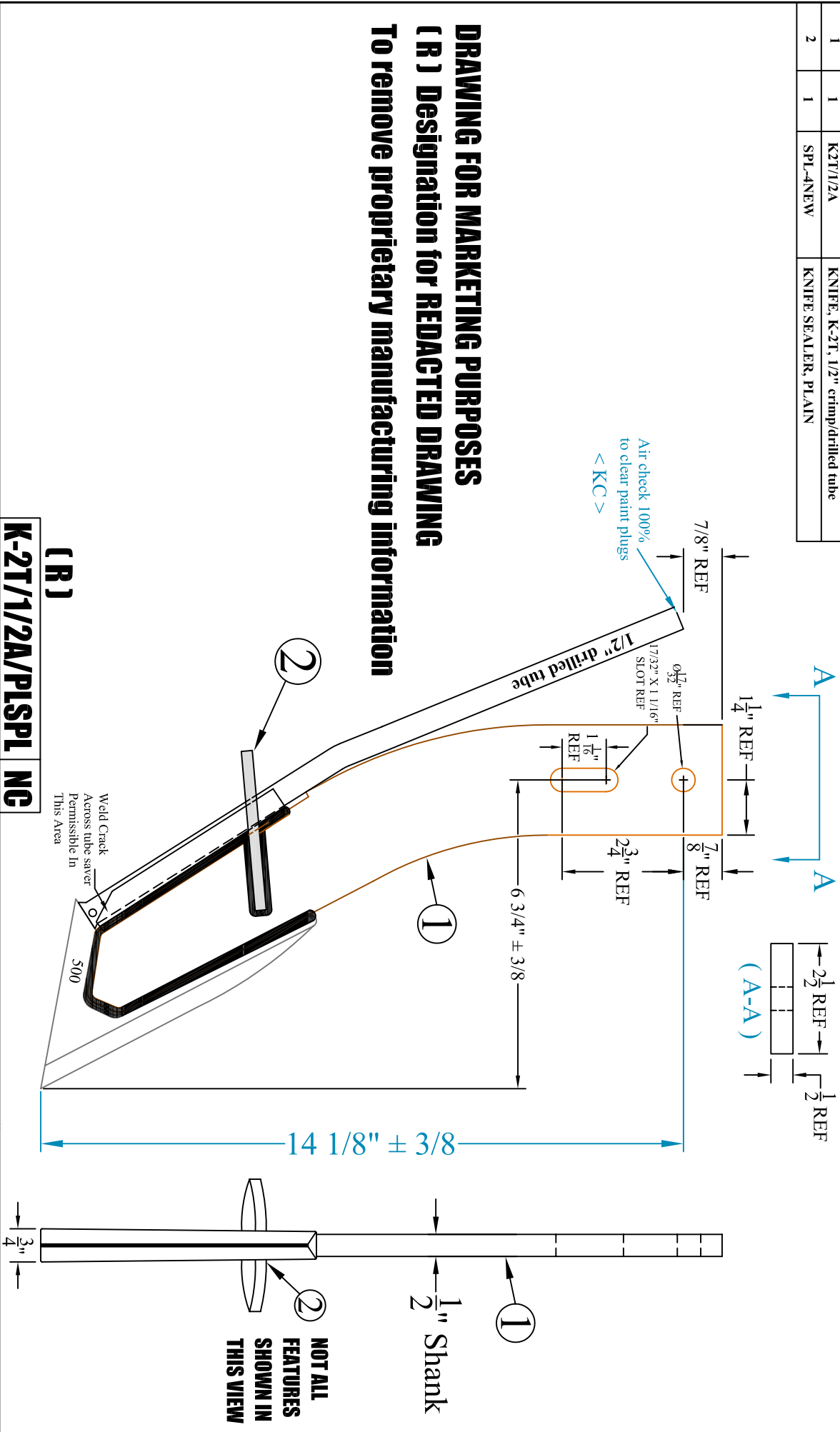
DRAWING FOR MARKETING PURPOSES
(R) Designation for REDACTED DRAWING
To remove proprietary manufacturing information

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

REV.	BY	DATE	DESCRIPTION	MATERIAL	DESCRIPTION	DATE	DATE	DATE	REV.
-	-	-	-	-	-	-	-	-	NC
-	-	-	-	-	-	-	-	-	NC
-	-	-	-	-	-	-	-	-	NC
-	-	-	-	-	-	-	-	-	NC
DESCRIPTION	KNIFE, K-2T, 1/2" OPEN-END TUBE				WELDMENT				REV.
					K-2T/1/2A/O (R)				
					SHIELD AGRICULTURAL EQUIPMENT				
					TOLERANCE UNLESS OTHERWISE NOTED				
					0/0 +/- .1/16				
					0.00 +/- .020				
					0.000 +/- .010				
					0.0000 +/- .001				
					ANGLE +/- .2				
					DRAWN BY: SHORES				
					DATE: 4/15/10				
					CHECKED BY: -				
					DATE: -				
					PART NO.				
					K-2T/1/2A/O (R)				

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

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

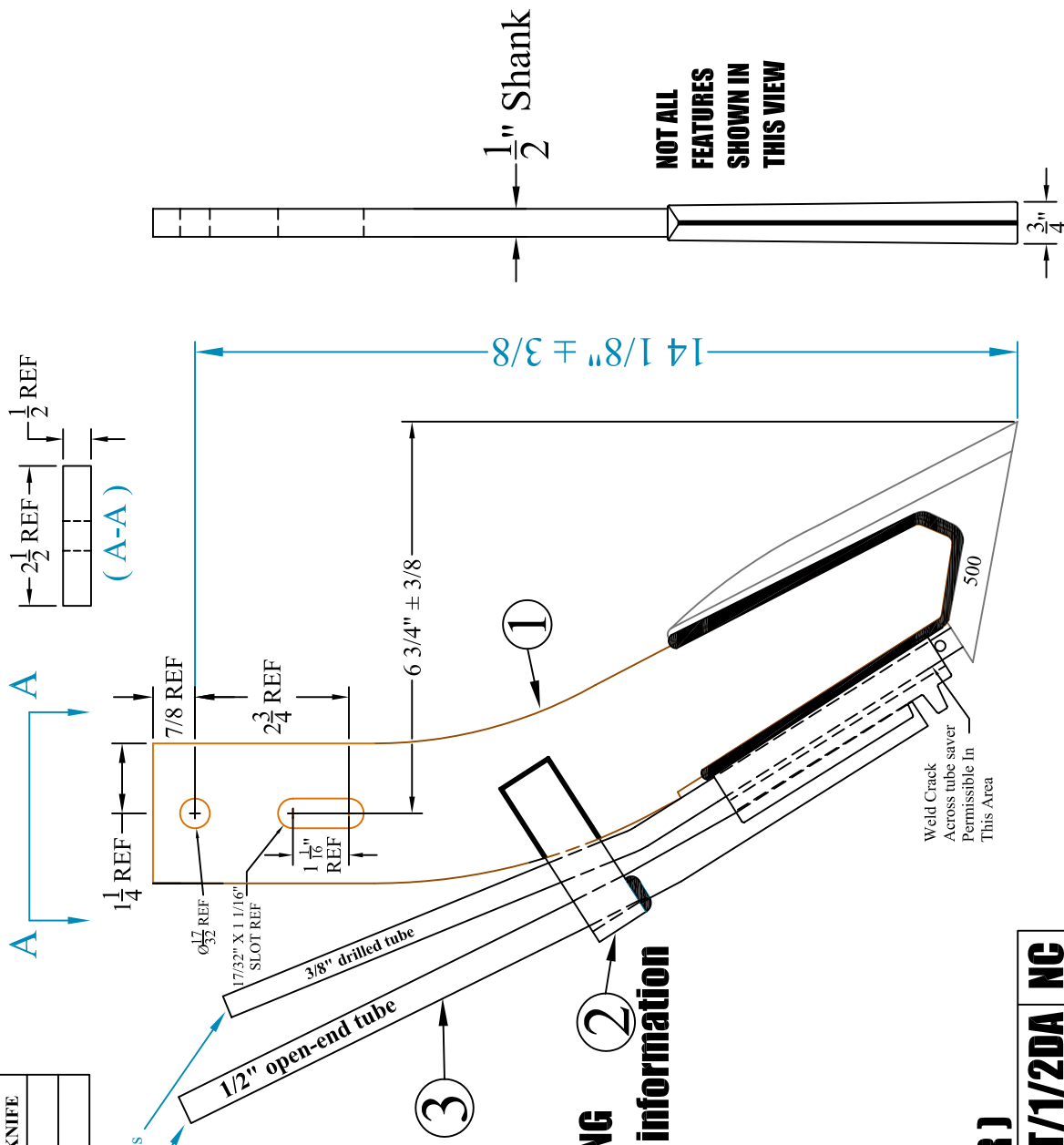


REV.	BY	DATE	DESCRIPTION	TOLERANCE UNLESS OTHERWISE NOTED	DRAWN BY:	DATE:	CHECKED BY:	DATE:	PART NO.	REV.
-	-	-	-	0/0 +/- 1/16	SHORES	4/15/10	-	-	K-2T/1/2A/PLSPL (R)	NG
-	-	-	-	0.00 +/- .020						
-	-	-	-	0.000 +/- .010						
-	-	-	-	ANGLE +/- 2						
DESCRIPTION				MATERIAL			REV.			
KNIFE, K-2T, 1/2"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

SHIELD
AGRICULTURAL EQUIPMENT

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	K2TB1/2A/O	KNIFE TUBE, 1/2" 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/1/2DA NC

TOLERANCE UNLESS OTHERWISE NOTED
0/0 +/- 1/16
0.00 +/- .020
0.000 +/- .010
0.0000 +/- .001
ANGLE +/- 2

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

SHIELD
AGRICULTURAL EQUIPMENT

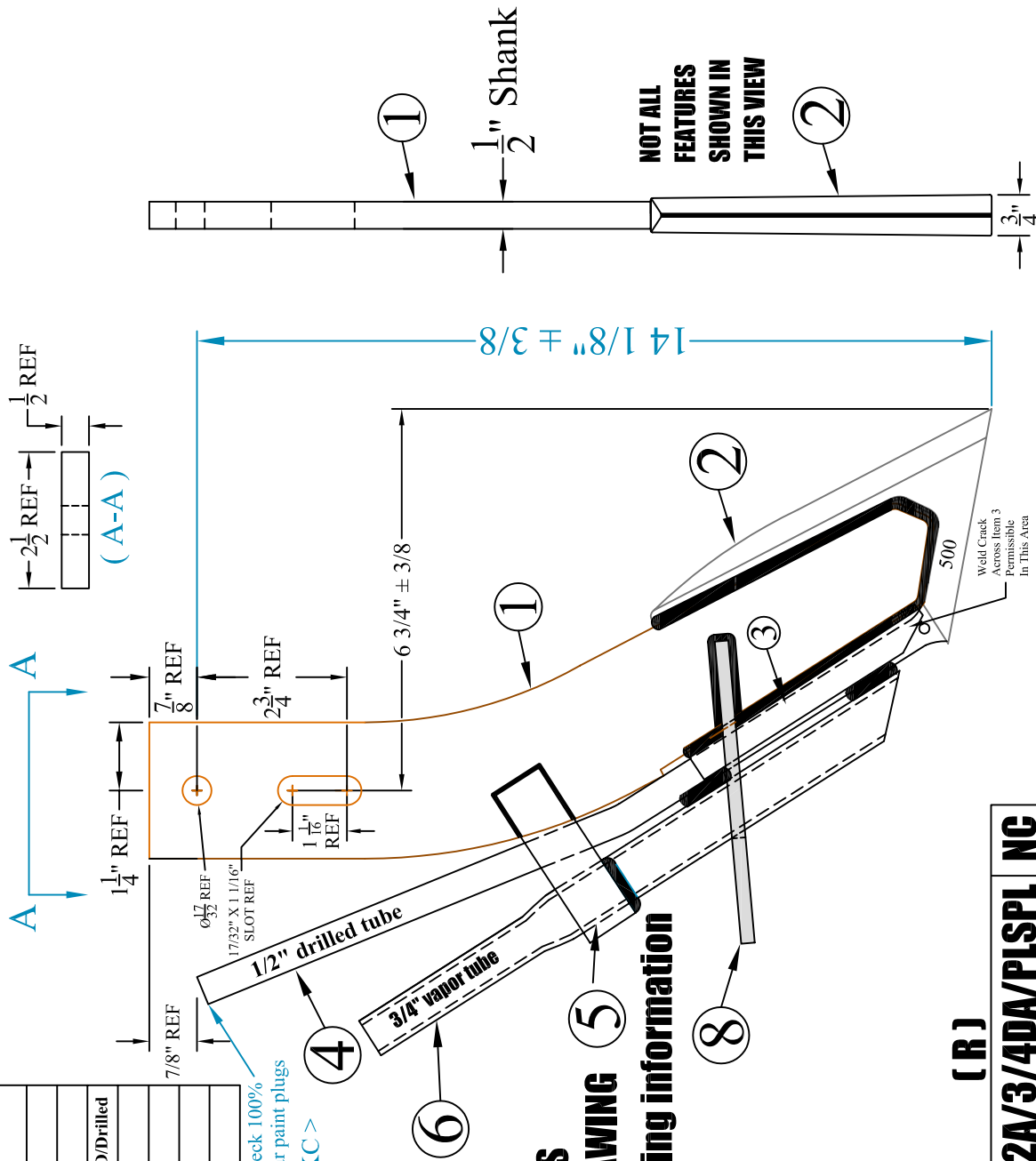
DRAWN BY: SHORES	DATE: 4/15/10
CHECKED BY: -	DATE: -

DESCRIPTION	MATERIAL	REV.
KNIFE, K-2T, 3/8" Drilled X 1/2" Open End Tubes	WELDMENT	NC
PART NO. K-2T/1/2DA (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	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 >

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



(R)

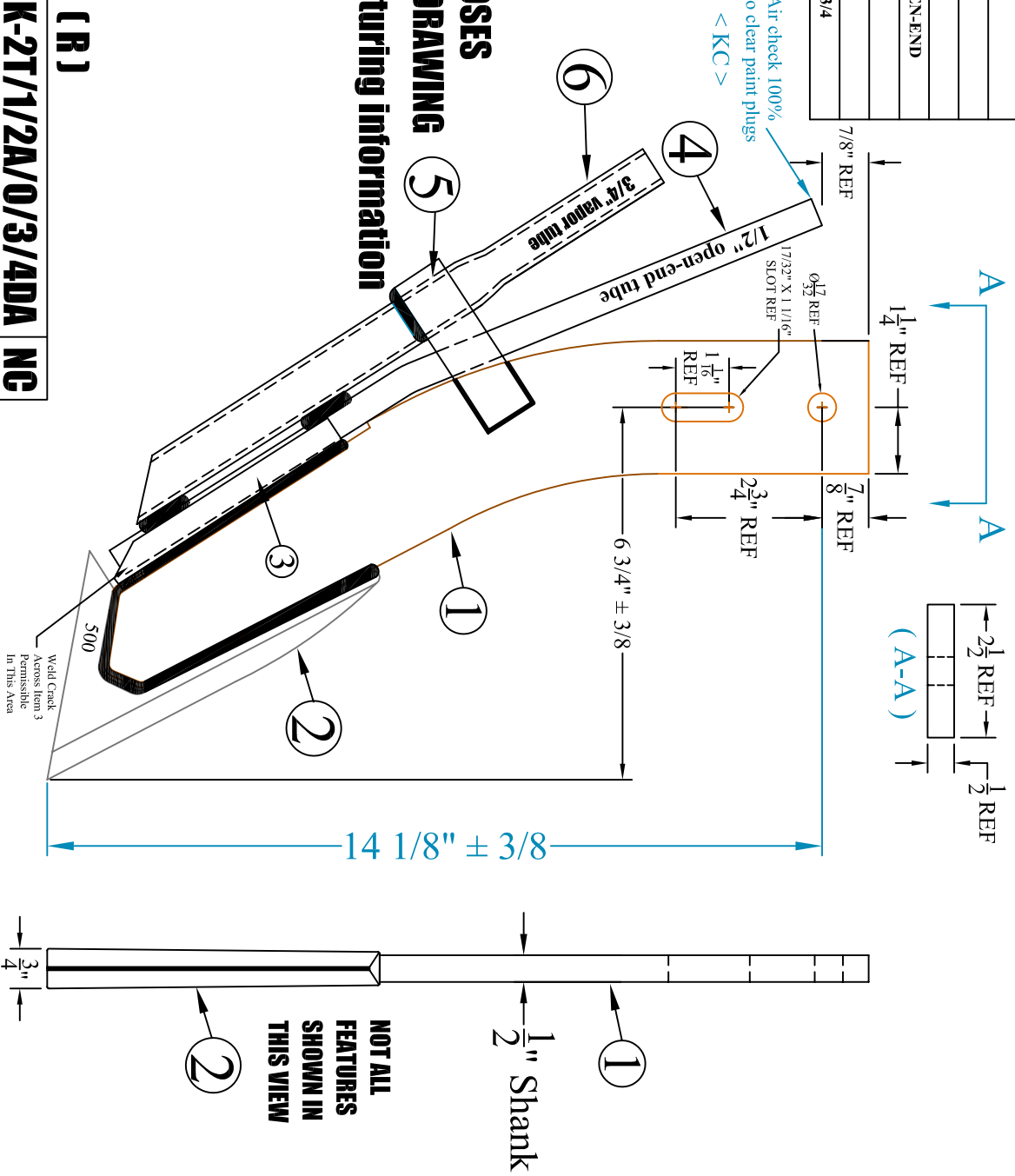
< KC > Key Characteristic

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

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

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	K2TBI/2A/O	KNIFE TUBE, K-2T, 1/2" OPEN-END
5	1	K4T1/2DAS	KNIFE STRAP
6	1	K2TBDAS/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

Air check 100%
to clear paint plugs
< KC >

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

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. K-2T/1/2A/O/3/4DA (R)

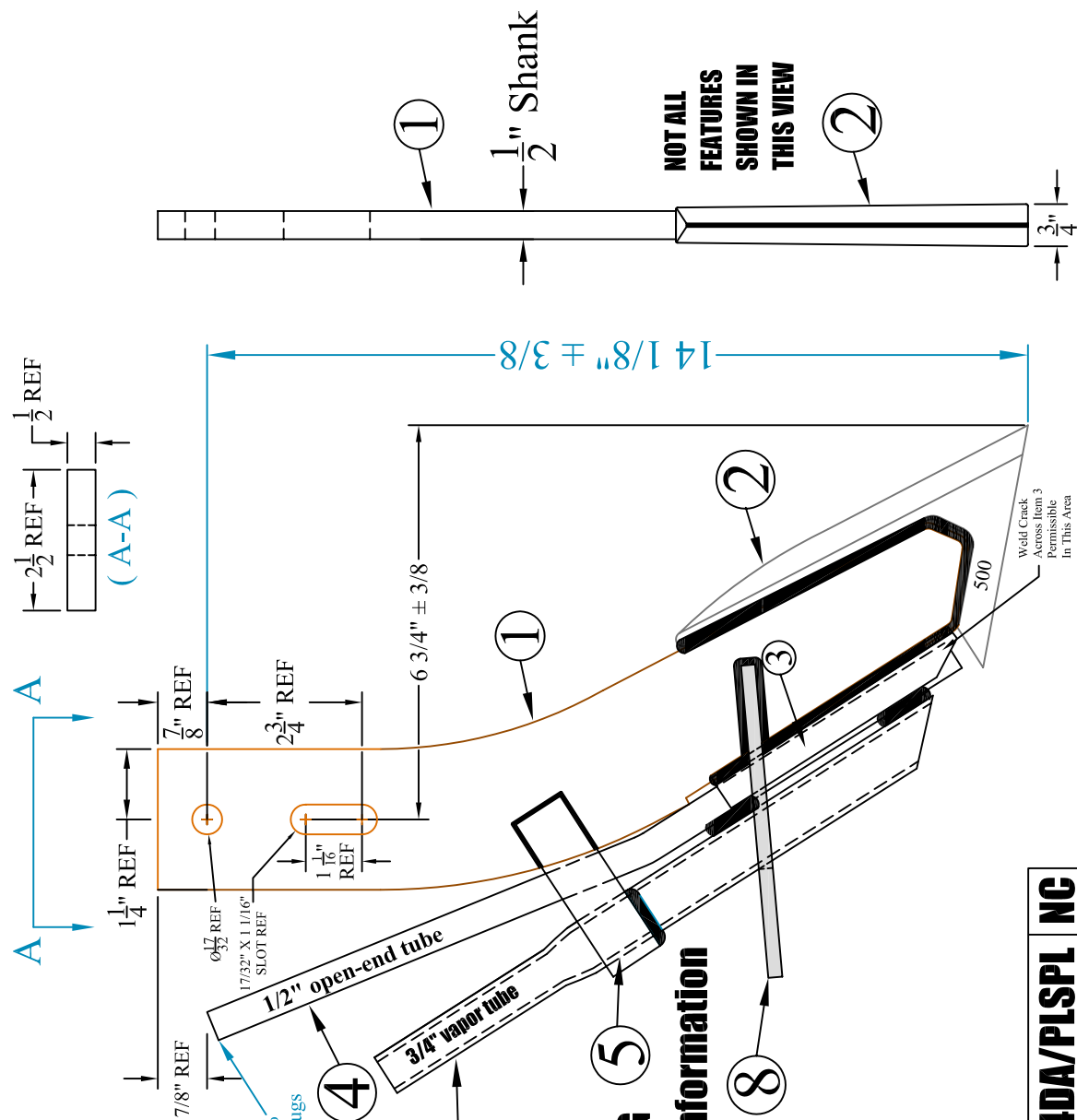
DESCRIPTION **KNIFE, K-2T, 1/2" open-end & 3/4" vapor tube**

MATERIAL **WELDMENT**

REV. NC

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	K4TT/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/O/3/4DA/PLSPL NG**

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

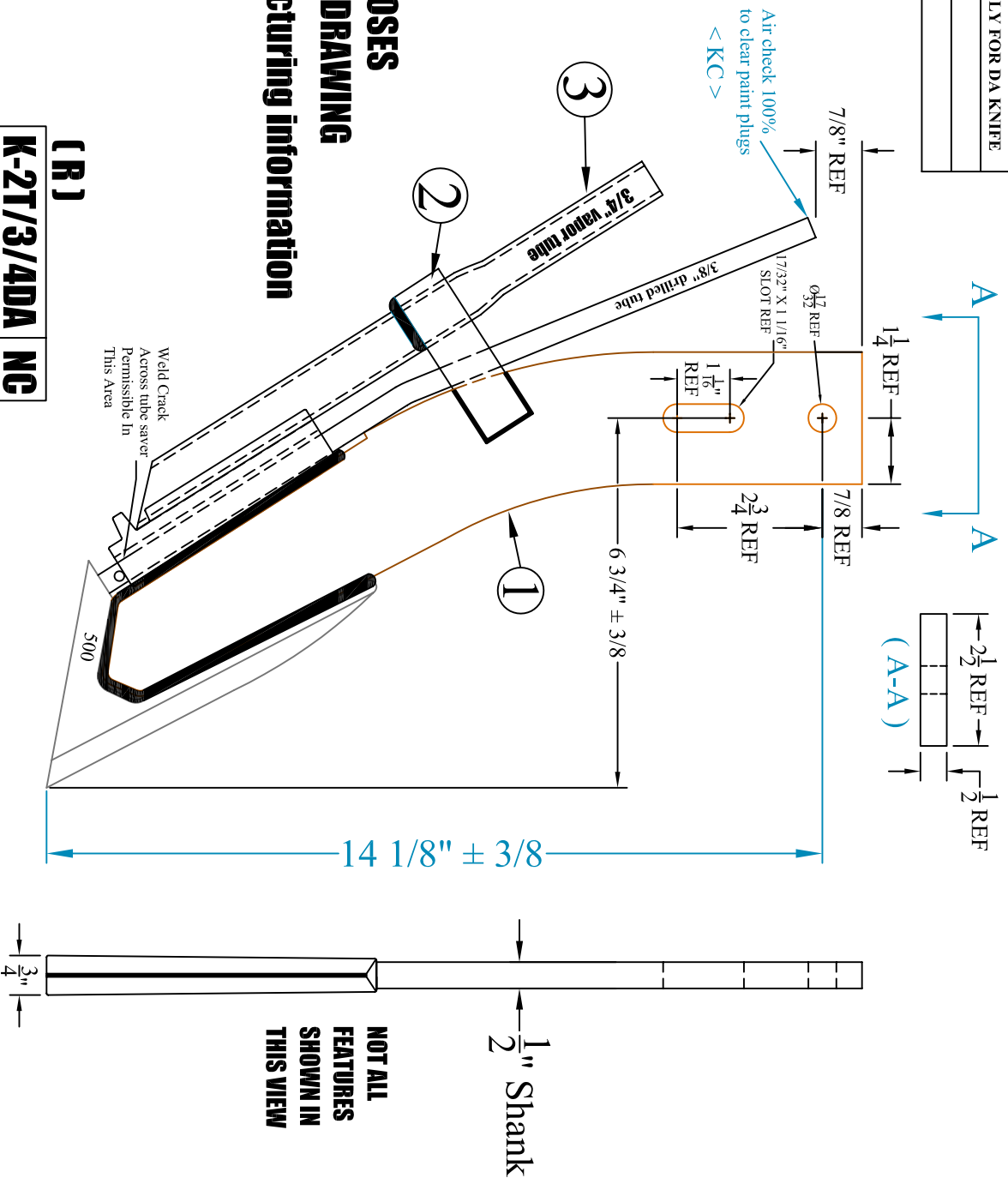
TOLERANCE UNLESS OTHERWISE NOTED
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 0.00 +/- .020
 0.000 +/- .010
 0.0000 +/- .001
 ANGLE +/- 2

SHIELD
 AGRICULTURAL EQUIPMENT

DRAWN BY: **SHORES** DATE: **4/15/10**
 CHECKED BY: **-** DATE: **-**

DESCRIPTION	MATERIAL	WELDMENT	PART NO.	REV.
KNIFE, K-2T, 1/2" open-end & 3/4" w/SEALER			K-2T/1/2A/O/3/4DA/PLSPL (R)	NC

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	K2TBD/3/4	KNIFE TUBE 3/4" Vapor



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

**(R)
K-2T/3/4DA NG**

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

TOLERANCE UNLESS OTHERWISE NOTED
 0/0 +/- 1/16
 0.00 +/- .020
 0.000 +/- .010
 0.0000 +/- .001
 ANGLE +/- 2

NOT ALL FEATURES SHOWN IN THIS VIEW

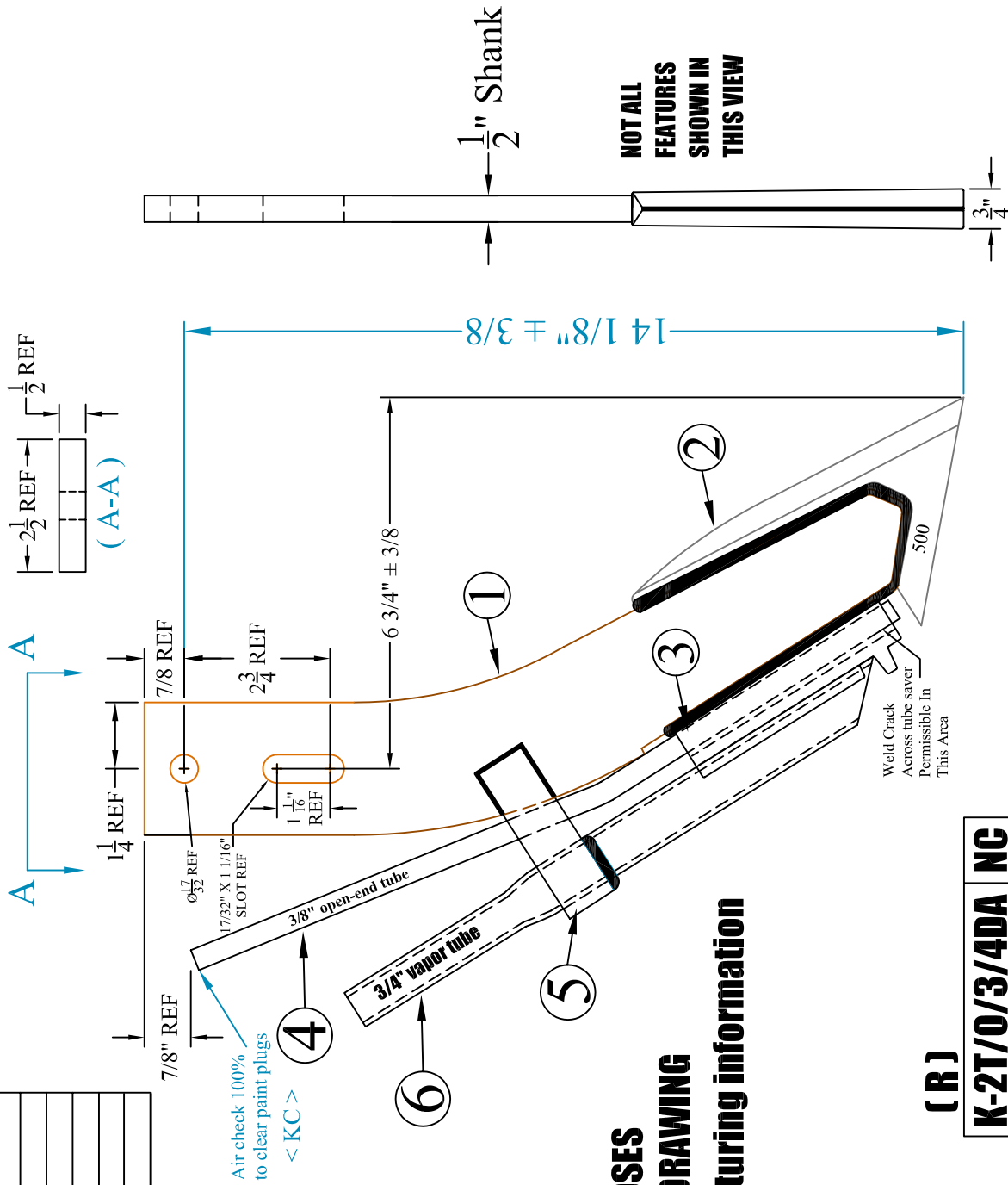
SHIELD
AGRICULTURAL EQUIPMENT

DRAWN BY: **SHORES** DATE: 4/15/10
 CHECKED BY: DATE:

PART NO. **K-2T/3/4DA (R)** REV. **NG**

DESCRIPTION **KNIFE, K-2T, 3/8" DRILLED X 3/4" VAPOR TUBES** MATERIAL **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	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
0/0 +/- 1/16
0.00 +/- .020
0.000 +/- .010
0.0000 +/- .001
ANGLE +/- 2

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

SHIELD
 AGRICULTURAL EQUIPMENT

DRAWN BY: **SHORES** DATE: **4/15/10**
 CHECKED BY: **-** DATE: **-**

PART NO. **K-2T/O/3/4DA (R)** REV. **NC**

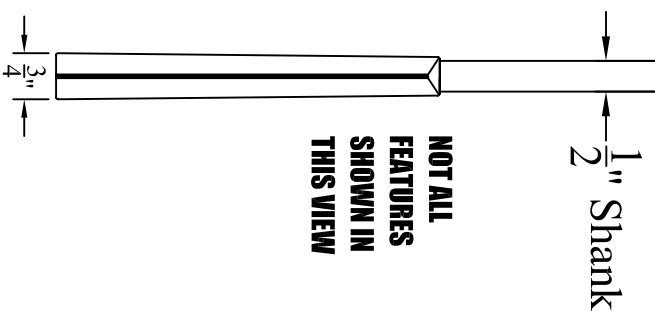
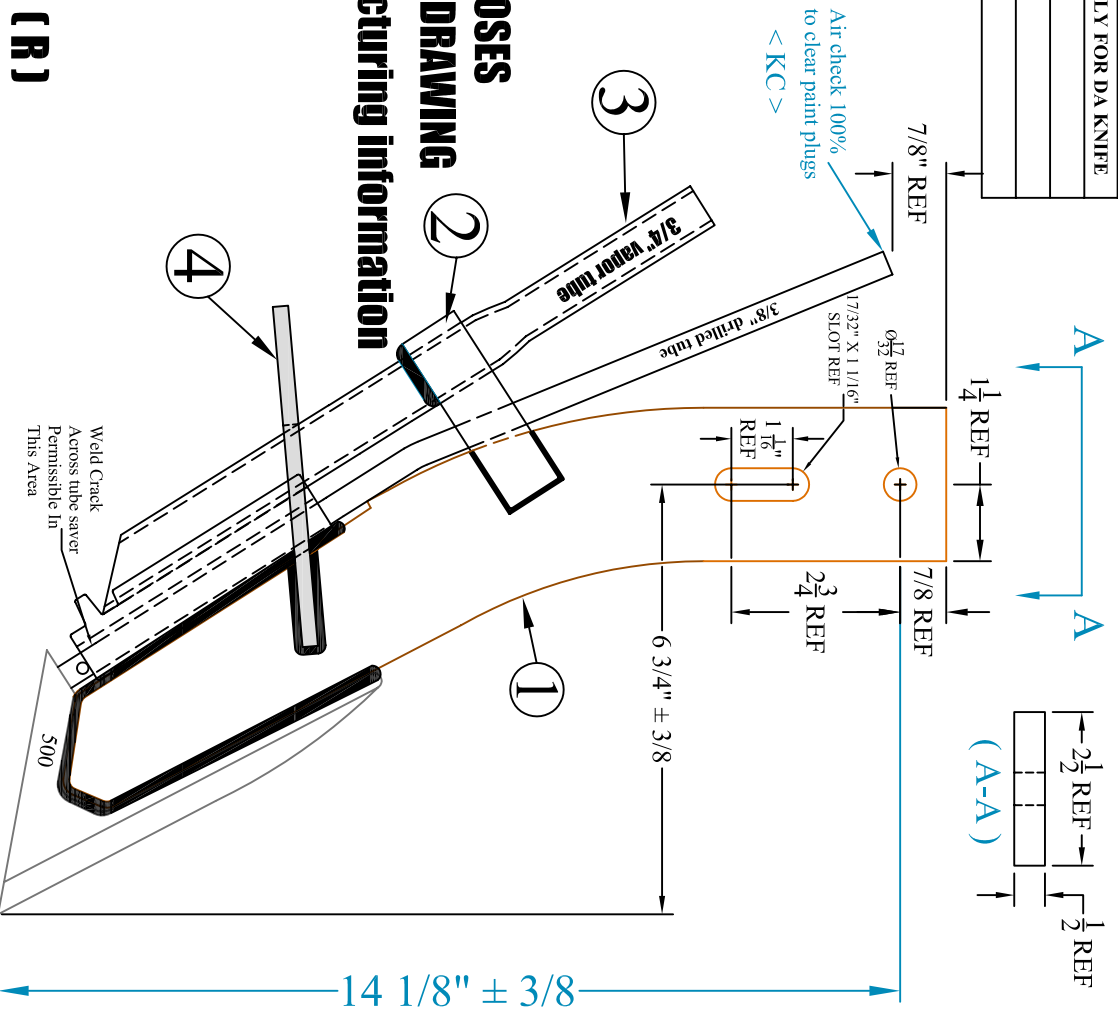
DESCRIPTION	MATERIAL	WELDMENT
KNIFE, K-2T, 3/8" open-end X 3/4" VAPOR TUBES		

ITEM #	QUAN.	PART #	DESCRIPTION
1	1	K-2T/DATS	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



NOT ALL
FEATURES
SHOWN IN
THIS VIEW

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

TOLERANCE UNLESS OTHERWISE NOTED
0/0 +/- 1/16
0.00 +/- .020
0.000 +/- .010
0.0000 +/- .001
ANGLE +/- 2

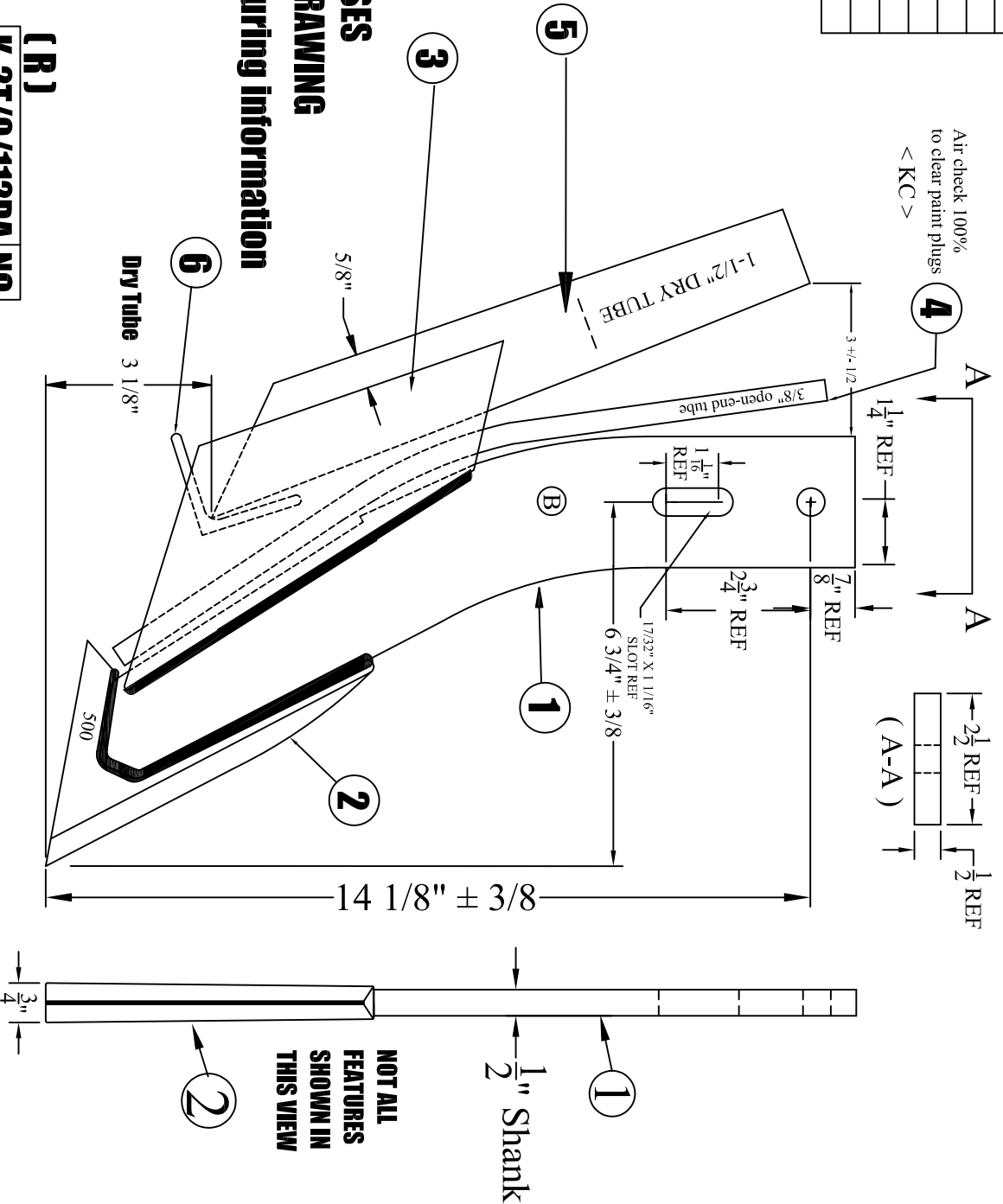
SHIELD
AGRICULTURAL EQUIPMENT

DRAWN BY: **SHORES** DATE: 4/15/10
CHECKED BY: DATE:

DESCRIPTION **KNIFE, K-2T, 3/8" DRILLED X 3/4" W/SEALER** MATERIAL **WELDMENT** PART NO. **K-2T/3/4DA/PLSPL (R)** REV. **NC**

ITEM #	QUAN.	PART #	DESCRIPTION
1	1	K2T-B	Knife Blank, K2T 1/2 X 2-1/2
2	1	500	Knife Point casting
3	2	K4TTARS-5	Side Plate for dry knives
4	1	TB-2/O	KNIFE TUBE
5	1	K4TB112DA	1-1/2" DRY TUBE
6	1	ST23175B	Dry tube baffle

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



< KC > Key Characteristic

(R)
K-2T/O/112DA NG

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

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

SHIELD
AGRICULTURAL EQUIPMENT

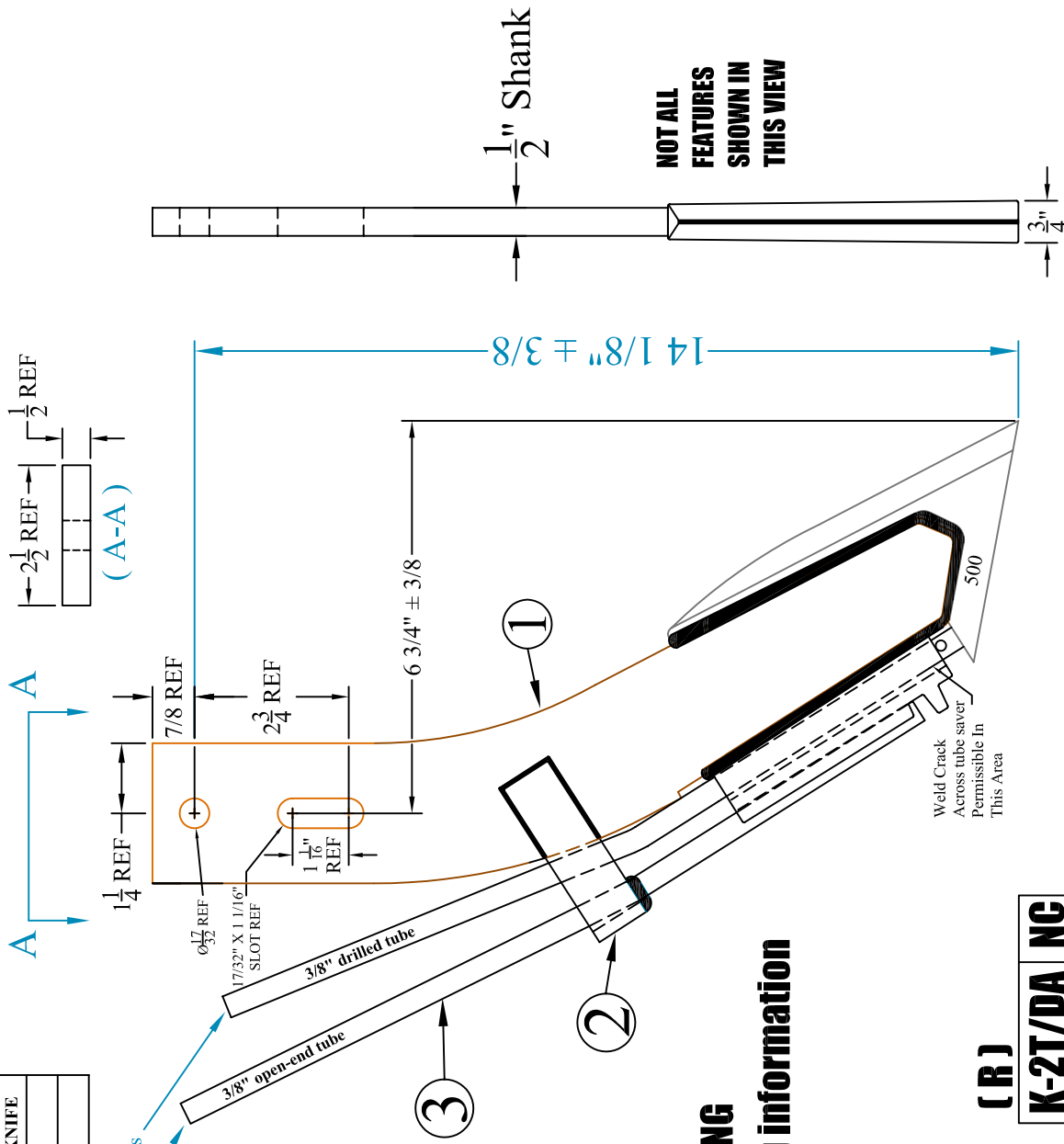
DRAWN BY: SHORES
DATE: 4/2/09

CHECKED BY: -
DATE: -

DESCRIPTION	MATERIAL	PART NO.	REV.
K-2T with 3/8" open-end tube and 1-1/2" dry tube	Weldment	K-2T/O/112DA (R)	NG

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

TOLERANCE UNLESS OTHERWISE NOTED
0/0 +/- 1/16
0.00 +/- .020
0.000 +/- .010
0.0000 +/- .001
ANGLE +/- 2

DESCRIPTION	DATE

REV.	BY	DATE

DESCRIPTION	MATERIAL

DESCRIPTION	DATE

DESCRIPTION	DATE

DESCRIPTION	DATE

DESCRIPTION	DATE

DESCRIPTION	DATE

DESCRIPTION	DATE

DESCRIPTION	DATE

DESCRIPTION	DATE

DESCRIPTION	DATE

SHIELD
 AGRICULTURAL EQUIPMENT

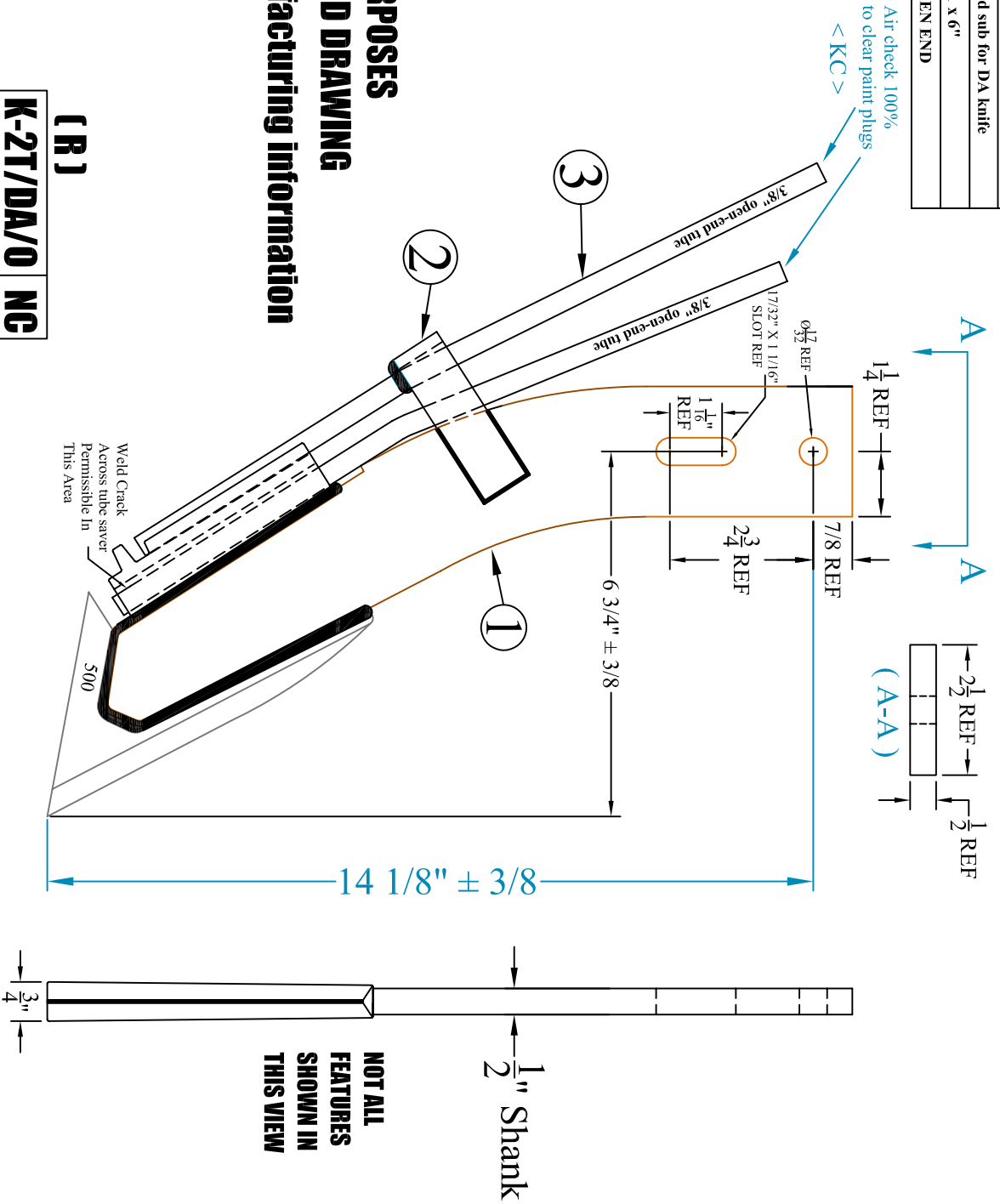
DRAWN BY: SHORES	DATE: 4/15/10
CHECKED BY: _	DATE: _

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

KNIFE, K-2T, 3/8" Drilled X 3/8" Open End Tubes

WELDMENT

ITEM #	QUAN.	PART #	DESCRIPTION
1	1	K-2T/DATS/O	KNIFE, K-2T, Open-end sub 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



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

(R)
K-2T/DA/O NG

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

TOLERANCE UNLESS OTHERWISE NOTED	
0/0 +/-	1/16
0.00 +/-	.020
0.000 +/-	.010
0.0000 +/-	.001
ANGLE +/-	2

DESCRIPTION	MATERIAL	PART NO.	REV.
KNIFE, K-2T, 3/8" Open-end X 3/8" Open End Tubes	WELDMENT	K-2T/DA/O (R)	NG

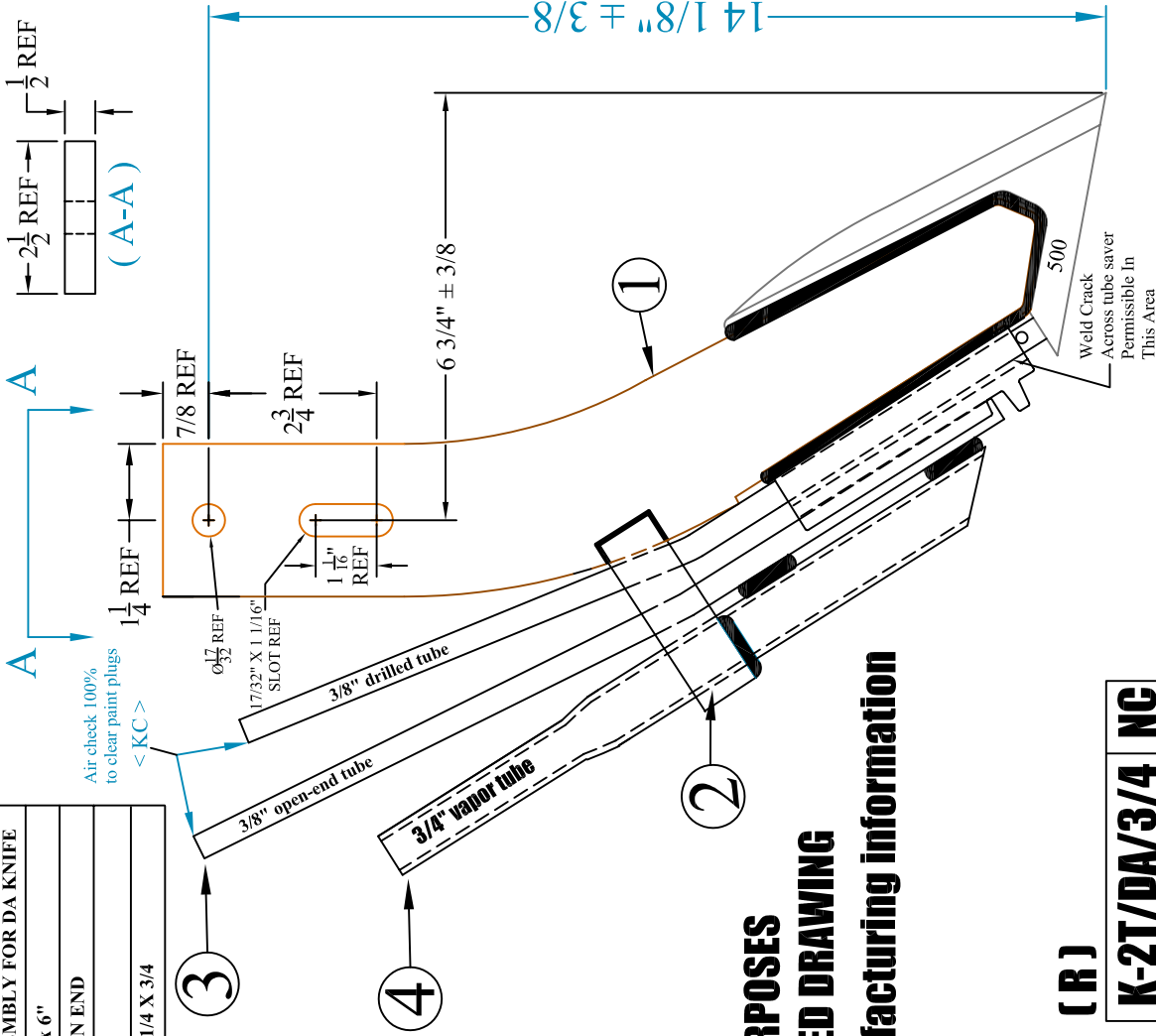
SHIELD
 AGRICULTURAL EQUIPMENT

DRAWN BY: SHORES **DATE: 4/15/10**

CHECKED BY: _____ **DATE:** _____

NOT ALL FEATURES SHOWN IN THIS VIEW

ITEM #	QUAN.	PART #	DESCRIPTION
1	1	K-2TDA1S	KNIFE, K-2T, SUBASSEMBLY FOR DA KNIFE
2	1	K4T1/2DAS	KNIFE STRAP, 1/8 x 1 x 6"
3	1	TB-2/O	KNIFE TUBE, 3/8" OPEN END
4	1	K2TBDA3/4	3/4" VAPOR TUBE
5	2	KSPCR	KNIFE TUBE SPACER 1/4 X 3/4



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

(R)

< KC > Key Characteristic

K-2T/DA/3/4 NC

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

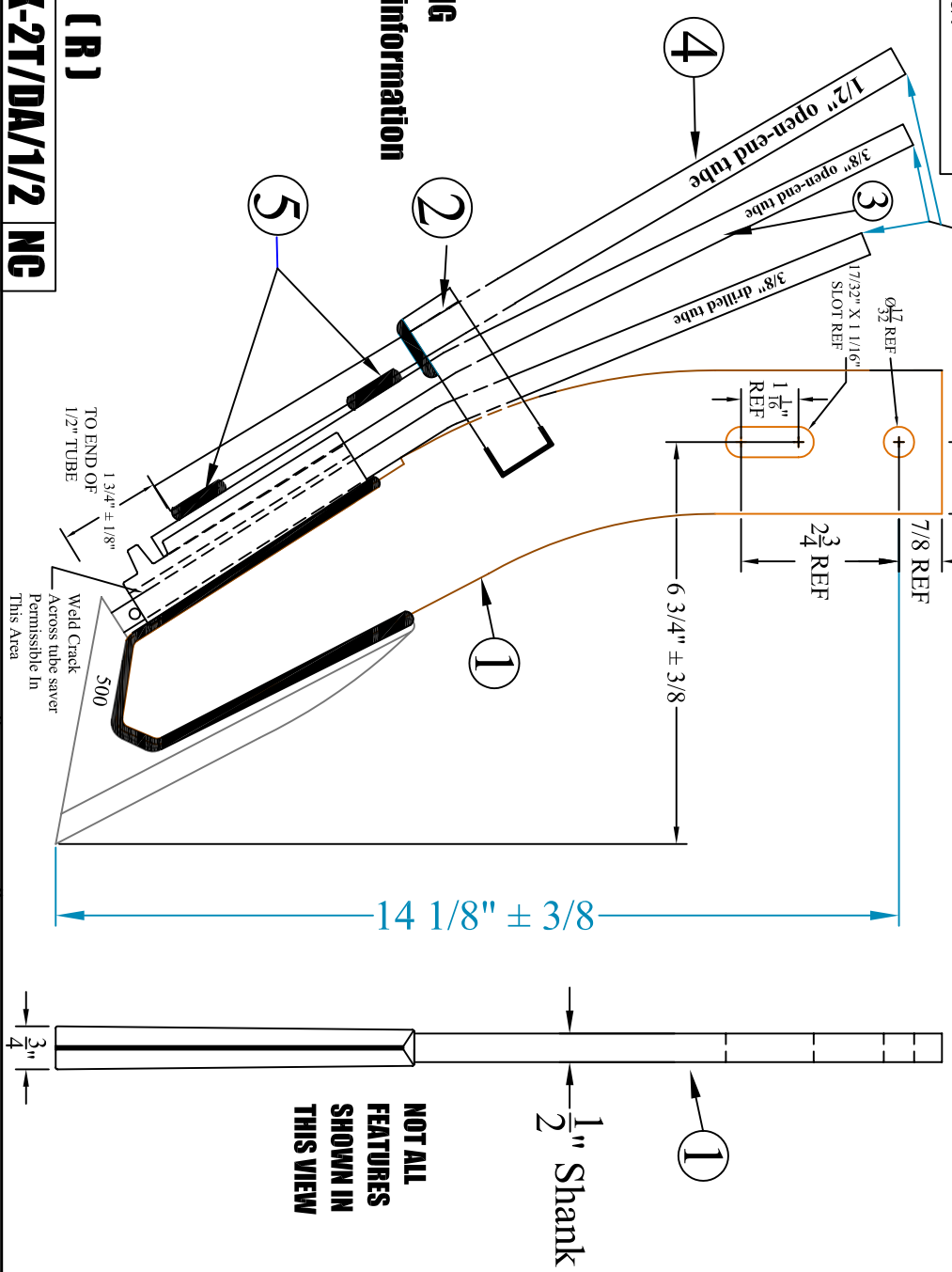
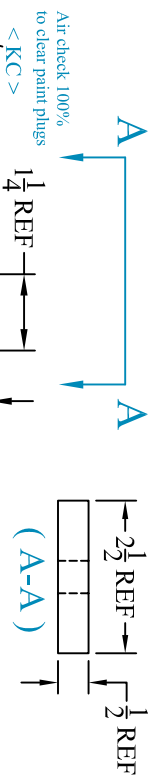
TOLERANCE UNLESS OTHERWISE NOTED	
0/0 +/-	1/16
0.00 +/-	.020
0.000 +/-	.010
0.0000 +/-	.001
ANGLE +/-	2

SHIELD AGRICULTURAL EQUIPMENT	
DRAWN BY: SHORES	DATE: 4/15/10
CHECKED BY: -	DATE: -
PART NO. K-2T/DA/3/4 (R)	REV. NC

KNIFE, K-2T, 3/8" Drilled X 3/8" Open End X 3/4" Vapor tubes

WELDMENT

ITEM #	QUAN.	PART #	DESCRIPTION
1	1	K-2TDA1S	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

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)
K-2T/DA/1/2 NG

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

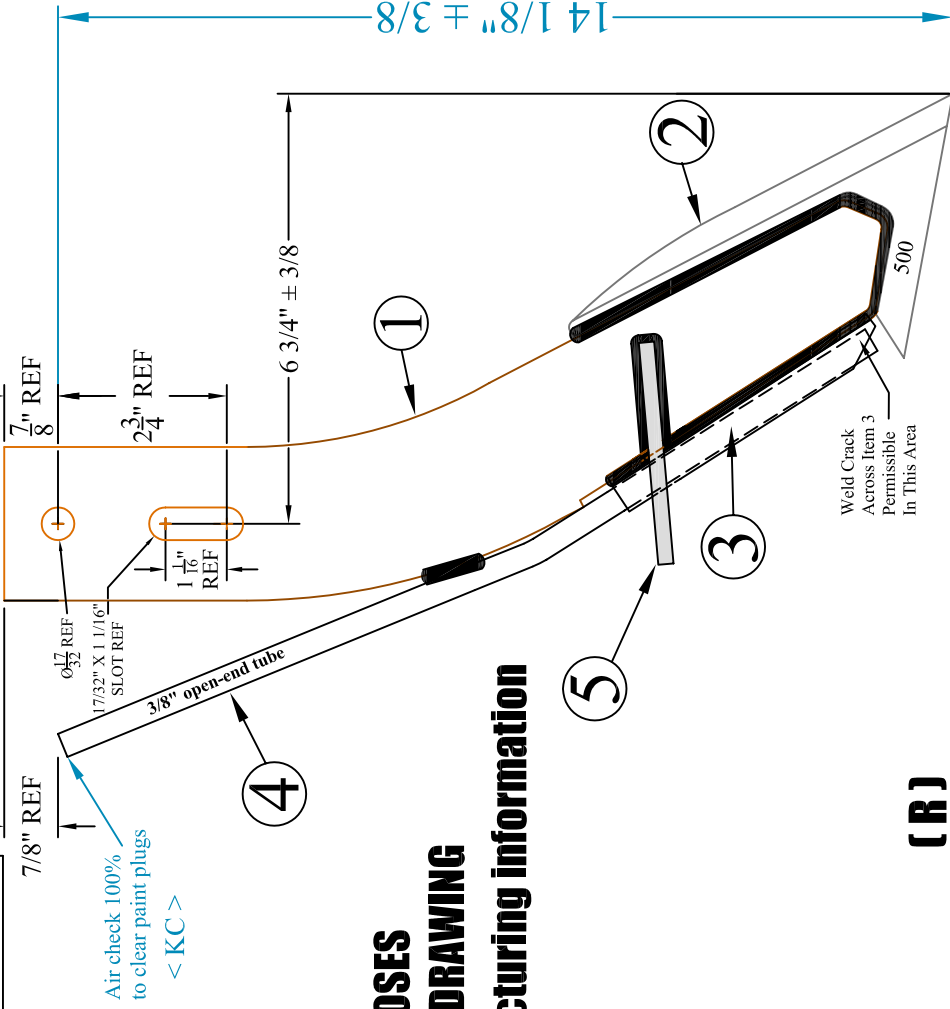
TOLERANCE UNLESS OTHERWISE NOTED	
0/0 +/-	1/16
0.00 +/-	.020
0.000 +/-	.010
0.0000 +/-	.001
ANGLE +/-	2

SHIELD
 AGRICULTURAL EQUIPMENT

DRAWN BY: SHORES DATE: 4/15/10
 CHECKED BY: DATE:

DESCRIPTION	MATERIAL	PART NO.	REV.
KNIFE, K-2T, 3/8" Drilled X 3/8" Open End X 1/2" Open End tubes	WELDMENT	K-2T/DA/1/2 (R)	NG

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-2/O	KNIFE TUBE, OPEN END
5	1	SPL-4NEW	KNIFE SEALER, PLAIN



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

(R)

K-2T/O/PLSPL NC

< KC > Key Characteristic

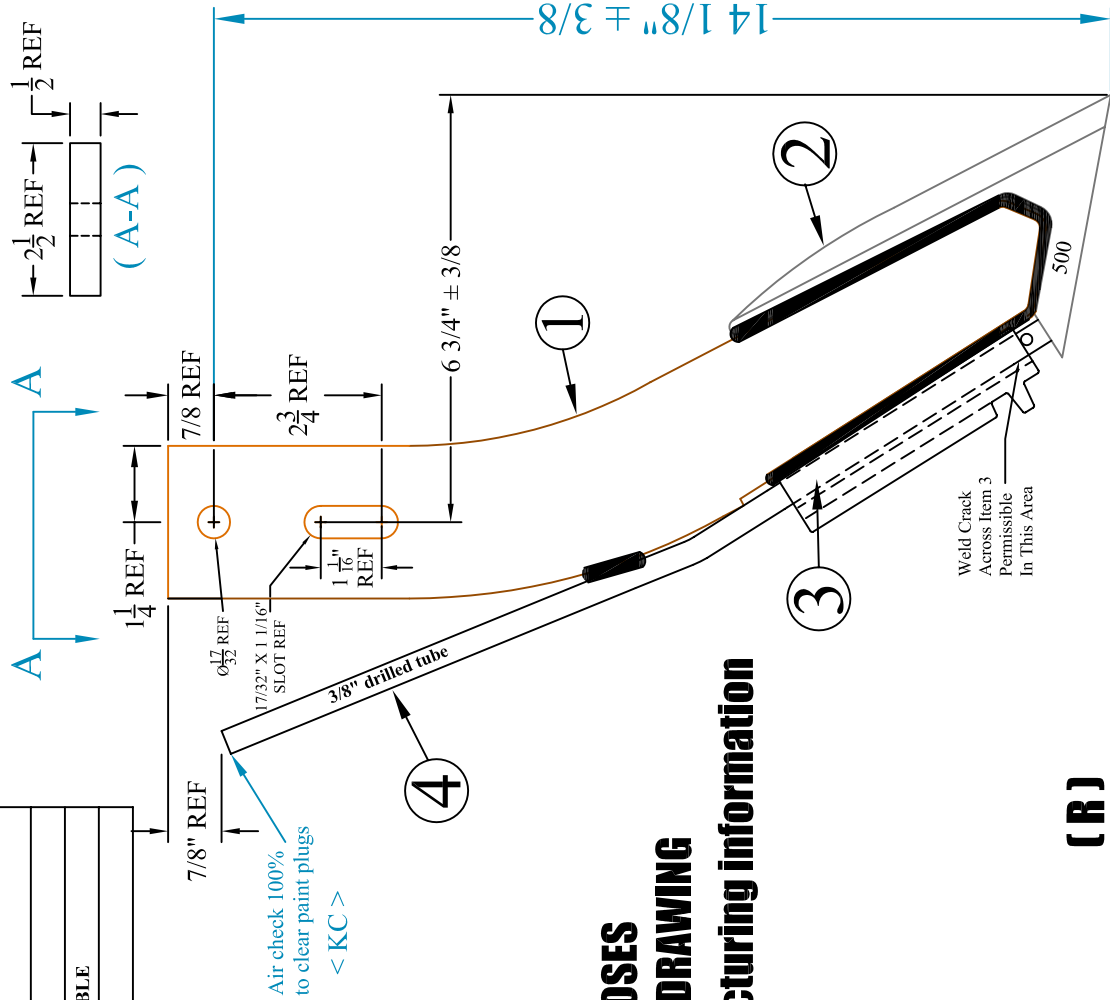
REV.	BY	DATE	DESCRIPTION
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-

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: -

DESCRIPTION	MATERIAL	REV.
KNIFE, K-2T, 3/8" OPEN TUBE PLAIN SEALER	WELDMENT	NC
PART NO. K-2T/O/PLSPL (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-3	KNIFE TUBE, K-2T, Drilled



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

(R)
K-2TDATS NC

< KC > Key Characteristic

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

TOLERANCE UNLESS OTHERWISE NOTED
 0/0 +/- 1/16
 0.00 +/- .020
 0.000 +/- .010
 0.0000 +/- .001
 ANGLE +/- 2

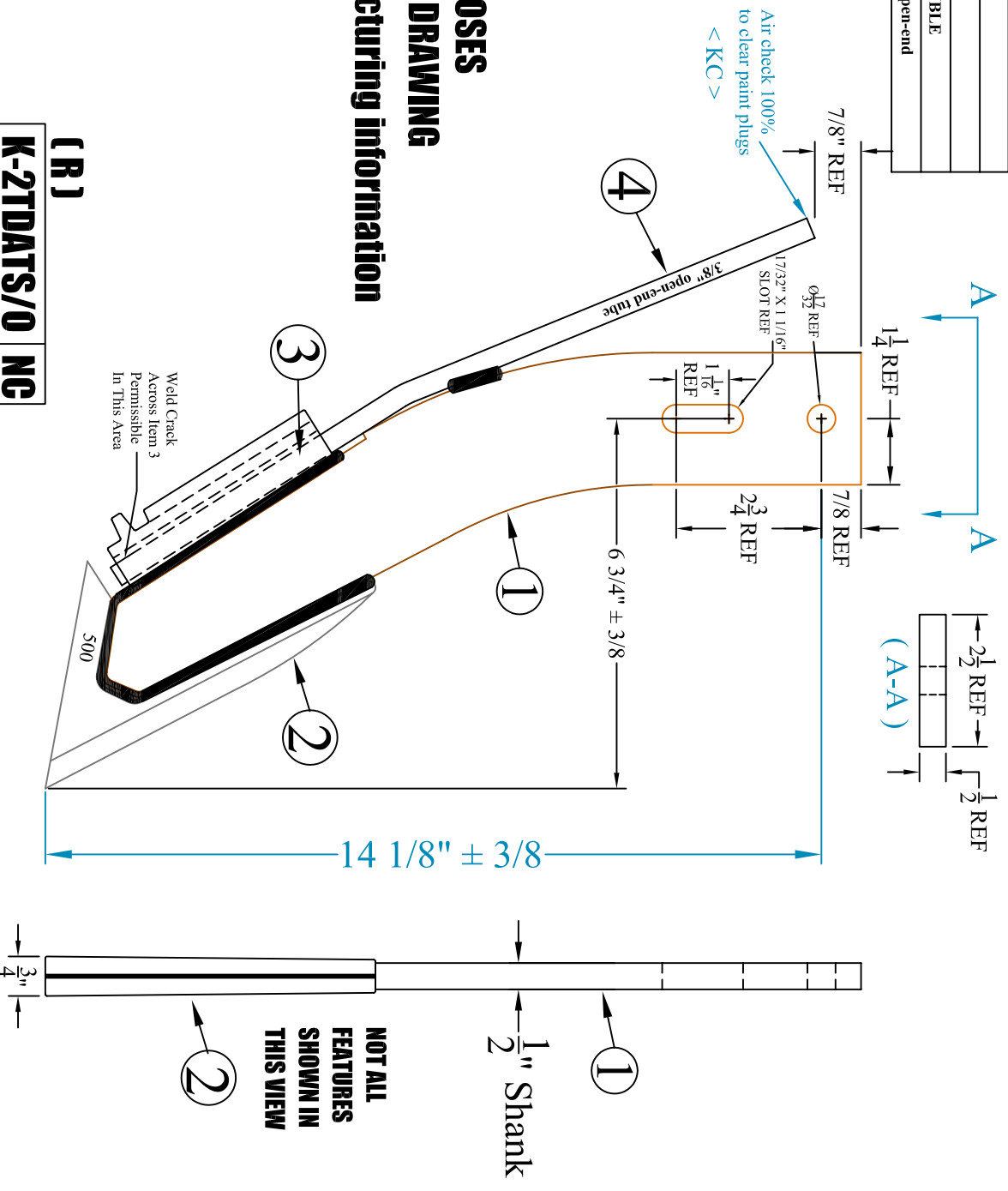
SHIELD
 AGRICULTURAL EQUIPMENT

DRAWN BY: **SHORES** DATE: **4/15/10**
 CHECKED BY: **-** DATE: **-**

PART NO. **K-2TDATS (R)** REV. **NC**

DESCRIPTION **KNIFE, K-2T, SUBASSEMBLY FOR DA KNIFE** MATERIAL **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, 3/8" Open-end



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

< KC > Key Characteristic

(R)
K-2TDATS/O NC

TOLERANCE UNLESS OTHERWISE NOTED

0/0 +/-	1/16
0.00 +/-	.020
0.000 +/-	.010
0.0000 +/-	.001
ANGLE +/-	2

SHIELD
 AGRICULTURAL EQUIPMENT

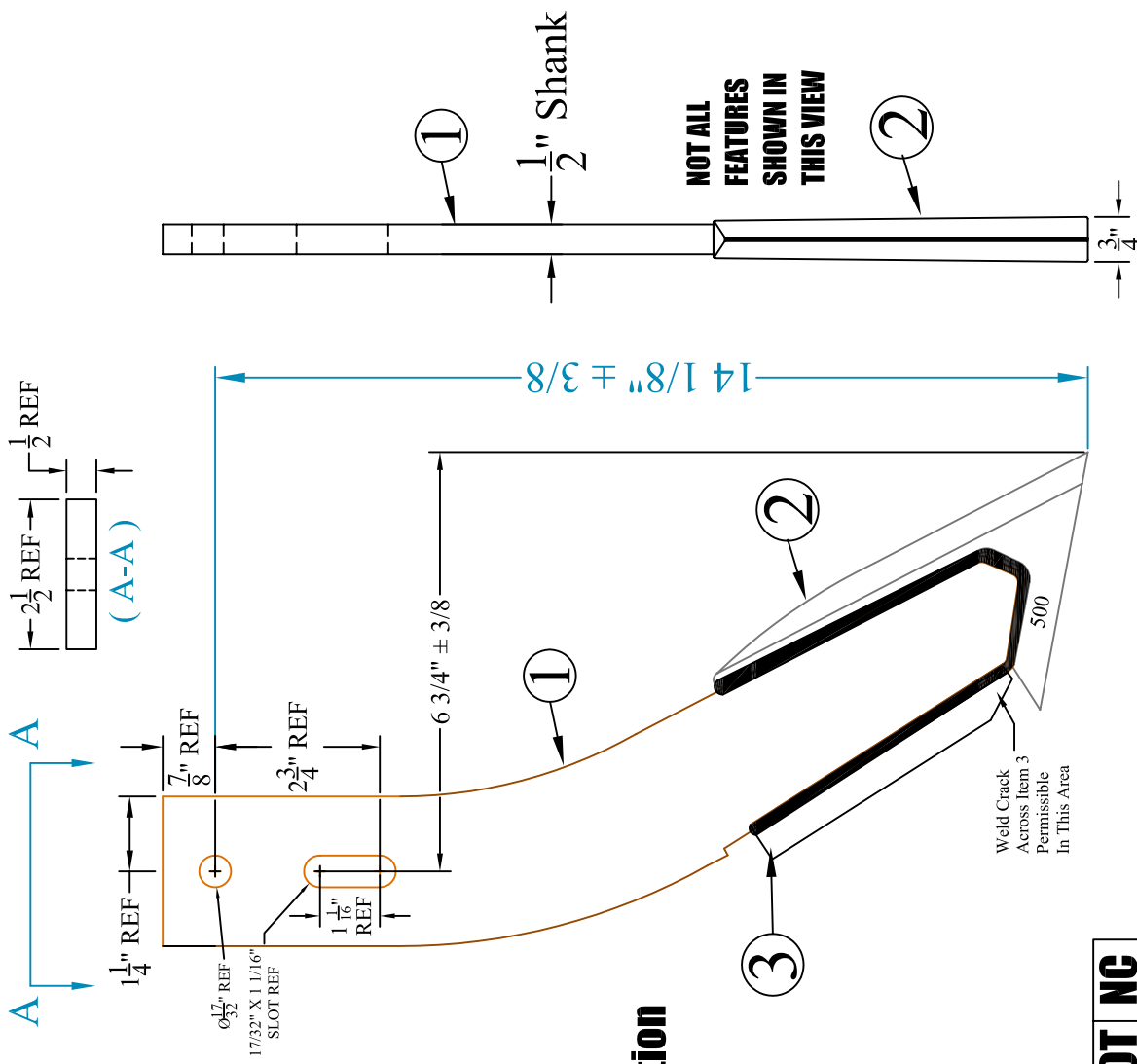
DRAWN BY: **SHORES** DATE: **4/15/10**

CHECKED BY: DATE:

REV.	BY	DATE	DESCRIPTION	MATERIAL	REV.
-	-	-	-	WELDMENT	NC
DESCRIPTION: KNIFE, K-2T, SUBASSEMBLY FOR DA KNIFE, open-end tube					REV. NC

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

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



(R)

K-2T/WOT NC

TOLERANCE UNLESS OTHERWISE NOTED
0/0 +/- 1/16
0.00 +/- .020
0.000 +/- .010
0.0000 +/- .001
ANGLE +/- 2

DATE: 4/15/10
DATE: -

SHIELD
 AGRICULTURAL EQUIPMENT

DRAWN BY: SHORES
CHECKED BY: -

PART NO. K-2T/WOT (R)
REV. NC

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

DESCRIPTION **KNIFE, K-2T, With Tube saver, NO TUBE** MATERIAL **WELDMENT**

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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

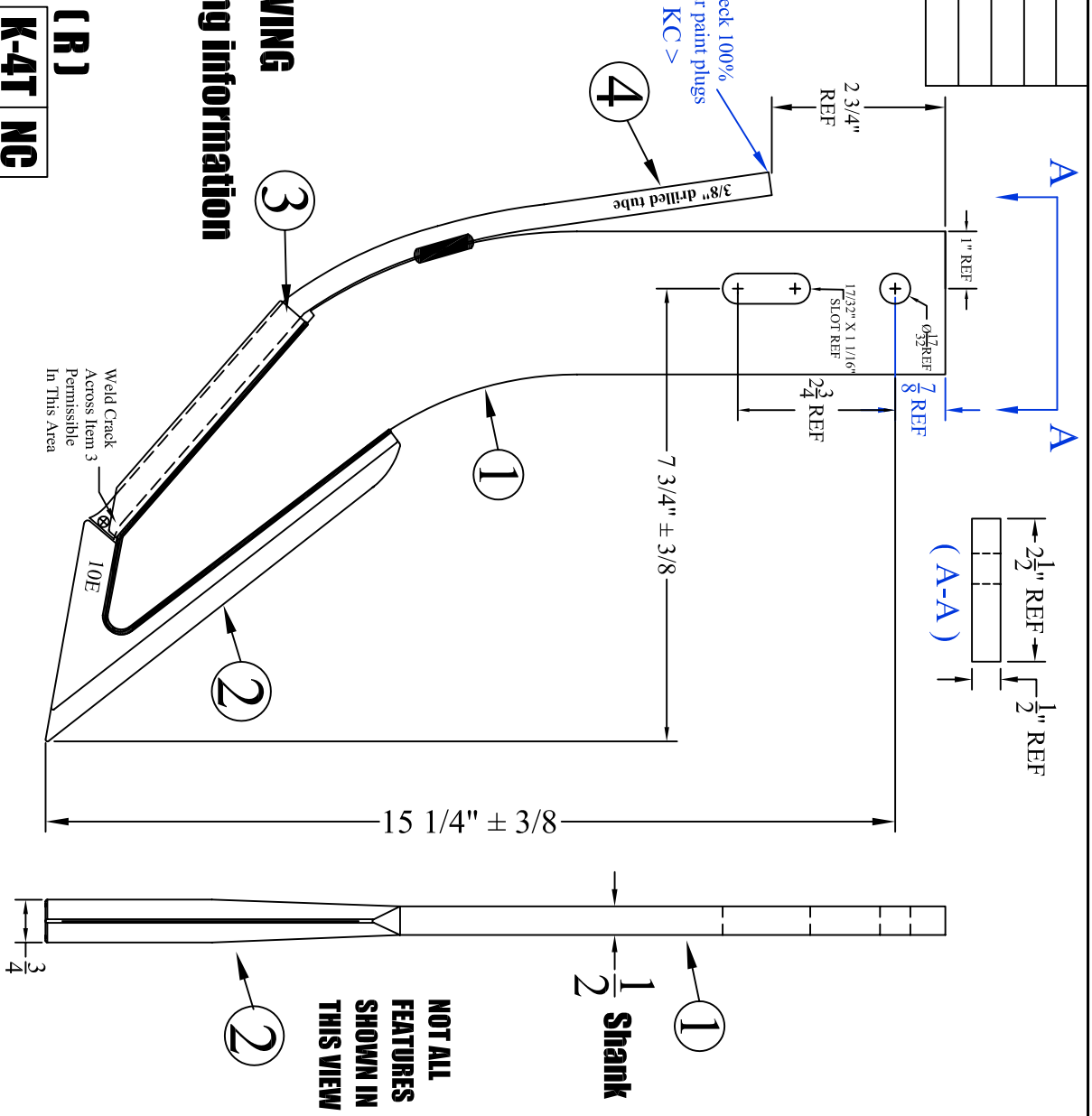
Part #	Description	DRAWING	Weight
K-4T	Single 3/8" NH3 tube	YES	6.6
K-4T/O	Single 3/8" open end tube	YES	6.6
K-4T/1/2A	Single 1/2" NH3 tube	YES	6.7
K-4T/1/2	Single 1/2" Open End tube		6.7
K-4T/1/2A/1/2DA	1/2" NH3 and 1/2" Open end tubes		7.2
K-4T/1/2/HFSPL	Single 1/2" Open End tube, hardfaced sealer		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/DF1
2	1	10E	KNIFE POINT, K-4T (10E)
3	1	DNC-200	KNIFE TUBE SAVER, SINGLE
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-4T NG**

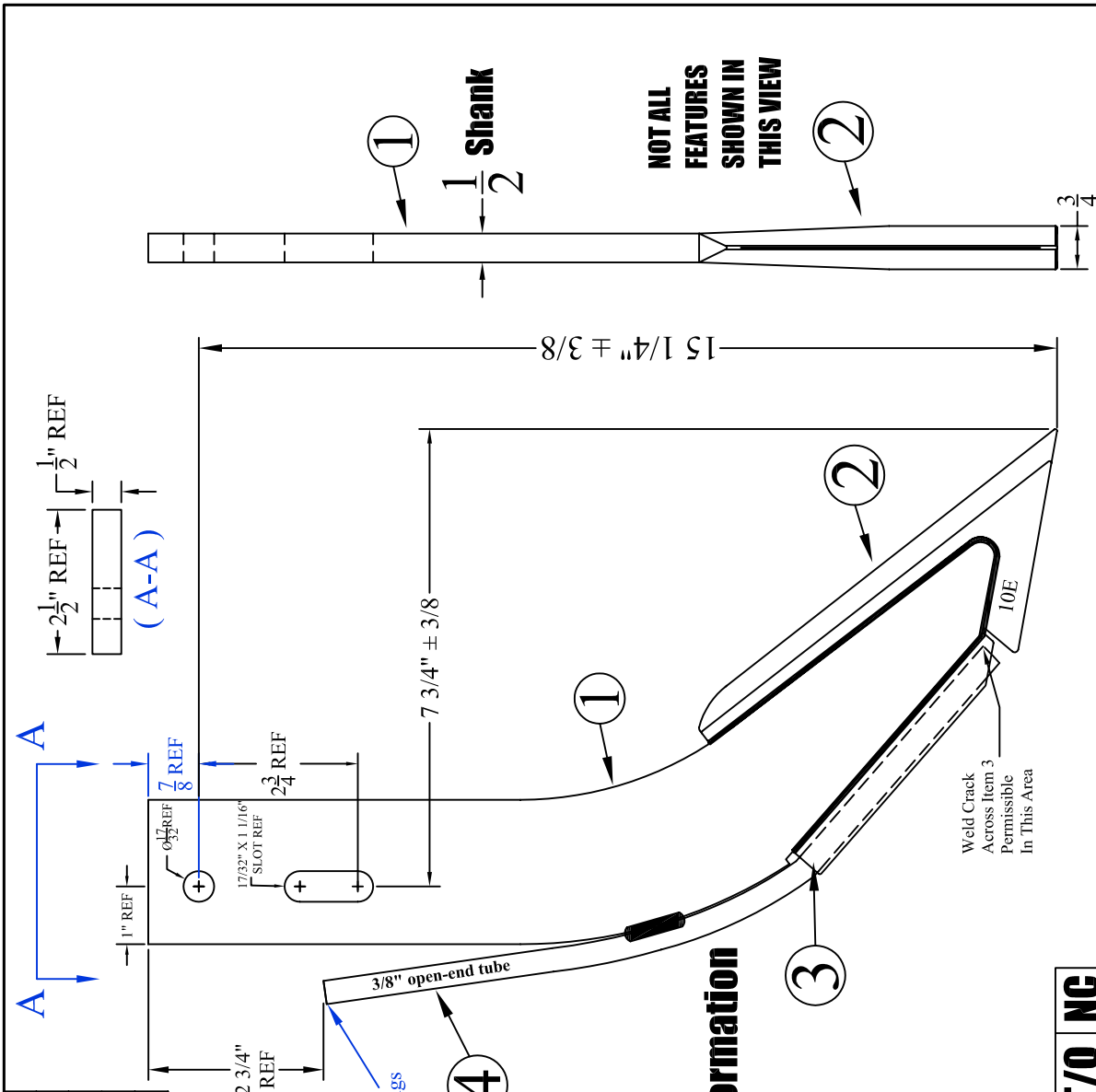
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-	-	-	-	0.00 +/- .020
-	-	-	-	0.000 +/- .010
-	-	-	-	0.0000 +/- .001
-	-	-	-	ANGLE +/- 2

SHIELD
 AGRICULTURAL EQUIPMENT

DRAWN BY: SHORES DATE: 4/15/10
 CHECKED BY: DATE: -

DESCRIPTION	MATERIAL	PART NO.	REV.
KNIFE, K-4T, 3/8 DRILLED TUBE	WELDMENT	K-4T (R)	NG

ITEM #	QUAN.	PART #	DESCRIPTION
1	1	K4T-B	KNIFE BLANK, K4T/DF1
2	1	10E	KNIFE POINT, K-4T (10E)
3	1	DNC-200	KNIFE TUBE SAVER, SINGLE
4	1	TB-4/O	KNIFE TUBE, OPEN END



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To remove proprietary manufacturing information

(R)
K-4T/O NC

<-KC> Key Characteristic

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

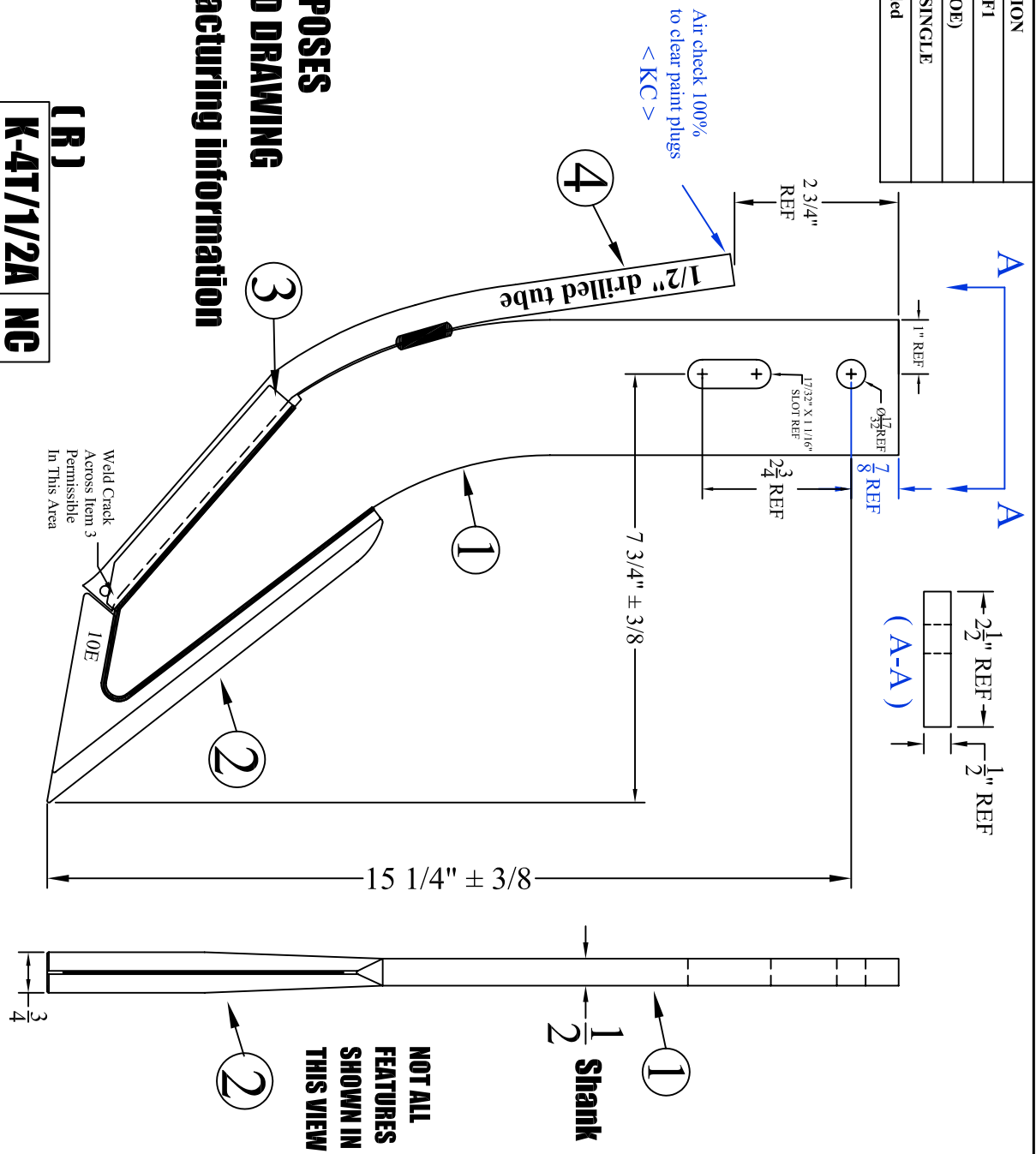
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0.00 +/- .020
0.000 +/- .010
0.0000 +/- .001
ANGLE +/- 2

SHIELD
AGRICULTURAL EQUIPMENT

DRAWN BY: SHORES **DATE: 4/15/10**
CHECKED BY: - **DATE: -**

DESCRIPTION	MATERIAL	PART NO.	REV.
KNIFE, K-4T, 3/8 TUBE, OPEN END	WELDMET	K-4T/O (R)	NC

ITEM #	QUAN.	PART #	DESCRIPTION
1	1	K4T-B	KNIFE BLANK, K4T/DF1
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



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< KC > Key Characteristic

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

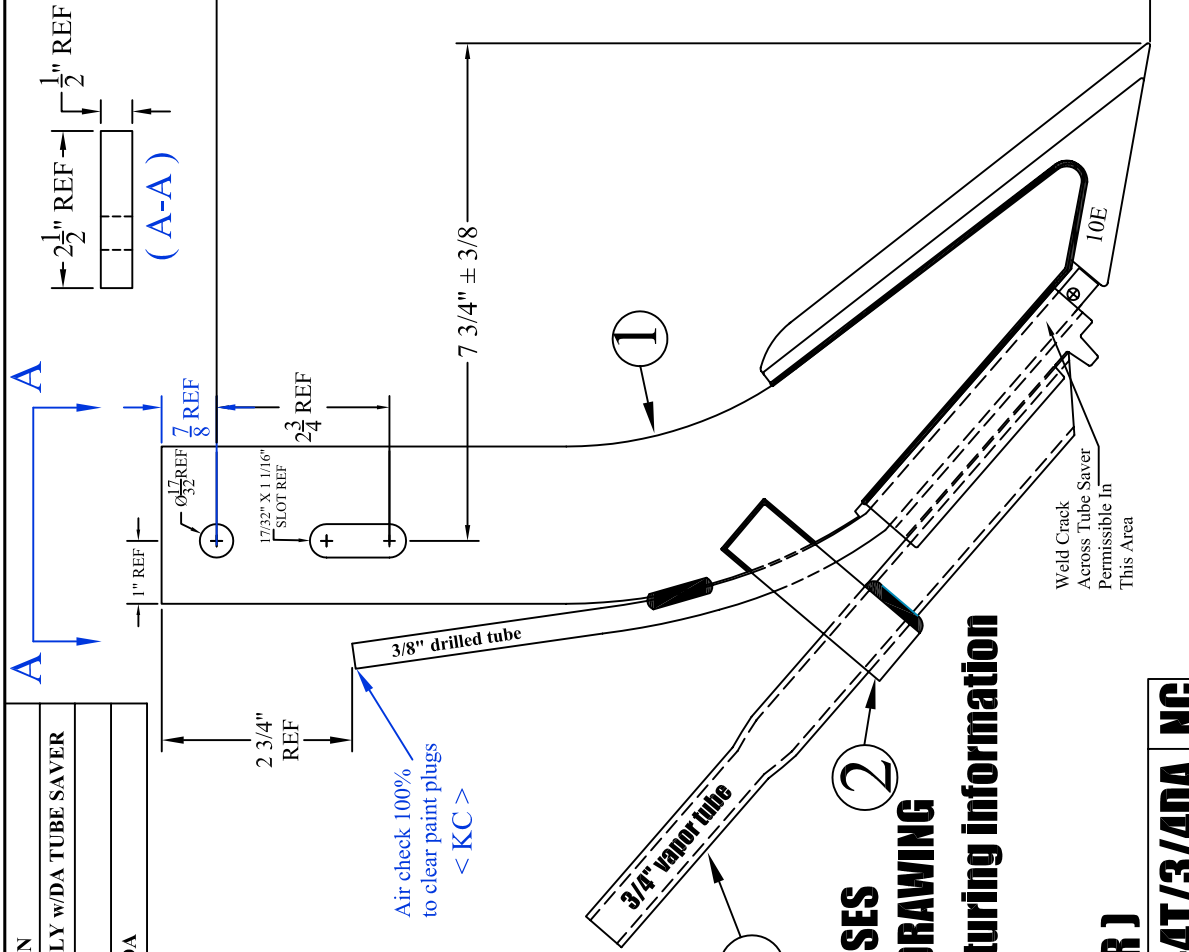
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-	-	-	-	0/0 +/- 1/16
-	-	-	-	0.00 +/- .020
-	-	-	-	0.000 +/- .010
-	-	-	-	0.0000 +/- .001
-	-	-	-	ANGLE +/- 2

SHIELD
 AGRICULTURAL EQUIPMENT

DRAWN BY: SHORES	DATE: 4/15/10
CHECKED BY: _	DATE: _

DESCRIPTION	MATERIAL	PART NO.	REV.
KNIFE, K-4T, 1/2" DRILLED TUBE	WELDMENT	K-4T/1/2A (R)	NG

ITEM #	QUAN.	PART #	DESCRIPTION
1	1	K-4TDATS	KNIFE, K-4T, SUBASSEMBLY w/DA TUBE SAVER
2	1	K4TI/2DAS	KNIFE STRAP, 1/8 x 1 x 6"
3	1	K2TBD A3/4	KNIFE TUBE, K-2T, 3/4" DA



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(R)

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

TOLERANCE UNLESS OTHERWISE NOTED
0/0 +/- 1/16
0.00 +/- .020
0.000 +/- .010
0.0000 +/- .001
ANGLE +/- 2

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

DESCRIPTION	MATERIAL	WELDMENT
KNIFE, K-4T, 3/8" drilled x 3/4" Vapor tubes		

SHIELD
 AGRICULTURAL EQUIPMENT

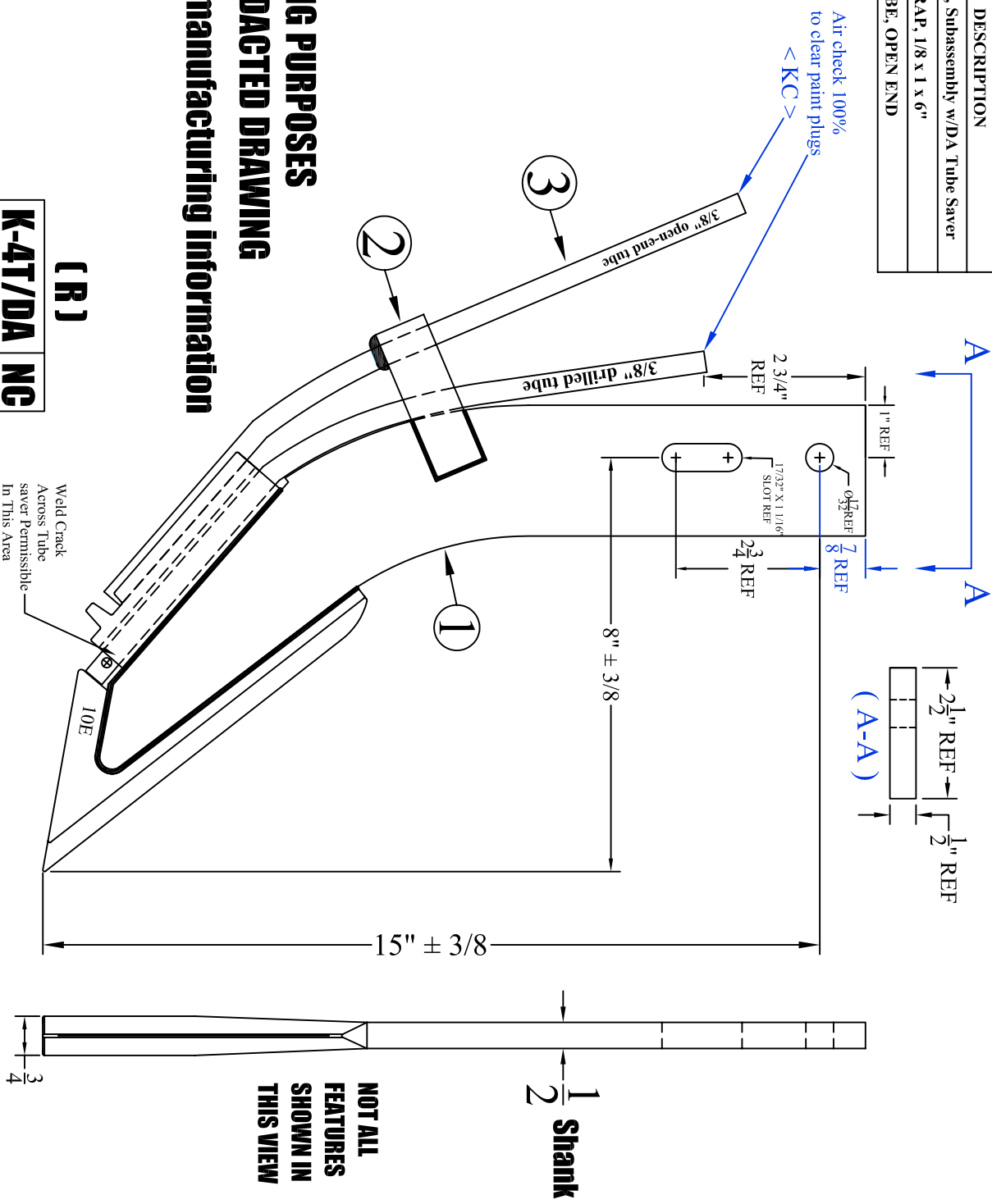
DRAWN BY: SHORES	DATE: 4/15/10
CHECKED BY: -	DATE: -

PART NO.	REV.
K-4T/3/4DA (R)	NC

NOT ALL FEATURES SHOWN IN THIS VIEW

Shank
 $\frac{1}{2}$

ITEM #	QVAN.	PART #	DESCRIPTION
1	1	K-4T/DATS	Knife, K-4T, Subassembly w/D.A Tube Saver
2	1	K4T1/2DAS	KNIFE STRAP, 1/8 x 1 x 6"
3	1	TB-4/O	KNIFE TUBE, OPEN END



DRAWING FOR MARKETING PURPOSES
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(R)
K-4T/DA NC

REV.	BY	DATE	DESCRIPTION	TOLERANCE UNLESS OTHERWISE NOTED	DRAWN 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				

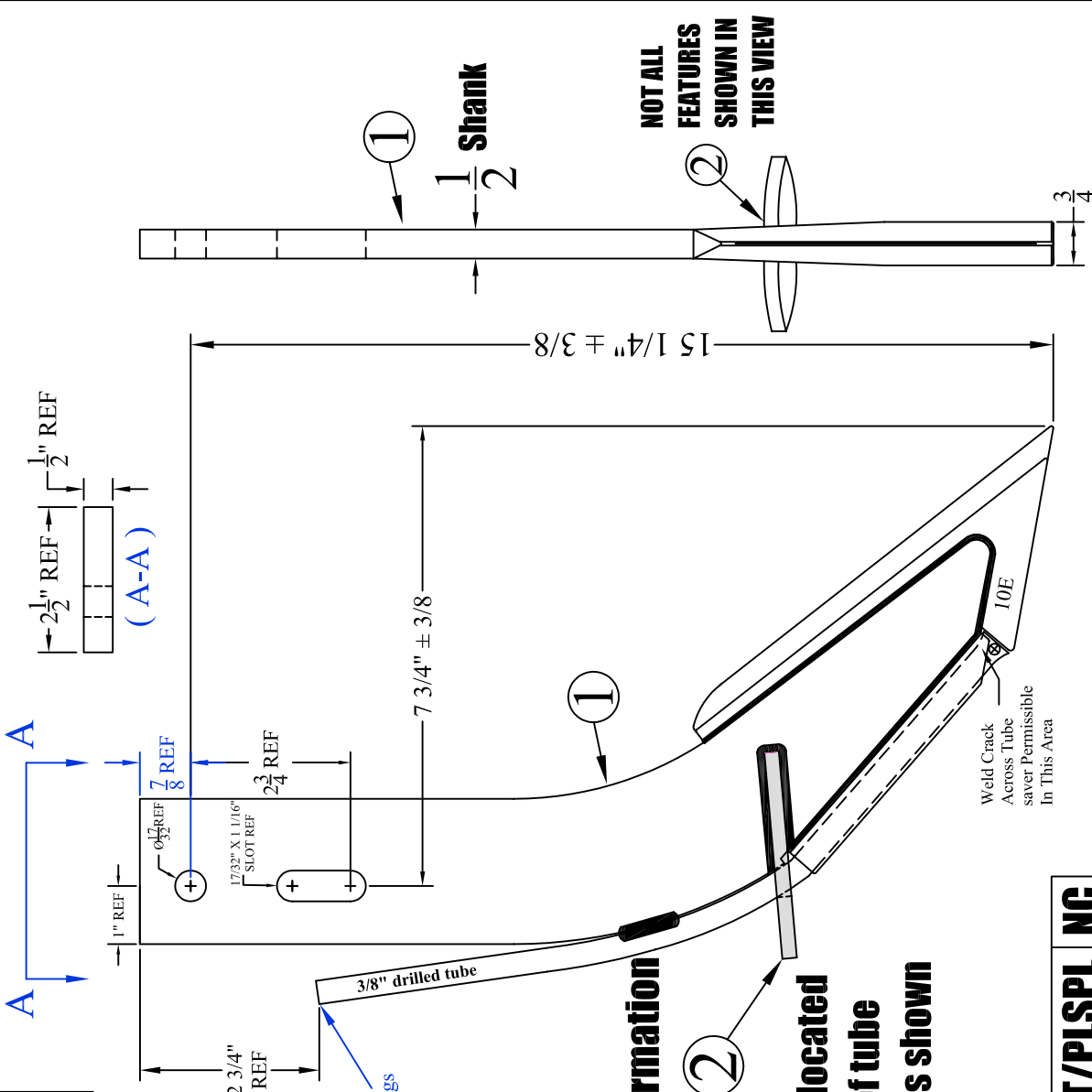
DESCRIPTION: **KNIFE-K-4T, 3/8" drilled x 3/8" open-end tubes**

MATERIAL: **WELDMENT**

SHIELD
 AGRICULTURAL EQUIPMENT

ITEM #	QUAN.	PART #	DESCRIPTION
1	1	K-4T	KNIFE, K-4T 3/8 DRILLED TUBE
2	1	SPL-4NEW	SEALER PLATE

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NOTE:
 Sealer located
 at top of tube
 saver as shown

(R)

< KC > Key Characteristic

K-4T/PLSPL NC

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: _

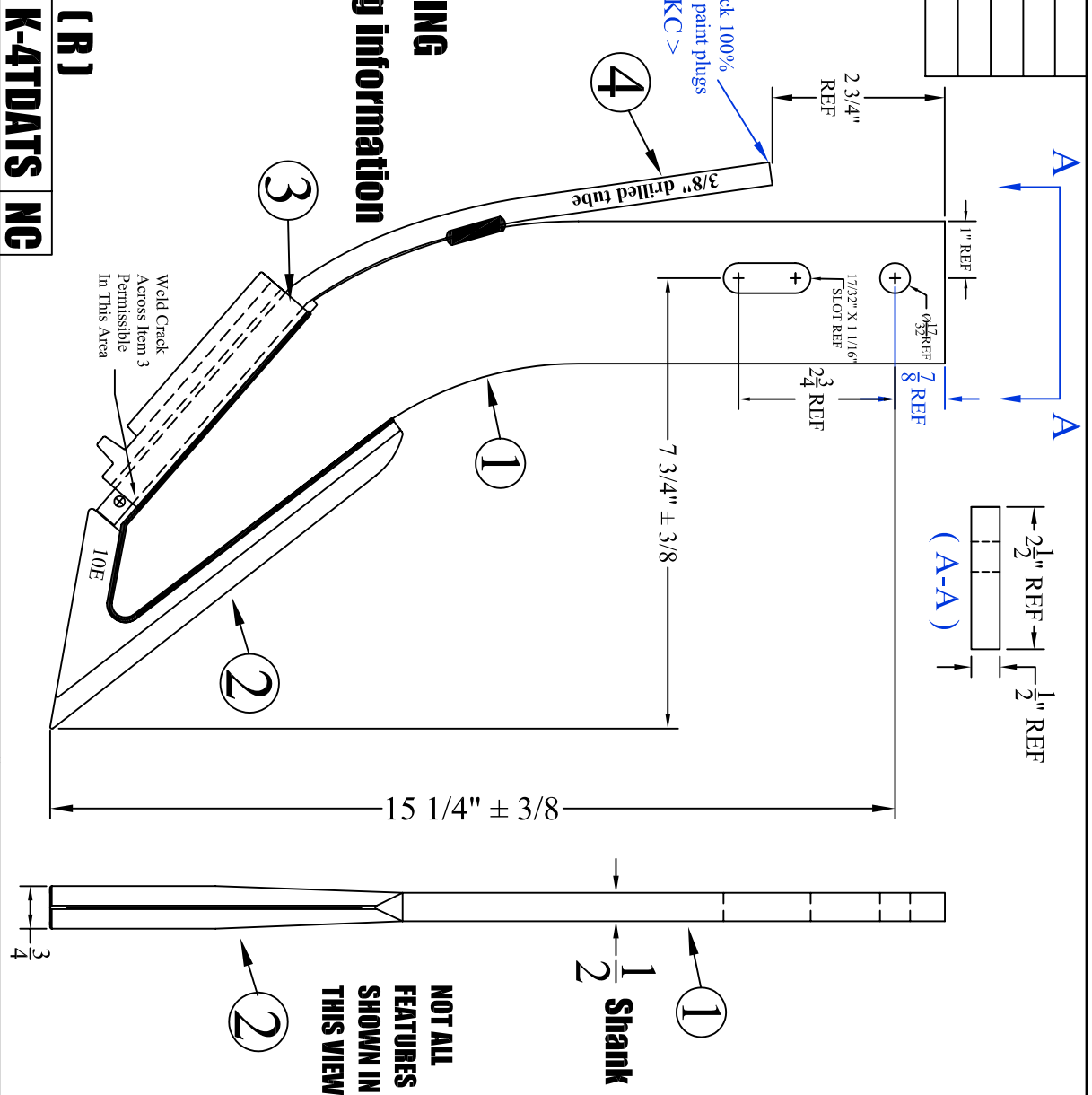
PART NO.	REV.
K-4T/PLSPL (R)	NC

MATERIAL **WELDMENT**

DESCRIPTION **KNIFE, K-4T, 3/8 DRILLED TUBE W/SEALER**

ITEM #	QUAN.	PART #	DESCRIPTION
1	1	K4T-B	KNIFE BLANK, K4T/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

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<-KC> Key Characteristic

(R)
K-4TDATS NG

REV.	BY	DATE	DESCRIPTION	MATERIAL	REVISION
-	-	-	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-
DESCRIPTION	KNIFE, K-4T, SUBASSEMBLY W/DA TUBE SAVER		MATERIAL WELDMENT		PART NO. K-4TDATS (R)
TOLERANCE UNLESS OTHERWISE NOTED			SHIELD AGRICULTURAL EQUIPMENT		
0/0 +/- 1/16			DATE: 4/15/10		
0.00 +/- .020			DRAWN BY: SHORES		
0.000 +/- .010			CHECKED BY: _		
0.0000 +/- .001			DATE: _		
ANGLE +/- 2			REV. NG		



K-4TS



K-4TSBS

Widest selection of narrow profile knives in the industry !!

Standard length "slim" knives, knives for coultter 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/HFSP	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 coultter injection rigs, lengths vary

Part #	Description	DRAWING	Weight
K-336070147BB	Boron Steel thin knife for DMI coultter rigs	YES	4.2
K-336070147BBST	Boron Steel thin knife for DMI coultter rigs with SURFA SHIELD	YES	4.6
K-5S	Thin Chrome knife for coultter injection systems	YES	4.8
K-5SB	Boron Steel thin knife for coultter injection rigs	YES	4.0
K-5SBSST	Boron Steel knife with SURFA SHIELD	YES	4.4
K-5SB/HF	Boron Steel thin knife for coultter 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 !!

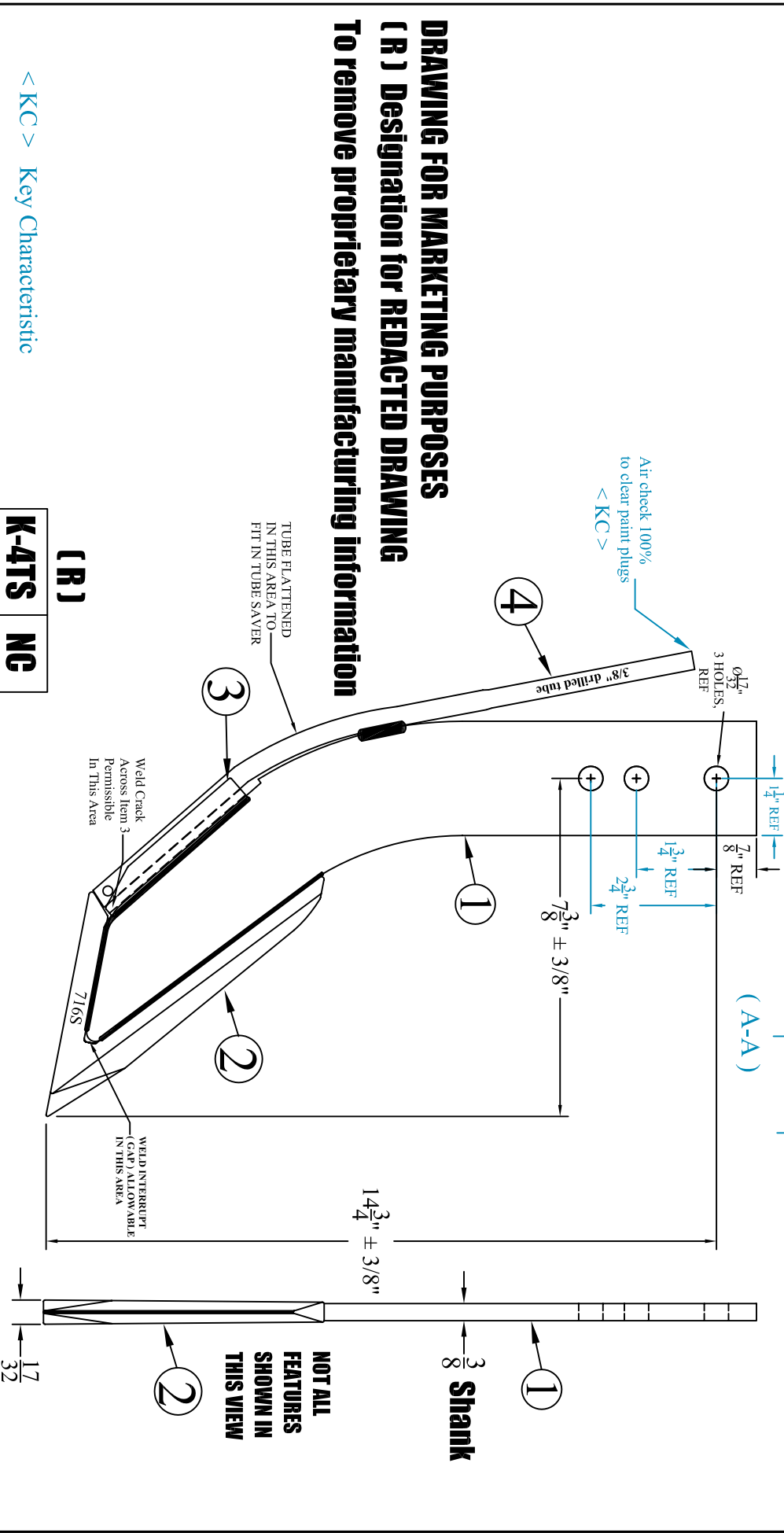
Part #	Replacement Parts for K-4TS "Slim" Knives	Weight
716SM	Knife point	0.73
100S	Single tube saver	0.22
100DS	Dual tube saver	0.35
K4STB	3/8" tube drilled	0.30
K4STB1/2A	1/2" tube drilled	0.50
K4TB.5DA	1/2" tube open end	0.50
K2TBDA3/4	3/4" tube open end	0.70
TB-2/O	3/8" tube open end	0.30
SPL-4SNEW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

**DRAWING FOR MARKETING PURPOSES
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< KC > Key Characteristic

K-4TS NC

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

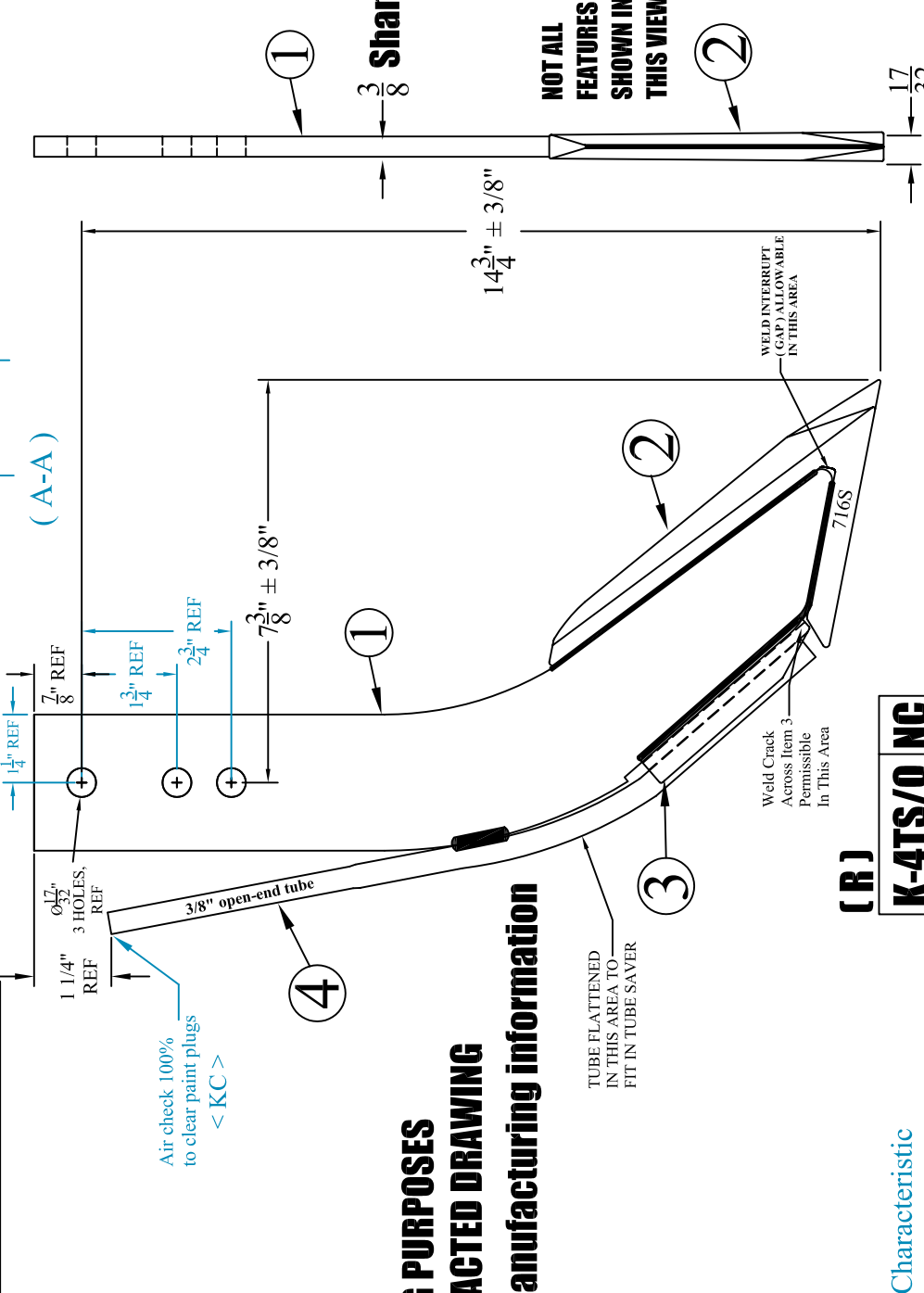
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0/0 +/- 1/16
0.00 +/- .020
0.000 +/- .005
0.0000 +/- .001
ANGLE +/- 2

SHIELD
AGRICULTURAL EQUIPMENT

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

DESCRIPTION	MATERIAL	REV.
K4 SLIM 3/8" KNIFE WITH 3/8" DRILLED TUBE	Weldment	K-4TS (R) NC

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	TB-2/OF	KNIFE TUBE, K-4TS, 3/8" Open-end



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< KC > Key Characteristic

SHIELD AGRICULTURAL EQUIPMENT	
DRAWN BY: SHORES	DATE: 05/15/10
CHECKED BY: -	DATE: -

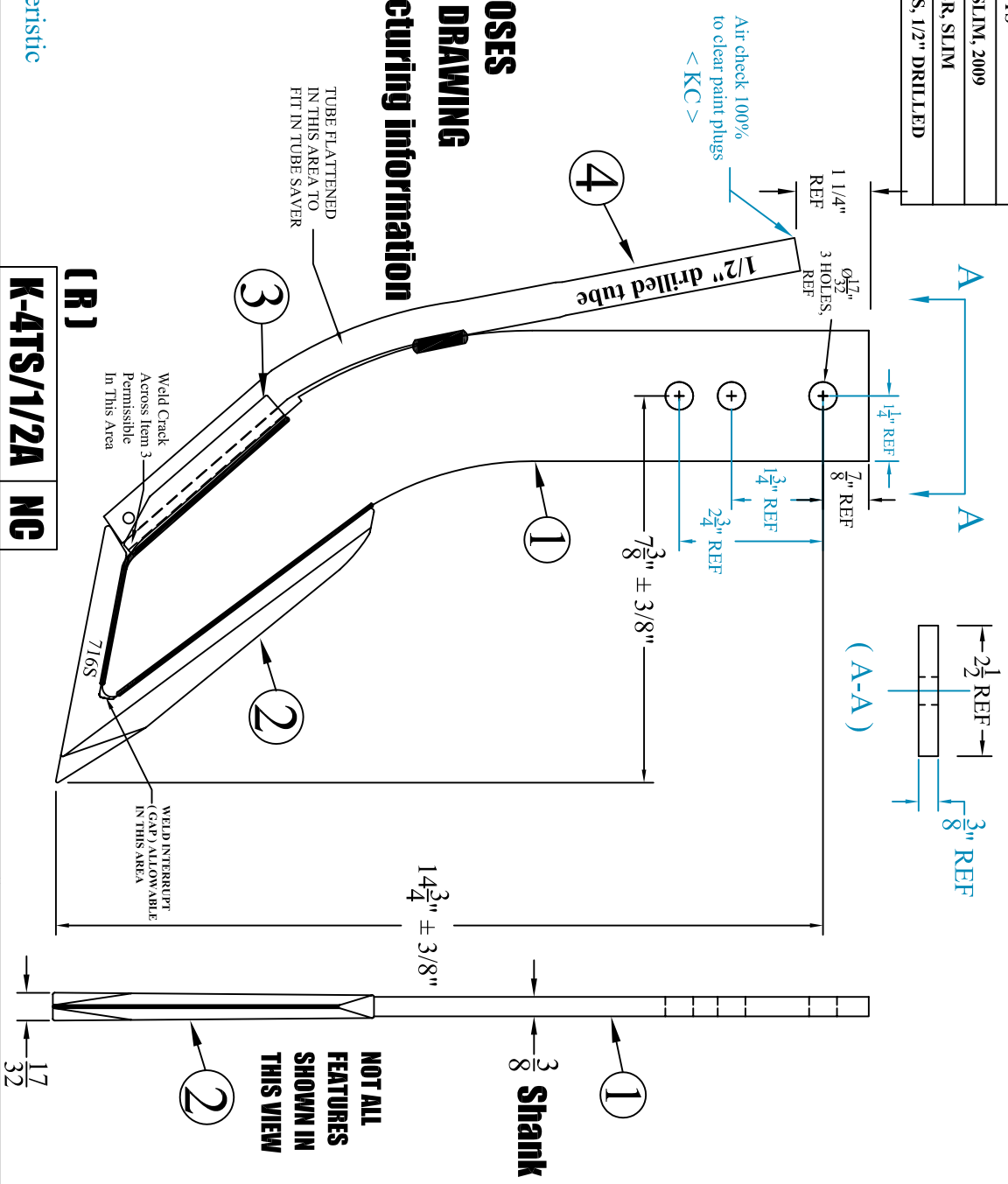
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0.0000 +/-	.001
ANGLE +/-	2

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

PART NO. K-4TS/0 (R)	
DESCRIPTION K4 SLIM 3/8" KNIFE WITH 3/8" Open-end tube	MATERIAL Weldment
REV. NC	NC

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
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 To remove proprietary manufacturing information**

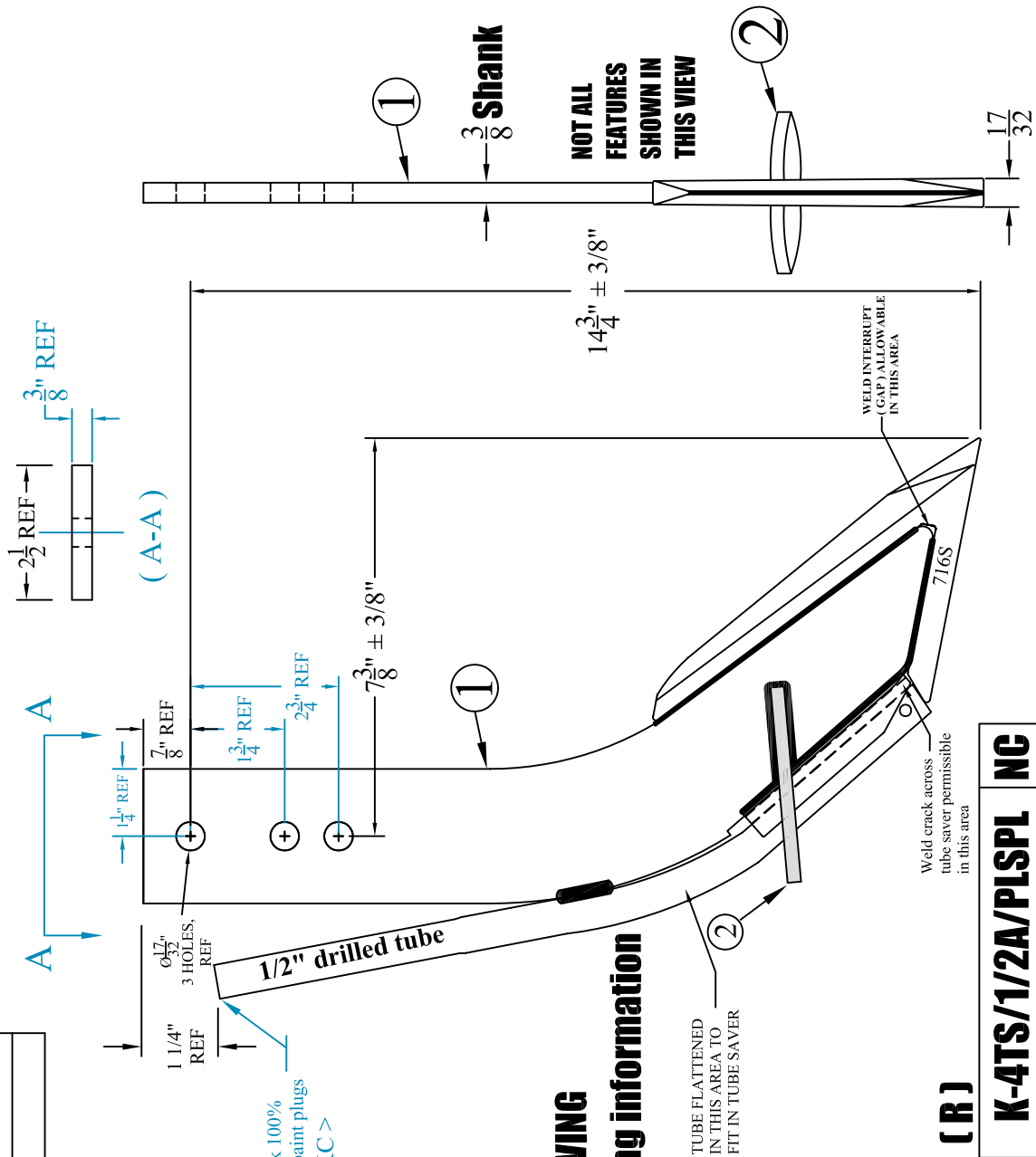


< KC > Key Characteristic

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

REV.	BY	DATE	DESCRIPTION	MATERIAL	REVISION
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-	-	-	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-
DESCRIPTION				PART NO.	
K4 SLIM 3/8" KNIFE WITH 1/2" DRILLED TUBE				K-4TS/1/2A (R)	
DESCRIPTION				MATERIAL	
K4 SLIM 3/8" KNIFE WITH 1/2" DRILLED TUBE				Weldment	
TOLERANCE UNLESS OTHERWISE NOTED				SHIELD	
0/0 +/- 1/16				AGRICULTURAL EQUIPMENT	
0.00 +/- .020				DRAWN BY: SHORES	
0.000 +/- .005				DATE: 05/15/10	
0.0000 +/- .001				CHECKED BY: -	
ANGLE +/- 2				DATE: -	
WELD INTERRUPT (GAP) ALLOWABLE IN THIS AREA				REV. NC	

ITEM #	QUAN.	PART #	DESCRIPTION
1	1	K-4TS/1/2A	Knife with 1/2" drilled tube
2	1	SPL-4SNEW	Sealer, slim



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(R) Designation for REDACTED DRAWING
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(R)
K-4TS/1/2A/PLSPL NC

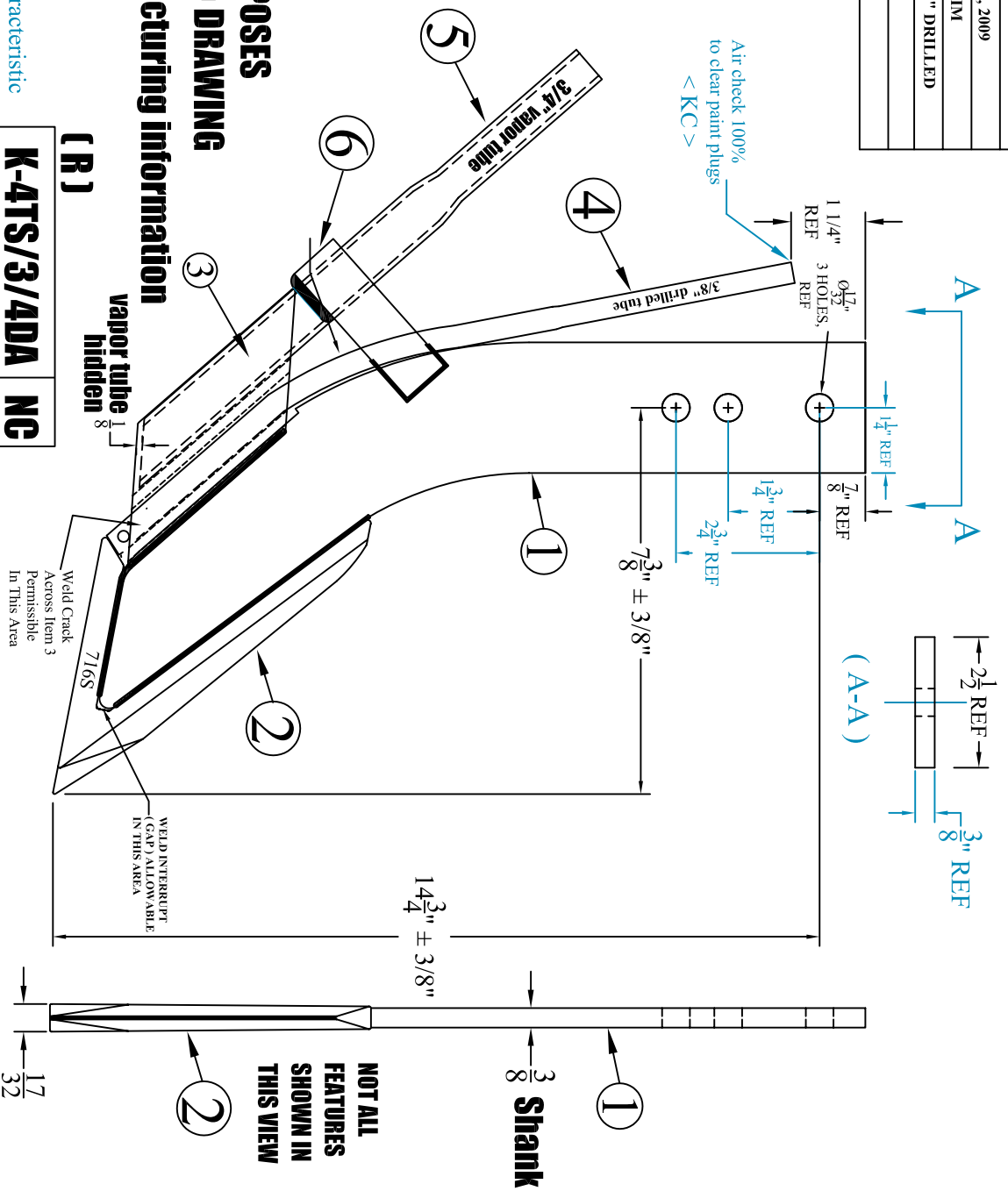
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TOLERANCE UNLESS OTHERWISE NOTED	
0/0 +/-	1/16
0.00 +/-	.020
0.000 +/-	.005
0.0000 +/-	.001
ANGLE +/-	2

SHIELD AGRICULTURAL EQUIPMENT	DRAWN BY: SHORES	DATE: 05/15/10
	CHECKED BY: -	DATE: -
REV. NC	PART NO. K-4TS/1/2A/PLSPL (R)	

DESCRIPTION	MATERIAL	REV.
K4 SLIM 3/8" KNIFE WITH 1/2" Drilled tube & sealer	Weldment	NC

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	K4T1/2DAS	KNIFE STRAP



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< KC > Key Characteristic

(R)
K-4TS/3/4DA
NC

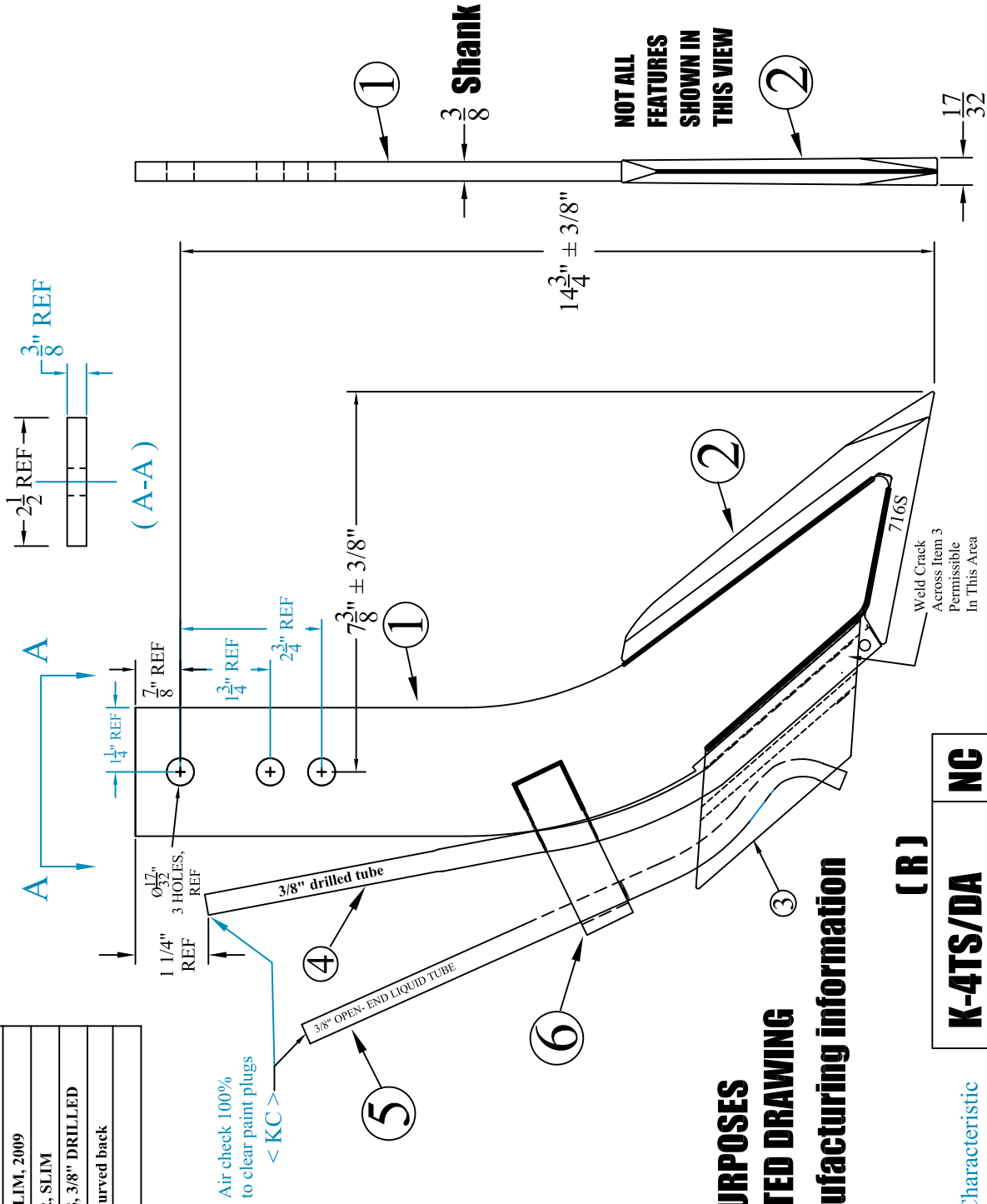
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TOLERANCE UNLESS OTHERWISE NOTED	
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0.00 +/-	.020
0.000 +/-	.005
0.0000 +/-	.001
ANGLE +/-	2

SHIELD AGRICULTURAL EQUIPMENT	DRAWN BY: SHORES	DATE: 05/15/10
	CHECKED BY: _	DATE: _

DESCRIPTION K4 SLIM 3/8" knife with 3/8" drilled & 3/4" vapor tubes	MATERIAL Weldment	PART NO. K-4TS/3/4DA (R)	REV. NC
---	-----------------------------	--------------------------------------	-------------------

ITEM #	QUAN.	PART #	DESCRIPTION
1	1	K4TS-B	KNIFE BLANK, K-4TS
2	1	716SM	KNIFE POINT, K-4SLJM, 2009
3	1	100DS	DUAL TUBE SAVER, SLIM
4	1	K4STB	KNIFE TUBE, K-4TS, 3/8" DRILLED
5	1	TB-18	3/8" Open-end tube, curved back
6	1	K4T1/2DAS	KNIFE STRAP



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

(R)

K-4TS/DA NC

< KC > Key Characteristic

REV.	BY	DATE	DESCRIPTION	MATERIAL	DESCRIPTION	PART NO.	REV.
-	-	-	-	K4 SLIM 3/8" knife with 3/8" drilled & 3/8" liquid tubes	Weldment	K-4TS/DA (R)	NC
-	-	-	-				
-	-	-	-				
-	-	-	-				
REV.	BY	DATE	DESCRIPTION				

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

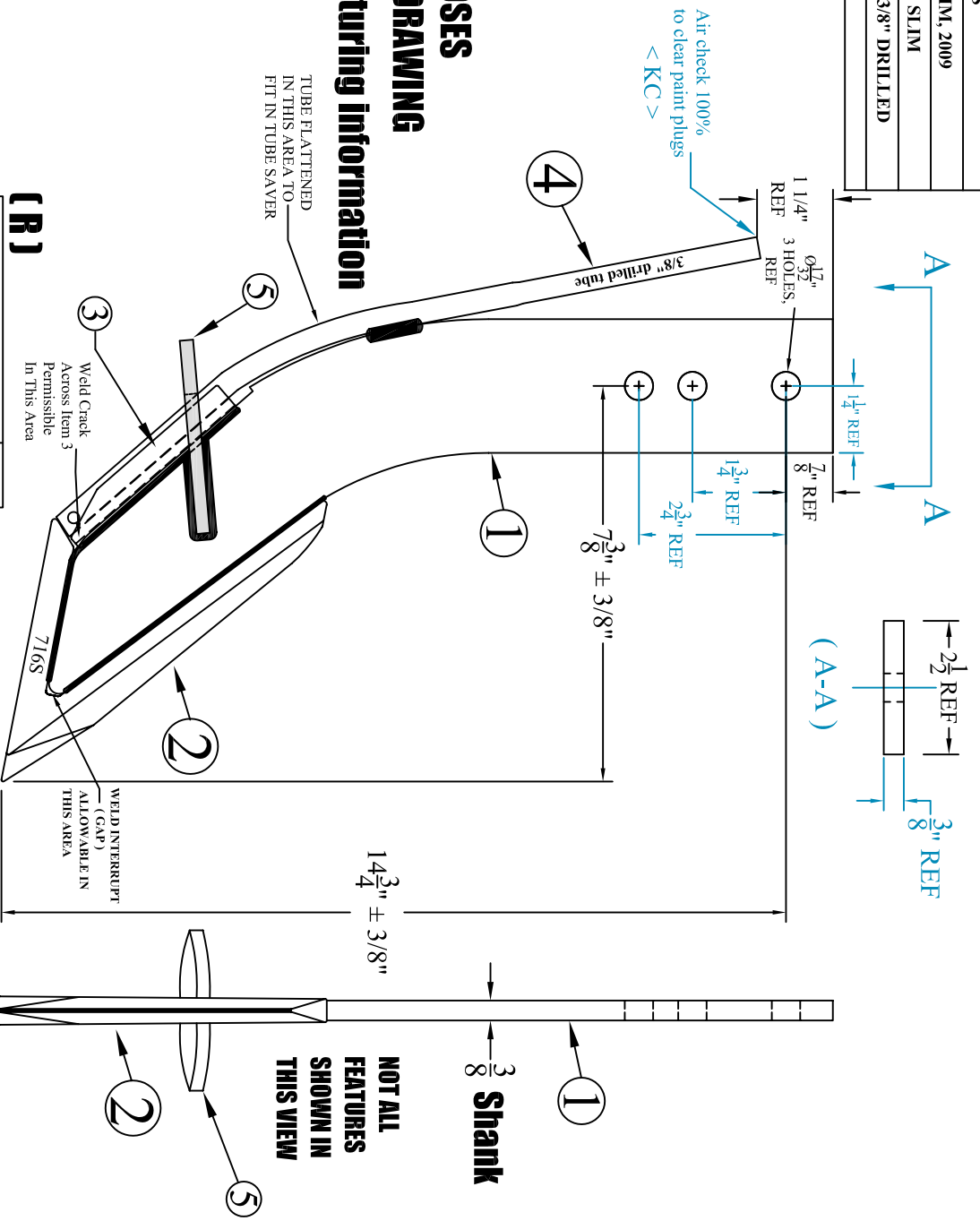
SHIELD
 AGRICULTURAL EQUIPMENT

DRAWN BY: **SHORES** DATE: **05/15/10**

CHECKED BY: **NC** DATE: **NC**

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	KNIFE TUBE, K-4TS, 3/8" DRILLED
5	1	SPL-4SNEW	Sealer plate, slim

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



< KC > Key Characteristic

(R)
K-4TS/PLSPL NC

REV.	BY	DATE	DESCRIPTION
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-	-	-	-
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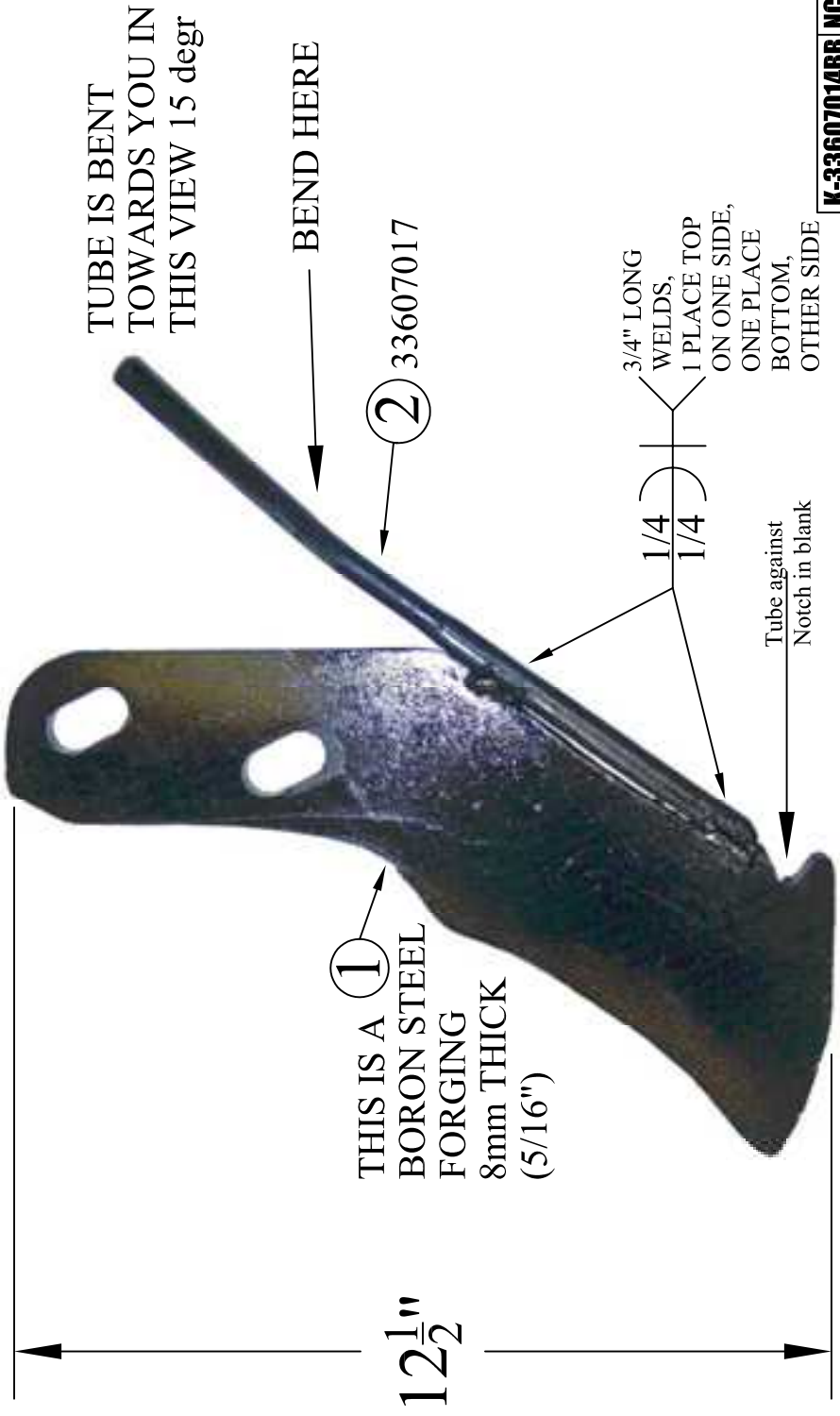
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 0.0000 +/- .001
 ANGLE +/- 2

SHIELD
 AGRICULTURAL EQUIPMENT

DRAWN BY: **SHORES** DATE: **05/15/10**
 CHECKED BY: **_** DATE: **_**

DESCRIPTION	MATERIAL	REV.
K4 SLIM 3/8" KNIFE WITH 3/8" Drilled tube & sealer	Weldment	NC

ITEM #	QUAN.	PART #	DESCRIPTION
1	1	87437978ST	BORON STEEL KNIFE BLANK
2	1	33607017	KNIFE TUBE



REV.	BY	DATE	DESCRIPTION	MATERIAL	WELDMENT
-	-	-	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-

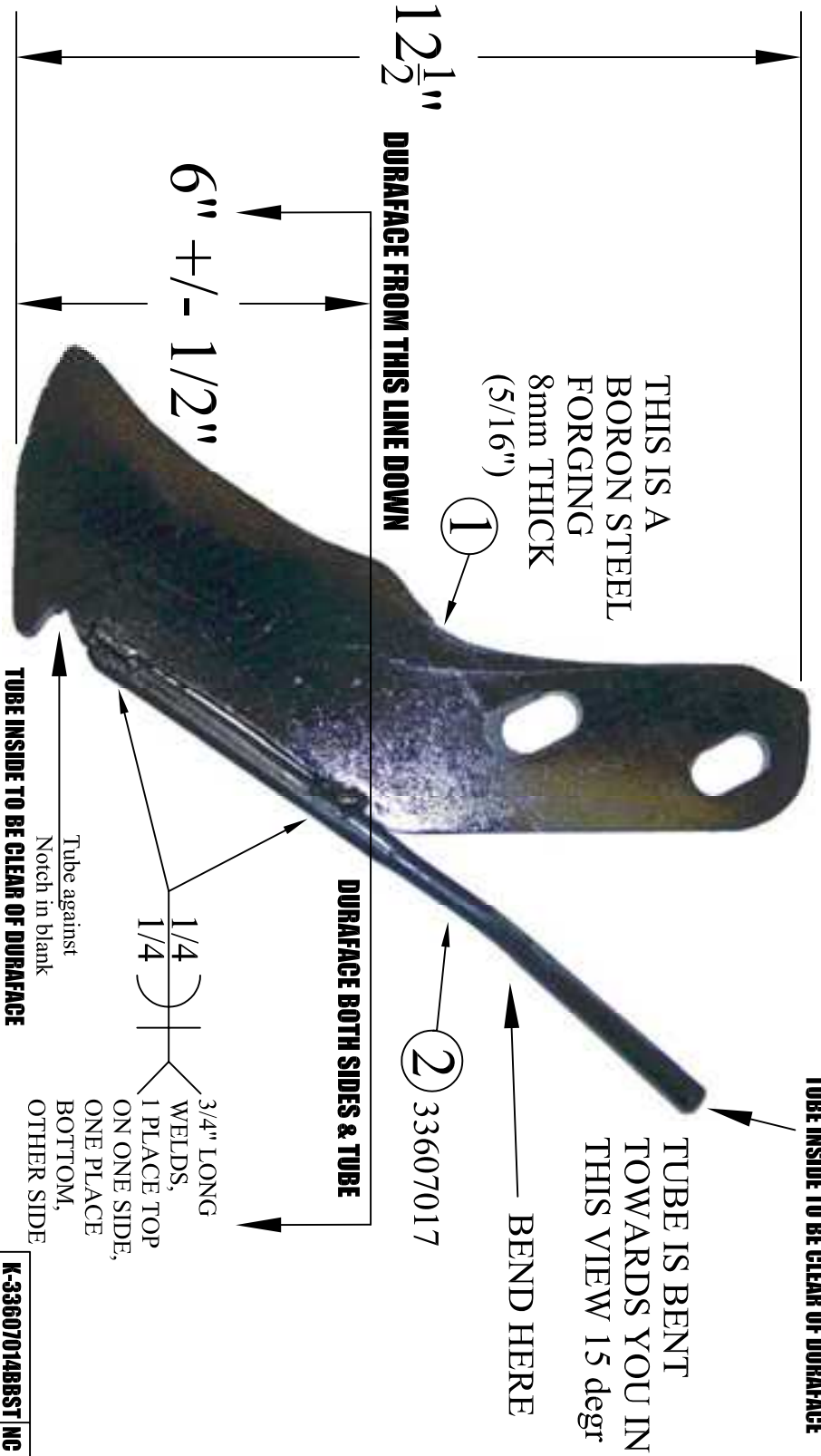
TOLERANCE UNLESS OTHERWISE NOTED
 0/0 +/- 1/32
 0.00 +/- .020
 0.000 +/- .005
 0.0000 +/- .001
 ANGLE +/- 1/2

SHIELD
 AGRICULTURAL EQUIPMENT
 DRAWN BY: SHORES DATE: 02/26/09
 CHECKED BY: DATE: _ _

PART NO. **K-33607014BB** REV. **NC**

ITEM #	QUAN.	PART #	DESCRIPTION
1	1	87437978ST	BORON STEEL KNIFE BLANK
2	1	33607017	KNIFE TUBE

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



THIS IS A
 BORON STEEL
 FORGING
 8mm THICK
 (5/16")

TUBE INSIDE TO BE CLEAR OF DURAFACE

TUBE IS BENT
 TOWARDS YOU IN
 THIS VIEW 15 degr

BEND HERE

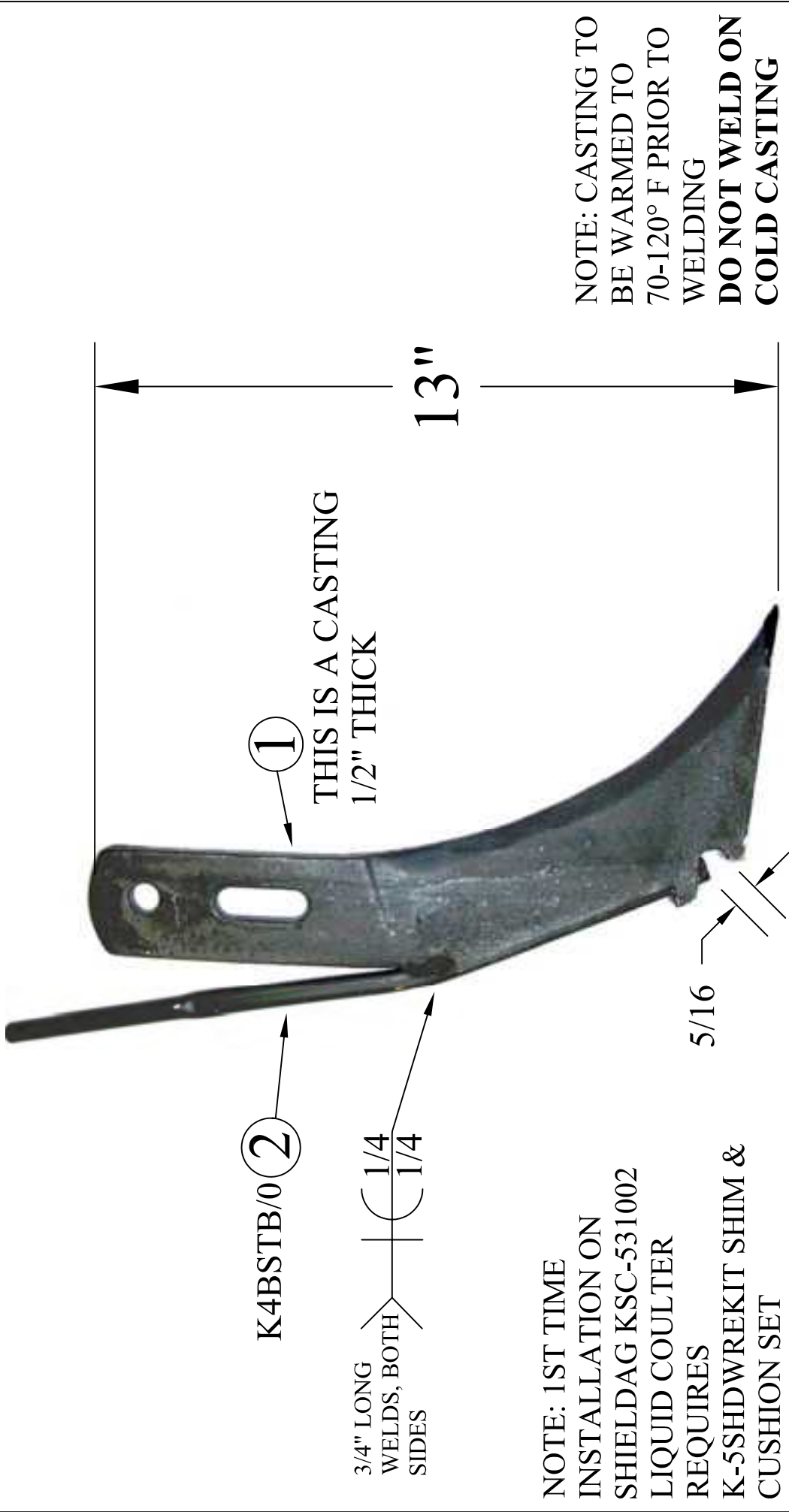
DURAFACE BOTH SIDES & TUBE

TUBE INSIDE TO BE CLEAR OF DURAFACE

K-33607014BBST NC

DESCRIPTION	MATERIAL	TOLERANCE UNLESS OTHERWISE NOTED	PART NO.	REV.
BORON STEEL DMI LIQUID KNIFE WITH DURAFACE	WELDMENT WITH DURAFACE	0/0 +/- 1/32 0.00 +/- .020 0.000 +/- .005 0.0000 +/- .001 ANGLE +/- 1/2	K-33607014BBST	NC
BY _____	DATE _____	SHIELD AGRICULTURAL EQUIPMENT DRAWN BY: SHORES DATE: 02/26/09 CHECKED BY: _____ DATE: _____		

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



K4BSTB/0 **2**

3/4" LONG
WELDS, BOTH
SIDES

1/4
1/4

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

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

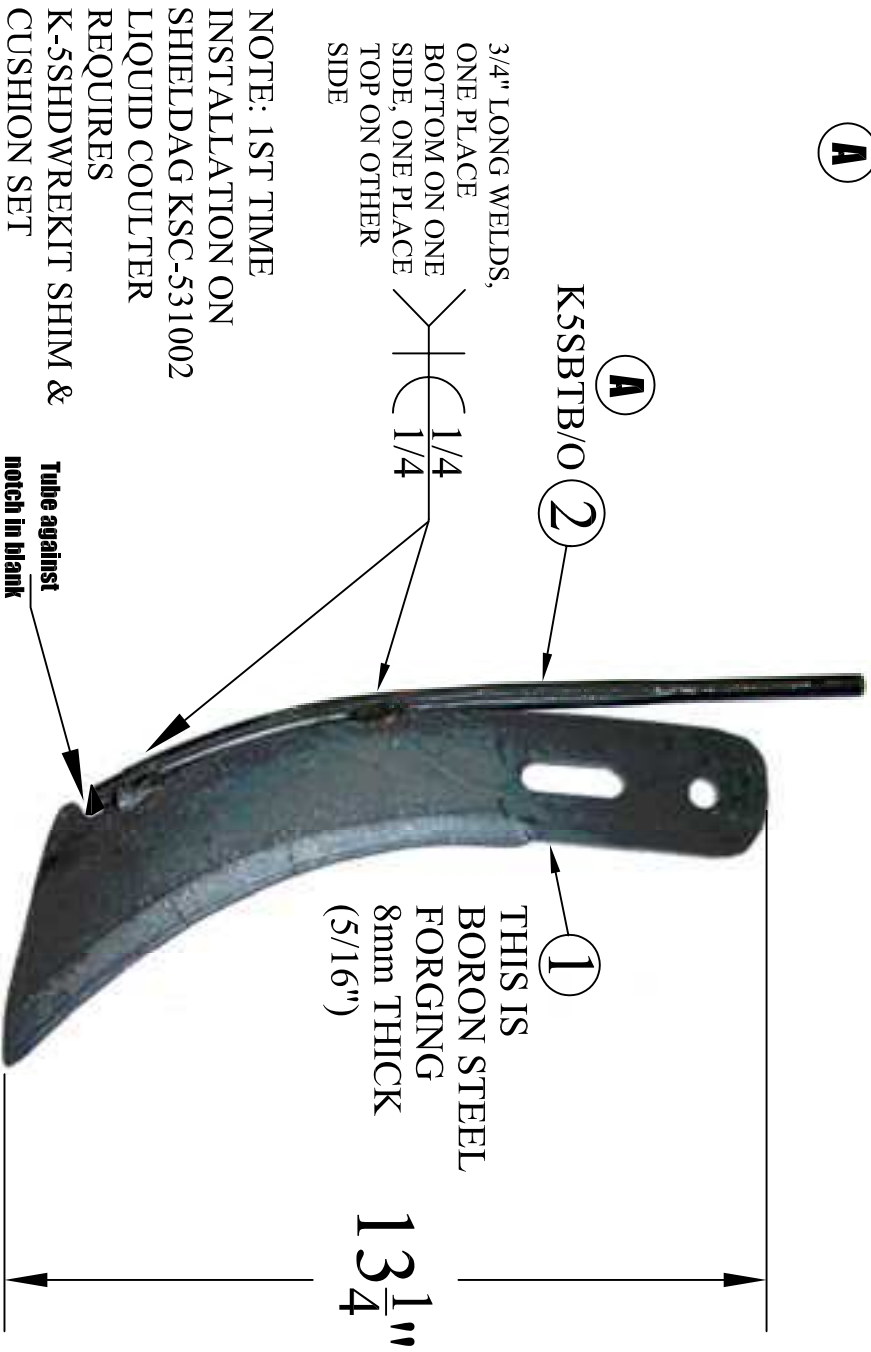
REV.	BY	DATE	DESCRIPTION	MATERIAL
-	-	-		
-	-	-		
-	-	-		
-	-	-		
REV.	BY	DATE	DESCRIPTION	MATERIAL

SHIELD AGRICULTURAL EQUIPMENT	
DRAWN BY: SHORES	DATE: 02/26/09
CHECKED BY: -	DATE: -
PART NO. K-5S	REV. -

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

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

A



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

Tube against notch in blank

THIS IS BORON STEEL FORGING 8mm THICK (5/16")

13 1/4"

K-5SB A

SHIELD
AGRICULTURAL EQUIPMENT

DRAWN BY: SHORES DATE: 02/26/09

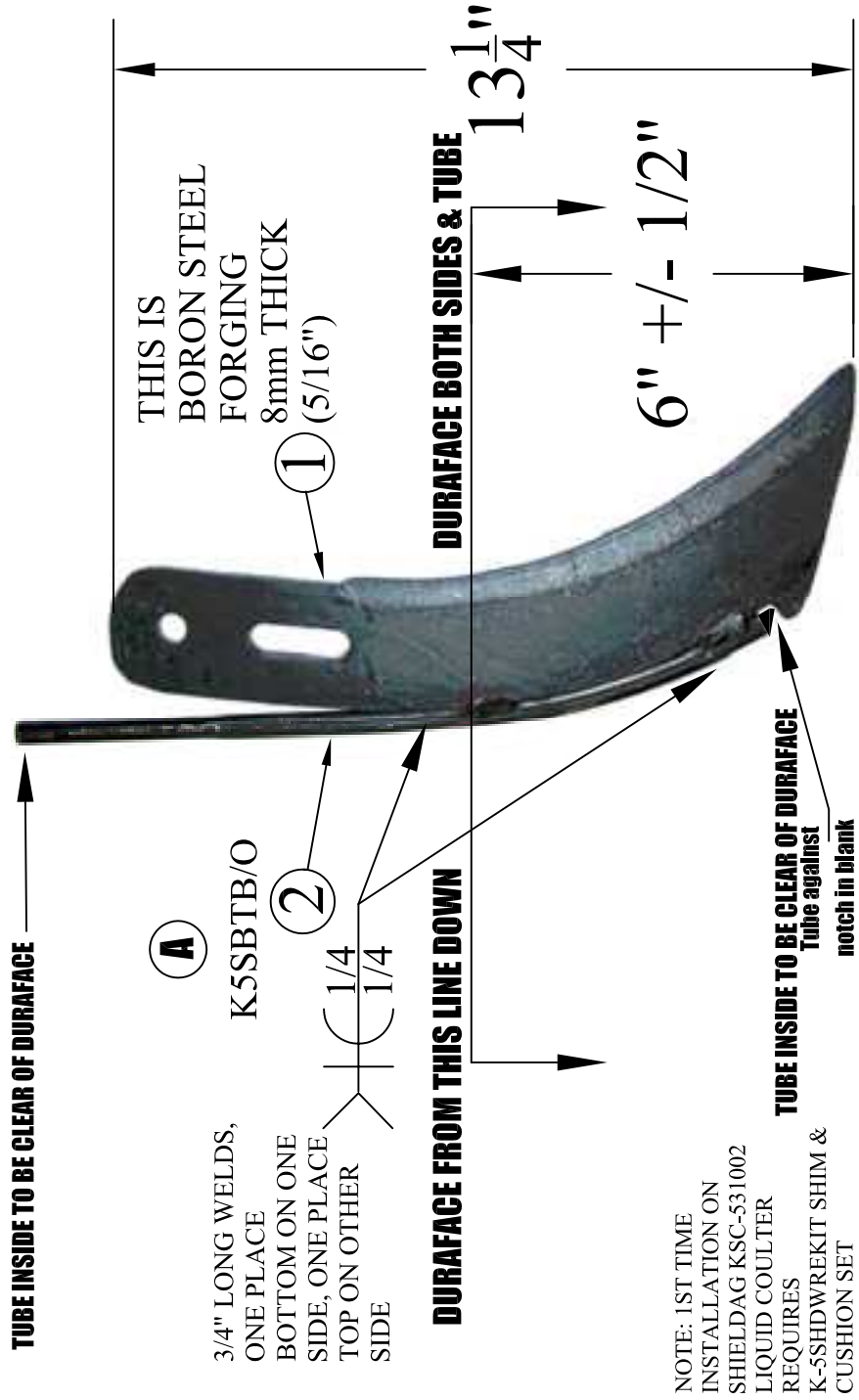
CHECKED BY: DATE:

REV.	BY	DATE	DESCRIPTION	MATERIAL	PART NO.	REV.
A	MB	06/22/10	Changed tube to K5SBTB/O part number	WELDMENT	K-5SB	A
<p>DESCRIPTION: BORON STEEL LIQUID KNIFE</p>						

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

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

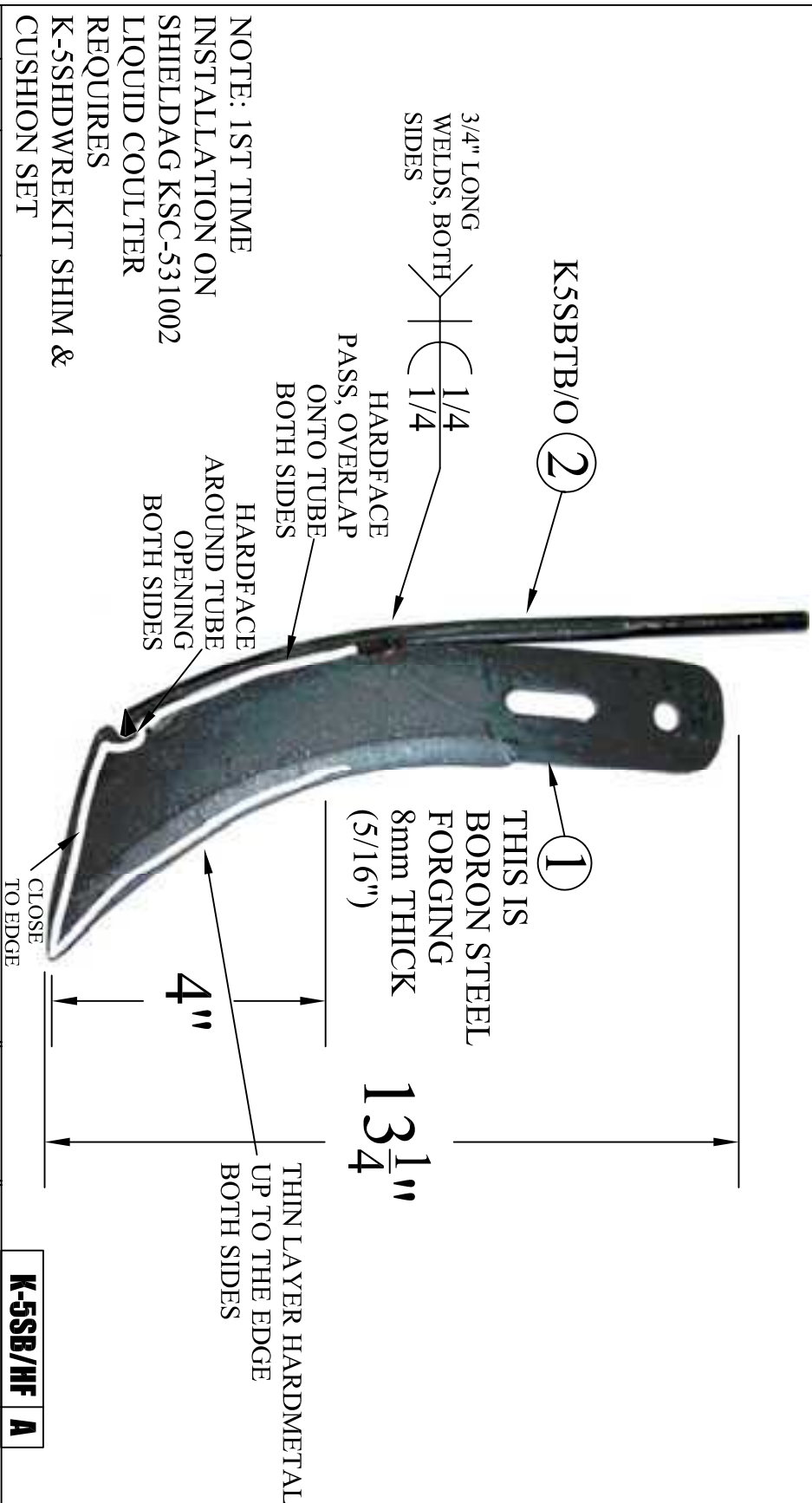
ITEM #	QUAN.	PART #	DESCRIPTION
1	1	K-5S/BORON	BORON STEEL KNIFE BLANK
2	1	K5SBTB/O	3/8" OPEN END TUBE



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

K-5SBSST		A	
TOLERANCE UNLESS OTHERWISE NOTED		SHIELD	
0/0 +/- 1/16		AGRICULTURAL EQUIPMENT	
0.00 +/- .020		DRAWN BY: SHORES	
0.000 +/- .005		DATE: 02/26/09	
0.0000 +/- .001		CHECKED BY: -	
ANGLE +/- 2		DATE: -	
-		PART NO. K-5SBSST	
-		REV. A	
-		-	
-		-	
-		-	
A	MB	06/22/10	Changed tube to K5SBTB/O part number
REV.	BY	DATE	DESCRIPTION
BORON STEEL LIQUID KNIFE WITH DURAFACE		WELDMENT WITH DURAFACE	
MATERIAL		MATERIAL	

ITEM #	QUAN.	PART #	DESCRIPTION
1	1	K-5SB	BORON STEEL KNIFE



K-5SB/HF A

SHIELD

AGRICULTURAL EQUIPMENT

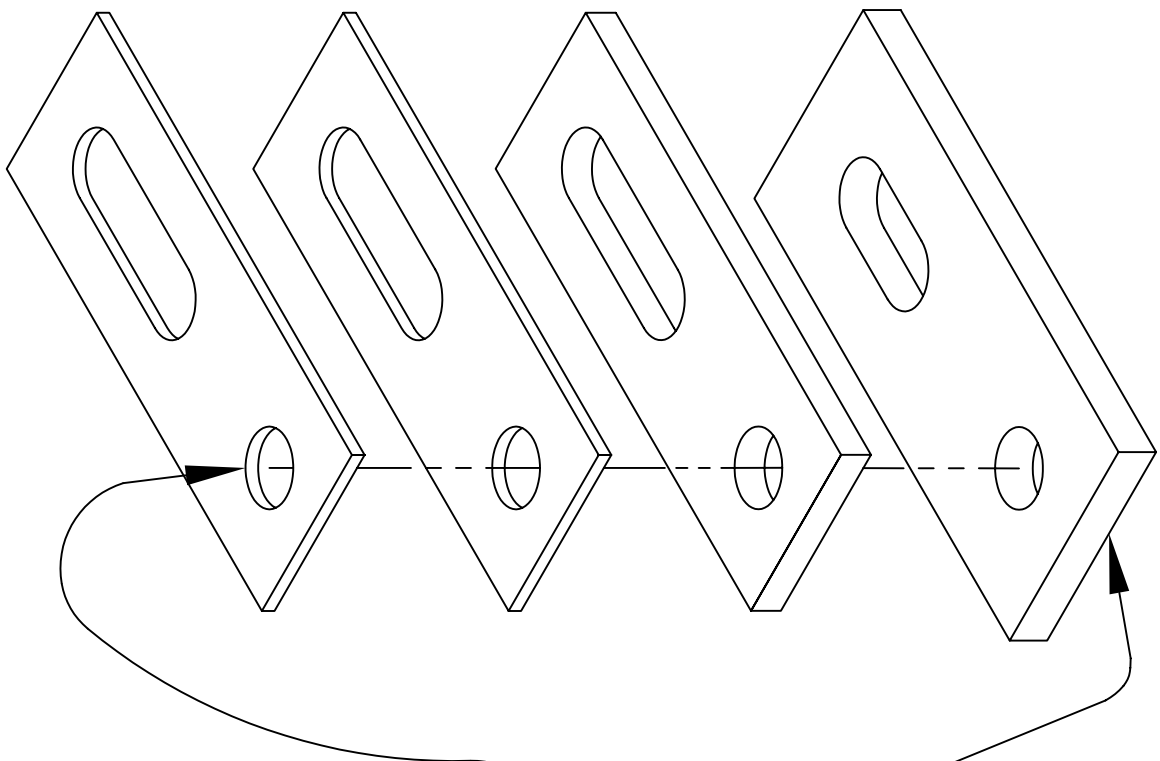
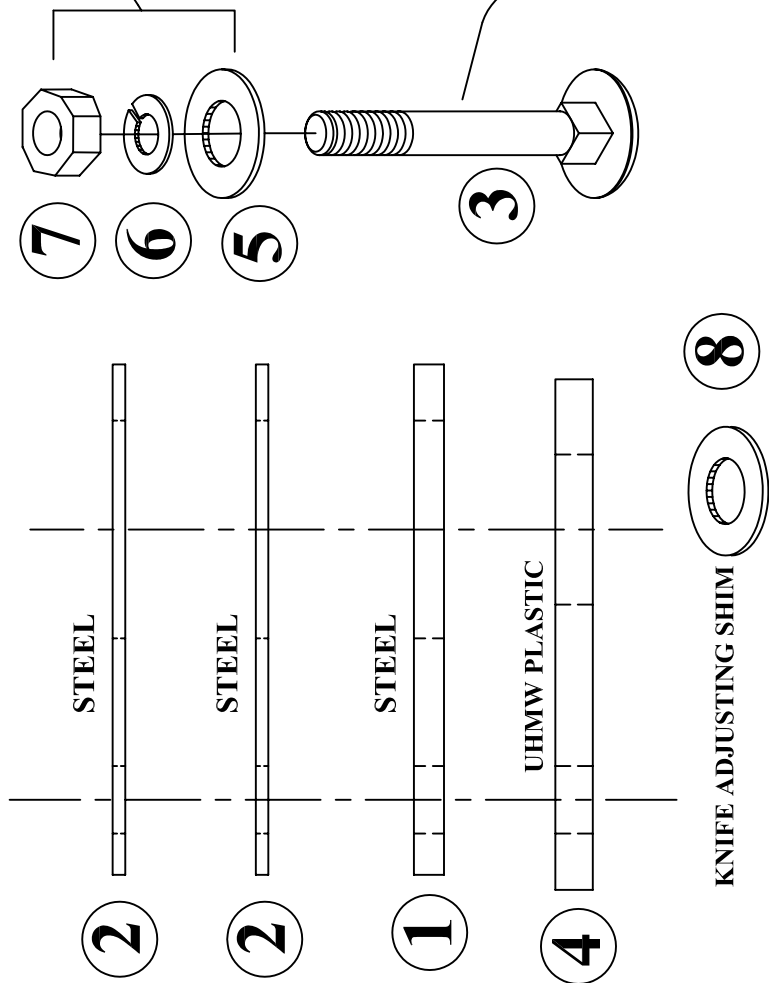
DRAWN BY: SHORES DATE: 02/26/09

CHECKED BY: DATE:

REV.	BY	DATE	DESCRIPTION
-	-	-	-
-	-	-	-
-	-	-	-
A	MB	06/22/10	Picture change, using K5SBTB/O tube cut at 45 degrees

DESCRIPTION	MATERIAL	PART NO.	REV.
BORON STEEL LIQUID KNIFE, HARDFACED	WELDMENT	K-5SB/HF	A

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



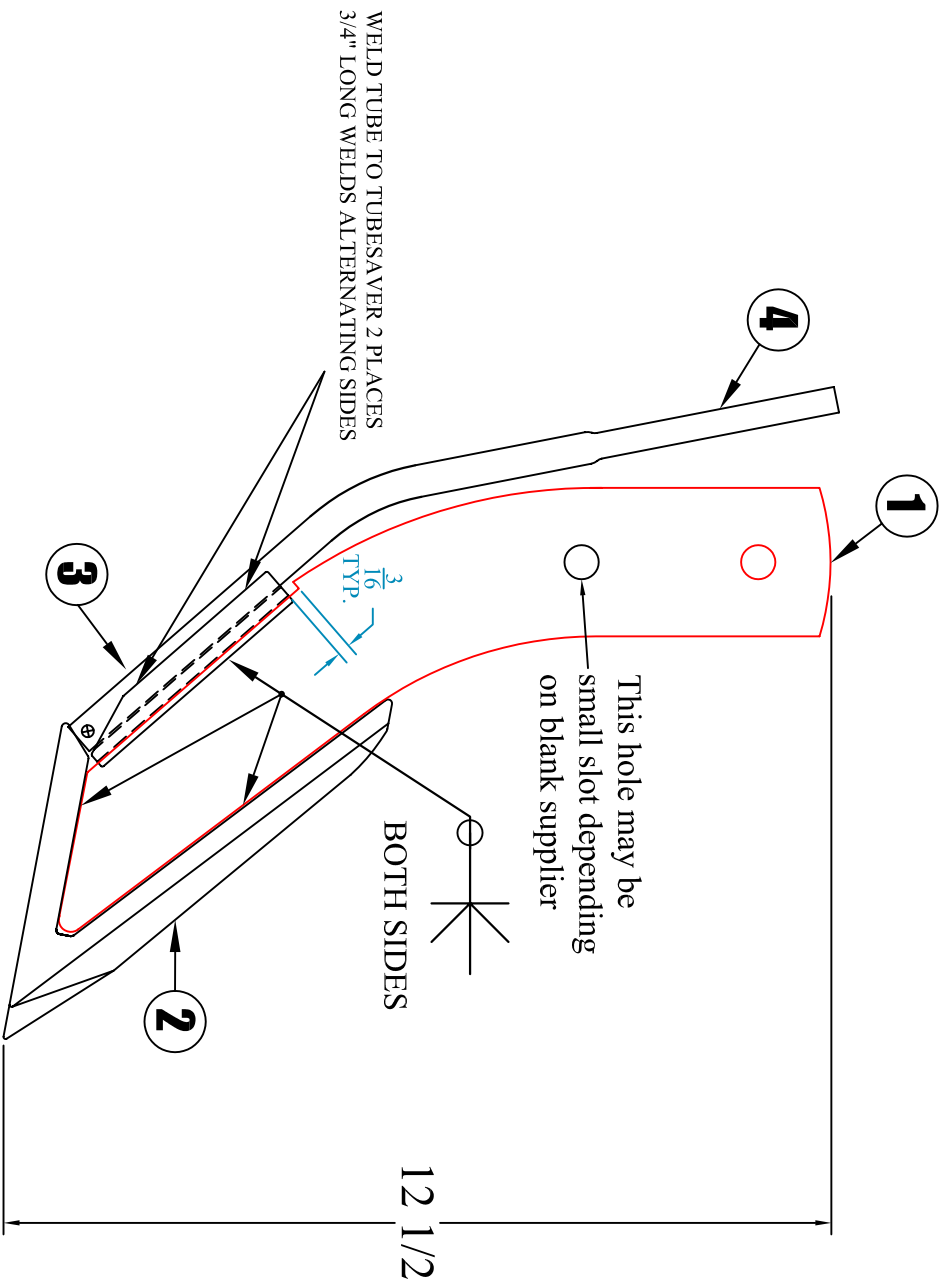
-	-	-
-	-	-
-	-	-
NC	AL	05-19-08
REV.	BY	DATE
DESCRIPTION		
MATERIAL		
ASSEMBLY		
PART NO.		
K-5SHDWREKIT		
REV.		
NC		

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: -

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

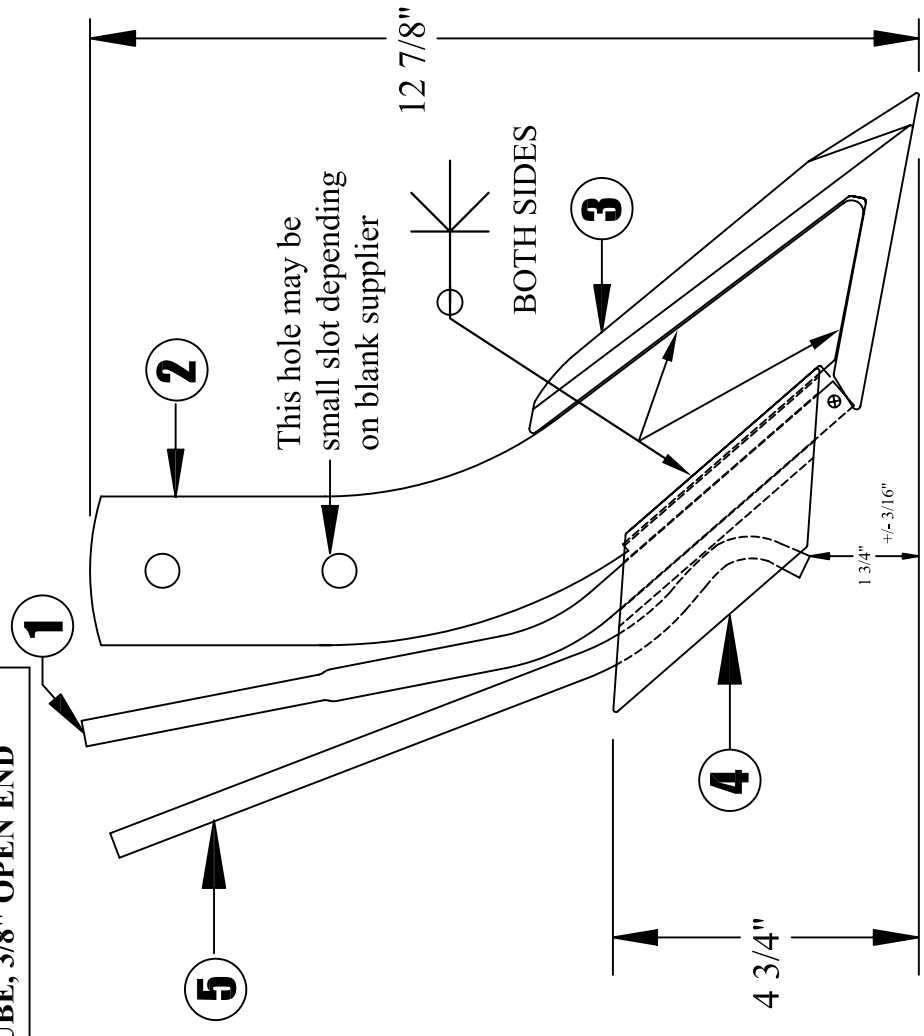


REV.	BY	DATE	DESCRIPTION
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-

TOLERANCE UNLESS OTHERWISE NOTED 0/0 +/- 1/32 0.00 +/- .020 0.000 +/- .005 0.0000 +/- .001 ANGLE +/- 1/2		SHIELD AGRICULTURAL EQUIPMENT DRAWN BY: ALBRIGHT CHECKED BY: _____ DATE: 4/2/09 DATE: _____
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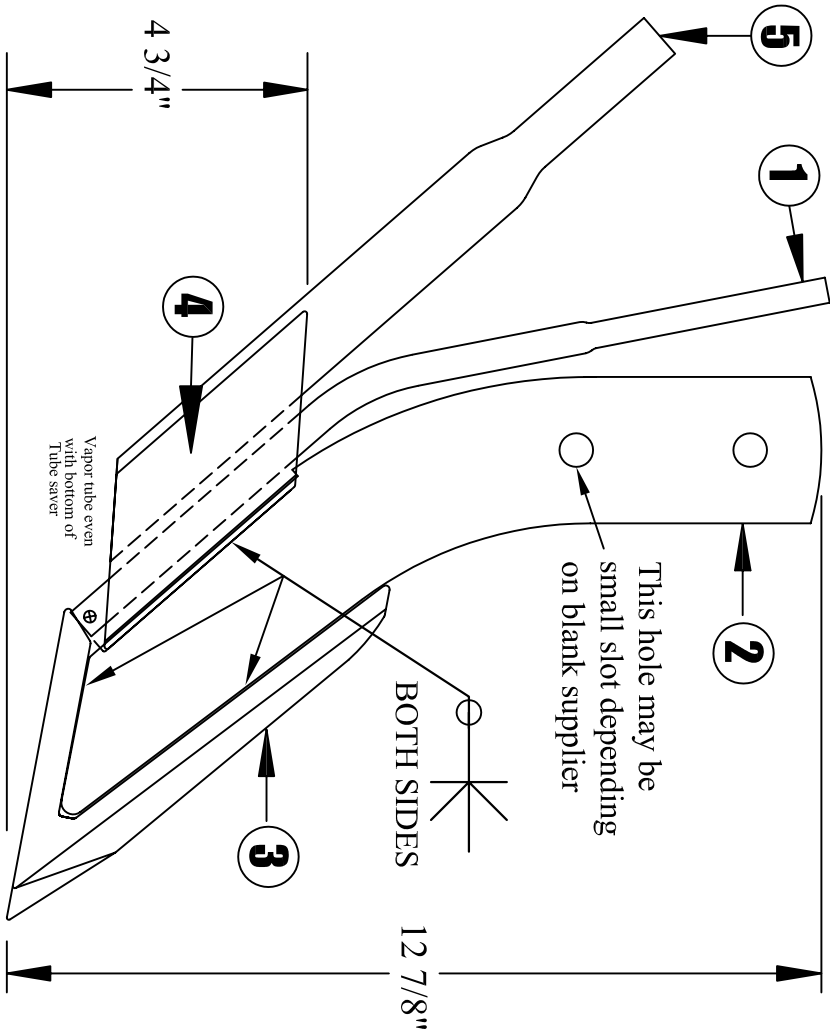
DESCRIPTION SLIM BORON KNIFE FOR HIGH SPEED	MATERIAL WELDMENT	PART NO. K-6S	REV. NG
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ITEM #	QUAN.	PART #	DESCRIPTION
1	1	K4STB	KNIFE TUBE
2	1	K6SB	5/16" BORON STEEL BLANK
3	1	716SM	CHROM CARBIDE POINT
4	1	100DS	TUBE SAVER
5	1	TB-18	KNIFE TUBE, 3/8" OPEN END



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

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	K2TBDAS/4	3/4" VAPOR TUBE



REV.	BY	DATE	DESCRIPTION	TOLERANCE UNLESS OTHERWISE NOTED	DRAWN BY:	DATE:	REV.
-	-	-	-	0/0 +/- .1/32	SHORES	12/1/09	NC
-	-	-	-	0.00 +/- .020			
-	-	-	-	0.000 +/- .005			
-	-	-	-	0.0000 +/- .001			
-	-	-	-	ANGLE +/- 1/2			

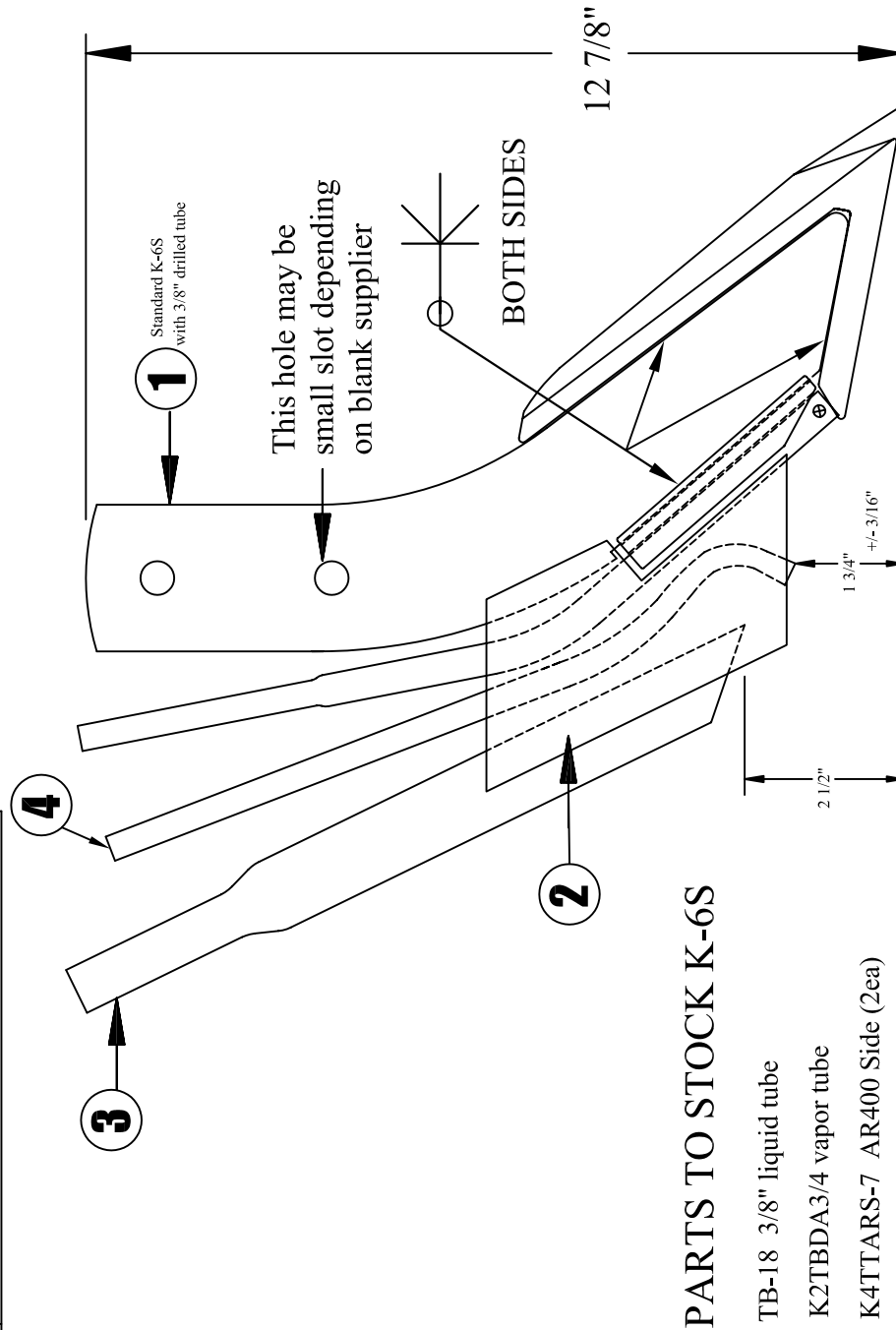
DESCRIPTION: SLIM KNIFE WITH 3/8" DRILLED TUBE AND 3/4 VAPOR TUBE

MATERIAL: WELDMENT

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



ADD PARTS TO STOCK K-6S

- TB-18 3/8" liquid tube
- K2TBDA3/4 vapor tube
- K4TTARS-7 AR400 Side (2ea)

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

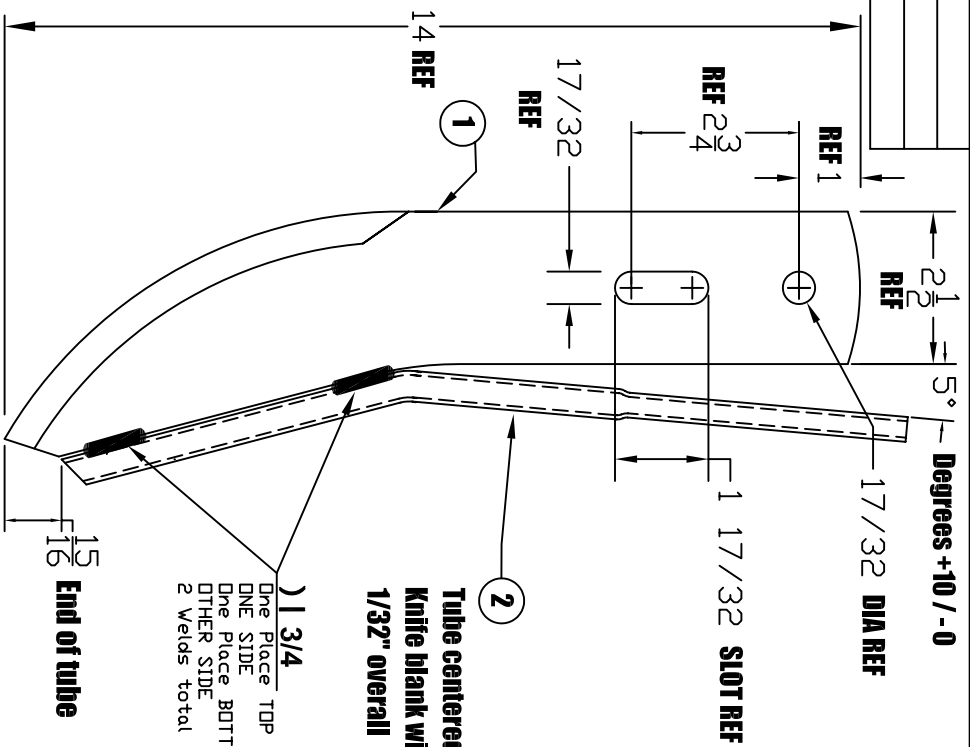
ITEM #	QUAN.	PART #	DESCRIPTION
1	1	K4BS-BORON	Knife blank, Boron Steel
2	1	K4BSTB/O	Knife tube 3/8" open end

5/16 K 2-1/2

Boron Steel Blank

Blank heat-treated to Rc 40--50

**Knife straight within 1/16"
Overall after welding**



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

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

SHIELD	DATE: 06/23/10
AGRICULTURAL EQUIPMENT	CHECKED BY: _____
DRAWN BY: ALBRIGHT	DATE: 06/23/10

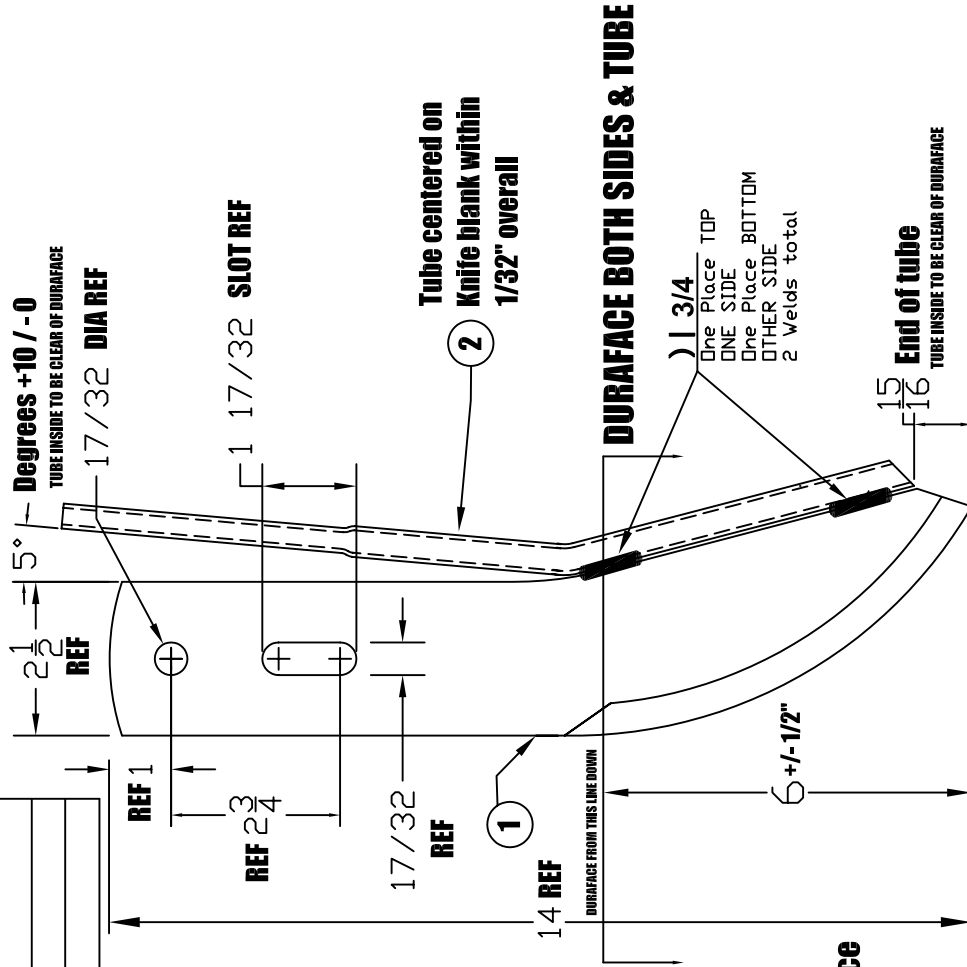
DESCRIPTION: Backswpt knife w/ 3/8" open-end tube	MATERIAL: WELDMENT	PART NO.: K-4TSBS/BORON	REV.: NC
--	---------------------------	--------------------------------	-----------------

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

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

SHIELD
AGRICULTURAL EQUIPMENT

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

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

DESCRIPTION	MATERIAL	WELDMENT	PART NO.	REV.
Backswept knife w/ 3/8" open-end tube, durafaced			K-4TSBS/BSST	NC

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ShieldAg 800-798-1968 www.shieldag.com

ShieldAg's ST-series Strip Till Points

optional
TB-18 tube



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

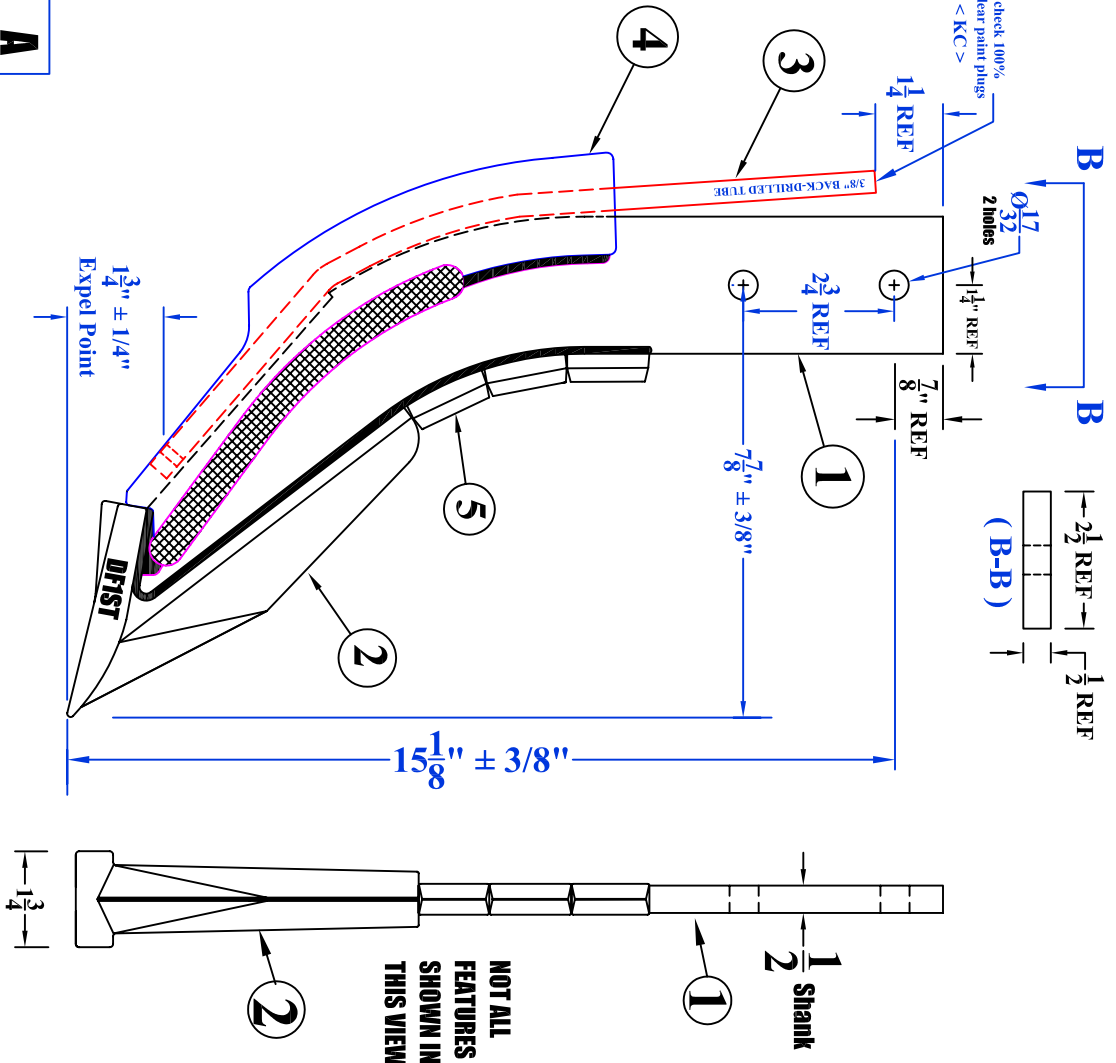
ITEM #	QUAN.	PART #	DESCRIPTION
1	1	K4T-BST	Blank, 1/2 X 2-1/2, Two-hole
2	1	DF1ST	STRIP TILL POINT, CASTING
3	2	K4TTARS-2	SIDE PLATE FOR STD LENGTH KNIFE
4	1	TB-4E	KNIFE TUBE, 3/8" back-drilled
5	.75	KTWS-01	SHANK GUARD, CASTING

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

Ag Dip Black Paint
Per Customer Specifications

< KC > Key Characteristic

ST-16 A



NOT ALL
FEATURES
SHOWN IN
THIS VIEW

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

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

SHIELD
AGRICULTURAL EQUIPMENT

DRAWN BY: **A LINK** DATE: **08/09/07**

CHECKED BY: **_** DATE: **_**

DESCRIPTION **STRIP TILL POINT with 3/8" back-drilled NH3 tube**

MATERIAL **WELDMENT**

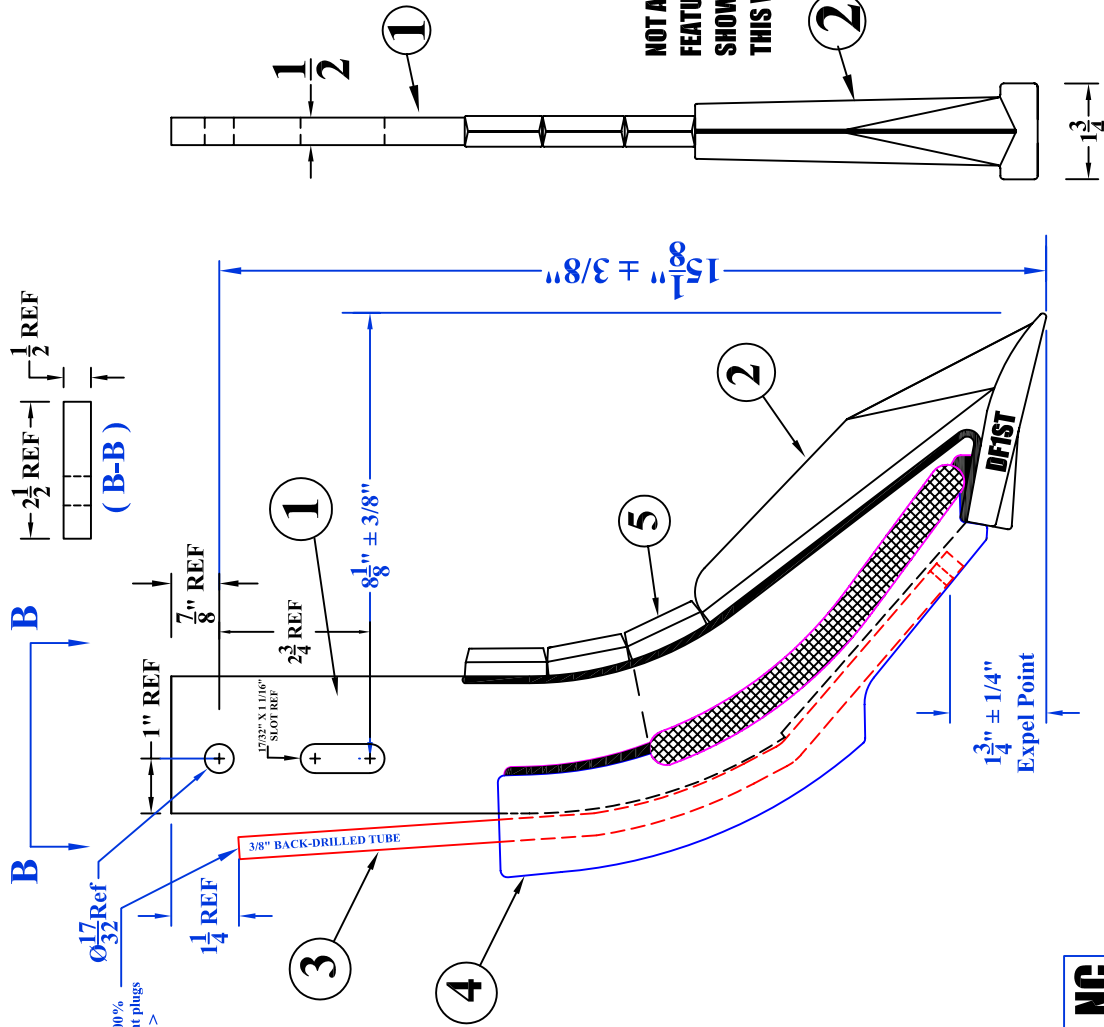
PART NO. **ST-16 (R)**

REV. **A**

REVISION NC USES HOLE-AND-SLOT BLANK

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

Air check 100%
to clear paint plugs
< KC >



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

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

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

SHIELD
AGRICULTURAL EQUIPMENT

DRAWN BY: A LINK	DATE: 08/09/07
CHECKED BY: -	DATE: -

DESCRIPTION
STRIP TILL POINT with 3/8" back-drilled NH3 tube

MATERIAL
WELDMENT

PART NO.
ST-16 (R)

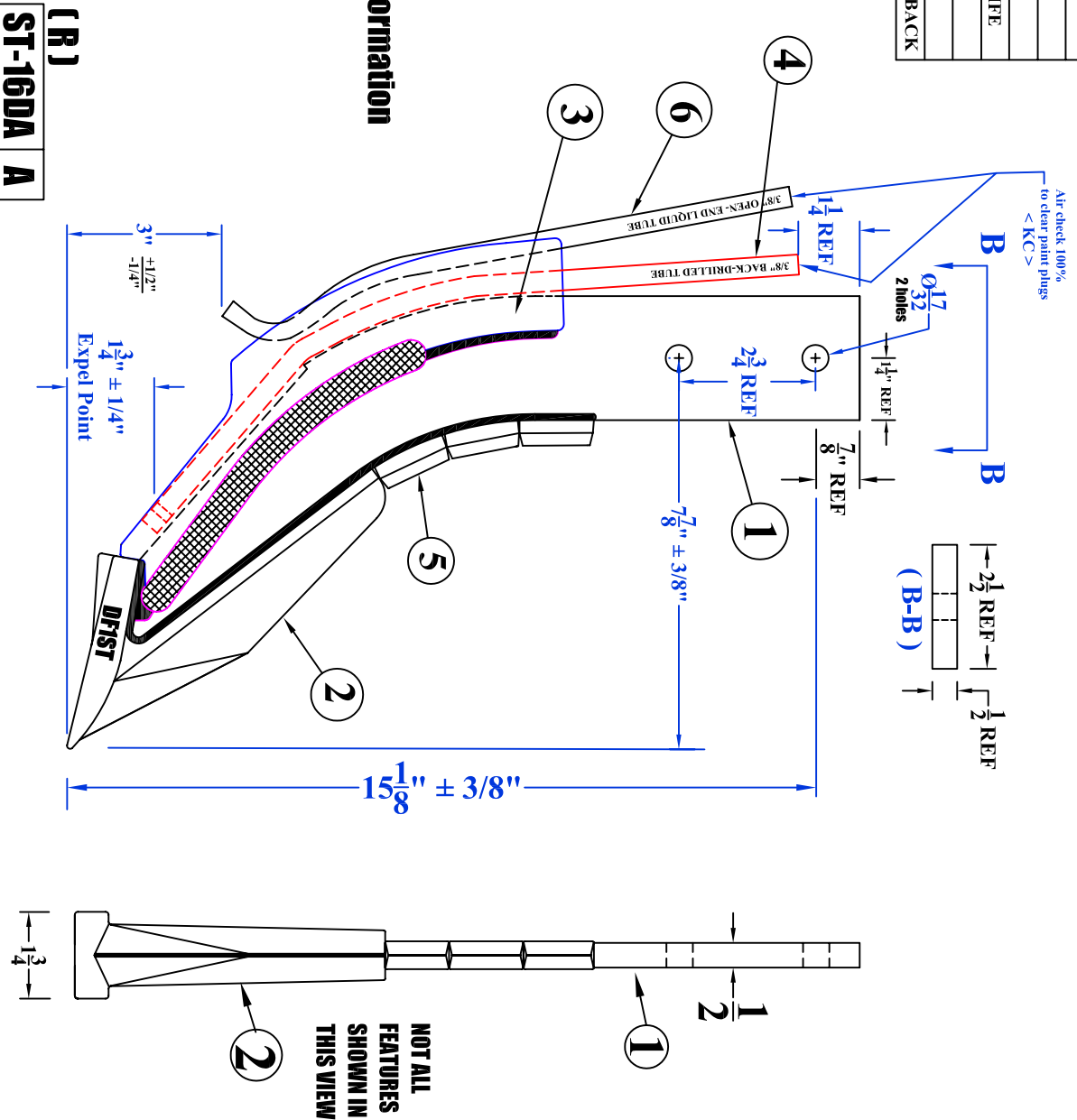
REV.
NC

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-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 CURVED-BACK

**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-16DA A

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

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

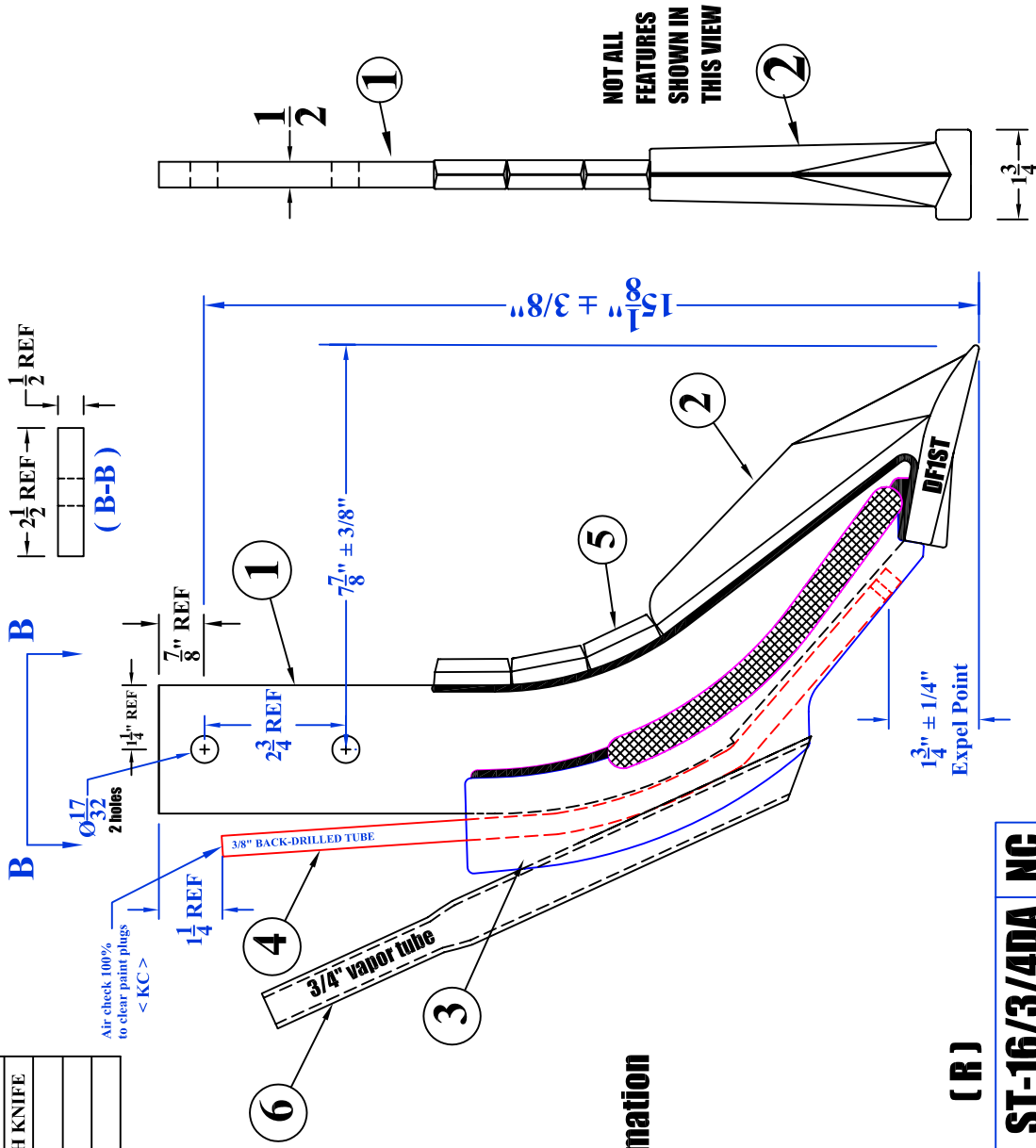
DESCRIPTION	MATERIAL	REV.
STRIP TILL POINT with 3/8" back-drilled NH3 tube & 3/8" Liquid Tube	WELDMENT	A

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	K2TBD3/4	3/4" VAPOR TUBE

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-16/3/4DA NC

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

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

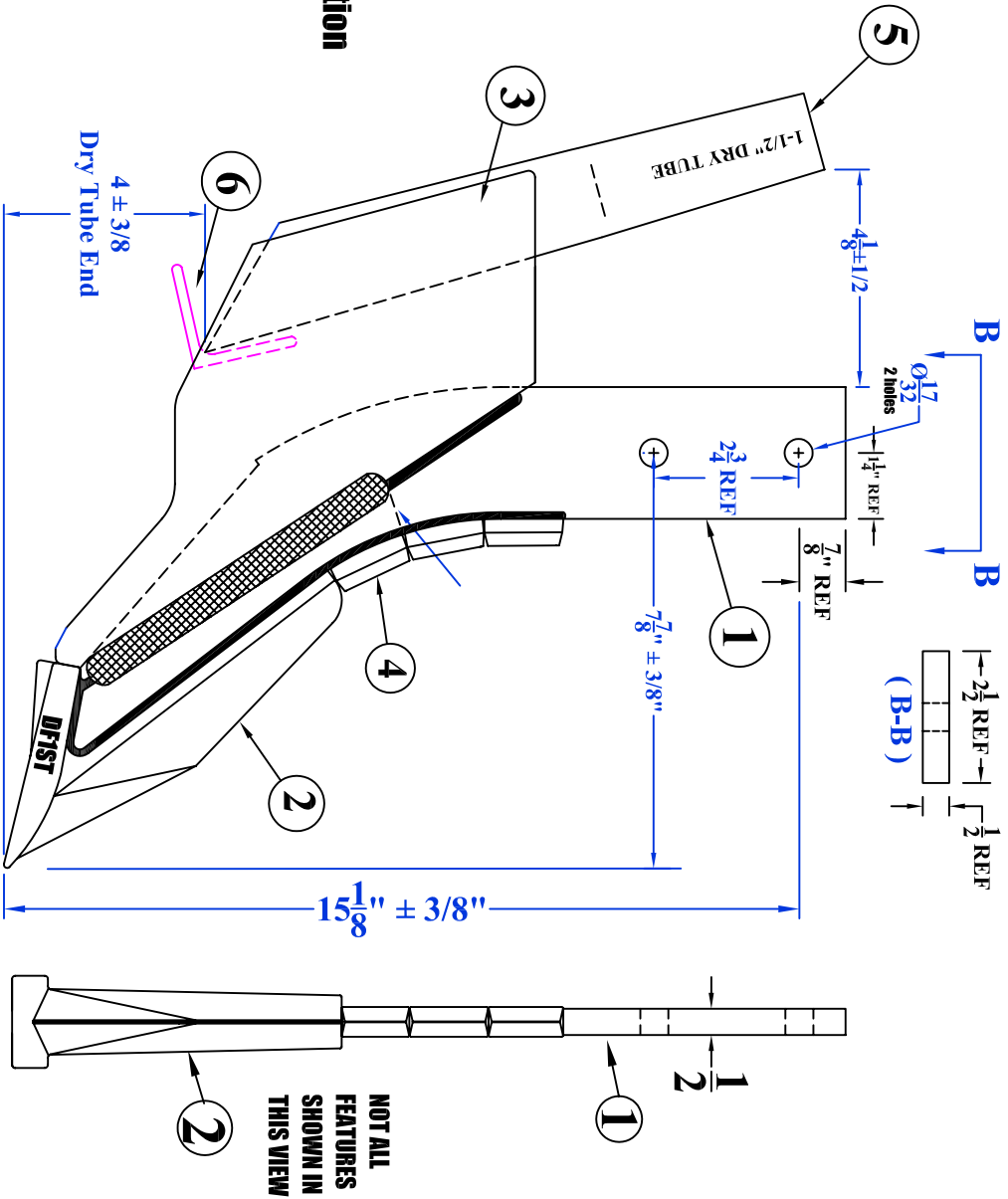
SHIELD
AGRICULTURAL EQUIPMENT

DRAWN BY: **A LINK** DATE: **08/09/07**
CHECKED BY: - DATE: -

DESCRIPTION	MATERIAL	PART NO.	REV.
STRIP TILL POINT with 3/8" back-drilled NH3 tube & 3/4" Vapor Tube	WELDMENT	ST-16/3/4DA (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-3	SIDE PLATE FOR STD LENGTH KNIFE
4	.75	K1WS-01	SHANK GUARD, CASTING
5	1	K4TB112DA	DEEP FURROW 1.5" DRY FEET TUBE
6	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-16/112 REV A

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

SHIELD
AGRICULTURAL EQUIPMENT

DESCRIPTION: **SHIELD AG STRIP TILL POINT & 1-1/2" DRY TUBE**

MATERIAL: **WELDMENT**

PART NO.: **ST-16/112 (R)**

REV.: **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

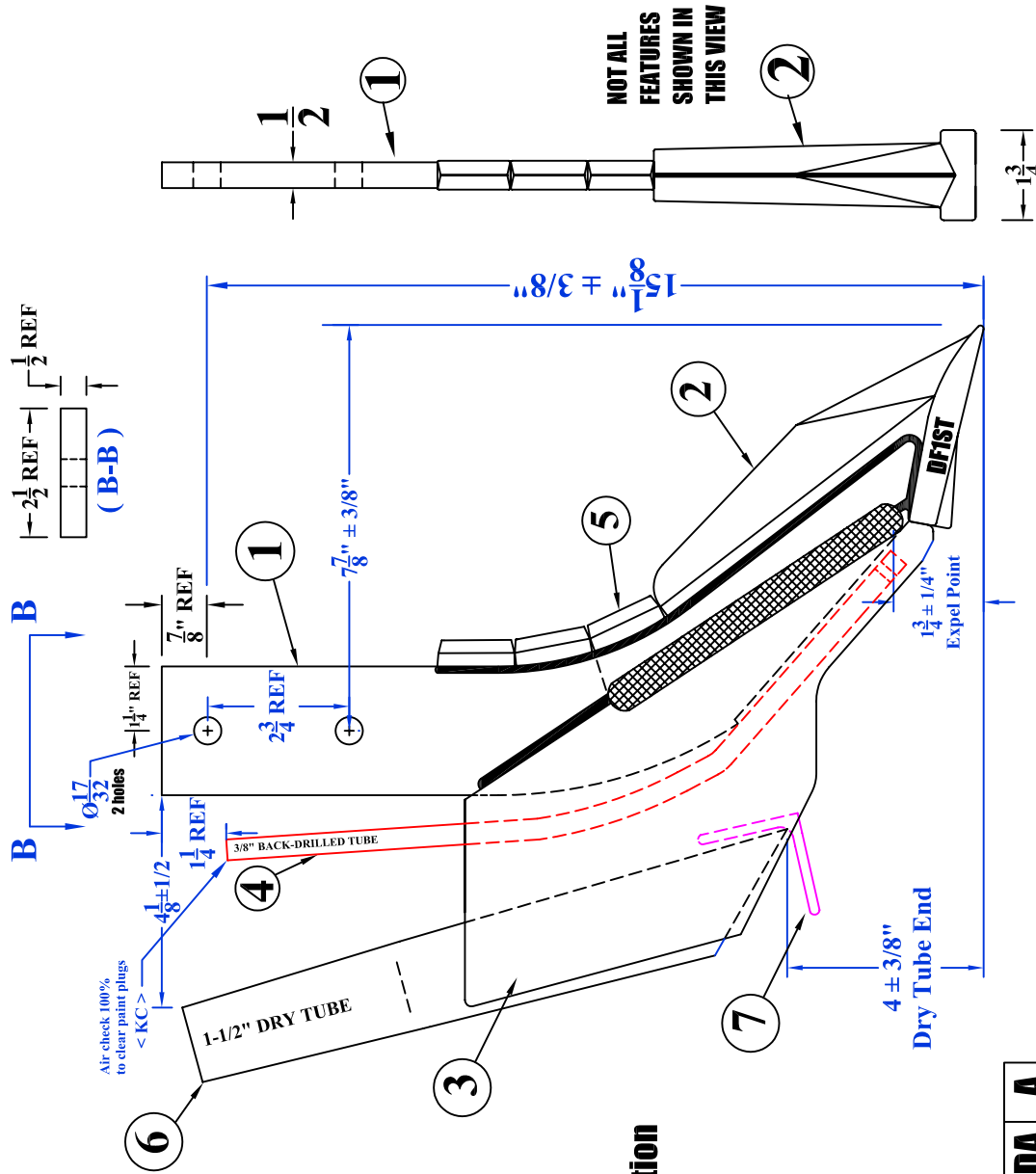
DRAWING FOR MARKETING PURPOSES
(R) Designation for REDACTED DRAWING
To remove proprietary manufacturing information

Ag Dip Black Paint
Per Customer Specifications

(R)

< KC > Key Characteristic

ST-16/112DA A



SHIELD AGRICULTURAL EQUIPMENT	
DRAWN BY: SHORES	DATE: 05/24/10
CHECKED BY: -	DATE: -

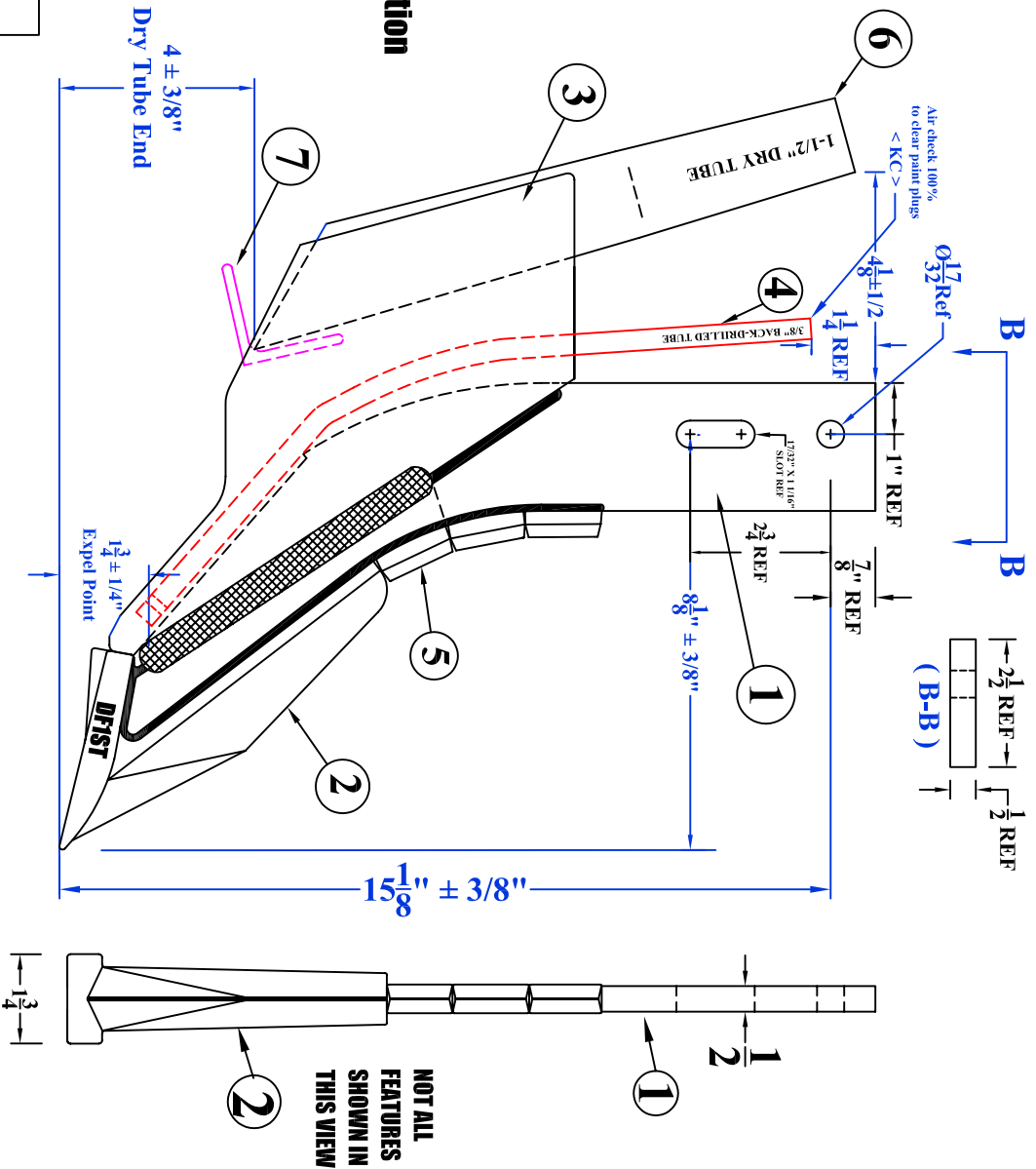
TOLERANCE UNLESS OTHERWISE NOTED	
0/0 +/-	1/16
0.00 +/-	.020
0.000 +/-	.005
0.0000 +/-	.001
ANGLE +/- 2	

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

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

ITEM #	QUAN.	PART #	DESCRIPTION
1	1	K4T-B	Blank, 1/2 X 2-1/2, DF-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 BARREL

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-16/112DA NC

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

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: **05/24/10**

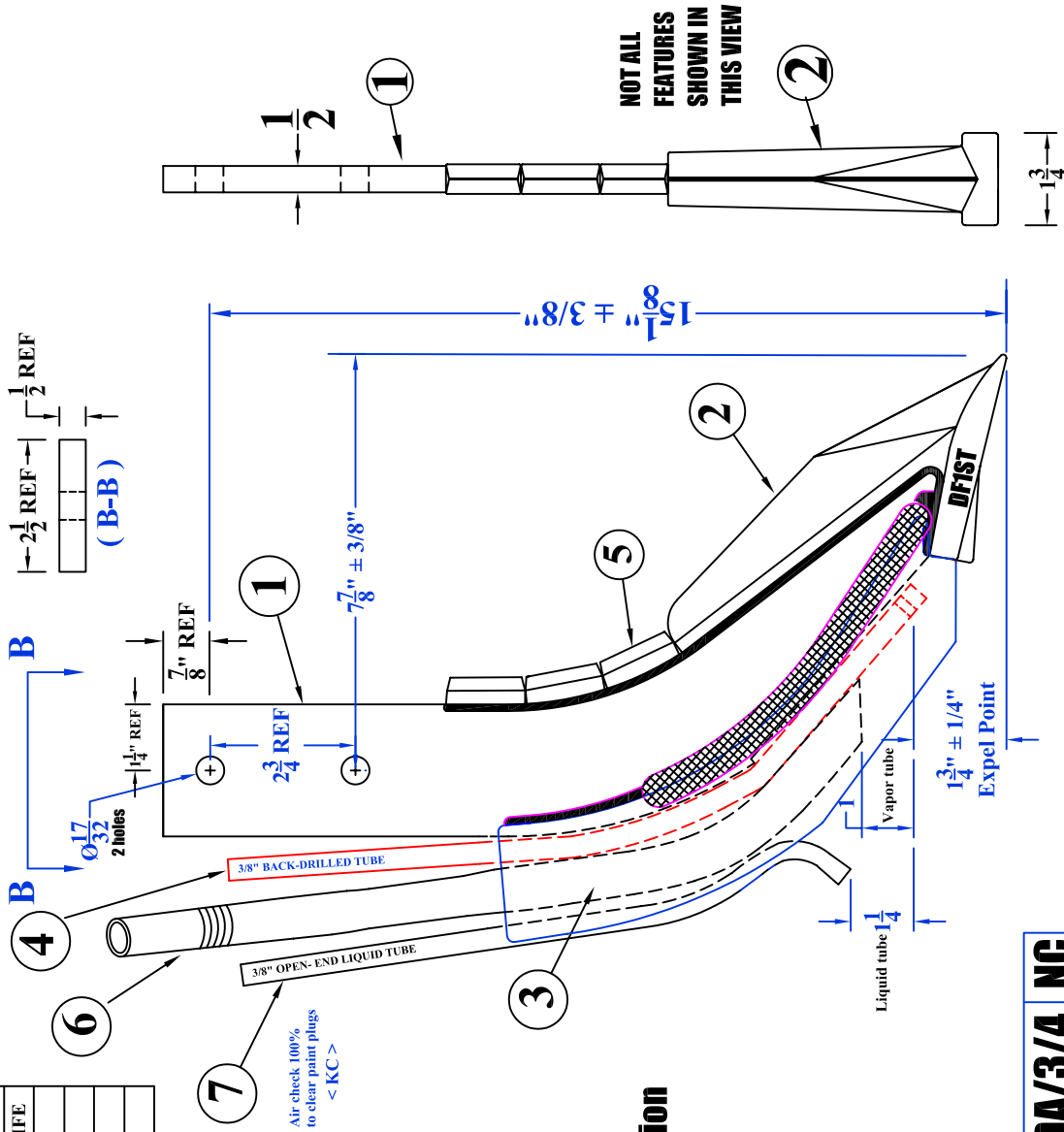
CHECKED BY: DATE:

DESCRIPTION **STRIP TILL POINT with 3/8" back-drilled NH3 tube & 1-1/2" Dry Tube**

MATERIAL **WELDMENT**

PART NO. **ST-16/112DA (R)** REV. **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



**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/DA/3/4 NC

REV.	BY	DATE	DESCRIPTION	MATERIAL	WELDMENT	PART NO.	REV.
-	-	-	-	-	-	-	NC
-	-	-	-	-	-	-	NC
-	-	-	-	-	-	-	NC
-	-	-	-	-	-	-	NC
REV.	BY	DATE	DESCRIPTION	MATERIAL	WELDMENT	PART NO.	REV.
06/01/10	MB	06/01/10	AGRICULTURAL EQUIPMENT	ST-16/DA/3/4 (R)	WELDMENT	ST-16/DA/3/4 (R)	NC

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

SHIELD
 AGRICULTURAL EQUIPMENT

DRAWN BY: MB
 CHECKED BY: -
 DATE: 06/01/10
 DATE: -

PART NO. ST-16/DA/3/4 (R)
 REV. NC

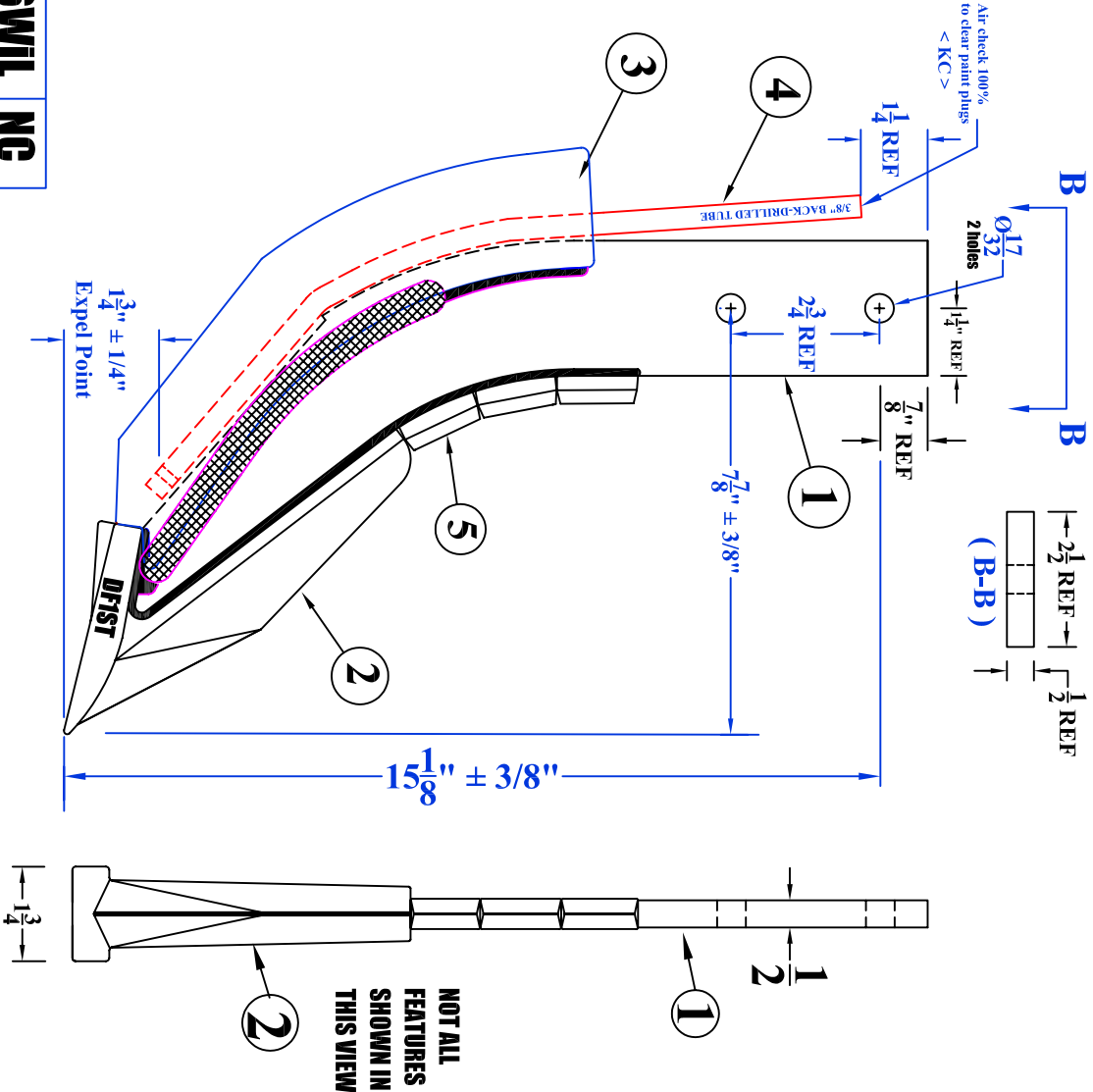
ITEM #	QUAN.	PART #	DESCRIPTION
1	1	K4T-BST	Blank, 1/2 X 2-1/2, Two-hole
2	1	DF1ST	STRIP TILL POINT, CASTING
3	2	K4TTARS	SIDE PLATE FOR STD LENGTH KNIFE
4	1	TB-4E	KNIFE TUBE, 3/8" back-drilled
5	.75	KTWS-01	SHANK GUARD, CASTING

**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-16WIL NG



NOT ALL
 FEATURES
 SHOWN IN
 THIS VIEW

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

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

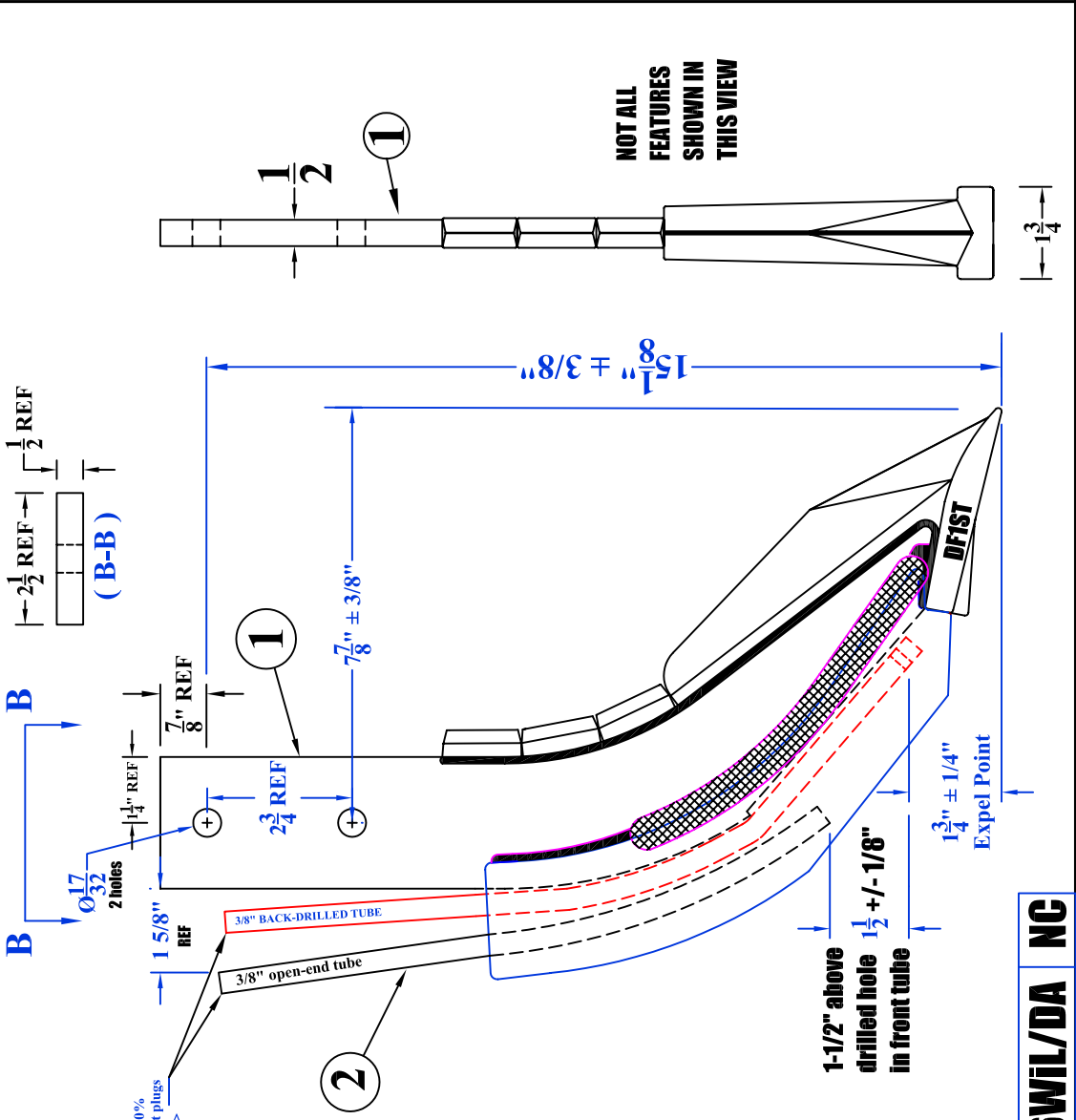
SHIELD AGRICULTURAL EQUIPMENT		DRAWN BY: ALINK	DATE: 08/09/07
		CHECKED BY: -	DATE: -

DESCRIPTION **STRIP TILL POINT with 3/8" back-drilled NH3 tube**

MATERIAL **WELDMENT**

PART NO. **ST-16WIL (R)** REV. **NG**

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



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

DO NOT REPAINT
 < KC > Key Characteristic

(R)
ST-16WIL/DA NC

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

DESCRIPTION		MATERIAL	
STRIP TILL POINT with 3/8" back-drilled NH3 tube & 3/8" Open-end tube		WELDMENT	
PART NO.		ST-16WIL/DA (R)	
REV.		NC	

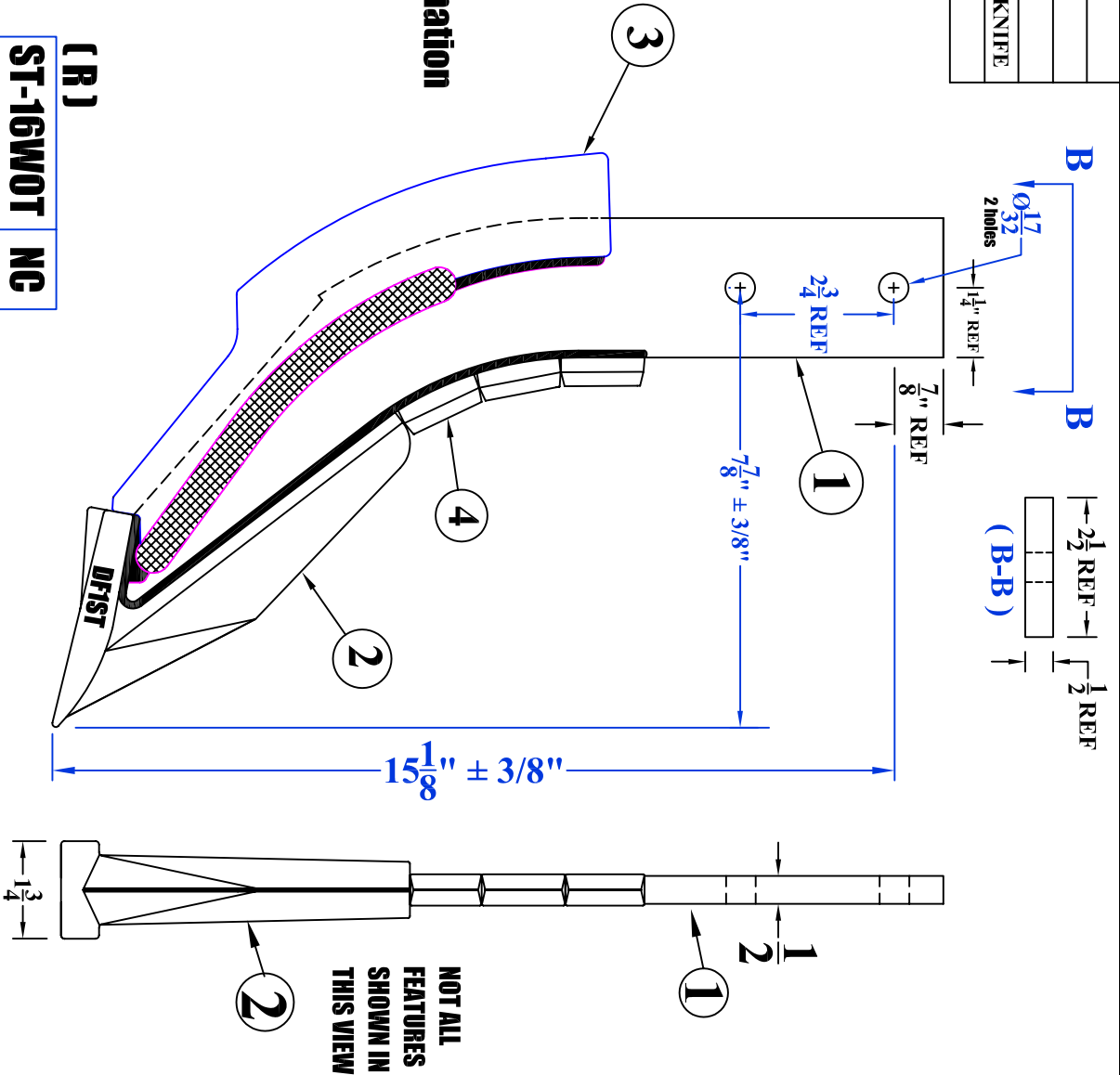
SHIELD AGRICULTURAL EQUIPMENT	
DRAWN BY: A LINK	DATE: 08/09/07
CHECKED BY: _	DATE: _

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	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

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

Ag Dip Black Paint
 Per Customer Specifications



(R)
ST-16WOT NC

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

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: **05/24/10**

CHECKED BY: DATE:

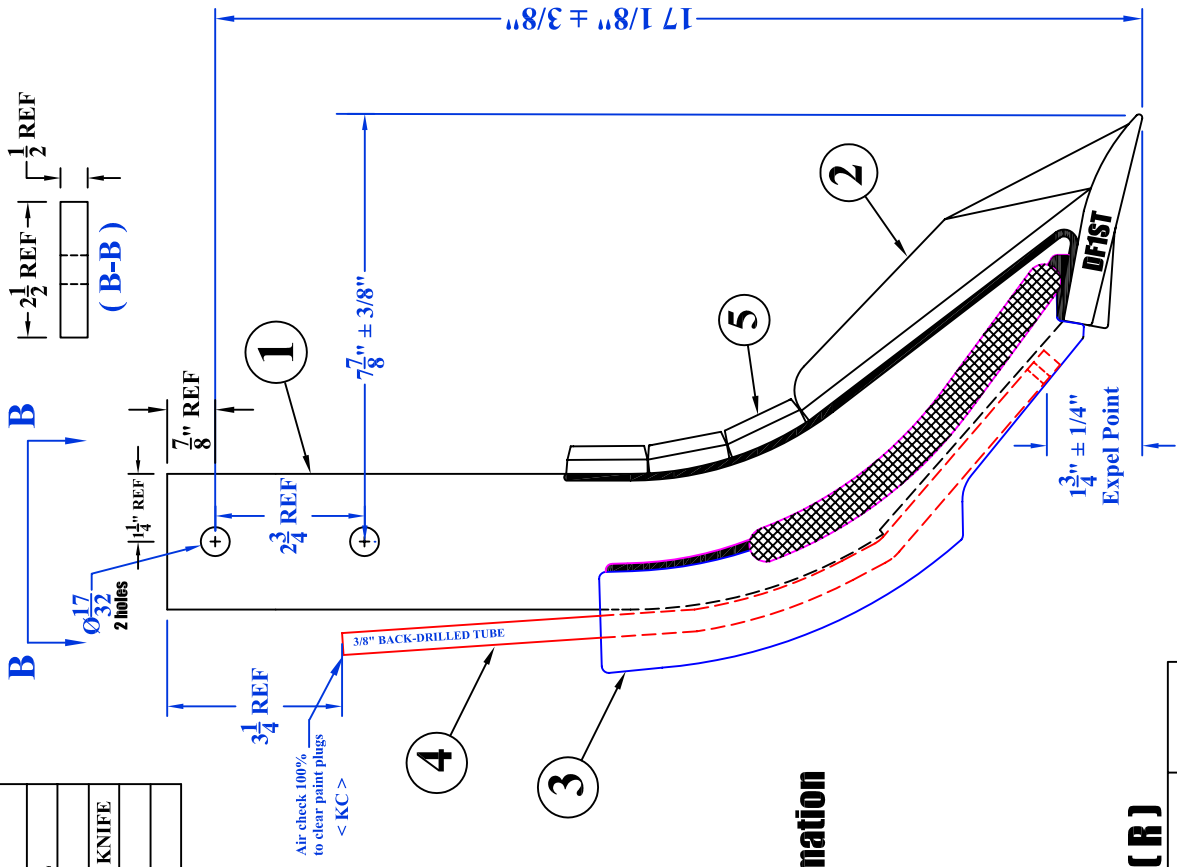
DESCRIPTION **SHIELD AG STRIP TILL POINT W/O tube**

MATERIAL **WELDMENT**

PART NO. **ST-16WOT (R)**

REV. **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

(R)
ST-18 REVA

< KC > Key Characteristic

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

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: **05/24/10**
CHECKED BY: - DATE: -

DESCRIPTION	SHIELD AG TALL STRIP TILL POINT, TALL	MATERIAL	WELDMENT	PART NO.	ST-18 (R)	REV.	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 !!

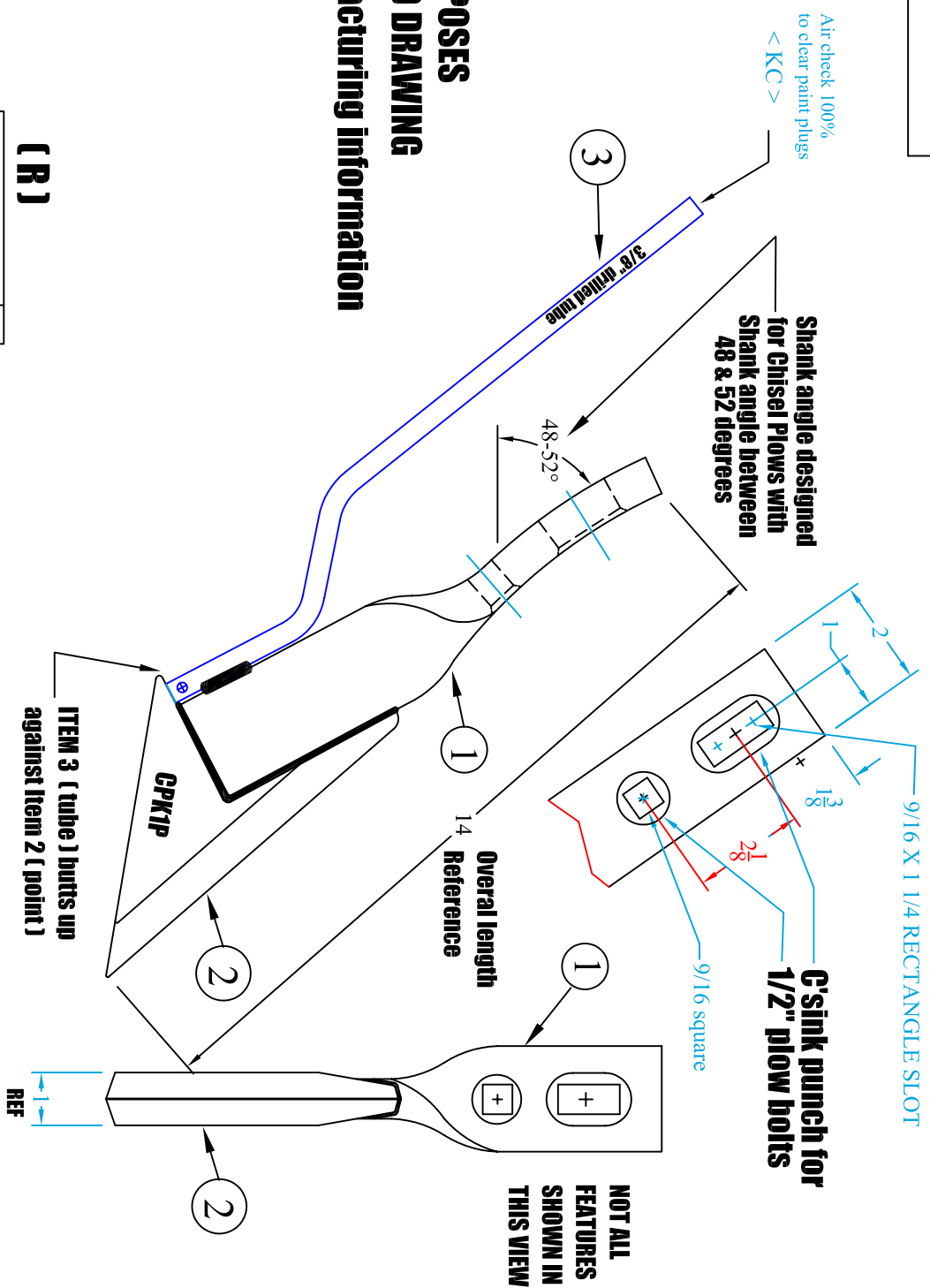
Your customer can also add ShieldAg Sweep/Chisel tubes to standard chisels and sweeps !!

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



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



**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)
CPK-1 A

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

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

SHIELD
AGRICULTURAL EQUIPMENT

DRAWN BY: ALBRIGHT DATE: 3/26/09
CHECKED BY: DATE:

DESCRIPTION	MATERIAL	PART NO.	REV.
Chisel knife w/ 3/8 drilled tube	Weldment	CPK-1 (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

All dimensions in this view are for REFERENCE ONLY

9/16 X 1 1/4 RECTANGLE SLOT

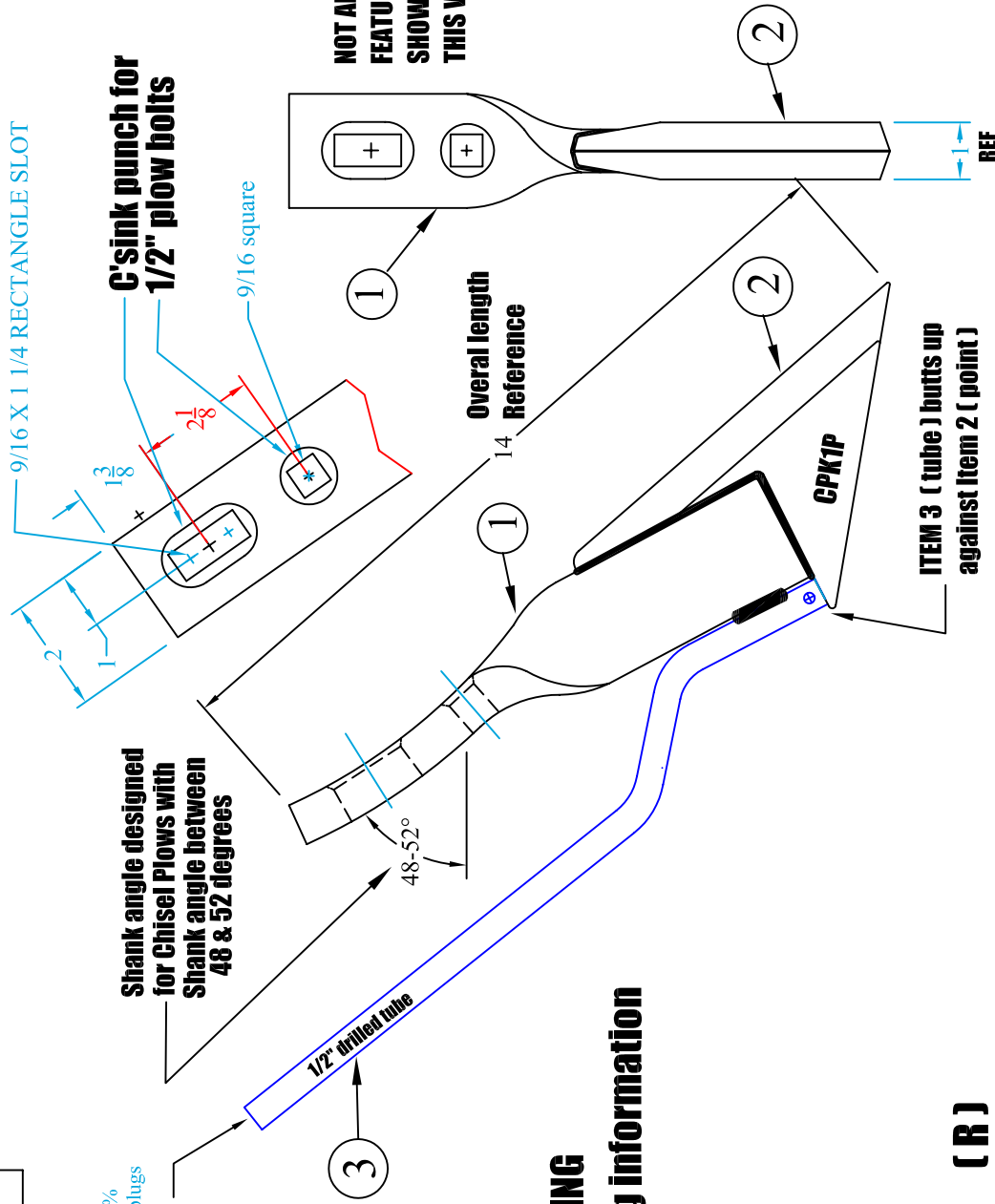
Air check 100%
to clear paint plugs
< KC >

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

C'sink punch for
1/2" plow bolts

1/2" drilled tube

NOT ALL
FEATURES
SHOWN IN
THIS VIEW



DRAWING FOR MARKETING PURPOSES

(R) Designation for REDACTED DRAWING

To remove proprietary manufacturing information

(R)

CPK-1/1/2A A

< KC > Key Characteristic

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

TOLERANCE UNLESS
OTHERWISE NOTED

0/0 +/- 1/16

0.00 +/- .020

0.000 +/- .005

0.0000 +/- .001

ANGLE +/- 2

SHIELD
AGRICULTURAL EQUIPMENT

DRAWN BY: **ALBRIGHT**

DATE: **3/26/09**

CHECKED BY: -

DATE: -

DESCRIPTION

Chisel knife w/ 1/2 drilled tube

MATERIAL

Weldment

PART NO.

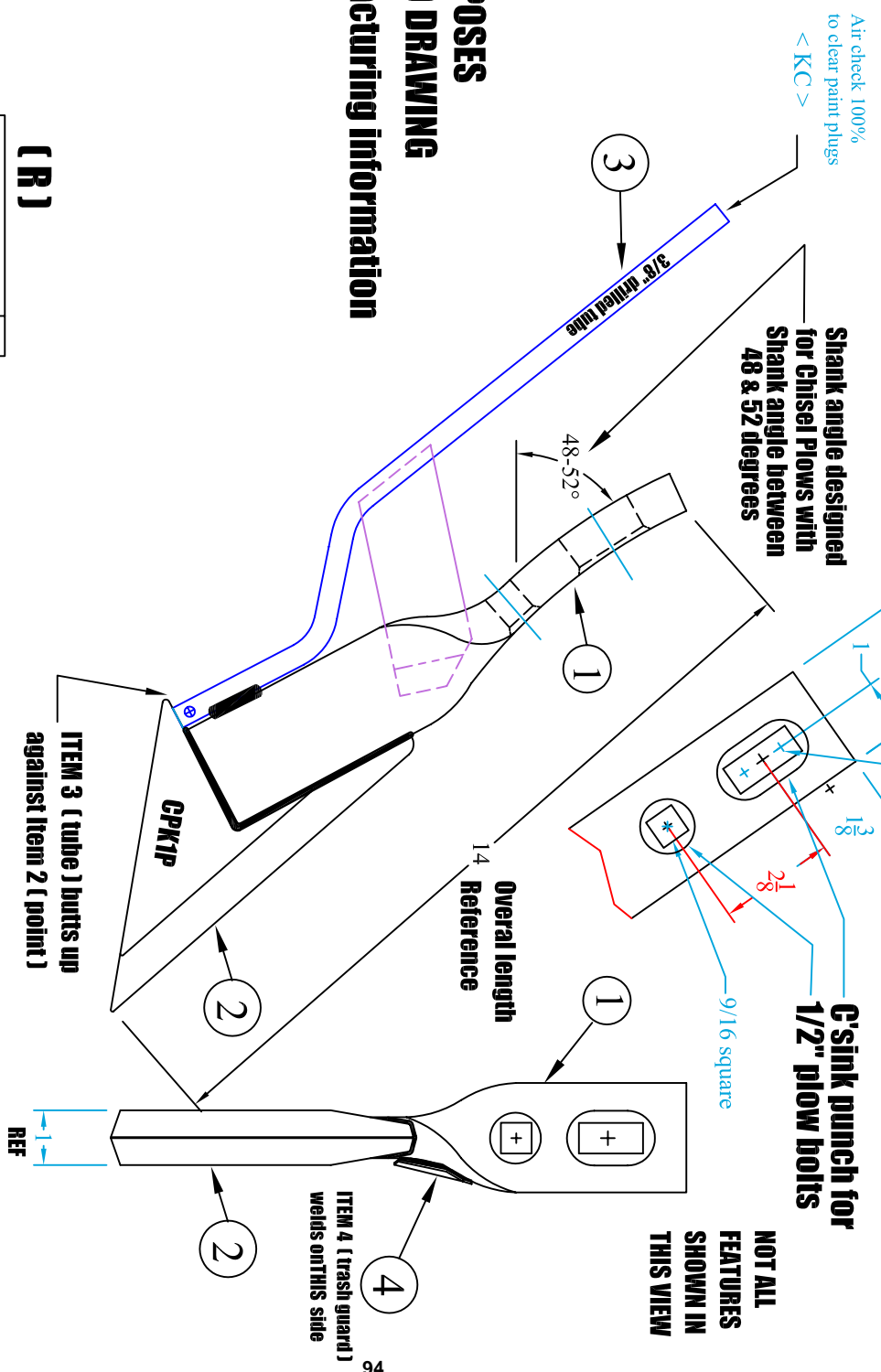
CPK-1/1/2A (R)

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



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

(R)
CPK-1E A

< KC > Key Characteristic

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

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

SHIELD
 AGRICULTURAL EQUIPMENT

DRAWN BY: **ALBRIGHT** DATE: **3/26/09**

CHECKED BY: _____ DATE: _____

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

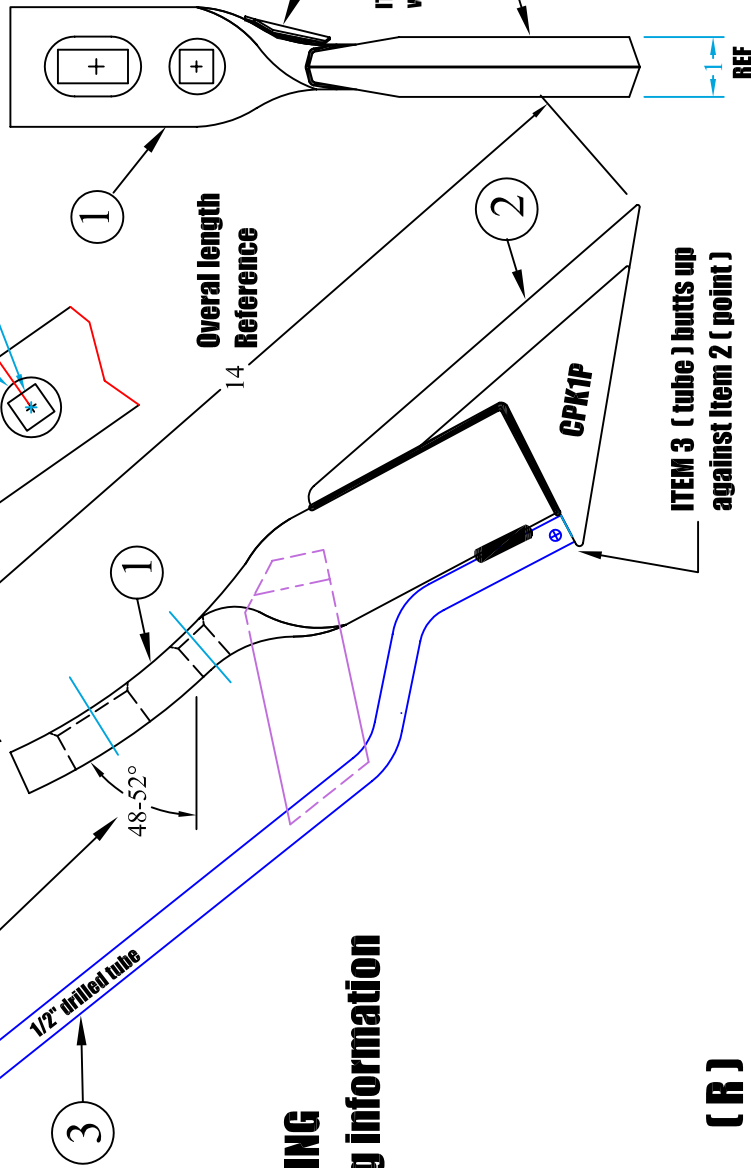
9/16 X 1 1/4 RECTANGLE SLOT

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

NOT ALL
FEATURES
SHOWN IN
THIS VIEW



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

(R)

CPK-1E/1/2A A

< KC > Key Characteristic

SHIELD
AGRICULTURAL EQUIPMENT

DRAWN BY: **ALBRIGHT** DATE: **3/26/09**
CHECKED BY: _____ DATE: _____

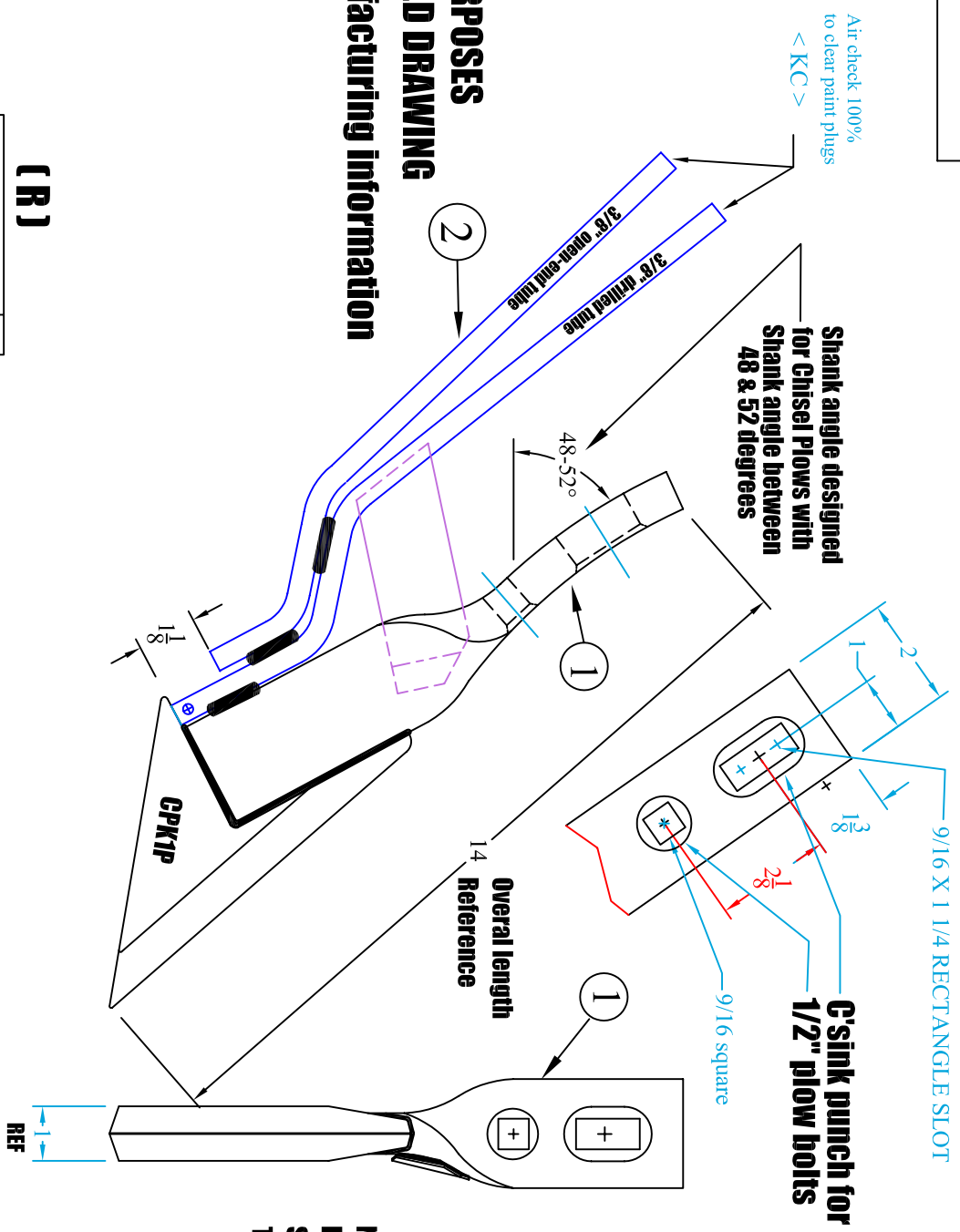
TOLERANCE UNLESS OTHERWISE NOTED
0/0 +/- 1/16
0.00 +/- .020
0.000 +/- .005
0.0000 +/- .001
ANGLE +/- 2

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

DESCRIPTION	MATERIAL	PART NO.	REV.
Chisel knife w/ 1/2 drilled tube & trash guard	Weldment	CPK-1E/1/2A (R)	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



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

< KC > Key Characteristic

**(R)
 CPK-1E/DA A**

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

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

SHIELD
 AGRICULTURAL EQUIPMENT

DRAWN BY: **MB** DATE: **06/05/10**

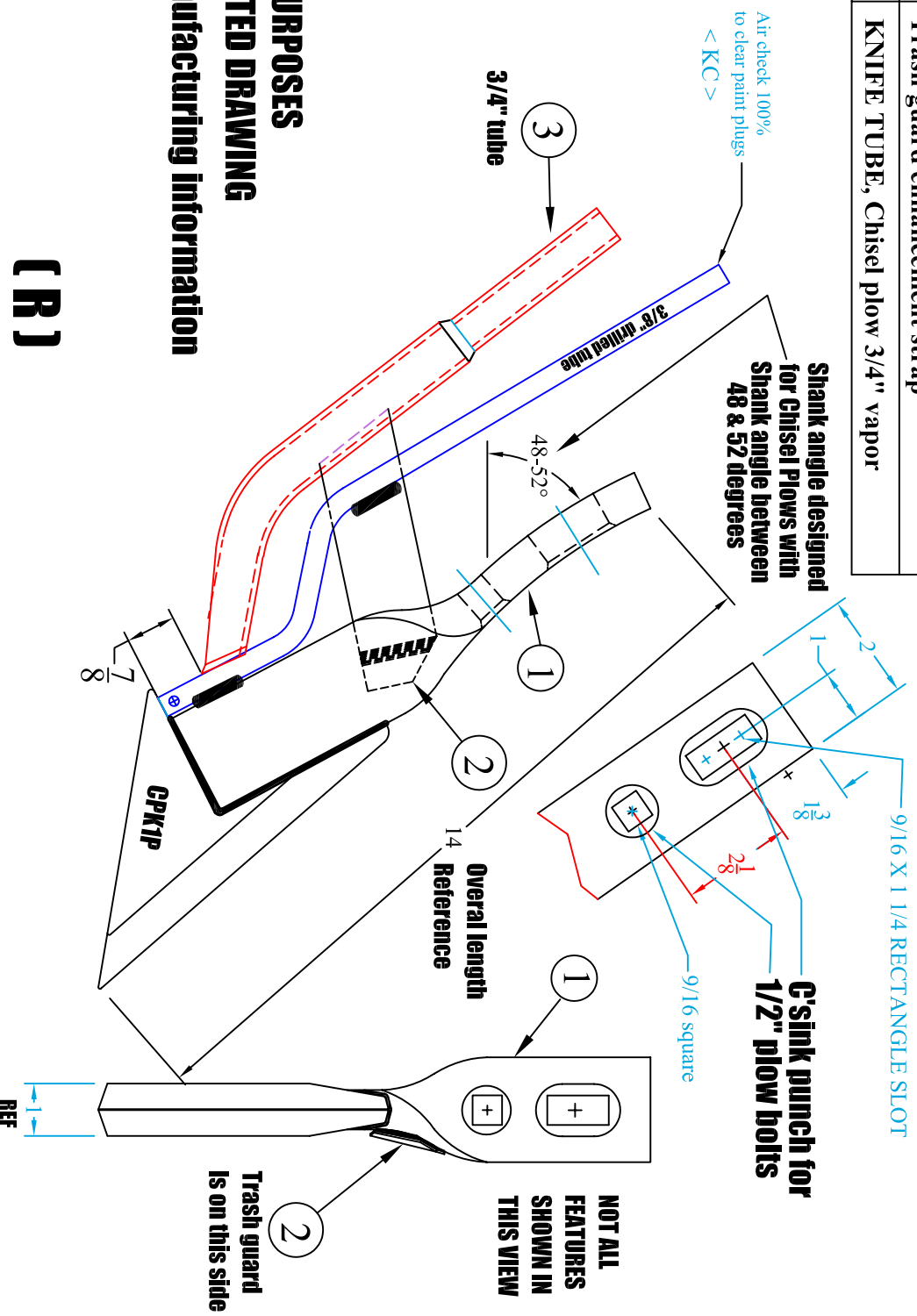
CHECKED BY: **-** DATE: **-**

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

NOT ALL FEATURES SHOWN IN THIS VIEW

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

All dimensions in this view are for REFERENCE ONLY



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

Ag Dip Black Paint
Per Customer Specifications

CPK-1E/3/4DA B

REV.	BY	DATE	DESCRIPTION
-	-	-	-
-	-	-	-
B	MB	7/25/12	REVISED AND REDRAWN

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

SHIELD
AGRICULTURAL EQUIPMENT

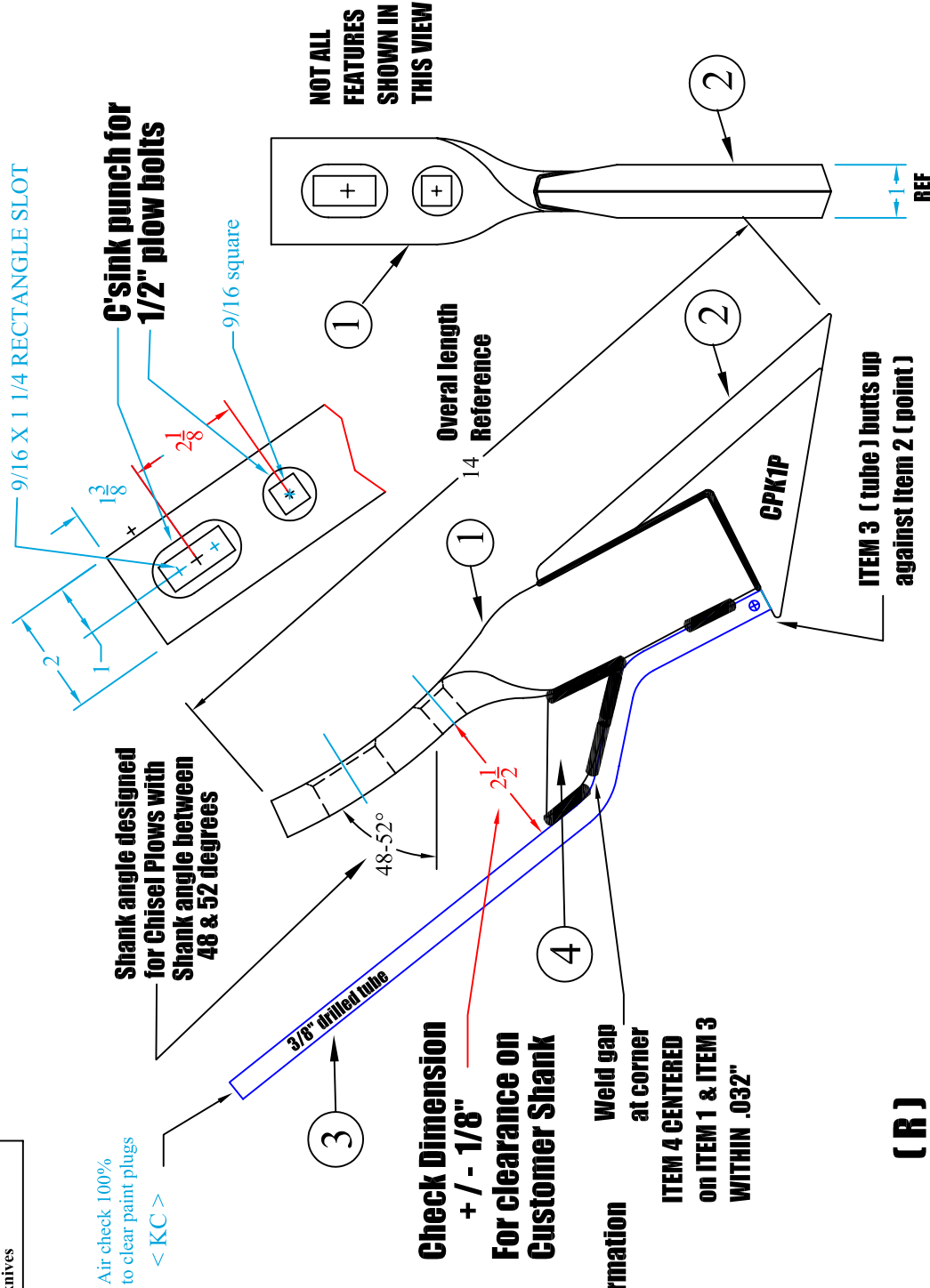
DRAWN BY: **MB** DATE: **07/25/12**

CHECKED BY: **_** DATE: **_**

DESCRIPTION	MATERIAL	PART NO.	REV.
Chisel knife w/ 3/8 drilled tube, trash guard and 3/4" vapor tube	Weldment	CPK-1E/3/4DA (R)	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



NOT ALL FEATURES SHOWN IN THIS VIEW

Air check 100% to clear paint plugs < KC >

Check Dimension + / - 1/8" For clearance on Customer Shank

DRAWING FOR MARKETING PURPOSES
 (R) Designation for REDACTED DRAWING
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Weld gap at corner
 ITEM 4 CENTERED on ITEM 1 & ITEM 3 WITHIN .032"

(R)

< KC > Key Characteristic

CPK-1LD A

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

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

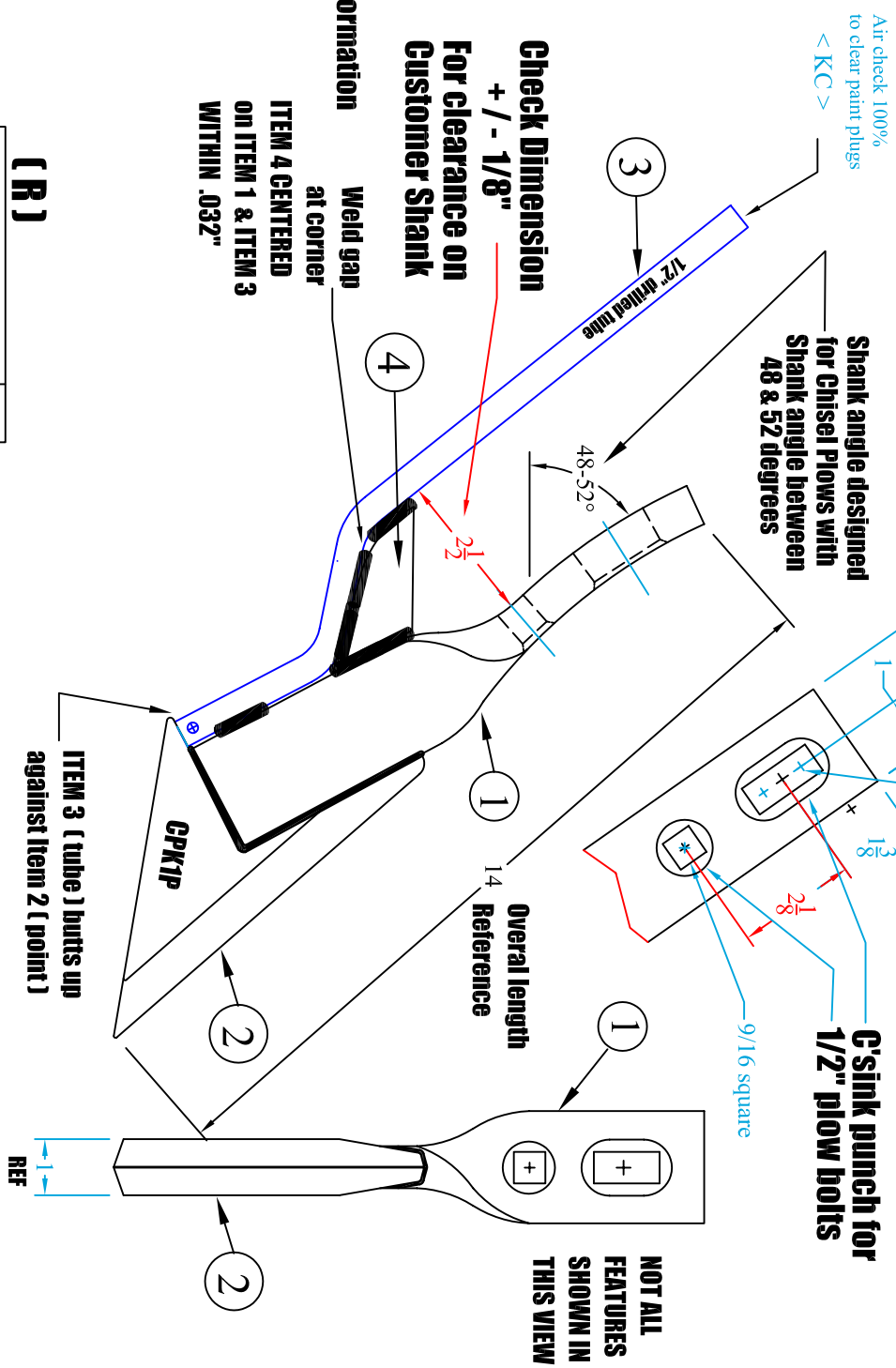
SHIELD
 AGRICULTURAL EQUIPMENT

DRAWN BY: ALBRIGHT	DATE: 3/26/09
CHECKED BY: -	DATE: -

DESCRIPTION	MATERIAL	PART NO.	REV.
Chisel knife w/ 3/8 drilled tube & LD Enhancement	Weldment	CPK-1LD (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	CPK1LD	Enhancement L&D chisel knives

All dimensions in this view are for REFERENCE ONLY



< KC > Key Characteristic

(R)
CPK-1LD/1/2A A

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

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

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

SHIELD
 AGRICULTURAL EQUIPMENT

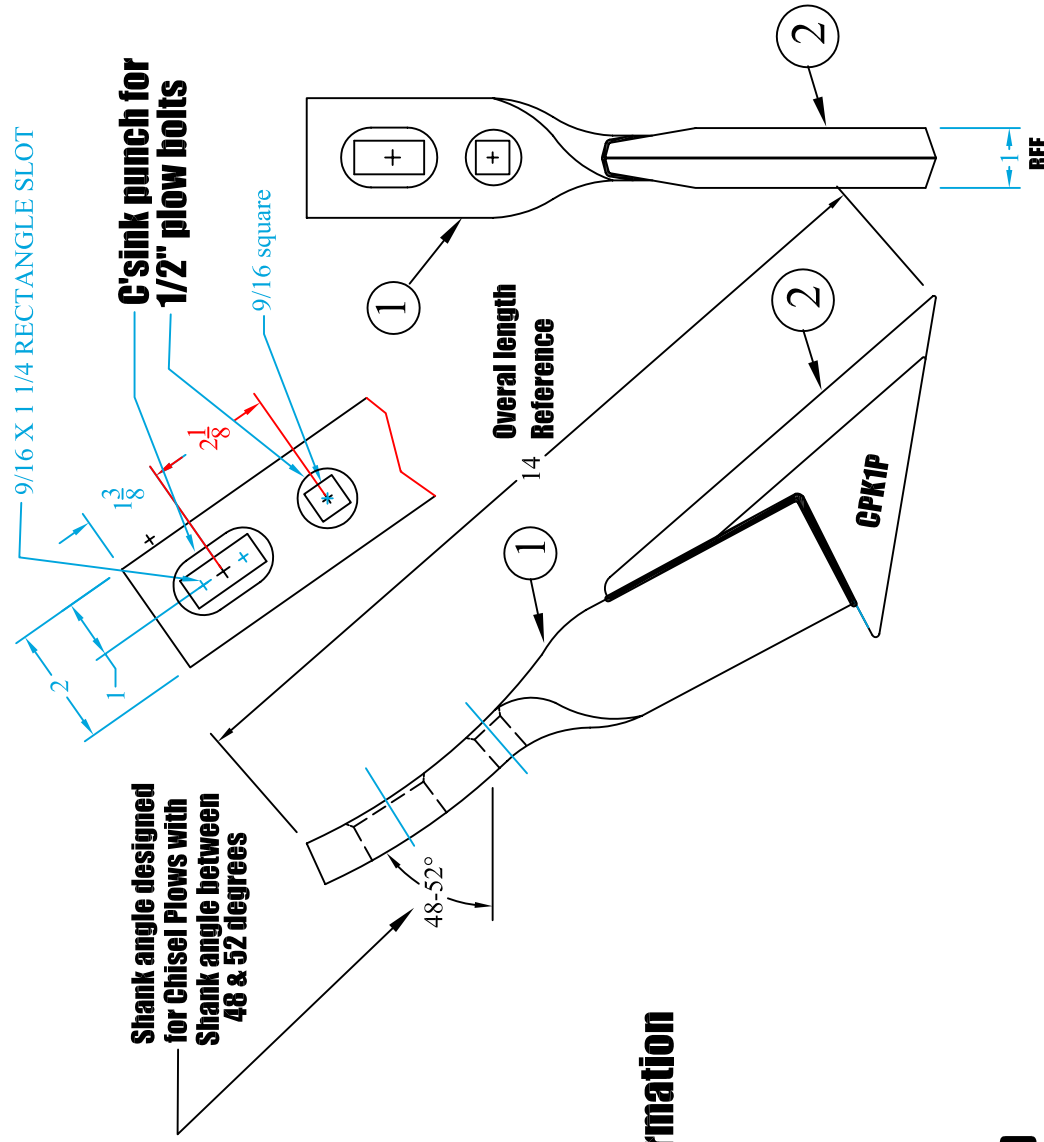
DRAWN BY: ALBRIGHT DATE: 3/26/09
 CHECKED BY: DATE:

DESCRIPTION	MATERIAL	PART NO.	REV.
Chisel knife w/ 1/2 drilled tube & LD Enhancement	Weldment	CPK-1LD/1/2A (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

All dimensions in this view are for REFERENCE ONLY

9/16 X 1 1/4 RECTANGLE SLOT



**DRAWING FOR MARKETING PURPOSES
(R) Designation for REDACTED DRAWING**

To remove proprietary manufacturing information

(R)

CPK-1/WOT A

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

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

SHIELD
 AGRICULTURAL EQUIPMENT

DRAWN BY: ALBRIGHT **DATE: 3/26/09**
CHECKED BY: **DATE:**

DESCRIPTION	MATERIAL	PART NO.	REV.
Chisel knife without tube	Weldment	CPK-1/WOT (R)	A

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CONFIGURATIONS !**

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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