

\$335.00

MPL40

PARTS MANUAL

JERR-DAN[®]

An Oshkosh Truck Corporation Company

1080 Hykes Road

Greencastle, PA 17225

Phone (717) 597-7111

www.jerr-dan.com

AJ-AF

Part Number 5-376-000093

Rev. 3

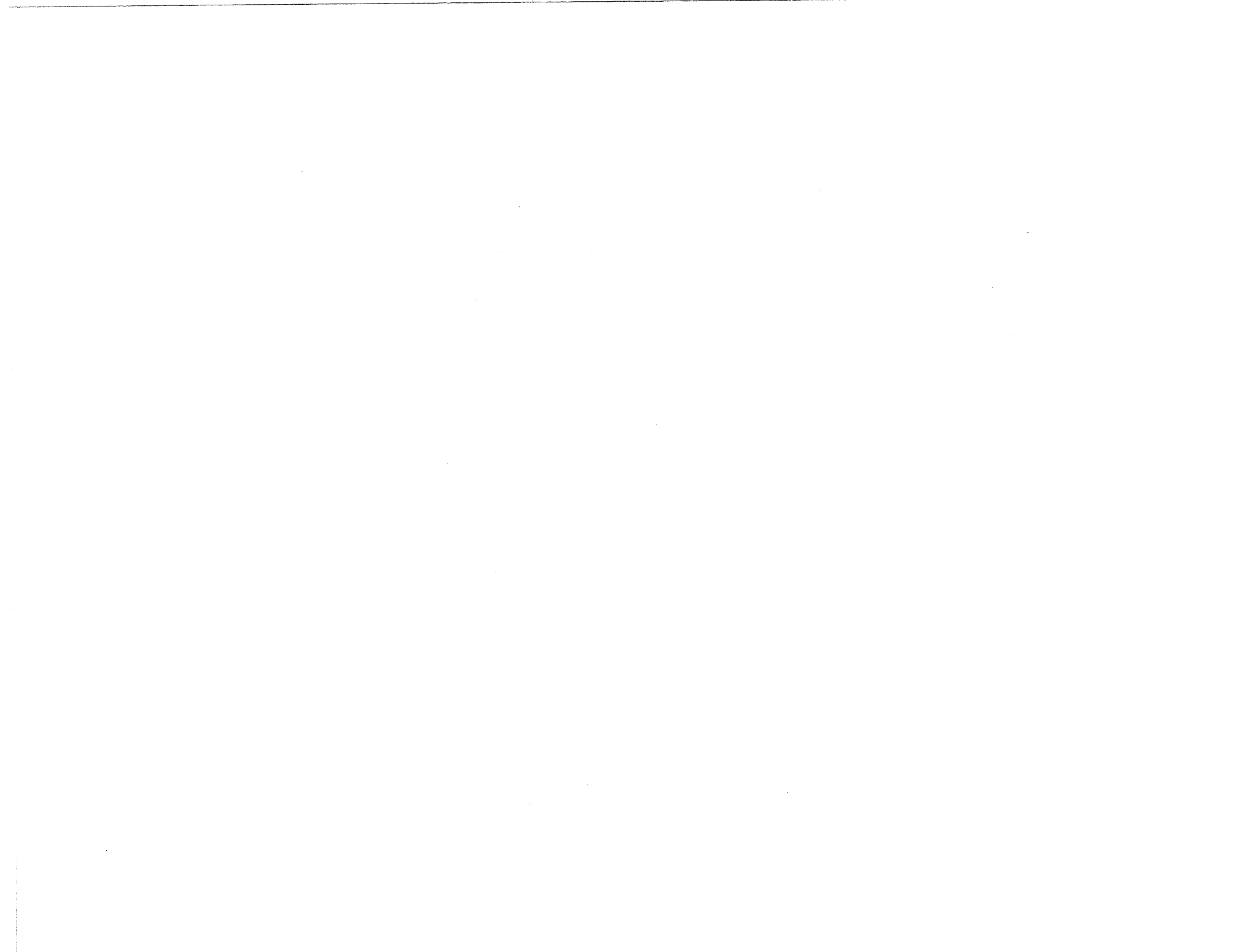
PARTS

To order repair parts, call your nearest Jerr-Dan Distributor or call 800-926-9666 for further information.

Give Sales Order No., Serial No. and Model No. along with part number and description of part.

TABLE OF CONTENTS

1. Subframe Installation
2. Subframe Assembly Kit
 - a. Ford – 17,500 GVWR
 - b. Ford – 19,000 GVRW
 - c. Chevy – C3500
3. Hydraulic Tank Installation
4. Underlift Boom Installation
5. Wrecker Boom Installation
6. Supply-Pressure-Return Installation
 - a. Ford – 60” C.A.
 - b. Ford – 84” C.A.
7. Hydraulic Lines & Fittings Installation
 - a. Dual Winches
 - b. Single Winch
8. Body Installation
9. Manual Controls Installation
10. Electrical Controls Installation
11. Winch Installation
 - a. Dual Winches
 - b. Single Winch
12. Winch Cable Installation
13. Underlift Installation
 - a. Underlift w/ Fixed Grid
 - b. Underlift w/ Manual L-Arm Grid
14. Wheelgrid Installation
 - a. Fixed Grid
 - b. Manual L-Arm Grid
 - c. Manual T-37 Pivoting Grid
15. Wheelgrid Hydraulic Lines & Fittings Installation
16. Light Pylon Installation
 - a. 37” Light Pylon
 - b. 28.31” Light Pylon
17. Decal Installation
18. Body Lights & Wiring Installation
19. Pylon Lights Installation
20. Fender Flare Installation
 - a. Narrow
 - b. Wide
21. Pylon Wiring Installation
 - a. 60” C.A. Body
 - b. 84’ C.A. Body
22. Mud Flap Installation
23. Identification 3 Light Bar Installation
24. Tow Ball Bracket Installation
25. Cable Tensioner
26. Tunnel Toolbox Installation
27. Switch Panel Installation
 - a. 3 Function Underdash
 - b. 5 Function Underdash
 - c. 5 Function Indash – Ford
 - d. 6 Function Indash – Ford
 - e. No Switch Panel
 - f. 4 Function Indash – Ford OEM
 - g. 6 Function Indash – Ford OEM
28. Emergency Light Bar Installation
 - a. 60” Federal Signal Halogen
 - b. 60” Federal Signal Strobe
29. Tow Sling Installation
 - a. Single Line Boom
 - b. Dual Line Boom
30. Tow Dolly Installation
31. Miscellaneous Lighting
 - a. Pylon Work Lights
32. Miscellaneous Accessories



Subframe Installation

***** Engineering Bill of Materials *****

** Report Excludes Shrinkage.

Effective as of 07/12/05

Item: 2509700043

SUBFRAME INSTALL MPL40

From Item: 2509700043

To Item: 2509700043

Reference: D/3774A

Last Changed Date:

Revision #0/1/3774

BIN: WA03

UOM: PC

Quantity 1

Receive into Whse: MYPT

Ball Dr

Bin

-oon Sz Component Type Location

Description

QtyPer UOM

Reference

Effectivity

01 D 3868000255

M WA00

SUBFRAME WELD MPL40 (NO-LUBE)

1.000 PC

-

02 A 4706004919

M WA03

PLATE 0.31 x 5.25 x 8.50

2.000 PC

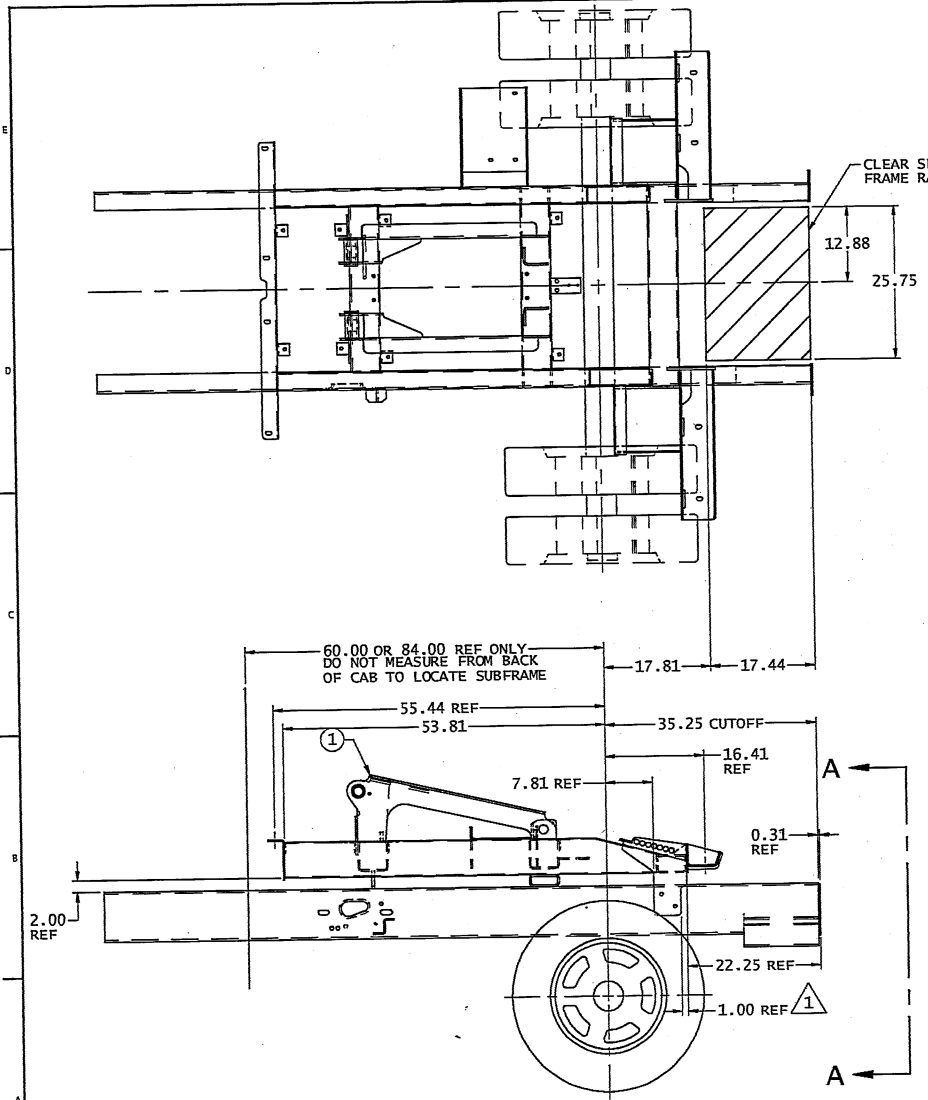
-

*** End of Item ***

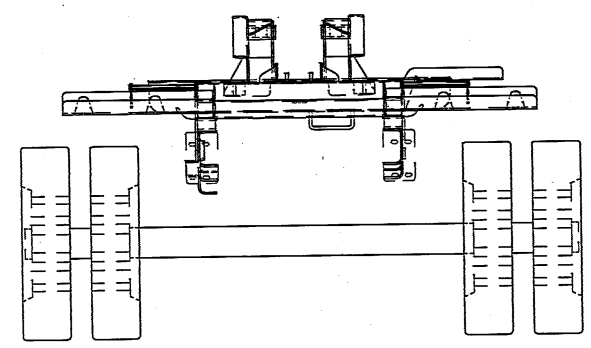
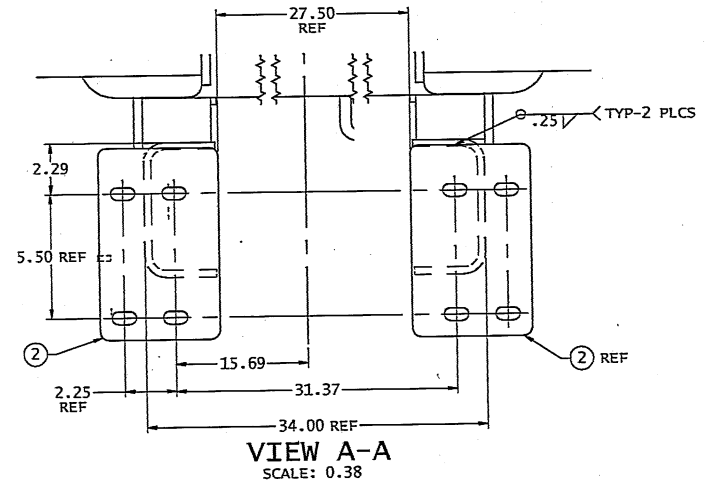
*** End of Report ***

SUBFRAME INSTALL MPL40

DWG NO 2-509-700043 REV 01



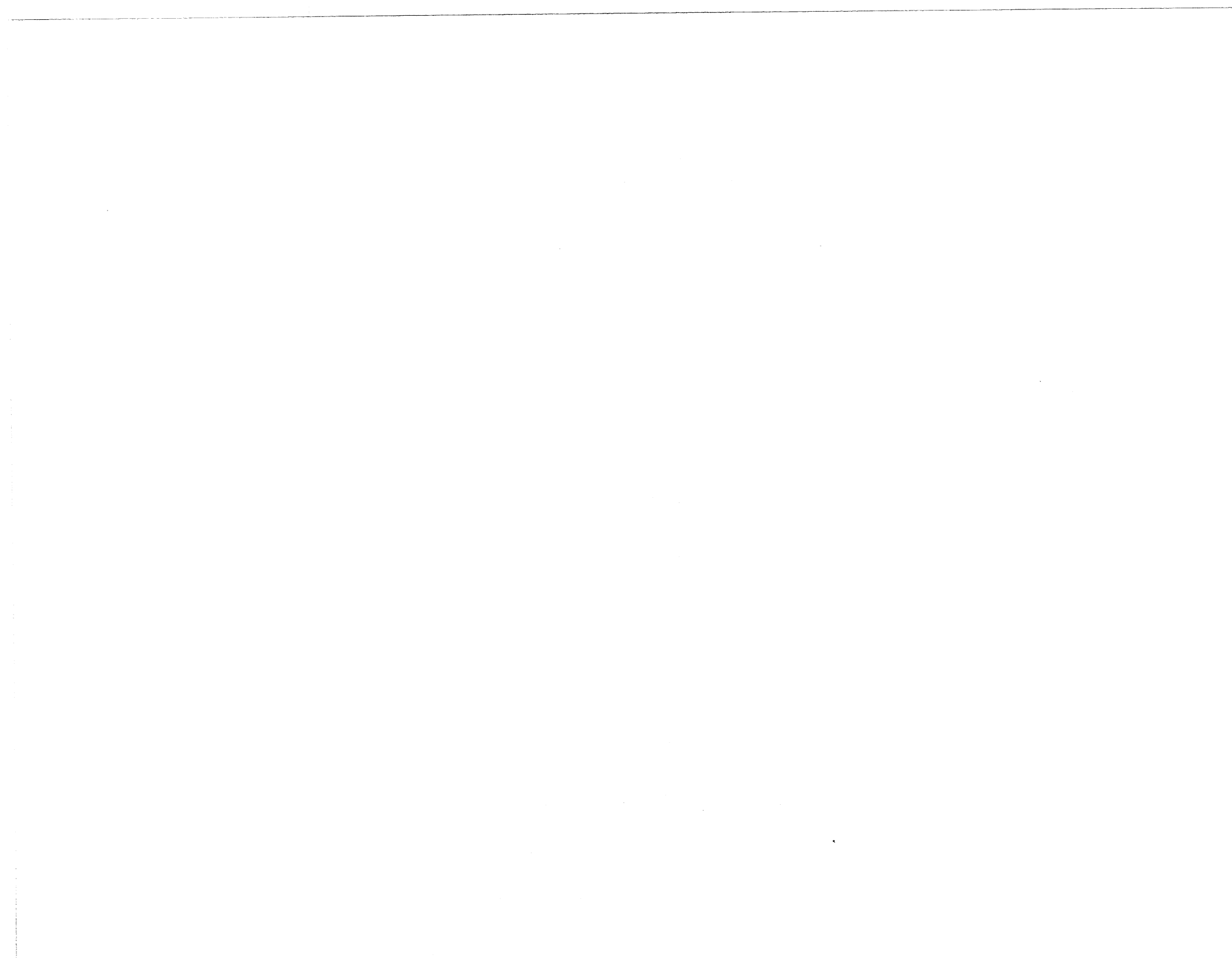
CLEAR SPACE BETWEEN FRAME RAILS



A ←

← A

<p>JERR-DAN A Division of Dana Corporation</p>		<p>IF IN DOUBT ASK TO GET SCALE DRAWING, REMOVE ALL STOPS AND SHANK CHANGES.</p>	<p>SEE B/M</p>	<p>SHEET 1 OF 1</p>
<p>THIS DRAWING AND RELATED MATTER CONTAINED HEREIN IS UNCLASSIFIED EXCEPT WHERE SHOWN OTHERWISE. THE DATE OF THIS ACTION IS 08/02/05. ALL INFORMATION CONTAINED HEREIN IS UNCLASSIFIED EXCEPT WHERE SHOWN OTHERWISE. DATE OF THIS ACTION IS 08/02/05.</p>		<p>NO CHANGES UNLESS SPECIFICALLY REQUESTED 3 PLACE DEC OR 0.00 3 PLACE DEC OR 0.00 3 PLACE DEC OR 0.00 3 PLACE DEC OR 0.00</p>	<p>TITLE SUBFRAME INSTALL MPL40</p>	<p>WEIGHT 7.2</p>
<p>DATE 02/02/05</p>	<p>DRW 3776</p>	<p>DATE 02/02/05</p>	<p>DRW REF D</p>	<p>DWG NO 2-509-700043</p>
<p>REV 01</p>	<p>REV 01</p>	<p>REV 01</p>	<p>REV 01</p>	<p>REV 01</p>



Subframe Assembly Kit

***** Engineering Bill of Materials *****

** Report Excludes Shrinkage.
Effective as of 07/11/05
Item: 3577000102

KIT SUBFRAME ASSY MPL40

From Item: 3577000102
To Item: 3577000102
Last Changed Date:

Reference:D/3774A
Revision #0/0
BIN: WA04

UOM: PC

Quantity 1 Receive into Whse: MYPT

Seq	Ball	Dr	No.	-oon	Sz	Component	Type	Location	Description	QtyPer	UOM	Reference	Effectivity
=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====
1	01	B	4706004950	M	WA04				PLATE 0.50 X 10.00 X 13.50	2.000	PC		-
4	02	3	7115181650	P	030601 a54				CAPSCREW 0.50"-13NC X 2.00" HEX HEAD	12.000	PC		-
3	03	N	7950180153	P	000104 x01				FLATWASHER .50" NOM HARDENED	12.000	pc		-
5	04	N	7660182601	P	000105 x01				LOCKNUT .50"-13NC GR5 HEC NYLOC	12.000	PC		-

*** End of Item ***

*** End of Report ***

[Empty rectangular box]

[Empty rectangular box]

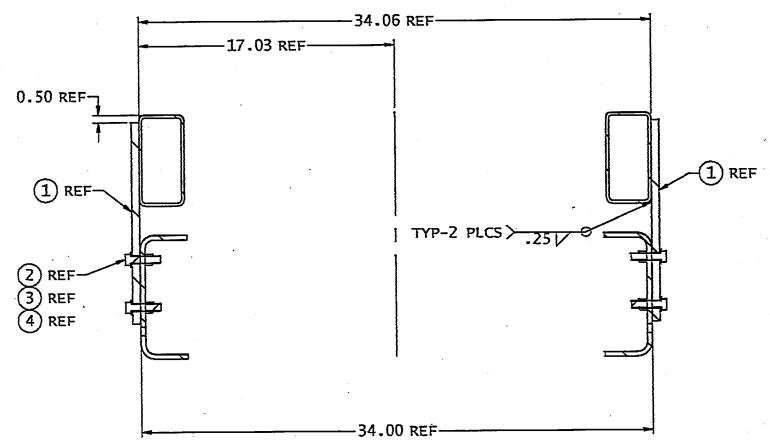
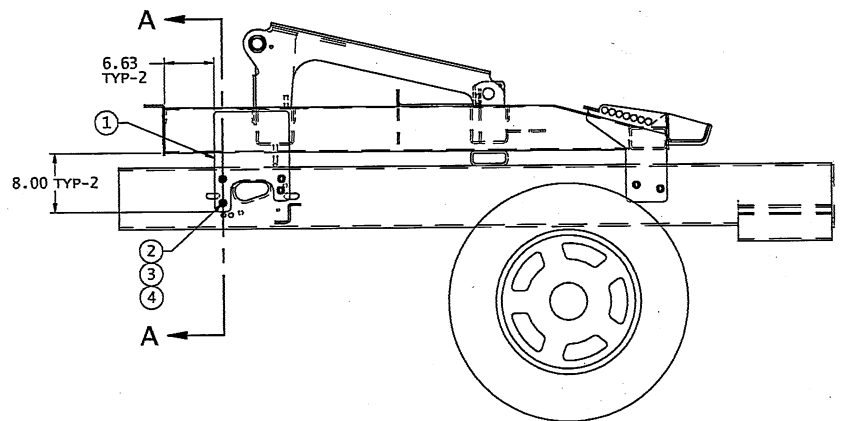
[Empty rectangular box]

[Empty rectangular box]

KIT SUBFRAME INSTALL MPL40

DWG NO 3-577-000102 REV 00

NOTE:
HOLES TO BE DRILLED THRU TRUCK FRAME USING
MOUNTING PLATES AS A TEMPLATE.



SECTION A-A
1:4

<p>JERR-DAN Specialty Truck Components</p>		<p>IF IN DOUBT ASK. DO NOT SCALE DRAWING. REMOVE ALL DIMS. AND SHARP CORNERS.</p>	<p>SHEET 1 OF 1 WEIGHT 7.8</p>																
<p>THIS DRAWING AND RELATED MATTER HEREIN IS THE PROPERTY OF JERR-DAN. IT IS TO BE USED ONLY FOR THE PURPOSES SPECIFIED HEREIN. IT IS TO BE RETURNED TO JERR-DAN UPON COMPLETION OF THE WORK. ACCEPTANCE OF THIS COPY SHALL BE CONSIDERED AS ACCEPTANCE OF THE WORKING CONDITION.</p>		<p>WE STRONGLY RECOMMEND OTHERS BE SPECIFIED 3/16" DIA. OR 1/2" 3/16" DIA. OR 1/2" M/A. TO MAINTAIN TOLERANCES.</p>	<p>DATE 01/13/05 DRAWN RMT 1</p>																
<p>REVISIONS</p> <table border="1"> <thead> <tr> <th>REV</th> <th>DESCRIPTION</th> <th>DATE</th> <th>BY</th> </tr> </thead> <tbody> <tr> <td>1</td> <td></td> <td></td> <td></td> </tr> <tr> <td>2</td> <td></td> <td></td> <td></td> </tr> <tr> <td>3</td> <td></td> <td></td> <td></td> </tr> </tbody> </table>		REV	DESCRIPTION	DATE	BY	1				2				3				<p>DATE 01/13/05 DRAWN RMT 1</p>	<p>TITLE KIT SUBFRAME INSTALL MPL40 SCALE 1:8 DWG 3774 REV 00</p>
REV	DESCRIPTION	DATE	BY																
1																			
2																			
3																			

***** Engineering Bill of Materials *****

** Report Excludes Shrinkage.

Effective as of 08/01/05

Item: 3577000103

KIT SUBFRAME ASSY MPL40 FORD 19,000#

From Item: 3577000103

To Item: 3577000103

Reference: D/3774A

Last Changed Date:

Revision #0/1/3774

BIN: WA04

UOM: PC

Quantity

1

Receive into Whse: MYPT

Ball Dr

Bin

-oon Sz

Component

Type

Location

Description

QtyPer UOM

Reference

Effectivity

01 B 4706004950

M WA04

PLATE 0.50 X 10.00 X 13.50

2.000 PC

-

02 3 7115181650

P 030601 a54

CAPSCREW 0.50"-13NC X 2.00" HEX HEAD

12.000 PC

-

03 N 7950180153

P 000104 x01

FLATWASHER .50" NOM HARDENED

12.000 pc

-

04 N 7660182601

P 000105 x01

LOCKNUT .50"-13NC GR5 HEC NYLOC

12.000 PC

-

05 A 4705000665

M WA04

PLATE 0.38 x 5.50 x 10.50

2.000 PC

-

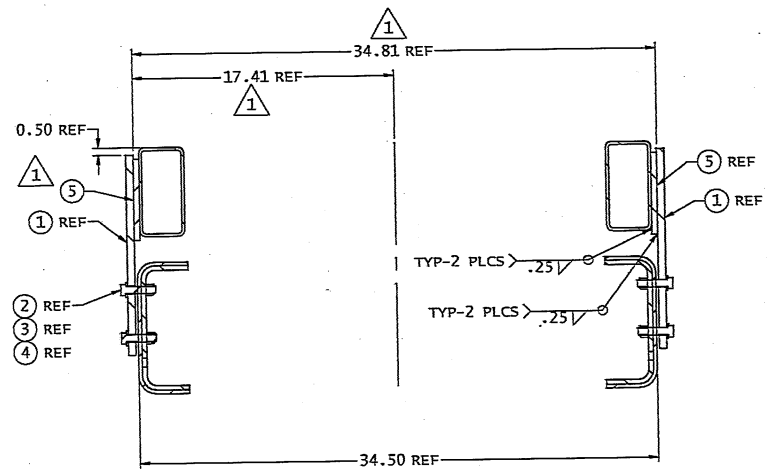
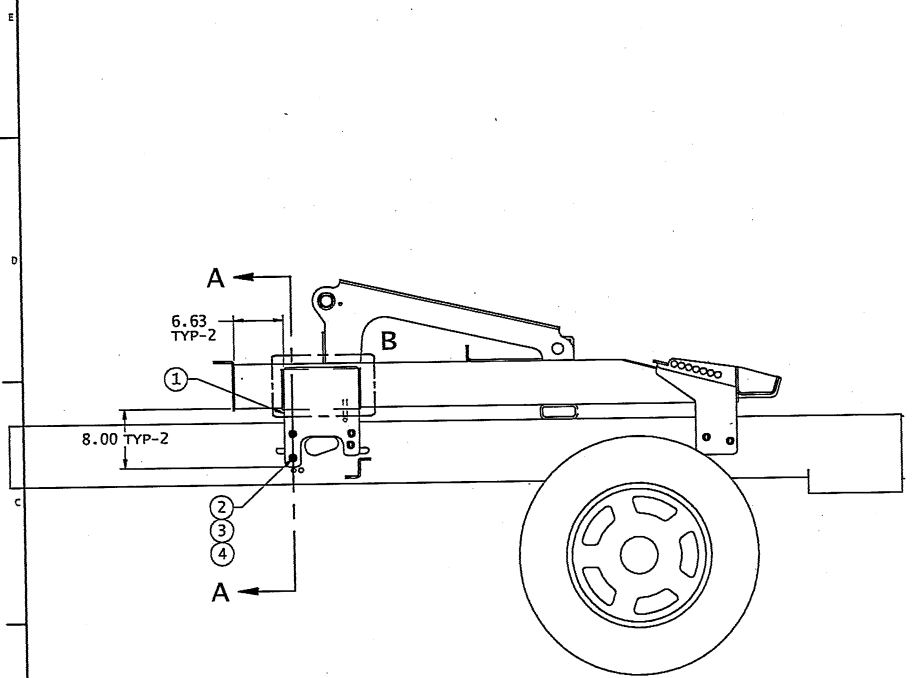
*** End of Item ***

*** End of Report ***

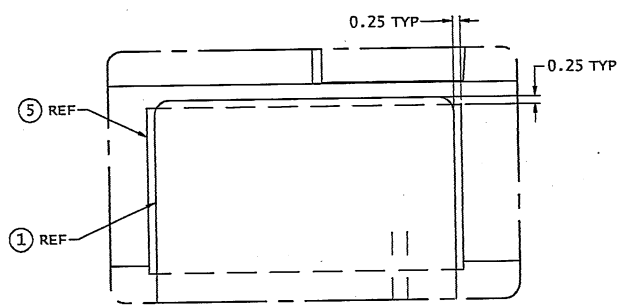
KIT SUBFRAME INSTALL MPL40 FORD 19,000#

DWG NO. **3-577-000103** REV **01**

NOTE:
HOLES TO BE DRILLED THRU TRUCK FRAME USING
MOUNTING PLATES AS A TEMPLATE.



SECTION A-A
1:4



DETAIL B
1:2

<p>JERR-DAN A Division of Dana Corporation</p>		<p>REV 1 OF 1</p>
<p>IF IN DOUBT ASK FOR NEW SCALE DRAWING. REMOVE ALL BRASS AND SHARP CORNERS.</p>		<p>WEIGHT 7.8</p>
<p>THIS DRAWING AND PRODUCT MATTER CONTAINED HEREIN ARE THE SOLE AND EXCLUSIVE PROPERTY OF JERR-DAN CORPORATION. THIS COPY IS LOANED TO THE SUBSCRIBER. IT SHALL NOT BE REPRODUCED IN ANY MANNER WITHOUT THE WRITTEN PERMISSION OF JERR-DAN CORPORATION. THIS COPY SHALL BE CONFIRMED AS ACCURATE BY THE ORIGINAL CONTRACTOR.</p>		<p>DATE 01/19/05</p>
<p>01 ALL 3774 34.36, 37.41 WAS 37.28</p>	<p>REVISIONS 001</p>	<p>DATE 11/22/05</p>
<p>REVISIONS 001</p>	<p>DESCRIPTION</p>	<p>DATE 11/22/05</p>
<p>01</p>	<p>PICTURE CHANGE TO ITEM 5, 34.81 WAS 34.50</p>	<p>DATE 01/19/05</p>
<p>01</p>	<p>PICTURE CHANGE TO ITEM 5, 34.81 WAS 34.50</p>	<p>DATE 01/19/05</p>
<p>01</p>	<p>PICTURE CHANGE TO ITEM 5, 34.81 WAS 34.50</p>	<p>DATE 01/19/05</p>

***** Engineering Bill of Materials *****

** Report Excludes Shrinkage.

Effective as of 07/11/05

Item: 3577000106

KIT SUBFRAME INSTALL MPL40 C3500

From Item: 3577000106

To Item: 3577000106

Reference:D/3774A

Last Changed Date:

Revision #0/0

BIN: WA04

UOM: PC

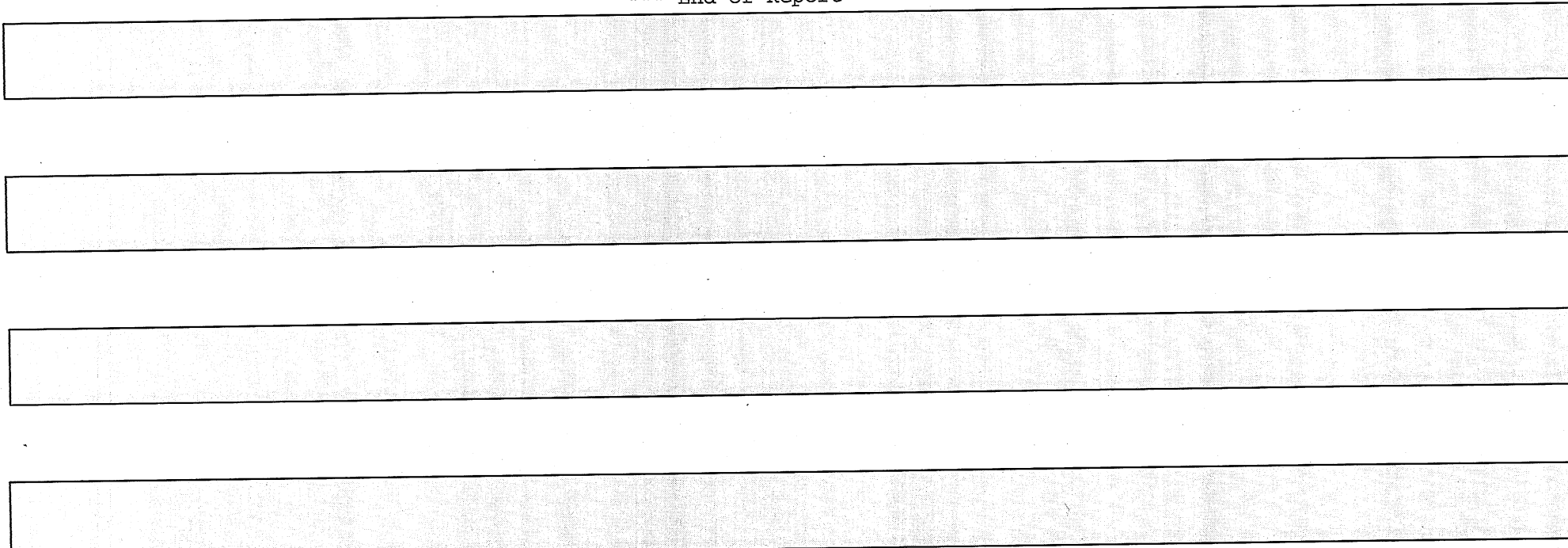
Quantity 1

Receive into Whse: MYPT

Seq No.	Ball	Dr	Sz	Component	Type	Bin Location	Description	QtyPer	UOM	Reference	Effectivity
1	01	B	4706004999	M	WA04		PLATE 0.50 x 10.00 x 15.00	2.000	PC		-
4	02	3	7115181650	P	030601 a54		CAPSCREW 0.50"-13NC X 2.00" HEX HEAD	12.000	PC		-
3	03	N	7950180153	P	000104 x01		FLATWASHER .50" NOM HARDENED	12.000	pc		-
5	04	N	7660182601	P	000105 x01		LOCKNUT .50"-13NC GR5 HEC NYLOC	12.000	PC		-

*** End of Item ***

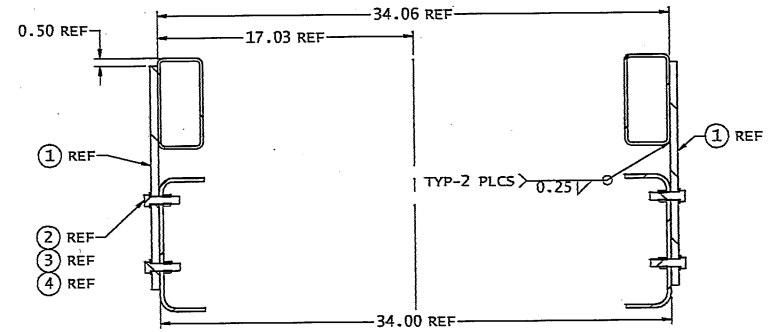
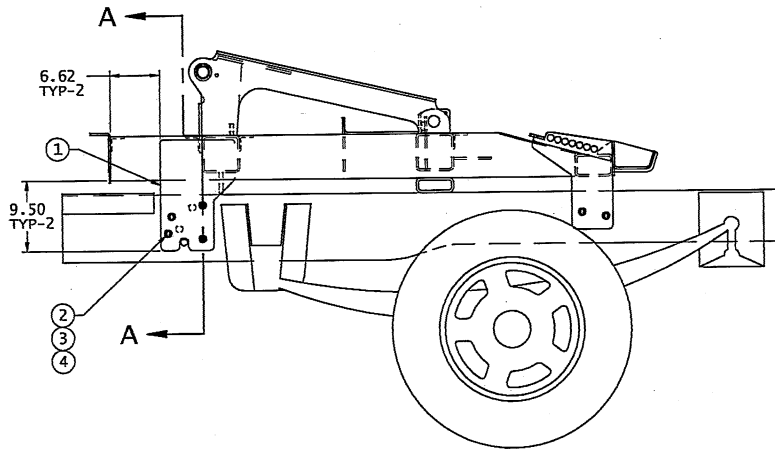
*** End of Report ***



KIT SUBFRAME INSTALL MPL40 C3500

DWG NO 3-577-000106 REV 00

NOTES:
HOLES TO BE DRILLED THRU CHASSIS FRAME USING
MOUNTING PLATES AS A TEMPLATE



SECTION A-A
1:4

JERRDAN
A Division of Dana Corporation

<small>IF YOU DO NOT ASK, DO NOT SCALE DRAWING. REMOVE ALL BRISKS AND SHARP CORNERS.</small> <small>THIS DRAWING AND RELATED MATTER CONTAINS AND THE SEAL AND INCLUDING HEREIN IS THE PROPERTY OF JERRDAN CORPORATION. THIS COPY IS LOANED WITH THE UNDERSTANDING THAT IT IS TO BE RETURNED TO THE COMPANY OR TO THE PERSON TO WHOM IT WAS LOANED. THIS COPY SHALL BE CONTROLLED BY THE PERSON TO WHOM IT WAS LOANED.</small>	<small>IF YOU DO NOT ASK, DO NOT SCALE DRAWING. REMOVE ALL BRISKS AND SHARP CORNERS.</small> <small>THIS DRAWING UNLESS OTHERWISE SPECIFIED IS PLACE AND NO USE IS TO BE MADE OF ANY PART HEREOF WITHOUT THE WRITTEN PERMISSION OF THE PERSON TO WHOM IT WAS LOANED.</small>	<small>SEE WILL OF MATERIAL</small>	<small>SHEET 1 OF 1</small>
		<small>WEIGHT</small>	<small>REV</small>
<small>DATE 02/27/05</small>		<small>SCALE 1:8</small>	<small>DWG NO 3774</small>
<small>DESCRIPTION</small>		<small>DATE 02/27/05</small>	<small>DRW JJA</small>
<small>REV</small>		<small>DATE 02/27/05</small>	<small>DWG NO 3-577-000106</small>



Hydraulic Tank Installation

***** Engineering Bill of Materials *****

** Report Excludes Shrinkage.

Effective as of 07/11/05

Item: 2509650041

HYDRAULIC RESERVOIR INSTALL (MPL40)

From Item: 2509650041

To Item: 2509650041

Reference: D/3774B

Last Changed Date:

Revision #0/0

BIN: WA00

UOM: PC

Quantity

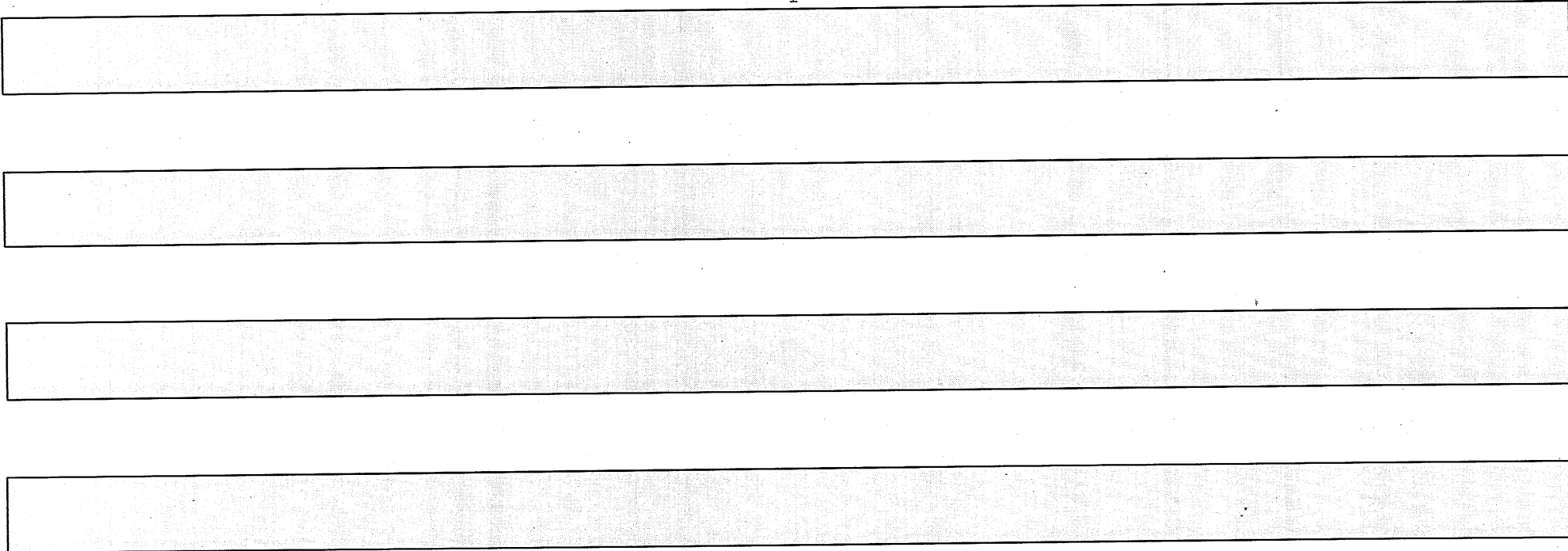
1

Receive into Whse: MYPT

Seq No.	Ball -oon	Dr Sz	Component	Type	Bin Location	Description	QtyPer	UOM	Reference	Effectivity
=====	====	==	=====	=====	=====	=====	=====	====	=====	=====
1	01	D	3750000049	M	WA00	RESERVOIR WELD HYDRAULIC (MPL40)	1.000	PC		-
2	02	B	4090000008	M	WA00	BELT 0.13 x 2.00 x 5.50 POLY	2.000	PC		-
3	03		7950180141	P	A99	FLATWASHER .50" NOM NARROW	4.000	pc		-
4	04	N	7660182601	P	000105 x01	LOCKNUT .50"-13NC GR5 HEC NYLOC	4.000	PC		-

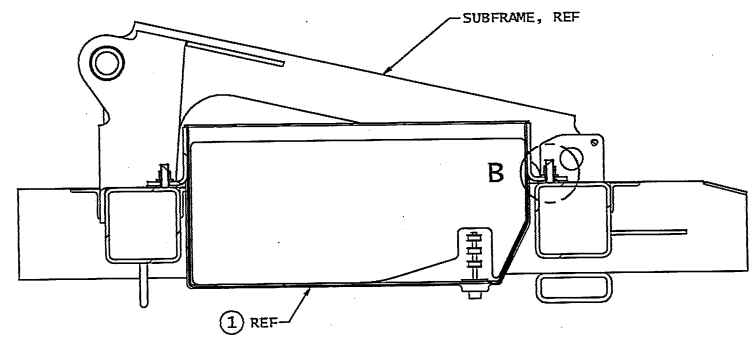
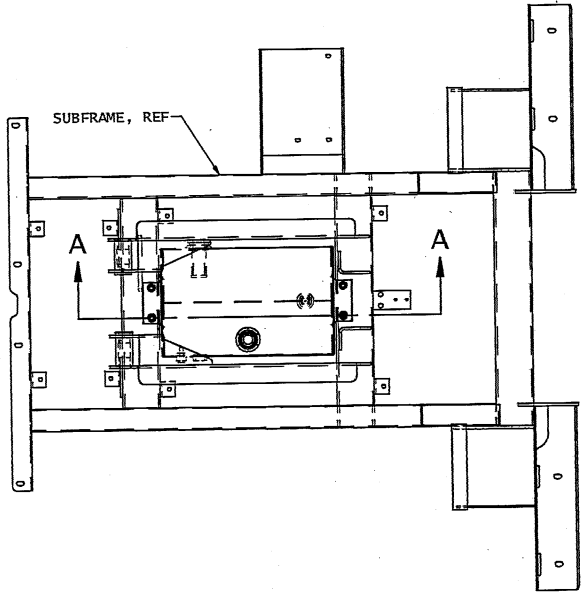
*** End of Item ***

*** End of Report ***

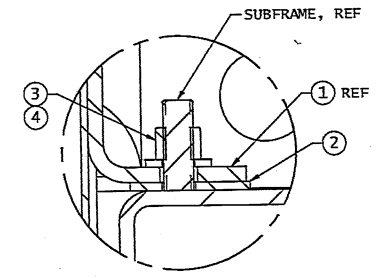
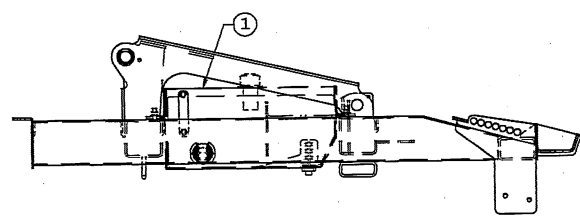


HYDRAULIC RESERVOIR INSTALL MPL

DWG NO. 2-509-650041 REV 00



SECTION A-A
1:4



DETAIL B
1:1

REVISIONS	DATE	BY	DESCRIPTION

<p>JERF-DAN A Division of Dresser Industries, Inc.</p>		<p>IF IN DOUBT ASC. TO NEXT SCALE DRAWING. REMOVE ALL SPICES AND SHARP CORNERS.</p>	<p>THIS DRAWING AND SUBJECT MATTER HEREON BELONG TO THE PROPERTY OF JERF-DAN CORPORATION. THIS DRAWING IS LOANED TO YOU BY COMPANY AND IS TO BE RETURNED TO ANY OTHER PARTY WITHOUT THE WRITTEN PERMISSION OF JERF-DAN CORPORATION. ACCEPTANCE OF THIS COPY SHALL BE CONSIDERED AS AGREEMENT TO THESE TERMS AND CONDITIONS.</p>	<p>DATE 01/04/05 DRAWN JMF 1</p>	<p>SCALE 1:4 DWG NO 3774 REV 00</p>	<p>HYDRAULIC RESERVOIR INSTALL MPL</p>	<p>SHEET 1 OF 1 WEIGHT C 620#</p>
<p>DATE 01/04/05</p>		<p>DRAWN JMF</p>	<p>REV 00</p>	<p>DWG NO 3774</p>	<p>HYDRAULIC RESERVOIR INSTALL MPL</p>	<p>SHEET 1 OF 1</p>	
<p>DATE 01/04/05</p>		<p>DRAWN JMF</p>	<p>REV 00</p>	<p>DWG NO 3774</p>	<p>HYDRAULIC RESERVOIR INSTALL MPL</p>	<p>SHEET 1 OF 1</p>	
<p>DATE 01/04/05</p>		<p>DRAWN JMF</p>	<p>REV 00</p>	<p>DWG NO 3774</p>	<p>HYDRAULIC RESERVOIR INSTALL MPL</p>	<p>SHEET 1 OF 1</p>	



***** Engineering Bill of Materials *****

** Report Excludes Shrinkage.
 Effective as of 08/04/05
 Item: 3750000049

RESERVOIR WELD HYDRAULIC (MPL40)

From Item: 3750000049
 To Item: 3750000049
 Last Changed Date:12/14/04

Reference:D/3774B
 Revision #0/I/3774
 BIN: WA00

UOM: PC

Quantity 1 Receive into Whse: MYPT

Ball Dr	Sz	Component	Type	Bin Location	Description	QtyPer	UOM	Reference	Effectivity
===	==	=====		=====	=====	=====	==	=====	=====
01	B	4811000612	M	WS03	SHEET 11GA x 14.12 x 42.00	1.000	PC		-
02	B	4017001393	M	WS03	ANGLE 3.85 X 2.62 X 0.25 X 14.12	2.000	PC		-
03	B	7470000009	P	100904 h08 J39	GAUGE LIQUID LEVEL W/ THERMOMETER	1.000	PC		-
04	C	4686000197	M	WS03	PANEL 11GA x 9.50 x 22.25	1.000	PC		-
05	B	4811000679	M	WS03	SHEET 11GA x 22.88 x 35.73	1.000	PC		-
06	A	7449000012	P	c10	FLANGE 1.00" NPT WELD #FDF-100	2.000	PC		-
07	A	7449000011	P	c09	FLANGE 2.00" NPT WELD #FDF200	1.000	PC		-
08	E	7183000002	P	100205 b78 d21	FILLER/ BREATHER CAP ASSY	1.000	PC		-
09	A	7430000010	P	e03	FILTER TANK FLOWLINE IMF-25-5-5.00 LONG	1.000	PC		-
10	A	7701000026	P	c16	PLUG 1.0"NPT X 1.5"NPT MAGNETIC	1.000	pc		-

*** End of Item ***

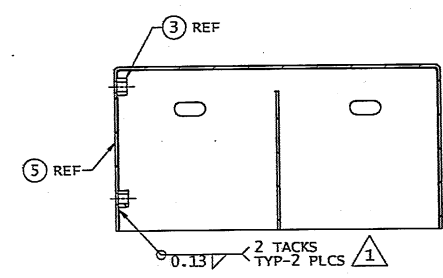
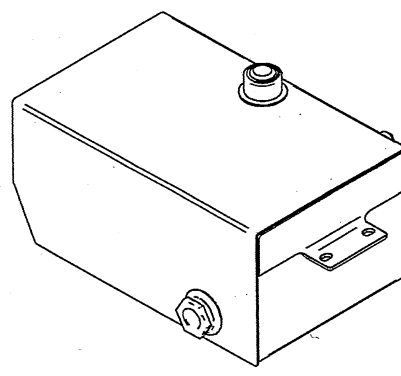
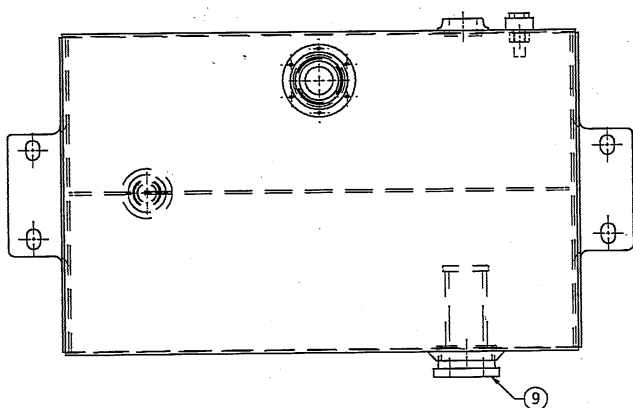
*** End of Report ***

RESERVOIR WELD HYDRAULIC (MPL40)

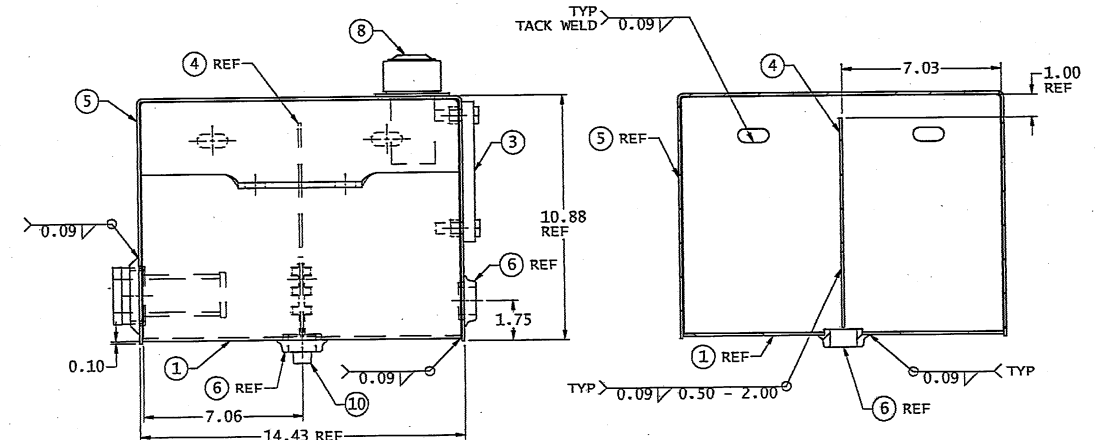
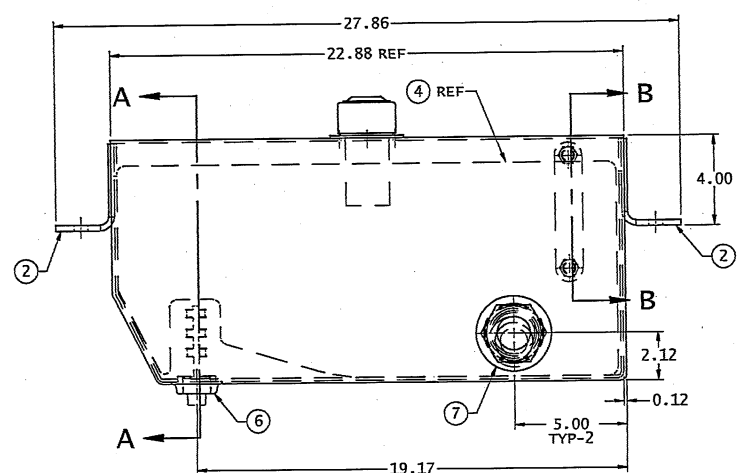
DWG NO 3-750-00004901 REV

NOTES:

1. 1/2" NUTS FROM LIQUID LEVEL GAUGE KIT (ITEM 3) MUST BE WELDED INSIDE TANK FIRST BEFORE ASSEMBLY.
2. DEBURR AND CLEAN AREAS AROUND HOLES FOR SIGHT GAUGE. THIS WILL ALLOW GAUGE TO SEAL PROPERLY.
3. TACK WELD ITEMS 2 TO ITEM 1 BEFORE LOCATING AND WELDING ITEM 5 INTO PLACE.
4. SKIP WELD ITEM 4 TO ITEM 1 BEFORE LOCATING AND WELDING ITEM 5 INTO PLACE.



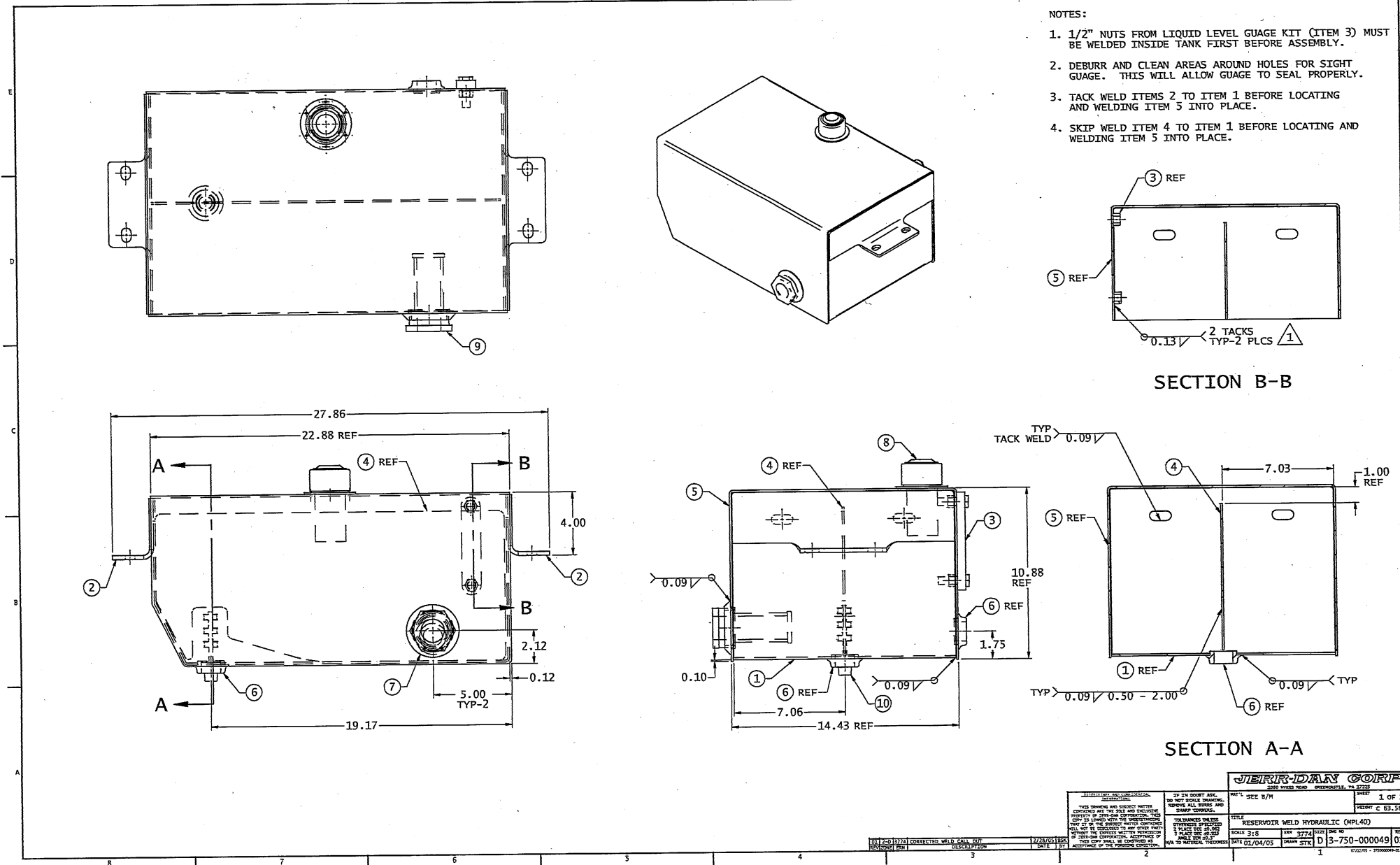
SECTION B-B



SECTION A-A

<p>JERR-DAN CORP JERRY DAN CORP 1000 W. 10th St., Grand Rapids, MI 49508</p>		<p>IF IN DOUBT ASK FOR SCALE DRAWING. REMOVE ALL BURRS AND SHARP EDGES.</p>	<p>SHEET 1 OF 1 WEIGHT C 63.568</p>
<p>THIS DRAWING AND EXACT MATTER HEREIN IS THE PROPERTY OF JERR-DAN CORP. IT IS LOANED TO YOU BY THE DRAWING OFFICE. IT IS NOT TO BE REPRODUCED OR COPIED IN ANY MANNER WITHOUT THE WRITTEN PERMISSION OF JERR-DAN CORP. ACCEPTANCE OF THIS DRAWING SHALL BE CONSIDERED AS ACCEPTANCE OF THE ABOVE CONDITIONS.</p>	<p>RESERVOIR WELD HYDRAULIC (MPL40)</p>	<p>DATE 01/04/05 DRAWN STC CHECKED JTC DATE 01/04/05</p>	<p>SCALE 3:1 SHEET 3774 DWG NO 3-750-00004901</p>

1012-013721 CORRECTED WELD CALL OUT
DESCRIPTION DATE BY





Underlift Boom Installation

***** Engineering Bill of Materials *****

** Report Excludes Shrinkage.

Effective as of 07/12/05

Item: 2170000069

BOOM INST MPL-40 KNEE

From Item: 2170000069

To Item: 2170000069

Reference: D/3774A

Last Changed Date: 03/22/05

Revision #A/1/3774

Quantity	1	Receive into Whse: MYPT	BIN: WA03	UOM: PC
----------	---	-------------------------	-----------	---------

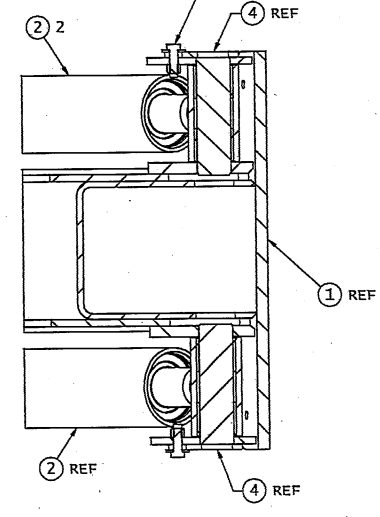
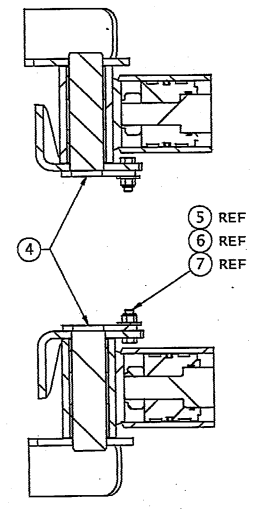
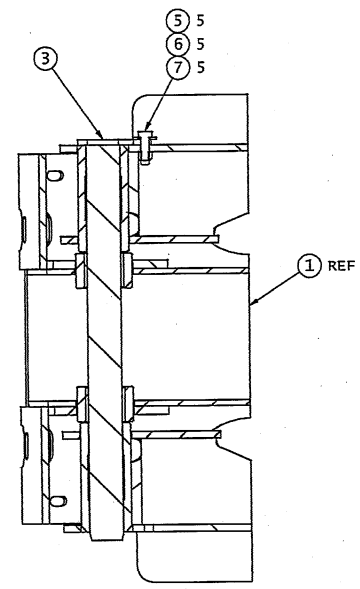
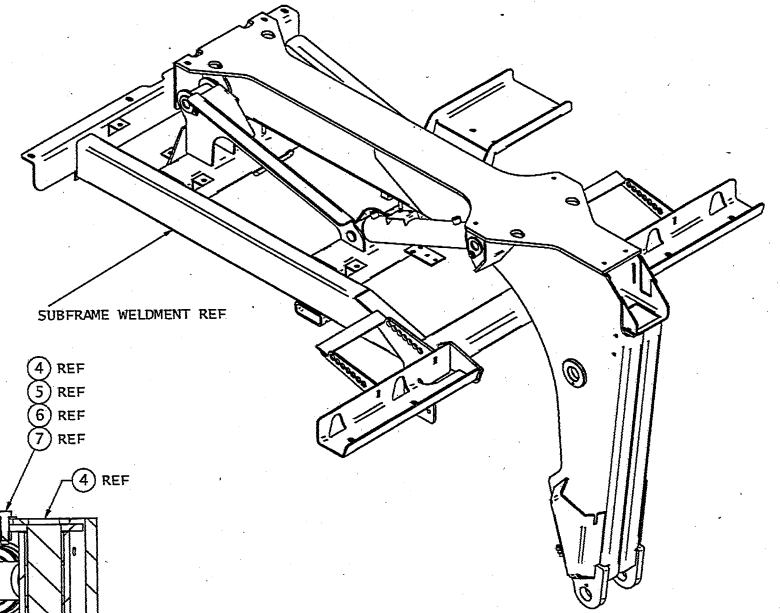
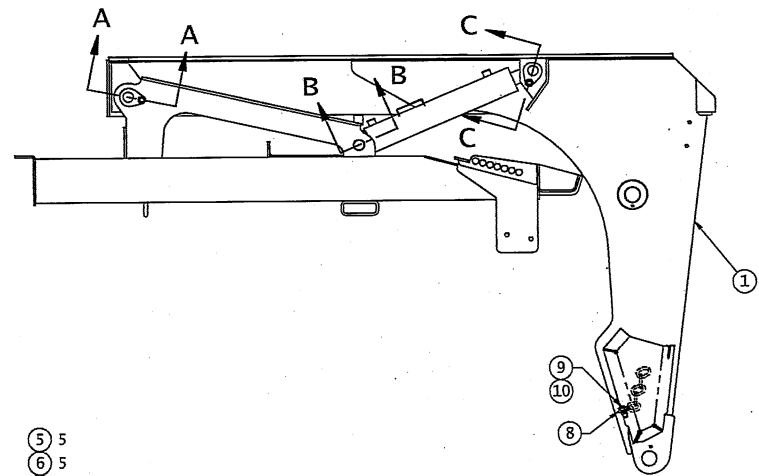
Ball Dr	Sz	Component	Type	Bin Location	Description	QtyPer	UOM	Reference	Effectivity
01	D	3170000369	M	WA00	BOOM WELD OUTER	1.000	PC		-
02	C	3320000153	M	WA00	CYLINDER ASSY 3.00/1.75 X 25.40-40.51	2.000	PC		-
03	B	3691000241	M	WA00	PIN WELD 1.50 DIA X 17.62	1.000	PC		-
04	B	3691000240	M	WA00	PIN WELD 1.50 DIA X 5.31	4.000	PC		-
05	N	7115161050	P	022504 x01	CAPSCREW .38"-16NC X 1.25" HEX HEAD	5.000	PC		-
06	N	7660162601	P	000105 x01	LOCKNUT .38"-16NC GR5 NYLOC	5.000	pc		-
07	N	7950160161	P	000104 A97 x01	FLATWASHER .38" NOM WIDE - PLATED	5.000	PC		-
08	B	7262000040	P	m08 RM-OS	CHAIN .31 x 10' GR. 70 W/LATCH HOOK	2.000	PC	3774	03/21/05-
09	N	7660182601	P	000105 x01	LOCKNUT .50"-13NC GR5 HEC NYLOC	2.000	PC	3774	03/21/05-
10	N	7115181050	P	080305 a48 x01	CAPSCREW .50"-13NC X 1.25" HEX HEAD	2.000	PC	3774	03/21/05-

*** End of Item ***

*** End of Report ***

BOOM INST MPL-40 KNEE

DWG NO 2-170-000069 REV 01



SECTION A-A
VIEW SCALE: 3:8

SECTION B-B
VIEW SCALE: 3:8

SECTION C-C
VIEW SCALE: 3:8

<p>IF IN DOUBT ASK FOR NOT SCALE DRAWING. REMOVE ALL DIMS AND SHARP CORNERS.</p> <p>THIS DRAWING AND SUBJECT MATTER IS THE PROPERTY OF JERRIDAN AND SHALL BE KEPT IN CONFIDENCE. IT IS TO BE USED ONLY FOR THE PURPOSES SPECIFIED HEREIN. IT IS TO BE RETURNED TO THE ISSUING OFFICE WHEN NO LONGER REQUIRED. IT IS TO BE DESTROYED BY THE ISSUING OFFICE WHEN NO LONGER REQUIRED.</p>		<p>DATE: 01/17/05</p> <p>DRAWN BY: BSK</p>	<p>SCALE: 1:8</p> <p>DWG NO: 2-170-000069</p>	<p>SHEET: 1 OF 1</p> <p>REV: 01</p>
<p>01 ALL 1774</p>	<p>ADDED ITEMS 8, 9, 4 JO</p>	<p>03/22/05</p>	<p>01</p>	<p>01</p>
<p>REVISIONS</p>	<p>DESCRIPTION</p>	<p>DATE</p>	<p>BY</p>	<p>REV</p>

***** Engineering Bill of Materials *****

** Report Excludes Shrinkage.

Effective as of 07/15/05

Item: 3320000153

CYLINDER ASSY 3.00/1.75 X 25.40-40.51

From Item: 3320000153

To Item: 3320000153

Last Changed Date:12/14/04

Reference:C/3774B

Revision #0/1/3774

BIN: WA00

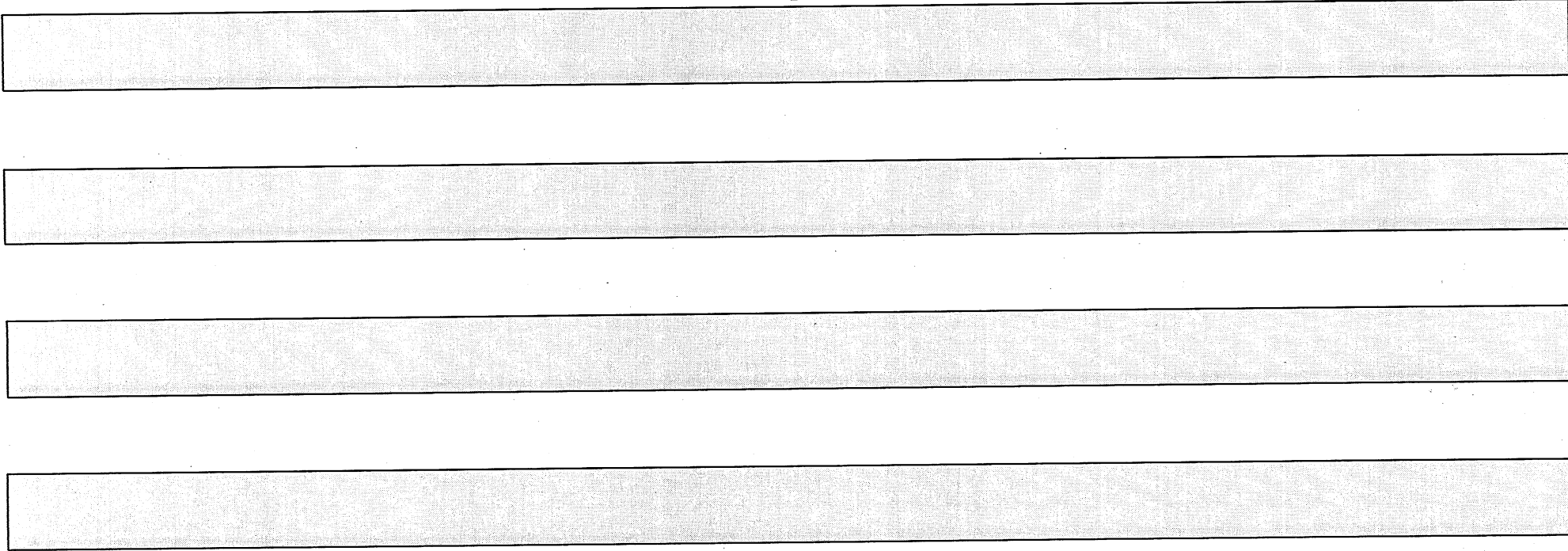
UOM: PC

Quantity 1 Receive into Whse: MYPT

Ball Dr	Bin			Description	QtyPer	UOM	Reference	Effectivity
-oon Sz Component Type Location					=====	====	=====	=====
01	C	3071000137	M	CC05	1.000	PC		-
02	C	3763000144	M	CC05	1.000	PC		-
03	B	3698000001	P		1.000	PC		-
04	B	3553000011	P		1.000	PC		-
05	A	7661000034	P	000105 d07	1.000	PC		-
06	A	7754000002	P	b62	1.000	pc		-
07	N	7754000026	P	b65	1.000	pc		-
08	A	7082000030	P	g01	4.000	PC		-

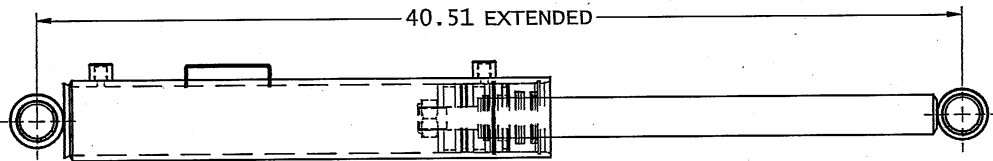
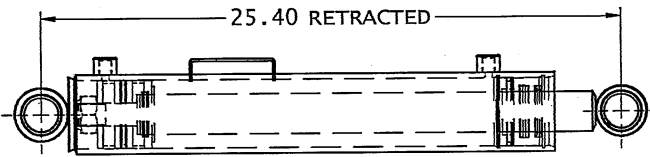
*** End of Item ***

*** End of Report ***

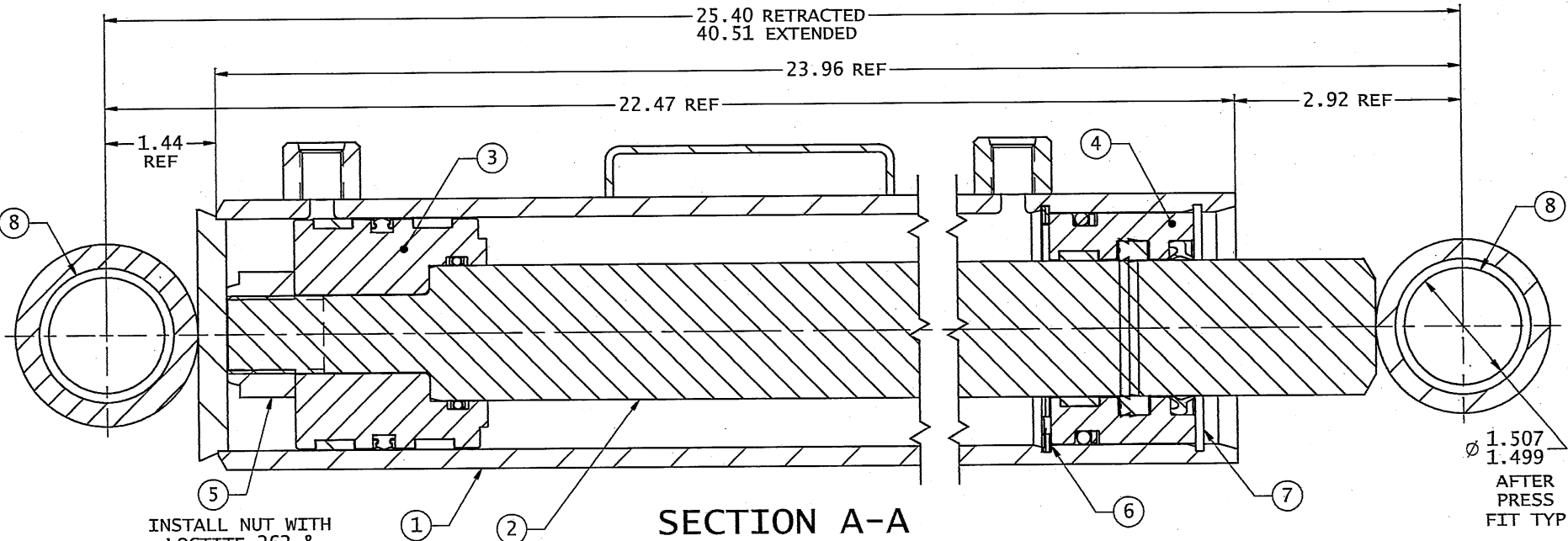
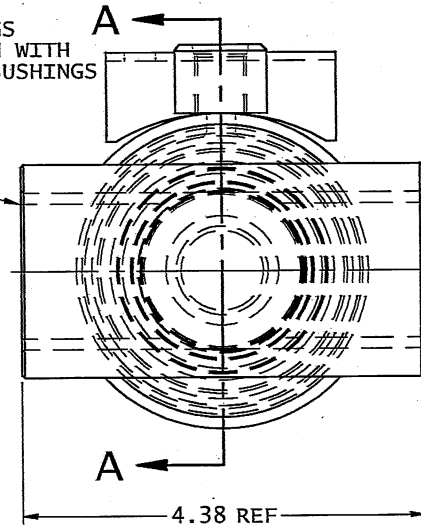


CYLINDER ASSY 3.00/1.75 X 25.40-40.51

DWG NO 3-320-000153 REV 01



INSTALL BEARINGS
(ITEM #8) FLUSH WITH
ENDS OF STEEL BUSHINGS



INSTALL NUT WITH
LOCTITE 262 &
TORQUE TO
280-320 FT-LBS

SECTION A-A

NOTE:

*PLUG PORTS FOR STORAGE

JERR-DAN CORP
1080 HYKES ROAD GREENCASTLE, PA 17223

PROPRIETARY AND CONFIDENTIAL INFORMATION: THIS DRAWING AND SUBJECT MATTER CONTAINED HERE IS THE SOLE AND EXCLUSIVE PROPERTY OF JERR-DAN CORPORATION. THIS COPY IS LOANED WITH THE UNDERSTANDING THAT IT OR THE SUBJECT MATTER CONTAINED WILL NOT BE DISCLOSED TO ANY OTHER PARTY WITHOUT THE EXPRESS WRITTEN PERMISSION OF JERR-DAN CORPORATION. ACCEPTANCE OF THIS COPY SHALL BE CONSTRUED AS ACCEPTANCE OF THE FORGING CONDITION.	IF IN DOUBT ASK. DO NOT SCALE DRAWING. REMOVE ALL BURRS AND SHARP CORNERS.	MAT'L SEE B/M	SHEET 1 OF 1
		WEIGHT E 42.0#	
TOLERANCES UNLESS OTHERWISE SPECIFIED: 2 PLACE DEC ±0.062 3 PLACE DEC ±0.013 ANGLE DIM ±0.5° N/A TO MATERIAL THICKNESS		TITLE CYLINDER ASSY 3.00/1.75 X 25.40-40.51	
SCALE 1:1	ERN 3774	SIZE DWG NO	REV
DATE 12/14/04	DRAWN STK	C 3-320-000153	01

01	ALL 3774	UPDATED VIEWS PER DETAIL CHANGES:	3/8/05	BSK
REV/ZONE	ERN	DESCRIPTION	DATE	BY

***** Engineering Bill of Materials for ALTERNATE Route *****

** Report Excludes Shrinkage.

Effective as of 07/13/05

Item: 3698000001

PISTON ASSY 3.00 BORE x 1.75 ROD

From Item: 3698000001

To Item: 3698000001

Reference: B/2962-A

Last Changed Date: 08/11/00

Alternate Route #A215015	Quantity 1	Receive into Whse: HYKS	Revision #0/0	UOM: PC
--------------------------	------------	-------------------------	---------------	---------

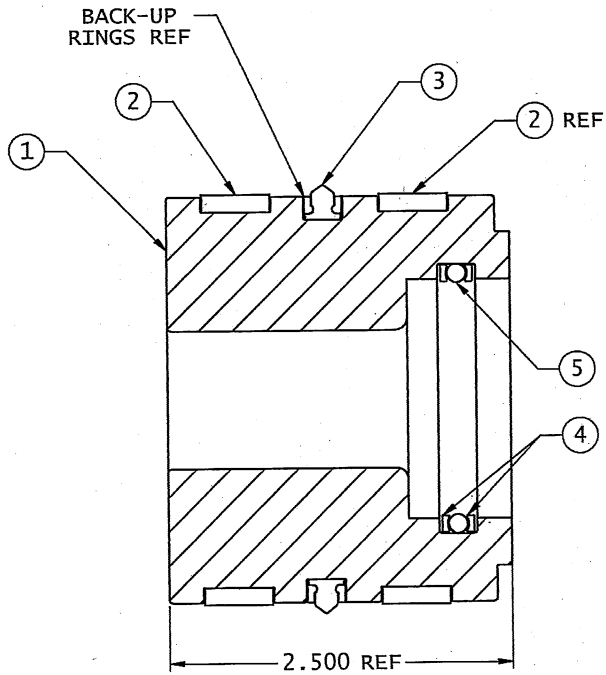
Seq	Ball	Dr	Sz	Component	Type	Bin	Description	Qty	Per	UOM	Reference	Effectivity
1	01	B		4698000007	P	1010	PISTON 3.00 BORE X 1.75 ROD X 2.50 LG	1.000		pc		-
2	02	A		7754000003	P		RING WEAR 3.00 x 0.50 x 0.120/0.125 THK	2.000		pc		-
3	03	A		7796000063	P		SEAL PISTON LOCKING T 3.00" BORE	1.000		PC		-
4	04	N		7755224609	P		RING BACK-UP PISTON 1.75" ROD	2.000		pc		-
5	05	N		7755224000	P		RING "O" PISTON 1.75" ROD	1.000		pc		-

*** End of Item ***

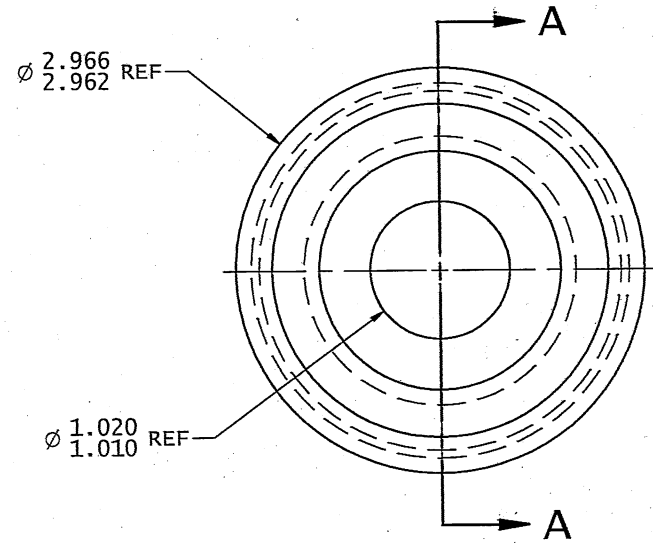
*** End of Report ***

PISTON ASSY (3.00 BORE CYLINDER)

DWG NO 3-698-000001 REV 02



SECTION A-A



02	ALL 3890	REDRAWN IN SOLID EDGE (3D/2D)	02/18/04	STK
REV	ZONE	ERN	DATE	BY
		DESCRIPTION		

PROPRIETARY AND CONFIDENTIAL INFORMATION
 THIS DRAWING AND SUBJECT MATTER CONTAINED ARE THE SOLE AND EXCLUSIVE PROPERTY OF JERR-DAN CORPORATION. THIS COPY IS LOANED WITH THE UNDERSTANDING THAT IT OR THE SUBJECT MATTER CONTAINED WILL NOT BE DISCLOSED TO ANY OTHER PARTY WITHOUT THE EXPRESS WRITTEN PERMISSION OF JERR-DAN CORPORATION. ACCEPTANCE OF THIS COPY SHALL BE CONSTRUED AS ACCEPTANCE OF THE FORGING CONDITION.

IF IN DOUBT ASK. DO NOT SCALE DRAWING. REMOVE ALL BURRS AND SHARP CORNERS.
 TOLERANCES UNLESS OTHERWISE SPECIFIED
 2 PLACE DEC ±0.062
 3 PLACE DEC ±0.013
 ANGLE DIM ±0.5°
 N/A TO MATERIAL THICKNESS

JERR-DAN CORP 3080 HYKES ROAD GREENCASTLE, PA 17225		MAT'L SEE B/M	SHEET 1 OF 1
TITLE PISTON ASSY (3.00 BORE CYLINDER)		WEIGHT E 3.24#	REV
SCALE 3:2	ERN 2962	SIZE DWG NO	REV
DATE 02/02/00	DRAWN VLW	C 3-698-000001	02

***** Engineering Bill of Materials for ALTERNATE Route *****

** Report Excludes Shrinkage.

Effective as of 08/04/05

Item: 3553000011

HEAD ASSY 3.00 BORE x 1.75 ROD

From Item: 3553000011

To Item: 3553000011

Reference: B/2962-A

Last Changed Date: 08/11/00

Revision #0/0

BIN:

UOM: PC

Alternate Route #A215021

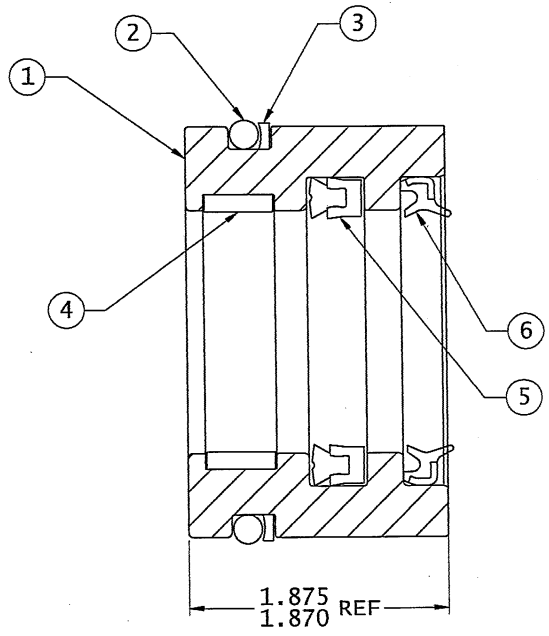
Quantity 1

Receive into Whse: HYKS

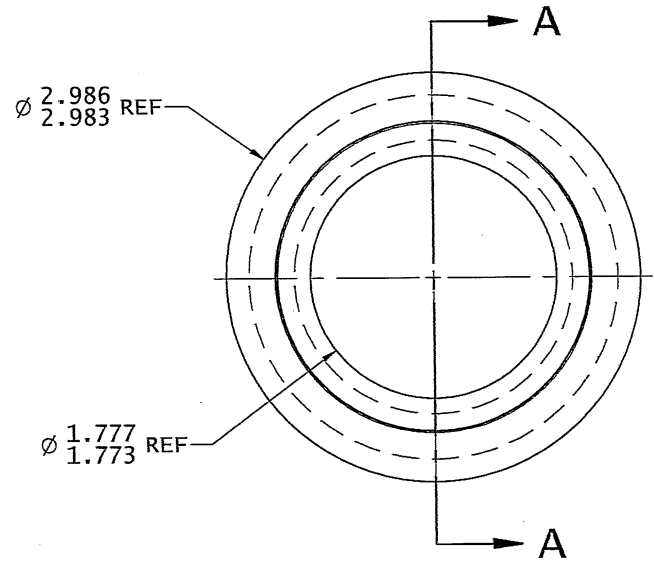
Seq	Ball	Dr	No.	-oon	Sz	Component	Type	Bin	Location	Description	QtyPer	UOM	Reference	Effectivity
====	==	==	====	==	====	====	====	====	====	====	====	====	====	====
1	01	B	4553000008	P	1010	HEAD 3.00 BORE X 1.75 ROD X 1.88 LG					1.000	pc		-
2	02	N	7755334000	P		RING "O" HEAD GLAND 3.00" BORE					1.000	pc		-
3	03	A	7755334609	P		RING BACK-UP HEAD GLAND 3.00" BORE					1.000	pc		-
4	04	A	7754000004	P	H01	RING WEAR HEAD 1.75" ROD					1.000	pc		-
5	05	A	7796000024	P		SEAL ROD 1.75"					1.000	pc		-
6	06	A	7796000008	P		SEAL WIPER 1.75" ROD					1.000	pc		-

*** End of Item ***

*** End of Report ***



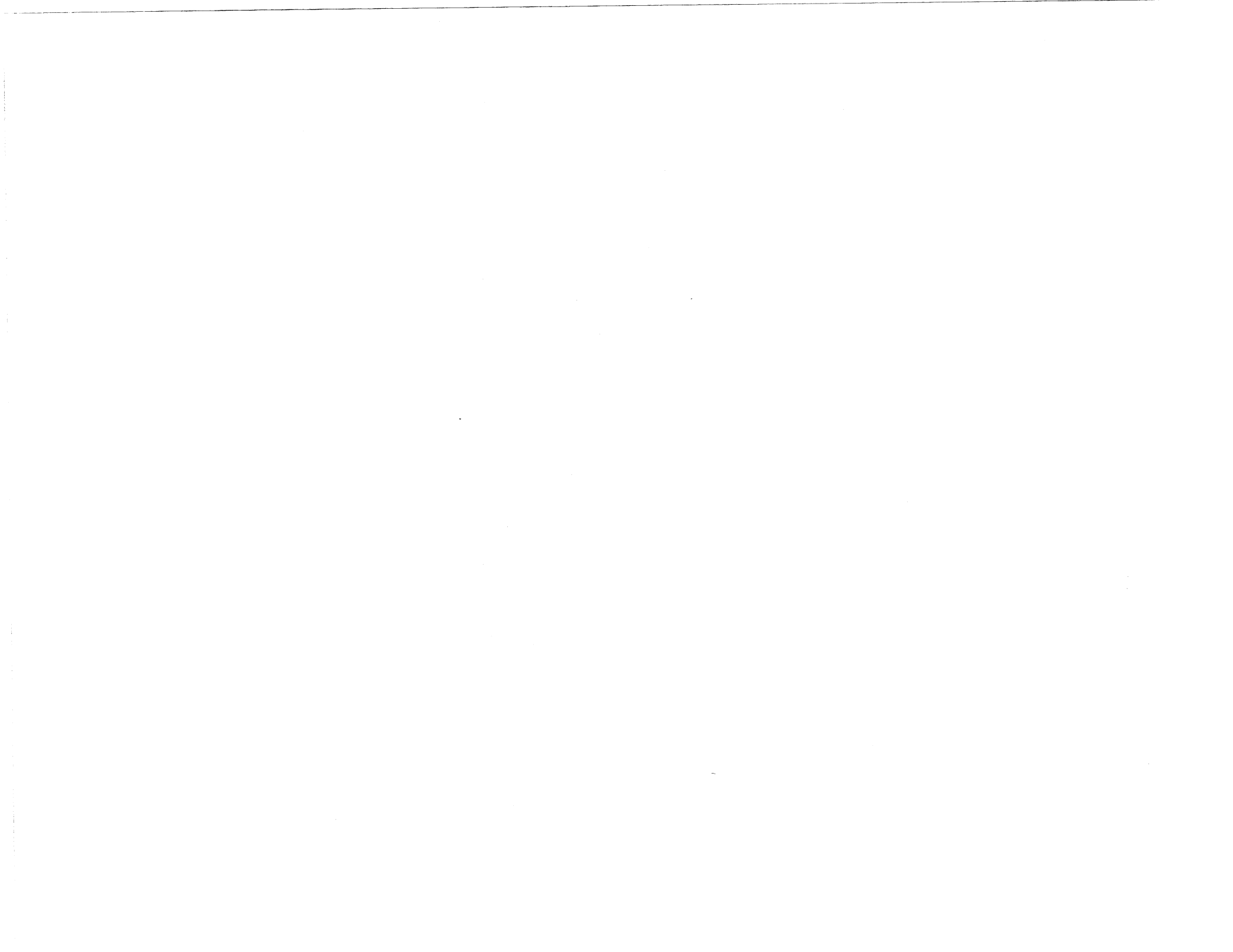
SECTION A-A



02	ALL 3690	REDRAWN IN SOLID EDGE (3D/2D)	02/18/04	STK
REV	ZONE	ERN	DATE	BY
		DESCRIPTION		

<p>PROPRIETARY AND CONFIDENTIAL INFORMATION:</p> <p>THIS DRAWING AND SUBJECT MATTER CONTAINED ARE THE SOLE AND EXCLUSIVE PROPERTY OF JERR-DAN CORPORATION. THIS COPY IS LOANED WITH THE UNDERSTANDING THAT IT OR THE SUBJECT MATTER CONTAINED WILL NOT BE DISCLOSED TO ANY OTHER PARTY WITHOUT THE EXPRESS WRITTEN PERMISSION OF JERR-DAN CORPORATION. ACCEPTANCE OF THIS COPY SHALL BE CONSTRUED AS ACCEPTANCE OF THE FOREGOING CONDITION.</p>	<p>IF IN DOUBT ASK. DO NOT SCALE DRAWING. REMOVE ALL BURRS AND SHARP CORNERS.</p> <p>TOLERANCES UNLESS OTHERWISE SPECIFIED 2 PLACE DEC ±0.002 3 PLACE DEC ±0.015 ANGLE DIM ±0.5° N/A TO MATERIAL THICKNESS</p>	<p>MAT'L SEE B/M</p>
---	--	----------------------

<p>JERR-DAN CORP</p> <p>1080 HYKES ROAD GREENCASTLE, PA 17225</p>		<p>SHEET 1 OF 1</p> <p>WEIGHT E 1.74#</p>
<p>TITLE HEAD ASSY (3.00 BORE CYLINDER)</p>		
<p>SCALE 3:2</p>	<p>ERN 2962</p>	<p>SIZE DWG NO</p>
<p>DATE 2/2/00</p>	<p>DRAWN VLW</p>	<p>REV 02</p>



Wrecker Boom Installation

***** Engineering Bill of Materials *****

** Report Excludes Shrinkage.

Effective as of 07/12/05

Item: 3170000371

BOOM INST FLY SECTION

From Item: 3170000371

To Item: 3170000371

Last Changed Date:

Reference:D/3774B

Revision #0/0

BIN: WA03

UOM: PC

Quantity 1 Receive into Whse: MYPT

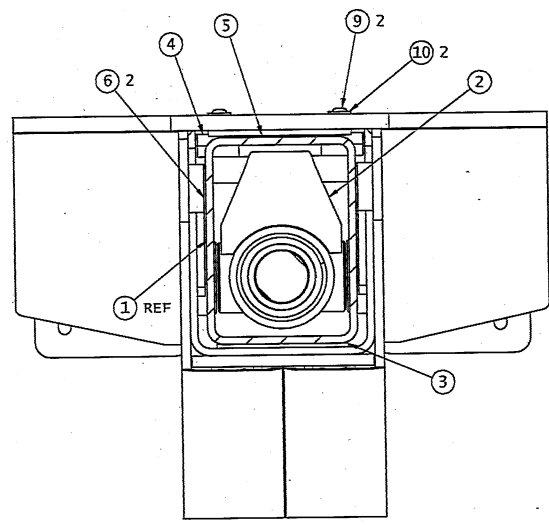
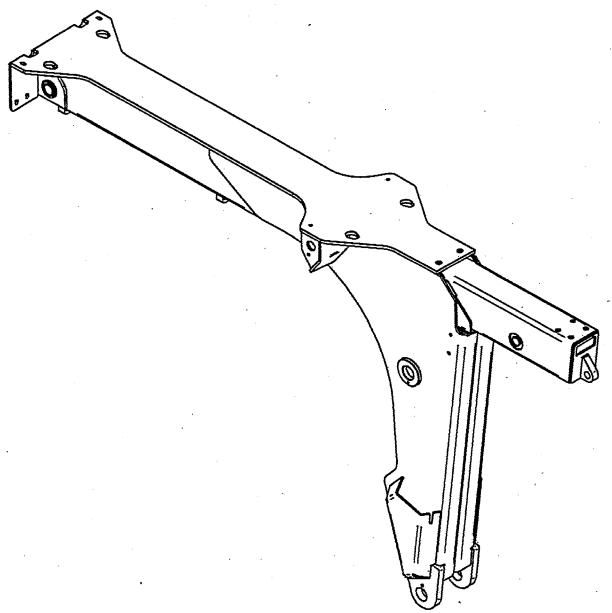
Ball Dr	Sz	Component	Type	Bin Location	Description	QtyPer	UOM	Reference	Effectivity
====	==	=====	=====	=====	=====	=====	==	=====	=====
01	D	3170000345	M	WA02	BOOM WELD, FLY SECTION	1.000	PC		-
02	C	3320000149	M	WA02	CYLINDER ASSY 3.00/1.75 X 68.70-126.97	1.000	PC		-
03	A	4679000251	M	WA02	PAD 0.38 x 4.38 x 4.38	1.000	PC		-
04	A	4679000237	M	WA02	PAD x 0.38 x 4.00 x 5.00	1.000	PC		-
05	A	4706000067	M	102505 WA00	PLATE 0.19 x 2.00 x 4.75	1.000	PC		-
06	A	4679000238	M	WA02	PAD 0.50 x 1.94 x 4.50	2.000	PC		-
07	A	4691000519	M	WA02	PIN 1.25 DIA x 5.00	1.000	PC		-
08	A	7754000006	P	000107 b62 c18	RING RETAINING - 1.25" DIA SHAFT	2.000	pc		-
09	N	7118140618	P		CAPSCREW .25"-20NC x .75 BH-ZINC	2.000	PC		-
10	N	7950140161	P	000104 A96	FLATWASHER .25" NOM WIDE - PLATED	2.000	pc		-

*** End of Item ***

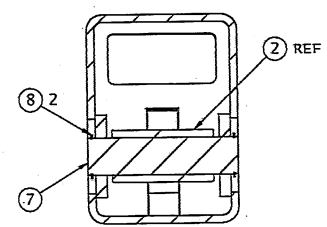
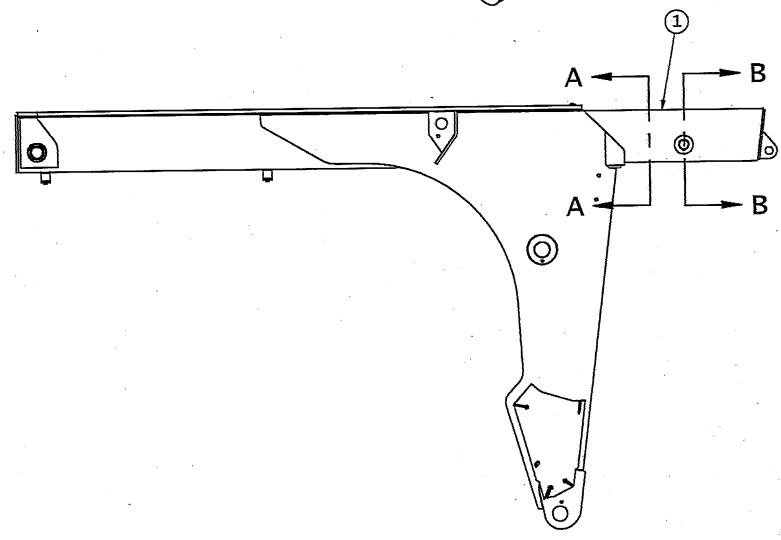
*** End of Report ***

BOOM INST FLY SECTION

DWG NO 3-170-000371 REV 00



SECTION A-A
VIEW SCALE: 1:4



SECTION B-B
VIEW SCALE: 1:4

<p>JEFF-DAN A Division of The Boeing Company</p>		<p>IF IN DOUBT ASK FOR NEXT SCALE DRAWING, REMOVE ALL DIMS AND SHARP CORNERS.</p>	<p>REV 1 SEE BOM</p>	<p>SHEET 1 OF 1</p>
<p>THIS DRAWING AND SUBJECT MATTER HEREON ARE THE PROPERTY OF JEFF-DAN CORPORATION, INC. COPY IS LOANED AND NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS WITHOUT THE WRITTEN PERMISSION OF JEFF-DAN CORPORATION. ACCEPTANCE OF THIS COPY SHALL BE CONSIDERED AS ACCEPTANCE OF THE FOREGOING CONDITIONS.</p>		<p>TRANSMISSIONS UNLESS SPECIFICALLY INDICATED SHALL BE MADE BY AIR MAIL UNLESS OTHERWISE SPECIFIED DATE 01/14/05 DRAWN BSK D</p>	<p>TITLE BOOM INST FLY SECTION</p>	<p>SCALE 1:5</p>
<p>REVISED</p>	<p>DESCRIPTION</p>	<p>DATE</p>	<p>BY</p>	<p>DWG NO 3-170-000371.00</p>

8 7 6 5 4 3 2 1

***** Engineering Bill of Materials *****

** Report Excludes Shrinkage.

Effective as of 07/13/05

Item: 3320000149

CYLINDER ASSY 3.00/1.75 X 68.70-126.97

From Item: 3320000149

To Item: 3320000149

Reference: C/3774B

Last Changed Date:

Revision #0/0

BIN: WA02

UOM: PC

Quantity 1 Receive into Whse: MYPT

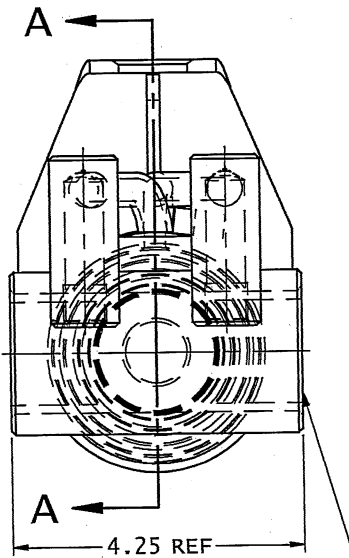
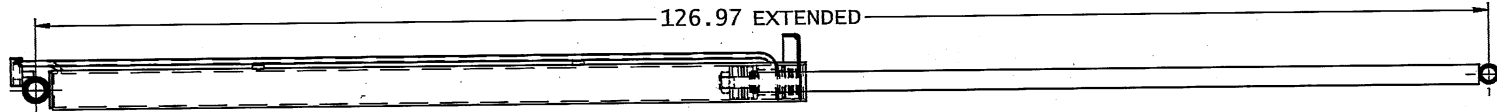
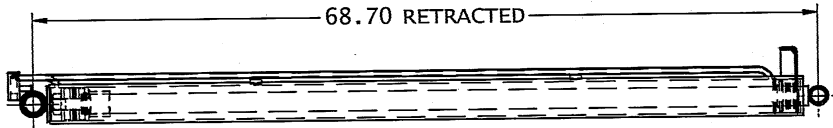
Ball Dr	Sz	Component	Type	Bin Location	Description	QtyPer	UOM	Reference	Effectivity
01	D	3071000134	M	CC05	BARREL WELD "3149"	1.000	PC		-
02	C	3763000040	M	CC05	ROD WELD 1.75 DIA "307"	1.000	PC		-
03	B	3698000001	P		PISTON ASSY 3.00 BORE x 1.75 ROD	1.000	PC		-
04	B	3553000011	P		HEAD ASSY 3.00 BORE x 1.75 ROD	1.000	PC		-
05	A	7661000034	P	000105 d07	NUT 1.00"-14NF NYLON INSERT HEX	1.000	PC		-
06	A	7754000002	P	b62	RING RETAINING 3" #1300-300	1.000	pc		-
07	N	7754000026	P	b65	RING RETAINING SMALLY WHM 300	1.000	pc		-
08	A	4912000358	M	CC05	TUBE 2.25 OD x 1.75 ID x 1.75 LG	1.000	PC		-
09	A	7082000017	P	f15	BEARING 1.75 OD x 1.50 ID x 1.25 POLYGON	2.000	PC		-

*** End of Item ***

*** End of Report ***

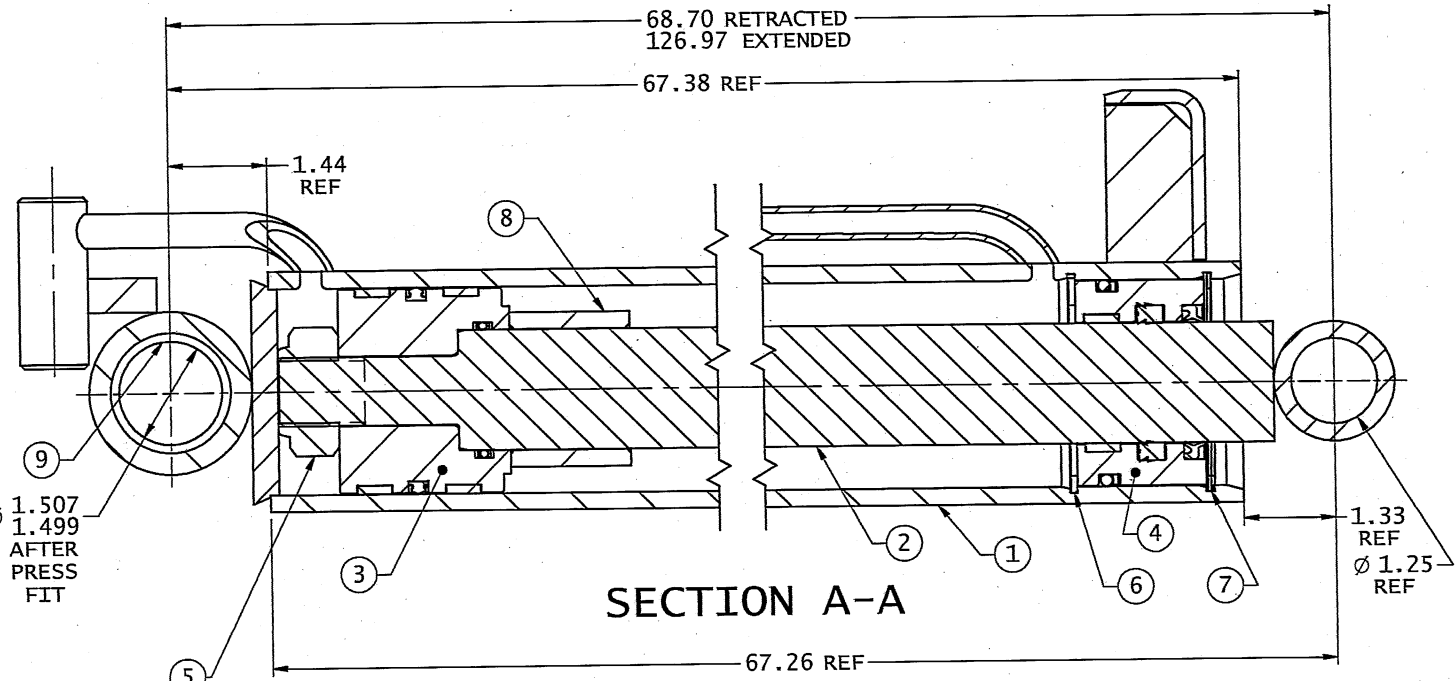
CYLINDER ASSY 3.00/1.75 X 68.70-126.97

DWG NO 3-320-000149 REV 00



INSTALL BEARINGS (ITEM #9) FLUSH WITH ENDS OF STEEL BUSHING

NOTE:
PLUG PORTS FOR STORAGE



SECTION A-A

INSTALL NUT WITH LOCTITE 262 TORQUE NUT TO 280 TO 320 FT-LBS

JERR-DAN CORP
1080 HYKES ROAD GREENCASTLE, PA 17225

PROPRIETARY AND CONFIDENTIAL INFORMATION
THIS DRAWING AND SUBJECT MATTER CONTAINED HEREIN ARE THE SOLE AND EXCLUSIVE PROPERTY OF JERR-DAN CORPORATION. THIS COPY IS LOANED WITH THE UNDERSTANDING THAT IT OR THE SUBJECT MATTER CONTAINED HEREIN WILL NOT BE DISCLOSED TO ANY OTHER PARTY WITHOUT THE EXPRESS WRITTEN PERMISSION OF JERR-DAN CORPORATION. ACCEPTANCE OF THIS COPY SHALL BE CONSTRUED AS ACCEPTANCE OF THE FORGING CONDITION.

IF IN DOUBT ASK. DO NOT SCALE DRAWING. REMOVE ALL BURRS AND SHARP CORNERS.

TOLERANCES UNLESS OTHERWISE SPECIFIED
2 PLACE DEC ±0.062
3 PLACE DEC ±0.015
ANGLE DIM ±0.5°
N/A TO MATERIAL THICKNESS

MAT'L	SEE B/M	SHEET	1 OF 1
		WEIGHT	C 108#
TITLE CYLINDER ASSY 3.00/1.75 X 68.70-126.97			
SCALE	4:4	ERN	3774
DATE	09/27/04	SIZE	DWG NO C 3-320-000149
		DRAWN	STK
		REV	00

REV	ZONE	ERN	DESCRIPTION	DATE	BY

***** Engineering Bill of Materials for ALTERNATE Route *****

** Report Excludes Shrinkage.

Effective as of 07/13/05

Item: 3698000001

PISTON ASSY 3.00 BORE x 1.75 ROD

Reference: B/2962-A

From Item: 3698000001

To Item: 3698000001

Last Changed Date: 08/11/00

Alternate Route #A215015	Quantity 1	Receive into Whse: HYKS	Revision #0/0	UOM: PC
--------------------------	------------	-------------------------	---------------	---------

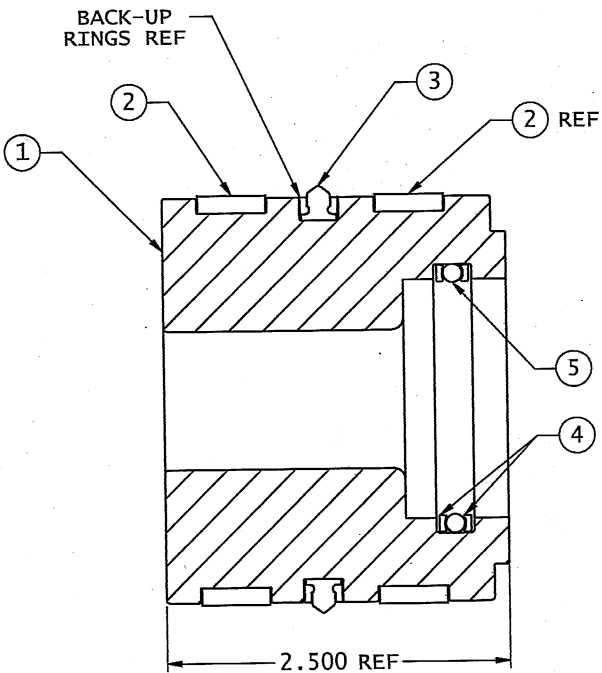
Seq	Ball Dr	Sz	Component	Type	Bin Location	Description	QtyPer	UOM	Reference	Effectivity
1	01	B	4698000007	P	1010	PISTON 3.00 BORE X 1.75 ROD X 2.50 LG	1.000	pc		-
2	02	A	7754000003	P		RING WEAR 3.00 x 0.50 x 0.120/0.125 THK	2.000	pc		-
3	03	A	7796000063	P		SEAL PISTON LOCKING T 3.00" BORE	1.000	PC		-
4	04	N	7755224609	P		RING BACK-UP PISTON 1.75" ROD	2.000	pc		-
5	05	N	7755224000	P		RING "O" PISTON 1.75" ROD	1.000	pc		-

*** End of Item ***

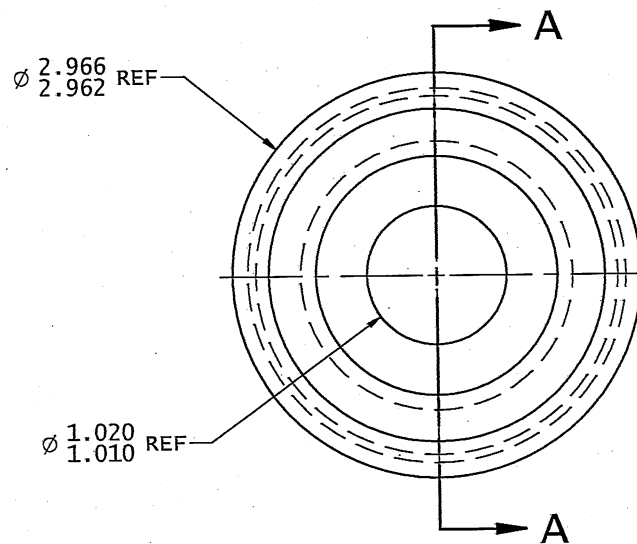
*** End of Report ***

PISTON ASSY (3.00 BORE CYLINDER)

DWG NO 3-698-000001 REV 02



SECTION A-A



02	ALL 3690	REDRAWN IN SOLID EDGE (3D/2D)	02/18/04	STK	
REV	ZONE	ERN	DATE	BY	

PROPRIETARY AND CONFIDENTIAL INFORMATION.
 THIS DRAWING AND SUBJECT MATTER CONTAINED ARE THE SOLE AND EXCLUSIVE PROPERTY OF JERR-DAN CORPORATION. THIS COPY IS LOANED WITH THE UNDERSTANDING THAT IT OR THE SUBJECT MATTER CONTAINED WILL NOT BE DISCLOSED TO ANY OTHER PARTY WITHOUT THE EXPRESS WRITTEN PERMISSION OF JERR-DAN CORPORATION. ACCEPTANCE OF THIS COPY SHALL BE CONSIDERED AS ACCEPTANCE OF THE FORGING CONDITION.

IF IN DOUBT ASK. DO NOT SCALE DRAWING. REMOVE ALL BURRS AND SHARP CORNERS.
 TOLERANCES UNLESS OTHERWISE SPECIFIED
 2 PLACE DEC ±0.002
 3 PLACE DEC ±0.015
 ANGLE DIM ±0.5°
 N/A TO MATERIAL THICKNESS

JERR-DAN CORP 1080 RYKES ROAD GREENCASTLE, PA 17225		MAT'L SEE B/M	SHEET 1 OF 1
TITLE PISTON ASSY (3.00 BORE CYLINDER)		WEIGHT E 3.24#	REV
SCALE 3:2	ERN 2962	SIZE DWG NO	02
DATE 02/02/00	DRAWN VLW	C 3-698-000001	

***** Engineering Bill of Materials for ALTERNATE Route *****

** Report Excludes Shrinkage.

Effective as of 07/13/05

Item: 3553000011

HEAD ASSY 3.00 BORE x 1.75 ROD

From Item: 3553000011

To Item: 3553000011

Last Changed Date:08/11/00

Reference:B/2962-A

Revision #0/0

BIN:

UOM: PC

Alternate route #A215021

Quantity 1

Receive into Whse: HYKS

Seq	Ball Dr	Bin	Description	QtyPer	UOM	Reference	Effectivity
No.	-oon	Sz	Component Type	Location			=====
1	01	B	4553000008	P 1010	1.000	pc	-
2	02	N	7755334000	P	1.000	pc	-
3	03	A	7755334609	P	1.000	pc	-
4	04	A	7754000004	P n01	1.000	pc	-
5	05	A	7796000024	P	1.000	pc	-
6	06	A	7796000008	P	1.000	pc	-

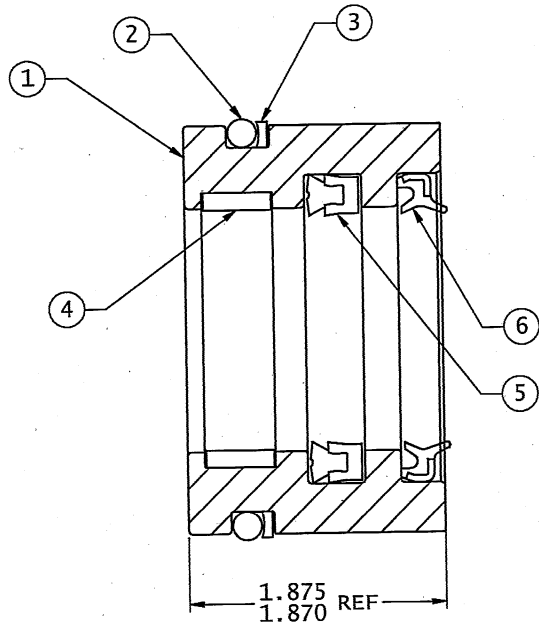
*** End of Item ***

*** End of Report ***

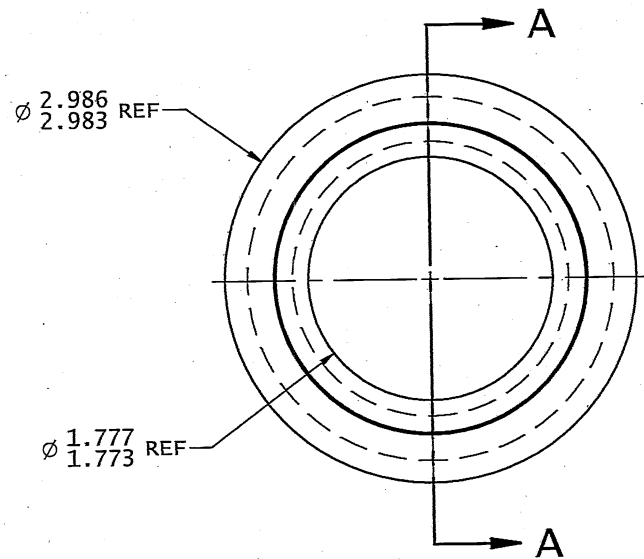
HEAD ASSY (3.00 BORE CYLINDER)

DWG NO 3-553-000011 REV 02

4



SECTION A-A

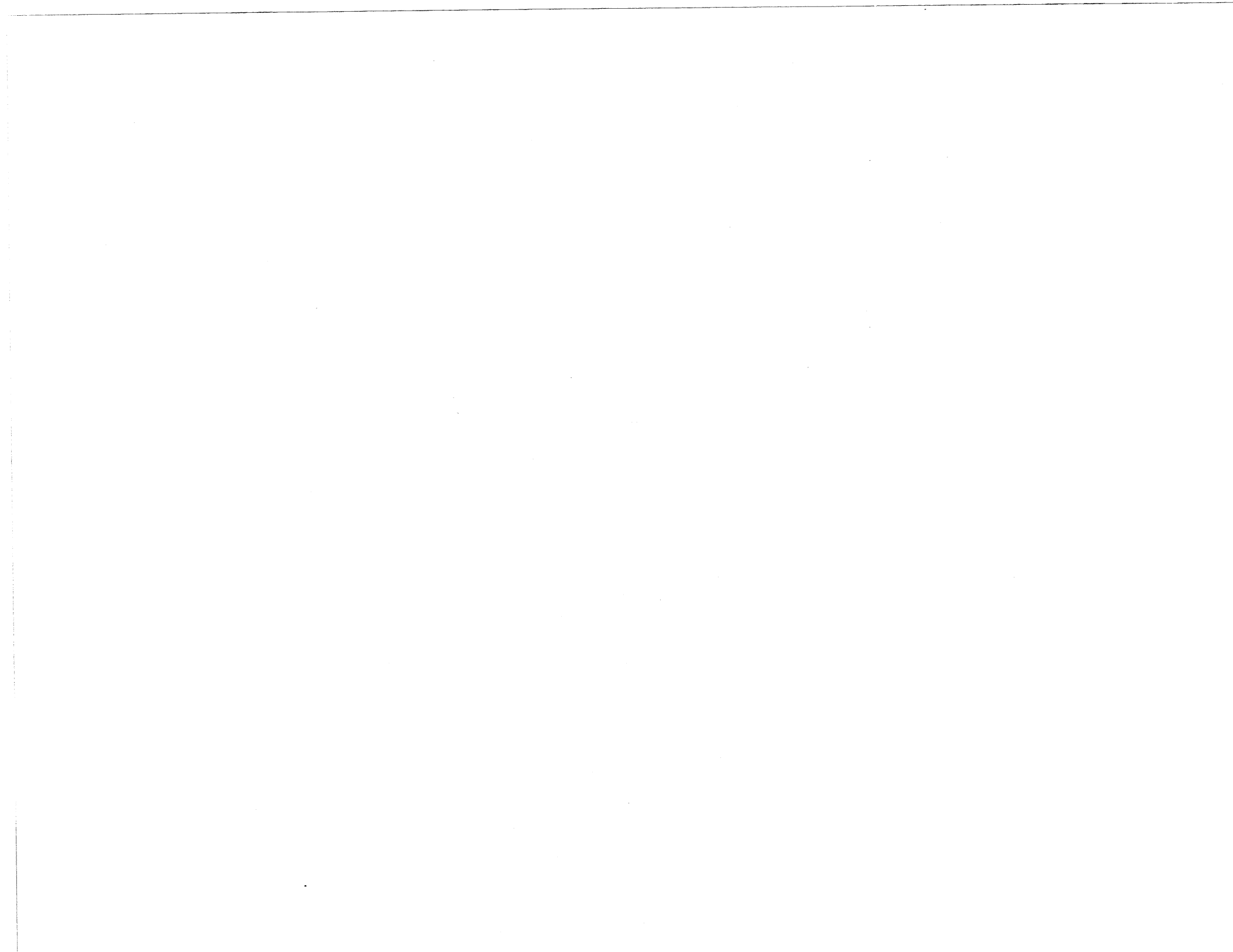


02	ALL 3690	REDRAWN IN SOLID EDGE (3D/2D)	02/18/04	STK
REV	DATE	DESCRIPTION	DATE	BY

PROPRIETARY AND CONFIDENTIAL INFORMATION.
THIS DRAWING AND SUBJECT MATTER CONTAINED ARE THE SOLE AND EXCLUSIVE PROPERTY OF JERR-DAN CORPORATION. THIS COPY IS LOANED WITH THE UNDERSTANDING THAT IT OR THE SUBJECT MATTER CONTAINED WILL NOT BE DISCLOSED TO ANY OTHER PARTY WITHOUT THE EXPRESS WRITTEN PERMISSION OF JERR-DAN CORPORATION. ACCEPTANCE OF THIS COPY SHALL BE CONSIDERED AS ACCEPTANCE OF THE FOREGOING CONDITION.

IF IN DOUBT ASK. DO NOT SCALE DRAWING. REMOVE ALL BURRS AND SHARP CORNERS.
TOLERANCES UNLESS OTHERWISE SPECIFIED
2 PLACE DEC ±0.002
3 PLACE DEC ±0.015
ANGLE DIM ±0.5°
N/A TO MATERIAL THICKNESS

JERR-DAN CORP 1080 HYKES ROAD GREENCASTLE, PA 17225		NAT'L SEE B/M	SHEET 1 OF 1
TITLE HEAD ASSY (3.00 BORE CYLINDER)		SCALE 3:2	WEIGHT E 1.74#
DATE 02/02/00	DRWN VLV	ERN 2962	REV 02
DWG NO 3-553-000011		SIZE C	REV 02



**Supply-Pressure-
Return**

***** Engineering Bill of Materials *****

** Report Excludes Shrinkage.

Effective as of 08/01/05

Item: 2509530042

HOSE INSTL SPR 60 CA FORD MPL-40

From Item: 2509530042

To Item: 2509530042

Reference: X/0818/3774B

Last Changed Date:

Quantity	1	Receive into Whse: MYPT	Revision #0/0	BIN: WA03	UOM: PC
----------	---	-------------------------	---------------	-----------	---------

Ball Dr	Bin	oon Sz Component Type Location	Description	QtyPer	UOM	Reference	Effectivity
====	==	=====	=====	=====	===	=====	=====
01	N	4567130155 M	HOSE ASSY .50 X 155 LG ST-ST FSW JIC	1.000	PC		-
02	N	4567180121 M WA03	HOSE 1.0 x 121 #16 ST(FSW) - #16 ST(FSW)	1.000	PC		-
03	A	7443000319 P b30	FITTING 90 DEG 1.00 NPTF x .75 HOSE BARB	2.000	PC		-
04	A	7274000047 P	CLAMP .75" WIDE T-BOLT HOSE	3.000	pc		-
05	X	4570000227 M WA03	HOSE RETURN .75 x 27	1.000	PC		-
06	A	7935000259 P	VALVE BRASS BALL 1" NPT (M-F) 90 SHUT	1.000	PC		-
07	A	7430000003 P g05 m08 SR-Ann	FILTER ASSY OIL W/ELEMENT #AA0380	1.000	pc		-
08	N	7114140818 P 000108 A125 x0	CAPSCREW 0.25"-20 X 1.00" SS BT HD	1.000	PC		-
09	N	7950140003 P	LOCKWASHER .25" NOM REG S/S	2.000	PC		-
10	N	7950140143 P 000102 x01	FLATWASHER 0.25 NOM NARROW SS	2.000	PC		-
11	A	7470000002 P 102206 g03 h09	GAUGE #15MST-01B60 OIL FILTER	1.000	pc		-
12	N	7443000066 P	FITTING 45EL.13NPT MALE X .13NPT FEM	1.000	PC		-
13	X	4570000228 M WA03	HOSE RETURN .75 x 46	1.000	PC	B0625	-
14	B	7274000076 P b19 d08	CLAMP CAST FRAME	2.000	PC		-
15	N	7660152601 P 022603 030602	LOCKNUT .31-18NC GR5 HEX NYLOC	14.000	pc		-
16	N	7785152420 P x01	SCREW SET 5/16 - 18 x 1.50 SQR HD CUP PT	2.000	PC		-
17	N	7115151050 P 000105 x01	CAPSCREW .31"-18NC X 1.25" HEX HEAD	12.000	pc		-
18	N	7950150161 P 030602 080304	FLATWASHER .31" NOM WIDE - PLATED	22.000	PC		-
19	A	7274000040 P 100801 x01	CLAMP .81" DIA LOOP #COV1413Z1	12.000	PC		-
20	A	7274000042 P f12 g05 x01	CLAMP 1.75" DIA LOOP #COV-2913	8.000	PC		-
21	N	7445162020 P	ELBOW #16JIC X 1.25"NPT (M) 90 DEG	1.000	PC		-
22	N	7443000374 P	FITTING 1" NPT (M) 0.75 BEADED BARB (M)	1.000	PC		-
23	N	8565000007 P A-FLOOR FLOOR	HOSE 2-1/2" SINGLE JACKET MILL	1.000	ft		-
24		8632000002 R e12	TRIM .25"EDGE-BLACK VINYL #1350-B-2X1/4A	.250	FT		-

*** End of Item ***

*** End of Report ***

***** Engineering Bill of Materials *****

** Report Excludes Shrinkage.

Effective as of 08/01/05

Item: 2509530060

HOSE INST SPR 84 CA FORD MPL-40

From Item: 2509530060

To Item: 2509530060

Reference: X/0818/3774B

Last Changed Date: 04/01/05

Revision #0/0

Quantity	1	Receive into Whse: MYPT	BIN: WA03	UOM: PC
----------	---	-------------------------	-----------	---------

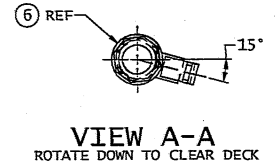
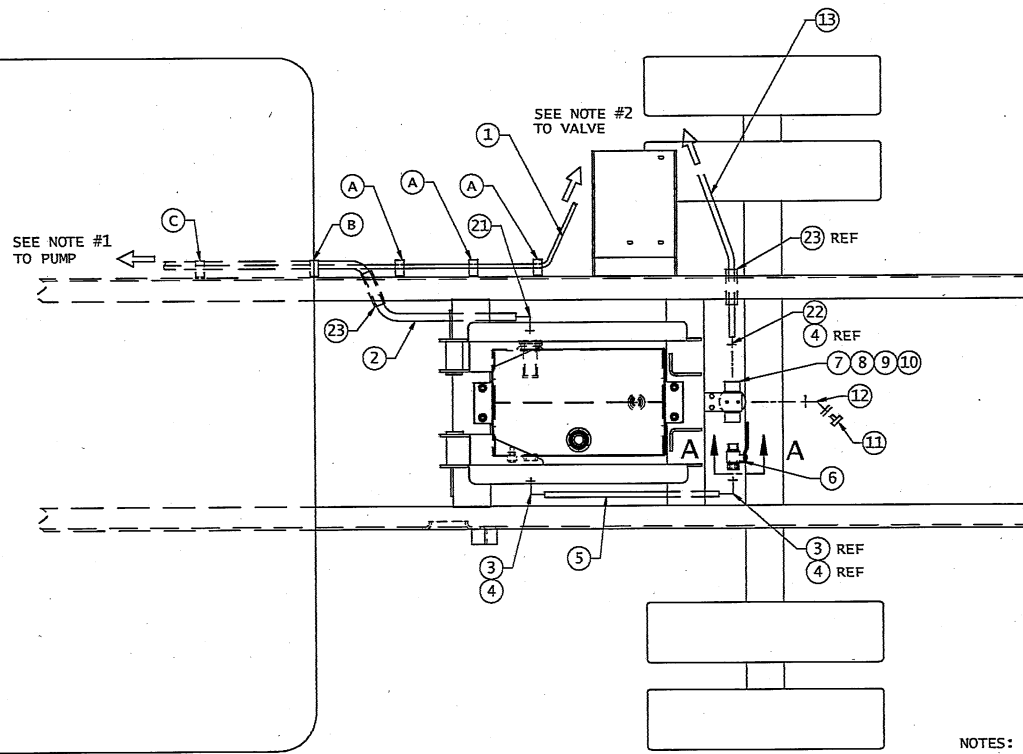
Ball Dr	Bin							
-oon Sz	Component	Type	Location	Description	QtyPer	UOM	Reference	Effectivity
===	==	=====	=====	=====	=====	===	=====	=====
01	N 4567130179	M	WA03	HOSE .50 x 179 #8 ST (FSW) - #8 ST(FSW)	1.000	PC		-
02	N 4567180145	M	WA03	HOSE 1.0 x 145 #16 ST(FSW) - #16 ST(FSW)	1.000	PC		-
03	A 7443000319	P	b30	FITTING 90 DEG 1.00 NPTF x .75 HOSE BARB	2.000	PC		-
04	A 7274000047	P		CLAMP .75" WIDE T-BOLT HOSE	3.000	pc		-
05	X 4570000227	M	WA03	HOSE RETURN .75 x 27	1.000	PC		-
06	A 7935000259	P		VALVE BRASS BALL 1" NPT (M-F) 90 SHUT	1.000	PC		-
07	A 7430000003	P	g05 m08 SR-Ann	FILTER ASSY OIL W/ELEMENT #AA0380	1.000	pc		-
08	N 7114140818	P	000108 A125 x0	CAPSCREW 0.25"-20 X 1.00" SS BT HD	1.000	PC		-
09	N 7950140003	P		LOCKWASHER .25" NOM REG S/S	2.000	PC		-
10	N 7950140143	P	000102 x01	FLATWASHER 0.25 NOM NARROW SS	2.000	PC		-
11	A 7470000002	P	102206 g03 h09	GAUGE #15MST-01B60 OIL FILTER	1.000	pc		-
12	N 7443000066	P		FITTING 45EL.13NPT MALE X .13NPT FEM	1.000	PC		-
13	X 4570000228	M	WA03	HOSE RETURN .75 x 46	1.000	PC	B0625	-
14	B 7274000076	P	b19 d08	CLAMP CAST FRAME	2.000	PC		-
15	N 7660152601	P	022603 030602	LOCKNUT .31-18NC GR5 HEX NYLOC	14.000	pc		-
16	N 7785152420	P	x01	SCREW SET 5/16 - 18 x 1.50 SQR HD CUP PT	2.000	PC		-
17	N 7115151050	P	000105 x01	CAPSCREW .31"-18NC X 1.25" HEX HEAD	12.000	pc		-
18	N 7950150161	P	030602 080304	FLATWASHER .31" NOM WIDE - PLATED	22.000	PC		-
19	A 7274000040	P	100801 x01	CLAMP .81" DIA LOOP #COV1413Z1	12.000	PC		-
20	A 7274000042	P	f12 g05 x01	CLAMP 1.75" DIA LOOP #COV-2913	8.000	PC		-
21	N 7445162020	P		ELBOW #16JIC X 1.25"NPT (M) 90 DEG	1.000	PC		-
22	N 7443000374	P		FITTING 1" NPT (M) 0.75 BEADED BARB (M)	1.000	PC		-
23	N 8565000007	P	A-FLOOR FLOOR	HOSE 2-1/2" SINGLE JACKET MILL	1.000	ft		-
24	8632000002	R	e12	TRIM .25"EDGE-BLACK VINYL #1350-B-2X1/4A	.250	FT		-

*** End of Item ***

*** End of Report ***

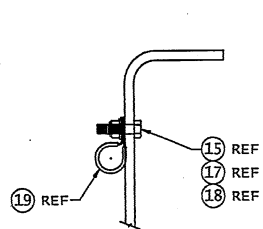
HOSE INSTALL SPR MPL40

DWG NO. 5-264-000818 REV 00

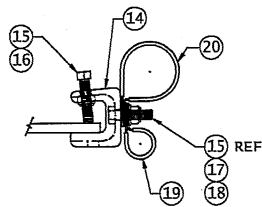


NOTES:

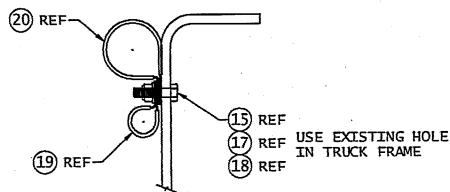
1. SEE PUMP FITTINGS B/M FOR FITTING CALL OUT.
2. SEE HYD. SCHEMATIC FOR FITTING CALL OUT.
3. SPACING FOR CLAMPS SHOULD BE LESS THAN 26" APART.
4. SEE B/M FOR ITEMS USED & QTY.
5. DRAWING SHOWS SUGGESTED STANDARD CLAMP CONFIGURATION FOR FORD CHASSIS. CONFIGURATION MAY VARY DEPENDING ON CHASSIS.
6. INSTALL ITEM 23 AROUND HOSES WHERE THEY PASS BETWEEN SUBFRAME AND CHASSIS FRAME.
7. ITEM 24 NOT SHOWN FOR CLARITY, INSTALL ITEM 24 ON EDGES OF SUBFRAME SPACER TUBE WHERE RETURN HOSE PASSES BETWEEN SUBFRAME AND CHASSIS FRAME.



CLAMP POINT "A"
TYP-4 PLACES REF



CLAMP POINT "B"
TYP-2 PLACES REF



CLAMP POINT "C"
TYP-6 PLACES REF

2-509-530042	60CA F-450/F-550 DIESEL STD CAB
2-509-500080	84CA F-450/F-550 DIESEL STD CAB

JEROLDAN
A Division of Ford Motor Company

<small>GENERAL INSTRUCTIONS: THIS DRAWING AND RELATED MATTER CONTAINED HEREIN IS THE PROPERTY OF JEROLDAN AND IS TO BE USED ONLY FOR THE PROJECT AND PURPOSE SPECIFIED HEREIN. IT IS TO BE RETURNED TO JEROLDAN UPON COMPLETION OF THE PROJECT AND ACCEPTANCE OF THE WORKING CONDITION. NO PART OF THIS DRAWING OR RELATED MATTER IS TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT THE WRITTEN PERMISSION OF JEROLDAN.</small>	27 24 DOWNT AGR. DO NOT SCALE DRAWING. REMOVE ALL DIMS AND SNAP COMMENTS.	PART: SEE B/M SHEET: 1 OF 1 WEIGHT: 7 #
	TITLE: HOSE INSTALL SPR MPL40 DRAWN: NONE DATE: 01/17/05 DESIGNED: NONE CHECKED: NONE APPROVED: NONE	REV: 3774 DATE: 01/17/05 DRAWN: JMF PART: 5-264-000818 00

REV	DESCRIPTION	DATE	BY
1			
2			
3			

Hydraulic Lines & Fittings Installation

***** Engineering Bill of Materials *****

** Report Excludes Shrinkage.
Effective as of 07/14/05
Item: 3509530093

HLF MPL-40 DUAL WINCH

From Item: 3509530093
To Item: 3509530093
Last Changed Date: 07/01/05
Reference: D/3774B

Quantity	1	Receive into Whse: MYPT	Revision #A/U	UOM: PC
			BIN: WA03	

Ball Dr	Bin	Description	QtyPer	UOM	Reference	Effectivity
-oon Sz Component Type Location			=====	===	=====	=====
01 N 7445080843	P 040303 080305	ADAPTER #8JIC(M) X #8"O"(M) STR	4.000	PC		-
02 7445060843	P 040303 b07 b43	ADAPTER #6JIC(M) x #8"O"(M) STR	6.000	pc		-
03 A 7443000231	P b05	FITTING 90 DEGREE ELBOW	2.000	PC		-
04 N 7445081043	P 020902 b47 j02	ADAPTER #8JIC(M) X #10"O"(M) STR	1.000	PC		-
05 A 7443000168	P b27	ADAPTER #12 "O" X .75ID BEADED 90DEG	1.000	pc		-
06 7445081045	P 022603 b08 b48	ELBOW #8JIC(M) X #10"O"(M) 90 DEG	4.000	pc		-
07 3 7443000372	P	FITTING T- RUN 3M #6 JIC	2.000	PC		-
08 N 7445060645	P 022505 b41 j02	ELBOW #6JIC(M)-#6"O"(M) 90 DEG	8.000	PC		-
09 N 7445060647	P b42	BRANCH #6JIC(2M)-"O" (M) TEE	4.000	PC		-
10 N 7445060646	P b42	ELBOW 45 DEG #6JIC(M)-#6 "O" RING(M)	2.000	pc		-
11 N 7445060643	P 021305 b41	ADAPTER STRAIGHT .38 O-RING TO .38	3.000	PC		-
12 N 7443000105	P b19	REDUCER #6 JIC(F) - #4 JIC(M)	1.000	pc		-
13 N 7443000106	P b01 b19	REDUCER NUT 841-FS-06 IMP. EASTMAN	1.000	pc		-
14 * 7445040443	P 021305 b37	ADAPTER STR #4JIC-#4 "O" RING (M)	2.000	pc		-
15 N 7445040643	P 011615 b39	ADAPTER, STR #4 JIC-#6 "O" RING (M)	1.000	PC		-
16 B 7912000028	P j43	TUBE ASSY 3/8"OD HYD LINE - 4.66" LG	2.000	pc		-
17 B 7912000204	P k-floor	TUBE ASSY 0.38 OD x 0.049W x 8.85 rev01	2.000	PC		-
18 B 7912000078	P 100903 j02 j46	TUBE ASSY 0.38 OD FLARED HYD X 2.75	1.000	PC		-
19 C 7912000205	P k-floor	TUBE ASSY 0.38 x 0.049W x 10.88	1.000	PC		-
20 C 7912000200	P k-floor	TUBE ASSY 0.38 OD x 0.049W x 106.59 LH	1.000	PC		-
21 C 7912000201	P k-floor	TUBE ASSY 0.38 OD x 0.049W x 105.81RH	1.000	PC		-
22 C 7912000203	P k-floor	TUBE ASSY 0.38 OD x 0.049W x 69.51	2.000	PC		-
23 A 7935000148	P 100806 C-END f	VALVE SUN COUNTER BALANCE 4000 PSI	4.000	PC		-
24 N 7115151650	P a29 x01	CAPSCREW .31"-18NC X 2.00" HEX HEAD	8.000	PC		-
25 N 7950150161	P 030602 080304	FLATWASHER .31" NOM WIDE - PLATED	8.000	PC		-
26 N 7660152601	P 022603 030602	LOCKNUT .31-18NC GR5 HEX NYLOC	8.000	pc		-
27 N 4567122026	M WA00 WA00	HOSE .38 X 26 #6 ST(FSW) - #6 90(FSW)	1.000	PC		-
28 N 4567122024	M	HOSE ASSY .38 X 24 ST-90 FSW JIC <OBS>	1.000	PC		-
29 N 4567122023	M	HOSE ASSY .38 x 23.00 ST-90 FSW JIC	2.000	PC		-
30 N 4567120016	M	HOSE .38 X 16 #6 ST(FSW)	2.000	PC		-
31 N 4567123056	M MDF1 MDF1	HOSE ASSY .38 x 56.00 ST-L90 FSW JIC	2.000	PC		-

***** Engineering Bill of Materials *****

** Report Excludes Shrinkage.
Effective as of 07/14/05
Item: 3509530093

HLF MPL-40 DUAL WINCH

From Item: 3509530093
To Item: 3509530093
Last Changed Date: 07/01/05

Reference: D/3774B

Revision #A/0

BIN: WA03

UOM: PC

Quantity 1

Receive into Whse: MYPT

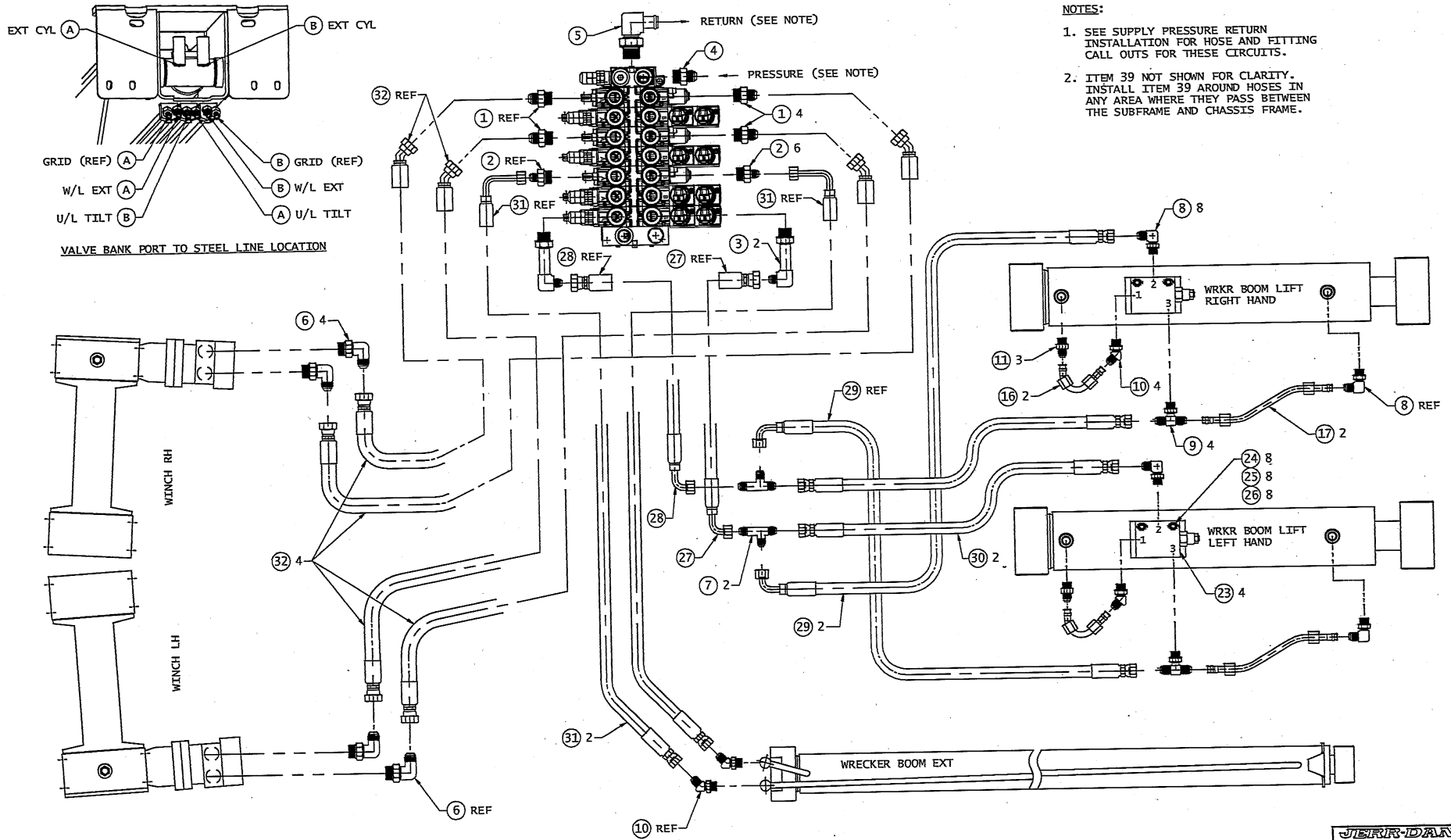
Ball Dr	-oon Sz	Component Type	Bin Location	Description	QtyPer	UOM	Reference	Effectivity
====	==	=====	=====	=====	=====	==	=====	=====
32	N	4567131080	M WA02	HOSE 0.50 x 80 #8 ST(FSW) - #8 45 (FSW)	4.000	PC		-
33	N	4569123061	M CJAS	HOSE ASSY.38x61.00 ST(M)-L90 (FSW)JIC	2.000	PC		-
34	N	4569120017	M WA02	HOSE .38 x 17 #6 ST(FSW) - #6 ST(M)	1.000	PC		-
35	N	4569120018	M WA02	HOSE ASSY 0.38x18.00 STR(M)-STR(FSW)	1.000	PC		-
36	N	4569123054	M WA02	HOSE .38 x 54 #6 ST(M) - #6 L90 (FSW)	2.000	PC		-
37	N	4567110024	M WA00 WA00	HOSE ASSY .25 x 24.00 STR-STR FSWJIC	1.000	PC		-
38	N	4567110025	M WA00 WA00	HOSE ASSY .25 x 25.00 STR-STR FSWJIC	1.000	PC		-
39	N	8565000007	P A-FLOOR FLOOR	HOSE 2-1/2" SINGLE JACKET MILL	2.000	ft		-

*** End of Item ***

*** End of Report ***

HYDRAULIC SCHEMATIC MPL-40

DWG NO 3-509-530093 REV 00



NOTES:

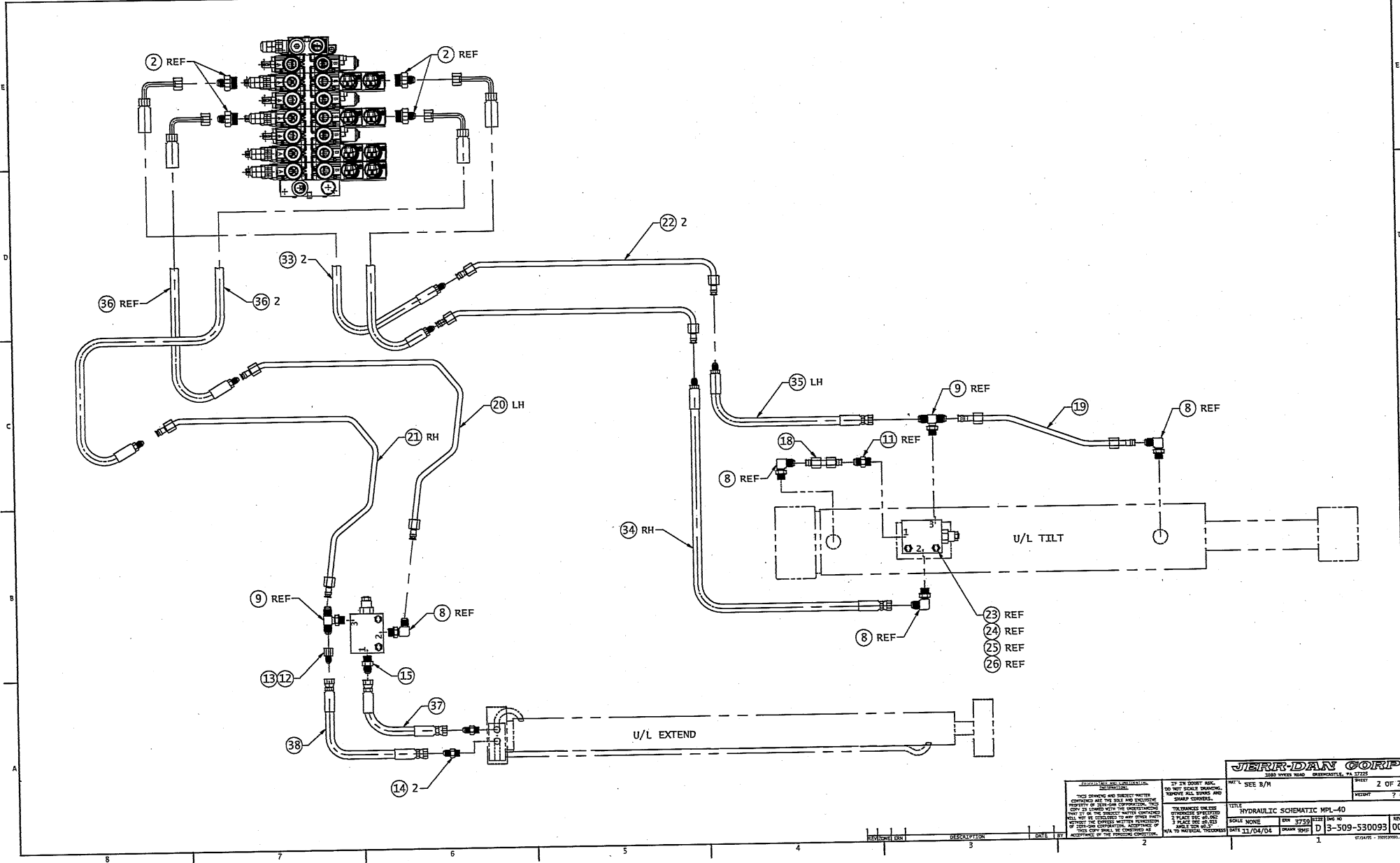
1. SEE SUPPLY PRESSURE RETURN INSTALLATION FOR HOSE AND FITTING CALL OUTS FOR THESE CIRCUITS.
2. ITEM 39 NOT SHOWN FOR CLARITY. INSTALL ITEM 39 AROUND HOSES IN ANY AREA WHERE THEY PASS BETWEEN THE SUBFRAME AND CHASSIS FRAME.

JERR-DAN CORP <small>2880 WILSON ROAD GREENSBORO, PA 15225</small>		DATE: 11/04/04 DRAWN: SHAF	1 OF 2 SHEET: 7 7
TITLE: HYDRAULIC SCHEMATIC MPL-40 SCALE: NONE DATE: 11/04/04 DRAWN: SHAF	PART: SEE B/H 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32	3-509-530093 00	REV: 00

REVISIONS	DESCRIPTION	DATE	BY
3			
2			
1			

HYDRAULIC SCHEMATIC MPL-40

DWG NO 3-509-530093 REV 00



JERR-DAN CORP 2300 WALKER ROAD GREENSBORO, VA 27426		PART # SEE B/M SHEET 2 OF 2 WEIGHT ? LB
THIS DRAWING AND RELATED MATTER CONTAINING ALL PATENT RIGHTS AND INVENTIONS ARE THE PROPERTY OF JERR-DAN CORP. IT IS LOANED TO YOU FOR INFORMATION ONLY AND IS NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT THE WRITTEN PERMISSION OF JERR-DAN CORP. THIS COPY SHALL BE COMPLETED AS ACCEPTANCE OF THE TECHNICAL CONDITIONS.		TITLE HYDRAULIC SCHEMATIC MPL-40 SCALE NONE DATE 11/04/04 DRAWN BY D DWG NO 3-509-530093 REV 00
25 IN COUNTY AND TO THE SCALE DRAWING. COVER ALL BURNS AND SHARP CORNERS.	TOLERANCES UNLESS OTHERWISE SPECIFIED: 2 PLACE DEC OR DEC 1 PLACE OR 0.01 UNLESS OTHERWISE SPECIFIED.	REVISIONS 3 DESCRIPTION DATE BY

***** Engineering Bill of Materials *****

** Report Excludes Shrinkage.

Effective as of 07/15/05

Item: 3509530107

HLF MPL-40 SINGLE WINCH

From Item: 3509530107

To Item: 3509530107

Last Changed Date: 07/01/05

Reference: D/3774B

Revision #A/0

BIN: WA02

UOM: PC

Quantity 1

Receive into Whse: MYPT

Ball Dr	Bin	Description	QtyPer	UOM	Reference	Effectivity
-oon Sz Component Type Location			=====	====	=====	=====
01 N 7445080843	P 040303 080305	ADAPTER #8JIC(M) X #8"O" (M) STR	2.000	PC		-
02 7445060843	P 040303 b07 b43	ADAPTER #6JIC(M) x #8"O" (M) STR	6.000	pc		-
03 A 7443000231	P b05	FITTING 90 DEGREE ELBOW	2.000	PC		-
04 N 7445081043	P 020902 b47 j02	ADAPTER #8JIC(M) X #10"O" (M) STR	1.000	PC		-
05 A 7443000168	P b27	ADAPTER #12 "O" X .75ID BEADED 90DEG	1.000	pc		-
06 7445081045	P 022603 b08 b48	ELBOW #8JIC(M) X #10"O" (M) 90 DEG	2.000	pc		-
07 3 7443000372	P	FITTING T- RUN 3M #6 JIC	2.000	PC		-
08 N 7445060645	P 022505 b41 j02	ELBOW #6JIC(M) -#6"O" (M) 90 DEG	8.000	PC		-
09 N 7445060647	P b42	BRANCH #6JIC(2M) -"O" (M) TEE	4.000	PC		-
10 N 7445060646	P b42	ELBOW 45 DEG #6JIC(M) -#6 "O" RING(M)	2.000	pc		-
11 N 7445060643	P 021305 b41	ADAPTER STRAIGHT .38 O-RING TO .38	3.000	PC		-
12 N 7443000105	P b19	REDUCER #6 JIC(F) - #4 JIC(M)	1.000	pc		-
13 N 7443000106	P b01 b19	REDUCER NUT 841-FS-06 IMP. EASTMAN	1.000	pc		-
14 * 7445040443	P 021305 b37	ADAPTER STR #4JIC-#4 "O" RING (M)	2.000	pc		-
15 N 7445040643	P 011615 b39	ADAPTER, STR #4 JIC-#6 "O" RING (M)	1.000	PC		-
16 B 7912000028	P j43	TUBE ASSY 3/8"OD HYD LINE - 4.66" LG	2.000	pc		-
17 B 7912000204	P k-floor	TUBE ASSY 0.38 OD x 0.049W x 8.85 rev01	2.000	PC		-
18 B 7912000078	P 100903 j02 j46	TUBE ASSY 0.38 OD FLARED HYD X 2.75	1.000	PC		-
19 C 7912000205	P k-floor	TUBE ASSY 0.38 x 0.049W x 10.88	1.000	PC		-
20 C 7912000200	P k-floor	TUBE ASSY 0.38 OD x 0.049W x 106.59 LH	1.000	PC		-
21 C 7912000201	P k-floor	TUBE ASSY 0.38 OD x 0.049W x 105.81RH	1.000	PC		-
22 C 7912000203	P k-floor	TUBE ASSY 0.38 OD x 0.049W x 69.51	2.000	PC		-
23 A 7935000148	P 100806 C-END f	VALVE SUN COUNTER BALANCE 4000 PSI	4.000	PC		-
24 N 7115151650	P a29 x01	CAPSCREW .31"-18NC X 2.00" HEX HEAD	8.000	PC		-
25 N 7950150161	P 030602 080304	FLATWASHER .31" NOM WIDE - PLATED	8.000	PC		-
26 N 7660152601	P 022603 030602	LOCKNUT .31-18NC GR5 HEX NYLOC	8.000	pc		-
27 N 4567122026	M WA00 WA00	HOSE .38 X 26 #6 ST(FSW) - #6 90(FSW)	1.000	PC		-
28 N 4567122024	M	HOSE ASSY .38 X 24 ST-90 FSW JIC <OBS>	1.000	PC		-
29 N 4567122023	M	HOSE ASSY .38 x 23.00 ST-90 FSW JIC	2.000	PC		-
30 N 4567120016	M	HOSE .38 X 16 #6 ST(FSW)	2.000	PC		-
31 N 4567123056	M MDF1 MDF1	HOSE ASSY .38 x 56.00 ST-L90 FSW JIC	2.000	PC		-

***** Engineering Bill of Materials *****

** Report Excludes Shrinkage.

Effective as of 07/15/05

Item: 3509530107

HLF MPL-40 SINGLE WINCH

From Item: 3509530107

To Item: 3509530107

Last Changed Date: 07/01/05

Reference: D/3774B

Revision #A/0

BIN: WA02

UOM: PC

Quantity 1 Receive into Whse: MYPT

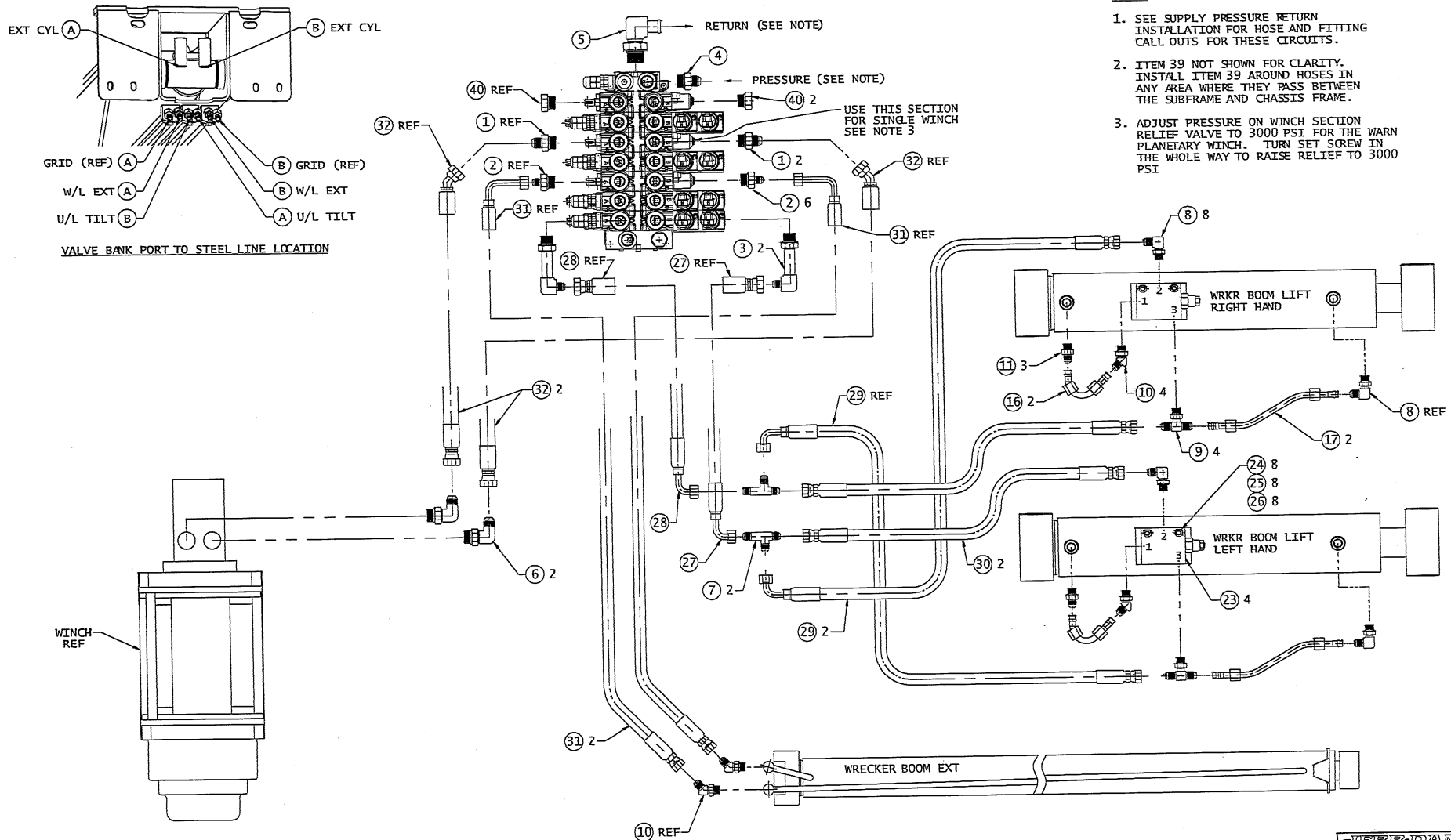
Ball Dr	Bin	Description	QtyPer	UOM	Reference	Effectivity
-oon Sz Component Type Location			=====	===	=====	=====
32 N 4567131061 M MDF1		HOSE 0.50 x 61 #8 ST(FSW) - #8 45 (FSW)	2.000	PC		-
33 N 4569123061 M CJAS		HOSE ASSY .38x61.00 ST(M)-L90 (FSW)JIC	2.000	PC		-
34 N 4569120017 M WA02		HOSE .38 x 17 #6 ST(FSW) - #6 ST(M)	1.000	PC		-
35 N 4569120018 M WA02		HOSE ASSY 0.38x18.00 STR(M)-STR(FSW)	1.000	PC		-
36 N 4569123054 M WA02		HOSE .38 x 54 #6 ST(M) - #6 L90 (FSW)	2.000	PC		-
37 N 4567110024 M WA00 WA00		HOSE ASSY .25 x 24.00 STR-STR FSWJIC	1.000	PC		-
38 N 4567110025 M WA00 WA00		HOSE ASSY .25 x 25.00 STR-STR FSWJIC	1.000	PC		-
39 N 8565000007 P A-FLOOR FLOOR		HOSE 2-1/2" SINGLE JACKET MILL	2.000	ft		-
40 7443000048 P b01 b13		FITTING PLUG #8"O" (M)	2.000	pc		-

*** End of Item ***

*** End of Report ***

HYDRAULIC SCHEMATIC MPL-40 SINGLE WINCH

DWG NO 3-509-530107 00 REV



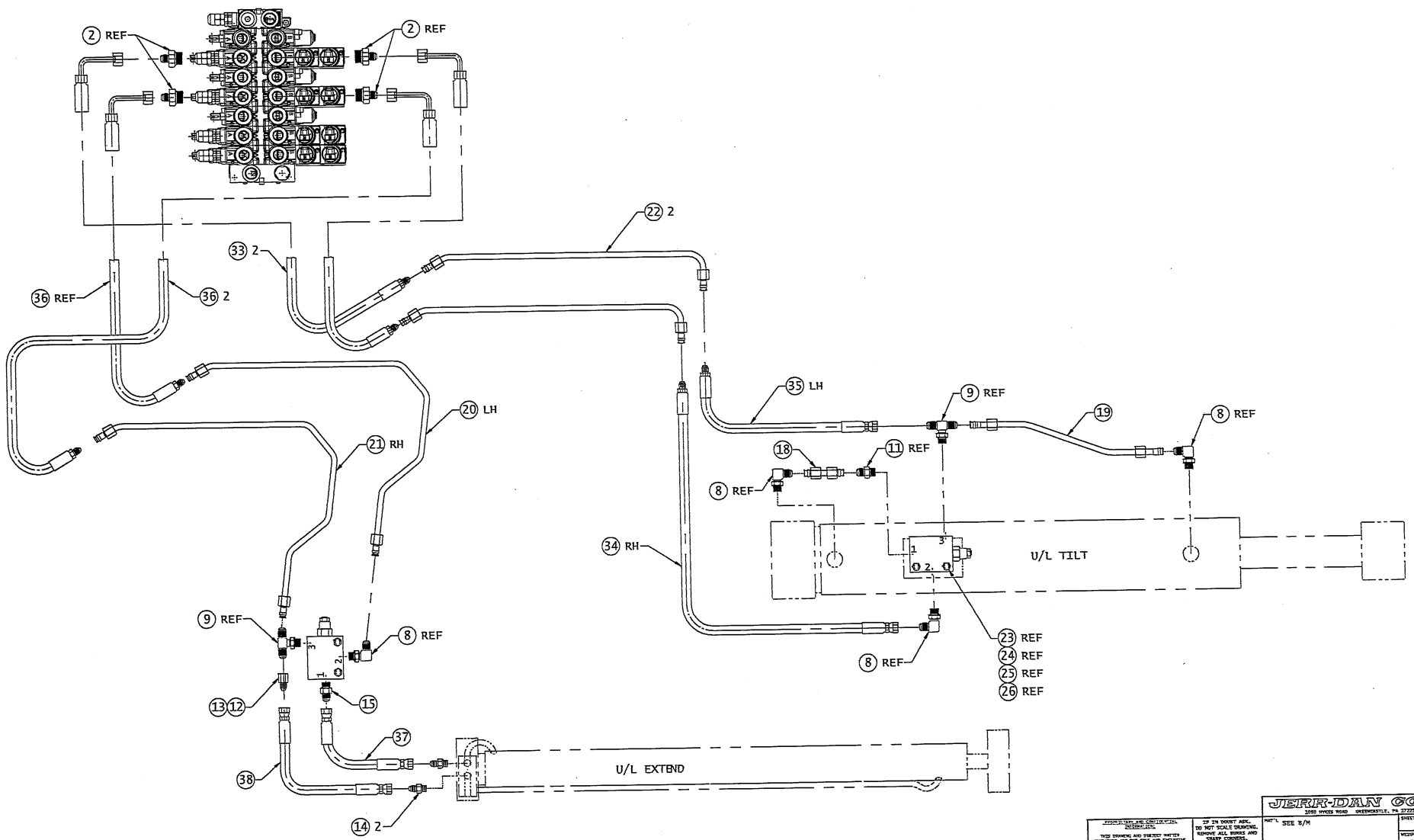
- NOTES:
1. SEE SUPPLY PRESSURE RETURN INSTALLATION FOR HOSE AND FITTING CALL OUTS FOR THESE CIRCUITS.
 2. ITEM 39 NOT SHOWN FOR CLARITY. INSTALL ITEM 39 AROUND HOSES IN ANY AREA WHERE THEY PASS BETWEEN THE SUBFRAME AND CHASSIS FRAME.
 3. ADJUST PRESSURE ON WINCH SECTION RELIEF VALVE TO 3000 PSI FOR THE WARN PLANETARY WINCH. TURN SET SCREW IN THE WHOLE WAY TO RAISE RELIEF TO 3000 PSI

<p>JERR-DAN CORP 2000 WILSON ROAD GREENSBORO, NC 27409</p>		<p>DATE: 11/4/04 DRAWN: SWS CHECKED: JTB</p>
<p>IF YOU HAVE ANY QUESTIONS CONTACT THE SALES AND SERVICE DEPARTMENT. WE WILL BE HAPPY TO HELP YOU WITH ANY QUESTIONS. IF YOU ARE A CUSTOMER OF JERR-DAN CORP. PLEASE CONTACT US AT THE ADDRESS LISTED ABOVE OR BY PHONE AT 336-735-1111.</p>	<p>IF YOU WANT A DO NOT SCALE DRAWING. WORK ALL DIMS AND SHARP CORNERS.</p>	<p>IF YOU HAVE ANY QUESTIONS PLEASE CONTACT US AT THE ADDRESS LISTED ABOVE OR BY PHONE AT 336-735-1111. PLEASE USE AN ISO DRAWING STYLE. IF YOU HAVE ANY QUESTIONS PLEASE CONTACT US AT THE ADDRESS LISTED ABOVE OR BY PHONE AT 336-735-1111.</p>
<p>REV 1 - SEE 8/14</p>	<p>SCALE NONE</p>	<p>TITLE: HYDRAULIC SCHEMATIC MPL-40 SINGLE WINCH PART NO: 3774 REV: 11/4/04 D 3-509-530107 00</p>

REV	DATE	BY	DESCRIPTION
1			

HYDRAULIC SCHEMATIC MPL-40 SINGLE WINCH

DWG NO 3-509-530107 REV 00



<p>JERRARD-DAN CORP</p> <p>1000 W. 10th St., St. Louis, Mo. 63103</p>		<p>DATE: 11/4/04</p>	<p>REV: 00</p>								
<p>IF IN DOUBT ASK. DO NOT SCALE DRAWING. REMOVE ALL BURRS AND SHARP CORNERS.</p>		<p>SCALE: NONE</p>	<p>2 OF 2</p>								
<p>UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS ARE IN INCHES. DIMENSIONS IN PARENTHESIS ARE ALTERNATE DIMENSIONS. DIMENSIONS IN PARENTHESIS TAKE PRECEDENCE OVER DIMENSIONS IN BRACKETS.</p>		<p>TITLE: HYDRAULIC SCHEMATIC MPL-40 SINGLE WINCH</p>	<p>WEIGHT: 7 #</p>								
<p>REVISIONS:</p> <table border="1"> <thead> <tr> <th>NO.</th> <th>DATE</th> <th>DESCRIPTION</th> <th>BY</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>		NO.	DATE	DESCRIPTION	BY					<p>DATE: 11/4/04</p>	<p>1</p>
NO.	DATE	DESCRIPTION	BY								

8 7 6 5 4 3 2 1



Body Installation



***** Engineering Bill of Materials *****

** Report Excludes Shrinkage.

Effective as of 08/04/05

Item: 2097000099

BODY INSTL MPL-40

From Item: 2097000099

To Item: 2097000099

Reference: D/3774D

Last Changed Date:

Revision #0/0

BIN: WA03

UOM: PC

Quantity

1

Receive into Whse: MYPT

Ball Dr

Bin

-oon Sz Component Type

Location

Description

QtyPer UOM

Reference

Effectivity

==== ==

=====

=====

===== ==

=====

=====

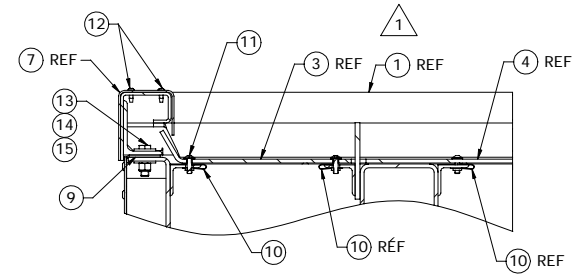
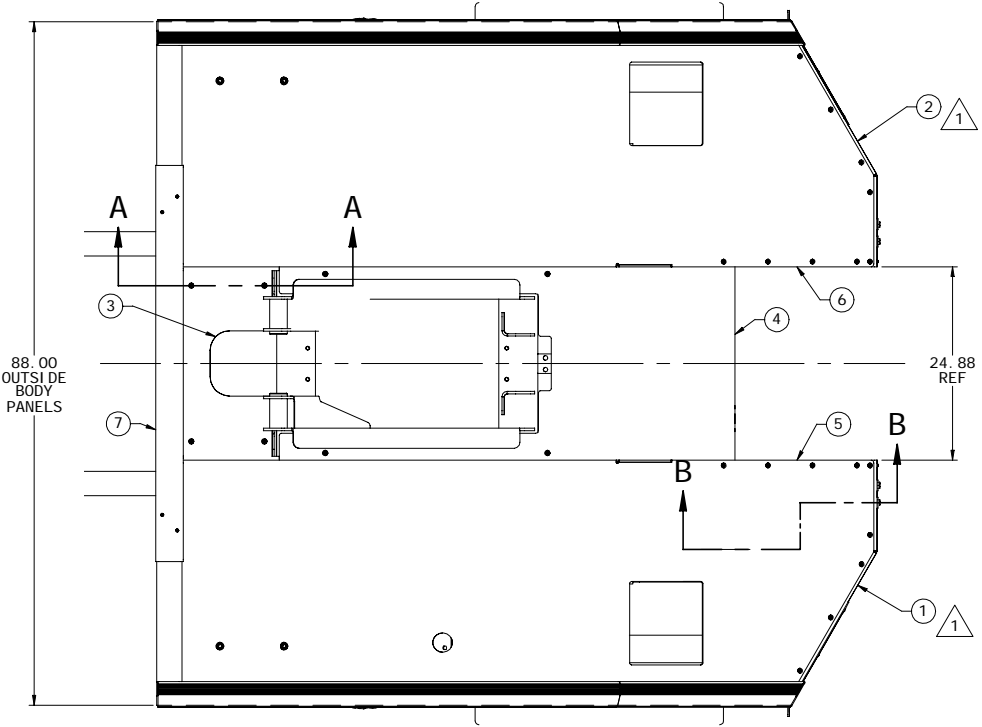
01	D	3097000521	M	WA03	BODY ASSY LH MPL-40	1.000	PC		-
02	D	3097000522	M	WA03	BODY ASSY RH MPL-40	1.000	PC		-
03	C	4314000089	M	WA03	COVERPLATE 0.19 x 14.18 x 31.00	1.000	PC		-
04	D	4314000090	M	WA03	COVERPLATE 0.19 x 31.00 x 62.63	1.000	PC		-
05	C	4314000095	M	WA03	COVERPLATE 0.12 X 19.67 X 20.21 LH	1.000	PC		-
06	C	4314000096	M	WA03	COVERPLATE 0.12 x 19.67 x 20.21 RH	1.000	PC		-
07	B	4314000097	M	AS12	COVERPLATE 0:12 x 10.38 x 51.00 ALUM	1.000	PC		-
08	B	4090000010	M	WA00	BELT 0.12 x 2.00 x 19.19	2.000	PC		-
09	B	4090000011	M	WA00	BELT 0.12 x 2.00 x 24.12	2.000	PC		-
10	#	7661000029	P		NUT J TYPE #C31280-5618-4	8.000	PC		-
11	N	7114150818	P		CAPSCREW .31"-18NC X 1.00" SS BH SH	8.000	PC		-
12	A	7120000046	P		BOLT 0.25-20NC x 0.75" SELF SS PHIL PAN	4.000	PC		-
13	N	7115181450	P	080305 a53 x01	CAPSCREW .50"-13NC X 1.75" HEX HEAD	16.000	pc		-
14	N	7660182601	P	000105 x01	LOCKNUT .50"-13NC GR5 HEC NYLOC	16.000	PC		-
15	N	7950180153	P	000104 x01	FLATWASHER .50" NOM HARDENED	24.000	pc		-
16	A	7949000015	P	d19	WASHER #J-2049-64 HEAD	8.000	pc		-
17	N	7114140818	P	000108 A125 x0	CAPSCREW 0.25"-20 X 1.00" SS BT HD	12.000	PC		-
18	N	7950140143	P	000102 x01	FLATWASHER 0.25 NOM NARROW SS	12.000	PC		-
19	A	7413000002	P	c14	NUTSERT .25"-20NC AVK INDUSTRIAL	8.000	pc		-
20	A	7949000056	P	a13	WASHER NYLON 0.50 OD x 0.25 x 0.03THK	4.000	PC		-
21	A	7796000012	P	e01 e04	SEAL ADHESIVE BACK .06 THK x .75 WIDE	12.500	ft		-

*** End of Item ***

*** End of Report ***

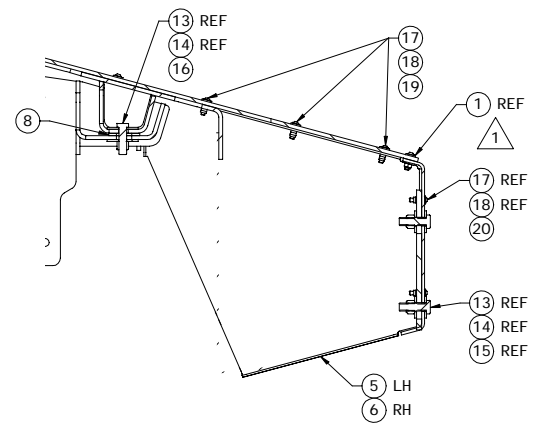
BODY INSTALL MPL-40

DWG NO 2-097-000099 REV 01



SECTION A-A

- NOTE:**
1. USE LOCTITE FOR ITEMS 11 & 17
 2. ITEM 21 NOT SHOWN FOR CLARITY. LOCATE BETWEEN ITEM 5 AND SUBFRAME TO PREVENT VIBRATION NOISE.
 3. USE ITEM 7 AS A TEMPLATE AND DRILL 0.219 DIA HOLE THRU FRONT RAIL OF DECK BEFORE INSTALLING ITEM 22



SECTION B-B

<p>JERR-DAN An Oshkosh Truck Company</p>		<p>TITLE: BODY INSTALL MPL-40</p>		<p>SHEET 1 OF 1</p>	
<p>DATE: 8/16/05</p>		<p>SCALE: 0.12</p>		<p>REV: 01</p>	
<p>DESCRIPTION: PICTORIAL CHANGE TO ITEMS #1 & 2</p>		<p>DATE: 4/4/05</p>		<p>DWG NO: 2-097-000099</p>	
<p>BY: [Signature]</p>		<p>DRAWN: SMG</p>		<p>REV: 01</p>	

***** Engineering Bill of Materials *****

** Report Excludes Shrinkage.

Effective as of 08/04/05

Item: 3097000521

BODY ASSY LH MPL-40

From Item: 3097000521

To Item: 3097000521

Reference: D/3774D

Last Changed Date:

Revision #0/1/3774

BIN: WA03

UOM: PC

Quantity

1

Receive into Whse: MYPT

Ball Dr	Bin	Component Type Location	Description	QtyPer	UOM	Reference	Effectivity
====	====	=====	=====	=====	====	=====	=====
01	D	3097000523 M WA01	DECK WELD LH MPL-40	1.000	PC		-
02	D	3899000119 M WA01	TOOLBOX BONDMENT LH	1.000	PC		-
03	D	4811000819 M WA01	SHEET 0.12 x 23.56 x 52.36 LH	1.000	PC		-
04	D	3811000033 M WA01	SHEET WELD TAILPLATE LH	1.000	PC		-
05	C	4314000091 M WA01	COVERPLATE 0.12 x 19.00 x 27.48 LH	1.000	PC		-
06	B	4178000579 M WA01	BRACKET 0.19 x 10.22 x 21.50 LH	1.000	PC		-
07	B	4178000577 M WA01	BRACKET 0.12 x 7.05 x 13.50	1.000	PC		-
08	C	4811000840 M WA01	SHEET 0.12 x 6.95 x 19.50	1.000	PC		-
09	C	7571000001 P 100501 m04	HOUSING TAILLIGHT COMPOSITE	1.000	PC		-
10	A	7796000012 P e01 e04	SEAL ADHESIVE BACK .06 THK x .75 WIDE	4.500	ft		-
11	D	7413000013 P 022304 e02	FASTENER PUSH ON RATCHET #27RT250800	8.000	PC		-
12	C	4686000207 M WA01	SHEET 0.12 x 14.35 x 28.42	1.000	PC		-
13	B	7555000012 P m09	HINGE DOOR S/S	2.000	PC		-
14	N	7114140818 P 000108 A125 x0	CAPSCREW 0.25"-20 X 1.00" SS BT HD	19.000	PC		-
15	A	7949000056 P a13	WASHER NYLON 0.50 OD x 0.25 x 0.03THK	11.000	PC		-
16	N	7950140161 P 000104 A96	FLATWASHER .25" NOM WIDE - PLATED	22.000	pc		-
17	N	7660142601 P a23	LOCKNUT .25"-20NC GR5 HEX NYLOC	16.000	pc		-
18	C	7585000019 P n-floor	LATCH ERGONOMIC T HANDLE LH 1-8400-L-31	1.000	PC		-
19	B	4632000050 M WA01	SEAL TOOLBOX DOOR 72.62	1.000	PC		-
20	A	4062000569 M WA01	BAR 0.12 x 0.50 x 4.00 ALUM	1.000	PC		-
21	A	4706003611 M AS13	PLATE 10GA X 1.00 X 4.00 SS	1.000	PC		-
22	N	7759000006 P 000104 c20	POP RIVET .13"DIA X .50" GRIP ALUM	2.000	pc		-
23	D	4811000823 M WA01	SHEET 0.12 x 9.85 x 37.66	1.000	PC		-
24	N	7115140650 P 080304 a23	CAPSCREW .25"-20NC X .75" HEX HEAD	3.000	PC		-
25	N	7950140000 P 000104 A96 x01	LOCKWASHER .25" NOM REG CS	6.000	PC		-
26	A	7413000002 P c14	NUTSERT .25"-20NC AVK INDUSTRIAL	3.000	pc		-
27	N	7950140143 P 000102 x01	FLATWASHER 0.25 NOM NARROW SS	5.000	PC		-
28	N	7115161050 P 022504 x01	CAPSCREW .38"-16NC X 1.25" HEX HEAD	23.000	PC		-
29	N	7950160161 P 000104 A97 x01	FLATWASHER .38" NOM WIDE - PLATED	33.000	PC		-
30	N	7660162601 P 000105 x01	LOCKNUT .38"-16NC GR5 NYLOC	10.000	pc		-
31	N	7950160000 P 000104 022504	LOCK WASHER .38"ID - PLATED	13.000	PC		-



***** Engineering Bill of Materials ****

** Report Excludes Shrinkage.

Effective as of 08/04/05

Item: 3097000521

BODY ASSY LH MPL-40

From Item: 3097000521

To Item: 3097000521

Last Changed Date:

Reference:D/3774D

Revision #07/1/3774

BIN: WA03

UOM: PC

Quantity 1

Receive into Whse: MYPT

Ball Dr

Bin

-oon Sz Component Type Location

Description

QtyPer UOM

Reference

Effectivity

=== == =====

=====

===== ==

=====

=====

32 A 4679000252 M WA03

PAD 0.19 x 16.25 x 32.50

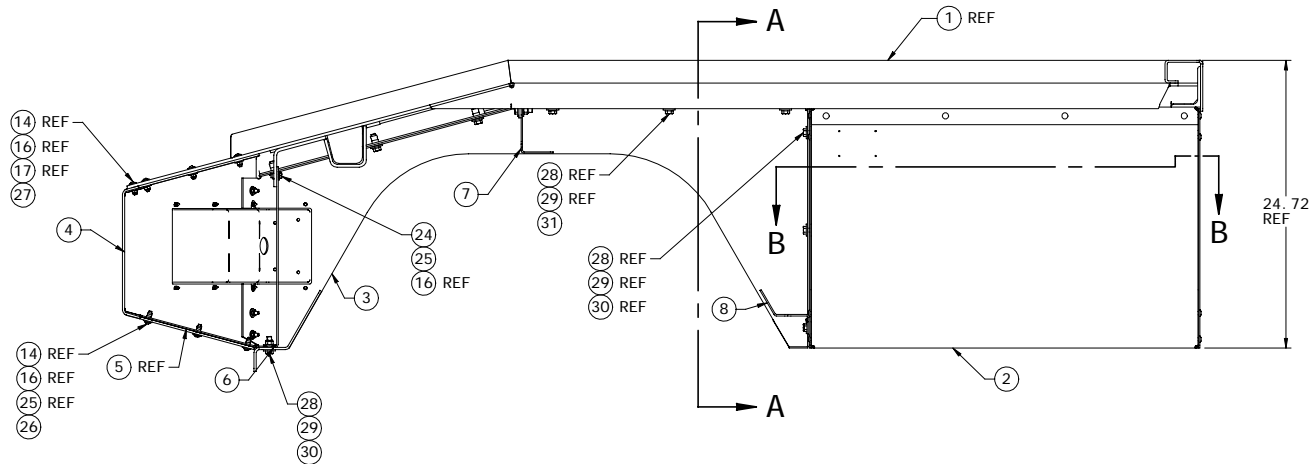
1.000 PC

*** End of Item ***

*** End of Report ***

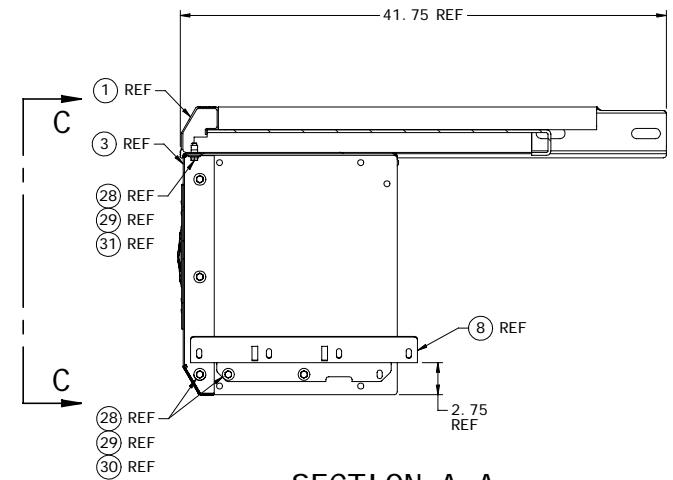
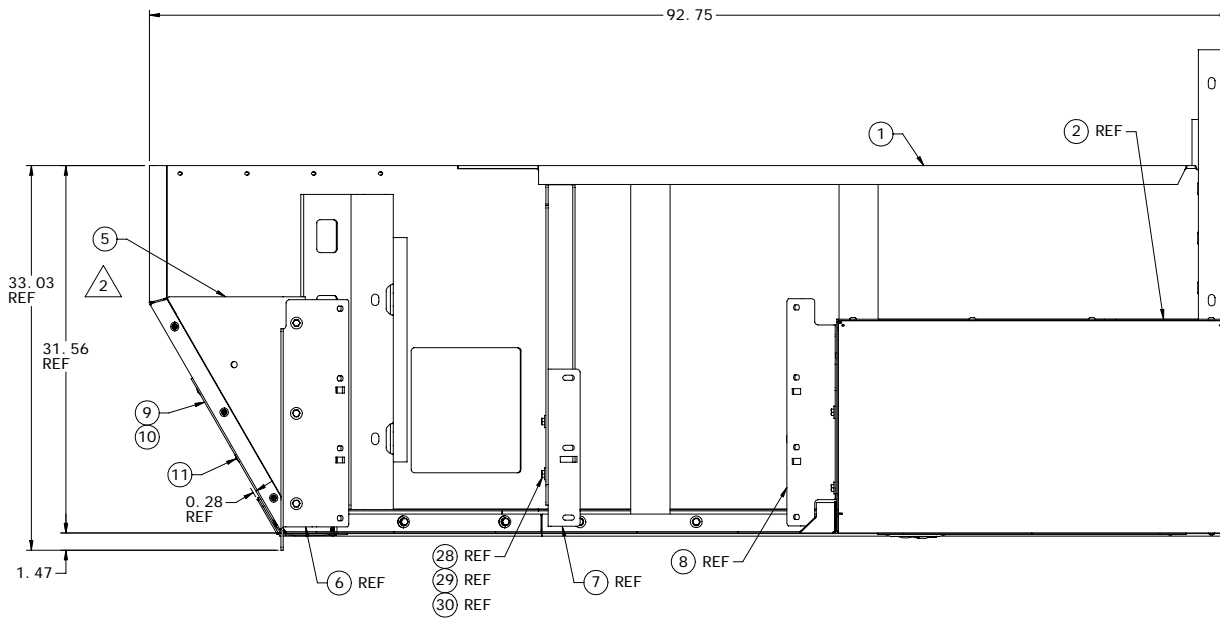
BODY ASSY LH

DWG NO
3-097-000521 REV
02



NOTES:

1. LOCATE SEAL (ITEM 10) BETWEEN ITEM 1 & ITEM 4, BETWEEN ITEM 3 & ITEM 4, AND BETWEEN ITEM 4 & ITEM 9 TO PREVENT PAINT DAMAGE.



SECTION A-A

<p>PROPRIETARY AND CONFIDENTIAL THIS DRAWING AND SUBJECT MATTER CONTAINED HEREIN IS THE SOLE AND EXCLUSIVE PROPERTY OF JERR-DAN CORPORATION. THIS COPY IS LOANED BY THE SUBSIDIARY THAT IT OR THE SUBJECT MATTER CONTAINED HEREIN MAY BE DISCLOSED TO ANY OTHER PARTY WITHOUT THE EXPRESS WRITTEN PERMISSION OF JERR-DAN CORPORATION. ACCEPTANCE OF THIS COPY SHALL BE CONSIDERED AS ACCEPTANCE OF THE FOREGOING CONDITIONS.</p>		<p>IF IN DOUBT ASK. DO NOT SCALE DRAWING. REMOVE ALL DIMS AND SHARP CORNERS.</p>		<p>TOLERANCES UNLESS OTHERWISE SPECIFIED: 2 PLACES DEC OR 0.02 3 PLACES DEC OR 0.015 N/A TO MATERIAL THICKNESS</p>	
<p>DATE: 1/12/05 DRAWN: SMG CHECKED: [blank] APPROVED: [blank]</p>		<p>DATE: [blank] BY: [blank]</p>		<p>DATE: 1/12/05 DRAWN: SMG CHECKED: [blank] APPROVED: [blank]</p>	
<p>REV 02 3-097-000521</p>		<p>REV 02 3-097-000521</p>		<p>REV 02 3-097-000521</p>	

JERR-DAN
An Oshkosh Truck Company

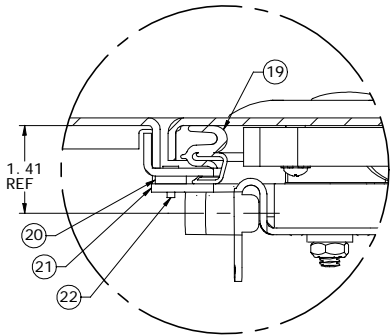
TITLE: BODY ASSY LH
SCALE: 0.19
DATE: 1/12/05
DRAWN: SMG
CHECKED: [blank]
APPROVED: [blank]

SHEET 1 OF 2
WEIGHT 7 g

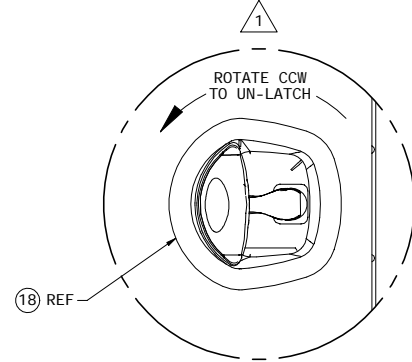
BODY ASSY LH

DWG NO 3-097-000521 REV 02

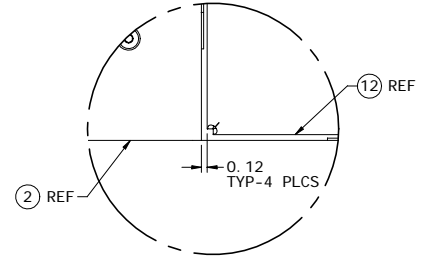
ADJUST LATCH SO THAT WHEN THE DOOR IS CLOSED IT IS FLUSH WITH THE FRONT OF TOOLBOX



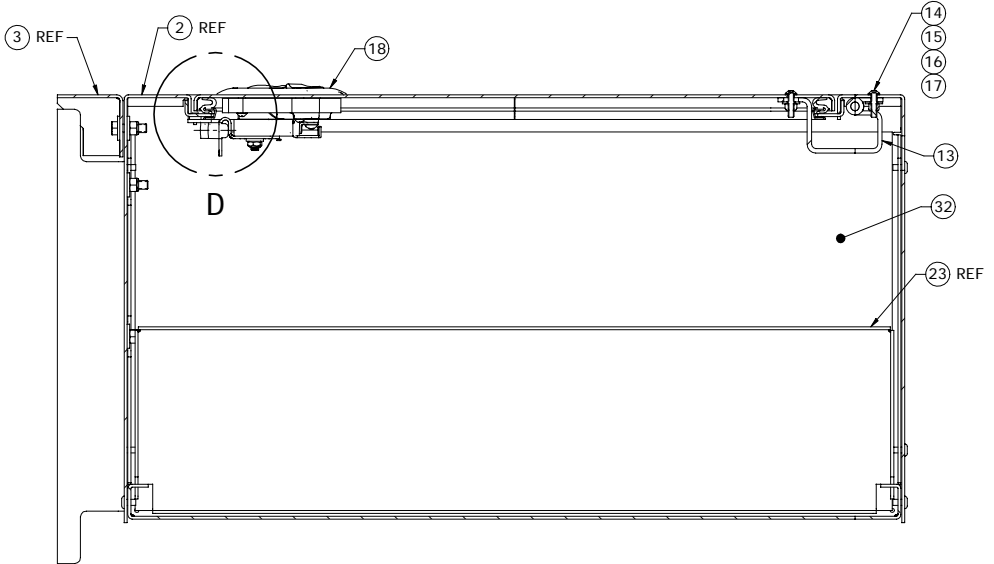
DETAIL D
SCALE: 1.00



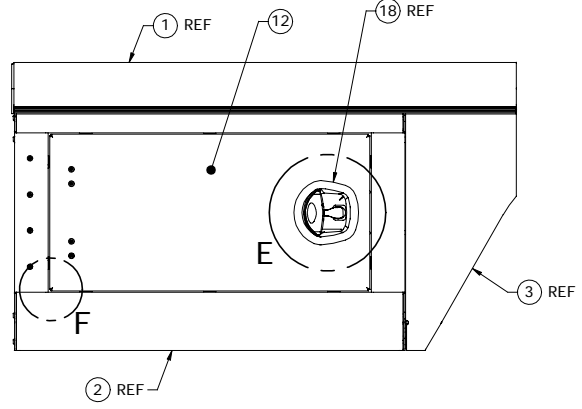
DETAIL E
ALL HARDWARE TO INSTALL LATCH IS INCLUDED



DETAIL F
SCALE: 1.00



SECTION B-B



SECTION C-C

<p>JERR-DAN <i>An Collins Tool Company</i></p>		<p>TITLE: BODY ASSY LH</p>		<p>SHEET: 2 OF 2</p>	
<p>SCALE: 0.19</p>		<p>DATE: 1/12/05</p>		<p>REV: 02</p>	
<p>DRW: SHG</p>		<p>CHK: D</p>		<p>DWG NO: 3-097-000521</p>	
<p>DATE: 1/12/05</p>		<p>SCALE: 0.19</p>		<p>REV: 02</p>	

THIS DRAWING AND SUBJECT MATTER CONTAINED HEREIN IS THE PROPERTY OF JERR-DAN CORPORATION. THIS COPY IS LOANED TO THE SUBMITTER UNDER THE UNDERSTANDING THAT IT OR THE SUBJECT MATTER CONTAINED HEREIN WILL NOT BE DISCLOSED TO ANY OTHER PARTY WITHOUT THE EXPRESS WRITTEN PERMISSION OF JERR-DAN CORPORATION. ACCEPTANCE OF THIS COPY SHALL BE CONSIDERED AS ACCEPTANCE OF THE FOREGOING CONDITIONS.

IF IN DOUBT ASK. DO NOT SCALE DRAWING. REMOVE ALL BURRS AND SHARP CORNERS.

TELEDIMENSIONS UNLESS OTHERWISE SPECIFIED 2 PLACE DEC IN INCH 3 PLACE DEC IN DIA UNLESS OTHERWISE SPECIFIED

NO	DATE	DESCRIPTION	BY	CHK
1	1/12/05	ADDED DETAIL C AND LATCH ROTATION NOTE	SHG	D



***** Engineering Bill of Materials *****

** Report Excludes Shrinkage.

Effective as of 08/04/05

Item: 3097000522

BODY ASSY RH MPL-40

From Item: 3097000522

To Item: 3097000522

Reference:D/3774D

Last Changed Date:

Revision #0/1/3774

BIN: WA03

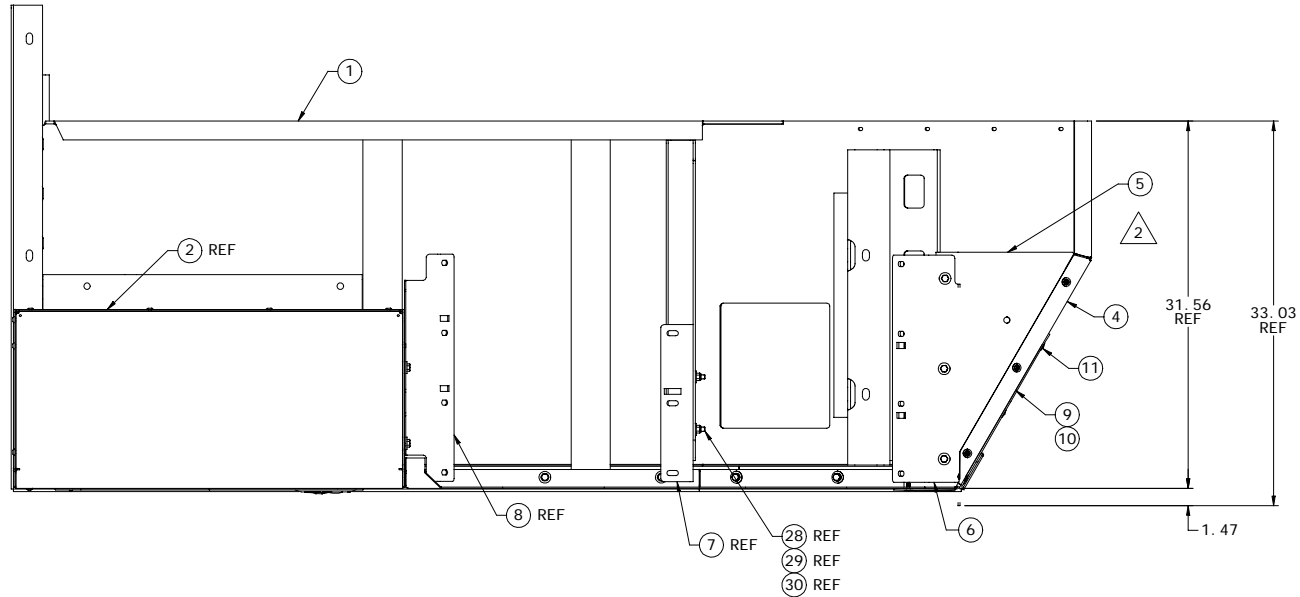
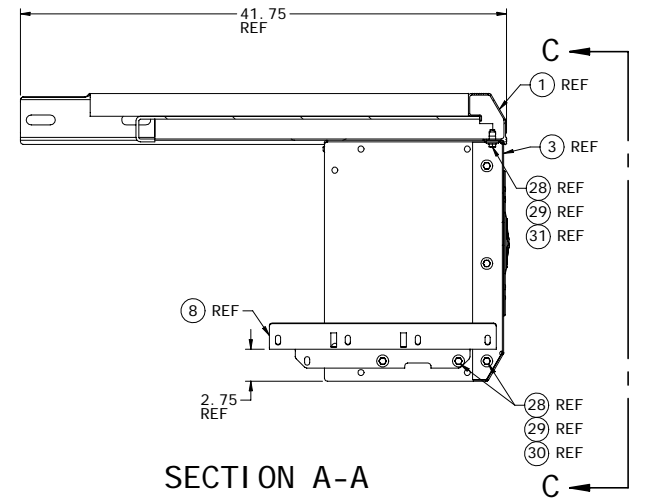
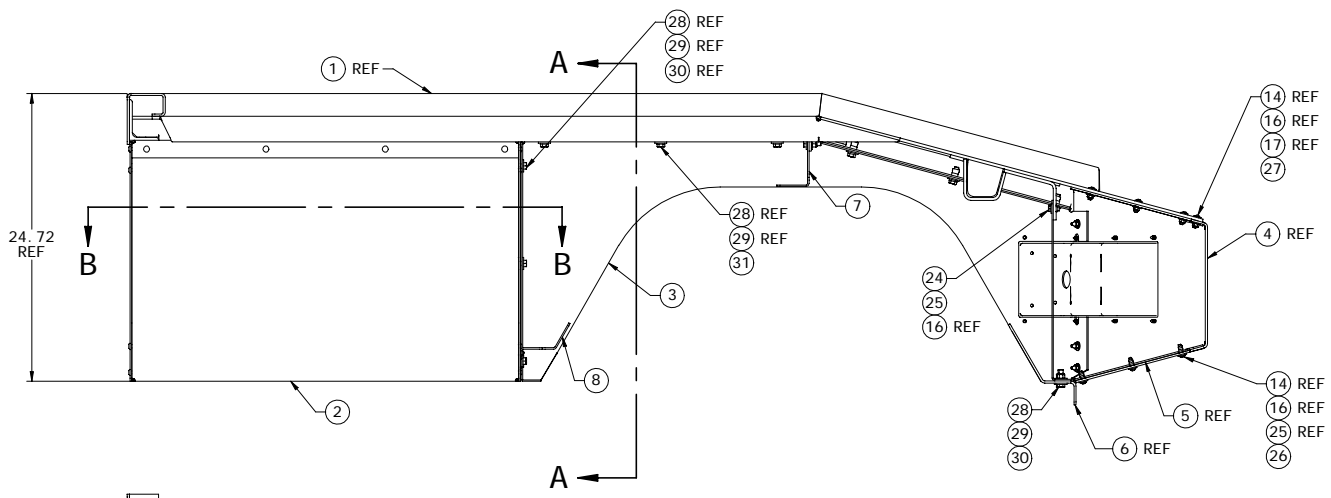
UOM: PC

Quantity 1 Receive into Whse: MYPT

Ball Dr	Bin	Description	QtyPer	UOM	Reference	Effectivity
-oon Sz Component Type Location			=====	====	=====	=====
01 D 3097000524	M WA01	DECK WELD RH MPL-40	1.000	PC		-
02 D 3899000120	M WA01	TOOLBOX BONDMENT RH	1.000	PC		-
03 D 4811000820	M WA01	SHEET 0.12 x 23.56 x 52.36 RH	1.000	PC		-
04 D 3811000034	M WA01	SHEET WELD TAILPLATE RH	1.000	PC		-
05 C 4314000092	M WA01	COVERPLATE 0.12 x 19.00 x 27.48 RH	1.000	PC		-
06 B 4178000580	M WA01	BRACKET 0.19 x 10.22 x 21.50 RH	1.000	PC		-
07 B 4178000577	M WA01	BRACKET 0.12 x 7.05 x 13.50	1.000	PC		-
08 C 4811000840	M WA01	SHEET 0.12 x 6.95 x 19.50	1.000	PC		-
09 C 7571000001	P 100501 m04	HOUSING TAILLIGHT COMPOSITE	1.000	PC		-
10 A 7796000012	P e01 e04	SEAL ADHESIVE BACK .06 THK x .75 WIDE	4.500	ft		-
11 D 7413000013	P 022304 e02	FASTENER PUSH ON RATCHET #27RT250800	8.000	PC		-
12 C 4686000207	M WA01	SHEET 0.12 x 14.35 x 28.42	1.000	PC		-
13 B 7555000012	P m09	HINGE DOOR S/S	2.000	PC		-
14 N 7114140818	P 000108 A125 x0	CAPSCREW 0.25"-20 X 1.00" SS BT HD	19.000	PC		-
15 A 7949000056	P a13	WASHER NYLON 0.50 OD x 0.25 x 0.03THK	11.000	PC		-
16 N 7950140161	P 000104 A96	FLATWASHER .25" NOM WIDE - PLATED	22.000	pc		-
17 N 7660142601	P a23	LOCKNUT .25"-20NC GR5 HEX NYLOC	16.000	pc		-
18 C 7585000020	P n-floor	LATCH ERGONOMIC T HANDLE RH 1-8400-R-31	1.000	PC		-
19 B 4632000050	M WA01	SEAL TOOLBOX DOOR 72.62	1.000	PC		-
20 A 4062000569	M WA01	BAR 0.12 x 0.50 x 4.00 ALUM	1.000	PC		-
21 A 4706003611	M AS13	PLATE 10GA X 1.00 X 4.00 SS	1.000	PC		-
22 N 7759000006	P 000104 c20	POP RIVET .13"DIA X .50" GRIP ALUM	2.000	pc		-
23 D 4811000823	M WA01	SHEET 0.12 x 9.85 x 37.66	1.000	PC		-
24 N 7115140650	P 080304 a23	CAPSCREW .25"-20NC X .75" HEX HEAD	3.000	PC		-
25 N 7950140000	P 000104 A96 x01	LOCKWASHER .25" NOM REG CS	6.000	PC		-
26 A 7413000002	P c14	NUTSERT .25"-20NC AVK INDUSTRIAL	3.000	pc		-
27 N 7950140143	P 000102 x01	FLATWASHER 0.25 NOM NARROW SS	5.000	PC		-
28 N 7115161050	P 022504 x01	CAPSCREW .38"-16NC X 1.25" HEX HEAD	23.000	PC		-
29 N 7950160161	P 000104 A97 x01	FLATWASHER .38" NOM WIDE - PLATED	33.000	PC		-
30 N 7660162601	P 000105 x01	LOCKNUT .38"-16NC GR5 NYLOC	10.000	pc		-
31 N 7950160000	P 000104 022504	LOCK WASHER .38"ID - PLATED	13.000	PC		-

BODY ASSY RH

DWG NO 3-097-000522 REV 02



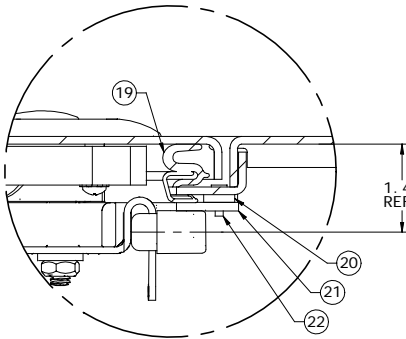
- NOTES:**
- LOCATE SEAL (ITEM 10) BETWEEN ITEM 1 & ITEM 4, BETWEEN ITEM 3 & ITEM 4, AND BETWEEN ITEM 4 & ITEM 9 TO PREVENT PAINT DAMAGE.

<p>JERR-DAN An Oshkosh Truck Company</p>		<p>NAT'L SEE B/M</p>		<p>SHEET 1 OF 2</p>	
<p>THIS DRAWING AND SUBJECT MATTER CONTAINED HEREIN ARE THE SOLE AND EXCLUSIVE PROPERTY OF JERR-DAN CORPORATION. THIS COPY IS LOANED TO THE SUBSIDIARY AND SHALL NOT BE DISCLOSED TO ANY OTHER PARTY WITHOUT THE EXPRESS WRITTEN PERMISSION OF JERR-DAN CORPORATION. ACCEPTANCE OF THIS COPY SHALL BE CONSIDERED AS ACCEPTANCE OF THE FOREGOING CONDITIONS.</p>		<p>IF IN DOUBT ASK DO NOT SCALE DRAWING. REMOVE ALL BURRS AND SHARP CORNERS.</p>		<p>TOLERANCES UNLESS OTHERWISE SPECIFIED: 2 PLACE DEC OR INCH 3 PLACE DEC OR DIA N/A TO MATERIAL THICKNESS</p>	
<p>TITLE BODY ASSY RH</p>		<p>SCALE 0.19</p>		<p>DATE 1/21/05</p>	
<p>DRW 3774</p>		<p>REV D</p>		<p>3-097-000522 02</p>	

NO	DATE	BY	DESCRIPTION
1	1/21/05	PT/CYRE	CHANGE TO ITEM 95
2	1/21/05	PT/CYRE	ADDED DETAIL TO DETAIL NOTE

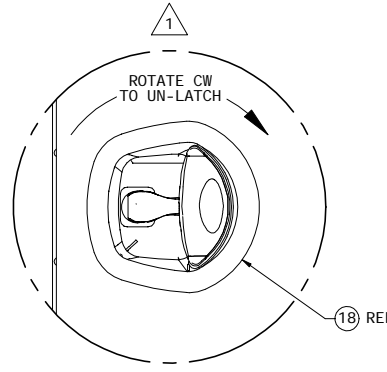
BODY ASSY RH

DWG NO
3-097-000522 REV
02

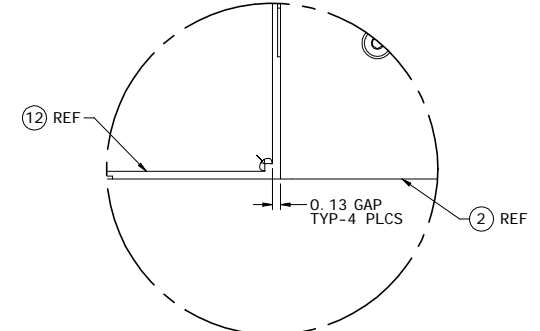


DETAIL D
SCALE: FULL

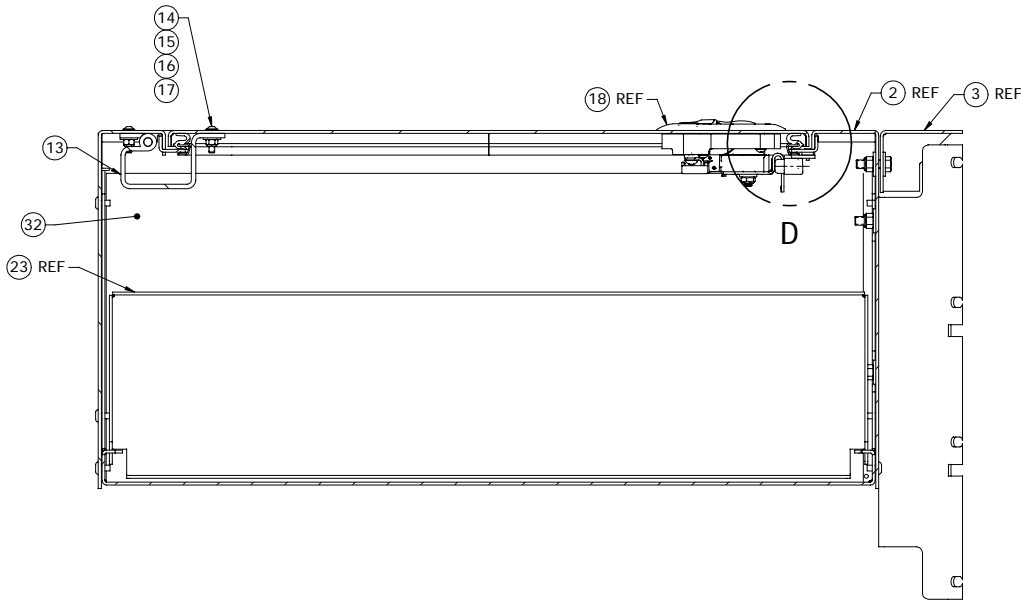
ADJUST LATCH SO THAT WHEN THE DOOR IS CLOSED IT IS FLUSH WITH THE FRONT OF TOOLBOX



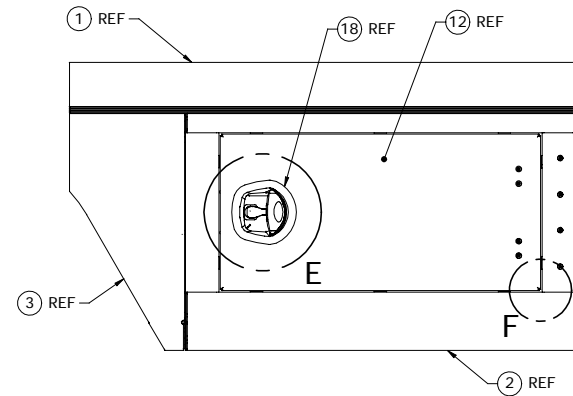
DETAIL E
SCALE: 0.50
ALL HARDWARE TO INSTALL LATCH IS INCLUDED



DETAIL F
SCALE: FULL



SECTION B-B
SCALE: 0.38



VIEW C-C

REV	DATE	BY	DESCRIPTION
01	1/21/05	RHF	ADDED DETAIL C AND ROTATION NOTE

THIS DRAWING AND SUBJECT MATTER CONTAINED AND THE SOLE AND EXCLUSIVE PROPERTY OF JERR-DAN CORPORATION. THIS COPY IS LOANED BY THE RECIPIENT HEREIN THAT ALL OF THE SUBJECT MATTER CONTAINED HEREIN BE KEPT IN STRICTLY CONFIDENTIAL AND NOT BE DISCLOSED TO ANY OTHER PARTY WITHOUT THE EXPRESS WRITTEN PERMISSION OF JERR-DAN CORPORATION. ACCEPTANCE OF THIS COPY SHALL BE CONSIDERED AS ACCEPTANCE OF THE FOREGOING CONDITIONS.

JERR-DAN An Oshkosh Truck Corporation Company		TITLE BODY ASSY RH	SHEET 2 OF 2
IF IN DOUBT ASK: DO NOT SCALE DRAWING. REMOVE ALL BURRS AND SHARP CORNERS.		MATERIAL SEE B/M	WEIGHT 7 #
TELE DIMENSIONS UNLESS OTHERWISE SPECIFIED		SCALE 0.19	DATE 1/21/05
3 PLACE DEC. IN DIMENSIONS UNLESS OTHERWISE SPECIFIED		DRAWN RHF	REV D
N/A TO MATERIAL THICKNESS		SIZE 3774	FIG. NO. 3-097-000522
DATE		BY	REV 02



Manual Controls Installation

***** Engineering Bill of Materials *****

** Report Excludes Shrinkage.
Effective as of 07/20/05
Item: 2509170038

CONTROL INSTALL W/ DUAL WINCH

From Item: 2509170038
To Item: 2509170038
Last Changed Date: 07/18/05

Reference: D/3774C

Revision #B/2/3774

BIN: WA03

UOM: PC

Quantity	1	Receive into Whse: MYPT	Reference: D/3774C	Last Changed Date: 07/18/05
----------	---	-------------------------	--------------------	-----------------------------

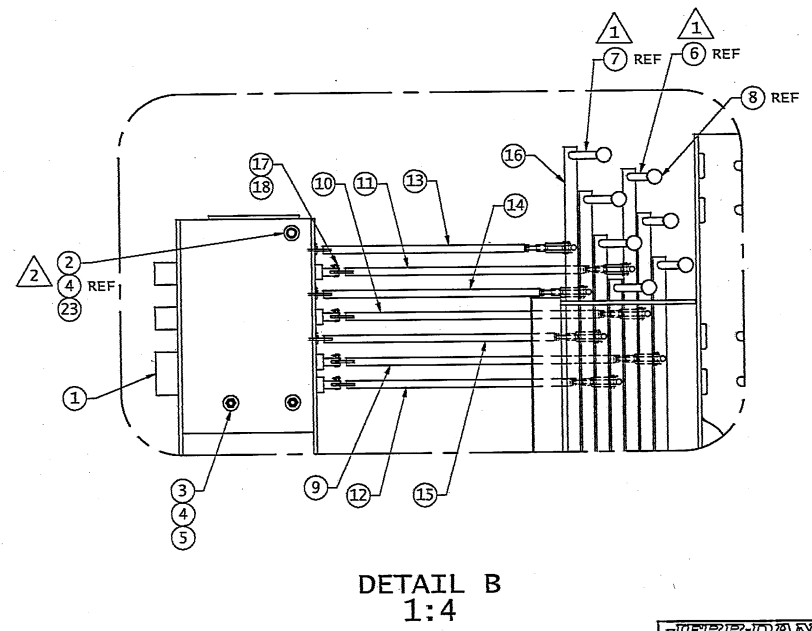
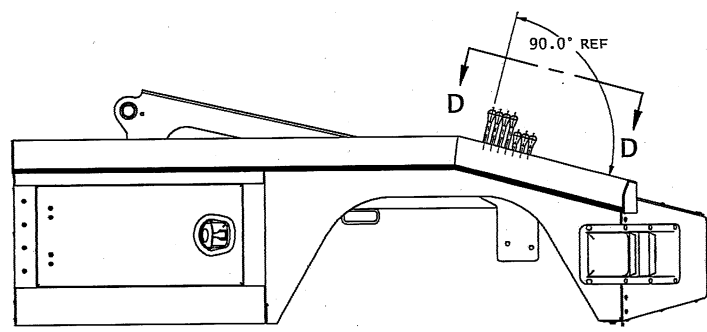
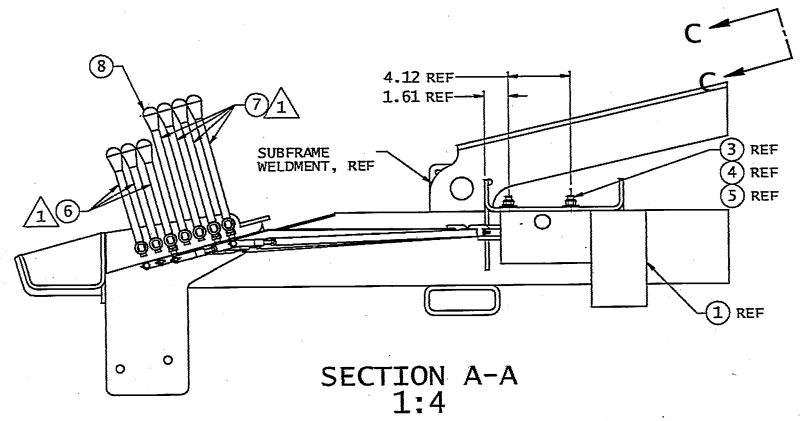
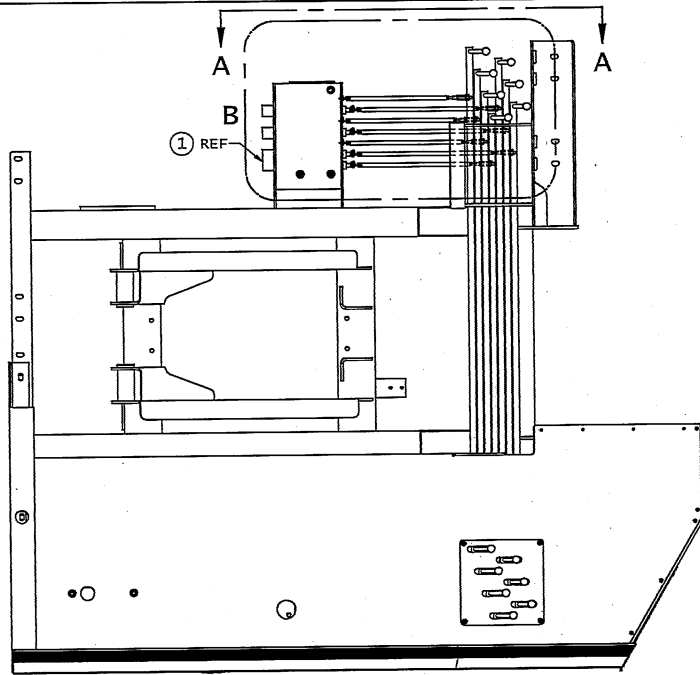
Ball Dr	Bin	Description	QtyPer	UOM	Reference	Effectivity
-oon Sz Component Type Location			=====	====	=====	=====
01	3 3935000130	P n-floor VALVE ASSEMBLY HUSCO 7-SECTION	1.000	PC		-12/30/29
02	N 7115151050	P 000105 x01 CAPSCREW .31"-18NC X 1.25" HEX HEAD	1.000	pc	3774	01/31/05-
03	N 7115161250	P 000102 a35 CAPSCREW .38"-16NC X 1.50" HEX HEAD	2.000	PC		-
04	N 7950140161	P 000104 A96 FLATWASHER .25" NOM WIDE - PLATED	3.000	pc	3774	01/31/05-
05	N 7660162601	P 000105 x01 LOCKNUT .38"-16NC GR5 NYLOC	2.000	pc		-
06	B 4763000302	P A-FLOOR ROD 0.50" DIA x 6.5"	6.000	PC		-
07	B 4763000303	P A-FLOOR ROD 0.50" DIA x 8.50"	8.000	PC		-
08	A 7551000015	P 100704 e05 KNOB DIMCO-GRAY #277	14.000	PC		-
09	B 3763000145	M WA00 ROD WELD CONTROL 20.28	1.000	PC		-
10	B 3763000146	M WA00 ROD WELD CONTROL 19.32	1.000	PC		-
11	B 3763000147	M WA00 ROD WELD CONTROL 18.35	1.000	PC		-
12	B 3763000148	M WA00 ROD WELD CONTROL 17.38	1.000	PC		-
13	B 3763000149	M WA00 ROD WELD CONTROL 15.90	1.000	PC		-
14	B 3763000150	M WA00 ROD WELD CONTROL 16.89	1.000	PC		-
15	B 3763000151	M WA00 ROD WELD CONTROL 17.78	1.000	PC		-
16	4763000154	M WA00 ROD .50 DIA x 68.00	7.000	PC		-
17	N 7690101200	P 000105 c21 PIN .19"DIA X .75" CLEVIS	7.000	PC		-
18	N 7690000810	P 000107 c14 PIN 0.063 X 0.50 COTTER	7.000	PC		-
19	A 7577000273	P KIT CONTROL HANDLE YOKE	7.000	PC		-
20	7765000006	P 080304 ROD END .38"-16NC - 1.88" LONG	7.000	PC		-
21	B 4314000085	M WA03 COVERPLATE 0.12 x 11.50 x 11.50	2.000	PC		-
22	A 7120000046	P BOLT 0.25-20NC x 0.75" SELF SS PHIL PAN	8.000	PC	3774	01/31/05-
23	N 7950160000	P 000104 022504 LOCK WASHER .38"ID - PLATED	1.000	PC	3774	01/31/05-
24	N 7660160000	P 000105 022504 NUT .38"-16NC GR2 HEX- PLATED	7.000	PC		-
25	3 7330000538	P c02 DECAL CONTROL MPL40	2.000	PC		-

*** End of Item ***

*** End of Report ***

CONTROL INSTALL W/ DUAL WINCH

DWG NO 2-509-170038 REV 02



<p>REVISIONS</p> <p>1. 11/14/1964 CORRECTED FROM 23 & 24</p> <p>2. 12/27/74 PICTURE CHANGE TO STOPS PG 6 & 7</p>		<p>DATE 1 87</p>	<p>23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100</p>	<p>DATE 12/20/04</p>	<p>SCALE 1:3</p>	<p>DATE 12/20/04</p>	<p>DRW 3774</p>	<p>DWG NO 2-509-170038</p>	<p>REV 02</p>
<p>REVISIONS</p> <p>1. 11/14/1964 CORRECTED FROM 23 & 24</p> <p>2. 12/27/74 PICTURE CHANGE TO STOPS PG 6 & 7</p>		<p>DATE 1 87</p>	<p>23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100</p>	<p>DATE 12/20/04</p>	<p>SCALE 1:3</p>	<p>DATE 12/20/04</p>	<p>DRW 3774</p>	<p>DWG NO 2-509-170038</p>	<p>REV 02</p>

JERR-DAN CORP

1 OF 2

CONTROL INSTALL W/ DUAL WINCH

DATE 12/20/04

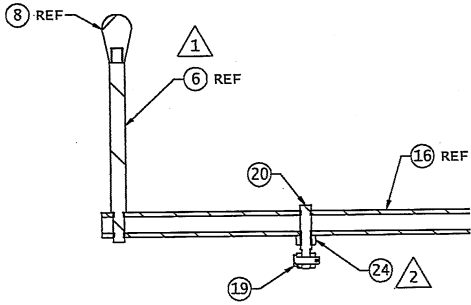
DRW 3774

DWG NO 2-509-170038

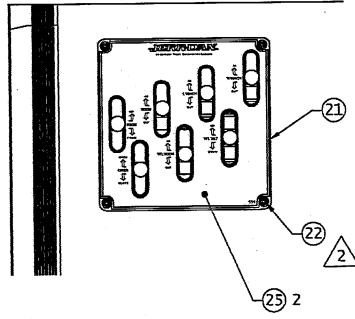
REV 02

CONTROL INSTALL W/ DUAL WINCH

DWG NO 2-509-170038 REV 02



SECTION C-C
1:2



USE ITEM 21 AS A TEMPLATE
LOCATE & DRILL 0.31 DIA
HOLES, TYP-8 PLCS

VIEW D-D
1:4

JERRI-DAN CORP <small>200 WOOD ROAD, GREENVILLE, PA 17020</small>		SHEET 2 OF 2 WEIGHT ? #	
THIS DRAWING AND SUBJECT MATTER HEREON ARE THE PROPERTY AND COPYRIGHT OF JERRI-DAN CORPORATION. THIS COPY IS LOANED TO YOU BY THE CORPORATION. ALL RIGHTS ARE RESERVED IN ANY EVENT. THIS DRAWING IS NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT THE WRITTEN PERMISSION OF THE CORPORATION.		IF 24 HOUR ASK. BY NET SCALE DRAWING. REMOVE ALL BURRS AND SHARP EDGES.	
UNLESS OTHERWISE SPECIFIED: DIMENSIONS IN INCHES DECIMALS TO TWO PLACES FRACTIONS TO SIXTEENTHS HOLE DIMENSIONS TO THIRTEENTHS UNLESS OTHERWISE SPECIFIED FINISHES TO BE AS SHOWN UNLESS OTHERWISE SPECIFIED MATERIALS TO BE AS SHOWN UNLESS OTHERWISE SPECIFIED TOLERANCES UNLESS SPECIFIED: FRACTIONS TO SIXTEENTHS DECIMALS TO TWO PLACES ANGLES TO NEAREST MINUTE UNLESS OTHERWISE SPECIFIED		TITLE CONTROL INSTALL W/ DUAL WINCH SCALE 1:1 DATE 12/20/04 DRAWN RWF CHECKED JDF APPROVED BY THE PROJECT ENGINEER	
REVISIONS NO. 1 DESCRIPTION DATE BY		REV 1 2-509-170038 02	

8 7 6 5 4 3 2 1

VALVE ASSY, HUSCO 7 SECTION

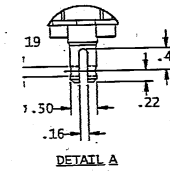
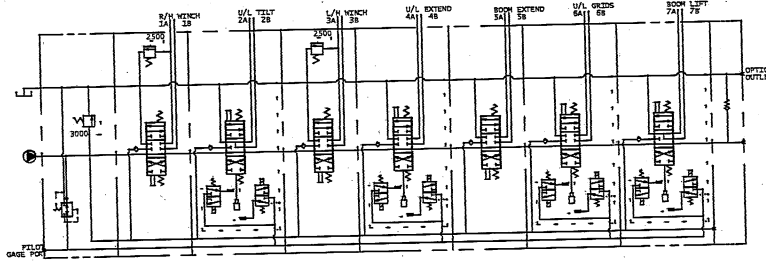
DWG NO. **3-935-000130** REV **00**

HUSCO: P/N 5000-G61

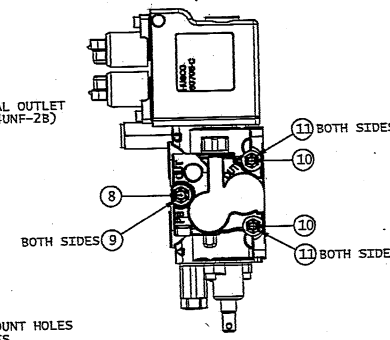
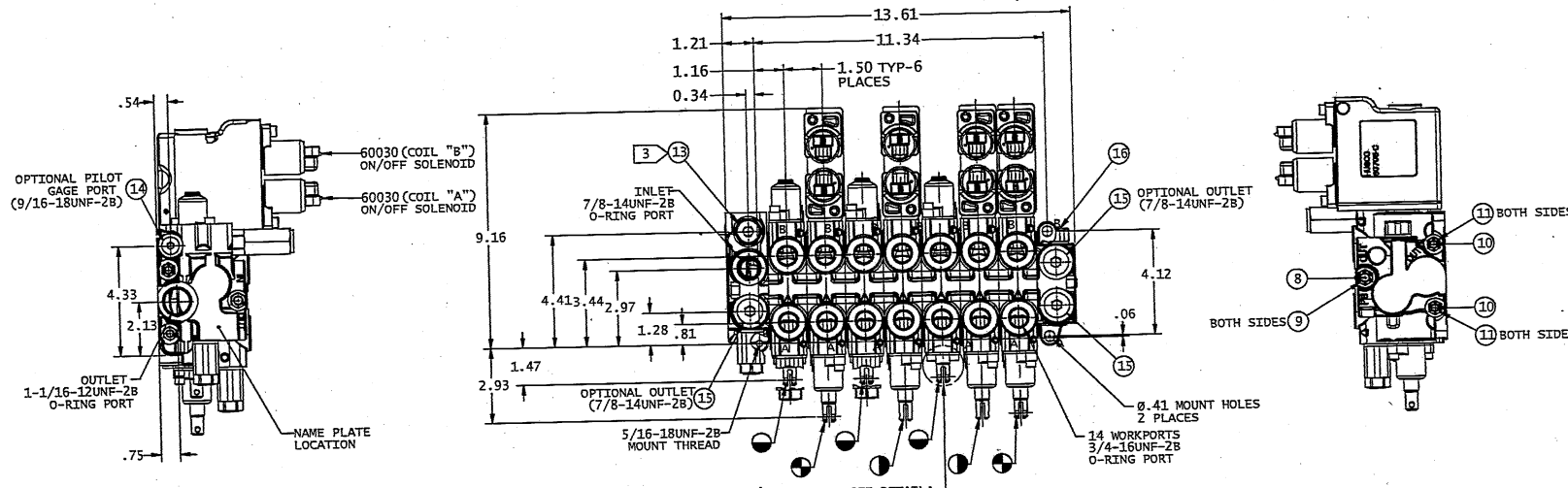
SPOOL MOVEMENTS			ON/OFF COIL 60030	
(IN)	(OUT)		COIL "A"	COIL "B"
0.28 HI-PRESS "A" - LOW-PRESS "B" (IN)			ON	OFF
0.00 NEUTRAL & HOLD "A & B"			OFF	OFF
0.28 HI-PRESS "B" - LOW-PRESS "A" (OUT)			OFF	ON

SPOOL MOVEMENTS			ON/OFF COIL 60030	
(IN)	(OUT)		COIL "A"	COIL "B"
0.28 HI-PRESS "A" - LOW-PRESS "B" (IN)			ON	OFF
0.00 NEUTRAL & HOLD "A & B"			OFF	OFF
0.28 HI-PRESS "B" - LOW-PRESS "A" (OUT)			OFF	ON

SPOOL MOVEMENTS			ON/OFF COIL 60030	
(IN)	(OUT)		COIL "A"	COIL "B"
0.28 HI-PRESS "A" - LOW-PRESS "B" (IN)			ON	OFF
0.00 NEUTRAL			OFF	OFF
0.28 HI-PRESS "B" - LOW-PRESS "A" (OUT)			OFF	ON



- RELIEF & REGULATING VALVE SETTINGS**
- 1 TO BE SET AT 3000 \pm 50 PSI @ 8 GPM
TORQUE CAP PER HUSCO SPEC. 810-Z14
 - 2 TO BE SET AT 2500 \pm 50 PSI @ 1 GPM
 - 3 TO BE SET AT 425 \pm 25 PSI @ 1 GPM



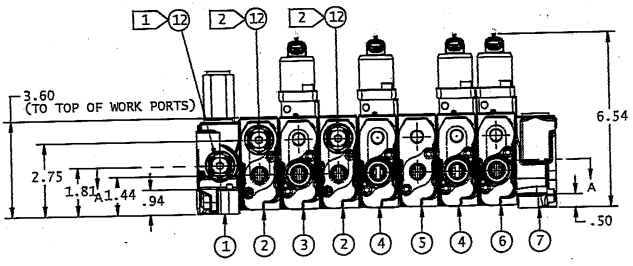
PARALLEL CIRCUIT - OPEN CENTER

JERR-DAN SPECIFICATIONS:
 PART NO.: 3935000130
 PUMP OUTPUT: 8 GPM
 OPERATING PRESS.: -20°F to +200°F
 OIL TYPE: SAE 10W
 CENTERING SPRINGS ARE ADEQUATE TO RETURN SPOOLS TO NEUTRAL PER ABOVE INFO.
 ELECTRICAL SPECS.: SEE TABLE

HUSCO TEST SPECIFICATIONS:
 1. TEST WITH PETROLEUM BASE SAE 10W HYD OIL AT 110°F \pm 10°F (129 SSU)
 2. VALVE TO BE TESTED AT 3000 \pm 50 PSI @ 8 GPM
 3. LEAKAGE RATES AT 1000 PSI:
 A. SPOOLS: PORTS 1A, 1B, 3A, 3B, 4A, 4B, 5A, & 5B:
 NOT TO EXCEED 0.75 CIPM
 B. SPOOLS: PORTS 2A, 2B, 7A & 7B:
 NO TEST (MOTOR SPOOLS)
 C. LOAD CHECK: ALL PORTS NOT TO EXCEED 5.0 CIPM
 4. SPECIAL TEST SPECIFICATIONS: TP-1002 & TP-1158
 5. SPOOL CENTERING TEST PER ABOVE INFO.
 6. ELECTRICAL SPECS.: SEE TABLE A

ON/OFF SOLENOID		P/N: 60030
CONNECTOR ON VALVE	METRIPACK 150-2 (REF. P/N: 12059512)	
MATING CONNECTOR	12162193-B (JD/7346000174)	
MATING PIN	12124075-L (JD/7346000175)	
RESISTANCE	10.5 ohms	
INDUCTANCE	112 mHr	
VOLTAGE	MAX	16 V
	NOMINAL	12 V
	MIN	1.6 A
CURRENT	RECOMMENDED	1.0 A
	ON	750 - 1600 mA
	OFF	< 90 mA

IDX	PART No.	QTY	DESCRIPTION	HUSCO SPEC. / MISC.
16	55400-1	1	CHECK VALVE ASSY.	HUSCO SPEC. 805-101
15	52669-1	3	PLUG ASSY.-SAE	HUSCO SPEC. 807-107
14	400079	1	PLUG ASSY.-SAE	HUSCO SPEC. 807-105
13	58108-2	1	PRESSURE REGULATING VALVE	HWSRO SPEC. 800-033
12	59670-B	3	RELIEF VALVE ASSY.	HUSCO SPEC. 805-101
11	1861	4	NUT-SPECIAL	HUSCO SPEC. 812-101
10	5069-7	2	TIE ROD	
9	1052	2	NUT-SPECIAL	HUSCO SPEC. 812-102
8	5089-7	1	TIE ROD	
7	5003-A67	1	OUTLET SECTION ASSY.	
6	5002-A1259	1	SPOOL SECTION ASSY.	
5	5002-A1261	1	SPOOL SECTION ASSY.	
4	5002-A1278	2	SPOOL SECTION ASSY.	
3	5002-A1260	1	SPOOL SECTION ASSY.	
2	5002-A1262	2	SPOOL SECTION ASSY.	
1	5001-T1	1	INLET SECTION ASSY.	



JERR-DAN
 A Division of The Torrington Company



Electrical Controls Installation



***** Engineering Bill of Materials *****

** Report Excludes Shrinkage.

Effective as of 08/04/05

Item: 3509330097

ELECT ASSY CONTROL MPL-40 W/HYD GRIDS

Reference: D/3774E

From Item: 3509330097

To Item: 3509330097

Last Changed Date:

Revision #0/0

BIN: WA03

UOM: PC

Quantity 1 Receive into Whse: MYPT

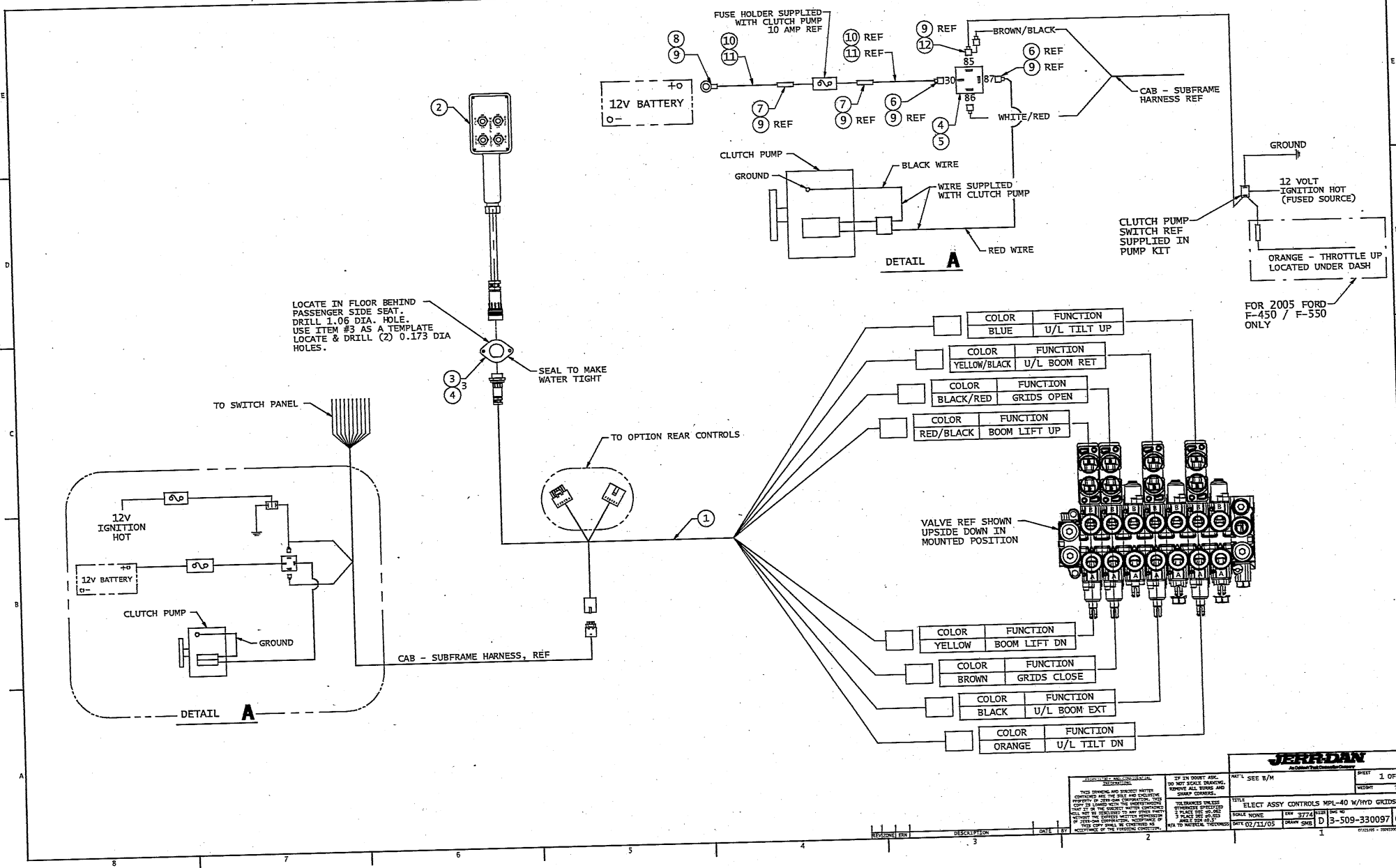
Ball Dr	Bin			Description	QtyPer	UOM	Reference	Effectivity
-oon Sz Component Type Location					=====	====	=====	=====
01 D 7552000289	P k06			HARNES WIRE REMOTE MPL40	1.000	PC		-
02 D 7295000062	P a20			CONTROLLER HAND 8 FUNCT W/ LANYARD	1.000	PC		-
03 A 4706003402	M WA00			PLATE 0.06 X 1.75 X 2.50 ALUM	1.000	PC		-
04 N 7790100856	P 000103 c21 x01			SCREW #10 X .50" HWH SELF-TAPPING	3.000	pc		-
05 A 7740000003	P a07 f18			RELAY (W/MTG BRKT) 12VDC 40A	1.000	pc		-
06 N 7345001710	P c20 j19			TAB #192005 .25" 14-16 NON-INSUL (F)	2.000	pc		-
07 N 7345001714	P 022506 c19 j19			TERMINAL #122005 14-16 NON-INSULATED	1.000	PC		-
08 N 7345221702	P c19 j17			TERMINAL .25"16-14 WIRE NON-INS RING	1.000	PC		-
09 N 7346000039	P d14 g-floor j0			TUBING .25"ID HS W/ADHESIVE - 48" LG	1.000	pc		-
10 N 8977500100	R b08 g04			WIRE #16GA TYPE SXL BLACK	3.000	ft		-
11 N 8597650002	R e-floor e22			WIRE .25" CONVOLUTED LOOM	3.000	ft		-
12 N 7345001747	P			FASTENERS PIGGY BACK #B51614-PBF	1.000	pc		-

*** End of Item ***

*** End of Report ***

ELECT ASSY CONTROLS MPL-40 W/HYD GRIDS

DWG NO 3-509-330097 REV 00



LOCATE IN FLOOR BEHIND PASSENGER SIDE SEAT. DRILL 1.06 DIA. HOLE. USE ITEM #3 AS A TEMPLATE LOCATE & DRILL (2) 0.173 DIA HOLES.

SEAL TO MAKE WATER TIGHT

TO OPTION REAR CONTROLS

CAB - SUBFRAME HARNESS, REF

VALVE REF SHOWN UPSIDE DOWN IN MOUNTED POSITION

FOR 2005 FORD F-450 / F-550 ONLY

COLOR	FUNCTION
BLUE	U/L TILT UP
COLOR	FUNCTION
YELLOW/BLACK	U/L BOOM RET
COLOR	FUNCTION
BLACK/RED	GRIDS OPEN
COLOR	FUNCTION
RED/BLACK	BOOM LIFT UP

COLOR	FUNCTION
YELLOW	BOOM LIFT DN
COLOR	FUNCTION
BROWN	GRIDS CLOSE
COLOR	FUNCTION
BLACK	U/L BOOM EXT
COLOR	FUNCTION
ORANGE	U/L TILT DN

JERR-DAN
An Oshkosh Truck Company

IF IN DOUBT, SEE THE ORIGINAL DRAWING.
DO NOT SCALE DRAWING, REPRODUCE ALL DIMS AND SHARP CORNERS.

THIS DRAWING AND RELATED MATTER CONTAINS THE DESIGN AND INVENTIVE CONCEPTS OF THE DRAWING. THE INFORMATION IS TO BE USED ONLY FOR THE PURPOSES SPECIFIED HEREIN. ANY REPRODUCTION OR TRANSMISSION OF THIS DRAWING WITHOUT THE WRITTEN PERMISSION OF JERR-DAN IS STRICTLY PROHIBITED.

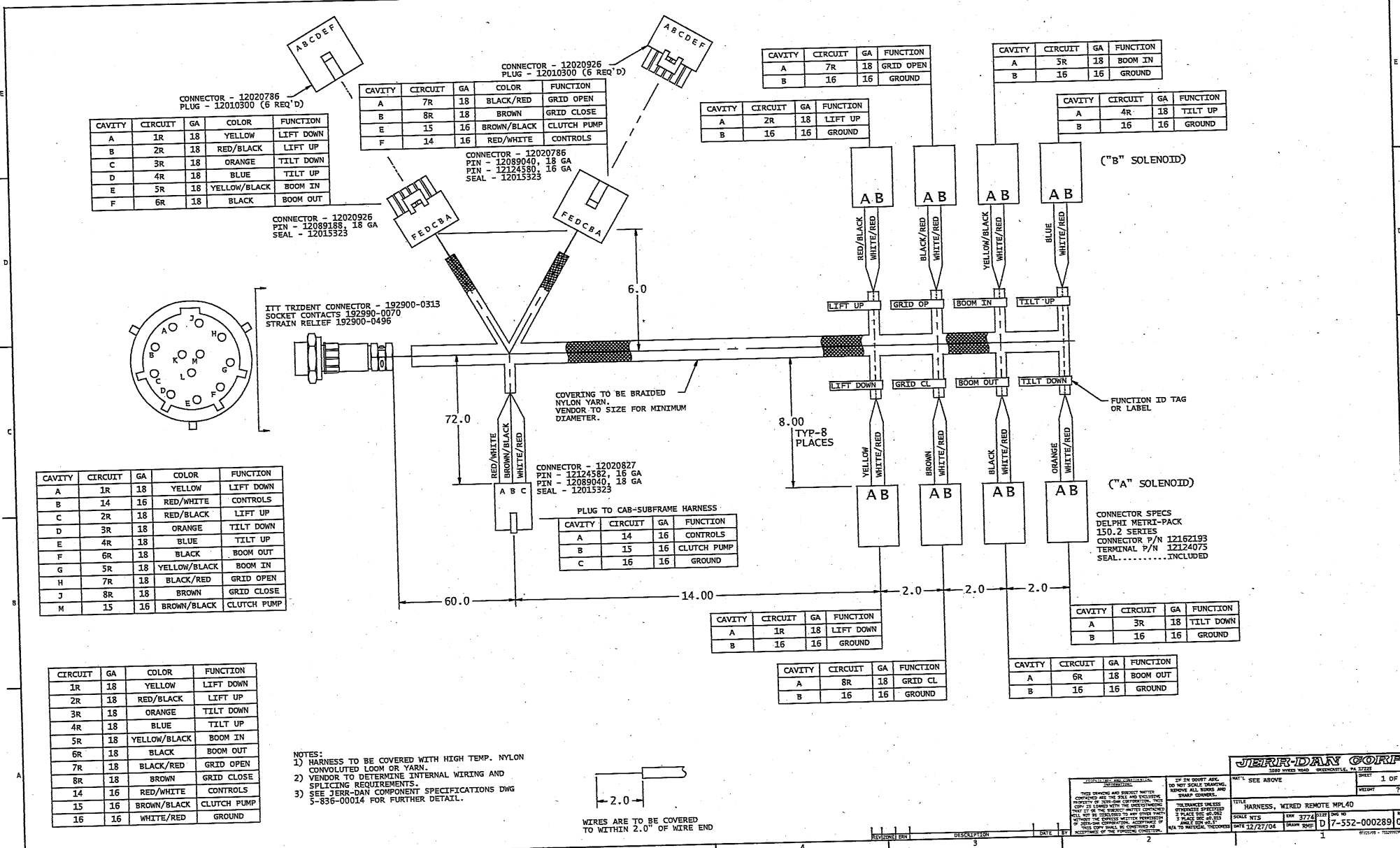
UNLESS SPECIFIED OTHERWISE, DIMENSIONS SPECIFIED IN PARENT PARENTHESIS SHALL BE IN INCHES AND DIMENSIONS SPECIFIED IN BRACKETED PARENTHESIS SHALL BE IN MILLIMETERS. UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS SHALL BE TO NEAREST TOLERANCE OF THE MANUFACTURING PROCESS.

SCALE NONE
DATE 02/11/05
DRAWN GMS
REV 3774
DWG NO 3-509-330097

SHEET 1 OF 1
WEIGHT 7.8

HARNES, WIRED REMOTE MPL40

DWG NO **7-552-000289** REV **00**



CONNECTOR - 12020786
PLUG - 12010300 (6 REQ'D)

CAVITY	CIRCUIT	GA	COLOR	FUNCTION
A	1R	18	YELLOW	LIFT DOWN
B	2R	18	RED/BLACK	LIFT UP
C	3R	18	ORANGE	TILT DOWN
D	4R	18	BLUE	TILT UP
E	5R	18	YELLOW/BLACK	BOOM IN
F	6R	18	BLACK	BOOM OUT

CONNECTOR - 12020926
PLUG - 12010300 (6 REQ'D)

CAVITY	CIRCUIT	GA	COLOR	FUNCTION
A	7R	18	BLACK/RED	GRID OPEN
B	8R	18	BROWN	GRID CLOSE
E	15	16	BROWN/BLACK	CLUTCH PUMP
F	14	16	RED/WHITE	CONTROLS

CAVITY	CIRCUIT	GA	FUNCTION
A	2R	18	LIFT UP
B	16	16	GROUND

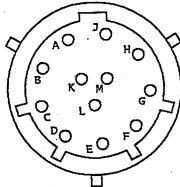
CAVITY	CIRCUIT	GA	FUNCTION
A	5R	18	BOOM IN
B	16	16	GROUND

CAVITY	CIRCUIT	GA	FUNCTION
A	4R	18	TILT UP
B	16	16	GROUND

CONNECTOR - 12020786
PIN - 12089040, 18 GA
PIN - 12124580, 16 GA
SEAL - 12015323

CONNECTOR - 12020926
PIN - 12089185, 18 GA
SEAL - 12015323

ITT TRIDENT CONNECTOR - 192900-0313
SOCKET CONTACTS 192900-0070
STRAIN RELIEF 192900-0496



CONNECTOR - 12020827
PIN - 12124582, 16 GA
PIN - 12089040, 18 GA
SEAL - 12015323

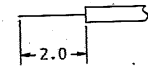
PLUG TO CAB-SUBFRAME HARNES

CAVITY	CIRCUIT	GA	FUNCTION
A	14	16	CONTROLS
B	15	16	CLUTCH PUMP
C	16	16	GROUND

CAVITY	CIRCUIT	GA	COLOR	FUNCTION
A	1R	18	YELLOW	LIFT DOWN
B	14	16	RED/WHITE	CONTROLS
C	2R	18	RED/BLACK	LIFT UP
D	3R	18	ORANGE	TILT DOWN
E	4R	18	BLUE	TILT UP
F	6R	18	BLACK	BOOM OUT
G	5R	18	YELLOW/BLACK	BOOM IN
H	7R	18	BLACK/RED	GRID OPEN
J	8R	18	BROWN	GRID CLOSE
M	15	16	BROWN/BLACK	CLUTCH PUMP

CIRCUIT	GA	COLOR	FUNCTION
1R	18	YELLOW	LIFT DOWN
2R	18	RED/BLACK	LIFT UP
3R	18	ORANGE	TILT DOWN
4R	18	BLUE	TILT UP
5R	18	YELLOW/BLACK	BOOM IN
6R	18	BLACK	BOOM OUT
7R	18	BLACK/RED	GRID OPEN
8R	18	BROWN	GRID CLOSE
14	16	RED/WHITE	CONTROLS
15	16	BROWN/BLACK	CLUTCH PUMP
16	16	WHITE/RED	GROUND

- NOTES:
- 1) HARNES TO BE COVERED WITH HIGH TEMP. NYLON CONVOLUTED LOOM OR YARN.
 - 2) VENDOR TO DETERMINE INTERNAL WIRING AND SPLICING REQUIREMENTS.
 - 3) SEE JERR-DAN COMPONENT SPECIFICATIONS DWG 5-836-00014 FOR FURTHER DETAIL.



WIRES ARE TO BE COVERED TO WITHIN 2.0" OF WIRE END

CONNECTOR SPECS
DELPHI METRI-PACK
150.2 SERIES
CONNECTOR P/N 12162193
TERMINAL P/N 12124075
SEAL.....INCLUDED

JERR-DAN CORP
3880 WYOMING ROAD GREENCASTLE, PA 15705

REV: SEE ABOVE SHEET 1 OF 1

TITLE: HARNES, WIRED REMOTE MPL40

SCALE: NTS

DATE: 12/27/04

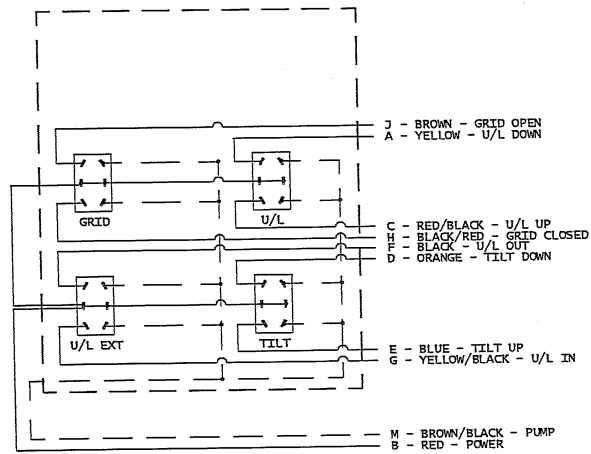
DRAWN: RMC

CHECKED: RMC

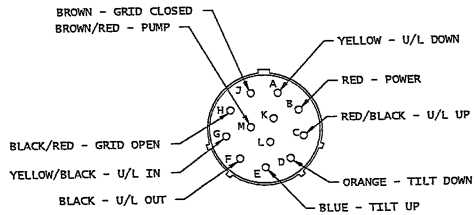
APPROVED: RMC

CONTROL, 8 FUNCTION WIRED REMOTE

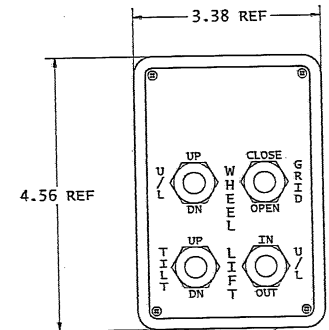
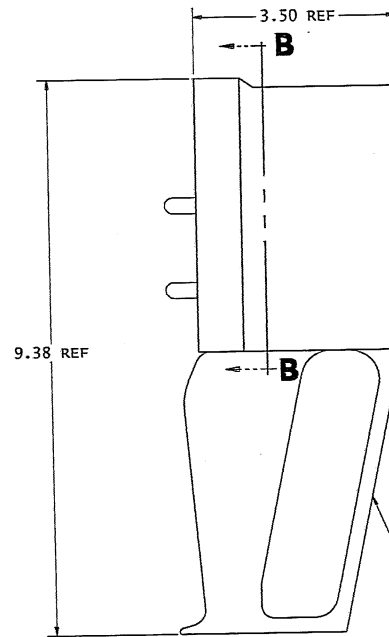
DWG NO 7-295-000062 REV 00



SECTION B - B
WIRING SCHEMATIC
NOT TO SCALE

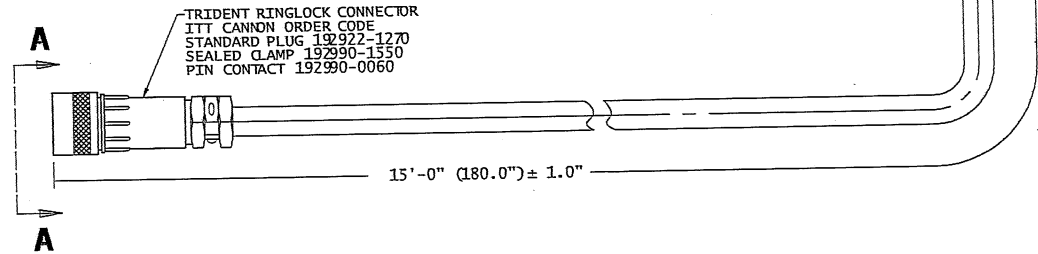


VIEW A - A
NOT TO SCALE



CONSTRUCTION:
 - HIGH IMPACT PLASTIC SHELL
 - MARINE GRADE TOGGLE SWITCHES
 - WATER TIGHT CONSTRUCTION
 - CABLE TO BE 18 GA/12 CONDUCTOR
 RATED FOR COLD WEATHER PERFORMANCE

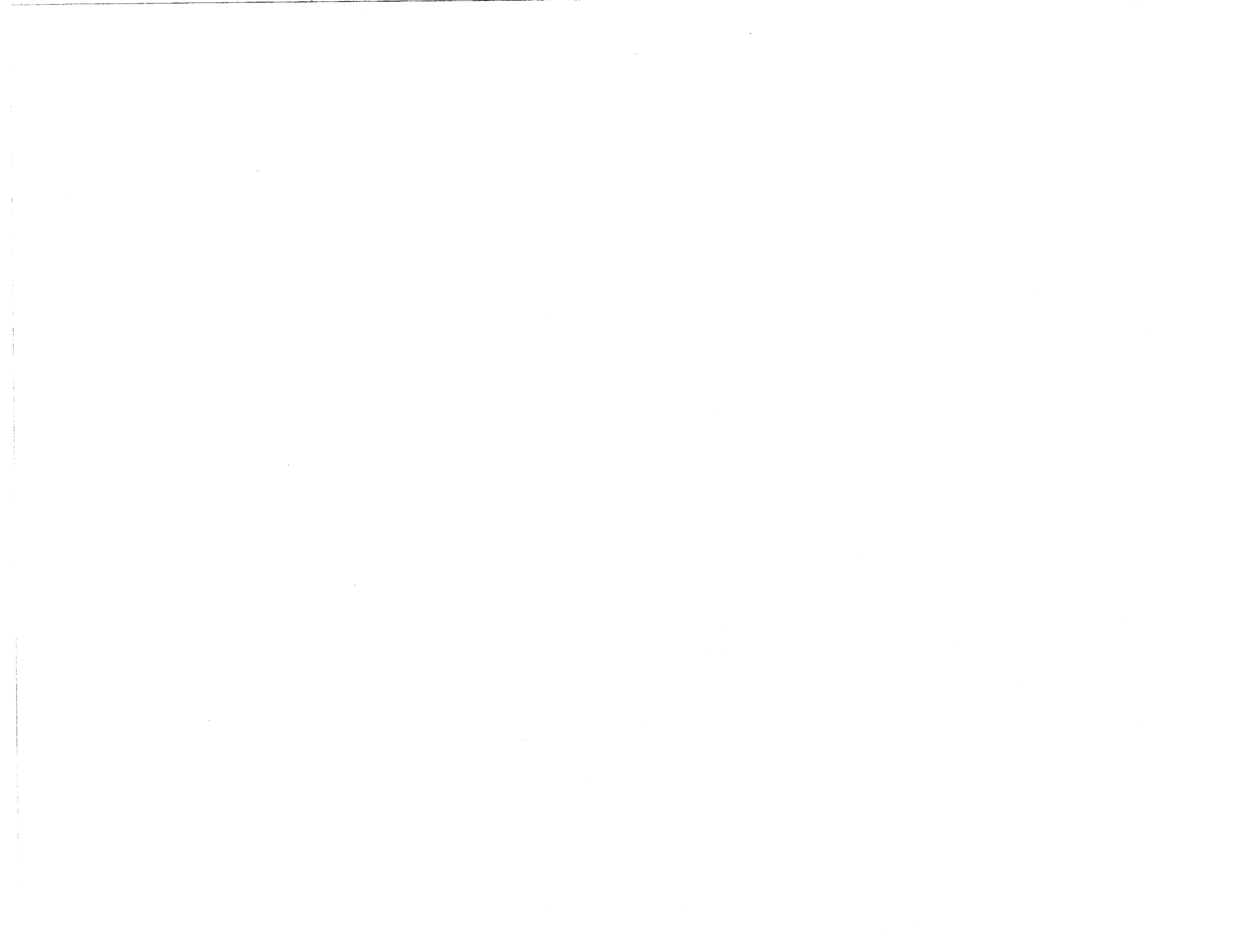
NOTE:
 ROSE ENCLOSURE P/N 29213000
 OR EQUAL



VENDOR:
 MOTECH INC.
 PHONE: 1-800-672-8777
 FAX: (630) 241-9597

APPROVED FOR CONSTRUCTION DATE: 12/15/03		IF IN DOUBT ASK DO NOT SCALE DIMENSIONS INDICATE ALL DIMS AND SHARP CORNERS.		SHEET 1 OF 1 WEIGHT 7 #	
THIS DRAWING AND PROJECT MATTER CONTAINED HEREIN IS THE SOLE AND EXCLUSIVE PROPERTY OF JERR-DAN CORP. NO PART HEREOF IS TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT THE EXPRESS WRITTEN PERMISSION OF JERR-DAN CORP. THIS DRAWING IS THE PROPERTY OF JERR-DAN CORP. AND IS TO BE KEPT CONFIDENTIAL.		TECHNICAL SPECIFICATIONS UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE SPECIFIED UNLESS OTHERWISE SPECIFIED UNLESS OTHERWISE SPECIFIED UNLESS OTHERWISE SPECIFIED		TITLE CONTROL, 8 FUNCTION WIRED REMOTE SCALE NTS DATE 12/15/03 DRAWN SWS CHECK SWS 7-295-000062 00	

REV	BY	DATE	DESCRIPTION



Winch Installation



***** Engineering Bill of Materials *****

** Report Excludes Shrinkage.

Effective as of 08/04/05

Item: 2509900044

WINCH INSTALL DUAL HD234 MPL40

From Item: 2509900044

To Item: 2509900044

Reference: D/3774C

Last Changed Date:

Revision #0/0

BIN: WA03

UOM: PC

Quantity 1 Receive into Whse: MYPT

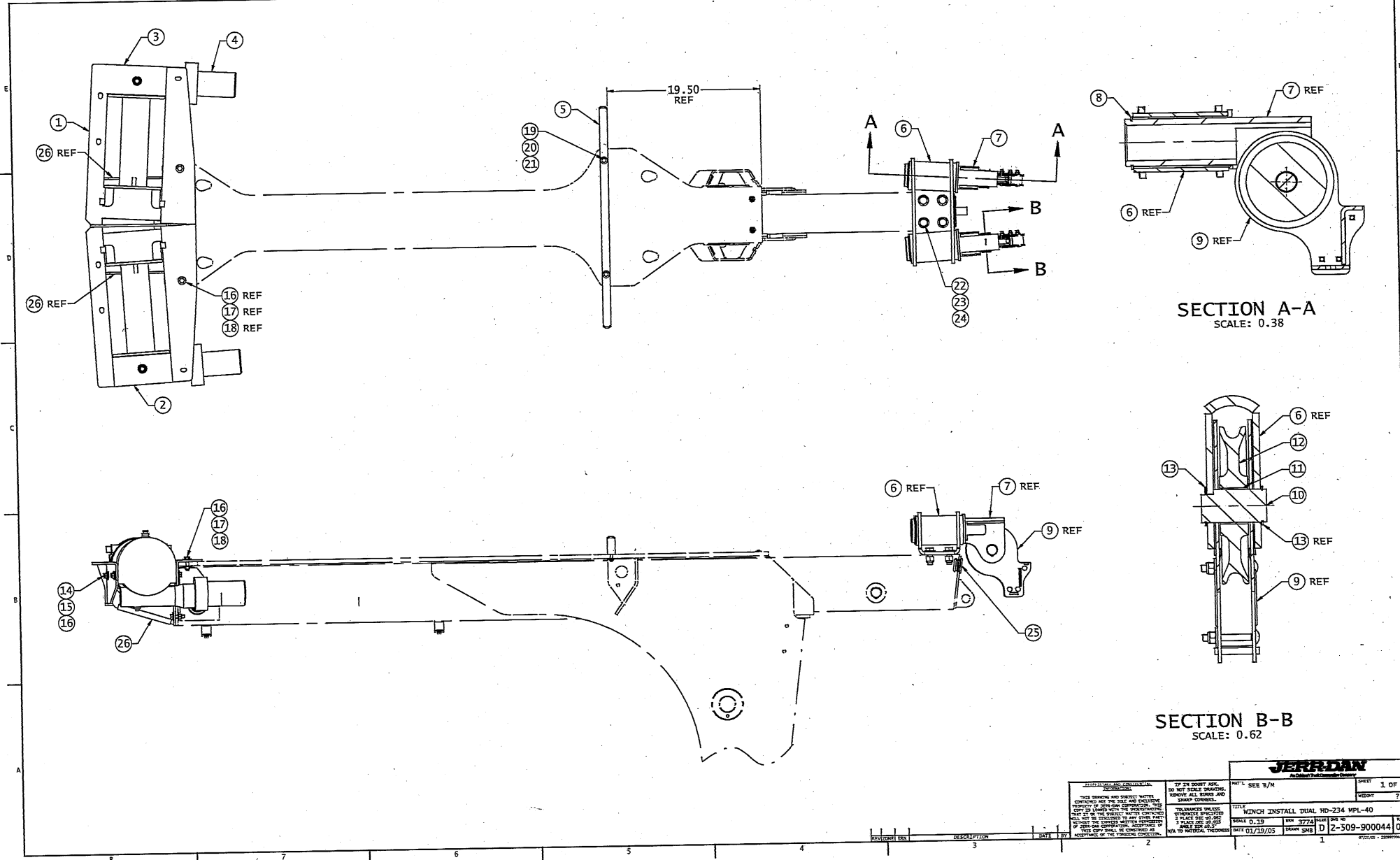
Ball Dr	Bin			Description	QtyPer	UOM	Reference	Effectivity
-oon Sz Component Type Location					=====	====	=====	=====
01 D 3178000419	M WA02			BRKT WELD, DUAL WINCH MOUNT HD-234	1.000	PC		-
02 3 7970000103	P m03			WINCH #HD-234L 8000# LH WORM GEAR	1.000	PC		-
03 D 7970000104	P m02			WINCH #HD-234R 8000# RH WORM GEAR	1.000	PC		-
04 A 7626000014	P 010204 108 m07			ORBIT MOTOR #101-1701-009 / #BP1-2295	1.000	PC		-
05 B 4062000541	M WBPS			BAR 0.25 x 1.00 x 29.87	1.000	PC		-
06 C 3170000357	M WA02			BOOM NOSE WELD	1.000	PC		-
07 C 3249000033	M WA02			SHEAVE SUPPORT WELD	2.000	PC		-
08 N 7754000018	P 000107 b64 MDF			RING #5100-300 RETAINING	2.000	PC		-
09 C 3249000034	M WA03			CABLE GUIDE ASSY	2.000	PC		-
10 A 4691000513	M WA02			PIN 1.25 OD x 2.47	2.000	PC		-
11 A 7082000032	P g01			BEARING 1.38 OD x 1.25 ID x 1.06 IFR	2.000	PC		-
12 3 7809000013	P a21			SHEAVE 6.00" DIA. X 1.38 I.D.	2.000	PC		-
13 A 7754000006	P 000107 b62 c18			RING RETAINING - 1.25" DIA SHAFT	4.000	pc		-
14 N 7115160850	P 000102 a32 x01			CAPSCREW .38"-16NC x 1.00" HEX HEAD	16.000	PC		-
15 N 7950160000	P 000104 022504			LOCK WASHER .38"ID - PLATED	16.000	PC		-
16 N 7950160162	P A97 x01			FLATWASHER .38" NOM WIDE HARDENED	28.000	pc		-
17 N 7115161250	P 000102 a35			CAPSCREW .38"-16NC X 1.50" HEX HEAD	6.000	PC		-
18 N 7660162601	P 000105 x01			LOCKNUT .38"-16NC GR5 NYLOC	6.000	pc		-
19 N 7115151050	P 000105 x01			CAPSCREW .31"-18NC X 1.25" HEX HEAD	2.000	pc		-
20 N 7950150161	P 030602 080304			FLATWASHER .31" NOM WIDE - PLATED	2.000	PC		-
21 N 7660152601	P 022603 030602			LOCKNUT .31-18NC GR5 HEX NYLOC	2.000	pc		-
22 N 7115201450	P			CAPSCREW .63"-11NC X 1.75" HEX HEAD	4.000	PC		-
23 N 7950200141	P A100			FLATWASHER .63" NOM NARROW - PLATED	4.000	pc		-
24 N 7660202601	P 080304			LOCKNUT .63"-11NC NYLON INSERT ZINC PLAT	4.000	PC		-
25 C 7701000051	P 100902 c18 f09			PLUG 4.00 x 2.00 x 0.19 TUBE	1.000	PC		-
26 8632000002	R e12			TRIM .25"EDGE-BLACK VINYL #1350-B-2X1/4A	1.250	FT		-

*** End of Item ***

*** End of Report ***

WINCH INSTALL DUAL HD-234 MPL-40

DWG NO 2-509-900044 REV 00



SECTION A-A
SCALE: 0.38

SECTION B-B
SCALE: 0.62

<p>UNLESS OTHERWISE SPECIFIED, MATERIALS SHALL BE AS SUPPLIED BY THE MANUFACTURER. ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE SPECIFIED. DIMENSIONS IN PARENTHESES ARE FOR INFORMATION ONLY. DIMENSIONS IN PARENTHESES ARE FOR INFORMATION ONLY. DIMENSIONS IN PARENTHESES ARE FOR INFORMATION ONLY.</p>		<p>IF IN DOUBT, ASK. DO NOT SCALE DRAWING. REMOVE ALL BURRS AND SHARP EDGES.</p>	<p>SEE B/M</p>	<p>SHEET 1 OF 1 WEIGHT 7.8</p>
<p>THIS DRAWING AND RELATED MATTER CONTAINED HEREIN ARE THE PROPERTY OF JERRIDAN CORPORATION. NO PART OF THIS DRAWING OR RELATED MATTER SHALL BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT THE WRITTEN PERMISSION OF JERRIDAN CORPORATION.</p>		<p>UNLESS OTHERWISE SPECIFIED, DIMENSIONS SHOWN ARE IN INCHES UNLESS OTHERWISE SPECIFIED. DIMENSIONS IN PARENTHESES ARE FOR INFORMATION ONLY. DIMENSIONS IN PARENTHESES ARE FOR INFORMATION ONLY.</p>	<p>TITLE WINCH INSTALL DUAL HD-234 MPL-40</p>	<p>DATE 03/29/05 DRAWN SWS REV 00</p>

REV	DESCRIPTION	DATE	BY
1			



***** Engineering Bill of Materials *****

** Report Excludes Shrinkage.

Effective as of 08/04/05

Item: 3249000034

CABLE GUIDE ASSY

From Item: 3249000034

To Item: 3249000034

Reference: C/3774C

Last Changed Date:

Revision #0/1/3774

BIN: WA03

UOM: PC

Quantity 1

Receive into Whse: MYPT

Ball Dr

Bin

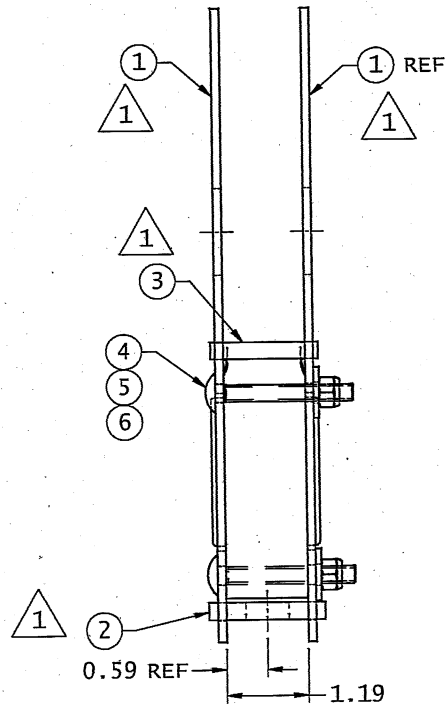
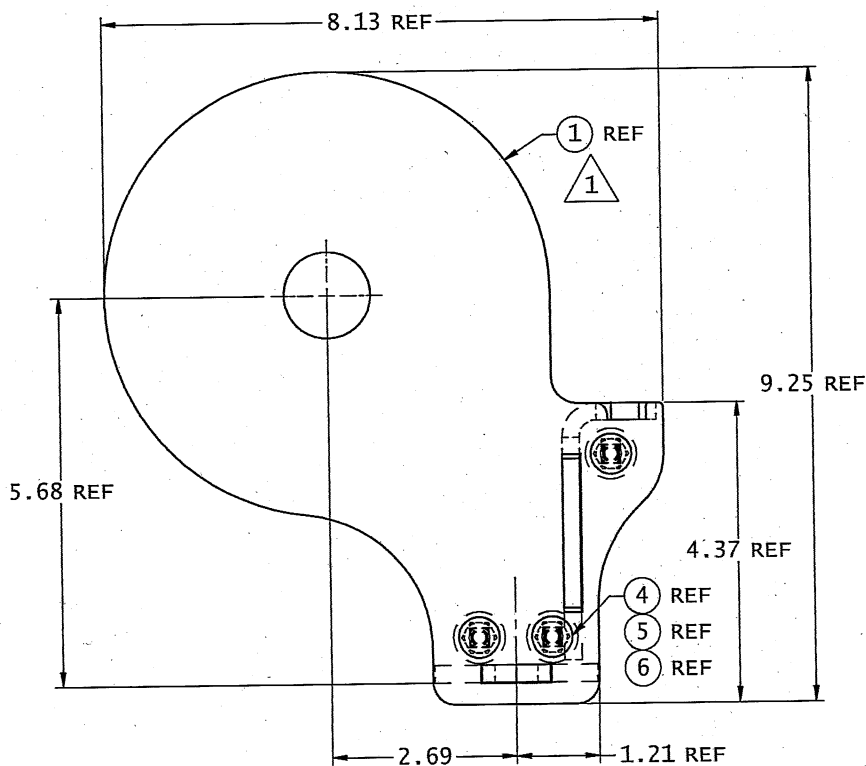
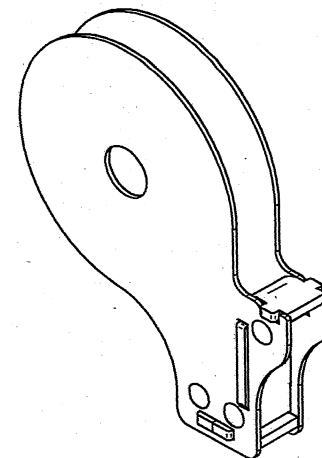
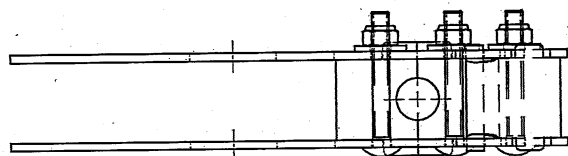
QTY	UOM	Reference	Effectivity				
01	B	4811000760	M WA02	SHEET 11GA x 8.13 x 9.25	2.000	PC	-
02	A	4706004851	M WA02	PLATE 0.25 x 1.19 x 1.69	2.000	PC	-
03	B	4706004852	M WA02	PLATE 0.25 x 1.56 x 4.66	1.000	PC	-
04	N	7115141664	P	CAPSCREW 0.25-20 UNC x 2.00 CARRIAGE	3.000	PC	-
05	N	7660142604	P 000102 a03	LOCKNUT .25"-20NC NYLOK STAINLESS	3.000	pc	-
06	N	7950140153	P	FLAT WASHER .25 NOM WIDE S/S	3.000	PC	-

*** End of Item ***

*** End of Report ***

CABLE GUIDE ASSEMBLY

DWG NO 3-249-000034 REV 01



JERR-DAN CORP
1080 HYKES ROAD GREENCASTLE, PA 17225

PROPRIETARY AND CONFIDENTIAL INFORMATION. THIS DRAWING AND SUBJECT MATTER CONTAINED ARE THE SOLE AND EXCLUSIVE PROPERTY OF JERR-DAN CORPORATION. THIS COPY IS LOANED WITH THE UNDERSTANDING THAT IT OR THE SUBJECT MATTER CONTAINED WILL NOT BE DISCLOSED TO ANY OTHER PARTY WITHOUT THE EXPRESS WRITTEN PERMISSION OF JERR-DAN CORPORATION. ACCEPTANCE OF THIS COPY SHALL BE CONSTRUED AS ACCEPTANCE OF THE FOREGOING CONDITION.	IF IN DOUBT ASK. DO NOT SCALE DRAWING. REMOVE ALL BURRS AND SHARP CORNERS.	MAT'L SEE B/M	SHEET 1 OF 1
		WEIGHT C 3.75#	
TOLERANCES UNLESS OTHERWISE SPECIFIED 2 PLACE DEC ±0.062 3 PLACE DEC ±0.015 ANGLE DIM ±0.5° N/A TO MATERIAL THICKNESS			
TITLE CABLE GUIDE ASSEMBLY			
SCALE 0.75	ERN 3774	SIZE DWG NO	REV
DATE 12/20/04	DRAWN SMB	C 3-249-000034	01

01	X-X	3774	PICTURE CHANGE TO ITEMS 1, 2 & 3, REMOVED NYLATRON CABLE GUIDE 4-249-000006, ITEM 4 7-111-141664 WAS 7-114-141450	12/20/04	RMF
REV	ZONE	ERN	DESCRIPTION	DATE	BY

***** Engineering Bill of Materials *****

** Report Excludes Shrinkage.

Effective as of 08/04/05

Item: 2509900053

WINCH INST SINGLE WARN PLANETARY

From Item: 2509900053

To Item: 2509900053

Reference: D/3774C

Last Changed Date:

Revision #0/0

BIN: WA03

UOM: PC

Quantity 1

Receive into Whse: MYPT

Ball Dr

Bin

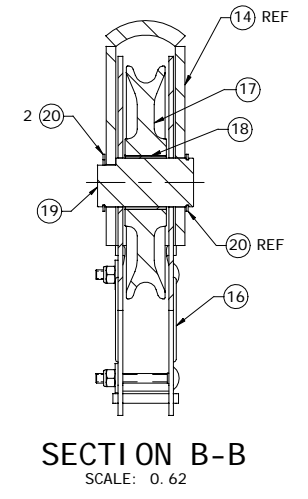
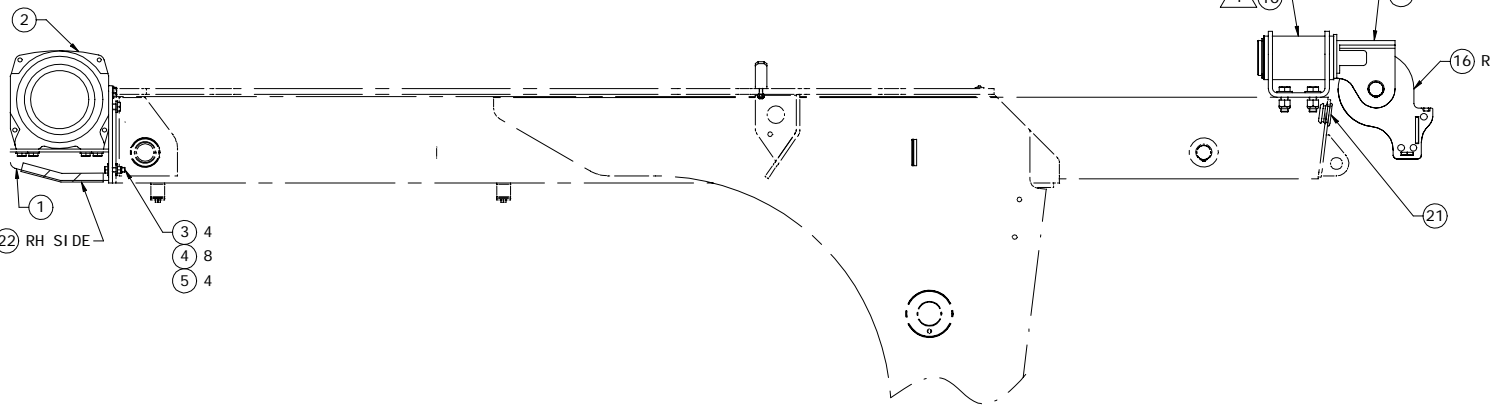
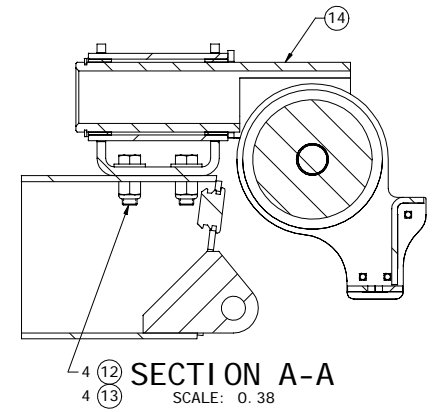
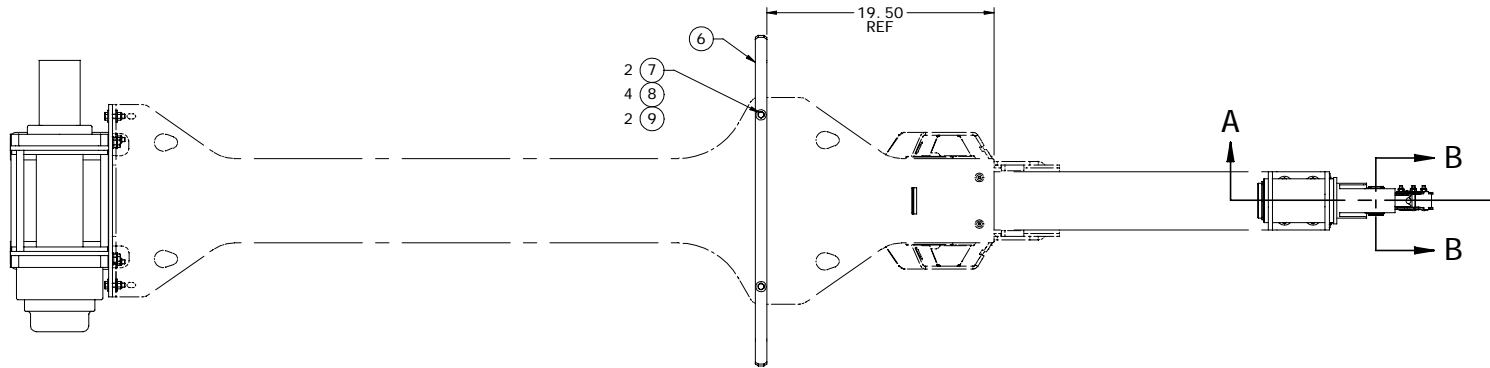
Ball Dr	Bin	QtyPer	UOM	Reference	Effectivity
01	C 3178000436	M WA02	BRACKET WELD WARN WINCH MOUNT	1.000 PC	-
02	3 7970000120	P n01	WINCH 9000# PLANETARY WARN #69180	1.000 PC	-
03	N 7115161250	P 000102 a35	CAPSCREW .38"-16NC X 1.50" HEX HEAD	4.000 PC	-
04	N 7950160162	P A97 x01	FLATWASHER .38" NOM WIDE HARDENED	8.000 pc	-
05	N 7660162601	P 000105 x01	LOCKNUT .38"-16NC GR5 NYLOC	4.000 pc	-
06	B 4062000541	M WBPS	BAR 0.25 x 1.00 x 29.87	1.000 PC	-
07	N 7115151050	P 000105 x01	CAPSCREW .31"-18NC X 1.25" HEX HEAD	2.000 pc	-
08	N 7950150161	P 030602 080304	FLATWASHER .31" NOM WIDE - PLATED	4.000 PC	-
09	N 7660152601	P 022603 030602	LOCKNUT .31"-18NC GR5 HEX NYLOC	2.000 pc	-
10	C 3170000358	M WA02	BOOM WELD NOSE SINGLE	1.000 PC	-
11	N 7115201450	P	CAPSCREW .63"-11NC X 1.75" HEX HEAD	4.000 PC	-
12	N 7950200141	P A100	FLATWASHER .63" NOM NARROW - PLATED	4.000 pc	-
13	N 7660202601	P 080304	LOCKNUT .63"-11NC NYLON INSERT ZINC PLAT	4.000 PC	-
14	C 3249000033	M WA02	SHEAVE SUPPORT WELD	1.000 PC	-
15	N 7754000018	P 000107 b64 MDF	RING #5100-300 RETAINING	1.000 PC	-
16	C 3249000034	M WA03	CABLE GUIDE ASSY	1.000 PC	-
17	3 7809000013	P a21	SHEAVE 6.00" DIA. X 1.38 I.D.	1.000 PC	-
18	A 7082000032	P g01	BEARING 1.38 OD x 1.25 ID x 1.06 IFR	1.000 PC	-
19	A 4691000513	M WA02	PIN 1.25 OD x 2.47	1.000 PC	-
20	A 7754000006	P 000107 b62 c18	RING RETAINING - 1.25" DIA SHAFT	2.000 pc	-
21	C 7701000051	P 100902 c18 f09	PLUG 4.00 x 2.00 x 0.19 TUBE	1.000 PC	-
22	8632000002	R e12	TRIM .25"EDGE-BLACK VINYL #1350-B-2X1/4A	.500 FT	-

*** End of Item ***

*** End of Report ***

WINCH INSTALL SINGLE PLAN MPL-40

DWG NO 2-509-900053 REV 01



THIS DRAWING AND SUBJECT MATTER CONTAINED HEREIN ARE THE SOLE AND EXCLUSIVE PROPERTY OF JERR-DAN CORPORATION. THIS COPY IS LOANED BY THE SUBSCRIBER AND IT IS THE OBLIGATION OF THE SUBSCRIBER TO RETURN IT TO THE ORIGINAL SOURCE WITHIN THE SPECIFIED PERIOD OF TIME. WITHOUT THE EXPRESS WRITTEN PERMISSION OF JERR-DAN CORPORATION, ACCEPTANCE OF THIS COPY SHALL BE CONSIDERED AS ACCEPTANCE OF THE FOREGOING CONDITIONS.	IF IN DOUBT ASK. DO NOT SCALE DRAWING. REMOVE ALL BURRS AND SHARP CORNERS.	TOLERANCES UNLESS OTHERWISE SPECIFIED: 2 FRACTION DEC 01 002 3 PLACE DEC 01 015 1/16 INCH DIA 01 27 1/4 TO MATERIAL THICKNESS	DATE 1/19/05	DRAWN BSK	CHECKED JER	DATE 8/17/05	BY PTO	PICTURE CHANGE TO ITEM #10	1/1/05	2-509-900053	01
--	--	---	--------------	-----------	-------------	--------------	--------	----------------------------	--------	--------------	----

JERR-DAN
An Oshkosh Truck Corporation

TITLE	WINCH INSTALL SINGLE PLAN MPL-40	SHEET	1 OF 1
SCALE	3:16	REVISION	7 #
DATE	1/19/05	DRAWN	BSK

©2005 JERR-DAN



***** Engineering Bill of Materials *****

** Report Excludes Shrinkage.

Effective as of 08/04/05

Item: 3249000034

CABLE GUIDE ASSY

From Item: 3249000034

To Item: 3249000034

Last Changed Date:

Reference:C/3774C

Revision #0/1/3774

Quantity	1	Receive into Whse: MYPT	BIN: WA03	UOM: PC
----------	---	-------------------------	-----------	---------

Ball Dr	Bin	Description	QtyPer	UOM	Reference	Effectivity
-oon Sz Component Type Location			=====	===	=====	=====
01 B 4811000760	M WA02	SHEET 11GA x 8.13 x 9.25	2.000	PC		-
02 A 4706004851	M WA02	PLATE 0.25 x 1.19 x 1.69	2.000	PC		-
03 B 4706004852	M WA02	PLATE 0.25 x 1.56 x 4.66	1.000	PC		-
04 N 7115141664	P	CAPSCREW 0.25-20 UNC x 2.00 CARRIAGE	3.000	PC		-
05 N 7660142604	P 000102 a03	LOCKNUT .25"-20NC NYLOK STAINLESS	3.000	pc		-
06 7950140153	P	FLAT WASHER .25 NOM WIDE S/S	3.000	PC		-

*** End of Item ***

*** End of Report ***

[Empty box]

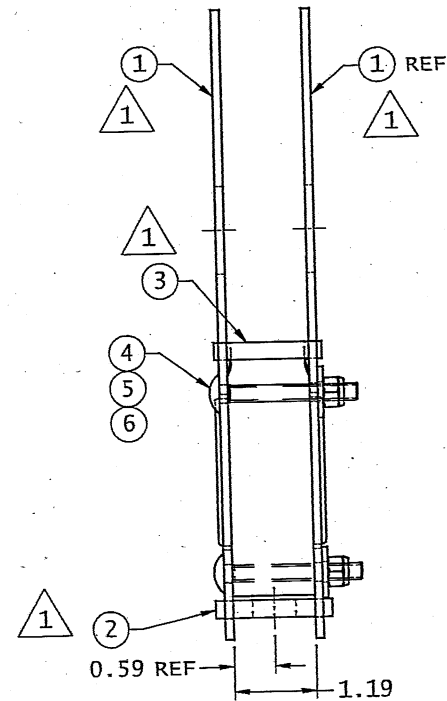
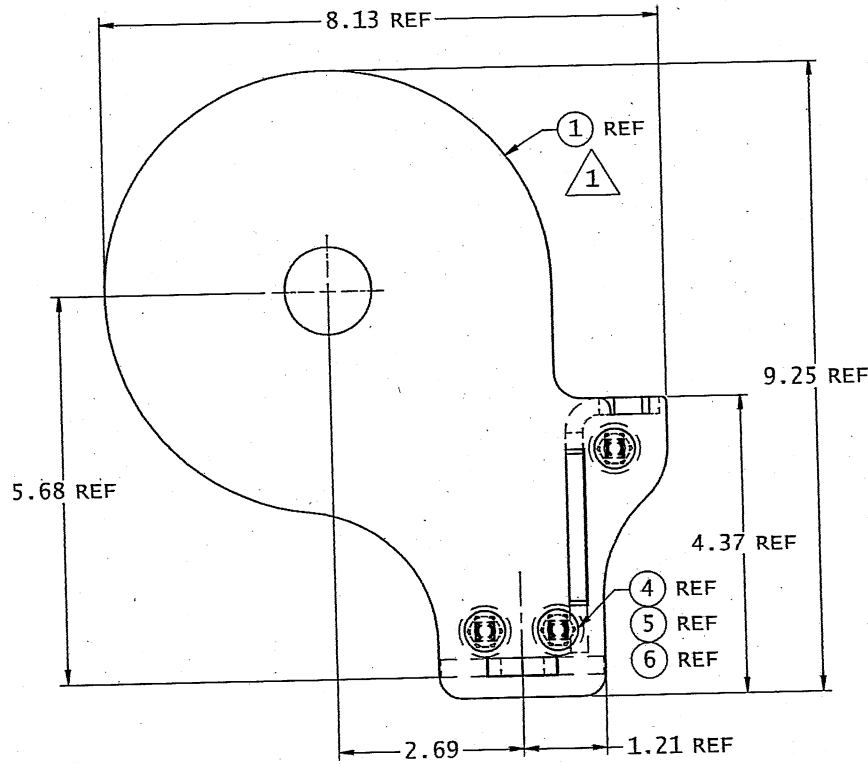
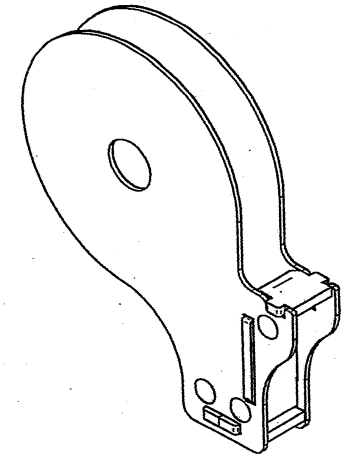
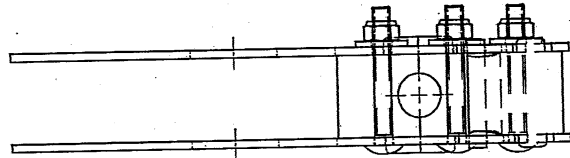
[Empty box]

[Empty box]

[Empty box]

CABLE GUIDE ASSEMBLY

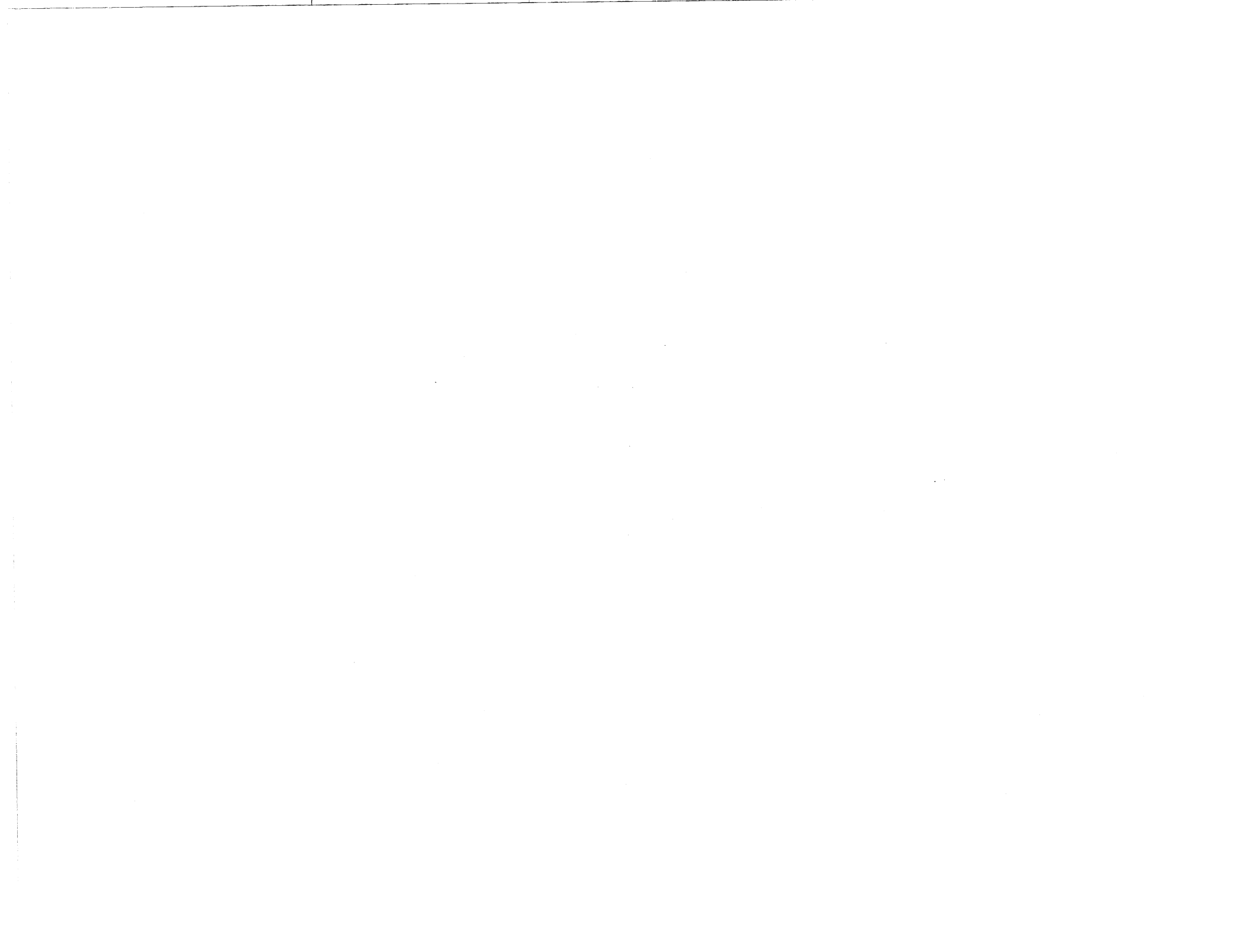
DWG NO 3-249-000034 REV 01



JERR-DAN CORP
1080 RYKES ROAD GREENCASTLE, PA 17225

PROPRIETARY AND CONFIDENTIAL INFORMATION. THIS DRAWING AND SUBJECT MATTER CONTAINED ARE THE SOLE AND EXCLUSIVE PROPERTY OF JERR-DAN CORPORATION. THIS COPY IS LOANED WITH THE UNDERSTANDING THAT IT OR THE SUBJECT MATTER CONTAINED WILL NOT BE DISCLOSED TO ANY OTHER PARTY WITHOUT THE EXPRESS WRITTEN PERMISSION OF JERR-DAN CORPORATION. ACCEPTANCE OF THIS COPY SHALL BE CONSIDERED AS ACCEPTANCE OF THE FOREGOING CONDITION.	IF IN DOUBT ASK. DO NOT SCALE DRAWING. REMOVE ALL BURRS AND SHARP CORNERS.	MAT'L SEE B/M	SHEET 1 OF 1
		WEIGHT c 3.75#	TITLE CABLE GUIDE ASSEMBLY
TOLERANCES UNLESS OTHERWISE SPECIFIED 2 PLACE DEC ±0.062 3 PLACE DEC ±0.015 ANGLE DIM ±0.5° N/A TO MATERIAL THICKNESS	SCALE 0.75	ERN 3774	SIZE DWG NO 3-249-000034
DATE 12/20/04	DRAWN SMB	REV C	REV 01


REV	DATE	BY	DESCRIPTION
01	12/20/04	ERN	PICTURE CHANGE TO ITEMS 1, 2 & 3, REMOVED NYLATRON CABLE GUIDE 4-249-000005, ITEM 4 7-111-141664 WAS 7-114-141430



Winch Cable

CABLE 3/8 DIA X 110 W/ 2T HOOK 6X25 EIPS DWG NO 7-248-000111 REV 00

REV	ZONE	ERN	DESCRIPTION	DATE	BY
1		3774	NOM. BREAKING STRENGTH WAS 12,000#	1/5/05	BSK

CABLE 3/8" DIA. X 110' LONG (6X25 EIPS RRL IWRC)
 EXTRA IMPROVED PLOW STEEL, RIGHT REGULAR LAY,
 INDEPENDENT WIRE ROPE CORE, BRIGHT WIRE ROPE ASSEMBLY
 NOMINAL BREAKING STRENGTH 15,100# 

SUPPLIED WITH A GALVANIZE 2-TON RATED WLL (PROOF LOAD
 2X WLL) EYE HOOK W/ SAFETY LATCH (#S320C OR EQUIVALENT)

ATTACHED WITH FLEMISH EYE CONSTRUCTION, HEAVY DUTY
 THIMBLE AND STEEL SLEEVE

JERR-DAN CORP
 1080 HYKES ROAD GREENCASTLE, PA 17225

<p><u>PROPRIETARY AND CONFIDENTIAL INFORMATION:</u></p> <p>THIS DRAWING AND SUBJECT MATTER CONTAINED ARE THE SOLE AND EXCLUSIVE PROPERTY OF JERR-DAN CORPORATION. THIS COPY IS LOANED WITH THE UNDERSTANDING THAT IT OR THE SUBJECT MATTER CONTAINED WILL NOT BE DISCLOSED TO ANY OTHER PARTY WITHOUT THE EXPRESS WRITTEN PERMISSION OF JERR-DAN CORPORATION. ACCEPTANCE OF THIS COPY SHALL BE CONSTRUED AS ACCEPTANCE OF THE FORGOING CONDITION.</p>	<p>IF IN DOUBT ASK. DO NOT SCALE DRAWING. REMOVE ALL BURRS AND SHARP CORNERS.</p>	<p>MAT'L SEE ABOVE</p>	<p>SHEET 1 OF 1</p>	
	<p>TOLERANCES UNLESS OTHERWISE SPECIFIED 2 PLACE DEC ±0.062 3 PLACE DEC ±0.015 ANGLE DIM ±0.5° N/A TO MATERIAL THICKNESS</p>	<p>TITLE CABLE 3/8 DIA X 110 W/ 2T HOOK 6X25 EIPS</p>	<p>SCALE NONE</p>	<p>WEIGHT ? #</p>
		<p>DATE 10/7/04</p>	<p>ERN 3759</p>	<p>SIZE A</p>
		<p>DRAWN BSK</p>	<p>DWG NO 7-248-000111</p>	<p>REV 00</p>

Underlift Installation



***** Engineering Bill of Materials *****

** Report Excludes Shrinkage.

Effective as of 12/21/05

Item: 2170000068

U/L BOOM INSTL HYD FIXED GRID (NO LUBE)

From Item: 2170000068

To Item: 2170000068

Reference:D/3774B

Last Changed Date:

Revision #0/4/3907

BIN: WA03

UOM: PC

Quantity 1

Receive into Whse: MYPT

Ball Dr

Bin

-oon Sz Component Type Location

Description

QtyPer UOM

Reference

Effectivity

=== == =====

=====

=====

=====

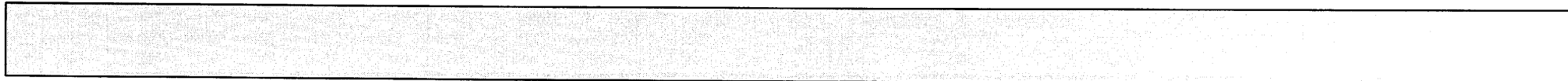
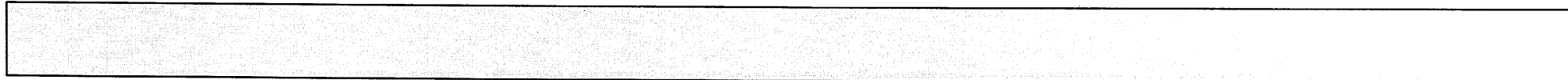
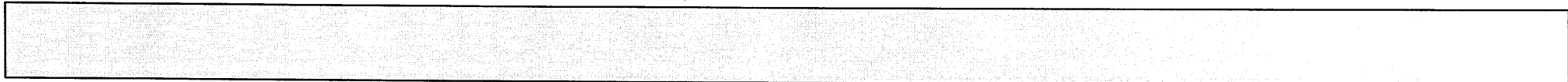
=====

=====

01	D	3170000368	M	WA00	BOOM ASSY HYD FIXED GRID UL (NO-LUBE)	1.000	PC		-
02	C	3320000150	M	WA00	CYLINDER ASSY 4.00/2.00 X 27.88-44.94	1.000	PC		-
03	B	3691000242	M	WA00	PIN WELD 2.00 DIA x 7.88	2.000	PC		-
04	B	3691000236	M	WA02	PIN WELD 2.00 DIA x 5.00	1.000	PC		-
05	N	7950160161	P	000104 14ASB M	FLATWASHER .38" NOM WIDE - PLATED	3.000	PC		-
06	N	7115160850	P	000102 AD00B M	CAPSCREW .38"-16NC x 1.00" HEX HEAD	3.000	PC		-
07	N	7950160000	P	000104 022504	LOCK WASHER .38"ID - PLATED	3.000	PC		-

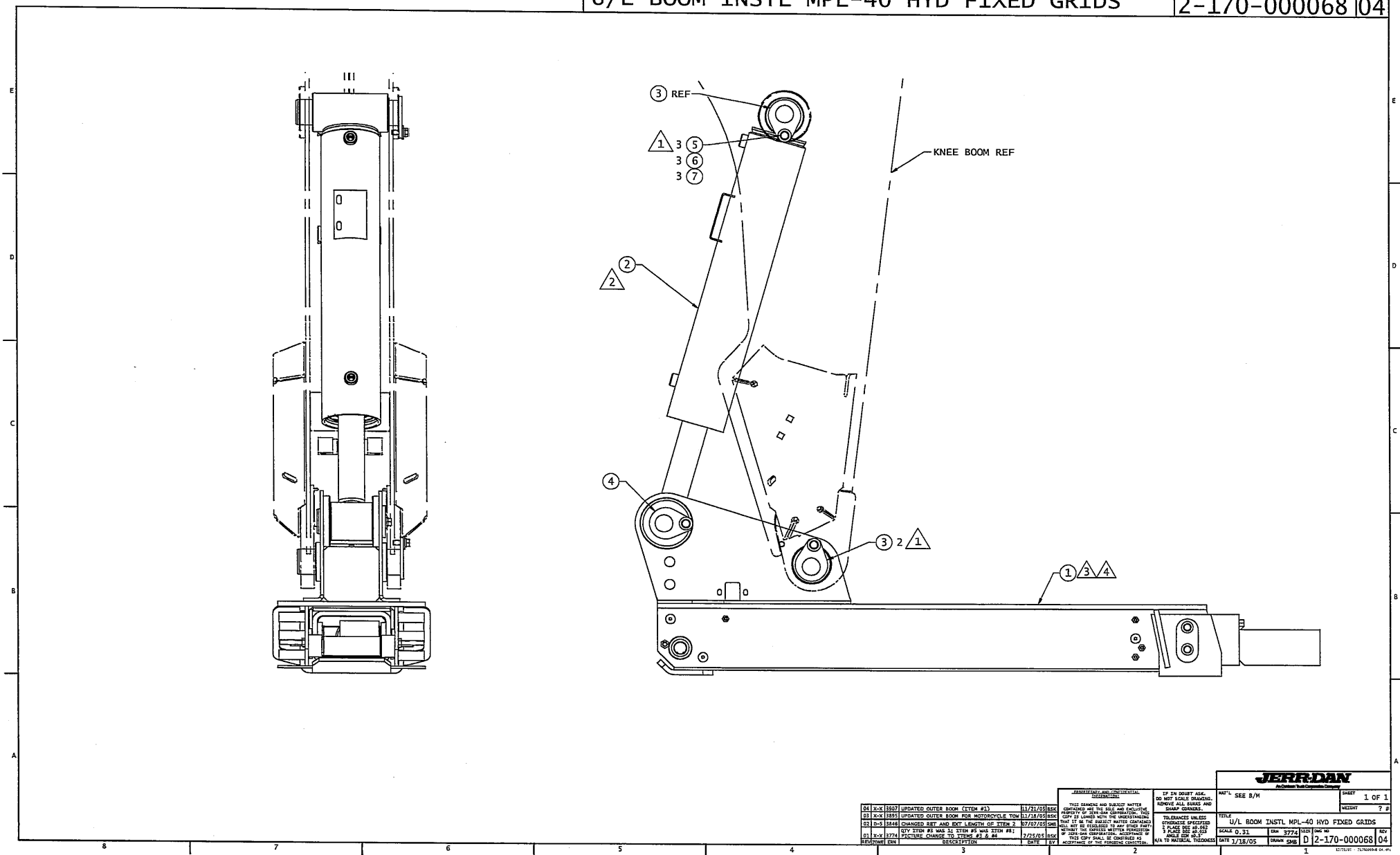
*** End of Item ***

*** End of Report ***



U/L BOOM INSTL MPL-40 HYD FIXED GRIDS

DWG NO 2-170-000068 REV 04



REV	DATE	BY	DESCRIPTION
04	11/21/05	BSK	UPDATED OUTER BOOM (ITEM #1)
03	11/21/05	BSK	UPDATED OUTER BOOM FOR MOTORCYCLE TOW
02	07/27/05	SM	CHANGED REF AND EXT LENGTH OF ITEM 2
01	2/25/05	BSK	ISSUE CHANGE TO ITEM #1 & #2

<p>JERR-DAN A Division of Tenneco Corporation</p>		<p>IF IN DOUBT ASK DO NOT SCALE DRAWING. REMOVE ALL DIMS AND DIMAP CORNERS.</p>	<p>WEIGHT 7 P</p>
<p>THIS DRAWING AND SUBJECT MATTER HEREIN IS THE PROPERTY OF JERR-DAN CORPORATION. THIS COPY IS LOANED TO THE RECIPIENT. WHAT IS ON THIS SUBJECT MATTER CONTAINED HEREIN IS TO BE RETURNED TO THE ISSUING PARTY WITHIN THE COMPANY WITH ALL INFORMATION HEREON IS TO BE KEPT CONFIDENTIAL AND NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION SYSTEMS WITHOUT THE WRITTEN PERMISSION OF JERR-DAN CORPORATION.</p>		<p>SCALE 0.31</p>	<p>DATE 1/18/05</p>
<p>TITLE U/L BOOM INSTL MPL-40 HYD FIXED GRIDS</p>		<p>DATE 1/18/05</p>	<p>REV 04</p>
<p>SCALE 0.31</p>		<p>DATE 1/18/05</p>	<p>REV 04</p>

***** Engineering Bill of Materials *****

** Report Excludes Shrinkage.

Effective as of 12/21/05

Item: 3170000368

BOOM ASSY HYD FIXED GRID UL (NO-LUBE)

From Item: 3170000368

To Item: 3170000368

Reference:D/3775

Last Changed Date:11/21/05

Revision #A/2/3907

BIN: WA00

UOM: PC

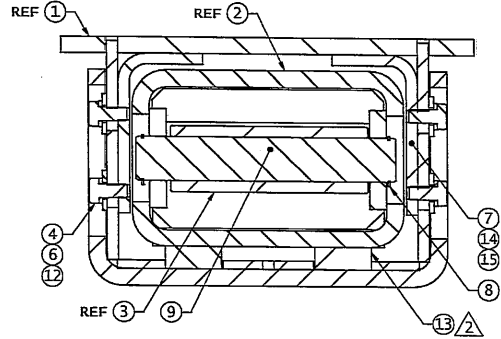
Quantity	1	Receive into Whse: MYPT		Reference:D/3775			Last Changed Date:11/21/05
Ball Dr	Bin			Revision #A/2/3907			
-oon Sz Component Type Location	Description	QtyPer	UOM	Reference	Effectivity		
==== == =====	=====	=====	===	=====	=====		
01 D 3170000367	M WA00	BOOM WELD BASE FIXED GRID UL (NO-LUBE)	1.000	PC		-	
02 C 3170000346	M WA00	BOOM WELD INNER FIXED GRID UL (NO-LUBE)	1.000	PC		-	
03 C 3320000148	M 110101 WA00	CYLINDER ASSY 2.13/1.00 X 36.00-65.12	1.000	PC		-	
04 N 7950150161	P 022603 080304	FLATWASHER .31" NOM WIDE - PLATED	4.000	PC		-	
05 B 4679000046	P 020105 050105	PAD 0.38 X 3.00 X 5.94 WEAR	1.000	PC		-	
06 N 7105150550	P 000102 WA00D	CAPSCREW .31"-24NF X .63" HEX HEAD	4.000	PC		-	
07 B 4062000455	M 102001 WBPS	BAR 0.25 x 1.00 x 5.00	2.000	PC		-	
08 * 7754000019	P 000107 b65 WA0	RING 1.00" SHAFT DIA RETAINING	2.000	pc		-	
09 B 4691000307	M 021006 WA00	PIN 1.00 DIA x 5.75	1.000	ea		-	
10 B 4691000308	M 021006 WA00	PIN 1.00 DIA x 6.62	1.000	ea		-	
11 N 7754000056	P 080306 c19	SNAP RING 1" INTERNAL	2.000	pc		-	
12 N 7950150000	P 080304 MDF1B M	WASHER .31" NOM REG LOCK - PLATED	4.000	PC		-	
13 A 4679000213	M 022404 WA00	PAD 0.50 x 1.25 x 3.50 NSM NYLATRON	2.000	PC	3907	12/12/05-	
14 A 4812000067	M 022305 WA00	UNDERLIFT SHIM 14GA X .94 X 2.94	2.000	PC		-	
15 A 4812000068	M 022305 WA00	SHIM 16GA x 0.94 x 2.94	2.000	PC		-	

*** End of Item ***

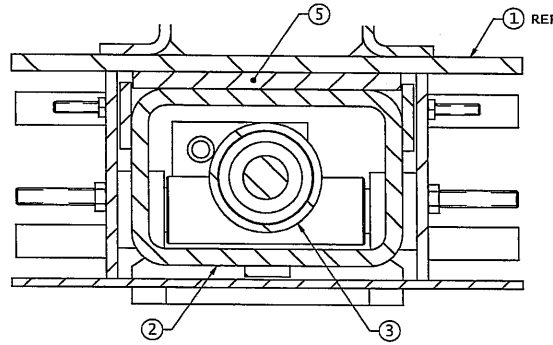
*** End of Report ***

BOOM ASSY HYD FIXED GRID UL (NO-LUBE)

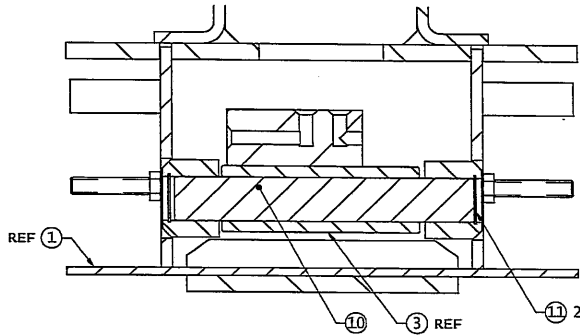
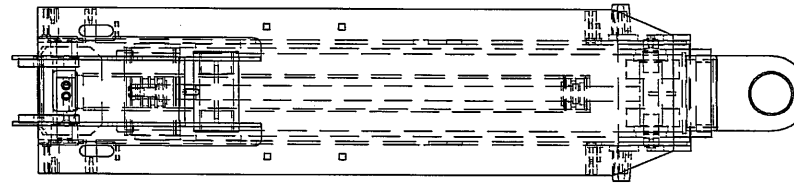
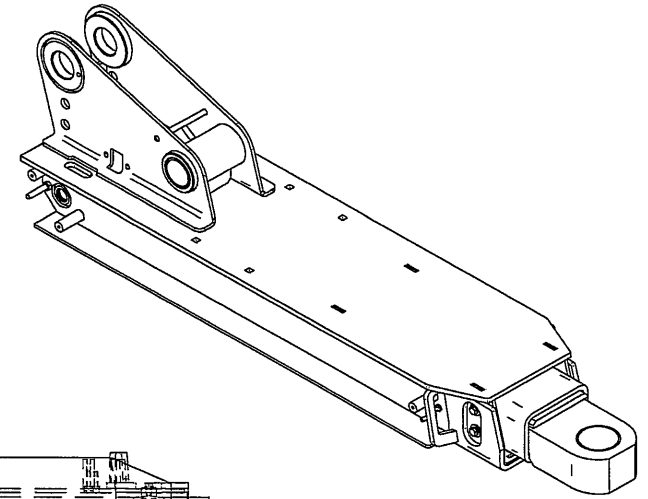
DWG NO 3-170-000368 REV 02



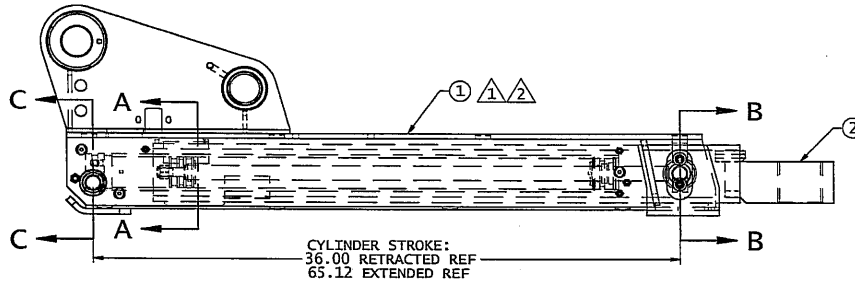
SECTION B-B
1:1.33



SECTION A-A
1:1.33



SECTION C-C
1:1.33



NOTE:

BRUSH A LIBERAL COAT OF ANTI-SEIZE COMPOUND TO ALL PIN & BUSHING, METAL TO METAL, CONTACT SURFACES UPON INSTALLATION.

03 120 11501 REVISED ITEM #1 - ITEM #14 MFG. QTY. 1. DRAWING: 11/18/2018
03 120 11501 UPDATED ITEM #1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14. DATE: 11/17/2018
REVISED FOR: [REDACTED] DATE: 11/17

PREPARED AND CHECKED BY: [REDACTED]
DESIGNED BY: [REDACTED]
IF IN DOUBT ASK. DO NOT SCALE DRAWING.
REMOVE ALL BURRS AND SHARP CORNERS.
TOLERANCES UNLESS OTHERWISE SPECIFIED:
3 PLACE DEC OR LESS
4 PLACE DEC OR LESS
N/A TO METRIC TOLERANCES

JERRI-DAN CORP 1000 SHAW BLVD. GREENWICH, GA 30759		MAT'L: SEE B/M	SHEET: 1 OF 1
TITLE: BOOM ASSY HYD FIXED GRID UL (NO-LUBE)		DESIGN: 3776	REVISION: 7 B
SCALE: 1:4	DATE: 12/28/04	DRAWN: STK	REV: D
DWG NO: 3-170-000368		REV: 02	

***** Engineering Bill of Materials *****

** Report Excludes Shrinkage.
Effective as of 07/25/05

From Item: 3320000150
To Item: 3320000150
Last Changed Date: 09/28/0

Item: 3320000150

CYLINDER ASSY 4.00/2.00 X 28.19-45.25

Reference: C/3774B

Revision #0/1/3774

BIN: WA00

UOM: PC

Quantity 1 Receive into Whse: MYPT

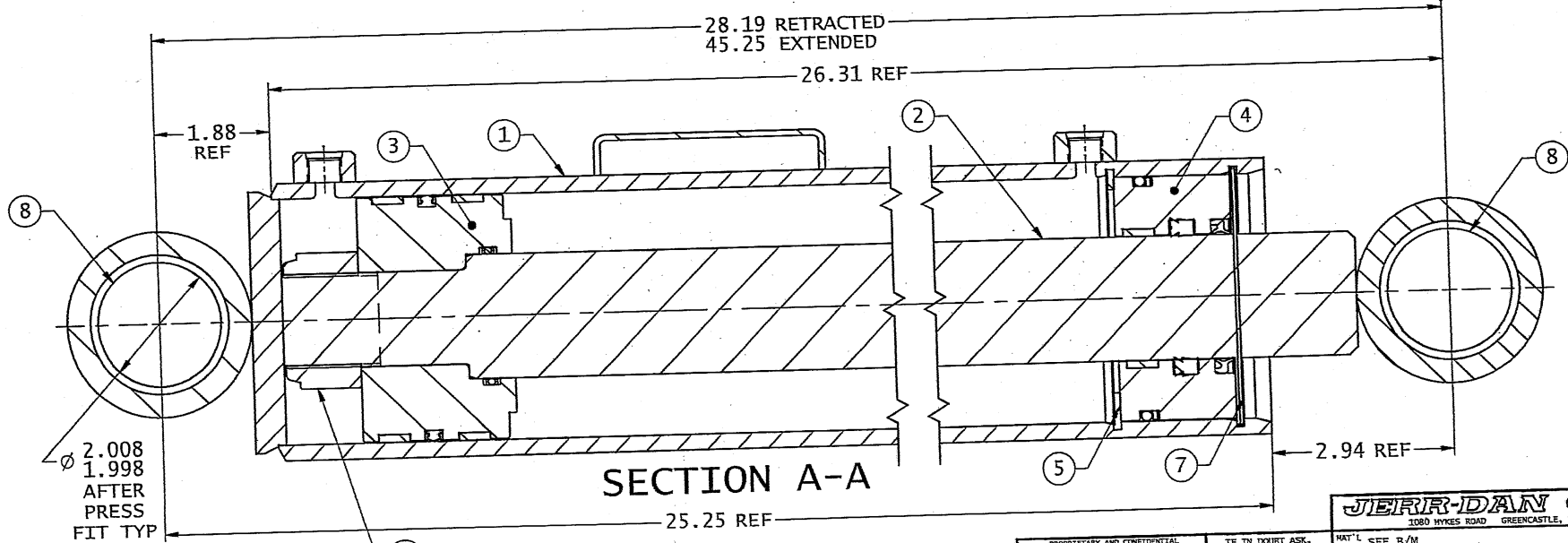
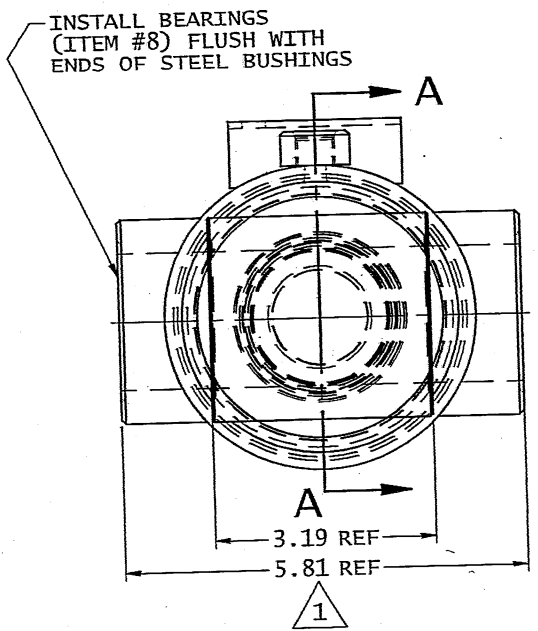
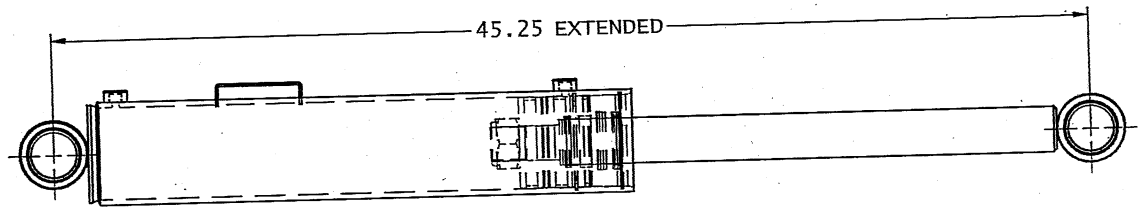
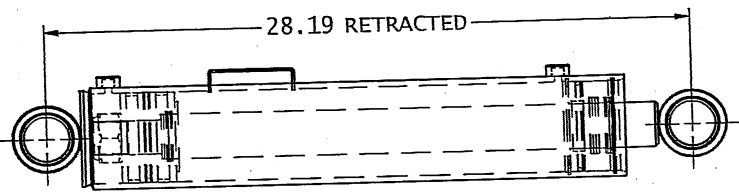
Ball Dr	Bin	Description	QtyPer	UOM	Reference	Effectivity
-oon Sz Component Type Location			=====	===	=====	=====
01 D 3071000135	M CC05	BARREL WELD "3150"	1.000	PC		-
02 C 3763000143	M CC05	ROD WELD "3150"	1.000	PC		-
03 B 3698000002	P	PISTON ASSY 4.00 BORE x 2.00 ROD	1.000	PC		-
04 B 3553000012	P	HEAD ASSY 4.00 BORE x 2.00 ROD	1.000	PC		-
05 A 7754000013	P b63	RING RETAINING 4" #1300-400	1.000	PC		-
06 A 7661000035	P 000105 d07	NUT 1.50"-12NF NYLON INSERT HEX	1.000	PC		-
07 7754000028	P b66	RING RETAINING SMALLY WHM 400	1.000	PC		-
08 A 7082000029	P g01	BEARING 2.25 OD X 2.00 ID X 1.50 IFR	4.000	PC		-

*** End of Item ***

*** End of Report ***

CYLINDER ASSY 4.00/2.00 X 28.19-45.25

DWG NO 3-320-000150 REV 01



NOTE:
PLUG PORTS FOR STORAGE

INSTALL NUT WITH
LOCTITE 262
TORQUE NUT TO
740 TO 780 FT-LBS

01	1-C	3/7/4	UP DATED VIEWS PER REVS: 5.81 WAS 6.00	3/8/05	BSK
REV	NO	DATE	DESCRIPTION	DATE	BY

PROPRIETARY AND CONFIDENTIAL
INFORMATION.
THIS DRAWING AND SUBJECT MATTER
CONTAINED ARE THE SOLE AND EXCLUSIVE
PROPERTY OF JERR-DAN CORPORATION. THIS
COPY IS LOANED WITH THE UNDERSTANDING
THAT IT OR THE SUBJECT MATTER CONTAINED
HEREIN WILL NOT BE DISCLOSED TO ANY OTHER PARTY
WITHOUT THE EXPRESS WRITTEN PERMISSION
OF JERR-DAN CORPORATION. ACCEPTANCE OF
THIS COPY SHALL BE CONSTRUED AS
ACCEPTANCE OF THE FORGING CONDITION.

IF IN DOUBT ASK.
DO NOT SCALE DRAWING.
REMOVE ALL BURRS AND
SHARP CORNERS.

TOLERANCES UNLESS
OTHERWISE SPECIFIED
2 PLACE DEC ±0.002
3 PLACE DEC ±0.015
ANGLE DD ±0.5°
N/A TO MATERIAL THICKNESS

JERR-DAN CORP
1080 HYKES ROAD GREENCASTLE, PA 17225

TITLE	CYLINDER ASSY 4.00/2.00 X 28.19-45.25	SHEET	1 OF
SCALE	3:4	WEIGHT	E 68.
DATE	09/28/04	DATE	07/25/05
DATE	09/28/04	DATE	07/25/05
DATE	09/28/04	DATE	07/25/05

07/25/05 - 332000150

***** Engineering Bill of Materials for ALTERNATE Route *****

** Report Excludes Shrinkage.

Effective as of 07/26/05

Item: 3698000002

PISTON ASSY 4.00 BORE x 2.00 ROD

Reference: B/2962-A

From Item: 3698000002

To Item: 3698000002

Last Changed Date: 08/11/00

Alternate Route #A215016	Revision #0/0	UOM: PC
Quantity 1	Receive into Whse: HYKS	BIN:

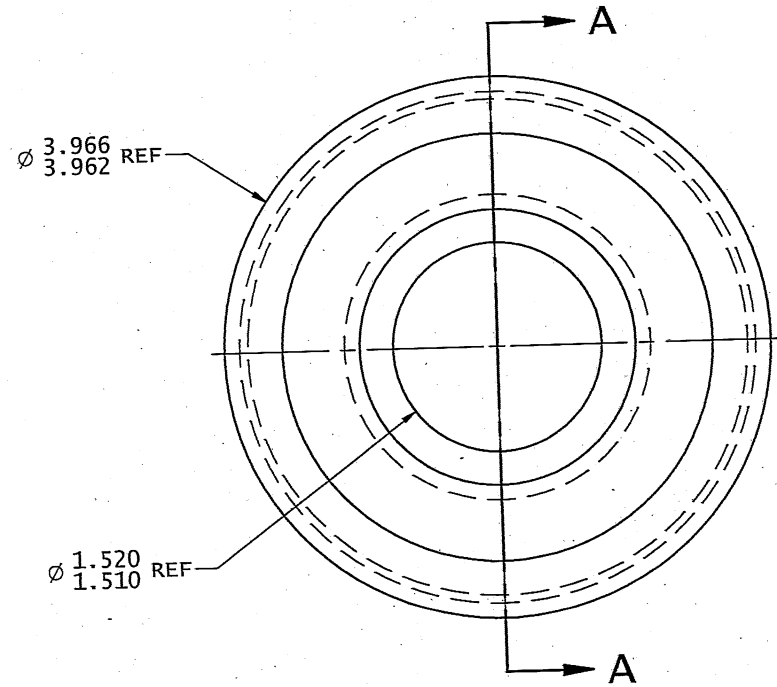
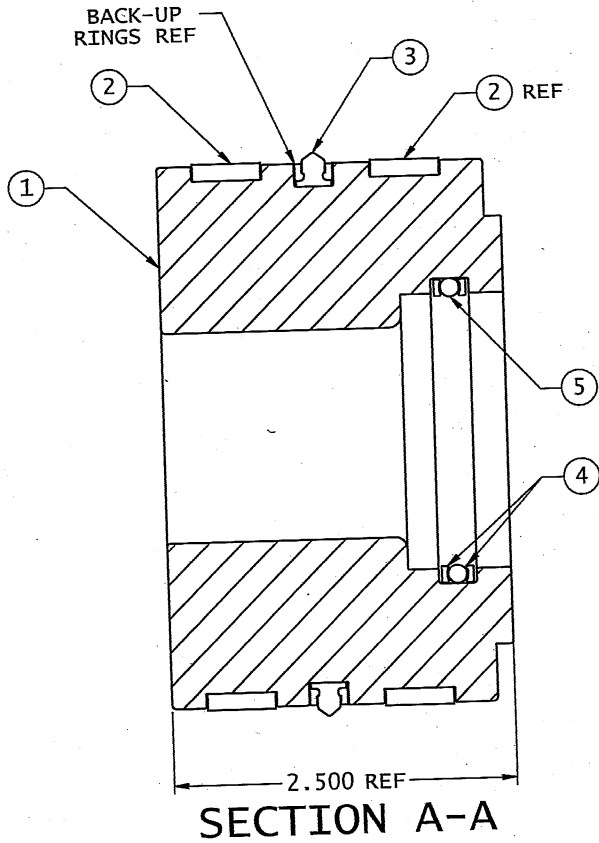
Seq	Ball Dr	Bin	Description	QtyPer	UOM	Reference	Effectivity
No.	-oon	Sz	Component Type	Location			
1	01	B	4698000008	P 1010	1.000	pc	-
2	02	A	7754000011	P J38	2.000	pc	-
3	03	A	7796000065	P	1.000	PC	-
4	04	N	7755226609	P	2.000	pc	-
5	05	N	7755226000	P	1.000	pc	-

*** End of Item ***

*** End of Report ***

PISTON ASSY (4.00 BORE CYLINDER)

DWG NO 3-698-000002 REV 02



JERR-DAN CORP
1080 HYPES ROAD GREENCASTLE, PA 17225

<small>PROPRIETARY AND CONFIDENTIAL INFORMATION</small> THIS DRAWING AND SUBJECT MATTER CONTAINED ARE THE SOLE AND EXCLUSIVE PROPERTY OF JERR-DAN CORPORATION. THIS COPY IS LOANED WITH THE UNDERSTANDING THAT IT OR THE SUBJECT MATTER CONTAINED WILL NOT BE DISCLOSED TO ANY OTHER PARTY WITHOUT THE EXPRESS WRITTEN PERMISSION OF JERR-DAN CORPORATION. ACCEPTANCE OF THIS COPY SHALL BE CONSIDERED AS ACCEPTANCE OF THE FORGOING CONDITION.	<small>IF IN DOUBT ASK DO NOT SCALE DRAWING. REMOVE ALL BURRS AND SHARP CORNERS.</small>	MAT'L SEE B/M	SHEET 1 OF 1
		WEIGHT E 6.00#	
<small>TOLERANCES UNLESS OTHERWISE SPECIFIED</small> 2 PLACE DEC ±0.052 3 PLACE DEC ±0.013 ANGLE DIM ±0.5° N/A TO MATERIAL THICKNESS		TITLE PISTON ASSY (4.00 BORE CYLINDER)	REV
SCALE 3:2	ERN 2962	DATE 02/09/00	DRAWN VLW C 3-698-000002 02

02	ALL	3690	REDRAWN IN SOLID EDGE (3D/2D)	02/18/04	STK
REV	ZONE	ERN	DESCRIPTION	DATE	BY



***** Engineering Bill of Materials for ALTERNATE Route *****

** Report Excludes Shrinkage.

Effective as of 08/04/05

Item: 3553000012

HEAD ASSY 4.00 BORE x 2.00 ROD

From Item: 3553000012

To Item: 3553000012

Last Changed Date: 08/11/00

Reference: B/2962-A

Revision #0/0

BIN:

UOM: PC

Alternate Route #A215022

Quantity 1

Receive into Whse: HYKS

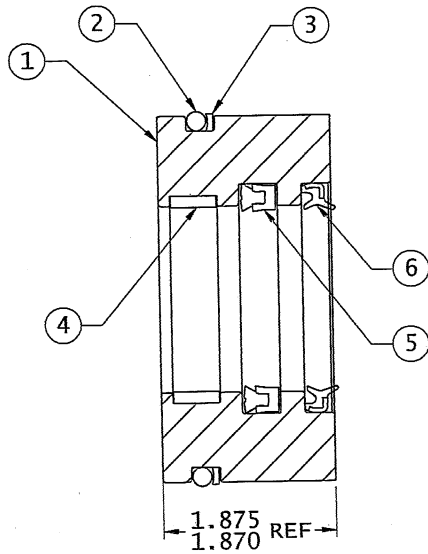
Seq	Ball	Dr	No.	-oon	Sz	Component	Type	Bin	Location	Description	QtyPer	UOM	Reference	Effectivity
=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====
1	01	B	4553000009	P	1010	HEAD 4.00 BORE X 2.00 ROD X 1.88 LG					1.000	pc		-
2	02	N	7755342000	P		RING "O" HEAD GLAND 4.00" BORE					1.000	pc		-
3	03	A	7755342609	P		RING BACK-UP HEAD GLAND 4.00" BORE					1.000	pc		-
4	04	A	7754000012	P		RING WEAR HEAD 2.00" ROD					1.000	pc		-
5	05	A	7796000025	P		SEAL ROD 2.00"					1.000	pc		-
6	06	A	7796000011	P		SEAL WIPER 2.00" ROD					1.000	pc		-

*** End of Item ***

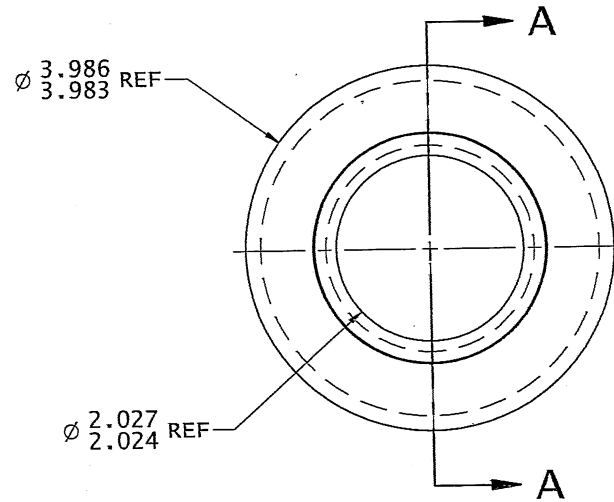
*** End of Report ***

HEAD ASSY (4.00 BORE CYLINDER)

DWG NO 3-553-0012 REV 02



SECTION A-A



JERR-DAN CORP
1080 HYKES ROAD GREENCASTLE, PA 17225

PROPRIETARY AND CONFIDENTIAL INFORMATION. THIS DRAWING AND SUBJECT MATTER CONTAINED ARE THE SOLE AND EXCLUSIVE PROPERTY OF JERR-DAN CORPORATION. THIS COPY IS LOANED WITH THE UNDERSTANDING THAT IT OR THE SUBJECT MATTER CONTAINED WILL NOT BE DISCLOSED TO ANY OTHER PARTY WITHOUT THE EXPRESS WRITTEN PERMISSION OF JERR-DAN CORPORATION. ACCEPTANCE OF THIS COPY SHALL BE CONSTRUED AS ACCEPTANCE OF THE FORGING CONDITION.	IF IN DOUBT ASK. DO NOT SCALE DRAWING. REMOVE ALL BURS AND SHARP CORNERS.	TOLERANCES UNLESS OTHERWISE SPECIFIED 2 PLACE DEC ±0.002 3 PLACE DEC ±0.015 ANGLE DIM ±0.5° N/A TO MATERIAL THICKNESS	MAT'L SEE B/M		SHEET 1 OF 1
			TITLE HEAD ASSY (4.00 BORE CYLINDER)		WEIGHT A 3.98#
02 ALL 3690 REDRAWN IN SOLID EDGE (3D/2D)	02/18/04 STK	DATE BY	SCALE 1:1	ERN 2962	SIZE DWG NO
REVIZONE ERN	DESCRIPTION		DATE 2/3/00	DRAWN VLW	C 3-553-000012 REV 02

***** Engineering Bill of Materials *****

** Report Excludes Shrinkage.

Effective as of 07/25/05

Item: 3320000148

CYLINDER ASSY 2.13/1.00 X 36.00-65.12

From Item: 3320000148

To Item: 3320000148

Last Changed Date:

Reference: C/3775

Revision #0/0

BIN: 110101

UOM: PC

Quantity

1

Receive into Whse: SERV

Ball Dr

Bin

-oon Sz

Component

Type

Location

Description

QtyPer UOM

Reference

Effectivity

01

D 3071000133

M CC05

BARREL WELD "3148"

1.000 PC

-

02

C 3763000142

M CC05

ROD WELD "3148"

1.000 PC

-

03

B 3698000005

P

PISTON ASSY 2.125 BORE x 1.00 ROD

1.000 PC

-

04

C 3553000015

P

HEAD ASSY 2.125 BORE x 1.00 ROD

1.000 PC

-

05

A 7754000001

P a07 b62

RING #1300-212 RETAINING

1.000 pc

-

06

A 7661000037

P A118

NUT .63"-18NF NYLON INSERT HEX

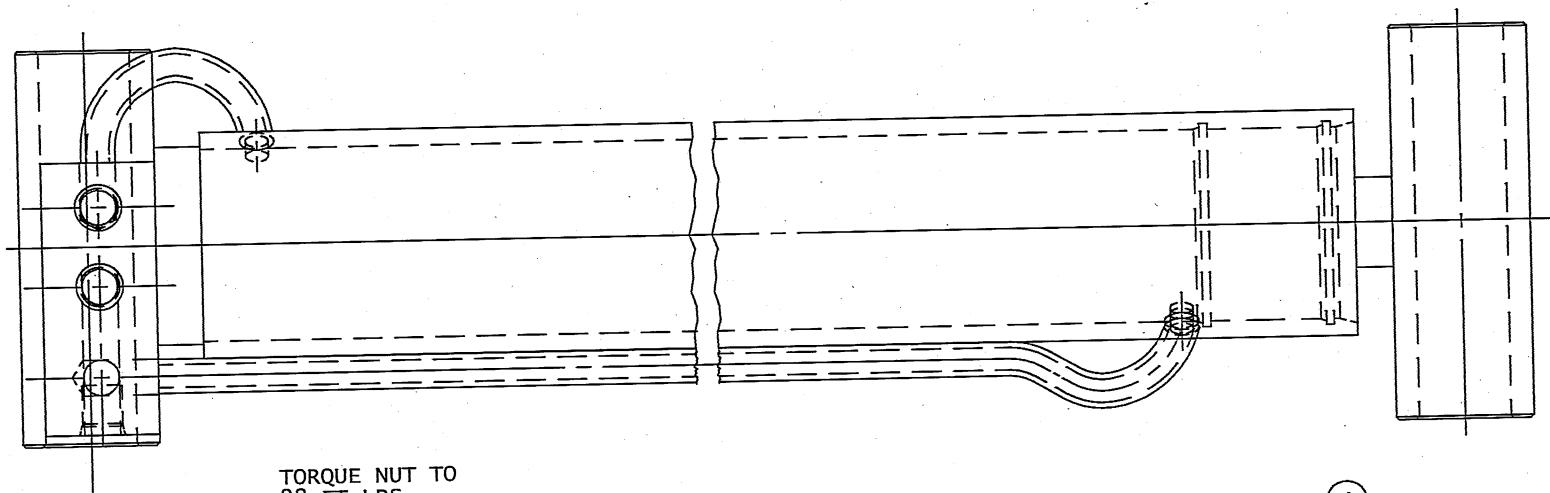
1.000 PC

-

*** End of Item ***

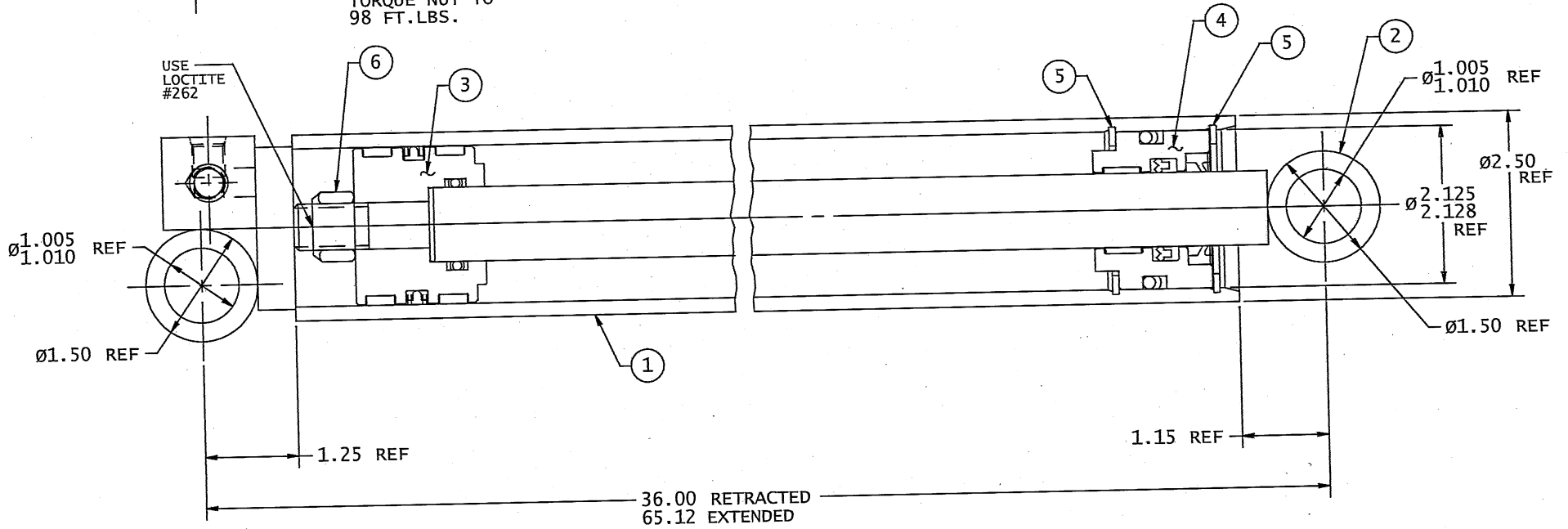
*** End of Report ***

GEN NOTES
DO NOT SCALE DRAWING
BREAK SHARP CORNERS



TORQUE NUT TO
98 FT.LBS.

USE
LOCTITE
#262



NOTE:
PLUG PORTS FOR STORAGE

REV		ERN	DESCRIPTION	DATE	DRN	TOLERANCES (EXCEPT AS NOTED) DECIMAL 2 PLACE .002 3 PLACE .013 ANGULAR $\pm 0^{\circ} 30'$ <small>LIMITS ARE TO BE NON-ACCUMULATIVE PER A LINE OF DIMENSIONS.</small>		JERR-DAN CORP. GREENCASTLE, PA.		MAT'L SEE B/M SCALE 1:1 DATE 12/27/04	DRAWN BY STK ERN NO. 3775 ORIGINAL
						TITLE CYLINDER ASSY 2.13/1.00		DRAWING NO. C3-320-000148			

***** Engineering Bill of Materials for ALTERNATE Route *****

** Report Excludes Shrinkage.

Effective as of 07/25/05

Item: 3698000005

PISTON ASSY 2.125 BORE x 1.00 ROD

Reference: B/2962-A

From Item: 3698000005

To Item: 3698000005

Last Changed Date: 08/11/00

Alternate Route #A215019

Quantity 1

Receive into Whse: HYKS

Revision #A/U

BIN:

UOM: PC

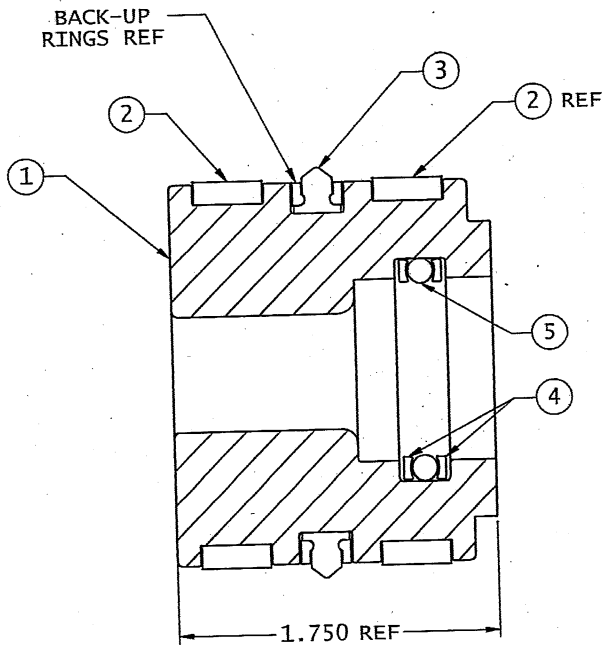
Seq	Ball Dr	No.	-oon	Sz	Component	Type	Bin	Location	Description	QtyPer	UOM	Reference	Effectivity
=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====
1	01	B	4698000011	P	1010				PISTON 2.13 BORE X 1.00 ROD X 1.75 LG	1.000	pc		-
2	02	N	7754000030	P					RING WEAR PISTON 2.125" BORE	2.000	pc		-
3	03	A	7796000062	P					SEAL PISTON LOCKING T 2.125" BORE	1.000	PC		-
4	04	N	7755214609	P					RING BACK-UP PISTON 1.00" ROD	2.000	pc		-
5	05	N	7755214000	P					RING "O" PISTON 1.00" ROD	1.000	pc		-

*** End of Item ***

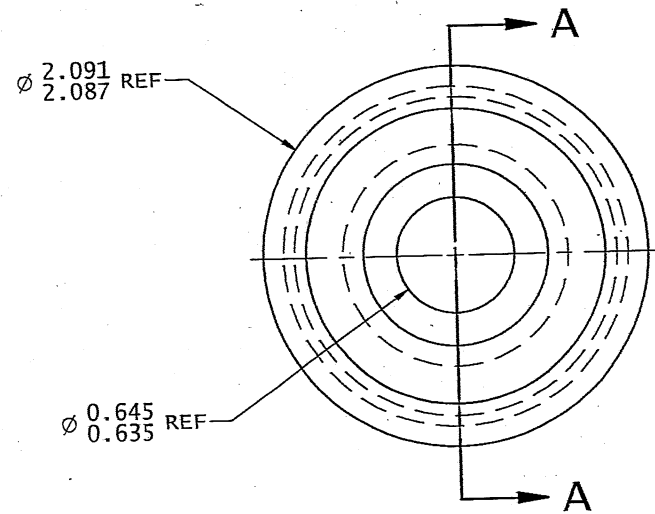
*** End of Report ***

PISTON ASSY (2.13 BORE CYLINDER)

DWG NO 3-698-000005 REV 01



SECTION A-A



01	ALL	3690	REDRAWN IN SOLID EDGE (3D/2D)	02/18/04	STK
REV	ZONE	ERN	DESCRIPTION	DATE	BY

PROPRIETARY AND CONFIDENTIAL
 THIS DRAWING AND SUBJECT MATTER CONTAINED ARE THE SOLE AND EXCLUSIVE PROPERTY OF JERR-DAN CORPORATION. THIS COPY IS LOANED WITH THE UNDERSTANDING THAT IT OR THE SUBJECT MATTER CONTAINED WILL NOT BE DISCLOSED TO ANY OTHER PARTY WITHOUT THE EXPRESS WRITTEN PERMISSION OF JERR-DAN CORPORATION. ACCEPTANCE OF THIS COPY SHALL BE CONSTRUED AS ACCEPTANCE OF THE FORGING CONDITION.

IF IN DOUBT ASK.
 DO NOT SCALE DRAWING.
 REMOVE ALL BURRS AND SHARP CORNERS.

TOLERANCES UNLESS OTHERWISE SPECIFIED
 2 PLACE DEC ±0.002
 3 PLACE DEC ±0.015
 ANGLE DIM ±0.3°
 N/A TO MATERIAL THICKNESS

JERR-DAN CORP 1080 HYMES ROAD GREENCASTLE, PA 17225		SHEET 1 OF 1	
MATERIAL SEE B/M		WEIGHT A 1.06#	
TITLE PISTON ASSY (2.13 BORE CYLINDER)			
SCALE 2:1	ERN 2962	SIZE C	DWG NO 3-698-000005
DATE 02/10/00	DRAWN VLV	REV 01	

***** Engineering Bill of Materials for ALTERNATE Route *****

** Report Excludes Shrinkage.

Effective as of 07/25/05

Item: 3553000015

HEAD ASSY 2.125 BORE x 1.00 ROD

Reference: C/2962-A

From Item: 3553000015

To Item: 3553000015

Last Changed Date: 08/11/00

Alternate Route #A215025

Quantity 1

Receive into Whse: HYKS

Revision #0/0

BIN:

UOM: PC

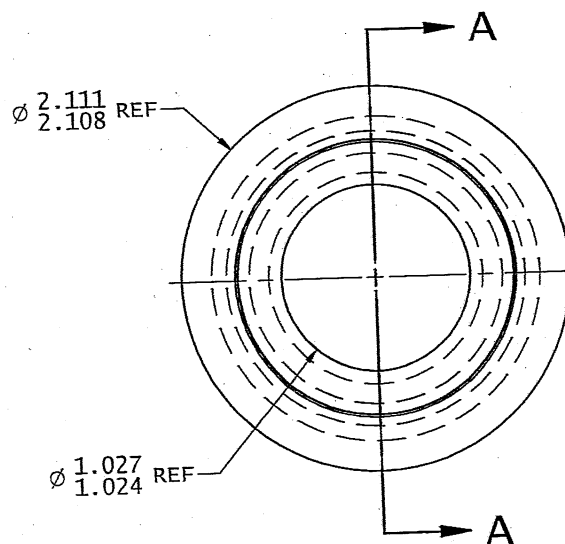
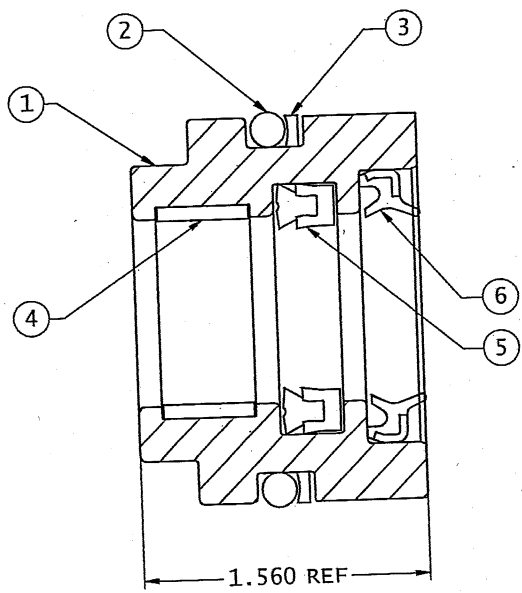
Seq	Ball Dr	No.	-oon	Sz	Component	Type	Bin	Location	Description	QtyPer	UOM	Reference	Effectivity
=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====
1	01	C	4553000015			P			HEAD 2.13 BORE X 1.00 ROD X 1.56 LG	1.000	pc		-
2	02	N	7755327000			P			RING "O" HEAD GLAND 2.125" BORE	1.000	pc		-
3	03	A	7755327609			P			RING BACK-UP HEAD GLAND 2.13" BORE	1.000	pc		-
4	04	N	7754000036			P			RING WEAR HEAD 1.00" BORE	1.000	pc		-
5	05	N	7796000023			P	0121		SEAL ROD 1.00"	1.000	pc		-
6	06	A	7796000005			P			SEAL WIPER 1.00" ROD	1.000	pc		-

*** End of Item ***

*** End of Report ***

HEAD ASSY (2.13 BORE CYLINDER)

DWG NO 3-553-000015 REV 01



01	ALL	3690	REDRAWN IN SOLID EDGE (3D/2D)	02/18/04	STK
REV	ZONE	ERN	DESCRIPTION	DATE	BY

PROPRIETARY AND CONFIDENTIAL INFORMATION.
THIS DRAWING AND SUBJECT MATTER CONTAINED ARE THE SOLE AND EXCLUSIVE PROPERTY OF JERR-DAN CORPORATION. THIS COPY IS LOANED WITH THE UNDERSTANDING THAT IT OR THE SUBJECT MATTER CONTAINED WILL NOT BE DISCLOSED TO ANY OTHER PARTY WITHOUT THE EXPRESS WRITTEN PERMISSION OF JERR-DAN CORPORATION. ACCEPTANCE OF THIS COPY SHALL BE CONSTRUED AS ACCEPTANCE OF THE FOREGOING CONDITION.

IF IN DOUBT ASK. DO NOT SCALE DRAWING. REMOVE ALL BURRS AND SHARP CORNERS.

TOLERANCES UNLESS OTHERWISE SPECIFIED
2 PLACE DEC ± 0.062
3 PLACE DEC ± 0.015
ANGLE DIM $\pm 0.5^\circ$
N/A TO MATERIAL THICKNESS

JERR-DAN CORP
1080 HYKES ROAD GREENCASTLE, PA 17225

MAT'L	SEE B/M	SHEET	1 OF 1
WEIGHT	A 0.76#	TITLE	HEAD ASSY (2.13 BORE CYLINDER)
SCALE	2:1	ERN	2962
DATE	02/08/00	SIZE	DWG NO
DRAWN	VLW	C	3-553-000015
			01



***** Engineering Bill of Materials *****

** Report Excludes Shrinkage.

Effective as of 12/21/05

Item: 2170000074

BOOM INSTL U/L MANUAL GRID

From Item: 2170000074

To Item: 2170000074

Last Changed Date:

Reference:D/3834

Revision #0/2/3907

Quantity	1	Receive into Whse: MYPT	BIN: WA03	UOM: PC
----------	---	-------------------------	-----------	---------

Ball Dr	Bin						
-oon Sz Component Type Location	Description	QtyPer	UOM	Reference	Effectivity		
=== == =====	=====	=====	===	=====	=====		
01 D 3170000394 M WA00	BOOM ASSY U/L MPL-40 MANUAL GRIDS	1.000	PC		-		
02 C 3320000150 M WA00	CYLINDER ASSY 4.00/2.00 X 27.88-44.94	1.000	PC		-		
03 B 3691000242 M WA00	PIN WELD 2.00 DIA x 7.88	2.000	PC		-		
04 B 3691000236 M WA02	PIN WELD 2.00 DIA x 5.00	1.000	PC		-		
05 N 7950160161 P 000104 14ASB M	FLATWASHER .38" NOM WIDE - PLATED	3.000	PC		-		
06 N 7115160850 P 000102 AD00B M	CAPSCREW .38"-16NC x 1.00" HEX HEAD	3.000	PC		-		
07 N 7950160000 P 000104 022504	LOCK WASHER .38"ID - PLATED	3.000	PC		-		

*** End of Item ***

*** End of Report ***

[Empty rectangular box]

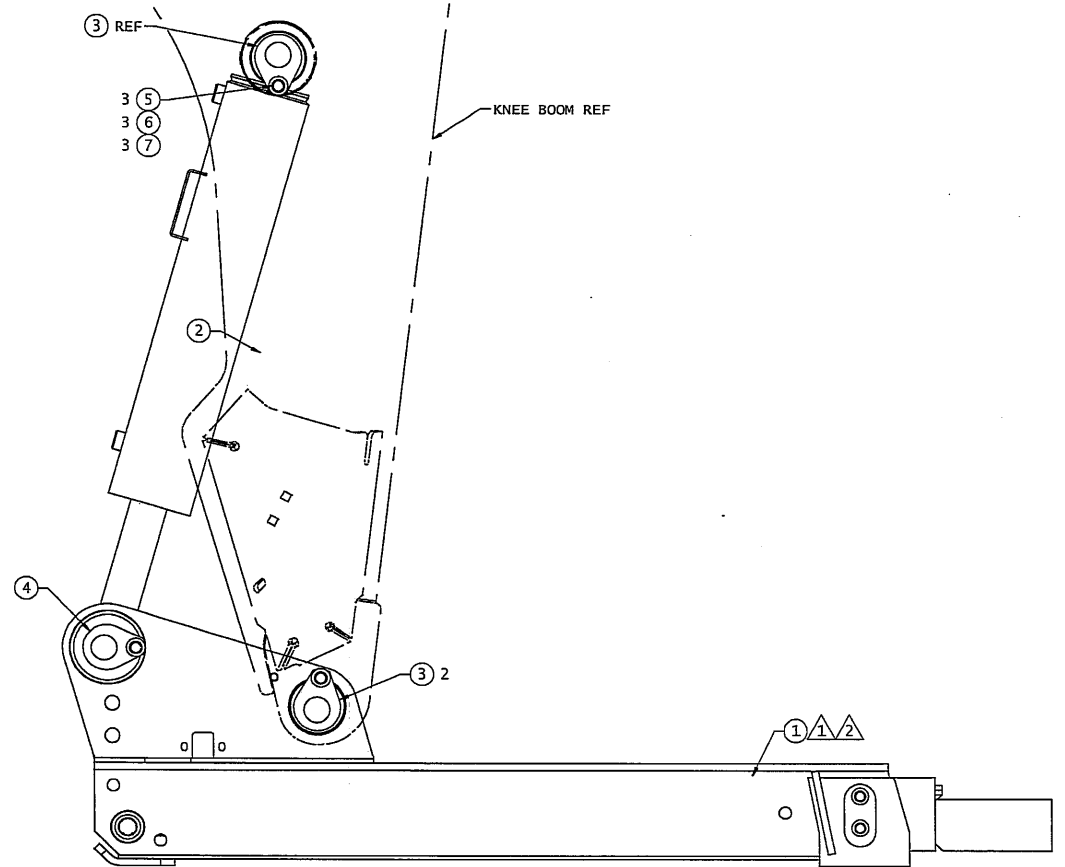
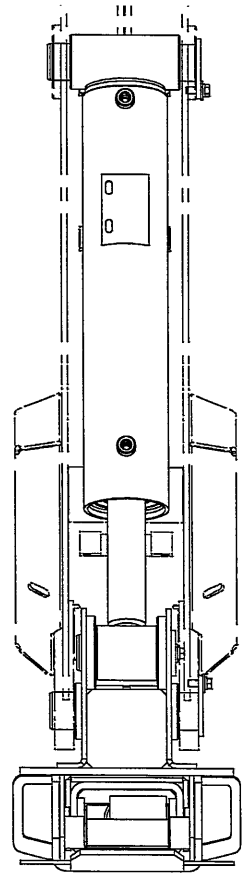
[Empty rectangular box]

[Empty rectangular box]

[Empty rectangular box]

BOOM INST U/L MPL-40 MANUAL GRIDS

DWG NO 2-170-000074 REV 02



DO NOT EXCEED OPERATING SPEEDS AS SHOWN ON THE WASHING MACHINE. DO NOT OPERATE THE WASHING MACHINE AT A SPEED OTHER THAN THAT SPECIFIED IN THE OPERATING MANUAL. DO NOT OPERATE THE WASHING MACHINE AT A SPEED OTHER THAN THAT SPECIFIED IN THE OPERATING MANUAL.

IF IN DOUBT ASK. DO NOT SCALE DRAWING. REMOVE ALL DIMENSIONS AND DIMENSIONS SPECIFIED IN THE DRAWING. REMOVE ALL DIMENSIONS AND DIMENSIONS SPECIFIED IN THE DRAWING. REMOVE ALL DIMENSIONS AND DIMENSIONS SPECIFIED IN THE DRAWING.

JERR-DAN A Division of The Danaher Corporation	
MATERIAL: SEE B/M	SHEET: 1 OF 1
TITLE: BOOM INST U/L MPL-40 MANUAL GRIDS	WEIGHT: 7.0
SCALE: 0.31	DATE: 8/28/05
DRAWN: S.M.B.	CHECKED: D
DATE: 8/28/05	REV: 02
12/26/04 - 2229663-02-01	

E
D
C
B
A

8 7 6 5 4 3 2 1

***** Engineering Bill of Materials *****

** Report Excludes Shrinkage.

Effective as of 12/21/05

Item: 3170000394

BOOM ASSY U/L MPL-40 MANUAL GRIDS

From Item: 3170000394

To Item: 3170000394

Reference:D/3834

Last Changed Date:11/21/05

Revision #B/3/3907

BIN: WA00

UOM: PC

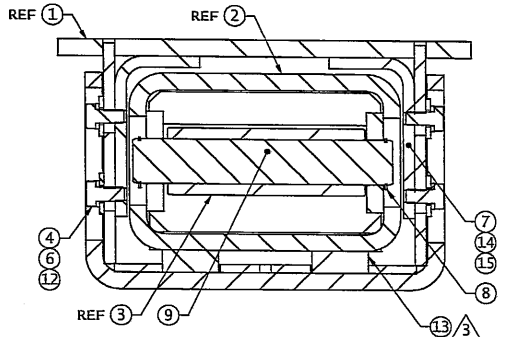
Quantity	1	Receive into Whse: MYPT		Reference:D/3834	Last Changed Date:11/21/05	
Ball Dr	Bin			Revision #B/3/3907		
-oon Sz Component Type	Location	Description	QtyPer	UOM	Reference	Effectivity
=== == =====	=====	=====	=====	===	=====	=====
01	D 3170000395	M WA00	BOOM WELD U/L BASE MPL MANUAL GRID	1.000	PC	3834 06/14/05-
02	D 3170000393	M WA00	BOOM WELD U/L FLY MPL MANUAL GRIDS	1.000	PC	-
03	C 3320000148	M 110101 WA00	CYLINDER ASSY 2.13/1.00 X 36.00-65.12	1.000	PC	-
04	N 7950150161	P 022603 080304	FLATWASHER .31" NOM WIDE - PLATED	4.000	PC	-
05	B 4679000046	P 020105 050105	PAD 0.38 X 3.00 X 5.94 WEAR	1.000	PC	-
06	N 7105150550	P 000102 WA00D	CAPSCREW .31"-24NF X .63" HEX HEAD	4.000	PC	-
07	B 4062000455	M 102001 WBPS	BAR 0.25 x 1.00 x 5.00	2.000	PC	-
08	* 7754000019	P 000107 b65 WA0	RING 1.00" SHAFT DIA RETAINING	2.000	pc	-
09	B 4691000307	M 021006 WA00	PIN 1.00 DIA x 5.75	1.000	ea	-
10	B 4691000308	M 021006 WA00	PIN 1.00 DIA x 6.62	1.000	ea	-
11	N 7754000056	P 080306 c19	SNAP RING 1" INTERNAL	2.000	pc	-
12	N 7950150000	P 080304 MDF1B M	WASHER .31" NOM REG LOCK - PLATED	4.000	PC	-
13	A 4679000213	M 022404 WA00	PAD 0.50 x 1.25 x 3.50 NSM NYLATRON	2.000	PC	3907 12/12/05-
14	A 4812000067	M 022305 WA00	UNDERLIFT SHIM 14GA X .94 X 2.94	2.000	PC	-
15	A 4812000068	M 022305 WA00	SHIM 16GA x 0.94 x 2.94	2.000	PC	-

*** End of Item ***

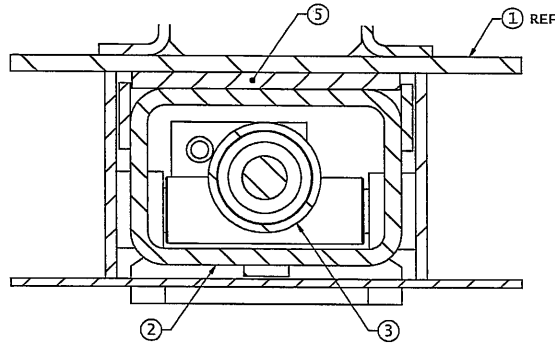
*** End of Report ***

BOOM ASSY MANUAL GRID UL (NO-LUBE)

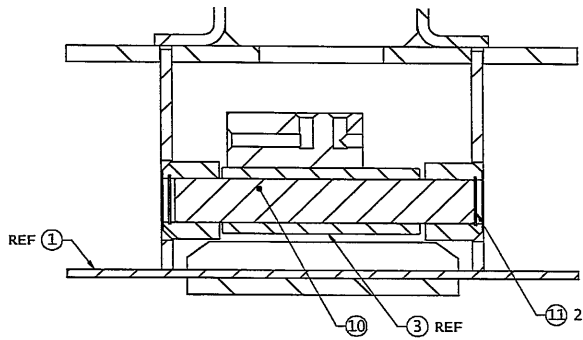
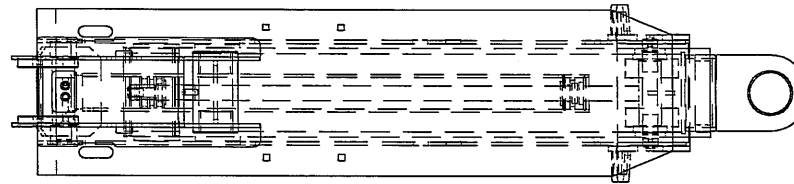
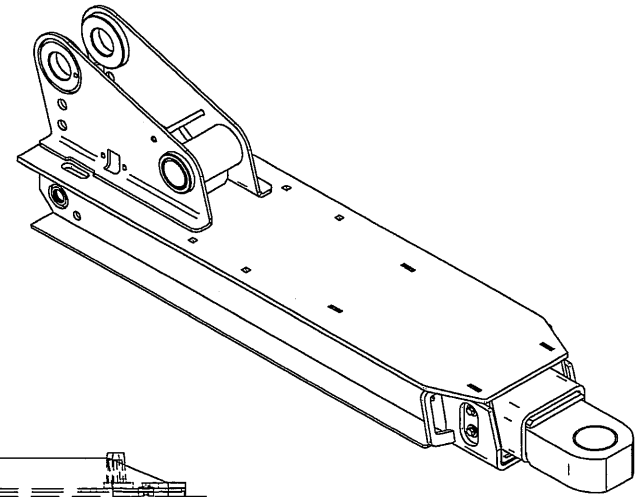
DWG NO 3-170-000394 REV 03



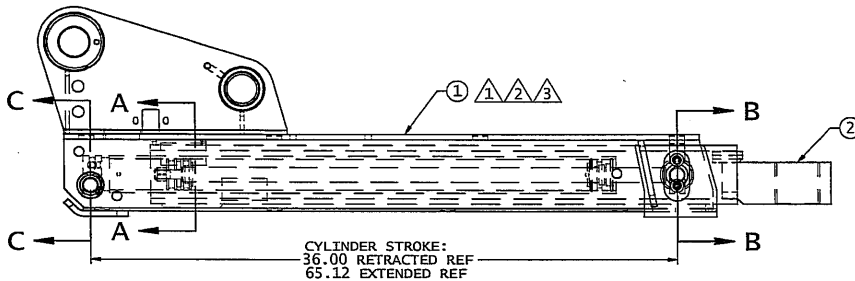
SECTION B-B
1:1.33



SECTION A-A
1:1.33



SECTION C-C
1:1.33



CYLINDER STROKE:
36.00 RETRACTED REF
65.12 EXTENDED REF

NOTE:
BRUSH A LIBERAL COAT OF ANTI-SEIZE COMPOUND TO ALL PIN & BUSHING, METAL TO METAL, CONTACT SURFACES UPON INSTALLATION.

REV	DATE	BY	DESCRIPTION
01	08/15/03	DM	CHANGED ITEM 1 - SHOW NEW BASE BOOM
02	11/17/03	DM	CHANGED ITEM 11 - SHOW NEW BASE BOOM
03	11/17/03	DM	CHANGED ITEM 11 - SHOW NEW BASE BOOM
04	11/17/03	DM	CHANGED ITEM 11 - SHOW NEW BASE BOOM
05	11/17/03	DM	CHANGED ITEM 11 - SHOW NEW BASE BOOM
06	11/17/03	DM	CHANGED ITEM 11 - SHOW NEW BASE BOOM
07	11/17/03	DM	CHANGED ITEM 11 - SHOW NEW BASE BOOM
08	11/17/03	DM	CHANGED ITEM 11 - SHOW NEW BASE BOOM
09	11/17/03	DM	CHANGED ITEM 11 - SHOW NEW BASE BOOM
10	11/17/03	DM	CHANGED ITEM 11 - SHOW NEW BASE BOOM
11	11/17/03	DM	CHANGED ITEM 11 - SHOW NEW BASE BOOM
12	11/17/03	DM	CHANGED ITEM 11 - SHOW NEW BASE BOOM
13	11/17/03	DM	CHANGED ITEM 11 - SHOW NEW BASE BOOM
14	11/17/03	DM	CHANGED ITEM 11 - SHOW NEW BASE BOOM
15	11/17/03	DM	CHANGED ITEM 11 - SHOW NEW BASE BOOM
16	11/17/03	DM	CHANGED ITEM 11 - SHOW NEW BASE BOOM
17	11/17/03	DM	CHANGED ITEM 11 - SHOW NEW BASE BOOM
18	11/17/03	DM	CHANGED ITEM 11 - SHOW NEW BASE BOOM
19	11/17/03	DM	CHANGED ITEM 11 - SHOW NEW BASE BOOM
20	11/17/03	DM	CHANGED ITEM 11 - SHOW NEW BASE BOOM
21	11/17/03	DM	CHANGED ITEM 11 - SHOW NEW BASE BOOM
22	11/17/03	DM	CHANGED ITEM 11 - SHOW NEW BASE BOOM
23	11/17/03	DM	CHANGED ITEM 11 - SHOW NEW BASE BOOM
24	11/17/03	DM	CHANGED ITEM 11 - SHOW NEW BASE BOOM
25	11/17/03	DM	CHANGED ITEM 11 - SHOW NEW BASE BOOM
26	11/17/03	DM	CHANGED ITEM 11 - SHOW NEW BASE BOOM
27	11/17/03	DM	CHANGED ITEM 11 - SHOW NEW BASE BOOM
28	11/17/03	DM	CHANGED ITEM 11 - SHOW NEW BASE BOOM
29	11/17/03	DM	CHANGED ITEM 11 - SHOW NEW BASE BOOM
30	11/17/03	DM	CHANGED ITEM 11 - SHOW NEW BASE BOOM
31	11/17/03	DM	CHANGED ITEM 11 - SHOW NEW BASE BOOM
32	11/17/03	DM	CHANGED ITEM 11 - SHOW NEW BASE BOOM
33	11/17/03	DM	CHANGED ITEM 11 - SHOW NEW BASE BOOM
34	11/17/03	DM	CHANGED ITEM 11 - SHOW NEW BASE BOOM
35	11/17/03	DM	CHANGED ITEM 11 - SHOW NEW BASE BOOM
36	11/17/03	DM	CHANGED ITEM 11 - SHOW NEW BASE BOOM
37	11/17/03	DM	CHANGED ITEM 11 - SHOW NEW BASE BOOM
38	11/17/03	DM	CHANGED ITEM 11 - SHOW NEW BASE BOOM
39	11/17/03	DM	CHANGED ITEM 11 - SHOW NEW BASE BOOM
40	11/17/03	DM	CHANGED ITEM 11 - SHOW NEW BASE BOOM
41	11/17/03	DM	CHANGED ITEM 11 - SHOW NEW BASE BOOM
42	11/17/03	DM	CHANGED ITEM 11 - SHOW NEW BASE BOOM
43	11/17/03	DM	CHANGED ITEM 11 - SHOW NEW BASE BOOM
44	11/17/03	DM	CHANGED ITEM 11 - SHOW NEW BASE BOOM
45	11/17/03	DM	CHANGED ITEM 11 - SHOW NEW BASE BOOM
46	11/17/03	DM	CHANGED ITEM 11 - SHOW NEW BASE BOOM
47	11/17/03	DM	CHANGED ITEM 11 - SHOW NEW BASE BOOM
48	11/17/03	DM	CHANGED ITEM 11 - SHOW NEW BASE BOOM
49	11/17/03	DM	CHANGED ITEM 11 - SHOW NEW BASE BOOM
50	11/17/03	DM	CHANGED ITEM 11 - SHOW NEW BASE BOOM
51	11/17/03	DM	CHANGED ITEM 11 - SHOW NEW BASE BOOM
52	11/17/03	DM	CHANGED ITEM 11 - SHOW NEW BASE BOOM
53	11/17/03	DM	CHANGED ITEM 11 - SHOW NEW BASE BOOM
54	11/17/03	DM	CHANGED ITEM 11 - SHOW NEW BASE BOOM
55	11/17/03	DM	CHANGED ITEM 11 - SHOW NEW BASE BOOM
56	11/17/03	DM	CHANGED ITEM 11 - SHOW NEW BASE BOOM
57	11/17/03	DM	CHANGED ITEM 11 - SHOW NEW BASE BOOM
58	11/17/03	DM	CHANGED ITEM 11 - SHOW NEW BASE BOOM
59	11/17/03	DM	CHANGED ITEM 11 - SHOW NEW BASE BOOM
60	11/17/03	DM	CHANGED ITEM 11 - SHOW NEW BASE BOOM
61	11/17/03	DM	CHANGED ITEM 11 - SHOW NEW BASE BOOM
62	11/17/03	DM	CHANGED ITEM 11 - SHOW NEW BASE BOOM
63	11/17/03	DM	CHANGED ITEM 11 - SHOW NEW BASE BOOM
64	11/17/03	DM	CHANGED ITEM 11 - SHOW NEW BASE BOOM
65	11/17/03	DM	CHANGED ITEM 11 - SHOW NEW BASE BOOM
66	11/17/03	DM	CHANGED ITEM 11 - SHOW NEW BASE BOOM
67	11/17/03	DM	CHANGED ITEM 11 - SHOW NEW BASE BOOM
68	11/17/03	DM	CHANGED ITEM 11 - SHOW NEW BASE BOOM
69	11/17/03	DM	CHANGED ITEM 11 - SHOW NEW BASE BOOM
70	11/17/03	DM	CHANGED ITEM 11 - SHOW NEW BASE BOOM
71	11/17/03	DM	CHANGED ITEM 11 - SHOW NEW BASE BOOM
72	11/17/03	DM	CHANGED ITEM 11 - SHOW NEW BASE BOOM
73	11/17/03	DM	CHANGED ITEM 11 - SHOW NEW BASE BOOM
74	11/17/03	DM	CHANGED ITEM 11 - SHOW NEW BASE BOOM
75	11/17/03	DM	CHANGED ITEM 11 - SHOW NEW BASE BOOM
76	11/17/03	DM	CHANGED ITEM 11 - SHOW NEW BASE BOOM
77	11/17/03	DM	CHANGED ITEM 11 - SHOW NEW BASE BOOM
78	11/17/03	DM	CHANGED ITEM 11 - SHOW NEW BASE BOOM
79	11/17/03	DM	CHANGED ITEM 11 - SHOW NEW BASE BOOM
80	11/17/03	DM	CHANGED ITEM 11 - SHOW NEW BASE BOOM
81	11/17/03	DM	CHANGED ITEM 11 - SHOW NEW BASE BOOM
82	11/17/03	DM	CHANGED ITEM 11 - SHOW NEW BASE BOOM
83	11/17/03	DM	CHANGED ITEM 11 - SHOW NEW BASE BOOM
84	11/17/03	DM	CHANGED ITEM 11 - SHOW NEW BASE BOOM
85	11/17/03	DM	CHANGED ITEM 11 - SHOW NEW BASE BOOM
86	11/17/03	DM	CHANGED ITEM 11 - SHOW NEW BASE BOOM
87	11/17/03	DM	CHANGED ITEM 11 - SHOW NEW BASE BOOM
88	11/17/03	DM	CHANGED ITEM 11 - SHOW NEW BASE BOOM
89	11/17/03	DM	CHANGED ITEM 11 - SHOW NEW BASE BOOM
90	11/17/03	DM	CHANGED ITEM 11 - SHOW NEW BASE BOOM
91	11/17/03	DM	CHANGED ITEM 11 - SHOW NEW BASE BOOM
92	11/17/03	DM	CHANGED ITEM 11 - SHOW NEW BASE BOOM
93	11/17/03	DM	CHANGED ITEM 11 - SHOW NEW BASE BOOM
94	11/17/03	DM	CHANGED ITEM 11 - SHOW NEW BASE BOOM
95	11/17/03	DM	CHANGED ITEM 11 - SHOW NEW BASE BOOM
96	11/17/03	DM	CHANGED ITEM 11 - SHOW NEW BASE BOOM
97	11/17/03	DM	CHANGED ITEM 11 - SHOW NEW BASE BOOM
98	11/17/03	DM	CHANGED ITEM 11 - SHOW NEW BASE BOOM
99	11/17/03	DM	CHANGED ITEM 11 - SHOW NEW BASE BOOM
100	11/17/03	DM	CHANGED ITEM 11 - SHOW NEW BASE BOOM

GENERAL NOTES AND DIMENSIONAL INFORMATION		IF IN DOUBT, ASK		REV	
THIS DRAWING AND SUBJECT MATTER CONTAINED HEREIN IS THE SOLE AND EXCLUSIVE PROPERTY OF JERR-DAN CORPORATION. THIS DRAWING IS LOANED TO THE USER UNDER THE UNDERSTANDING THAT IT IS THE SUBJECT MATTER CONTAINED HEREIN IS TO BE RETURNED TO THE USER PARTY WITHOUT THE EXPRESS WRITTEN PERMISSION OF JERR-DAN CORPORATION. ACCEPTANCE OF THIS DRAWING SHALL BE CONSIDERED AS ACCEPTANCE OF THE ABOVE CONDITIONS.		DO NOT SCALE DRAWING. REMOVE ALL DIMENSIONS AND DIMENSIONS.		SEE B/M	
UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES AND DECIMALS THEREOF.		IF IN DOUBT, ASK		1 OF 1	
UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES AND DECIMALS THEREOF.		IF IN DOUBT, ASK		WEIGHT 7.9	
UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES AND DECIMALS THEREOF.		IF IN DOUBT, ASK		TITLE ROOM ASSY MANUAL GRID UL (NO-LUBE)	
UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES AND DECIMALS THEREOF.		IF IN DOUBT, ASK		SCALE 1:4	
UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES AND DECIMALS THEREOF.		IF IN DOUBT, ASK		DRAW 3834	
UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES AND DECIMALS THEREOF.		IF IN DOUBT, ASK		DATE 12/28/04	
UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES AND DECIMALS THEREOF.		IF IN DOUBT, ASK		DRAW BSK D 3-170-000394 03	

***** Engineering Bill of Materials *****

** Report Excludes Shrinkage.
Effective as of 07/25/05
*Item: 3320000150

CYLINDER ASSY 4.00/2.00 X 28.19-45.25

From Item: 3320000150
To Item: 3320000150
Last Changed Date: 09/28/04

Reference: C/3774B

Revision #0/1/3774

BIN: WA00

UOM: PC

Quantity 1 Receive into Whse: MYPT

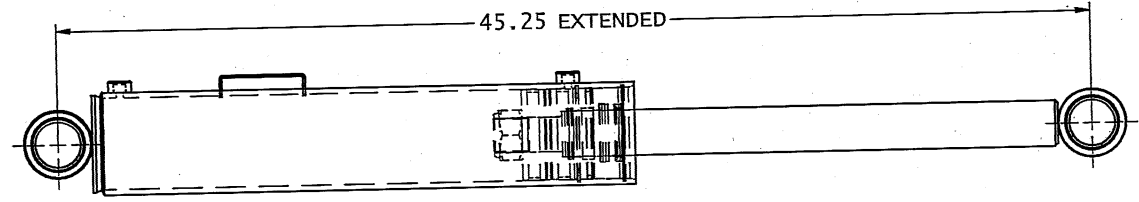
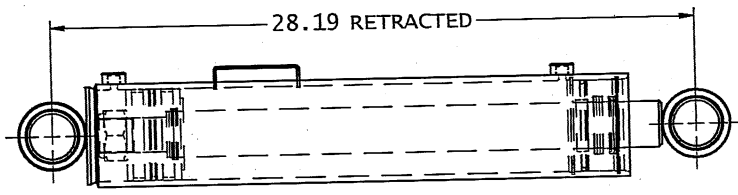
Ball Dr	Bin	Description	QtyPer	UOM	Reference	Effectivity
-oon Sz Component Type Location			=====	===	=====	=====
01 D 3071000135	M CC05	BARREL WELD "3150"	1.000	PC		-
02 C 3763000143	M CC05	ROD WELD "3150"	1.000	PC		-
03 B 3698000002	P	PISTON ASSY 4.00 BORE x 2.00 ROD	1.000	PC		-
04 B 3553000012	P	HEAD ASSY 4.00 BORE x 2.00 ROD	1.000	PC		-
05 A 7754000013	P b63	RING RETAINING 4" #1300-400	1.000	pc		-
06 A 7661000035	P 000105 d07	NUT 1.50"-12NF NYLON INSERT HEX	1.000	PC		-
07 7754000028	P b66	RING RETAINING SMALLY WHM 400	1.000	pc		-
08 A 7082000029	P g01	BEARING 2.25 OD X 2.00 ID X 1.50 IFR	4.000	PC		-

*** End of Item ***

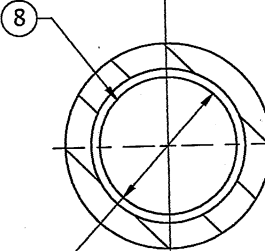
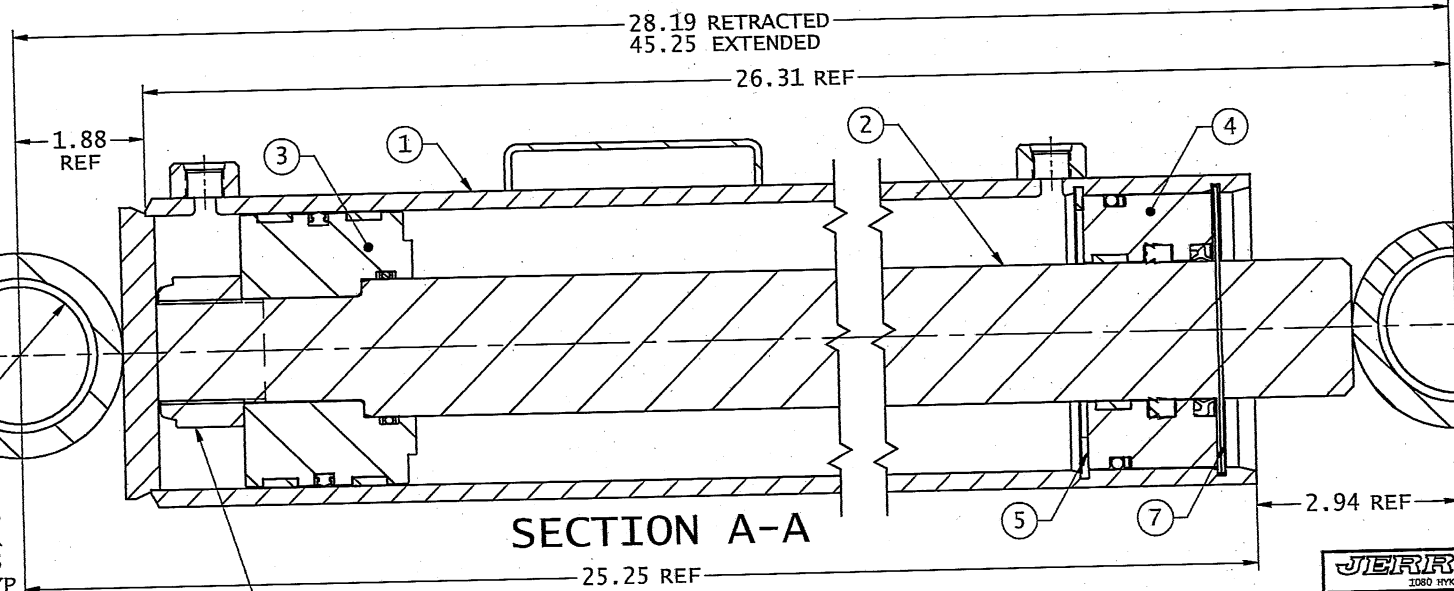
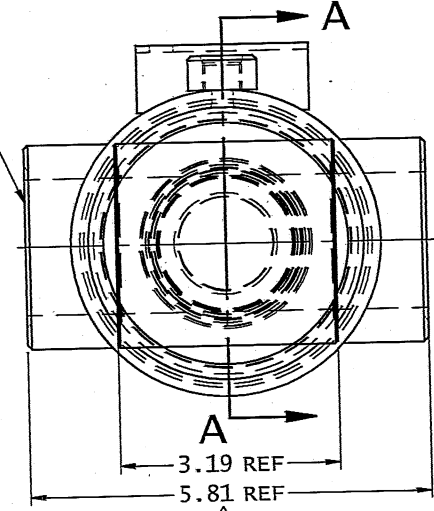
*** End of Report ***

CYLINDER ASSY 4.00/2.00 X 28.19-45.25

DWG NO 3-320-000150 REV 01



INSTALL BEARINGS (ITEM #8) FLUSH WITH ENDS OF STEEL BUSHINGS



∅ 2.008
1.998
AFTER PRESS
FIT TYP

SECTION A-A

INSTALL NUT WITH
LOCTITE 262
TORQUE NUT TO
740 TO 780 FT-LBS

NOTE:
PLUG PORTS FOR STORAGE

PROPRIETARY AND CONFIDENTIAL INFORMATION.
THIS DRAWING AND SUBJECT MATTER CONTAINED HEREIN ARE THE SOLE AND EXCLUSIVE PROPERTY OF JERR-DAN CORPORATION. THIS COPY IS LOANED WITH THE UNDERSTANDING THAT IT OR THE SUBJECT MATTER CONTAINED HEREIN WILL NOT BE DISCLOSED TO ANY OTHER PARTY WITHOUT THE EXPRESS WRITTEN PERMISSION OF JERR-DAN CORPORATION. ACCEPTANCE OF THIS COPY SHALL BE CONSTRUED AS ACCEPTANCE OF THE FORGING CONDITION.

IF IN DOUBT ASK, DO NOT SCALE DRAWINGS. REMOVE ALL BURS AND SHARP CORNERS.
TOLERANCES UNLESS OTHERWISE SPECIFIED:
2 PLACE DEC ±0.002
3 PLACE DEC ±0.013
ANGLE DIM ±0.5°
N/A TO MATERIAL THICKNESS

JERR-DAN CORP
1080 HYKES ROAD GREENCASTLE, PA 17225

MAT'L SEE B/M	SHEET 1 OF 1
WEIGHT E 68.0#	REV
TITLE CYLINDER ASSY 4.00/2.00 X 28.19-45.25	
SCALE 3:4	ERN 3774
DATE 09/28/04	DRAWN STK
SIZE C	DWG NO 3-320-000150
REV 01	

01	1-C	3774	UP DATED VIEWS PER REVIS: 5.81 WAS 6.00:	3/8/05	BSK
REVISON	ERN		DESCRIPTION	DATE	BY

***** Engineering Bill of Materials for ALTERNATE Route *****

** Report Excludes Shrinkage.

Effective as of 08/04/05

Item: 3698000002

PISTON ASSY 4.00 BORE x 2.00 ROD

Reference: B/2962-A

From Item: 3698000002

To Item: 3698000002

Last Changed Date: 08/11/00

Alternate Route #A215016

Revision #0/0

Quantity 1

Receive into Whse: HYKS

BIN:

UOM: PC

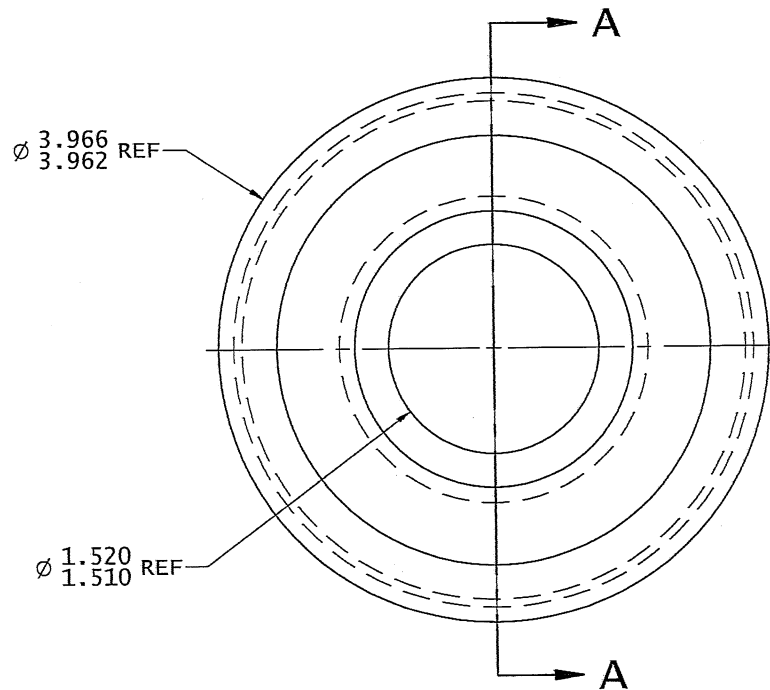
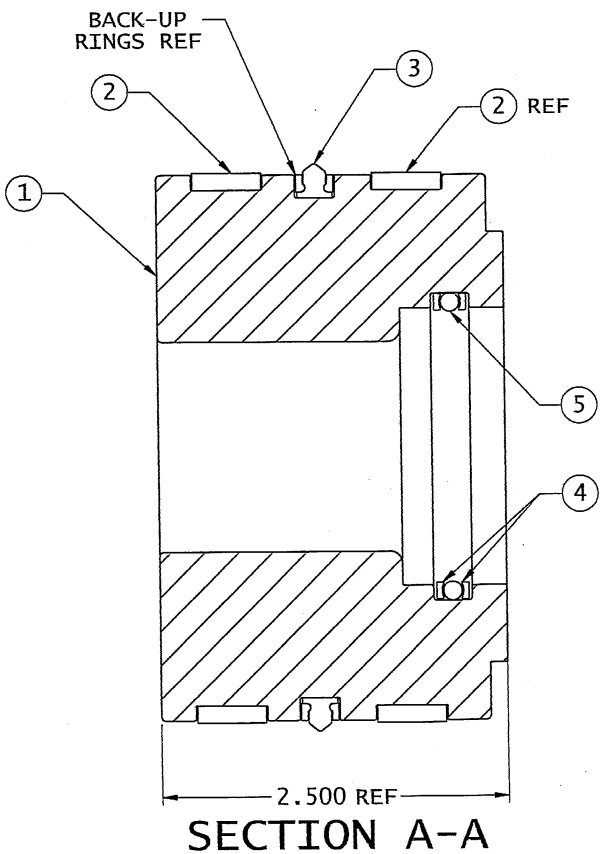
Seq	Ball	Dr	No.	oon	Sz	Component	Type	Bin	Location	Description	QtyPer	UOM	Reference	Effectivity
=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====
1	01	B	4698000008	P	1010	PISTON 4.00 BORE X 2.00 ROD X 2.50 LG					1.000	pc		-
2	02	A	7754000011	P	J38	RING WEAR PISTON 4.00" BORE					2.000	pc		-
3	03	A	7796000065	P		SEAL PISTON LOCKING T 4.00" BORE					1.000	PC		-
4	04	N	7755226609	P		RING BACK-UP PISTON 2.00" ROD					2.000	pc		-
5	05	N	7755226000	P		RING "O" PISTON 2.00" ROD					1.000	pc		-

*** End of Item ***

*** End of Report ***

PISTON ASSY (4.00 BORE CYLINDER)

DWG NO 3-698-0002 REV 02



JERR-DAN CORP
1080 HYKES ROAD GREENCASTLE, PA 17225

<small>PROPRIETARY AND CONFIDENTIAL INFORMATION.</small> THIS DRAWING AND SUBJECT MATTER CONTAINED ARE THE SOLE AND EXCLUSIVE PROPERTY OF JERR-DAN CORPORATION. THIS COPY IS LOANED WITH THE UNDERSTANDING THAT IT OR THE SUBJECT MATTER CONTAINED WILL NOT BE DISCLOSED TO ANY OTHER PARTY WITHOUT THE EXPRESS WRITTEN PERMISSION OF JERR-DAN CORPORATION. ACCEPTANCE OF THIS COPY SHALL BE CONSTRUED AS ACCEPTANCE OF THE FORGING CONDITION.	<small>IF IN DOUBT ASK. DO NOT SCALE DRAWING. REMOVE ALL BURRS AND SHARP CORNERS.</small>	MAT'L SEE B/M	SHEET 1 OF 1
		WEIGHT E 6.00#	
<small>TOLERANCES UNLESS OTHERWISE SPECIFIED</small> 2 PLACE DEC ±0.002 3 PLACE DEC ±0.013 ANGLE DIM ±0.5° N/A TO MATERIAL THICKNESS		TITLE PISTON ASSY (4.00 BORE CYLINDER)	DATE 2/9/00
02 ALL 3690 REDRAWN IN SOLID EDGE (3D/2D)	02/18/04 STK	ERN 2962	SIZE DWG NO C 3-698-00002 02
REVIZONE ERN	DATE BY	DRAWN V/LW	REV 02

02 | ALL | 3690 | REDRAWN IN SOLID EDGE (3D/2D) | 02/18/04 | STK | ERN 2962 | DATE | BY

***** Engineering Bill of Materials for ALTERNATE Route ****

** Report Excludes Shrinkage.

Effective as of 07/26/05

From Item: 3553000012

To Item: 3553000012

Item: 3553000012

HEAD ASSY 4.00 BORE x 2.00 ROD

Reference: B/2962-A

Last Changed Date: 08/11/00

Revision #0/0

Alternate Route #A215022	Receive into Whse: HYKS	BIN:	UOM: PC
Quantity 1			

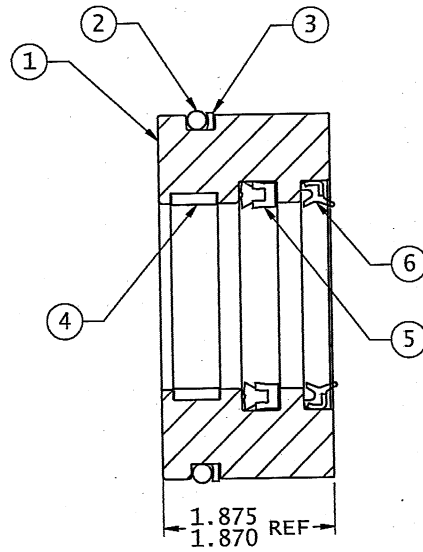
Seq	Ball	Dr	No.	-oon	Sz	Component	Type	Bin	Location	Description	QtyPer	UOM	Reference	Effectivity
=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====
1	01	B	4553000009	P	1010	HEAD 4.00 BORE X 2.00 ROD X 1.88 LG					1.000	pc		-
2	02	N	7755342000	P		RING "O" HEAD GLAND 4.00" BORE					1.000	pc		-
3	03	A	7755342609	P		RING BACK-UP HEAD GLAND 4.00" BORE					1.000	pc		-
4	04	A	7754000012	P		RING WEAR HEAD 2.00" ROD					1.000	pc		-
5	05	A	7796000025	P		SEAL ROD 2.00"					1.000	pc		-
6	06	A	7796000011	P		SEAL WIPER 2.00" ROD					1.000	pc		-

*** End of Item ***

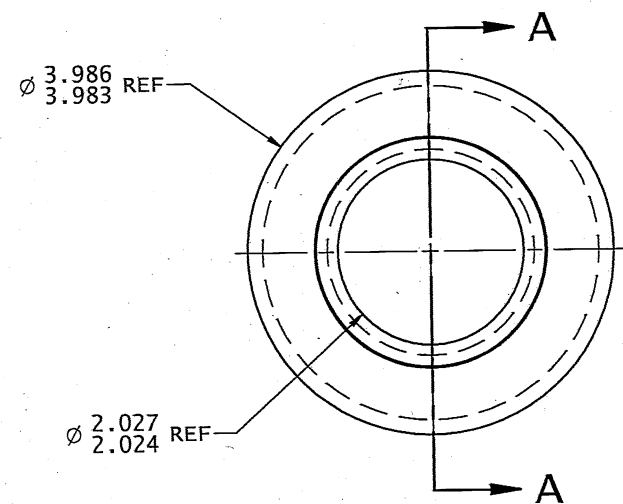
*** End of Report ***

HEAD ASSY (4.00 BORE CYLINDER)

DWG NO 3-553-000012 REV 02



SECTION A-A



JERR-DAN CORP
1080 HYKES ROAD GREENCASTLE, PA 17225

<small>PROPRIETARY AND CONFIDENTIAL INFORMATION.</small> <small>THIS DRAWING AND SUBJECT MATTER CONTAINED ARE THE SOLE AND EXCLUSIVE PROPERTY OF JERR-DAN CORPORATION. THIS COPY IS LOANED WITH THE UNDERSTANDING THAT IT OR THE SUBJECT MATTER CONTAINED WILL NOT BE DISCLOSED TO ANY OTHER PARTY WITHOUT THE EXPRESS WRITTEN PERMISSION OF JERR-DAN CORPORATION. ACCEPTANCE OF THIS COPY SHALL BE CONSTRUED AS ACCEPTANCE OF THE FORGING CONDITION.</small>	<small>IF IN DOUBT ASK. DO NOT SCALE DRAWING. REMOVE ALL BURRS AND SHARP CORNERS.</small>	<small>MAT'L</small> SEE B/M		<small>SHEET</small> 1 OF 1	
		<small>TOLERANCES UNLESS OTHERWISE SPECIFIED</small> 2 PLACE DEC ±0.052 3 PLACE DEC ±0.015 ANGLE DIM ±0.5° N/A TO MATERIAL THICKNESS		<small>WEIGHT</small> A 3.98#	
<small>DATE</small> 02/18/04 <small>STK</small>		<small>TITLE</small> HEAD ASSY (4.00 BORE CYLINDER)		<small>DATE</small> 02/03/00	
<small>REVIZONEI</small> ERN		<small>SCALE</small> 1:1		<small>ERN</small> 2962 <small>SIZE</small> DWG NO 3-553-000012 <small>REV</small> 02	

02	ALL	3690	REDRAWN IN SOLID EDGE (3D/2D)	02/18/04	STK
			DESCRIPTION	DATE	BY

***** Engineering Bill of Materials *****

** Report Excludes Shrinkage.

Effective as of 07/25/05

Item: 3320000148

CYLINDER ASSY 2.13/1.00 X 36.00-65.12

Reference: C/3775

From Item: 3320000148

To Item: 3320000148

Last Changed Date:

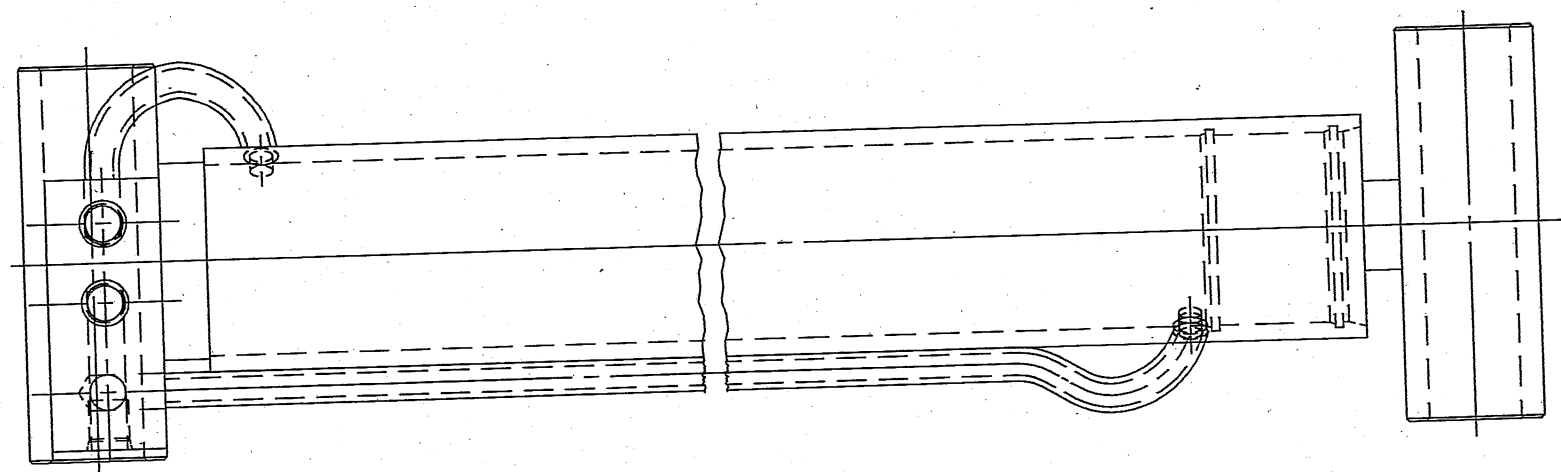
Quantity	1	Receive into Whse: SERV	Revision #0/0	BIN: 110101	UOM: PC
----------	---	-------------------------	---------------	-------------	---------

Ball Dr	oon Sz	Component	Type	Bin Location	Description	QtyPer	UOM	Reference	Effectivity
01	D	3071000133	M	CC05	BARREL WELD "3148"	1.000	PC		-
02	C	3763000142	M	CC05	ROD WELD "3148"	1.000	PC		-
03	B	3698000005	P		PISTON ASSY 2.125 BORE x 1.00 ROD	1.000	PC		-
04	C	3553000015	P		HEAD ASSY 2.125 BORE x 1.00 ROD	1.000	PC		-
05	A	7754000001	P	a07 b62	RING #1300-212 RETAINING	1.000	pc		-
06	A	7661000037	P	A118	NUT .63"-18NF NYLON INSERT HEX	1.000	PC		-

*** End of Item ***

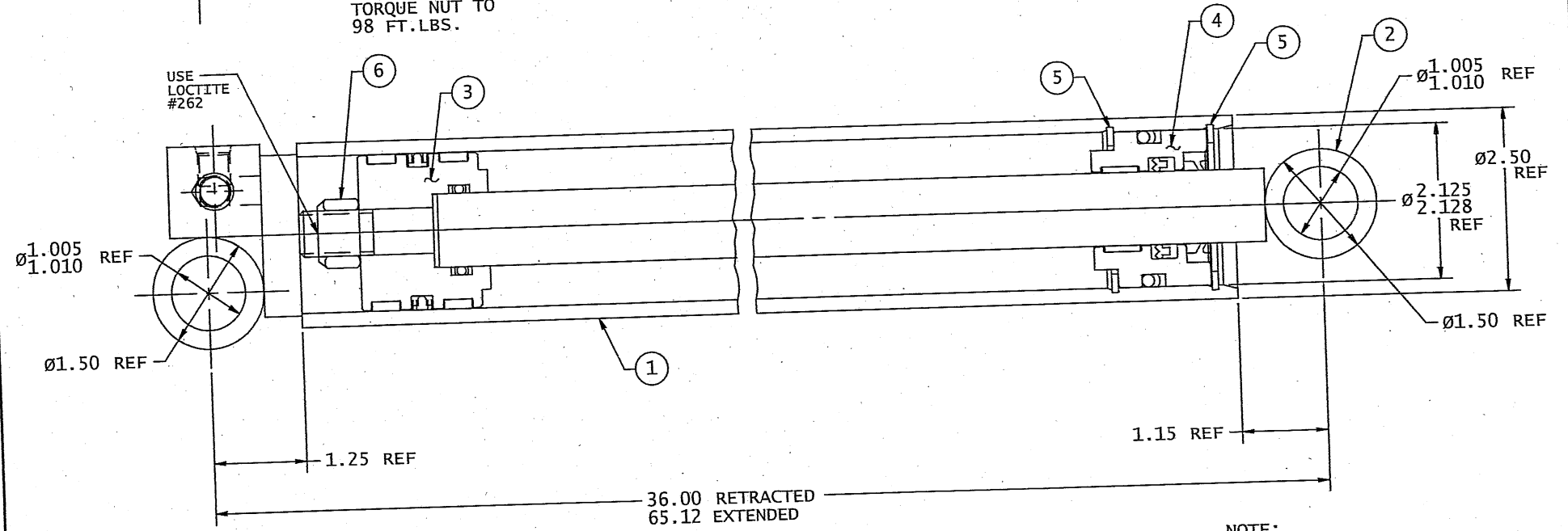
*** End of Report ***

GEN. NOTES
DO NOT SCALE DRAWING
BREAK SHARP CORNERS



TORQUE NUT TO
98 FT.LBS.

USE
LOCTITE
#262



NOTE:
PLUG PORTS FOR STORAGE

						JERR-DAN CORP. GREENCASTLE, PA.	
TOLERANCES (EXCEPT AS NOTED)		MAT'L SEE B/M		SCALE 1:1	DRAWN BY STR		ERN NO. 3775
DECIMAL 2 PLACE .002 3 PLACE .015				TITLE CYLINDER ASSY 2.13/1.00			
ANGULAR ±0° 30'		DATE 12/27/04		NEXT ASS'Y		ORIGINAL	
LIMITS ARE TO BE NON-ACCUMULATIVE PER A LINE OF DIMENSIONS.		DRAWING NO. C3-320-000148					
REV	ERN	DESCRIPTION	DATE	DRN			

***** Engineering Bill of Materials for ALTERNATE Route ****

** Report Excludes Shrinkage.

Effective as of 08/04/05

Item: 3698000005

PISTON ASSY 2.125 BORE x 1.00 ROD

Reference: B/2962-A

From Item: 3698000005

To Item: 3698000005

Last Changed Date: 08/11/00

Alternate Route #A215019	Quantity 1	Receive into Whse: HYKS	Revision #A/0	UOM: PC
--------------------------	------------	-------------------------	---------------	---------

Seq No.	Ball	Dr	Sz	Component	Type	Bin Location	Description	QtyPer	UOM	Reference	Effectivity
1	01	B		4698000011	P	1010	PISTON 2.13 BORE X 1.00 ROD X 1.75 LG	1.000	pc		-
2	02	N		7754000030	P		RING WEAR PISTON 2.125" BORE	2.000	pc		-
3	03	A		7796000062	P		SEAL PISTON LOCKING T 2.125" BORE	1.000	PC		-
4	04	N		7755214609	P		RING BACK-UP PISTON 1.00" ROD	2.000	pc		-
5	05	N		7755214000	P		RING "O" PISTON 1.00" ROD	1.000	pc		-

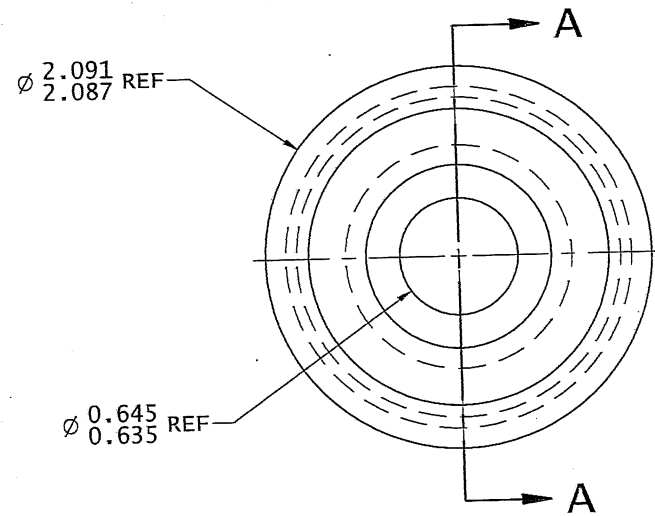
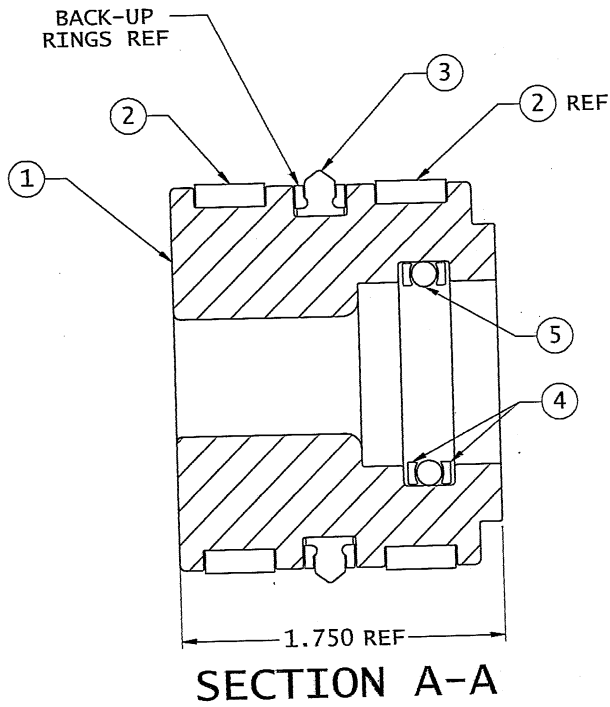
*** End of Item ***

*** End of Report ***



PISTON ASSY (2.13 BORE CYLINDER)

DWG NO 3-698-C 005 01 REV



SECTION A-A

JERR-DAN CORP
1080 HYKES ROAD GREENCASTLE, PA 17223

<small>PROPRIETARY AND CONFIDENTIAL INFORMATION.</small> THIS DRAWING AND SUBJECT MATTER CONTAINED ARE THE SOLE AND EXCLUSIVE PROPERTY OF JERR-DAN CORPORATION. THIS COPY IS LOANED WITH THE UNDERSTANDING THAT IT OR THE SUBJECT MATTER CONTAINED WILL NOT BE DISCLOSED TO ANY OTHER PARTY WITHOUT THE EXPRESS WRITTEN PERMISSION OF JERR-DAN CORPORATION. ACCEPTANCE OF THIS COPY SHALL BE CONSTRUED AS ACCEPTANCE OF THE FORGING CONDITION.	<small>IF IN DOUBT ASK. DO NOT SCALE DRAWING. REMOVE ALL BURRS AND SHARP CORNERS.</small>	<small>TOLERANCES UNLESS OTHERWISE SPECIFIED 2 PLACE DEC ±0.002 3 PLACE DEC ±0.015 ANGLE DIM ±0.5° N/A TO MATERIAL THICKNESS</small>	NAT'L SEE B/M		SHEET 1 OF 1
			TITLE PISTON ASSY (2.13 BORE CYLINDER)		WEIGHT A 1.06#
SCALE 2:1	ERN 2962	DATE 2/10/00	DRAWN VLV	SIZE C	DWG NO 3-698-000005 01

101	ALL 3690	REDRAWN IN SOLID EDGE (3D/2D)	02/18/04	STK
REV	ZONE	DESCRIPTION	DATE	BY



***** Engineering Bill of Materials for ALTERNATE Route *****

** Report Excludes Shrinkage.

Effective as of 08/04/05

Item: 3553000015

HEAD ASSY 2.125 BORE x 1.00 ROD

From Item: 3553000015

To Item: 3553000015

Reference: C/2962-A

Last Changed Date: 08/11/00

Revision #0/0

Alternate Route #A215025

Quantity 1

Receive into Whse: HYKS

BIN:

UOM: PC

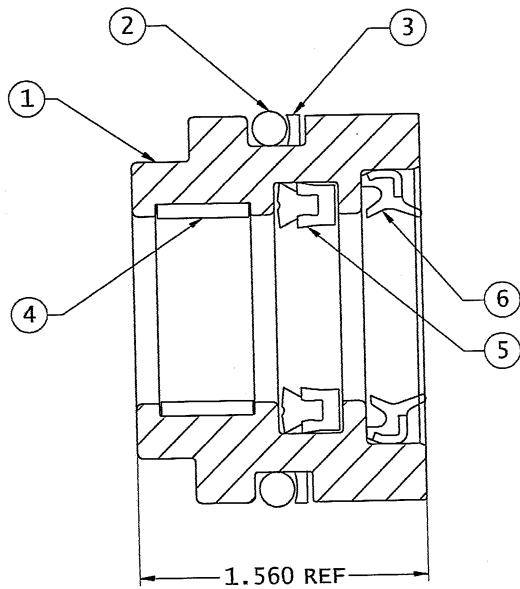
Seq	Ball	Dr	No.	-oon	Sz	Component	Type	Bin	Location	Description	QtyPer	UOM	Reference	Effectivity
=====	====	==	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====
1	01	C	4553000015	P		HEAD 2.13 BORE X 1.00 ROD X 1.56 LG					1.000	pc		-
2	02	N	7755327000	P		RING "O" HEAD GLAND 2.125" BORE					1.000	pc		-
3	03	A	7755327609	P		RING BACK-UP HEAD GLAND 2.13" BORE					1.000	pc		-
4	04	N	7754000036	P		RING WEAR HEAD 1.00" BORE					1.000	pc		-
5	05	N	7796000023	P	0121	SEAL ROD 1.00"					1.000	pc		-
6	06	A	7796000005	P		SEAL WIPER 1.00" ROD					1.000	pc		-

*** End of Item ***

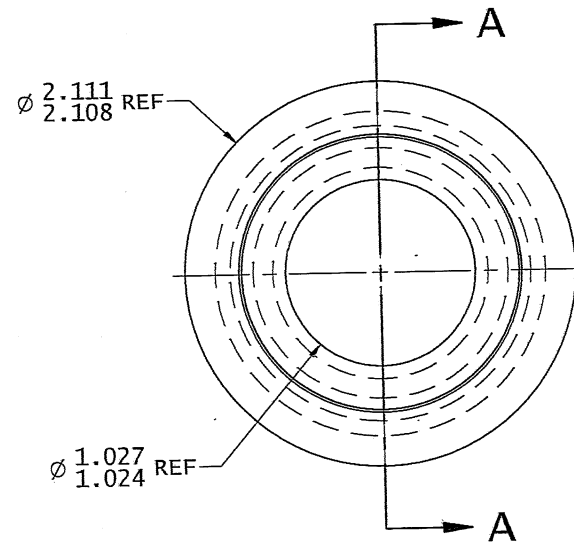
*** End of Report ***

HEAD ASSY (2.13 BORE CYLINDER)

DWG NO 3-553-C 015 01 REV

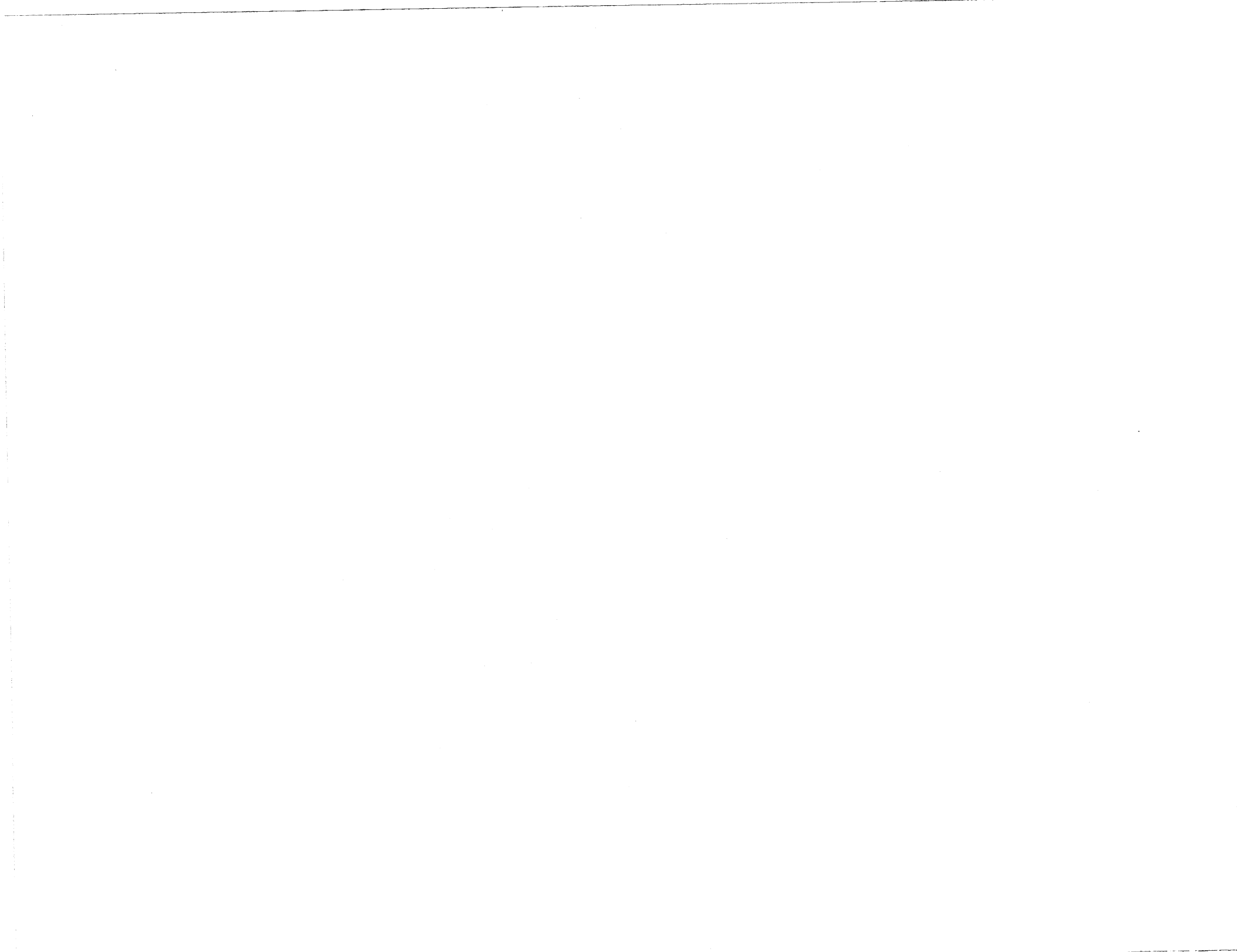


SECTION A-A



JERR-DAN CORP
1080 HYKES ROAD GREENCASTLE, PA 17225

PROPRIETARY AND CONFIDENTIAL INFORMATION. THIS DRAWING AND SUBJECT MATTER CONTAINED HEREIN ARE THE SOLE AND EXCLUSIVE PROPERTY OF JERR-DAN CORPORATION. THIS COPY IS LOANED WITH THE UNDERSTANDING THAT IT OR THE SUBJECT MATTER CONTAINED HEREIN WILL NOT BE DISCLOSED TO ANY OTHER PARTY WITHOUT THE EXPRESS WRITTEN PERMISSION OF JERR-DAN CORPORATION. ACCEPTANCE OF THIS COPY SHALL BE CONSTRUED AS ACCEPTANCE OF THE FORGING CONDITION.	IF IN DOUBT ASK. DO NOT SCALE DRAWING. REMOVE ALL BURRS AND SHARP CORNERS.	MAT'L	SEE B/M	SHEET	1 OF 1
		TOLERANCES UNLESS OTHERWISE SPECIFIED 2 PLACE DEC ±0.002 3 PLACE DEC ±0.013 ANGLE DIM ±0.5° N/A TO MATERIAL THICKNESS		WEIGHT	A 0.76#
TITLE HEAD ASSY (2.13 BORE CYLINDER)		SCALE	2:1	ERN	2962
DATE 2/8/00		DRAWN	VLW	SIZE	C
01 ALL 13690 REDRAWN IN SOLID EDGE (3D/2D) 02/18/04 STK REVIZONE ERN DESCRIPTION DATE BY		DWG NO 3-553-000015		REV 01	



Wheelgrid Installation

***** Engineering Bill of Materials *****

** Report Excludes Shrinkage.

Effective as of 08/19/05

Item: 3484000069

GRID ASSY NO-LUBE HYD FIXED GRID

From Item: 3484000069

To Item: 3484000069

Reference: D/3775

Last Changed Date: 08/18/05

Quantity	1	Receive into Whse: MYPT	Revision #C/3	BIN: WA03	UOM: PC
----------	---	-------------------------	---------------	-----------	---------

Ball Dr	oon Sz	Component Type	Bin Location	Description	QtyPer	UOM	Reference	Effectivity
====	==	=====	=====	=====	=====	==	=====	=====
01	D	3484000068	M WA03	GRID WELD NO-LUBE HYD FIXED GRID	1.000	PC		-
02	B	4691000482	P 010304 m01	PIN 2.75 DIA x 4.54	1.000	PC		-
03	A	4949000047	P 020304 d08 e12	WASHER 5.00"OD X 2.84"ID X .063"THK	2.000	pc		-
04	A	7754000024	P 010304 c18 g04	RING #WSM-275 RETAINING	1.000	pc		-
05	C	4314000076	M WA03	COVERPLATE 11GA X 2.50 X 31.85	2.000	PC		-
06	N	7114140518	P 000108 a10 A12	CAPSCREW .25"-20NC X .62" BSH S/S	4.000	pc		-
07	B	4619000013	P d02	MANIFOLD HYD 1.00 x 2.00 x 10.38 LG ALUM	1.000	PC		-
08	N	7115151250	P	CAPSCREW .31"-18NC x 1.50" HEX HEAD	4.000	pc		-
09	N	7950160000	P 000104 022504	LOCK WASHER .38"ID - PLATED	2.000	PC		-
10	B	7912000184	P J58	TUBE ASSY 0.25 OD FLARED HYD X 11.00	4.000	PC		-
11	B	4064000052	M WA03	BAR 1.25 DIA X 1.50	1.000	PC		-
12	A	7843000037	P a07	SPRING DIE 1.25 OD X 1.50 LG	1.000	PC		-
13	B	4831000095	M WA00	SPACER 1.25 DIA X 0.10 THK	1.000	PC		-
14	A	7786000009	P a07	SETSCREW .75-16NF X 1.5" CUP PNT, PLATED	1.000	PC		-
15		7785140400	P 100606	SCREW .25"-20NC X .25" SET	2.000	pc		-
16	C	7320000064	P m02	CYLINDER ASSY NO-LUBE HYD FIXED GRID	2.000	PC		-
17	A	3691000229	M WA03	PIN WELD 0.75 DIA X 3.50	4.000	PC		-
18	A	4691000497	M WA03	PIN 0.7465/.7475 DIA X 1.75	2.000	PC		-
19	A	7274000039	P 022406 b11 e18	COVER BEHRINGER CLAMP COVER	2.000	PC		-
20	N	7785140870	P 030505	SCREW .25"-20 X .50"LG HSH CP SET	2.000	pc		-
21	C	3592000052	M WA03	LINK WELD CYL NO-LUBE HYD FIXED GRID	2.000	PC		-
22	N	7115151023	P	CAPSCREW .31"-18NC X 1.25" FH SH JS2000	6.000	PC		-
23	B	3592000051	M WA03	LINK WELD L-ARM NO-LUBE HYD FIXED GRID	2.000	PC		-
24	B	4706003497	M 030303 WA03	PLATE 0.38 X 1.50 X 4.50	2.000	PC		-
25	A	7754000022	P 080306 b65	RETAINING RING - .75"DIA SHAFT	4.000	pc		-
26	D	3020000116	M WA03	ARM WELD LH NO-LUBE HYD FIXED GRID "L"	1.000	PC		-
27	D	3020000117	M WA03	ARM WELD RH NO-LUBE HYD FIXED GRID "L"	1.000	PC		-
28	A	3691000230	M WA03	PIN WELD 1.25 DIA X 3.63	2.000	PC		-
29	*	7445040443	P 021305 b37	ADAPTER STR #4JIC-#4 "O" RING (M)	4.000	pc		-
30	DEL		M	*****ITEM DELETED*****	1.000	PC	3858	08/11/05-
31	A	7274000086	P b17	CLAMP TWIN 0.25 DIA TUBE HALF	4.000	PC		-



***** Engineering Bill of Materials *****

** Report Excludes Shrinkage.

Effective as of 08/19/05

Item: 3484000069

GRID ASSY NO-LUBE HYD FIXED GRID

From Item: 3484000069

To Item: 3484000069

Reference:D/3775

Last Changed Date:08/18/05

Revision #C/3

Quantity	1	Receive into Whse: MYPT	BIN: WA03	UOM: PC
----------	---	-------------------------	-----------	---------

Ball Dr

Bin

-oon Sz	Component	Type	Location	Description	QtyPer	UOM	Reference	Effectivity
===	==	=====	=====	=====	=====	===	=====	=====

32	C	3831000026	M 102501 WA03	SPACER WHEEL GRID	2.000	PC		-
33	N	7660152601	P 022603 030602	LOCKNUT .31-18NC GR5 HEX NYLOC	6.000	pc		-
34	N	7330000037	P 040706 c02 f02	DECAL - MOVING PARTS	2.000	pc		-
35	B	7330000036	P 040706 c02 c03	DECAL - WARNING - SECURE VEHICLE	1.000	pc		-
36	B	7894000034	P FLOOR m10 n01	STRAP & RATCHET LIGHT DUTY L-ARM	2.000	PC	3846	08/10/05-12/30/29

*** End of Item ***

*** End of Report ***

Empty table row

Empty table row

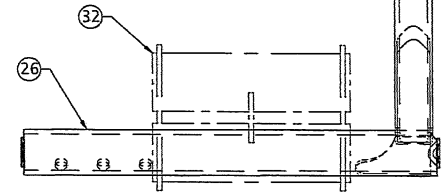
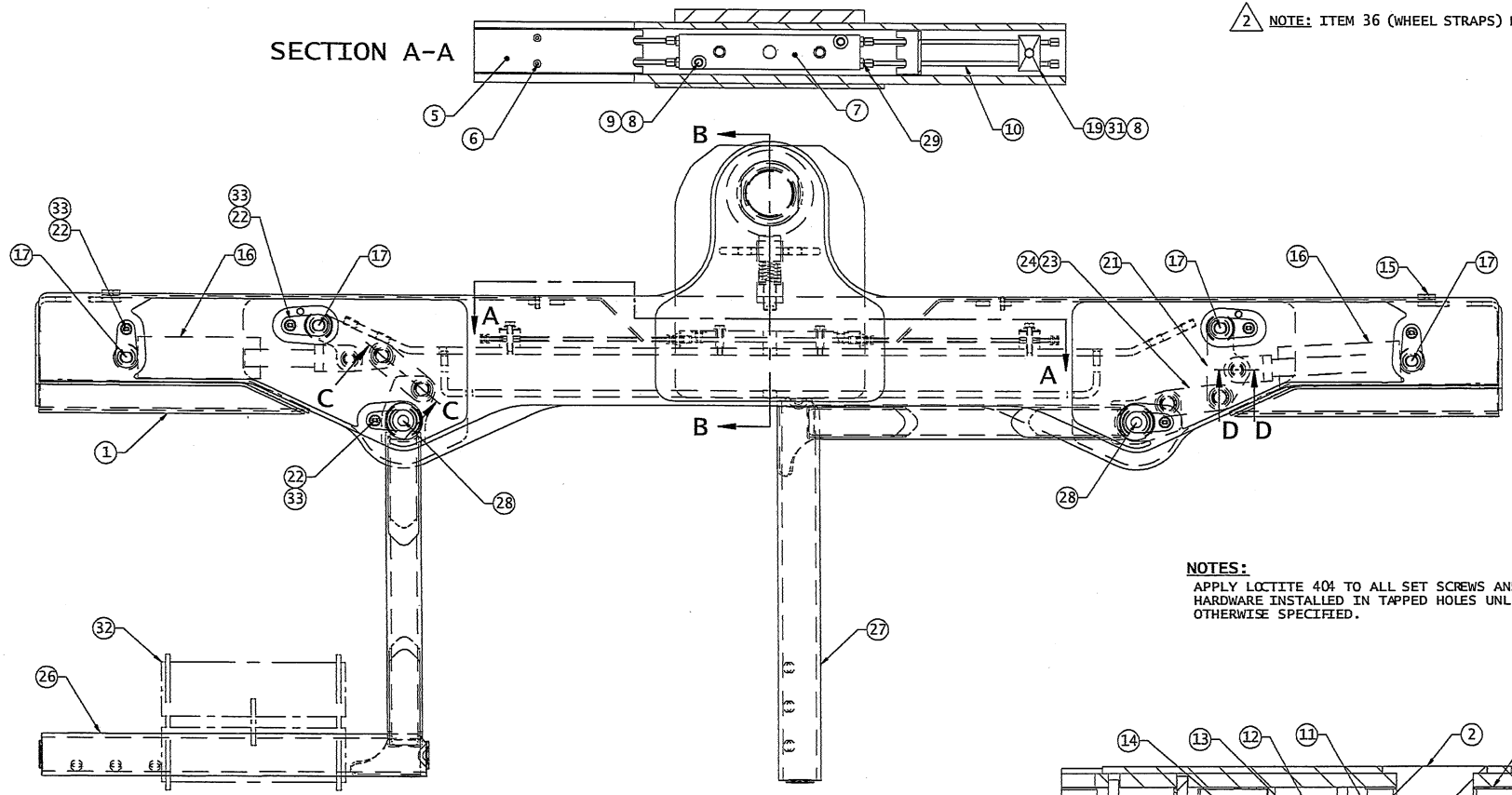
Empty table row

Empty table row

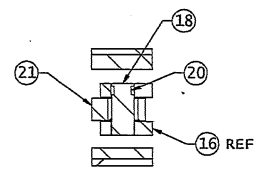
GRID ASSY NO-LUBE HYD FIXED GRID

DWG NO **3-484-000069** REV **03**

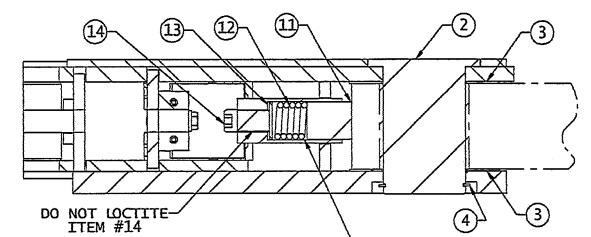
NOTE: ITEM 36 (WHEEL STRAPS) NOT SHOWN FOR CLARITY



SECTION C-C
1:2



SECTION D-D
1:2



SECTION B-B
1:2

NOTES:
APPLY LOCTITE 404 TO ALL SET SCREWS AND
HARDWARE INSTALLED IN TAPPED HOLES UNLESS
OTHERWISE SPECIFIED.

DO NOT LOCTITE
ITEM #14

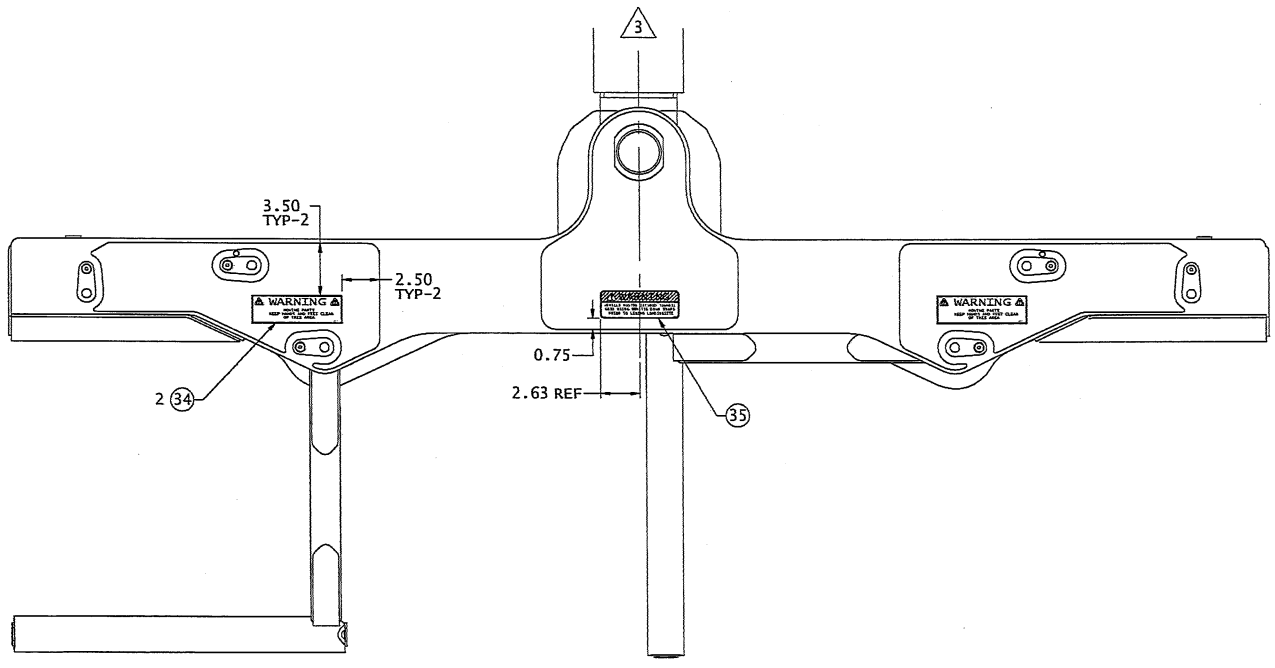
APPLY LIBERAL COAT OF ANTI
SEIZE COMPOUND TO INSIDE
OF BUSHING AND THREADED
AREA BEFORE INSTALLING
ITEMS #11,12,13,14.

JERR-DAN CORP
1848 WHEEL ROAD GREENCASTLE, PA. 15225

<p>THIS DRAWING AND RELATED MATERIAL CONTAINED HEREIN IS UNCLASSIFIED EXCEPT WHERE SHOWN OTHERWISE. DATE 07/23/03 BY [signature]</p> <p>UNCLASSIFIED EXCEPT WHERE SHOWN OTHERWISE. DATE 07/23/03 BY [signature]</p> <p>UNCLASSIFIED EXCEPT WHERE SHOWN OTHERWISE. DATE 07/23/03 BY [signature]</p>	<p>IF IN DOUBT ASK. DO NOT SCALE DRAWING. REMOVE ALL DIMS AND SHARP CORNERS.</p> <p>TELEPHONE NUMBER: 724-837-1111</p> <p>SCALE: 5:16</p> <p>DATE: 12/17/04</p>	<p>REF: SEE B/M</p> <p>SHEET: 1 OF 2</p> <p>WEIGHT: 7 #</p>
<p>GRID ASSY NO-LUBE HYD FIXED GRID</p> <p>SCALE: 5:16</p> <p>DATE: 12/17/04</p> <p>DRW: STK</p>	<p>REV: 03</p> <p>DWG NO: 3-484-000069</p>	<p>DATE: 12/17/04</p> <p>DRW: STK</p> <p>REV: 03</p>

GRID ASSY NO-LUBE HYD FIXED GRID

DWG NO 3-484-000069 REV 03



WHEEL GRID DECALS

<p>JERR-DAN CORP 1585 MYERS ROAD GREENCASTLE, PA 17225</p>		<p>TITLE: GRID ASSY NO-LUBE HYD FIXED GRID</p>	
<p>IF IN DOUBT ASK. DO NOT SCALE DRAWING. REMOVE ALL BURRS AND SHARP CORNERS.</p>		<p>IF IN DOUBT ASK. DO NOT SCALE DRAWING. REMOVE ALL BURRS AND SHARP CORNERS.</p>	
<p>IF THE DRAWING AND SERVICE PARTS CONTAINED ARE THE PROPERTY OF JERR-DAN CORP. THE USER AGREES TO HOLD JERR-DAN CORP. HARMLESS FROM ANY AND ALL LIABILITY THAT MAY BE INCURRED BY THE USER IN THE USE OF THE SERVICE PARTS CONTAINED HEREIN. THE USER AGREES TO HOLD JERR-DAN CORP. HARMLESS FROM ANY AND ALL LIABILITY THAT MAY BE INCURRED BY THE USER IN THE USE OF THE SERVICE PARTS CONTAINED HEREIN.</p>		<p>IF THE DRAWING AND SERVICE PARTS CONTAINED ARE THE PROPERTY OF JERR-DAN CORP. THE USER AGREES TO HOLD JERR-DAN CORP. HARMLESS FROM ANY AND ALL LIABILITY THAT MAY BE INCURRED BY THE USER IN THE USE OF THE SERVICE PARTS CONTAINED HEREIN.</p>	
<p>DATE: 12/17/04</p>		<p>SCALE: 5:16</p>	
<p>REV: 03</p>		<p>DRAWN BY: STK</p>	
<p>DATE: 12/17/04</p>		<p>SCALE: 5:16</p>	
<p>REV: 03</p>		<p>DRAWN BY: STK</p>	

***** Engineering Bill of Materials *****

** Report Excludes Shrinkage.

Effective as of 07/27/05

Item: 3484000076

GRID ASSY BIAS CUT L-ARM

From Item: 3484000076

To Item: 3484000076

Last Changed Date:

Reference:D/3834

Revision #0/0

BIN:

UOM: PC

Quantity

1

Receive into Whse: HYKS

Ball Dr	Bin	Description	QtyPer	UOM	Reference	Effectivity
-oon Sz Component Type Location			=====	===	=====	=====
01	C 3170000390	M BOOM WELD U/L CROSSTUBE	1.000	PC		-
02	B 4691000427	P 010203 h04 m03 PIN 2.75 DIA x 5.05 PIVOT	1.000	PC		-
03	A 4949000047	P 020304 d08 e12 WASHER 5.00"OD X 2.84"ID X .063"THK	2.000	pc		-
04	A 7754000024	P 010304 c18 g04 RING #WSM-275 RETAINING	1.000	pc		-
05	C 3484000030	M 080101 WA00 WA GRID WELD RH (4.00 SQ STD)	1.000	PC		-
06	C 3484000031	M 080101 WA00 GRID WELD LH (4.00 SQ STD)	1.000	PC		-
07	C 3020000037	M 040910 n01 WA0 ARM WELD LH "L" (PLATED) 2 x 3	1.000	PC		-
08	C 3020000038	M 040910 n01 WA0 ARM WELD RH "L" (PLATED) 2 x 3	1.000	ea		-
09	A 3551000036	P 102202 f04 f08 HANDLE WELD "T" - ZINIC PLATED	2.000	PC		-
10	C 3178000448	M BRKT WELD L-ARM STORAGE REAR LH	1.000	PC		-
11	C 3178000449	M BRKT WELD L-ARM STORAGE REAR RH	1.000	PC		-
12	B 4911000454	M TUBE 3.50 x 2.50 x 0.19 x 4.50	2.000	PC		-
13	A 4090000013	M BELT 0.12 x 2.00 x 7.00	2.000	PC		-
14	N 7114140818	P 000108 A125 x0 CAPSCREW 0.25"-20 X 1.00" SS BT HD	8.000	PC		-
15	N 7950140000	P 000104 A96 x01 LOCKWASHER .25" NOM REG CS	8.000	PC		-
16	N 7950140143	P 000102 x01 FLATWASHER 0.25 NOM NARROW SS	8.000	PC		-
17	A 7413000002	P c14 NUTSERT .25"-20NC AVK INDUSTRIAL	8.000	pc		-
18	A 7843000006	P 030505 101604 SPRING .66"OD X 1.75 LG COMP (MUSIC)	2.000	pc		-
19	A 4691000186	P 030505 102206 PIN 0.75 DIA X 3.313	2.000	PC		-
20	A 4254000005	P 030505 102205 CAP 1.25"DIA X 1.22" LONG	2.000	PC		-
21	A 4763000184	P 102205 d05 ROD .38"DIA C1040/45 CF - 1.75" LG	2.000	pc		-
22	N 7440030000	P 000103 c15 FITTING 0.25-28NF - STRAIGHT GREASE	2.000	PC		-
23	B 7330000036	P 040706 c02 c03 DECAL - WARNING - SECURE VEHICLE	2.000	pc		-
24	N 7330000037	P 040706 c02 f02 DECAL - MOVING PARTS	1.000	pc		-
25	B 7330000122	P 040704 c03 DECAL ALUMINUM - W/L WARNING	1.000	pc		-
26	A 7330000553	P DECAL L-ARM STORAGE	2.000	PC		-
27	B 7894000034	P FLOOR m10 n01 STRAP & RATCHET LIGHT DUTY L-ARM	2.000	PC		-

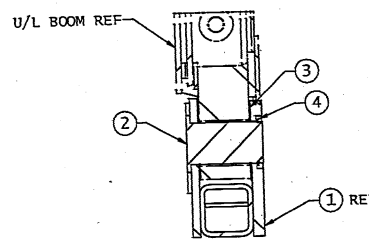
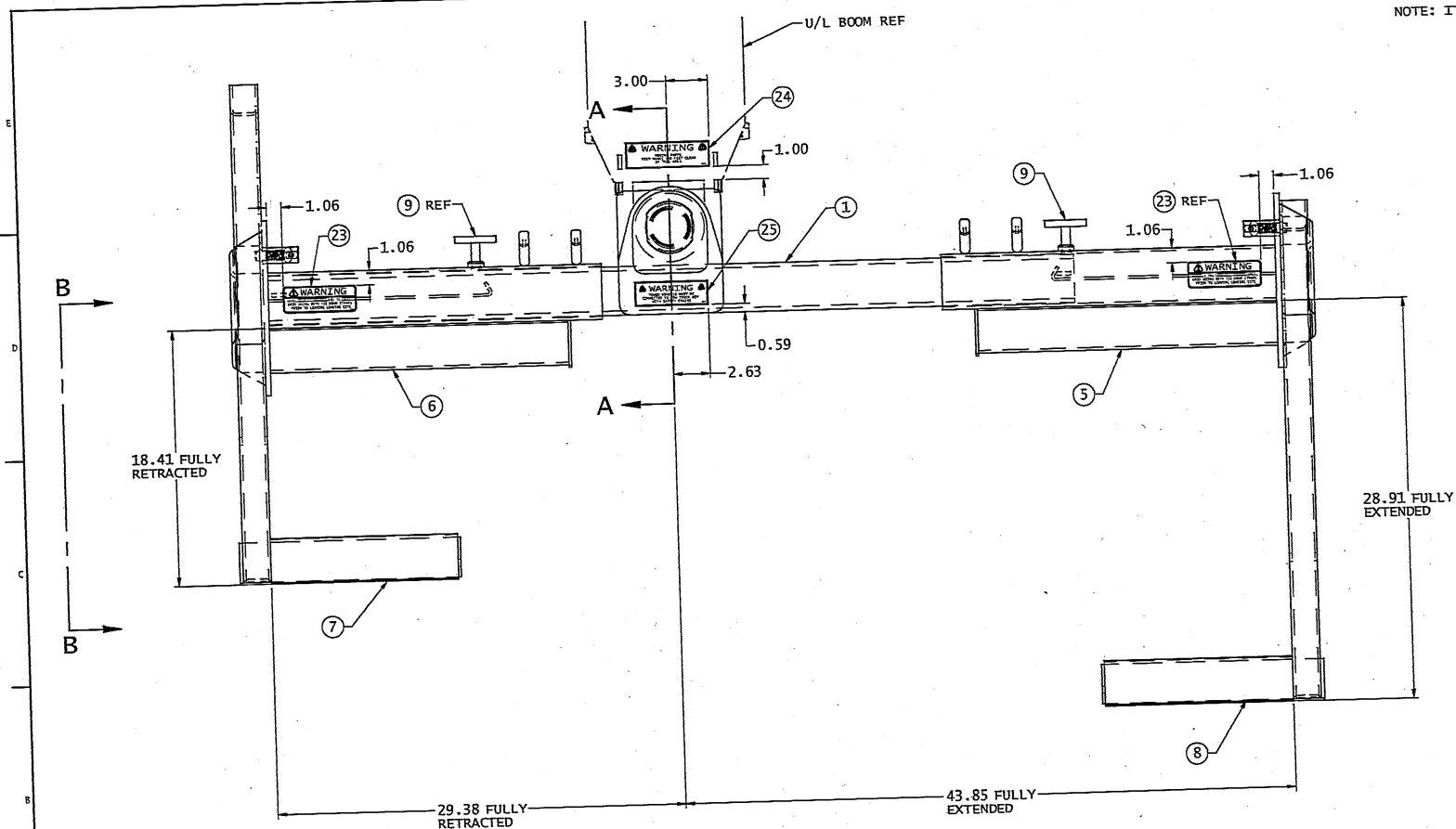
*** End of Item ***

*** End of Report ***

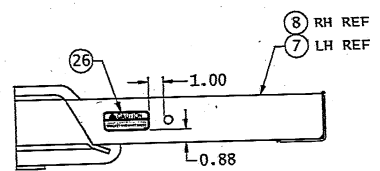
GRID ASSY BIAS CUT L-ARM

DWG NO **3-484-000076** REV **00**

NOTE: ITEM 27 (WHEEL STRAPS) NOT SHOWN FOR CLARITY



SECTION A-A



SECTION B-B
TYP-2 PLACES
LH SIDE SHOWN

<p>JERR-DAN A Division of Lockheed Martin</p>		SHEET	1 OF 2
		FIGURE	7 #
<p>IF IN DOUBT, ASK DO NOT SCALE DRAWING. REMOVE ALL DIMS. AND ROUND CORNERS.</p>		META	SEE B/M
<p>THIS DRAWING AND ALL PARTS THEREOF HEREBY ARE THE PROPERTY OF LOCKHEED MARTIN CORPORATION. IT IS TO BE KEPT IN CONFIDENTIALITY AND NOT TO BE REPRODUCED, COPIED, OR DISCLOSED TO ANY OTHER PARTY WITHOUT THE WRITTEN PERMISSION OF LOCKHEED MARTIN CORPORATION. ACCEPTANCE OF THIS DRAWING CONSTITUTES AGREEMENT TO THESE TERMS AND CONDITIONS.</p>		<p>TITLE GRID ASSY BIAS CUT L-ARM SCALE D, 23 DATE 06/14/05 DRAWN SWS CHECKED D 3-484-000076 REV 00</p>	

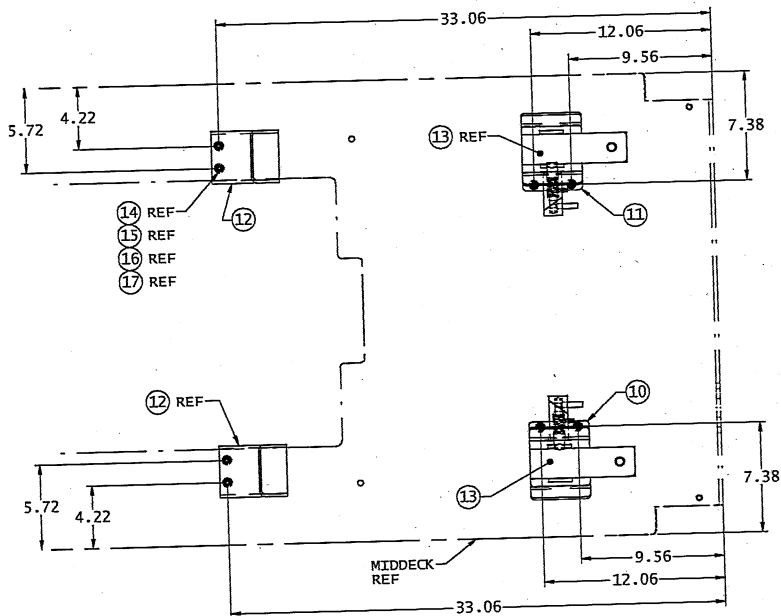
REVISION	BY	DATE	DESCRIPTION
1			

GRID ASSY BIAS CUT L-ARM

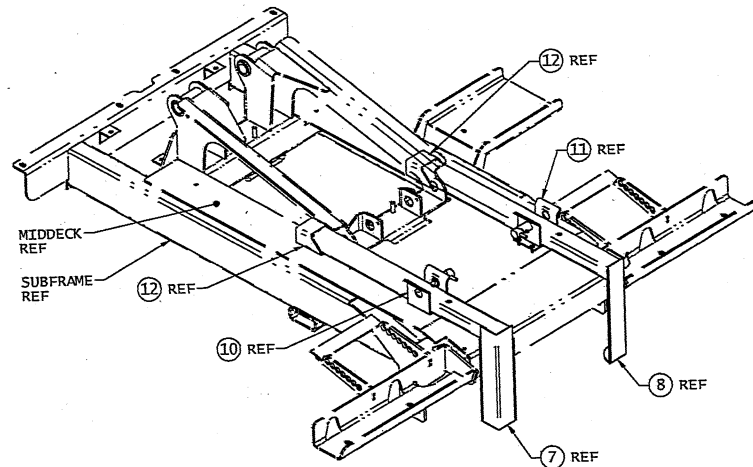
DWG NO 3-484-000076 REV 00

NOTE:

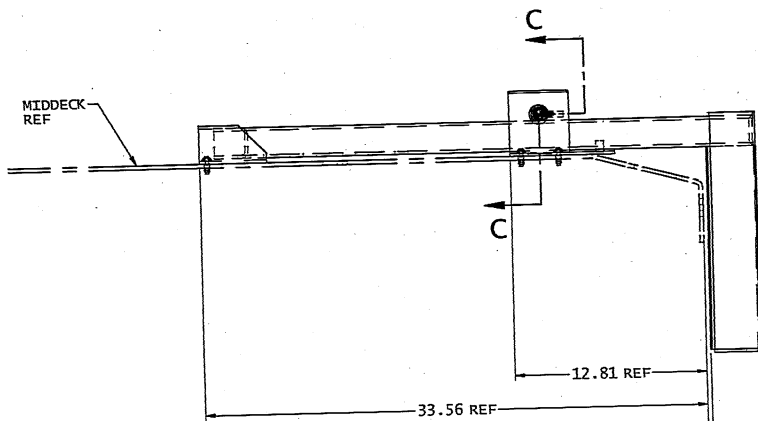
1. (FACTORY INSTALLATION - BEFORE INSTALLING MIDDECK)
DRILL 0.391 DIA HOLES IN MIDDECK AND INSTALL ITEM 17 (TYP-8 PLACES).
LOCATE HOLES PER DIMS SHOWN IN VIEW B-B, OR USE DRILL TEMPLATE PSMB05060201
2. BOND ITEM 13 TO ITEM 10 & 11
3. ASSEMBLE ITEM 19 (CAM LOCK PIN) WITH THE CHAMFER FACING UP WHEN IN THE CLOSED/STORED POSITION. ITEM 19 MUST SECURE ITEM 7 & 8 (T-37 ARMS) FROM LIFTING OUT OF BRKT.
4. APPLY 242 LOCTITE TO ITEM 21 (PIN) AND TIGHTEN SECURELY



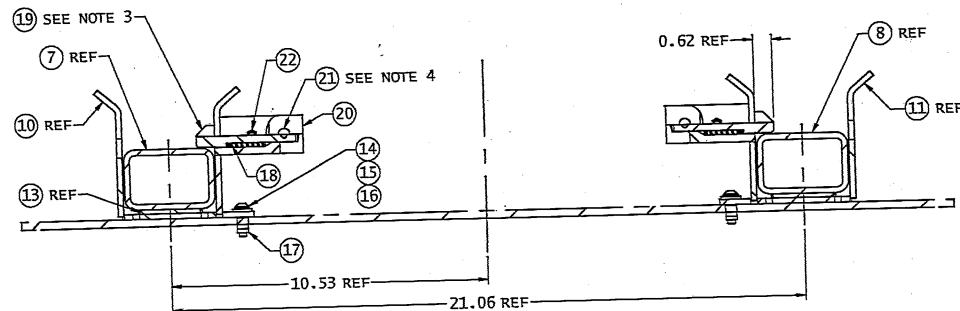
TOP VIEW
ITEMS 7 & 8 NOT SHOWN FOR CLARITY



AUX VIEW
SCALE: 0.12



L-ARM STORAGE
SCALE: 0.19



SECTION C-C
SCALE: 0.50

<p>JERR-DAN An Oshkosh Truck Company</p>		<p>DATE: 06/14/05 SCALE: 0.25 DRAWN: SPB</p>	<p>ITEM NO: 3834 REV: 00 DWG NO: 3-484-000076</p>	<p>SHEET: 2 OF 2 WEIGHT: 7.8</p>
<p>THIS DRAWING AND RELATED MATTER CONTAINS THE TRADE AND PROPRIETARY INFORMATION OF JERR-DAN. IT IS TO BE KEPT IN STRICTLY CONFIDENTIAL AND NOT TO BE REPRODUCED OR DISCLOSED TO ANY OTHER PERSON OR ENTITY WITHOUT THE WRITTEN CONSENT OF JERR-DAN. THIS COPY SHALL BE CONTROLLED BY JERR-DAN.</p>		<p>DO NOT SCALE DRAWING. REMOVE ALL DIMS AND DIMENSION LINES. DIMENSIONS SPECIFIED IN PARENT PARENTHESIS SHALL TAKE PRECEDENCE OVER DIMENSIONS SPECIFIED IN CHILD PARENTHESIS. DIMENSIONS SPECIFIED IN PARENT PARENTHESIS SHALL TAKE PRECEDENCE OVER DIMENSIONS SPECIFIED IN CHILD PARENTHESIS.</p>		
<p>REVISED BY: _____</p>	<p>DESCRIPTION: _____</p>	<p>DATE: _____</p>	<p>SCALE: _____</p>	<p>REV: _____</p>

***** Engineering Bill of Materials *****

** Report Excludes Shrinkage.

Effective as of 07/29/05

Item: 3484000077

GRID ASSY T-37 MANUAL PIVOTING

Reference: D/3834

From Item: 3484000077

To Item: 3484000077

Last Changed Date:

Revision #0/0

BIN:

UOM: PC

Quantity

1

Receive into Whse: HYKS

Ball Dr	Bin	Description	QtyPer	UOM	Reference	Effectivity
-oon Sz Component Type Location			=====	====	=====	=====
01 C 3170000390	M	BOOM WELD U/L CROSSTUBE	1.000	PC		-
02 B 4691000427	P 010203 h04 m03	PIN 2.75 DIA x 5.05 PIVOT	1.000	PC		-
03 A 4949000047	P 020304 d08 e12	WASHER 5.00"OD X 2.84"ID X .063"THK	2.000	pc		-
04 A 7754000024	P 010304 c18 g04	RING #WSM-275 RETAINING	1.000	pc		-
05 D 3484000046	M 080201 RBPS RB	GRID ASSY RH (4.00 SQ T37)	1.000	PC		-
06 D 3484000047	M 080201 090201	GRID ASSY LH (4.00 SQ T37)	1.000	PC		-
07 C 3020000029	M 070201 n01 WA0	LH L-ARM WELD (PLATED)	1.000	PC		-
08 C 3020000030	M 070201 n01 WA0	RH L-ARM WELD (PLATED)	1.000	PC		-
09 B 7894000034	P FLOOR m10 n01	STRAP & RATCHET LIGHT DUTY L-ARM	2.000	PC		-
10 3 3178000446	M	BRKT WELD T-37 STORAGE REAR LH	1.000	PC		-
11 C 3178000447	M	BRKT WELD T-37 STORAGE REAR RH	1.000	PC		-
12 3 4913000503	M	TUBE 2.50 x 2.50 x 0.19 x 4.50	2.000	PC		-
13 A 4090000013	M	BELT 0.12 x 2.00 x 7.00	2.000	PC		-
14 N 7114140818	P 000108 A125 x0	CAPSCREW 0.25"-20 X 1.00" SS BT HD	8.000	PC		-
15 N 7950140000	P 000104 A96 x01	LOCKWASHER .25" NOM REG CS	8.000	PC		-
16 N 7950140143	P 000102 x01	FLATWASHER 0.25 NOM NARROW SS	8.000	PC		-
17 A 7413000002	P c14	NUTSERT .25"-20NC AVK INDUSTRIAL	8.000	pc		-
18 A 7843000006	P 030505 101604	SPRING .66"OD X 1.75 LG COMP (MUSIC)	2.000	pc		-
19 A 4691000186	P 030505 102206	PIN 0.75 DIA X 3.313	2.000	PC		-
20 A 4254000005	P 030505 102205	CAP 1.25"DIA X 1.22" LONG	2.000	PC		-
21 A 4763000184	P 102205 d05	ROD .38"DIA C1040/45 CF - 1.75" LG	2.000	pc		-
22 N 7440030000	P 000103 c15	FITTING 0.25-28NF - STRAIGHT GREASE	2.000	PC		-
23 B 7330000036	P 040706 c02 c03	DECAL - WARNING - SECURE VEHICLE	2.000	pc		-
24 N 7330000037	P 040706 c02 f02	DECAL - MOVING PARTS	1.000	pc		-
25 A 7330000553	P	DECAL L-ARM STORAGE	2.000	PC		-
26 B 7330000383	P c09 f02	DECAL L-ARM SAFETY	2.000	PC		-
27 A 7330000384	P c09	DECAL T37 PATENT 4" GRID (SERVICE)REV2	2.000	PC		-

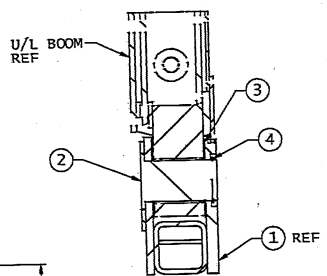
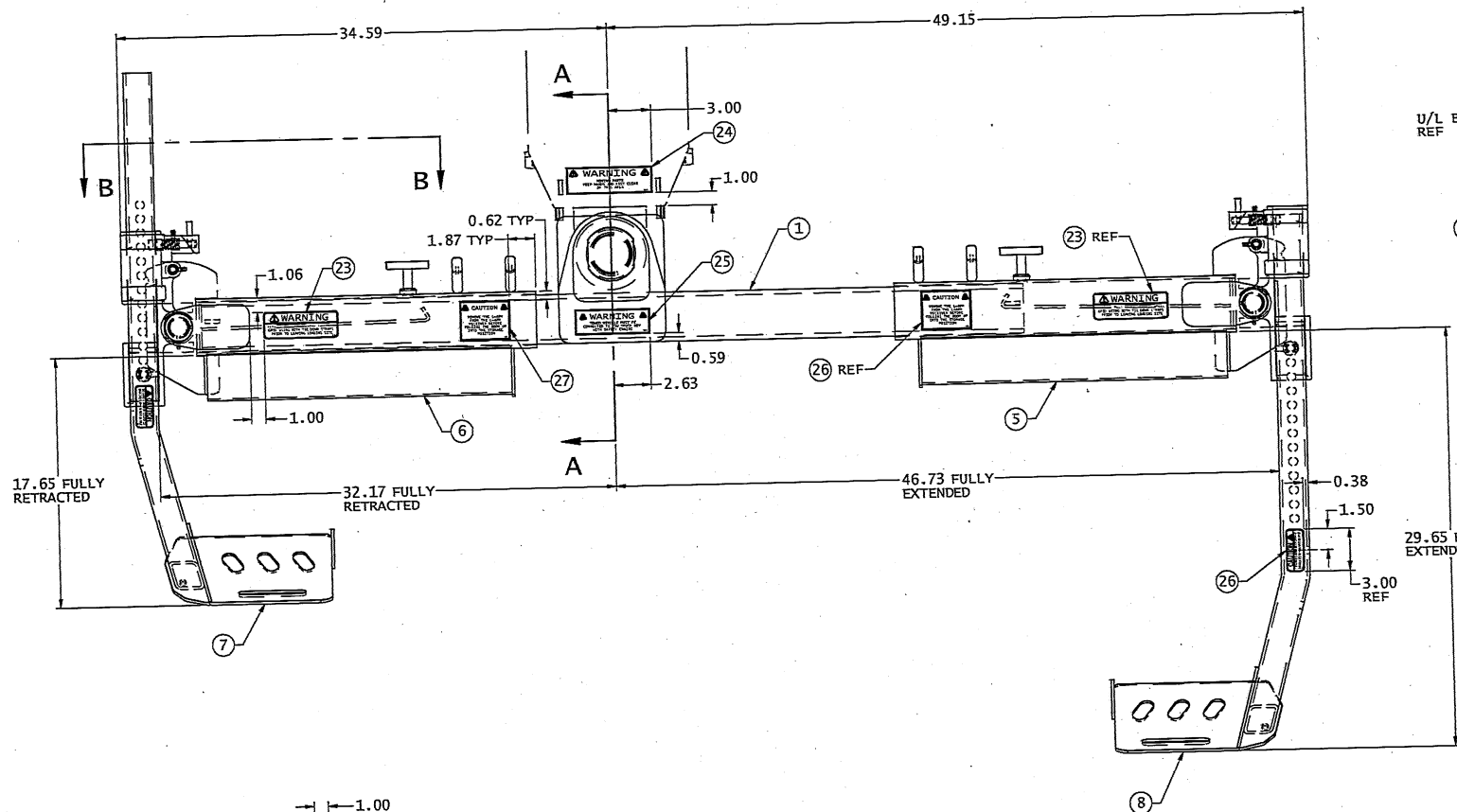
*** End of Item ***

*** End of Report ***

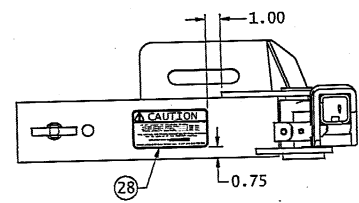
GRID ASSY T-37 MANUAL PIVOTING

DWG NO 3-484-000077 REV 00

NOTE: ITEM 9 (WHEEL STRAPS) NOT SHOWN FOR CLARITY



SECTION A-A



SECTION B-B
TYP-2 PLACES
LH SIDE SHOWN

<p>JERRIDAN An Alamo Truck Company</p>		<p>REV L SEE B/H</p>	<p>SHEET 1 OF 2</p>
<p>TITLE GRID ASSY T-37 MANUAL PIVOTING</p>		<p>REV 3834</p>	<p>WEIGHT 7.7</p>
<p>DATE 06/20/05</p>	<p>DRW SHE D</p>	<p>REV 00</p>	<p>DWG NO 3-484-000077</p>
<p>REV 01</p>	<p>DATE 06/20/05</p>	<p>REV 00</p>	<p>DWG NO 3-484-000077</p>

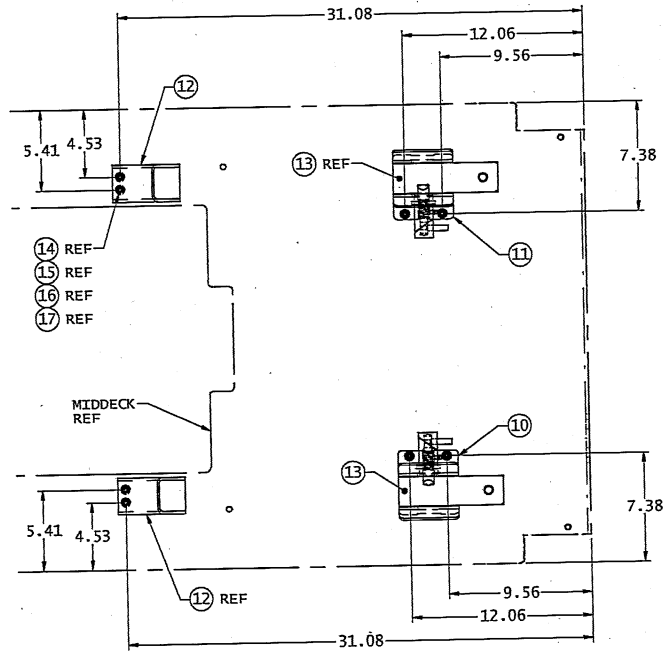
REV	DESCRIPTION	DATE
1		

GRID ASSY T-37 MANUAL PIVOTING

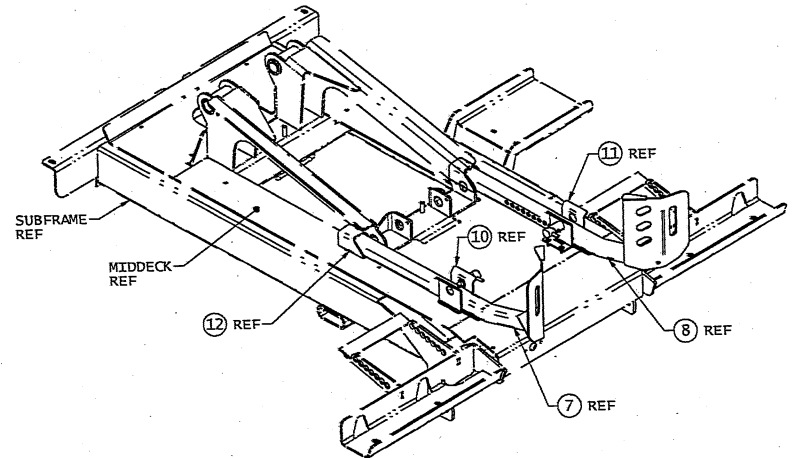
DWG NO **3-484-000077** REV **00**

NOTE:

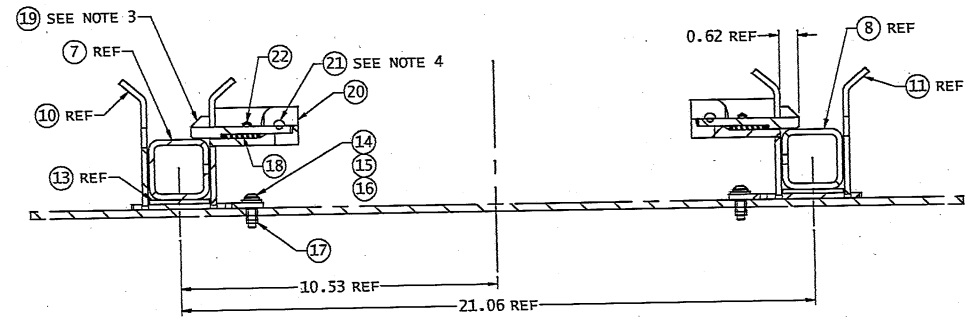
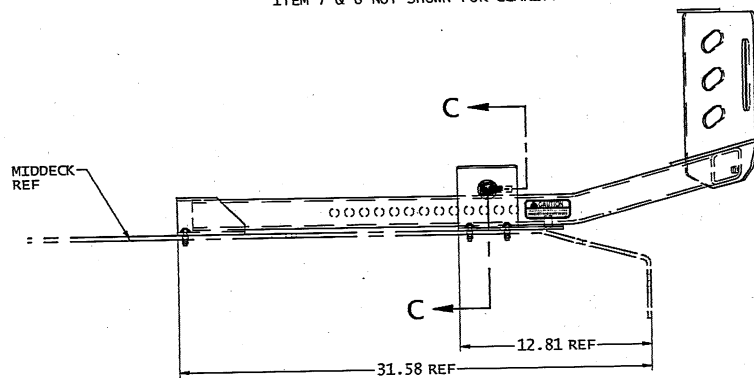
1. (FACTORY INSTALLATION - BEFORE INSTALLING MIDDECK)
DRILL 0.391 DIA HOLES IN MIDDECK AND INSTALL ITEM 17 (TYP-8 PLACES).
LOCATE HOLES PER DIMS SHOWN IN VIEW B-B, OR USE DRILL TEMPLATE PSMB05060201
2. BOND ITEM 13 TO ITEM 10 & 11
3. ASSEMBLE ITEM 19 (CAM LOCK PIN) WITH THE CHAMFER FACING UP WHEN IN THE CLOSED/STORED POSITION. ITEM 19 MUST SECURE ITEMS 7 & 8 (T-37 ARMS) FROM LIFTING OUT OF BRKT.
4. APPLY 242 LOCTITE TO ITEM 21 (PIN) AND TIGHTEN SECURELY



TOP VIEW
ITEM 7 & 8 NOT SHOWN FOR CLARITY



AUX VIEW
SCALE: 0.12



SECTION C-C
SCALE: 0.50

JERRIDAN Aircraft Products Company		SHEET 2 OF 2	
TO IN DOUBT ASK TO GET SCALE DRAWING REMOVE ALL SURFS AND DIMS CORRECTLY.		WEIGHT ? #	
TOLERANCE UNLESS OTHERWISE SPECIFIED		DATE 06/20/05	
5 PLACE DEC DIMS		DRAW SHG D	
3 PLACE DIMS UNLESS OTHERWISE SPECIFIED		3-484-000077	
4 PLACE DIMS UNLESS OTHERWISE SPECIFIED		REV	
1/16" UNLESS OTHERWISE SPECIFIED		06/20/05	

REVISION	BY	DESCRIPTION	DATE
1			

Wheelgrid Hydraulic Lines & Fittings

***** Engineering Bill of Materials *****

** Report Excludes Shrinkage.
Effective as of 07/29/05
Item: 3509530098

HYD GRID HLF INST MPL-40

From Item: 3509530098
To Item: 3509530098
Last Changed Date:

Reference: D/3774B

Revision #0/0

BIN: WA03

UOM: PC

Quantity 1 Receive into Whse: MYPT

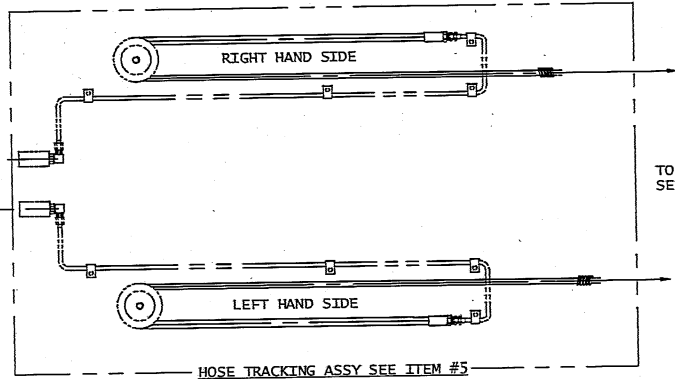
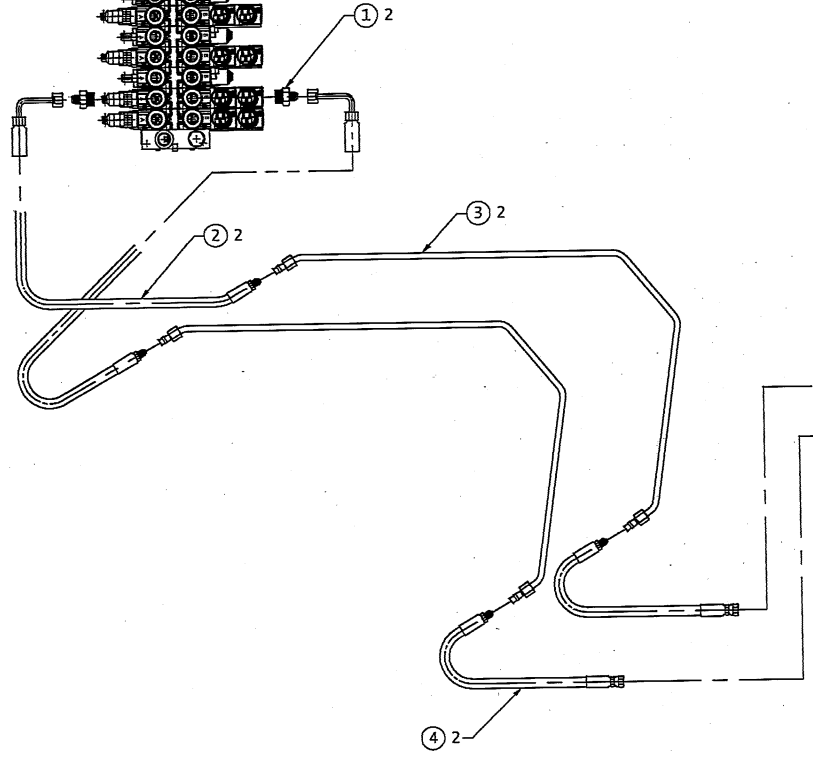
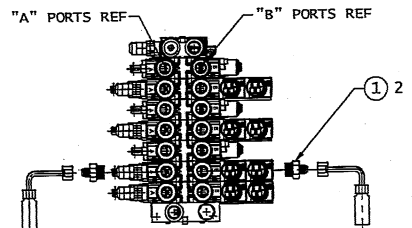
Ball Dr	Bin	Description	QtyPer	UOM	Reference	Effectivity
-oon Sz Component Type Location			=====	===	=====	=====
01	7445060843 P 040303 b07 b43	ADAPTER #6JIC(M) x #8"O"(M) STR	2.000	pc		-
02	N 4569123054 M WA02	HOSE .38 x 54 #6 ST(M) - #6 L90(FSW)	2.000	PC		-
03	C 7912000202 P k-floor	TUBE ASSY 0.38 OD x 0.049W x 112.25	2.000	PC		-
04	N 4570000229 M WA03	HOSE 0.25 x 14.50 #4 ST(FSW) - #6 ST(M)	2.000	PC		-
05	D 3509870046 M WA00	UNDERLIFT ASSY HOSE TRACKING	1.000	PC		-
06	D 3509530061 M WA00	HYDRAULIC SCHEMATIC GRID	1.000	PC		-

*** End of Item ***

*** End of Report ***

HYD GRID HLF INST MPL-40

DWG NO 3-509-530098 REV 00



TO GRID HOSE ASSY
SEE ITEM #6

JERR-DAN CORP <small>3000 WYCKE ROAD GREENCASTLE, PA 15225</small>		PART: SEE B/M SHEET: 1 OF 1 WEIGHT: ? #
<small>THIS DRAWING AND RELATED MATTER IS UNCLASSIFIED AND THE DATE AND AUTHORITY ARE: 08/01/2001 BY: 60322 UCBAW/STW</small>		TITLE: HYD GRID HLF INST MPL-40 SCALE: NONE DWG NO: 3774 REV: D DATE: 02/02/05 DRAWN: BSK DWG NO: 3-509-530098 REV: 00
TO THE POINTS AND... DO NOT SCALE DRAWING. REMOVE ALL DIMS AND... DIMENSIONS UNLESS... UNLESS SPECIFIED... 2 PLACE DEC IN... 3 PLACE DEC IN... 4 PLACE DEC IN... 5 PLACE DEC IN... 6 PLACE DEC IN... 7 PLACE DEC IN... 8 PLACE DEC IN... 9 PLACE DEC IN... 0 PLACE DEC IN...	TO THE POINTS AND... DO NOT SCALE DRAWING. REMOVE ALL DIMS AND... DIMENSIONS UNLESS... UNLESS SPECIFIED... 2 PLACE DEC IN... 3 PLACE DEC IN... 4 PLACE DEC IN... 5 PLACE DEC IN... 6 PLACE DEC IN... 7 PLACE DEC IN... 8 PLACE DEC IN... 9 PLACE DEC IN... 0 PLACE DEC IN...	TO THE POINTS AND... DO NOT SCALE DRAWING. REMOVE ALL DIMS AND... DIMENSIONS UNLESS... UNLESS SPECIFIED... 2 PLACE DEC IN... 3 PLACE DEC IN... 4 PLACE DEC IN... 5 PLACE DEC IN... 6 PLACE DEC IN... 7 PLACE DEC IN... 8 PLACE DEC IN... 9 PLACE DEC IN... 0 PLACE DEC IN...

REV	DESCRIPTION	DATE	BY
1			
2			

***** Engineering Bill of Materials *****

** Report Excludes Shrinkage.
Effective as of 07/29/05
Item: 3509870046

UNDERLIFT ASSY HOSE TRACKING

Reference: D/3627
Revision #0/1/3666
BIN: WA00
From Item: 3509870046
To Item: 3509870046
Last Changed Date:

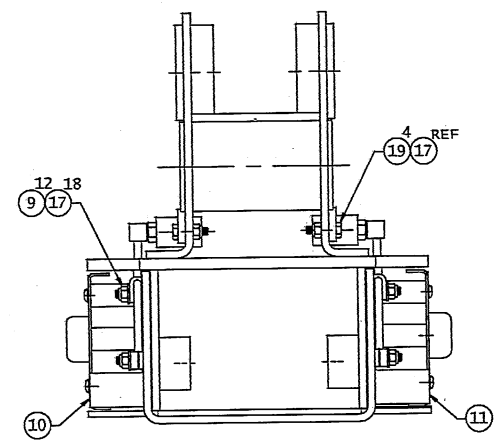
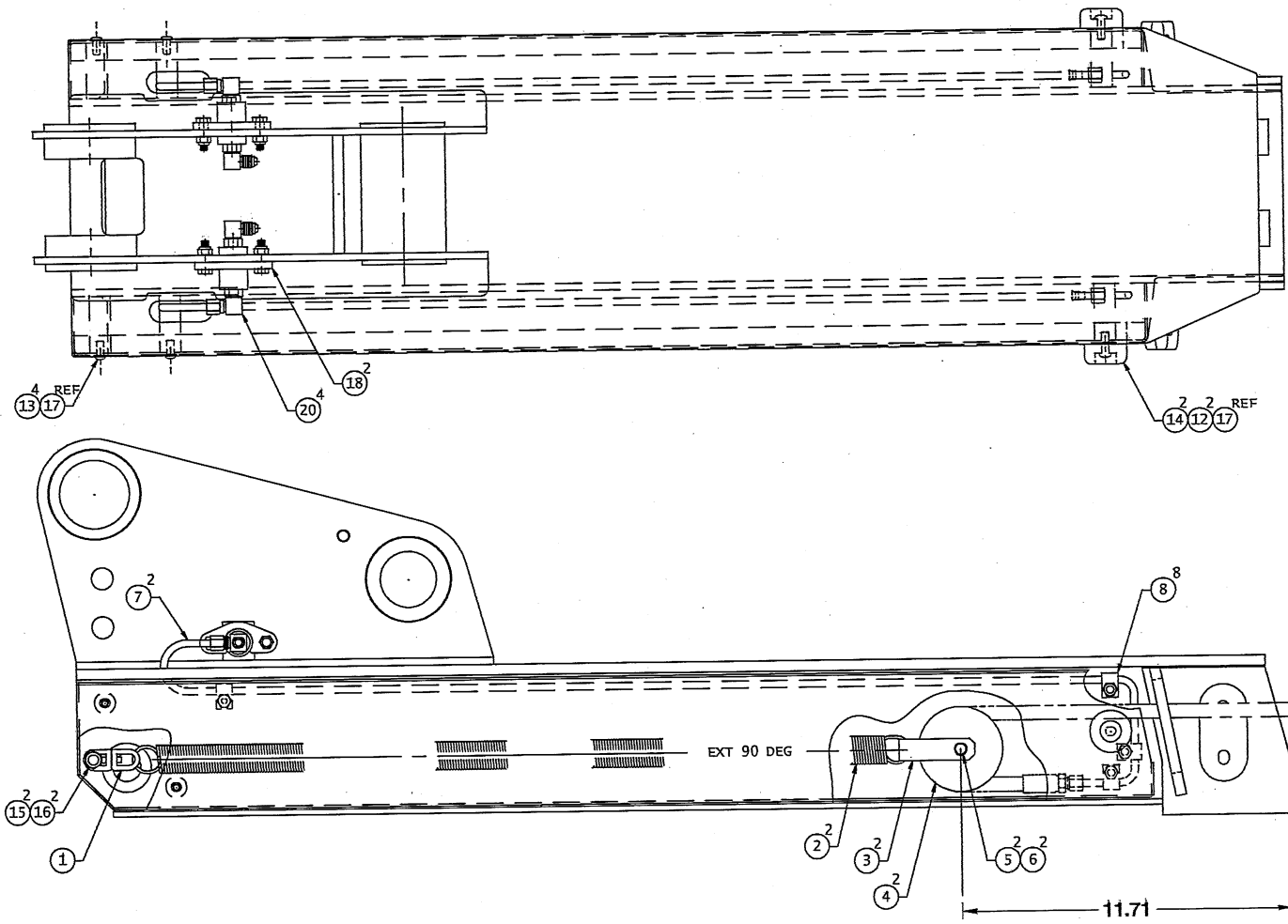
Quantity	1	Receive into Whse: MYPT	Reference: D/3627	Revision #0/1/3666	UOM: PC
----------	---	-------------------------	-------------------	--------------------	---------

Ball Dr	Bin	Location	Description	QtyPer	UOM	Reference	Effectivity
01	A 7592000004	P 102405 a07	LINK SWIVEL #S0128-0004	2.000	PC		-
02	B 7843000031	P a07	SPRING EXT 1.00 OD X 8.00/ 0.095 W	2.000	PC		-
03	B 4706003501	M WBPS	PLATE 14GA X 0.75 X 5.80	2.000	PC		-
04	A 7719000004	P a08	Roller	2.000	PC		-
05	A 7691000040	P a07	PIN CLEVIS 0.38 DIA X 1.50 LG	2.000	PC		-
06	A 7691000042	P a07	PIN COTTER 5/32" DIA. X 1"	2.000	PC		-
07	C 7912000174	P j59	TUBE 0.25 OD X 0.049W X 42.18	2.000	PC		-
08	A 7274000073	P 102405 b19	HOSE CLAMP 0.25 DIA	8.000	PC		-
09	N 7660142604	P 000102 a03	LOCKNUT .25"-20NC NYLOK STAINLESS	12.000	pc		-
10	C 4706004066	M WBPS	PLATE 14GA X 6.14 X 42.09 LH	1.000	PC		-
11	C 4706004067	M WBPS	PLATE 14GA X 6.14 X 42.09 RH	1.000	PC		-
12	N 7114140618	P 000108	CAPSCREW .25 - 20NC x .75 SS BTHD SC	2.000	pc		-
13	N 7114140427	P 000102	CAPSCREW .25"-20NC X .50" SS BH w/PATCH	4.000	PC		-
14	A 7189000019	P 102306 a05	BUMPER RUBBER 1.50 x DAI BOLT-ON	2.000	PC		-
15	N 7950160153	P 000108	FLAT WASHER .38" NOM REG S/S	2.000	PC		-
16	N 7660162604	P	LOCKNUT 0.38-16 NC S/S NYLOC	2.000	PC		-
17	N 7950140143	P 000102 x01	FLATWASHER 0.25 NOM NARROW SS	18.000	PC		-
18	B 3619000001	M WS02	MANIFOLD WELDMENT QP40 GRIDS	2.000	PC		-
19	N 7115140850	P 080303 A127 x0	CAPSCREW .25"-20NC X 1.00" HEX HEAD	4.000	pc		-
20	* 7445040445	P 020506 b38	ELBOW 90 MRG #4JIC(M) -#4"O" (M)	4.000	pc		-

*** End of Item ***

*** End of Report ***

GENERAL NOTES
 DO NOT SCALE DRAWING
 BREAK SHARP CORNERS
 ⬠ DENOTES "CRITICAL"
 DIMENSION AND MUST
 BE CONTROLLED BY
 STATISTICAL ANALYSIS



CROSSTUBE STOP NOT
 SHOWN IN THIS VIEW
 FOR CLARITY

				TOLERANCES (EXCEPT AS NOTED)		JERR-DAN CORP. GREENCASTLE, PA.	
				DECIMAL	MAT'L SEE ABOVE	SCALE HALF	DRAWN BY SCH/RMF
				FRACTION			DWG NO. 3627
				ANGULAR	TITLE ASSY, BASE BOOM		
				±0° 30'	DATE	REV ASBY	03-509-870009
				APPLICABLE TO THE PART & LINE OF CONTROLLING	8/2/03	DRAWING NO.	D3-509-870046
1	3666	PICTURE CHANGE TO BASE BOOM	10/29/03	RMP			ORIGINAL
REV	ERN	DESCRIPTION	DATE	DNK			

***** Engineering Bill of Materials *****

** Report Excludes Shrinkage.
Effective as of 07/29/05
Item: 3509530061

HYDRAULIC SCHEMATIC GRID

From Item: 3509530061
To Item: 3509530061
Reference: D/3653
Revision #0/0
BIN: WA00
Last Changed Date:
UOM: PC

Quantity	1	Receive into Whse: MYPT	Reference: D/3653	Revision #0/0	BIN: WA00	UOM: PC
----------	---	-------------------------	-------------------	---------------	-----------	---------

Ball Dr	Bin							
-oon Sz	Component	Type	Location	Description	QtyPer	UOM	Reference	Effectivity
===	==	=====	=====	=====	=====	==	=====	=====
01	N 4570000210	M		HOSE 0.19 x 64.50 #4JIC ST(RM)-ST(FSW)	2.000	PC		-
02	* 7445040445	P	020506 b38	ELBOW 90 MRG #4JIC(M)-#4"O"(M)	6.000	pc		-
03	N 4570000211	M		HOSE 0.19 x 18.00 #4JIC ST(RM)-ST(FSW)	2.000	PC		-
04	N 4570000212	M		HOSE 0.19 x 25.25 #4JIC ST(RM)-ST(FSW)	2.000	PC		-

*** End of Item ***

*** End of Report ***

*** End of Report ***								
-----------------------	--	--	--	--	--	--	--	--

--	--	--	--	--	--	--	--	--

--	--	--	--	--	--	--	--	--

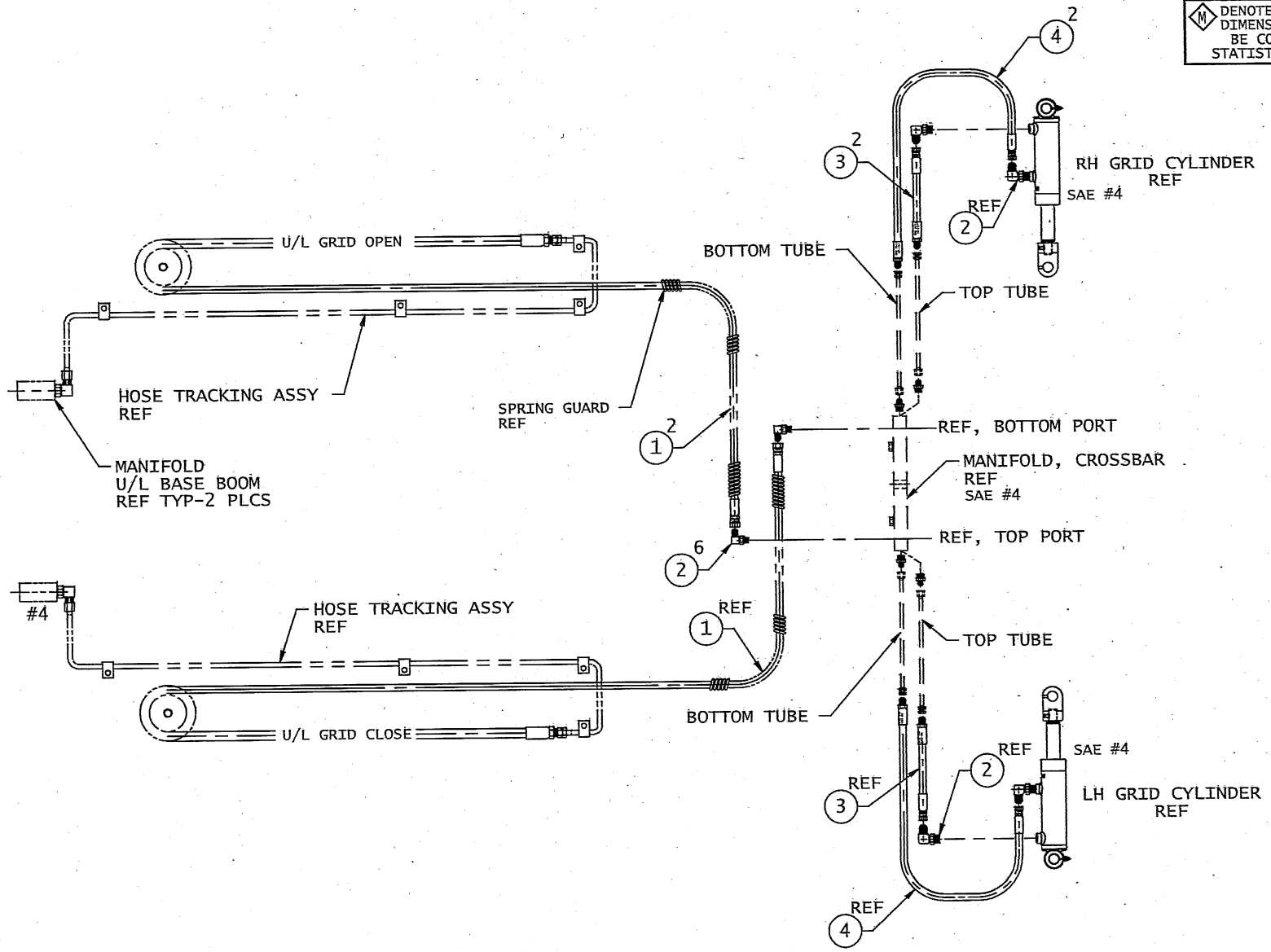
--	--	--	--	--	--	--	--	--

--	--	--	--	--	--	--	--	--

GENERAL NOTES

DO NOT SCALE DRAWING
BREAK SHARP CORNERS

M DENOTES "CRITICAL"
DIMENSION AND MUST
BE CONTROLLED BY
STATISTICAL ANALYSIS



REV		ERN	DESCRIPTION	DATE	DRN																																										
<table border="1" style="width: 100%;"> <tr> <td colspan="2">TOLERANCES (EXCEPT AS NOTED)</td> <td colspan="4" style="text-align: center;">JERRI-DAN CORP. GREENCASTLE, PA.</td> </tr> <tr> <td>DECIMAL</td> <td>MAT'L</td> <td>SEE ABOVE</td> <td>SCALE</td> <td colspan="2">DRAWN BY SCH</td> </tr> <tr> <td>2 PLACE .002</td> <td></td> <td></td> <td>NTS</td> <td colspan="2">ERN NO. 3653</td> </tr> <tr> <td>3 PLACE .015</td> <td></td> <td></td> <td></td> <td colspan="2"></td> </tr> <tr> <td>ANGULAR</td> <td colspan="2">TITLE</td> <td colspan="3">HYDRAULIC SCHEMATIC, GRID</td> </tr> <tr> <td>±0° 30'</td> <td>DATE</td> <td>12-08-03</td> <td>NEXT ASS'Y</td> <td>3-484-000060</td> <td>ORIGINAL</td> </tr> <tr> <td colspan="2">LIMITS ARE TO BE NON-ACCUMULATIVE PER A LINE OF DIMENSIONS.</td> <td colspan="2">DRAWING NO.</td> <td colspan="2">C3-509-530061</td> </tr> </table>						TOLERANCES (EXCEPT AS NOTED)		JERRI-DAN CORP. GREENCASTLE, PA.				DECIMAL	MAT'L	SEE ABOVE	SCALE	DRAWN BY SCH		2 PLACE .002			NTS	ERN NO. 3653		3 PLACE .015						ANGULAR	TITLE		HYDRAULIC SCHEMATIC, GRID			±0° 30'	DATE	12-08-03	NEXT ASS'Y	3-484-000060	ORIGINAL	LIMITS ARE TO BE NON-ACCUMULATIVE PER A LINE OF DIMENSIONS.		DRAWING NO.		C3-509-530061	
TOLERANCES (EXCEPT AS NOTED)		JERRI-DAN CORP. GREENCASTLE, PA.																																													
DECIMAL	MAT'L	SEE ABOVE	SCALE	DRAWN BY SCH																																											
2 PLACE .002			NTS	ERN NO. 3653																																											
3 PLACE .015																																															
ANGULAR	TITLE		HYDRAULIC SCHEMATIC, GRID																																												
±0° 30'	DATE	12-08-03	NEXT ASS'Y	3-484-000060	ORIGINAL																																										
LIMITS ARE TO BE NON-ACCUMULATIVE PER A LINE OF DIMENSIONS.		DRAWING NO.		C3-509-530061																																											

Light Pylon Installation

***** Engineering Bill of Materials *****

** Report Excludes Shrinkage.

Effective as of 08/01/05

Item: 2509570054

LIGHT PYLON INSTALL 37" MPL

From Item: 2509570054

To Item: 2509570054

Reference: D/3774E

Last Changed Date:

Revision #0/0

Quantity	1	Receive into Whse: MYPT	BIN: WA03	UOM: PC
----------	---	-------------------------	-----------	---------

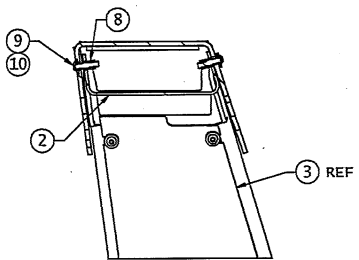
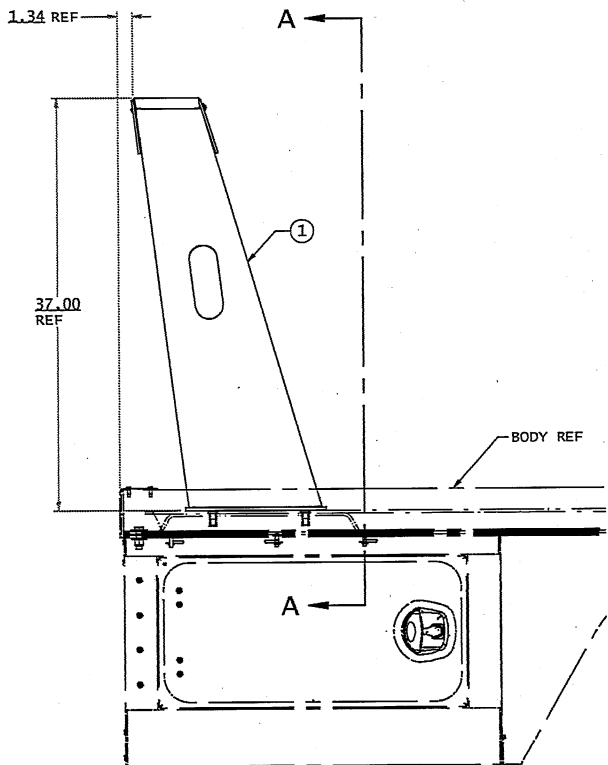
Ball Dr	Bin	Description	QtyPer	UOM	Reference	Effectivity
-oon Sz Component Type Location			=====	===	=====	=====
01 D 3509570103	M WA00	LIGHT PYLON WELDMENT 37" MPL	1.000	PC		-
02 D 4263000689	M WBPS	CHANNEL 0.12 x 9.13 x 55.32 ALUM	1.000	PC		-
03 C 4706005002	M WA00	PLATE 0.12 x 14.94 x 34.12 ALUM	2.000	PC		-
04 A 7949000058	P	WASHER 0.88 OD x 0.53 ID x 0.187" ZINC	4.000	PC		-
05 3 7796000091	P e01	GASKET .06 X 3.62 X 12.50 NEOPRENE	2.000	PC		-
06 N 7115181450	P 080305 a53 x01	CAPSCREW .50"-13NC X 1.75" HEX HEAD	4.000	pc		-
07 N 7950180161	P 030602 080305	FLATWASHER .50" NOM WIDE - PLATED	4.000	PC		-
08 A 7413000002	P c14	NUTSERT .25"-20NC AVK INDUSTRIAL	8.000	pc		-
09 N 7114140818	P 000108 A125 x0	CAPSCREW 0.25"-20 X 1.00" SS BT HD	8.000	PC		-
10 N 7950140143	P 000102 x01	FLATWASHER 0.25 NOM NARROW SS	20.000	PC		-
11 N 7114140618	P 000108	CAPSCREW .25 - 20NC x .75 SS BTHD SC	12.000	pc		-
12 A 7661000019	P 000102	U-NUT .25"-20NC	12.000	pc		-

*** End of Item ***

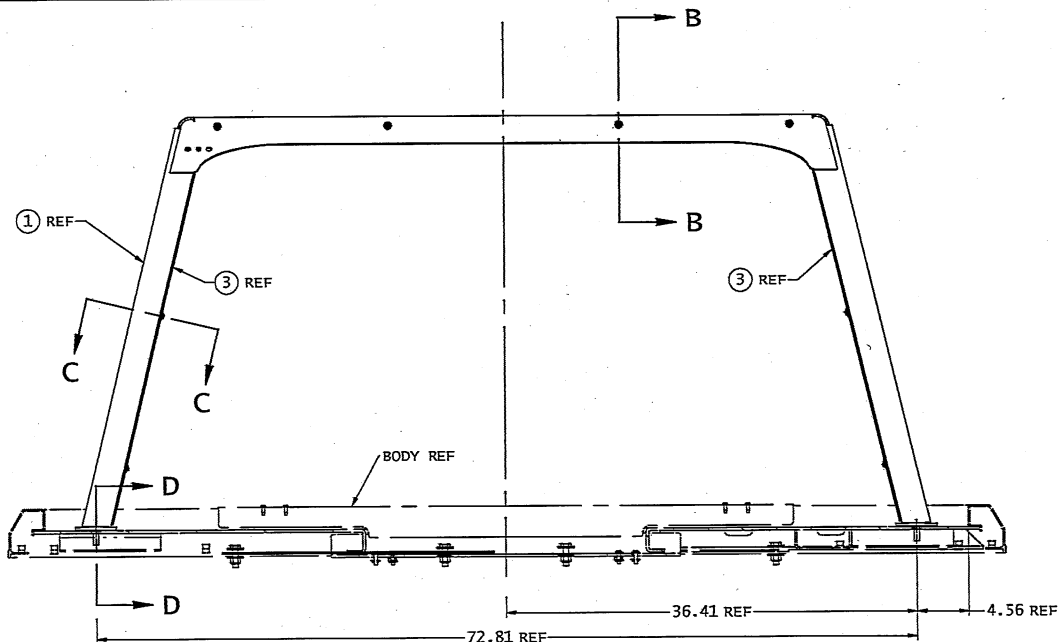
*** End of Report ***

LIGHT PYLON INSTALL 37" MPL-40

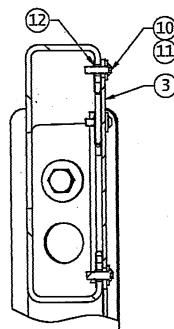
DWG NO. 2-509-570054 REV 00



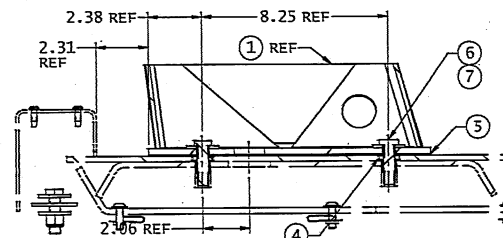
SECTION B-B
SCALE: 0.38



SECTION A-A



SECTION C-C
SCALE: 0.50



USING ITEM 1 AS A
TEMPLATE DRILL 1.88
DIA HOLE THRU DECK
FOR WIRING HARNESS

SECTION D-D
SCALE: 0.38

<p>JERRIDAN Aircraft Maintenance Equipment</p>		<p>IF IN DOUBT ASK. DO NOT HANG DRAWING. REMOVE ALL BURRS AND SHARP CORNERS.</p>	<p>NET: SEE S/M</p>	<p>SHEET 1 OF 1 FIGURE 7 8</p>
<p>THIS DRAWING AND RELATED MATTER CONTAINED HEREIN IS THE SOLE AND EXCLUSIVE PROPERTY OF JERRIDAN CORPORATION. THIS DRAWING IS LOANED TO YOU FOR YOUR USE ONLY. IT IS NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT THE WRITTEN CONSENT OF JERRIDAN CORPORATION. ACCEPTANCE OF THIS OFF-PALM IS CONSIDERED AS AGREEMENT BY THE PURCHASER.</p>		<p>THE DIMENSIONS SHOWN UNLESS OTHERWISE SPECIALLY NOTED ARE IN INCHES UNLESS OTHERWISE SPECIALLY NOTED DATE 02/25/05</p>	<p>TITLE LIGHT PYLON INSTALL 37" MPL-40</p>	<p>SCALE: 0.38 DATE 02/25/05 DRAWN: SMC CHECK: SMC</p>
<p>REVISED BY</p>	<p>DESCRIPTION</p>	<p>DATE</p>	<p>BY</p>	<p>2-509-570054 00</p>

***** Engineering Bill of Materials *****

** Report Excludes Shrinkage.
Effective as of 08/01/05
Item: 2509570057

LIGHT PYLON INSTALL 28.31" MPL

From Item: 2509570057
To Item: 2509570057
Reference: D/3774E
Last Changed Date:
Revision #0/0

Quantity	1	Receive into Whse: MYPT	Reference: D/3774E	Last Changed Date:
			Revision #0/0	
			BIN: WA03	UOM: PC

Ball Dr	-oon Sz	Component	Type	Bin Location	Description	QtyPer	UOM	Reference	Effectivity
====	==	=====		=====	=====	=====	---	=====	=====
01	D	3509570106	M	WA03	LIGHT PYLON WELDMENT 28.31 MPL-40	1.000	PC		-
02	D	4263000689	M	WBPS	CHANNEL 0.12 x 9.13 x 55.32 ALUM	1.000	PC		-
03	B	4314000102	M	WBPS	COVER PLATE 0.12 x 13.74 x 25.62	2.000	PC		-
04	A	7949000058	P		WASHER 0.88 OD x 0.53 ID x 0.187" ZINC	4.000	PC		-
05	3	7796000091	P	e01	GASKET .06 X 3.62 X 12.50 NEOPRENE	2.000	PC		-
06	3	7115181650	P	030601 a54	CAPSCREW 0.50"-13NC X 2.00" HEX HEAD	4.000	pc		-
07	N	7950180161	P	030602 080305	FLATWASHER .50" NOM WIDE - PLATED	8.000	PC		-
08	A	7413000002	P	c14	NUTSERT .25"-20NC AVK INDUSTRIAL	8.000	pc		-
09	N	7114140818	P	000108 A125 x0	CAPSCREW 0.25"-20 X 1.00" SS BT HD	8.000	PC		-
10	N	7950140143	P	000102 x01	FLATWASHER 0.25 NOM NARROW SS	20.000	PC		-
11	N	7114140618	P	000108	CAPSCREW .25 - 20NC x .75 SS BTHD SC	12.000	pc		-
12	A	7661000019	P	000102	U-NUT .25"-20NC	12.000	pc		-
13	N	7660182601	P	000105 x01	LOCKNUT .50"-13NC GR5 HEC NYLOC	4.000	PC		-

*** End of Item ***

*** End of Report ***

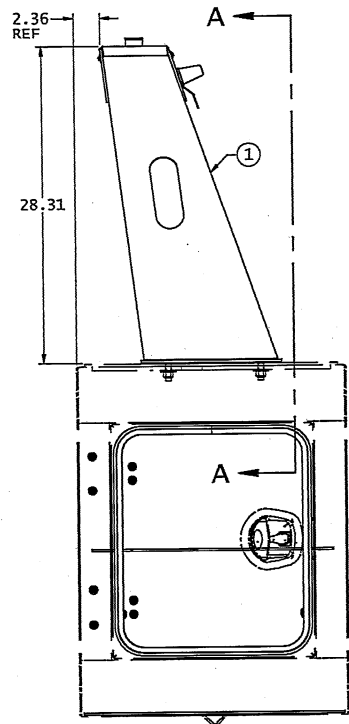
--

--

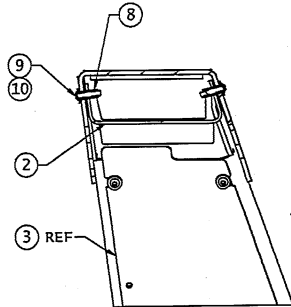
--

LIGHT PYLON INSTALL 28.31" MPL-40

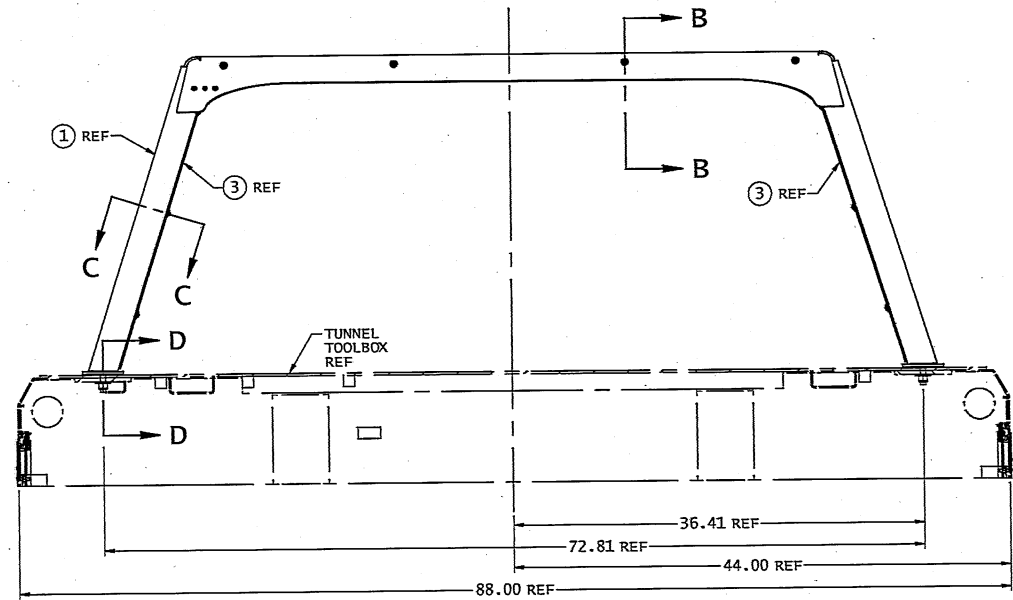
DWG NO 2-509-570057 REV 00



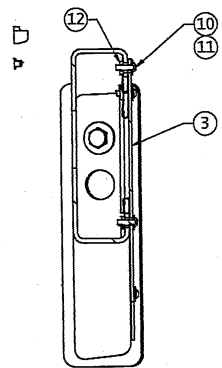
SECTION B-B
SCALE: 0.38



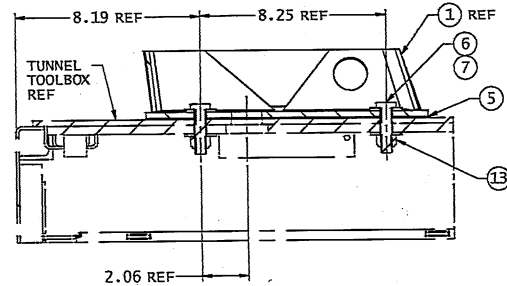
SECTION C-C
SCALE: 0.38



SECTION A-A



SECTION D-D
SCALE: 0.38

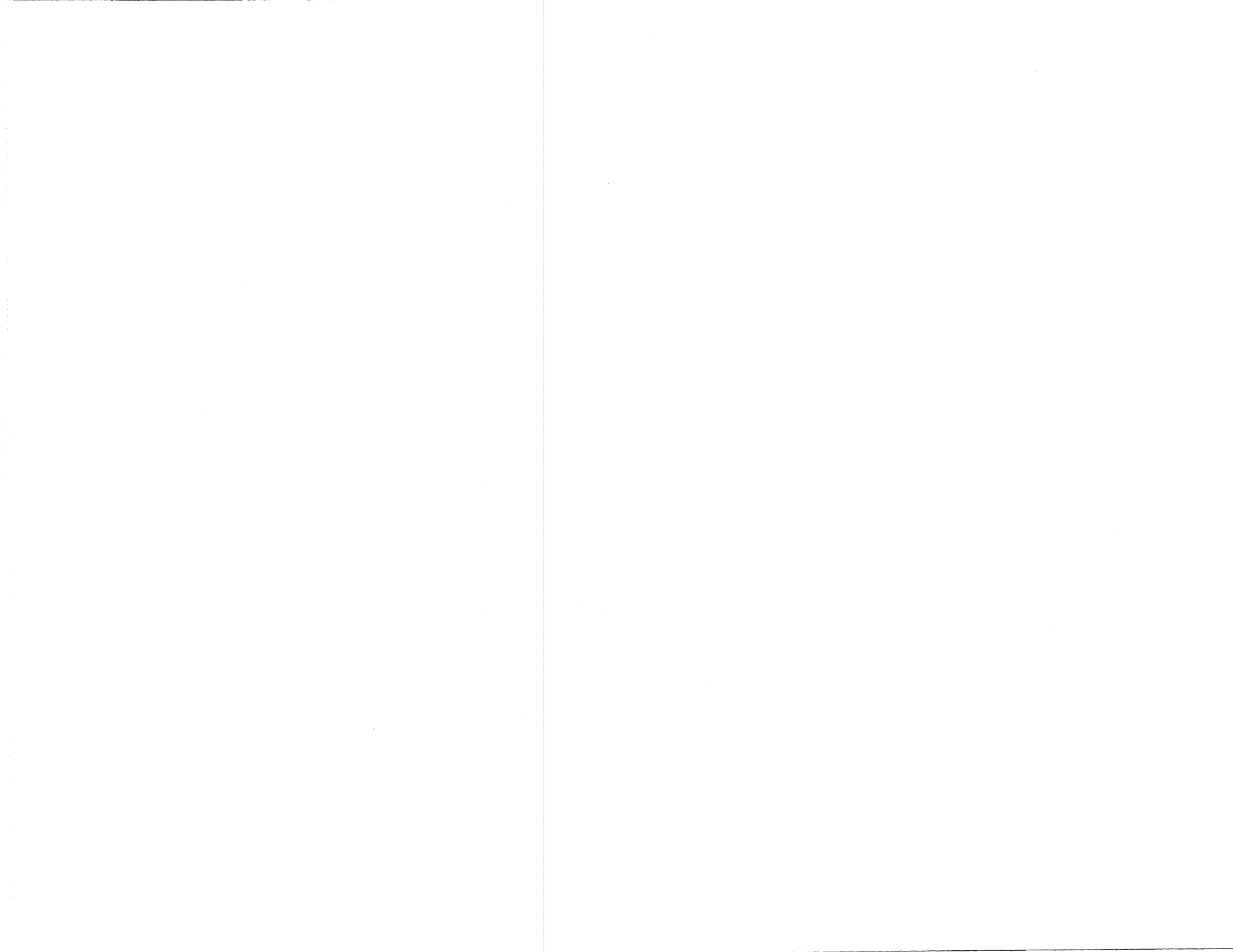


SECTION D-D
SCALE: 0.38

NOTES:

1. USE HOLES IN BACKING PLATE ON THE INSIDE OF TUNNEL AS A TEMPLATE AND DRILL (QTY-4) 0.531 DIA MOUNTING HOLES AND DRILL (QTY-1 LEFT SIDE ONLY) 1.875 DIA WIRE HARNESS HOLE

<p>JERR-DAN A Division of JERR-DAN INDUSTRIES, INC.</p>		<p>SEE B/M</p>	<p>SHEET 1 OF 1</p>
<p>THIS DRAWING AND RELATED MATTER CONTAINS THE DESIGN AND INVENTION OF THE DRAWING COMPANY. IT IS THE PROPERTY OF THE DRAWING COMPANY AND IS NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT THE EXPRESS WRITTEN PERMISSION OF THE DRAWING COMPANY. IN WITNESS WHEREOF, THE DRAWING COMPANY HAS HEREUNTO SET ITS HAND AND SEAL THIS 03/16/05.</p>		<p>DO NOT SCALE DRAWING. REMOVE ALL SPURS AND SHARP CORNERS.</p>	<p>WEIGHT 7 #</p>
<p>UNLESS OTHERWISE SPECIFIED: DIMENSIONS IN INCHES. DIMENSIONS IN MILLIMETERS ARE GIVEN IN PARENTHESES. TOLERANCES UNLESS OTHERWISE SPECIFIED: FRACTIONS DECIMALS</p>		<p>DATE 03/16/05</p>	<p>SCALE 0.15</p>
<p>DATE 03/16/05</p>		<p>DRAWN SWS</p>	<p>REV D</p>
<p>DESCRIPTION</p>		<p>DATE</p>	<p>DWG NO 2-509-570057</p>
<p>REV</p>		<p>DATE</p>	<p>REV 00</p>



Decal Installation



***** Engineering Bill of Materials *****

** Report Excludes Shrinkage.

Effective as of 08/19/05

Item: 2509290058

DECAL INST MPL-40

From Item: 2509290058

To Item: 2509290058

Last Changed Date: 07/28/05

Reference: D/3774D

Revision #A/I/3858

BIN: FG00

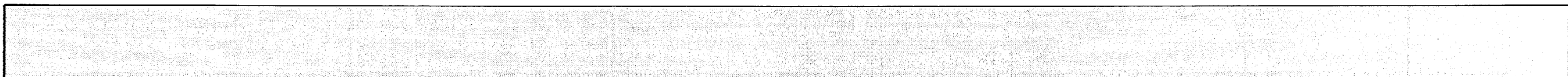
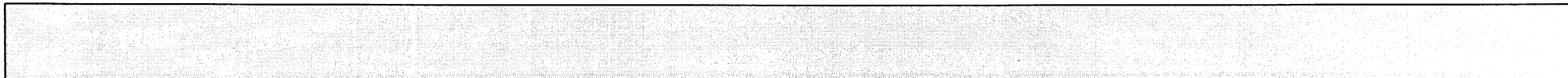
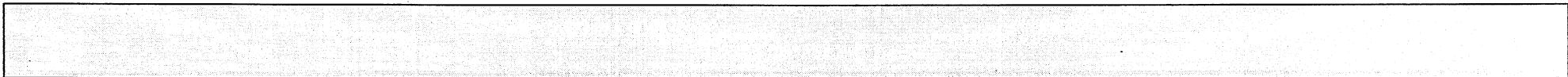
UOM: PC

Quantity	1	Receive into Whse: MYPT
----------	---	-------------------------

Ball Dr	Bin	Description	QtyPer	UOM	Reference	Effectivity
-oon Sz Component Type Location			=====	====	=====	=====
01 A 7330000546	P c02	DECAL WINCH CABLE WRAP WARNING	1.000	PC		-
02 A 7330000414	P a06	DECAL SELF LOADER PATENT	1.000	PC		-
03 A 7330000272	P 040606 c06	DECAL OIL LEVEL CAUTION	1.000	pc		-
04 B 7330000433	P 040605 c12 f01	DECAL NAMEPLATE "JERR-DAN" BLACK REV1	2.000	PC		-
05 D 7330000500	P ER01	DECAL SERIAL NUMBER/MODEL NUMBER/RATING	1.000	PC		-
06 D 7330000307	P ER01	DECAL S.T.A.R. PLACARD REV1	1.000	PC		-
07 A 7330000001	P a12 ER01	DECAL ALUMINUM SERIAL NUMBER rev3	1.000	pc		-
08 A 7759000004	P 000103 c20	POP RIVET .13"DIA X .13" GRIP ALUM	12.000	PC		-
09 C 7330000541	P c02	DECAL LUBRICATION MPL40 (VINYL)	1.000	PC		-
10 A 7330000143	P 040704 c03 c05	DECAL - "PROUDLY MADE IN THE USA"	1.000	pc		-
11 C 7330000138	P 040707 c03 f02	DECAL ALUM W/L CHECKLIST rev1	1.000	PC		-
12 A 7330000139	P 040704 c03 c05	DECAL - CHECKLIST REMINDER	1.000	pc		-
13 B 7330000122	P 040704 c03	DECAL ALUMINUM - W/L WARNING	2.000	pc	3858	08/11/05-

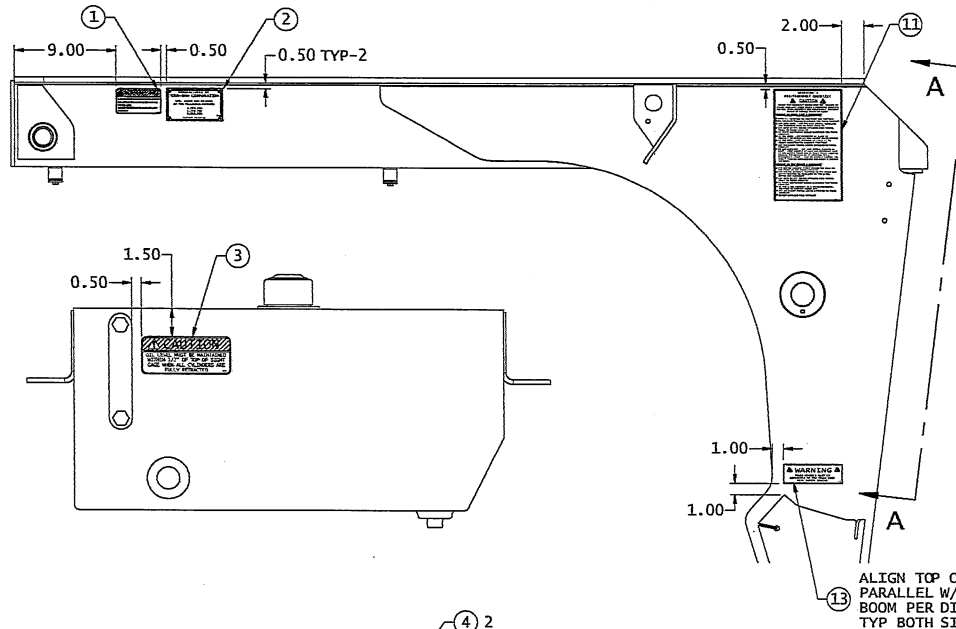
*** End of Item ***

*** End of Report ***



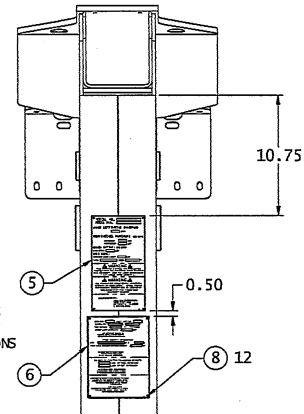
DECAL INST MPL-40

DWG NO 2-509-290058 REV 01

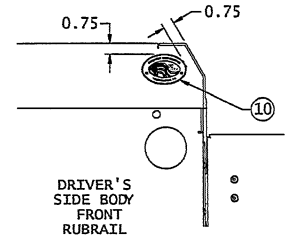


ITEMS #5 AND #6 TO BE CENTER ON BOOM AT LOCATIONS SHOWN

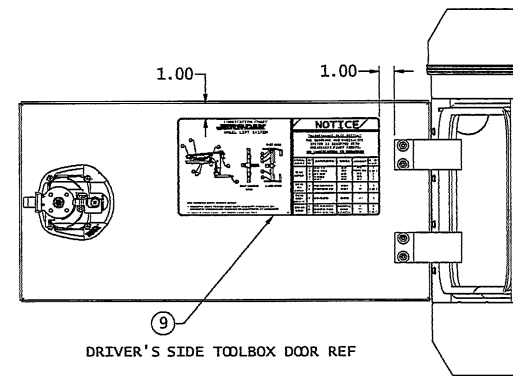
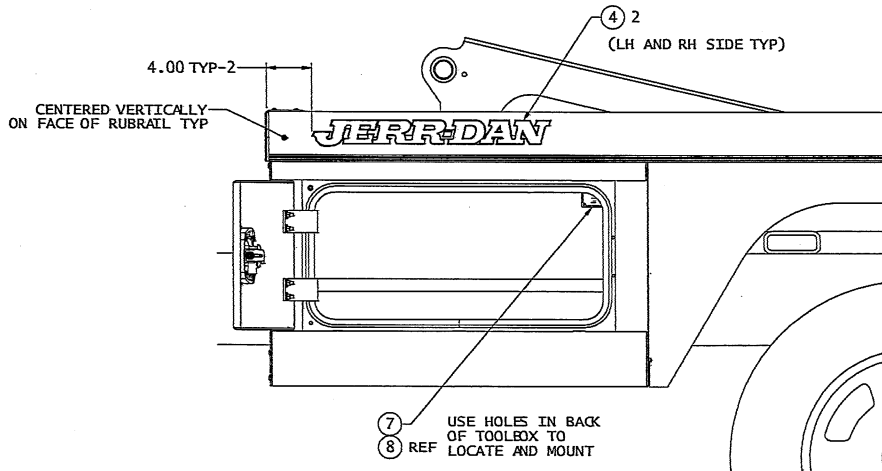
ALIGN TOP OF DECAL PARALLEL W/ TOP OF BOOM PER DIMS SHOWN TYP BOTH SIDES



SECTION A-A



DRIVER'S SIDE BODY FRONT RUBRAIL



DRIVER'S SIDE TOOLBOX DOOR REF

NOTE:

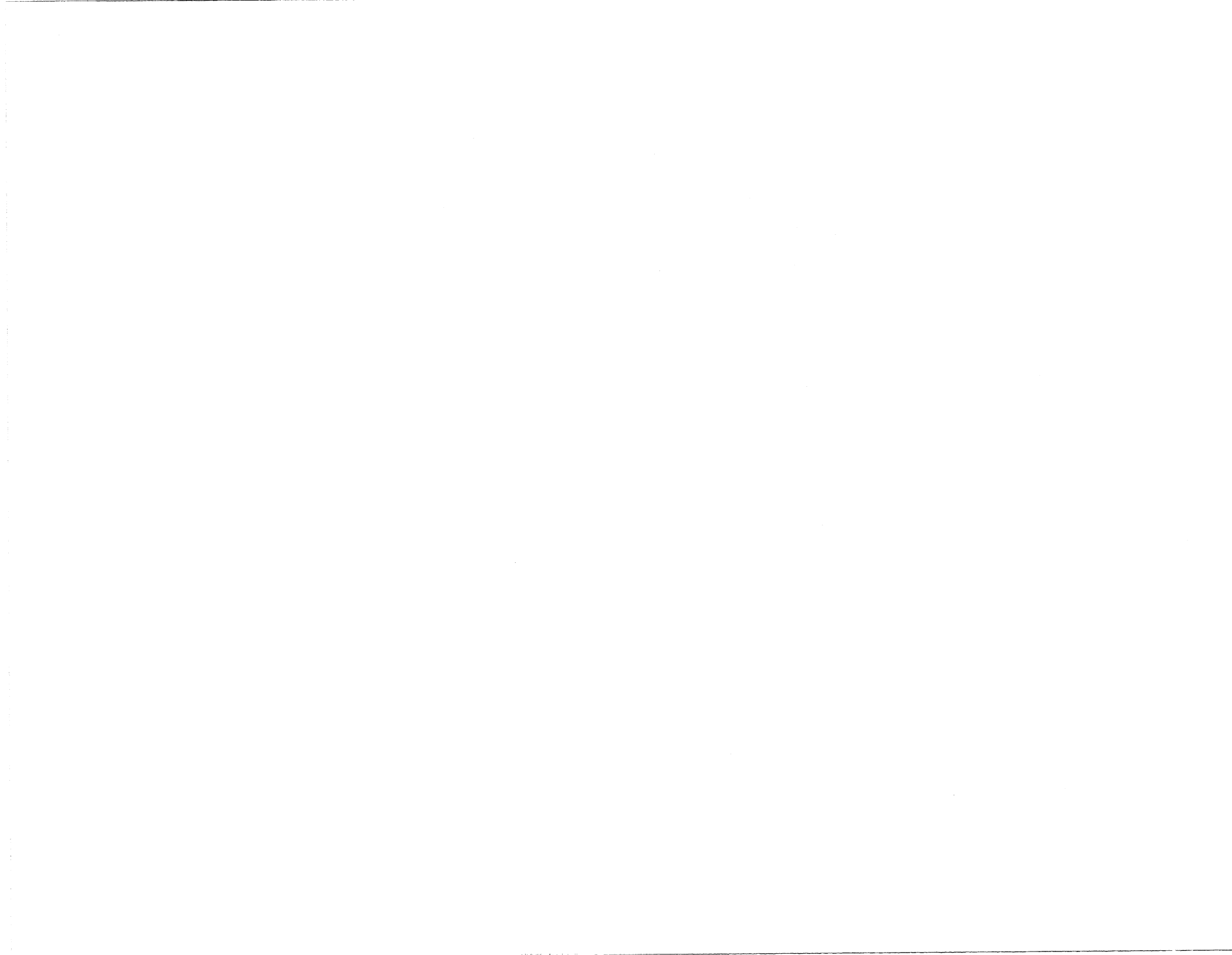
ITEM #12 NOT SHOWN. APPLY TO EITHER THE DRIVER'S SIDE DASH OR SUNVISOR.

REV	DATE	BY	DESCRIPTION
01	03/28/05	SKM	ADDED ITEM 13

THIS DRAWING AND RELATED PARTS CONTAINED HEREIN ARE THE PROPERTY OF JERR-DAN CORPORATION. ALL RIGHTS ARE RESERVED. NO PART OF THIS DRAWING IS TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT THE WRITTEN PERMISSION OF JERR-DAN CORPORATION.

IF IN DOUBT ASK, DO NOT SCALE DRAWING. REMOVE ALL BURRS AND SHARP CORNERS. OVERLAPMENTS SHOWN IN PLACE ARE TO BE USED UNLESS OTHERWISE SPECIFIED.

JERR-DAN <small>An Cummins Truck Component Company</small>		DATE: 3/31/05	REV: 01
WGT: SEE BOM	DRY WT: 1.00	NET WT: 7.2	REV: 01
TITLE: DECAL INST MPL-40	DATE: 3/31/05	REV: 01	REV: 01
SKM	SKM	SKM	SKM
3774	3774	3774	3774
2-509-290058	2-509-290058	2-509-290058	2-509-290058



Body Lights & Wiring Installation

***** Engineering Bill of Materials *****

** Report Excludes Shrinkage.

Effective as of 08/01/05

Item: 3509330096

BODY LIGHT & WIRING MPL-40

From Item: 3509330096

To Item: 3509330096

Reference: D/3774E

Last Changed Date:

Quantity	1	Receive into Whse: MYPT	Revision #0/0	Reference: D/3774E	Last Changed Date:
			BIN: WA03		UOM: PC

Ball	Dr	oon	Sz	Component	Type	Bin Location	Description	Qty	Per	UOM	Reference	Effectivity
====	==	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====
01	D			7552000292	P	k07	HARNESS CAB-SUBFRAME MPL40 rev02	1.000		PC		-
02	A			7457000004	P	100106 g01 h08	BREAKER 50 AMP CIRCUIT #75155	1.000		PC		-
03	N			7792000001	P		SCREW #10 X .75 SELF TAPPING SS	2.000		PC		-
04	N			8977530200	P	g04	WIRE 10GA TYPE SXL RED	3.000		FT		-
05	N			8597650002	R	e-floor e22	WIRE .25" CONVOLUTED LOOM	3.000		ft		-
06	N			7345211902	P	c19 j17	TERMINAL #10 10-12 GA NON-INSUL RING	1.000		pc		-
07	N			7345221902	P	022506 c19 j17	TERMINAL .25"NON-INSULATED O-RING #153145	1.000		PC		-
08	N			7346000039	P	d14 g-floor j0	TUBING .25"ID HS W/ADHESIVE - 48" LG	.500		pc		-
09	N			7111141050	P	080306	CAPSCREW .25"-20NC X 1.25" HEX HEAD	4.000		pc		-
10	N			7660142600	P	000108 x01	LOCKNUT .25"-20NC GR2 NYLOK HEX	4.000		pc		-
11	N			7950140141	P	a23	FLATWASHER .25" NOM NARROW	6.000		pc		-
12	D			7552000290	P	k07	HARNESS, LH BODY MPL40 rev01	1.000		PC		-
13	D			7552000291	P	k07	HARNESS RH BODY MPL40 rev01	1.000		PC		-
14	A			7590000131	P	101407 e09	LIGHT #30-86-202 WRAP AROUND MARKER	2.000		pc		-
15	A			7590000128	P	101506 e09	LIGHT #30-86-101 STOP-TAIL-TURN	2.000		pc		-
16	A			7590000130	P	101504 e09	LIGHT #30-86-103 VERTICAL MT. BACKUP	2.000		pc		-
17	N			7111100810	P		SCREW #10-24NC X 1.00" RH MACHINE	24.000		pc		-
18				7661000002	P	000104 022506	HEX NUT #10-24 W/LOCKWASHER - PLATED	24.000		pc		-
19	A			7577000194	P	022504 a08 h08	KIT CHASSIS WIRING CONNECTOR	1.000		pc		-
20	A			7590000048	P	f03 loft	LIGHT #10205Y SIDE MARKER - AMBER	2.000		pc		-
21	A			7493000009	P	101607 b01 f05	GROMMET BLACK (2.50 DIA LIGHT) #82839	2.000		pc		-
22	B			7590000185	P	101007 d18 e11	LIGHT #80466 ROUND RUBBER WORK	2.000		PC		-
23	A			7291000003	P	101204 d22 f12	CONNECTOR 4 ROUND FEMALE	1.000		PC		-
24	N			7111140613	P	080304 A125	SCREW .25"-20NC X .75" TH MACHINE	2.000		pc		-
25	N			7950140000	P	000104 A96 x01	LOCKWASHER .25" NOM REG CS	2.000		PC		-
26	A			7413000002	P	c14	NUTSERT .25"-20NC AVK INDUSTRIAL	2.000		pc		-
27	A			7011000003	P	g02 i27 106	ALARM, BACK-UP #ECC0520 97db	1.000		PC		-
28	A			7894000042	P	j40	TIE STRAP, .25 x 8.39 PUSH IN	25.000		PC		-
29	3			7870000115	P	a20	SWITCH 2.5" ADJUSTABLE PIN SWITCH	2.000		PC		-
30	N			7790100856	P	000103 c21 x01	SCREW #10 X .50" HWH SELF-TAPPING	4.000		pc		-
31	A			7590000273	P	e10	LIGHT DOME LAMP 1.75 x 2.53 x 4.58 #4249	2.000		PC		-



***** Engineering Bill of Materials *****

** Report Excludes Shrinkage.

Effective as of 08/01/05

Item: 3509330096

BODY LIGHT & WIRING MPL-40

From Item: 3509330096

To Item: 3509330096

Reference:D/3774E

Last Changed Date:

Revision #0/0

BIN: WA03

UOM: PC

Quantity	1	Receive into Whse: MYPT	Reference:D/3774E	Last Changed Date:
----------	---	-------------------------	-------------------	--------------------

Ball Dr	Bin	Description	QtyPer	UOM	Reference	Effectivity
-oon Sz	Component Type	Location	====	====	====	====
32	A 7661000047	P	NUT NYLON PANNEL #8-10 GRIP 0.03-0.13"	4.000	PC	-

*** End of Item ***

*** End of Report ***

--

--

--

--

--

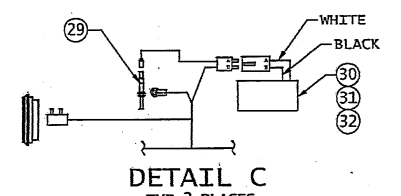
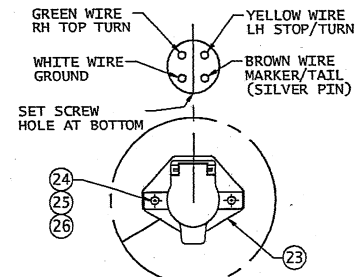
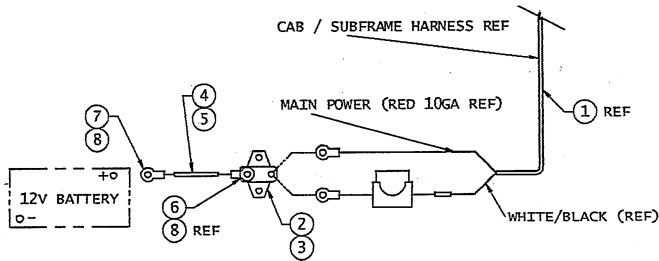
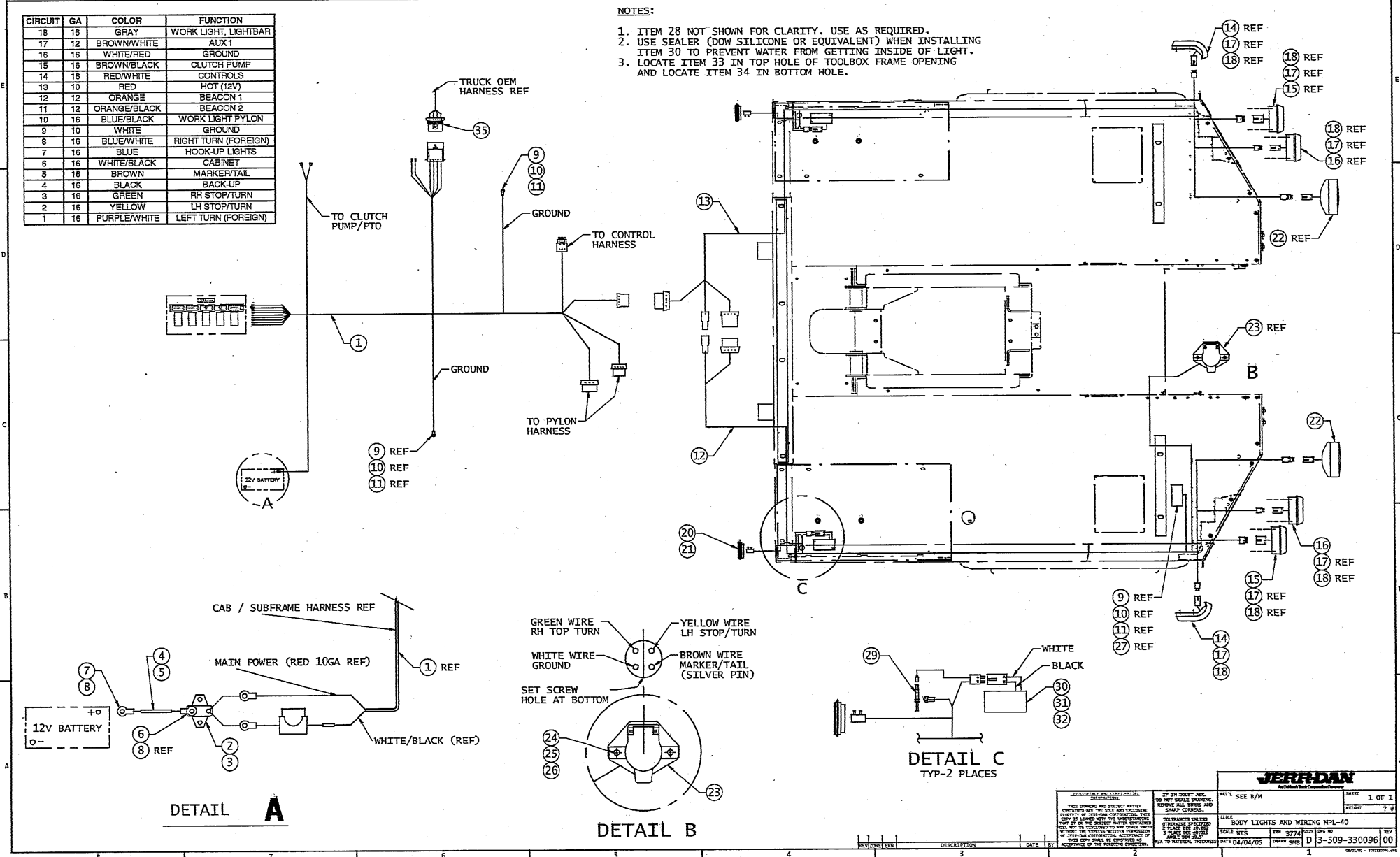
BODY LIGHTS AND WIRING MPL-40

DWG NO 3-509-330096 REV 00

CIRCUIT	GA	COLOR	FUNCTION
18	16	GRAY	WORK LIGHT, LIGHTBAR
17	12	BROWN/WHITE	AUX 1
16	16	WHITE/RED	GROUND
15	16	BROWN/BLACK	CLUTCH PUMP
14	16	RED/WHITE	CONTROLS
13	10	RED	HOT (12V)
12	12	ORANGE	BEACON 1
11	12	ORANGE/BLACK	BEACON 2
10	16	BLUE/BLACK	WORK LIGHT PYLON
9	10	WHITE	GROUND
8	16	BLUE/WHITE	RIGHT TURN (FOREIGN)
7	16	BLUE	HOOK-UP LIGHTS
6	16	WHITE/BLACK	CABINET
5	16	BROWN	MARKER/TAIL
4	16	BLACK	BACK-UP
3	16	GREEN	RH STOP/TURN
2	16	YELLOW	LH STOP/TURN
1	16	PURPLE/WHITE	LEFT TURN (FOREIGN)

NOTES:

- ITEM 28 NOT SHOWN FOR CLARITY. USE AS REQUIRED.
- USE SEALER (DOW SILICONE OR EQUIVALENT) WHEN INSTALLING ITEM 30 TO PREVENT WATER FROM GETTING INSIDE OF LIGHT.
- LOCATE ITEM 33 IN TOP HOLE OF TOOLBOX FRAME OPENING AND LOCATE ITEM 34 IN BOTTOM HOLE.



JERRARD
Aircraft Performance Center

THIS DRAWING AND SUBJECT MATTER ARE UNCLASSIFIED EXCEPT WHERE SHOWN OTHERWISE. THIS INFORMATION IS UNCLASSIFIED EXCEPT WHERE SHOWN OTHERWISE. THIS INFORMATION IS UNCLASSIFIED EXCEPT WHERE SHOWN OTHERWISE.

DATE 04/04/05

3-509-330096 00

REV	DESCRIPTION	DATE	BY
1			

HARNESS, CAB-SUBFRAME MPL40

CIRCUIT	GA	COLOR	FUNCTION
18	16	GRAY	WORK LIGHT, LIGHTBAR
17	12	BROWN/WHITE	AUX 1
16	16	WHITE/RED	GROUND
15	16	BROWN/BLACK	CLUTCH PUMP
14	16	RED/WHITE	CONTROLS
13	10	RED	HOT (12V)
12	12	ORANGE	BEACON 1
11	12	ORANGE/BLACK	BEACON 2
10	16	BLUE/BLACK	WORK LIGHT, PYLON
9	10	WHITE	GROUND
8	16	BLUE/WHITE	RIGHT TURN (FOREIGN)
7	16	BLUE	HOOK-UP LIGHTS
6	16	WHITE/BLACK	CABINET
5	16	BROWN	MARKER/TAIL
4	16	BLACK	BACK-UP
3	16	GREEN	RH STOP/TURN
2	16	YELLOW	LH STOP/TURN
1	16	PURPLE/WHITE	LEFT TURN (FOREIGN)

CIRCUIT	GA	FUNCTION	TERMINAL
18	16	WORK LIGHT, LIGHTBAR	BARBED WIRE, 0.38 LONG
17	12	AUX 1	BARBED WIRE, 0.38 LONG
14	16	CONTROLS	BARBED WIRE, 0.38 LONG
13	10	HOT (12V)	BARBED WIRE, 0.38 LONG
12	12	BEACON 1	BARBED WIRE, 0.38 LONG
11	12	BEACON 2	BARBED WIRE, 0.38 LONG
10	16	WORK LIGHT, PYLON	BARBED WIRE, 0.38 LONG
16	16	GROUND	BARBED WIRE, 0.38 LONG
7	16	HOOK-UP LIGHTS	BARBED WIRE, 0.38 LONG
6	16	CABINET	BARBED WIRE, 0.38 LONG
5	16	MARKER	BARBED WIRE, 0.38 LONG

GRAY
BROWN/WHITE
RED/WHITE
RED
ORANGE
ORANGE/BLACK
BLUE/BLACK
WHITE/RED
BLUE
WHITE/BLACK
BROWN

CIRCUIT	GA	FUNCTION	TERMINAL
15	16	CLUTCH PUMP	1/4 FEMALE TAB
16	16	GROUND	1/4 FEMALE TAB

CIRCUIT	GA	FUNCTION	TERMINAL
16	16	GROUND	1/4 RING

CIRCUIT	GA	FUNCTION	TERMINAL
9	10	GROUND	1/4 RING

CIRCUIT	GA	FUNCTION	TERMINAL
1	16	LEFT TURN (FOREIGN)	UNFINISHED END W/ HEAT SHRINK
8	16	RIGHT TURN (FOREIGN)	UNFINISHED END W/ HEAT SHRINK

PLUG TO PYLON HARNESS

CAVITY	CIRCUIT	GA	FUNCTION
C	11	12	BEACON 2
B	12	12	BEACON 1
A	9	10	GROUND

PLUG TO PYLON HARNESS

CAVITY	CIRCUIT	GA	FUNCTION
A	1	16	LEFT TURN (FOREIGN)
B	2	16	LH STOP/TURN
C	3	16	RH STOP/TURN
D	6	16	CABINET
E	5	16	MARKER/TAIL
F	18	16	WORK LIGHT, LIGHTBAR
G	10	16	WORK LIGHT, PYLON
H	8	16	RIGHT TURN (FOREIGN)

PLUG TO RH BODY HARNESS

CAVITY	CIRCUIT	GA	FUNCTION
A	1	16	LEFT TURN (FOREIGN)
B	2	16	LH STOP/TURN
C	3	16	RH STOP/TURN
D	4	16	BACK-UP
E	5	16	MARKER/TAIL
F	6	16	CABINET
G	7	16	HOOK-UP LIGHTS
H	8	16	RIGHT TURN (FOREIGN)

PLUG FROM CONTROL HARNESS

CAVITY	CIRCUIT	GA	FUNCTION
A	14	16	CONTROLS
B	15	16	CLUTCH PUMP
C	16	16	GROUND

CONNECTOR P.E. 12186400
LOCK: P.E. 12084673
TERMINAL P.E. 12129497
TERMINAL SEAL P.E. 12015359
CAVITY PLUG P.E. 12010300

CIRCUIT	CAVITY	GA	FUNCTION
4	A	16	BACK-UP
2	B	16	LH STOP/TURN
3	C	16	RH STOP/TURN
5	D	16	MARKER/TAIL
N/A	E		PLUG

REV	BY	DATE	DESCRIPTION
1			ISSUED FOR PRODUCTION

JERR-DAN CORP
 TITLE: HARNESS, CAB-SUBFRAME MPL40
 SHEET NO: 1 OF 1
 DATE: 12/22/04
 DRAWING NO: 7-552-000292

- NOTES:
- 1) HARNESS TO BE COVERED WITH HIGH TEMP. NYLON CONVULATED LOOM OR YARN.
 - 2) VENDOR TO DETERMINE INTERNAL WIRING AND SPLICING REQUIREMENTS.
 - 3) SEE JERR-DAN COMPONENT SPECIFICATIONS DWG 5-836-00014 FOR FURTHER DETAIL.

WIRES ARE TO BE COVERED TO WITHIN 2.0" OF WIRE END

HARNESS, LH BODY MPL40

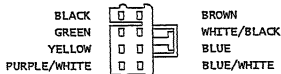
DWG NO 7-552-000290 01 REV

CIRCUIT	GA	COLOR	FUNCTION
9	12	WHITE	GROUND
8	16	BLUE/WHITE	RIGHT TURN (FOREIGN)
7	16	BLUE	HOOK-UP LIGHT
6	16	WHITE/BLACK	CABINET
5	16	BROWN	MARKER/TAIL
4	16	BLACK	BACK-UP
3	16	GREEN	RH STOP/TURN
2	16	YELLOW	LH STOP/TURN
1	16	PURPLE/WHITE	LEFT TURN (FOREIGN)

PLUG FROM RH BODY HARNESS

CAVITY	CIRCUIT	GA	FUNCTION
A	1	16	LEFT TURN (FOREIGN)
B	2	16	LH STOP/TURN
C	3	16	RH STOP/TURN
D	4	16	BACK-UP
E	5	16	MARKER/TAIL
F	6	16	CABINET
G	7	16	HOOK-UP LIGHT
H	8	16	RIGHT TURN (FOREIGN)

CONNECTOR - 1204937
 LOCK - J2066304
 SEAL - J2048086
 TERMINAL - 12048074



PLUG FROM RH BODY HARNESS

CAVITY	CIRCUIT	GA	FUNCTION
A	9	12	GROUND

CONNECTOR - 12065171
 LOCK - J2065249
 SEAL - J2015193
 TERMINAL - 12129497

WIRES ARE TO BE COVERED TO WITHIN 2.0" OF WIRE END

- NOTES:**
- HARNESS TO BE COVERED WITH HIGH TEMP. NYLON CONVOLUTED LOOM OR YARN.
 - VENDOR TO DETERMINE INTERNAL WIRING AND SPLICING REQUIREMENTS.
 - SEE JERR-DAN COMPONENT SPECIFICATIONS DWG 3-836-00014 FOR FURTHER DETAIL.

CIRCUIT	GA	FUNCTION	TERMINAL
5	16	MARKER/TAIL	TRUCK-LITE 94909 REF
9	16	GROUND	

CIRCUIT	GA	FUNCTION	TERMINAL
9	16	GROUND	#10 RING

CONNECTOR - 12015792
 SEAL - J2015323
 TERMINAL - 12124580

CIRCUIT	GA	FUNCTION
9	16	GROUND
7	16	HOOK-UP LIGHT

CONNECTOR - 12015792
 SEAL - J2015323
 TERMINAL - 12124580

CIRCUIT	GA	FUNCTION
9	16	GROUND
4	16	BACK-UP

CIRCUIT	GA	FUNCTION	TERMINAL
1	16	LEFT TURN (FOREIGN)	UNFINISHED ENDS

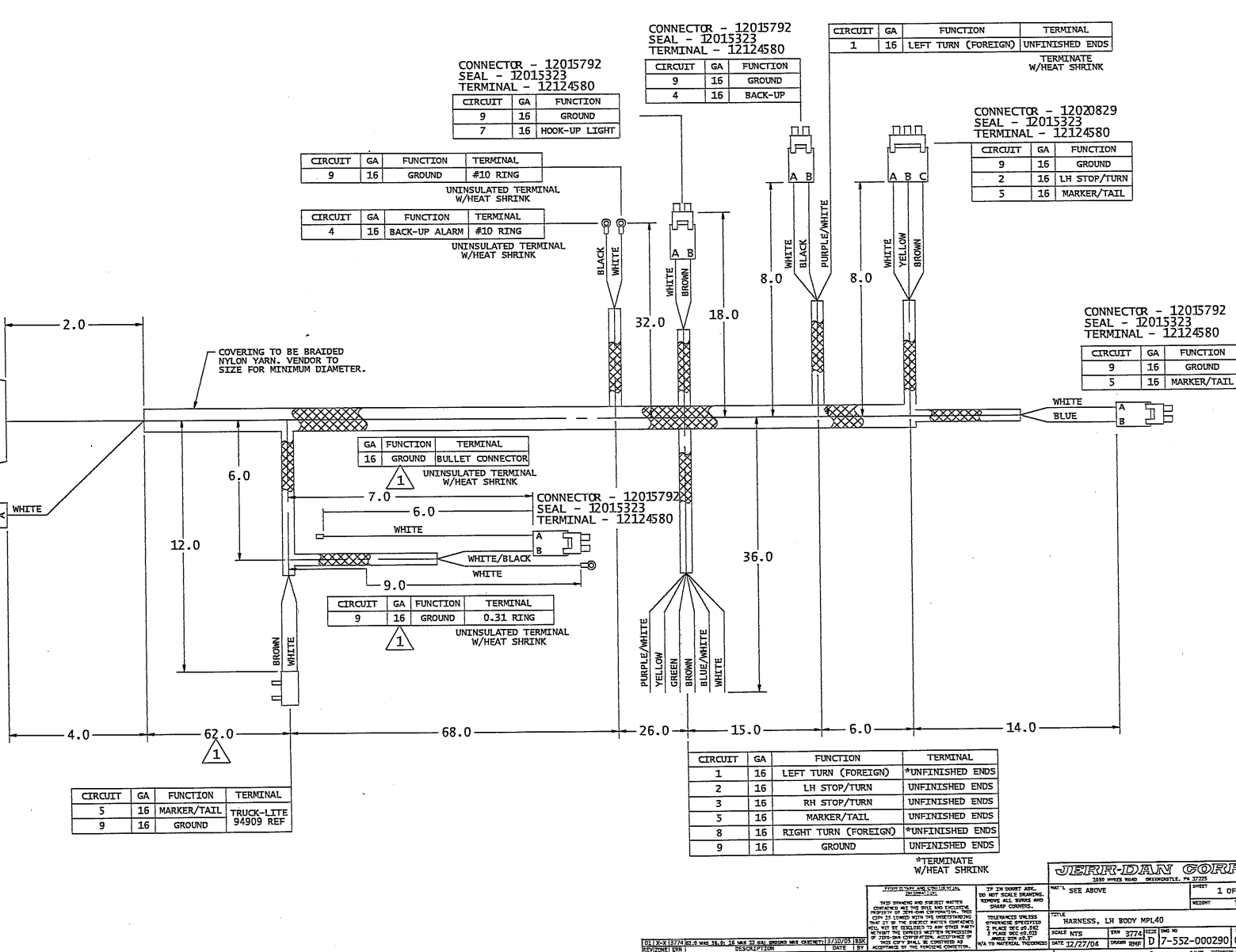
TERMINATE W/HEAT SHRINK

CONNECTOR - 12020829
 SEAL - J2015323
 TERMINAL - 12124580

CIRCUIT	GA	FUNCTION
9	16	GROUND
2	16	LH STOP/TURN
5	16	MARKER/TAIL

CONNECTOR - 12015792
 SEAL - J2015323
 TERMINAL - 12124580

CIRCUIT	GA	FUNCTION
9	16	GROUND
5	16	MARKER/TAIL



JERR-DAN CORP

DATE 12/27/04

SCALE NTS

DATE 12/27/04

7-552-000290 01

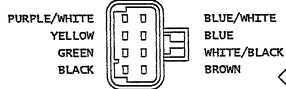
HARNESS, RH BODY MPL40

DWG NO 7-552-000291 01 REV

PLUG TO LH BODY HARNESS

CAVITY	CIRCUIT	GA	FUNCTION
A	1	16	LEFT TURN (FOREIGN)
B	2	16	LH STOP/TURN
C	3	16	RH STOP/TURN
D	4	16	BACK-UP
E	5	16	MARKER/TAIL
F	6	16	CABINET
G	7	16	HOOK-UP LIGHTS
H	8	16	RIGHT TURN (FOREIGN)

CONNECTOR - 12047931
 LOCK - 12047936
 SEAL - 12048086
 TERMINAL - 12045773



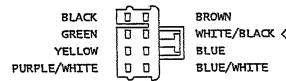
CIRCUIT	GA	FUNCTION	TERMINAL
5	16	MARKER/TAIL	TRUCK-LITE 94909 REF
9	16	GROUND	

- NOTES:
 1) HARNESS TO BE COVERED WITH HIGH TEMP. NYLON CONVOLUTED LOOM OR YARN.
 2) VENDOR TO DETERMINE INTERNAL WIRING AND SPLICING REQUIREMENTS.
 3) SEE JERR-DAN COMPONENT SPECIFICATIONS DWG 5-836-00014 FOR FURTHER DETAIL.

PLUG TO LH BODY HARNESS

CAVITY	CIRCUIT	GA	FUNCTION
A	9	12	GROUND

CONNECTOR - 12065172
 LOCK - 12065249
 SEAL - 12015193
 TERMINAL - 12129493



PLUG FROM CAB-SUBFRAME HARNESS

CAVITY	CIRCUIT	GA	FUNCTION
A	1	16	LEFT TURN (FOREIGN)
B	2	16	LH STOP/TURN
C	3	16	RH STOP/TURN
D	4	16	BACK-UP
E	5	16	MARKER/TAIL
F	6	16	CABINET
G	7	16	HOOK-UP LIGHTS
H	8	16	RIGHT TURN (FOREIGN)

CONNECTOR - 12047937
 LOCK - 12066304
 SEAL - 12048086
 TERMINAL - 12048074

CIRCUIT	GA	COLOR	FUNCTION
9	12	WHITE	GROUND
8	16	BLUE/WHITE	RIGHT TURN (FOREIGN)
7	16	BLUE	HOOK-UP LIGHTS
6	16	WHITE/BLACK	CABINET
5	16	BROWN	MARKER/TAIL
4	16	BLACK	BACK-UP
3	16	GREEN	RH STOP/TURN
2	16	YELLOW	LH STOP/TURN
1	16	PURPLE/WHITE	LEFT TURN (FOREIGN)

CIRCUIT	GA	FUNCTION	TERMINAL
9	12	GROUND	1/2 RING

UNINSULATED TERMINAL W/HEAT SHRINK

CONNECTOR - 12015792
 SEAL - 12015323
 TERMINAL - 12124580

CIRCUIT	GA	FUNCTION
7	16	HOOK-UP LIGHT
9	16	GROUND

CIRCUIT	GA	FUNCTION	TERMINAL
8	16	RIGHT TURN (FOREIGN)	UNFINISHED ENDS

CONNECTOR - 12015792
 SEAL - 12015323
 TERMINAL - 12124580

CIRCUIT	GA	FUNCTION
9	16	GROUND
4	16	BACK-UP

CONNECTOR - 12020829
 SEAL - 12015323
 TERMINAL - 12124580

CIRCUIT	GA	FUNCTION
9	16	GROUND
3	16	RH STOP/TURN
5	16	MARKER/TAIL

COVERING TO BE BRAIDED NYLON YARN. VENDOR TO SIZE FOR MINIMUM DIAMETER.

WIRES ARE TO BE COVERED TO WITHIN 2.0" OF WIRE END

JERR-DAN CORP
 3888 WYCK ROAD, OSTERVILLE, OH 43081

DESIGN AND CONSTRUCTION	BY THE DRAWER	NOT TO SCALE ABOVE	1 OF 1
THIS DRAWING AND RELATED WORK CONTAINS THE SPEC AND EXCLUSIVE PROPERTY OF JERR-DAN CORP. THIS COPY IS TO BE USED ONLY FOR THE PURPOSES SPECIFIED HEREIN. ANY REPRODUCTION OR USE WITHOUT THE EXPRESS WRITTEN PERMISSION OF JERR-DAN CORP. IS PROHIBITED. ACCEPTANCE OF THIS COPY SHALL BE CONSIDERED AS ACCEPTANCE OF THE PROVISIONS OF THIS AGREEMENT.	DO NOT SCALE DRAWING, REMOVE ALL DIMS AND SHARP CORNERS.	3 PLACE ONE END OF WIRE INTO ONLY W/A TO MATERIAL PROVIDED	RESP 7 #
TITLE: HARNESS, RH BODY MPL40	SCALE: NTS	DATE: 12/27/04	DRAWN BY: D
DATE: 12/27/04	DATE: 12/27/04	DATE: 12/27/04	DATE: 12/27/04

12124580 01 REV 18.04.04 DWG NO 7-552-000291 01



Pylon Lights Installation



***** Engineering Bill of Materials *****

** Report Excludes Shrinkage.

Effective as of 08/01/05

Item: 2590000129

LIGHT INSTL PYLON MARKER

From Item: 2590000129

To Item: 2590000129

Reference: B/3325-N

Last Changed Date:

Revision #0/0

BIN:

UOM: PC

Quantity

1

Receive into Whse: HYKS

Ball Dr

Bin

-oon Sz Component Type

Location

Description

QtyPer UOM

Reference

Effectivity

====

====

====

=====

=====

=====

01 N 7590000095 P 101503 e-floor ASSY MARKER LIGHT-YEL LIGHT/GROMMET ONLY

2.000 PC

-

02 7894000010 P j40 STRAP TIE DEL-CITY 6" (WHITE)

2.000 pc

-

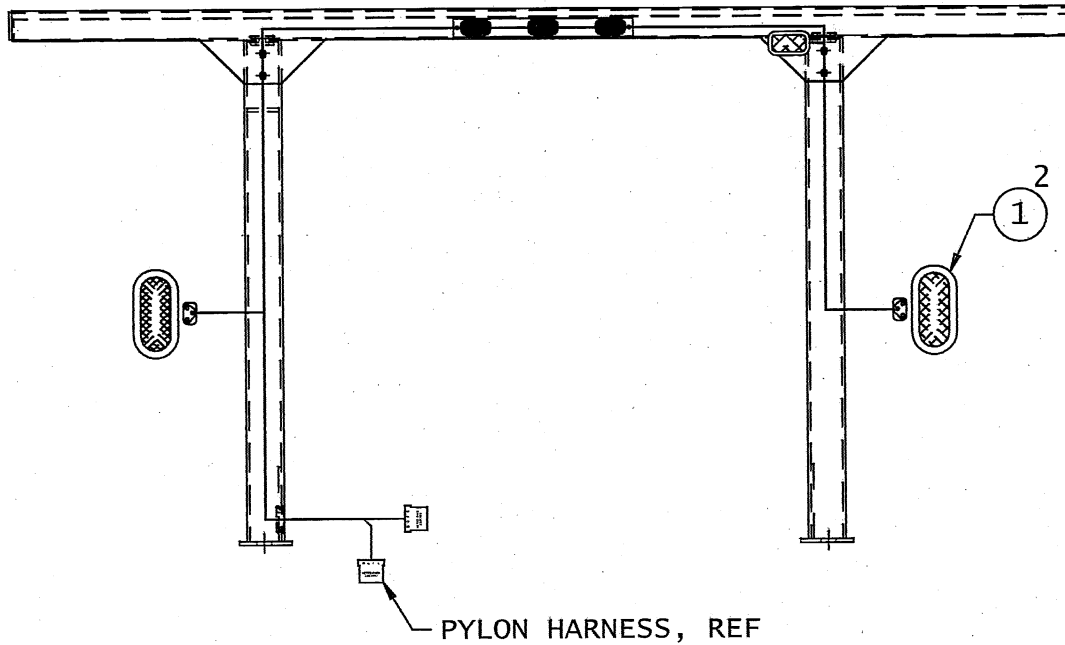
*** End of Item ***

*** End of Report ***

GENERAL NOTES

DO NOT SCALE DRAWING
BREAK SHARP CORNERS

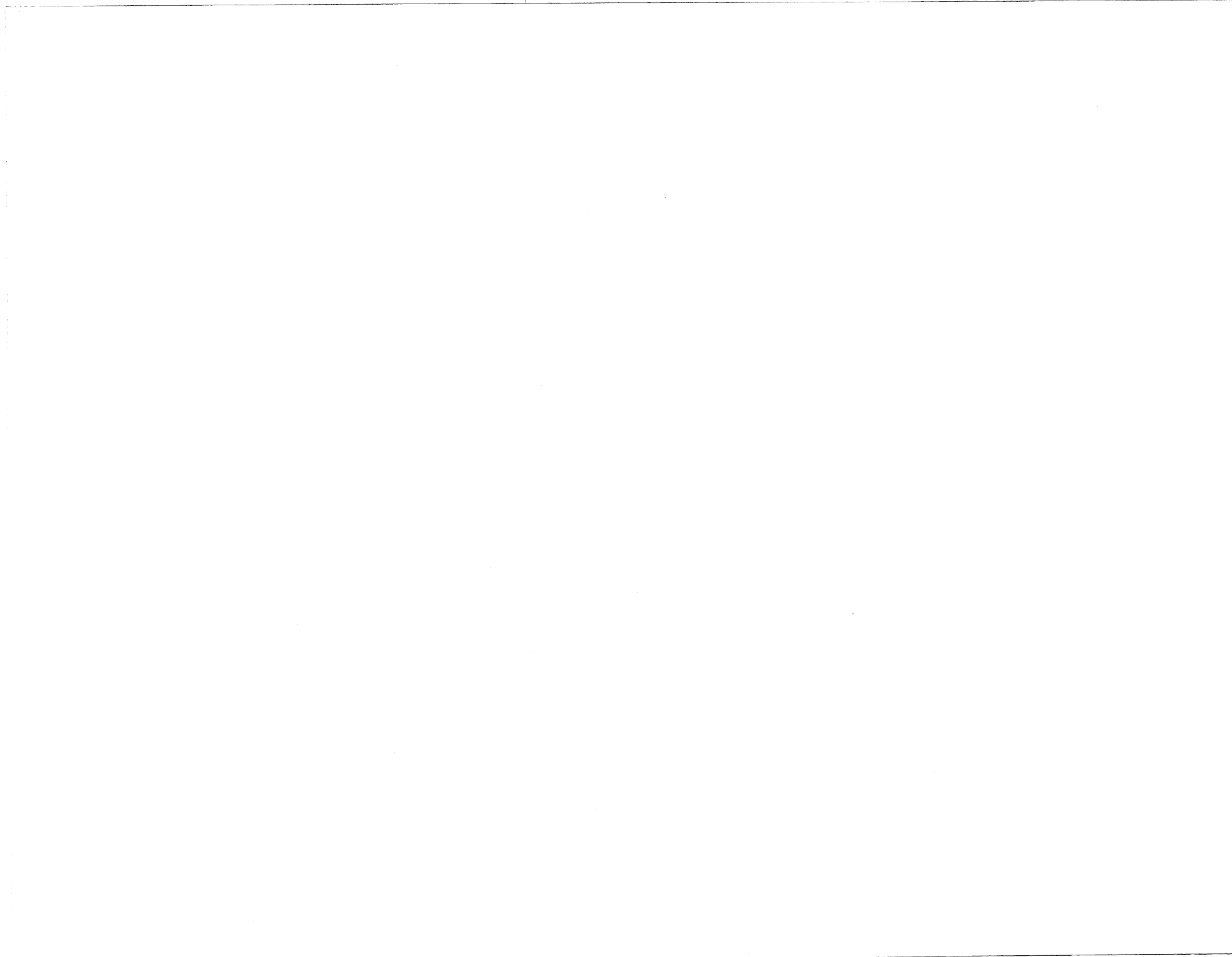
M DENOTES "CRITICAL"
DIMENSION AND MUST
BE CONTROLLED BY
STATISTICAL ANALYSIS



ITEM #2 NOT SHOWN

REV	ERN	DESCRIPTION	DATE	DRN

TOLERANCES (EXCEPT AS NOTED)		JERR-DAN CORP. GREENCASTLE, PA.	
DECIMAL	MAT'L SEE B/M	SCALE	DRAWN BY RMF
2 PLACE .062		0.13	ERN NO. 3325
3 PLACE .015			
ANGULAR	TITLE LIGHT ASSY, PYLON MARKERS		
±0° 30'	DATE	NEXT ASS'Y	ORIGINAL
LIMITS ARE TO BE NON-ACCUMULATIVE PER A LINE OF DIMENSIONS.	6/24/02	~	DRAWING NO. B2-590-000129



Fender Flare Installation

***** Engineering Bill of Materials *****

** Report Excludes Shrinkage.

Effective as of 08/01/05

Item: 2415000019

FENDER FLARE INSTALL NARROW MPL-40

From Item: 2415000019

To Item: 2415000019

Last Changed Date:

Reference:N/3774D

Revision #0/0

BIN: WA01

UOM: PC

Quantity 1 Receive into Whse: MYPT

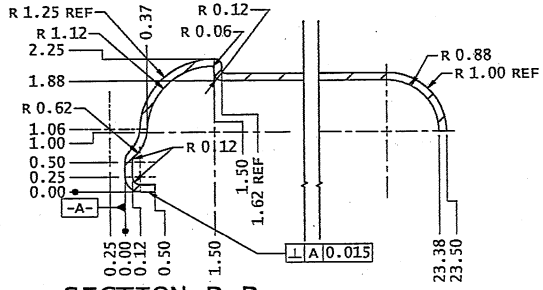
Ball Dr	-oon Sz	Component	Type	Bin Location	Description	QtyPer	UOM	Reference	Effectivity
===	==	=====		=====	=====	=====	==	=====	=====
01	D	7415000021	P	m-floor	FENDER PLASTIC QP40 (UNPAINTED)	2.000	PC		-
02		7114150850	P	all	CAPSCREW .31"-18NC X 1.00" HEX HEAD SS	22.000	PC		-
03	N	7950150000	P	080304 x01	WASHER .31" NOM REG LOCK - PLATED	22.000	PC		-
04	N	7949000055	P		WASHER FENDER 1.50 OD X 0.38 ID X 0.06	22.000	PC		-
05	#	7661000029	P		NUT J TYPE #C31280-5618-4	22.000	PC		-

*** End of Item ***

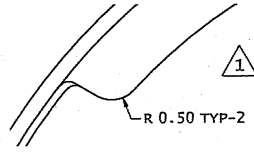
*** End of Report ***

FENDER PLASTIC 1.62" WIDE

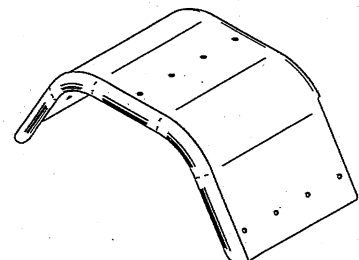
DWG NO. 7-415-000021 REV 01



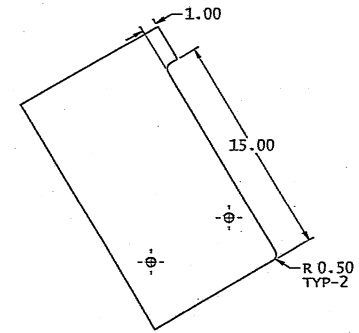
SECTION B-B
VIEW SCALE: 1:1



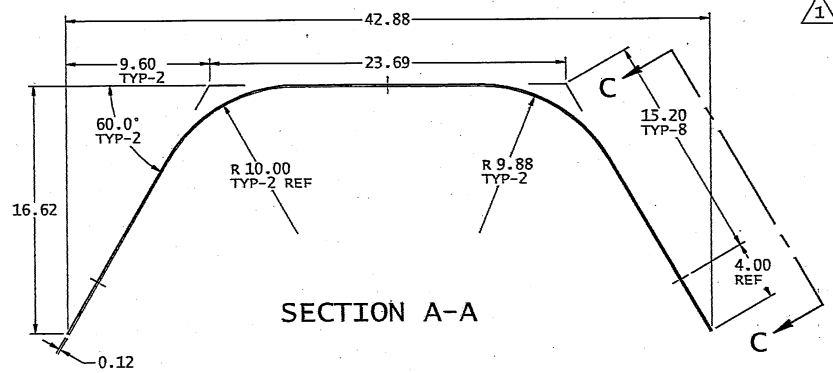
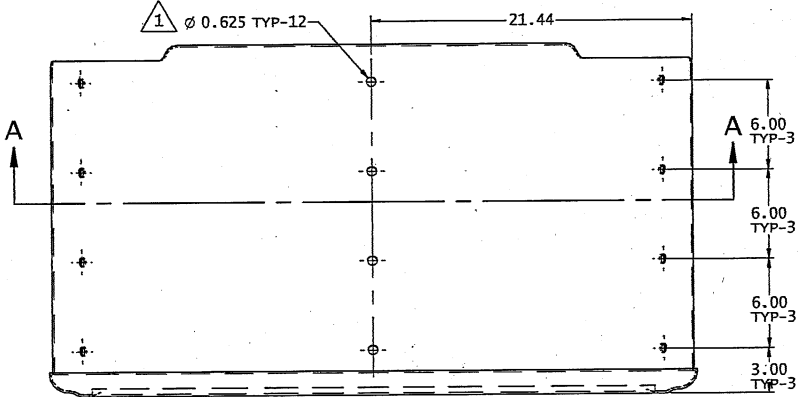
SECTION D-D
VIEW SCALE: 1:1



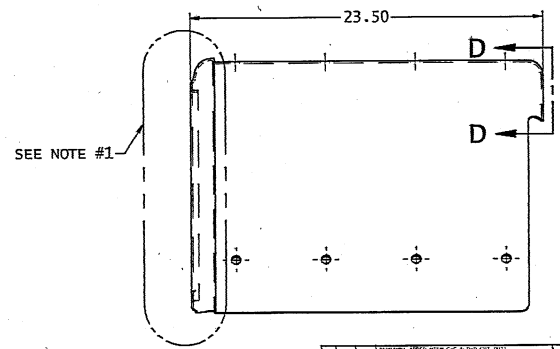
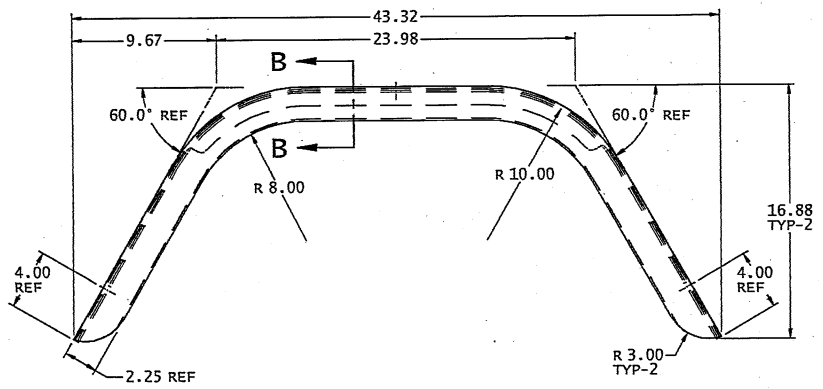
VIEW SCALE: 1:8



SECTION C-C
CUTOUT DETAIL TYP-2



SECTION A-A



SEE NOTE #1

- 1. ALL OUTSIDE SURFACES MUST BE FREE OF DIPS, BOWS, INDENTATIONS AND CUTS.
- 2. MINIMUM PART THICKNESS TO BE 0.12" THICK AND UNIFORM THROUGHOUT.
- 3. ALL TRIMMED EDGES MUST BE FREE OF NICKS, GOUGES AND CUTS.

MATERIAL:
HIGH MOLECULAR WEIGHT POLYETHYLENE
MATERIAL THICKNESS: 0.187"
MATERIAL COLOR: BLACK

JERRIDIAN		SHEET 1 OF 1	
FENDER PLASTIC 1.62" WIDE		WEIGHT ? LB	
DATE 10/07/02	DRAWN ELB	DATE 10/07/02	DRAWN ELB
REV 01	7-415-000021	REV 01	7-415-000021

***** Engineering Bill of Materials *****

** Report Excludes Shrinkage.

Effective as of 08/01/05

Item: 2415000020

FENDER FLARE INSTALL WIDE MPL-40

From Item: 2415000020

To Item: 2415000020

Last Changed Date:

Reference:N/3774D

Revision #0/0

BIN: WA01

UOM: PC

Quantity 1 Receive into Whse: MYPT

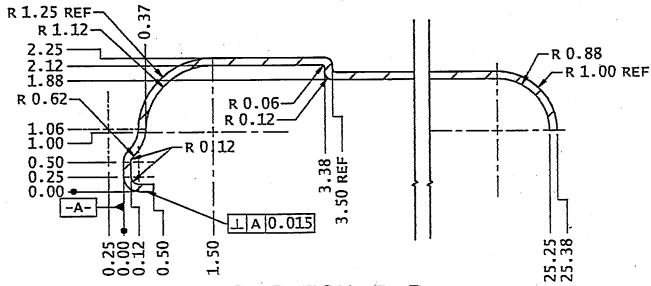
Ball Dr	Sz	Component	Type	Bin Location	Description	QtyPer	UOM	Reference	Effectivity
01	3	7415000023	P		PLASTIC FENDER FOR MPL-40	2.000	PC		-
02		7114150850	P	a11	CAPSCREW .31"-18NC X 1.00" HEX HEAD SS	22.000	PC		-
03	N	7950150000	P	080304 x01	WASHER .31" NOM REG LOCK - PLATED	22.000	PC		-
04	N	7949000055	P		WASHER FENDER 1.50 OD X 0.38 ID X 0.06	22.000	PC		-
05	#	7661000029	P		NUT J TYPE #C31280-5618-4	22.000	PC		-

*** End of Item ***

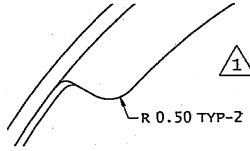
*** End of Report ***

FENDER PLASTIC 3.50" WIDE

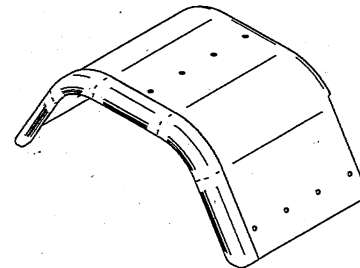
DWG NO. **7-415-000023** REV **01**



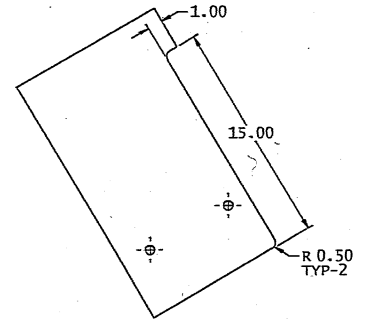
SECTION B-B
VIEW SCALE: 1:1



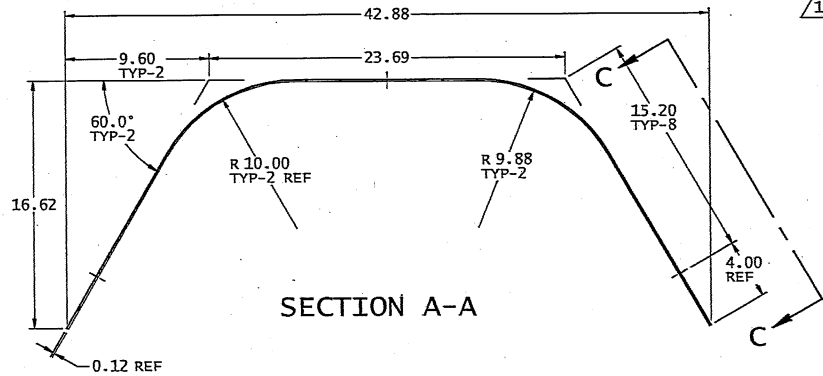
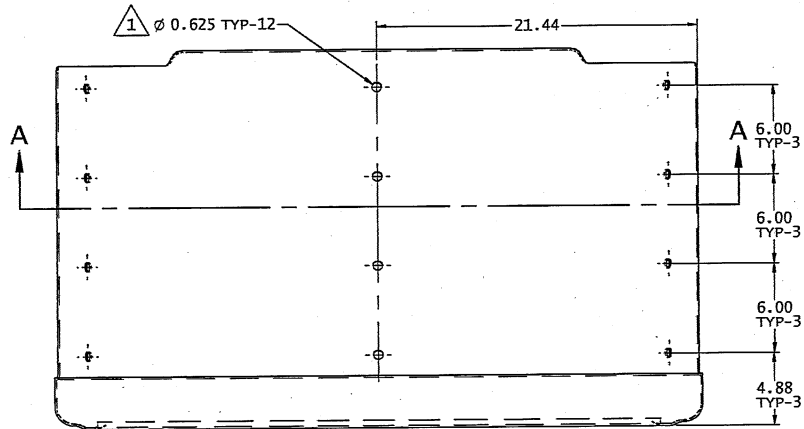
SECTION D-D
VIEW SCALE: 1:1



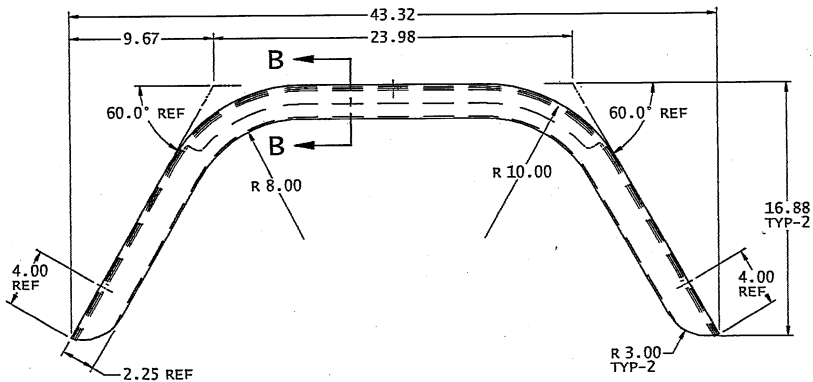
VIEW SCALE: 1:8



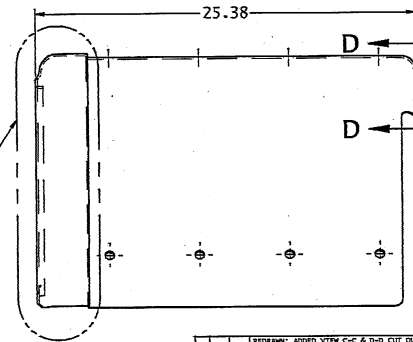
SECTION C-C
CUTOUT DETAIL TYP-2



SECTION A-A



SEE NOTE #1

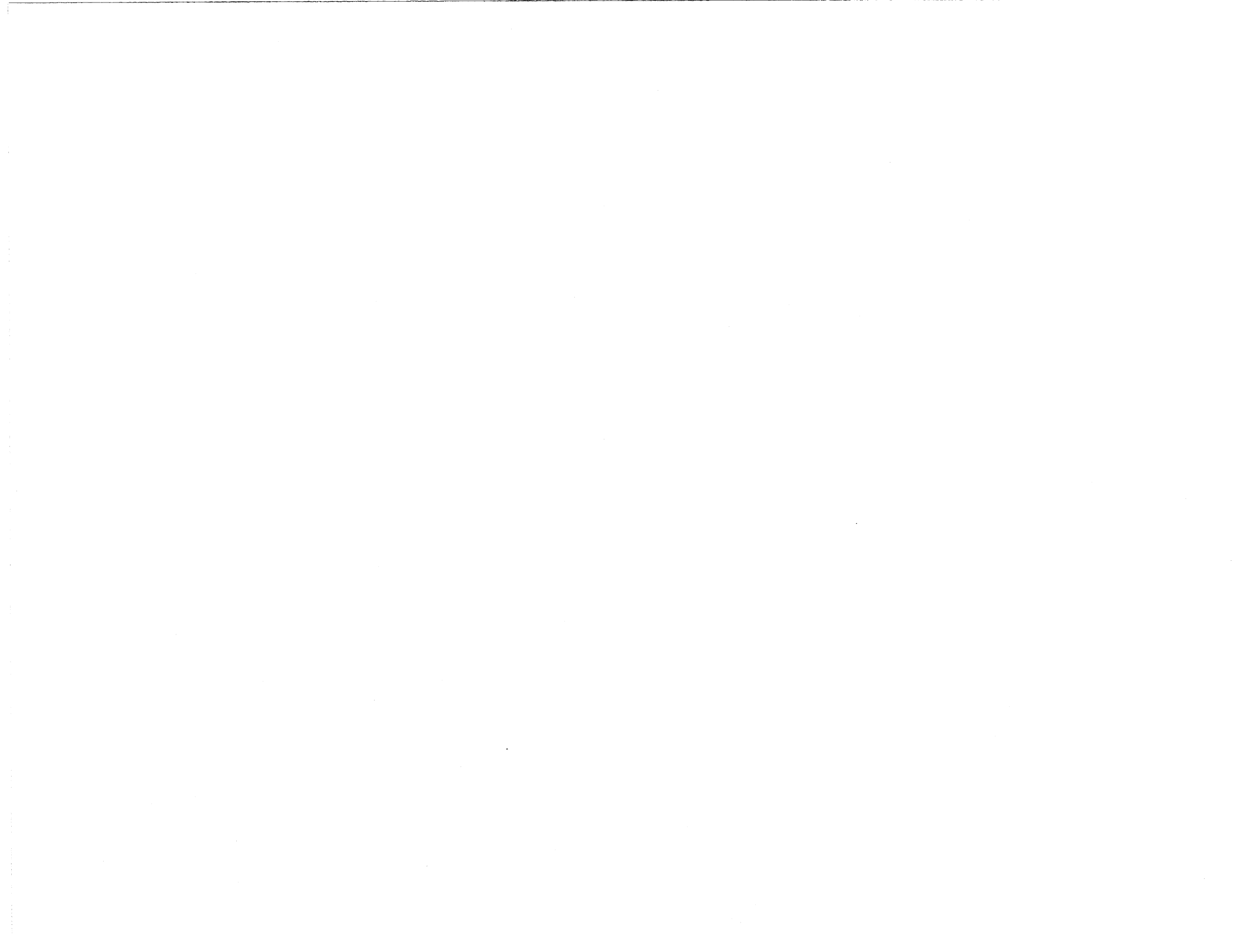


1. ALL OUTSIDE SURFACES MUST BE FREE OF DIPS, BOWS, INDENTATIONS AND CUTS.
2. MINIMUM PART THICKNESS TO BE 0.12" THICK AND UNIFORM THROUGHOUT.
3. ALL TRIMMED EDGES MUST BE FREE OF NICKS, GOUGES AND CUTS.

MATERIAL:
HIGH MOLECULAR WEIGHT POLYETHYLENE
MATERIAL THICKNESS: 0.187"
MATERIAL COLOR: BLACK

REV	DATE	DESCRIPTION	DATE	BY	CHKD	APP'D
1	12/23/05	REVISION: ADDED VIEW C-C & D-D CUT OUT;	12/23/05	MS		
2		REVISION: 1.00				

JERRIDAN	
DATE: 02/18/05	DRAWN: BSC
TITLE: FENDER PLASTIC 3.50" WIDE	SCALE: 1:4
REV: 01	DWG NO: 7-415-000023
SHEET: 1 OF 1	WEIGHT: ? LB



Pylon Wiring Installation

***** Engineering Bill of Materials *****

** Report Excludes Shrinkage.

Effective as of 08/01/05

Item: 3509330108

ELECTRICAL ASSY BASE PYLON MPL-40 60CA

From Item: 3509330108

To Item: 3509330108

Reference: B/3774E

Last Changed Date:

Revision #0/0

BIN: WA03

UOM: PC

Quantity 1 Receive into Whse: MYPT

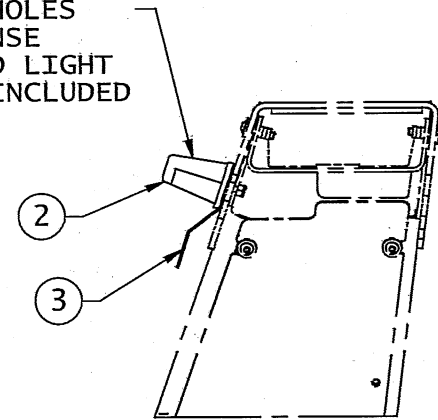
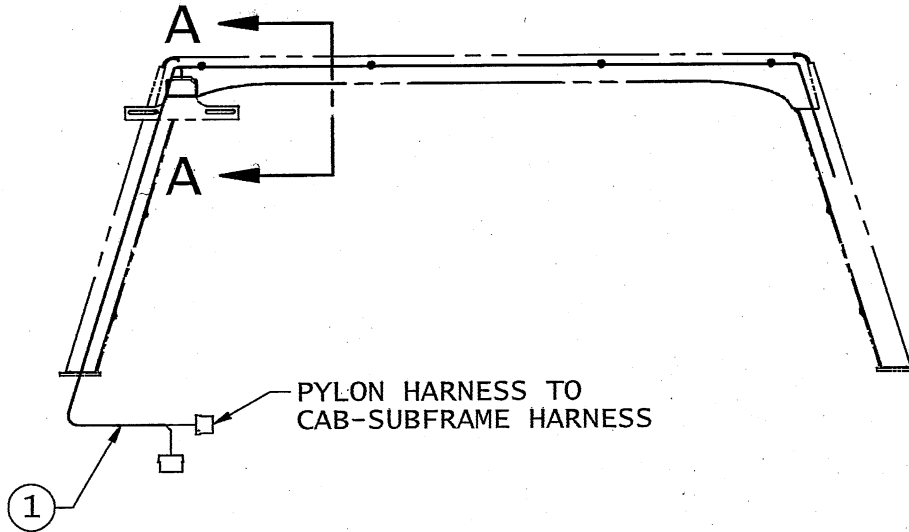
Ball Dr	Bin							
-oon Sz	Component	Type	Location	Description	QtyPer	UOM	Reference	Effectivity
===	==	=====	=====	=====	=====	==	=====	=====
01	D 7552000293	P	k07	HARNES HEADBOARD MPL40	1.000	PC		-
02	N 7590000105	P	e-floor	LIGHT #436SX LICENSE PLATE	1.000	pc		-
03	N 7178000025	P	e02	LICENSE PLATE BRACKET #3272100KEL	1.000	PC		-
04	N 7346000039	P	d14 g-floor j0	TUBING .25"ID HS W/ADHESIVE - 48" LG	.125	pc		-
05	A 7894000042	P	j40	TIE STRAP, .25 x 8.39 PUSH IN	1.000	PC		-
06	N 5526000553	P	c13	TIE PLASTIC STRAP - 5/16"W X 8" LG	1.000	pc		-

*** End of Item ***

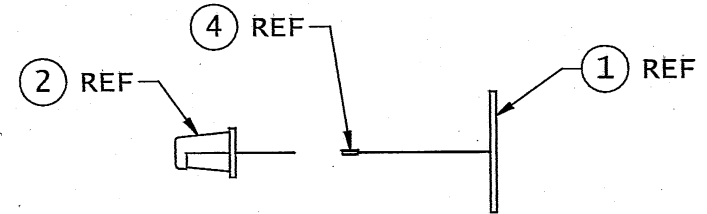
*** End of Report ***

NOTE: ITEMS 5 & 6 (WIRE TIES) NOT SHOWN
USE AS REQUIRED

USE EXISTING HOLES
TO MOUNT LICENSE
PLATE BRKT AND LIGHT
ALL HARDWARE INCLUDED
WITH LIGHT



SECTION A-A



REV	ZONE	ERN	DESCRIPTION	DATE	BY
2					

PROPRIETARY AND CONFIDENTIAL INFORMATION:
THIS DRAWING AND SUBJECT MATTER CONTAINED ARE THE SOLE AND EXCLUSIVE PROPERTY OF JERR-DAN CORPORATION. THIS COPY IS LOANED WITH THE UNDERSTANDING THAT IT OR THE SUBJECT MATTER CONTAINED WILL NOT BE DISCLOSED TO ANY OTHER PARTY WITHOUT THE EXPRESS WRITTEN PERMISSION OF JERR-DAN CORPORATION. ACCEPTANCE OF THIS COPY SHALL BE CONSTRUED AS ACCEPTANCE OF THE FORGOING CONDITION.

IF IN DOUBT ASK.
DO NOT SCALE DRAWING.
REMOVE ALL BURRS AND SHARP CORNERS.

TOLERANCES UNLESS OTHERWISE SPECIFIED
2 PLACE DEC ± 0.062
3 PLACE DEC ± 0.015
ANGLE DIM $\pm 0.5^\circ$
N/A TO MATERIAL THICKNESS

JERR-DAN An Oshkosh Truck Corporation Company			
MATERIAL SEE B/M		SHEET 1 OF 1	
		WEIGHT ? #	
TITLE ELECTRICAL ASSY BASE PYLON MPL-40 60CA			
SCALE NTS	ERN 3774	SIZE B	DWG NO 3-509-330108
DATE 03/23/05	DRAWN SMB		REV 00

HARNES HEADBOARD MPL40

DWG NO **7-552-000293** REV **00**

CIRCUIT	GA	COLOR	FUNCTION
18	16	GRAY	WORK LIGHT, LIGHTBAR
12	12	ORANGE	BEACON 1
11	12	ORANGE/BLACK	BEACON 2
10	16	BLUE/BLACK	WORK LIGHT, PYLON
9	10	WHITE	GROUND
8	16	BLUE/WHITE	RIGHT TURN (FOREIGN)
5	16	BROWN	MARKER/TAIL
3	16	GREEN	RH STOP/TURN
2	16	YELLOW	LH STOP/TURN
1	16	PURPLE/WHITE	LEFT TURN (FOREIGN)

CIRCUIT	GA	FUNCTION	TERMINAL
10	16	WORK LIGHT, PYLON	BUTT CONNECTOR
9	16	GROUND	BUTT CONNECTOR

UNINSULATED

CIRCUIT	GA	FUNCTION	TERMINAL
5	16	MARKER/TAIL	TRUCK-LITE
9	16	GROUND	94991 REF

CIRCUIT	GA	FUNCTION	TERMINAL
1	16	LEFT TURN (FOREIGN)	UNFINISHED END
2	16	LH STOP TURN	UNFINISHED END
3	16	RH STOP TURN	UNFINISHED END
5	16	MARKER/TAIL	UNFINISHED END
8	16	RIGHT TURN (FOREIGN)	UNFINISHED END
9	10	GROUND	UNFINISHED END
11	12	BEACON 2	UNFINISHED END
12	12	BEACON 1	UNFINISHED END
18	16	WORK LIGHT, LIGHTBAR	UNFINISHED END

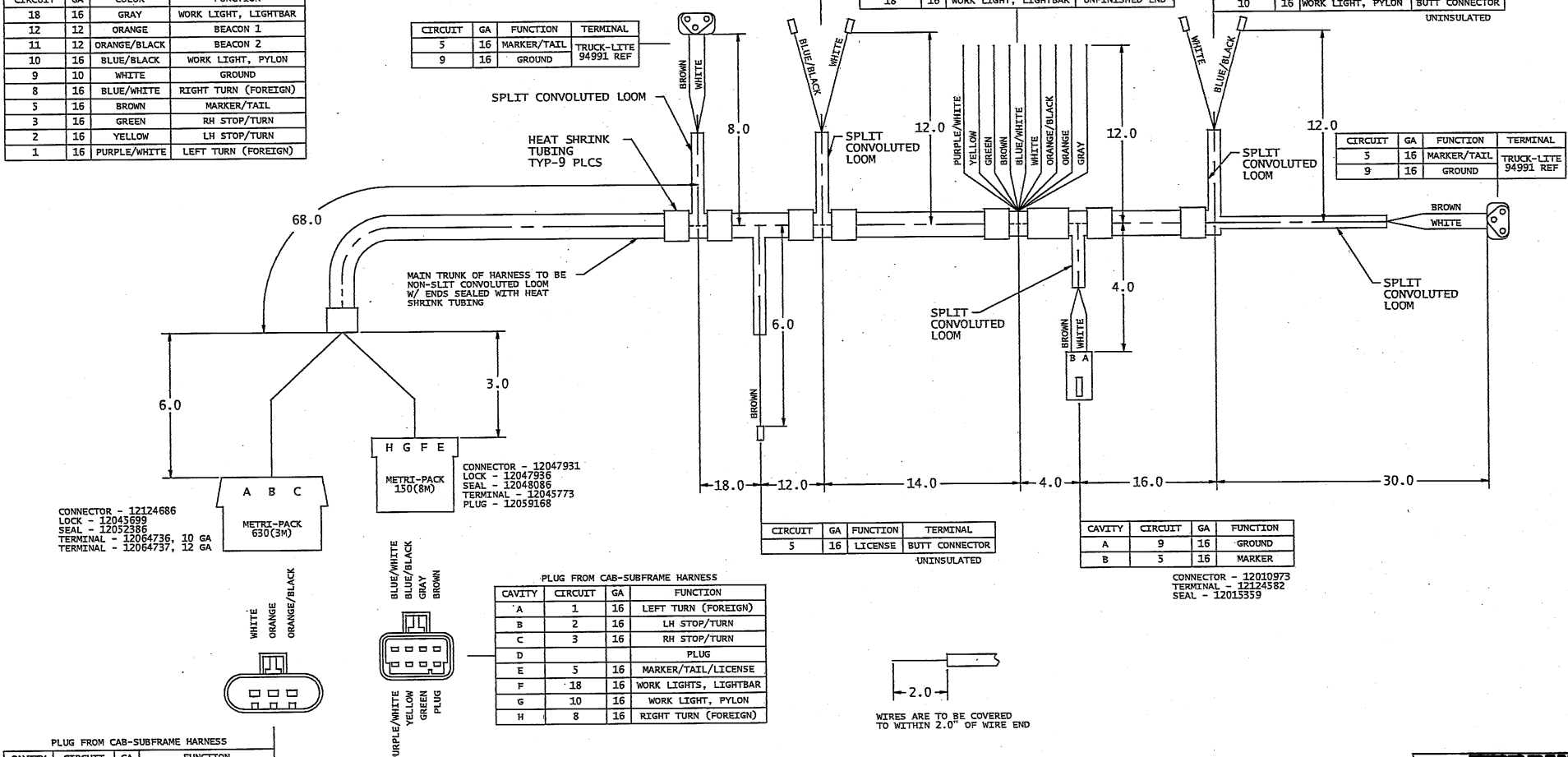
BAG & TAG SHEP LOOSE WITH HARNES
 CONNECTOR: 12124685
 TERMINAL: 12035997 (10-12GA)
 TERMINAL SEAL: 12059260 (10GA)
 LOCK (TPA): 12045699

CONNECTOR: 12015797
 TERMINAL: 12124580 (16GA)
 TERMINAL SEAL: 12015359 (16GA)

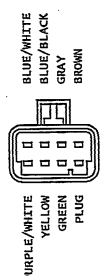
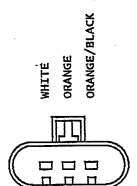
CIRCUIT	GA	FUNCTION	TERMINAL
9	16	GROUND	BUTT CONNECTOR
10	16	WORK LIGHT, PYLON	BUTT CONNECTOR

UNINSULATED

CIRCUIT	GA	FUNCTION	TERMINAL
5	16	MARKER/TAIL	TRUCK-LITE
9	16	GROUND	94991 REF



CONNECTOR - 12124686
 LOCK - 12045699
 SEAL - 12052386
 TERMINAL - 12064736, 10 GA
 TERMINAL - 12064737, 12 GA



CONNECTOR - 12047931
 LOCK - 12047936
 SEAL - 12048086
 TERMINAL - 12045773
 PLUG - 12059168

PLUG FROM CAB-SUBFRAME HARNES

CAVITY	CIRCUIT	GA	FUNCTION
A	1	16	LEFT TURN (FOREIGN)
B	2	16	LH STOP/TURN
C	3	16	RH STOP/TURN
D			PLUG
E	5	16	MARKER/TAIL/LICENSE
F	18	16	WORK LIGHTS, LIGHTBAR
G	10	16	WORK LIGHT, PYLON
H	8	16	RIGHT TURN (FOREIGN)

CIRCUIT	GA	FUNCTION	TERMINAL
5	16	LICENSE	BUTT CONNECTOR

UNINSULATED

CAVITY	CIRCUIT	GA	FUNCTION
A	9	16	GROUND
B	5	16	MARKER

CONNECTOR - 12010973
 TERMINAL - 12124582
 SEAL - 12015359

WIRES ARE TO BE COVERED TO WITHIN 2.0" OF WIRE END

PLUG FROM CAB-SUBFRAME HARNES

CAVITY	CIRCUIT	GA	FUNCTION
A	9	10	GROUND
B	12	12	BEACON 1
C	11	12	BEACON 2

- NOTES:
- 1) HARNES TO BE COVERED WITH HIGH TEMP. NYLON CONVOLUTED LOOM OR YARN.
 - 2) VENDOR TO DETERMINE INTERNAL WIRING AND SPLICING REQUIREMENTS.
 - 3) SEE JERR-DAN COMPONENT SPECIFICATIONS DWG 5-836-00014 FOR FURTHER DETAIL.

***** Engineering Bill of Materials *****

** Report Excludes Shrinkage.

Effective as of 08/01/05

Item: 3509330109

ELECT ASSY PYLON & TUNNEL MPL-40 84CA

Reference: D/3774E

From Item: 3509330109

To Item: 3509330109

Last Changed Date:

Quantity	1	Receive into Whse: MYPT	Revision #0/0	BIN: WA03	UOM: PC
----------	---	-------------------------	---------------	-----------	---------

Ball Dr	Bin	Description	QtyPer	UOM	Reference	Effectivity
-oon Sz Component Type Location						
=== == =====	=====	=====	=====	===	=====	=====
01	D 7552000295	P k08 HARNESS HEADBOARD/TUNNEL MPL- 40	1.000	PC		-
02	N 7590000105	P e-floor LIGHT #436SX LICENSE PLATE	1.000	pc		-
03	N 7178000025	P e02 LICENSE PLATE BRACKET #3272100KEL	1.000	PC		-
04	N 7346000039	P d14 g-floor j0 TUBING .25"ID HS W/ADHESIVE - 48" LG	.125	pc		-
05	A 7894000042	P j40 TIE STRAP, .25 x 8.39 PUSH IN	3.000	PC		-
06	N 5526000553	P c13 TIE PLASTIC STRAP - 5/16"W X 8" LG	8.000	pc		-
07	N 7790100856	P 000103 c21 x01 SCREW #10 X .50" HWH SELF-TAPPING	4.000	pc		-
08	A 7590000274	P e10 LIGHT INTERIOR DOME #V391C	2.000	PC		-
09	A 7661000047	P NUT NYLON PANNEL #8-10 GRIP 0.03-0.13"	4.000	PC		-
10	A 7493000009	P 101607 b01 f05 GROMMET BLACK (2.50 DIA LIGHT) #82839	2.000	pc		-
11	B 7590000185	P 101007 d18 e11 LIGHT #80466 ROUND RUBBER WORK	2.000	PC		-
12	3 7870000115	P a20 SWITCH 2.5" ADJUSTABLE PIN SWITCH	2.000	PC		-
13	D 7413000013	P 022304 e02 FASTENER PUSH ON RATCHET #27RT250800	2.000	PC		-
14	A 7493000011	P 101404 c10 f06 GROMMET 1.38" ID RUBBER	1.000	PC		-

*** End of Item ***

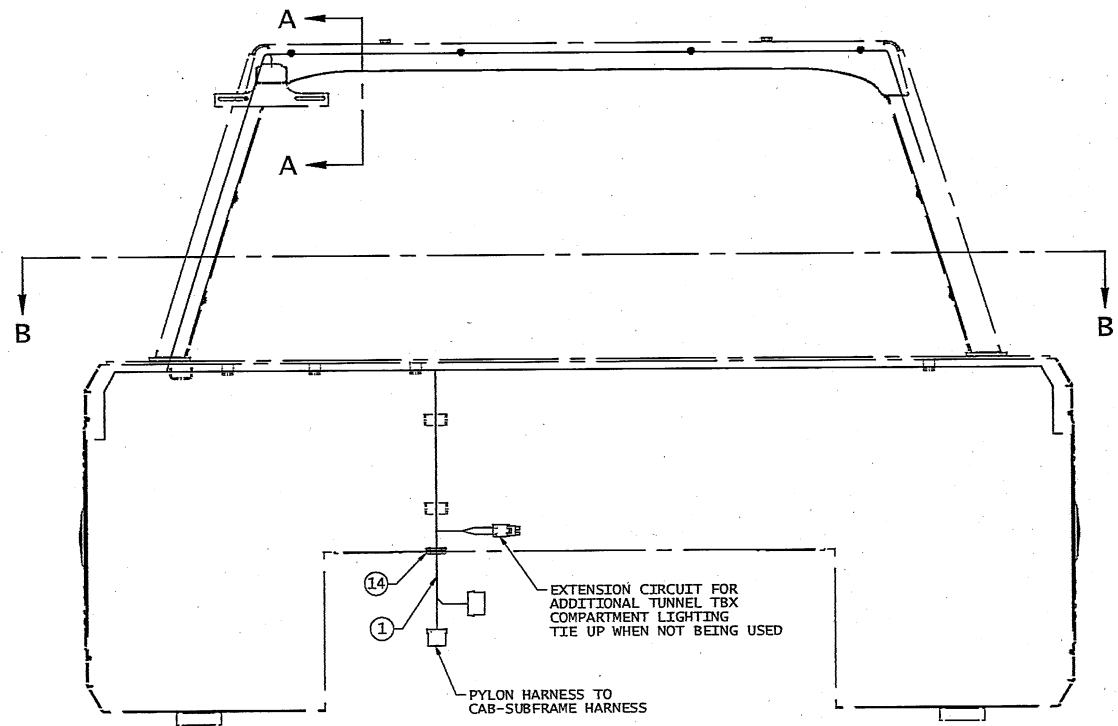
*** End of Report ***



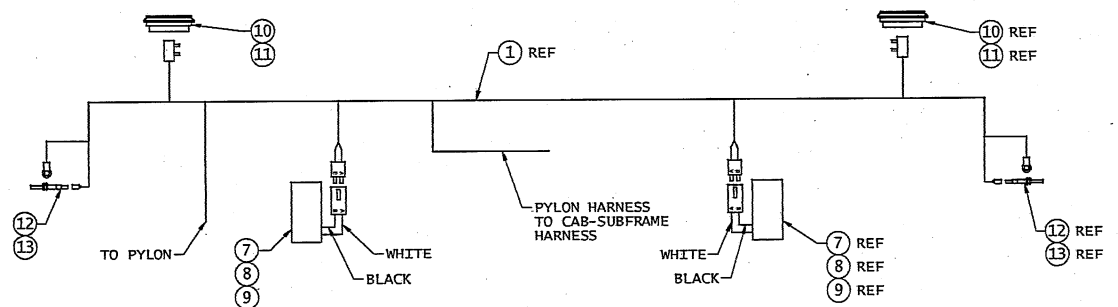
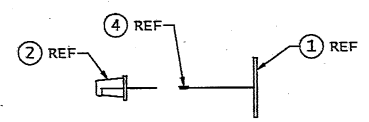
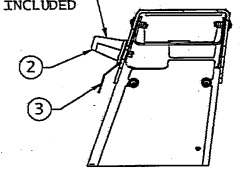
ELECT ASSY PYLON & TUNNEL MPL-40 84CA

DWG NO 3-509-330109 REV 00

NOTE: ITEMS 5 & 6 (WIRE TIES) NOT SHOWN
USE AS REQUIRED



USE EXISTING HOLES TO MOUNT LICENSE PLATE BRKT AND LIGHT ALL HARDWARE INCLUDED WITH LIGHT



<p>JERRIDAN Aircraft Products Division</p>		<p>DATE: 03/24/05</p>	<p>REV: 00</p>
<p>DESIGNER: []</p>	<p>DATE: []</p>	<p>BY: []</p>	<p>BY: []</p>
<p>THIS DRAWING AND RELATED MATTER IS THE PROPERTY OF JERRIDAN CORPORATION. IT IS TO BE USED ONLY FOR THE PURPOSES SPECIFIED HEREIN. ANY REPRODUCTION OR TRANSMISSION OF THIS DRAWING WITHOUT THE WRITTEN PERMISSION OF JERRIDAN CORPORATION IS STRICTLY PROHIBITED.</p>		<p>IF IN DOUBT ASK DO NOT SCALE DRAWING. REMOVE ALL SURFS AND DIMENSIONS.</p>	
<p>TITLE: ELECT ASSY PYLON & TUNNEL MPL-40 84CA</p>		<p>SCALE: 1:1</p>	<p>SHEET: 1 OF 1</p>
<p>DRAWN BY: []</p>		<p>DATE: 03/24/05</p>	<p>WEIGHT: ? #</p>
<p>CHECKED BY: []</p>		<p>DATE: 03/24/05</p>	<p>REV: 00</p>
<p>DATE: 03/24/05</p>		<p>DRAWN: []</p>	<p>DWG NO: 3-509-330109</p>

HARNES HEADBOARD / TUNNEL MPL-40

DWG NO 7-552-000295 REV 00

CIRCUIT	GA	FUNCTION	TERMINAL
1	16	LEFT TURN (FOREIGN)	UNFINISHED END
2	16	LH STOP TURN	UNFINISHED END
3	16	RH STOP TURN	UNFINISHED END
5	16	MARKER/TAIL	UNFINISHED END
8	16	RIGHT TURN (FOREIGN)	UNFINISHED END
9	10	GROUND	UNFINISHED END
11	12	BEACON 2	UNFINISHED END
12	12	BEACON 1	UNFINISHED END
18	16	WORK LIGHT, LIGHTBAR	UNFINISHED END

BAG & TAG SHIP LOOSE WITH HARNES
CONNECTOR: 12124685
TERMINAL: 12033997 (10-12GA)
TERMINAL SEAL: 12059257 (10GA)
TERMINAL SEAL: 12059260 (12GA)
LOCK (TPA): 12045699
CONNECTOR: 12015797
TERMINAL: 12124580 (16GA)
TERMINAL SEAL: 12015359 (16GA)

CIRCUIT	GA	FUNCTION	TERMINAL
10	16	WORK LIGHT, PYLON	BUTT CONNECTOR
9	16	GROUND	BUTT CONNECTOR

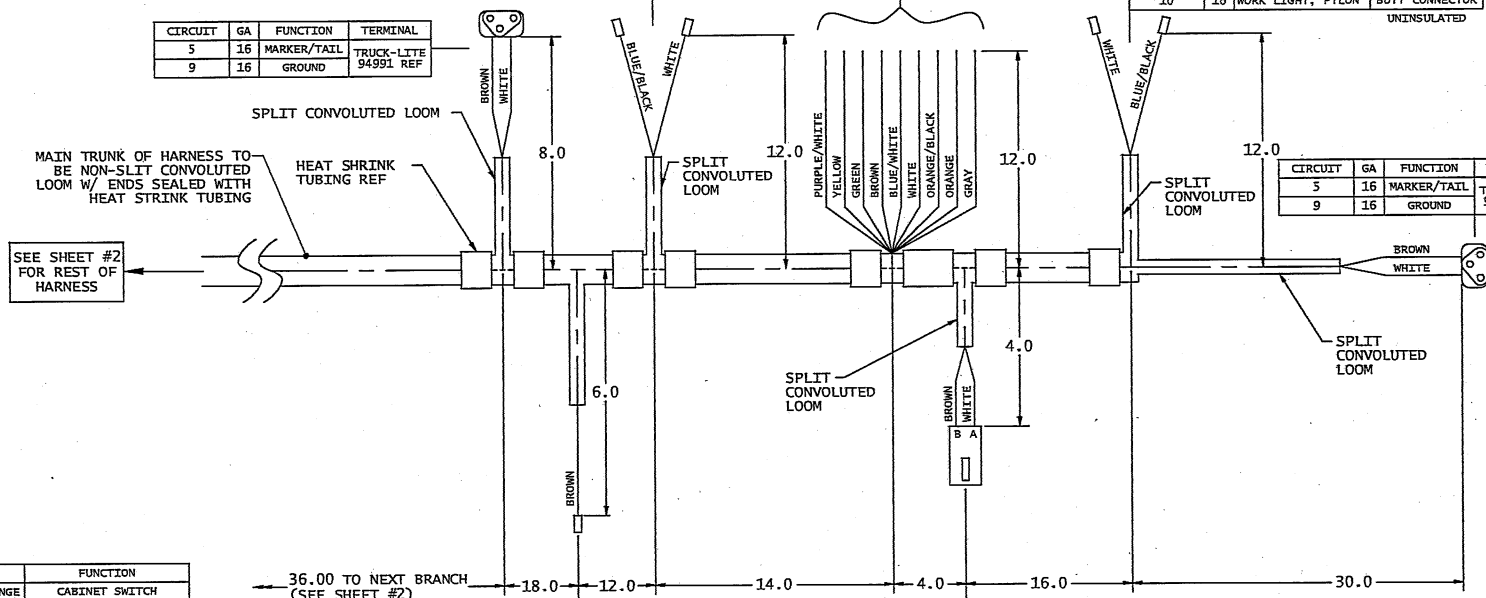
UNINSULATED

CIRCUIT	GA	FUNCTION	TERMINAL
5	16	MARKER/TAIL	TRUCK-LITE 94991 REF
9	16	GROUND	TRUCK-LITE 94991 REF

CIRCUIT	GA	FUNCTION	TERMINAL
9	16	GROUND	BUTT CONNECTOR
10	16	WORK LIGHT, PYLON	BUTT CONNECTOR

UNINSULATED

CIRCUIT	GA	FUNCTION	TERMINAL
5	16	MARKER/TAIL	TRUCK-LITE 94991 REF
9	16	GROUND	TRUCK-LITE 94991 REF



CIRCUIT	GA	COLOR	FUNCTION
19	16	WHITE/ORANGE	CABINET SWITCH
18	16	GRAY	WORK LIGHT, LIGHTBAR
12	12	ORANGE	BEACON 1
11	12	ORANGE/BLACK	BEACON 2
10	16	BLUE/BLACK	WORK LIGHT, PYLON
9	10	WHITE	GROUND
8	16	BLUE/WHITE	RIGHT TURN (FOREIGN)
6	16	WHITE/BLACK	CABINET LIGHTS
5	16	BROWN	MARKER/TAIL
3	16	GREEN	RH STOP/TURN
2	16	YELLOW	LH STOP/TURN
1	16	PURPLE/WHITE	LEFT TURN (FOREIGN)

CIRCUIT	GA	FUNCTION	TERMINAL
5	16	LICENSE	BUTT CONNECTOR

UNINSULATED

CAVITY	CIRCUIT	GA	FUNCTION
A	9	16	GROUND
B	5	16	MARKER

CONNECTOR - 12010973
TERMINAL - 12124382
SEAL - 12015359

- NOTES:
1) HARNES TO BE COVERED WITH HIGH TEMP. NYLON CONVOLUTED LOOM OR YARN.
2) VENDOR TO DETERMINE INTERNAL WIRING AND SPLICING REQUIREMENTS.
3) SEE JERR-DAN COMPONENT SPECIFICATIONS DWG 5-836-00014 FOR FURTHER DETAIL.

WIRES ARE TO BE COVERED TO WITHIN 2.0" OF WIRE END

JERR-DAN
A Division of Jerr-Dan Corporation

DATE: 03/09/05
DRAWN BY: BSK
CHECKED BY: []
APPROVED BY: []

TITLE: HARNES HEADBOARD / TUNNEL MPL-40
SCALE: NONE
SHEET: 1 OF 2

REVISION	DATE	BY	DESCRIPTION
1			

HARNES HEADBOARD / TUNNEL MPL-40

DWG NO 7-552-000295 REV 00

CIRCUIT	GA	FUNCTION	TERMINAL
5	16	MARKER/TAIL	TRUCK-LITE 94909 REF
9	16	GROUND	

CIRCUIT	GA	FUNCTION	TERMINAL
19	16	CABINET /SWITCH	BULLET CONNECTOR (5/32" DIA)
9	16	GROUND	0.31 RING

PLUG FROM CAB-SUBFRAME HARNES

CAVITY	CIRCUIT	GA	FUNCTION
A	1	16	LEFT TURN (FOREIGN)
B	2	16	LH STOP/TURN
C	3	16	RH STOP/TURN
D	6	16	CABINET LIGHTS
E	5	16	MARKER/TAIL/LICENSE
F	18	16	WORK LIGHTS, LIGHTBAR
G	10	16	WORK LIGHT, PYLON
H	8	16	RIGHT TURN (FOREIGN)

MAIN TRUNK OF HARNES TO BE NON-SLIT CONVOLUTED LOOM W/ ENDS SEALED WITH HEAT STRINK TUBING

SEE SHEET #1 FOR REST OF HARNES

36.00 TO NEXT BRANCH (SEE SHEET #1)

CIRCUIT	GA	FUNCTION	TERMINAL
5	16	MARKER/TAIL	TRUCK-LITE 94909 REF
9	16	GROUND	

CIRCUIT	GA	FUNCTION	TERMINAL
19	16	CABINET /SWITCH	BULLET CONNECTOR (5/32" DIA)
9	16	GROUND	0.31 RING

UNINSULATED TERMINALS W/ HEAT SHRINK

CONNECTOR - 12015792
SEAL - 12015323
TERMINAL - 12124580

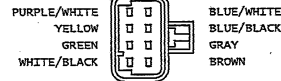
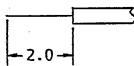
CIRCUIT	GA	FUNCTION
6	16	CABINET LIGHT
9	16	GROUND

(EXTENTION CIRCUIT FOR ADDITIONAL TUNNEL TOOLBOX REF)

CIRCUIT	GA	COLOR	FUNCTION
19	16	WHITE/ORANGE	CABINET SWITCH
18	16	GRAY	WORK LIGHT, LIGHTBAR
12	12	ORANGE	BEACON 1
11	12	ORANGE/BLACK	BEACON 2
10	16	BLUE/BLACK	WORK LIGHT, PYLON
9	10	WHITE	GROUND
8	16	BLUE/WHITE	RIGHT TURN (FOREIGN)
6	16	WHITE/BLACK	CABINET LIGHTS
5	16	BROWN	MARKER/TAIL
3	16	GREEN	RH STOP/TURN
2	16	YELLOW	LH STOP/TURN
1	16	PURPLE/WHITE	LEFT TURN (FOREIGN)

- NOTES:
- 1) HARNES TO BE COVERED WITH HIGH TEMP. NYLON CONVOLUTED LOOM OR YARN.
 - 2) VENDOR TO DETERMINE INTERNAL WIRING AND SPLICING REQUIREMENTS.
 - 3) SEE JERR-DAN COMPONENT SPECIFICATIONS DWG 5-836-00014 FOR FURTHER DETAIL.

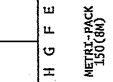
WIRES ARE TO BE COVERED TO WITHIN 2.0" OF WIRE END



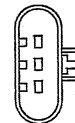
BLUE/WHITE
BLUE/BLACK
GRAY
BROWN



CONNECTOR - 12047931
LOCK - 12047956
SEAL - 12045086
TERMINAL - 12045773
PLUG - 12059168



CONNECTOR - 12124686
LOCK - 12045699
SEAL - 12052386
TERMINAL - 12064736, 10 GA
TERMINAL - 12064737, 12 GA



WHITE
ORANGE
ORANGE/BLACK

PLUG FROM CAB-SUBFRAME HARNES

CAVITY	CIRCUIT	GA	FUNCTION
A	9	10	GROUND
B	12	12	BEACON 1
C	11	12	BEACON 2

JERR-DAN
A Division of Jerr-Dan Corporation

REVISION	DESCRIPTION	DATE	BY
1			

THIS DRAWING AND SUBJECT MATTER IS THE PROPERTY OF JERR-DAN CORPORATION. THE COPY IS LOANED TO YOU BY THE COMPANY AND IS TO BE RETURNED TO THE COMPANY WITHIN 30 DAYS OF THE DATE OF THIS COPY. ANY REPRODUCTION OR DISTRIBUTION OF THIS COPY SHALL BE CONSIDERED AS ACCEPTANCE OF THE FOREGOING CONDITIONS.

IF IN DOUBT ASK TO THE DRAWING ENGINEER. REMOVE ALL DIMS AND DIMENSION LINES.

THE DRAWING ENGINEER IS RESPONSIBLE FOR THE CORRECTNESS OF THE DRAWING. THE DRAWING ENGINEER SHALL BE RESPONSIBLE FOR THE CORRECTNESS OF THE DRAWING. THE DRAWING ENGINEER SHALL BE RESPONSIBLE FOR THE CORRECTNESS OF THE DRAWING.

TITLE: HARNES HEADBOARD / TUNNEL MPL-40
 DRAWN BY: 3774
 DATE: 03/09/05
 SHEET NO: 2 OF 2
 REV: 00

Mud Flap Installation



***** Engineering Bill of Materials *****

** Report Excludes Shrinkage.

Effective as of 08/01/05

Item: 2638000006

MUDFLAP INST QP40

From Item: 2638000006

To Item: 2638000006

Reference: D/3560

Last Changed Date:

Revision #0/0

BIN: WA00

UOM: PC

Quantity 1 Receive into Whse: MYPT

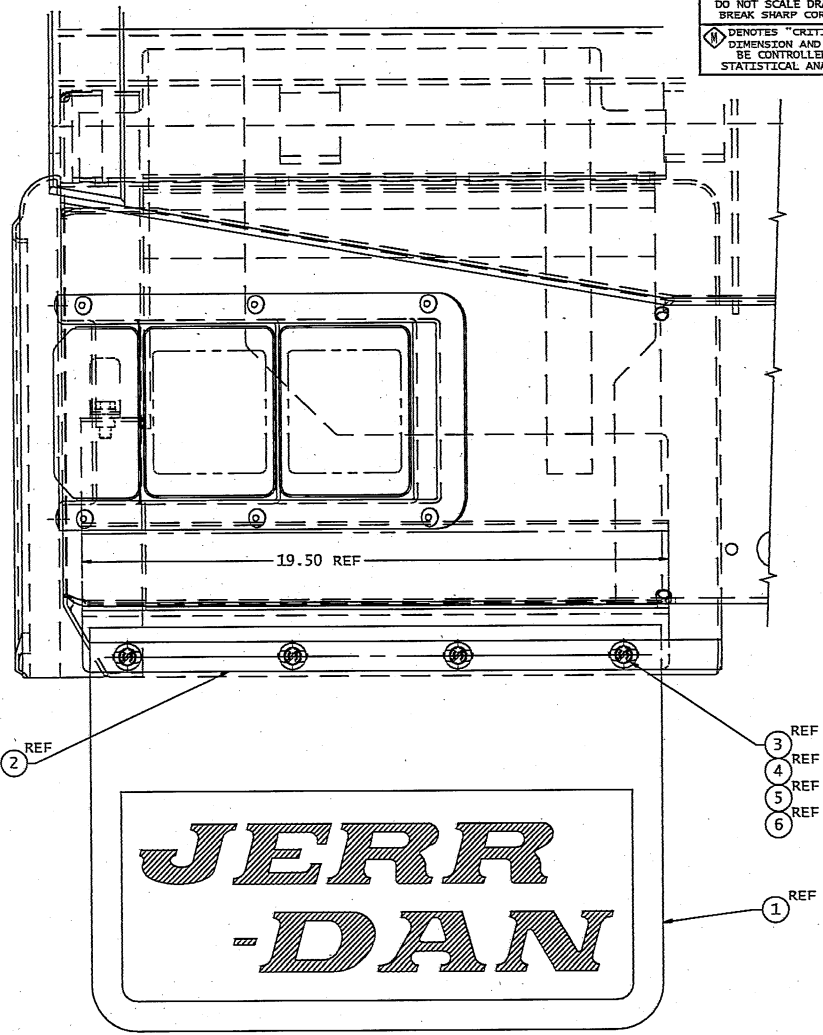
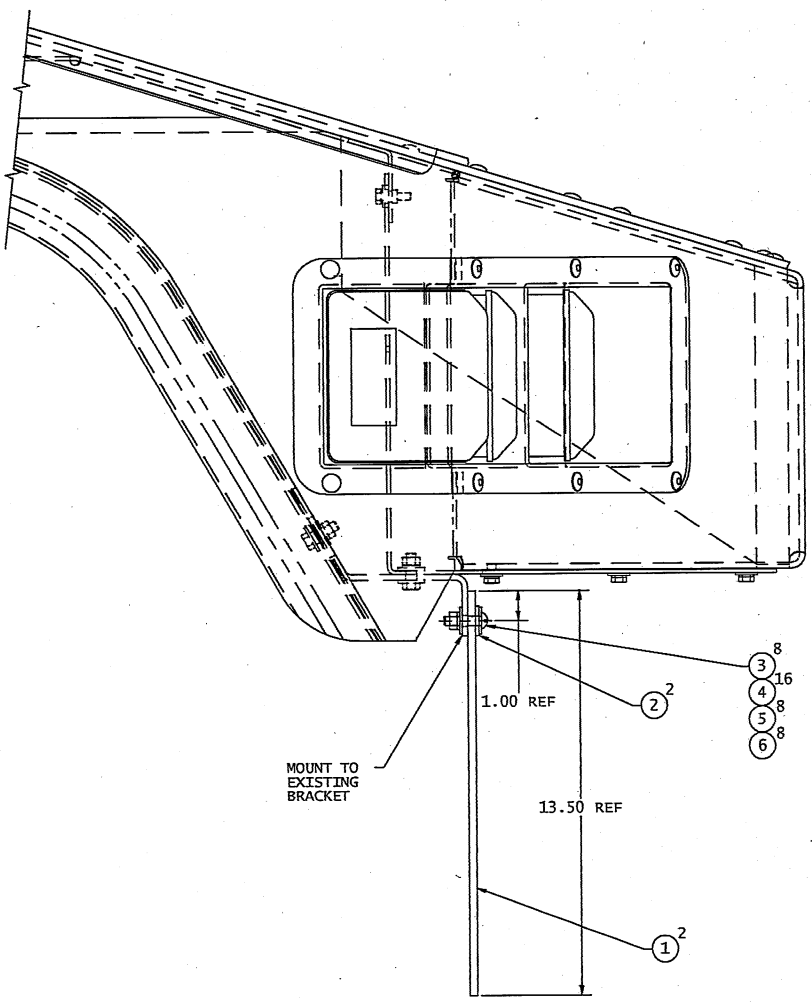
Ball Dr	Sz	Component	Type	Bin Location	Description	QtyPer	UOM	Reference	Effectivity
---	--	-----		-----	-----	-----	---	-----	-----
01	D	7638000003	P	040106 e09 m03	FLAP MUD W/JERR-DAN LOGO - 19"x13.5"	2.000	pc		-
02	B	4706001124	M	102007 WA00	PLATE 0.13 x 1.00 x 21.00	2.000	PC		-
03		7111151010	P	000103	SCREW .31"-18NC X 1.25" RH MACHINE	8.000	pc		-
04	N	7950150161	P	030602 080304	FLATWASHER .31" NOM WIDE - PLATED	16.000	PC		-
05	N	7950150000	P	080304 x01	WASHER .31" NOM REG LOCK - PLATED	8.000	PC		-
06		7660150000	P	080304 A109	HEX NUT .31"-18NC - PLATED	8.000	pc		-

*** End of Item ***

*** End of Report ***

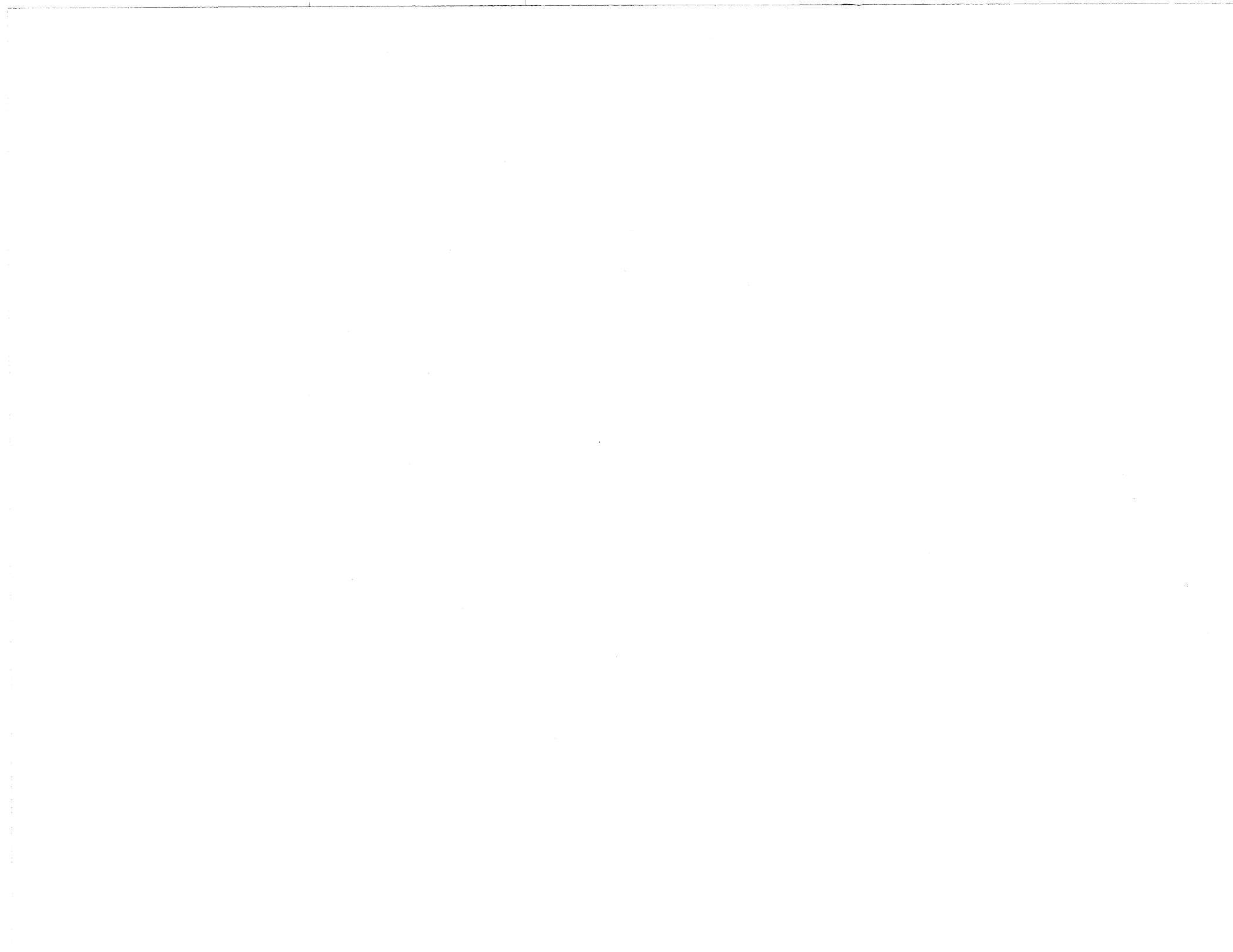


GENERAL NOTES
 DO NOT SCALE DRAWING
 BREAK SHARP CORNERS
 DENOTES "CRITICAL"
 DIMENSION AND MUST
 BE CONTROLLED BY
 STATISTICAL ANALYSIS



ASSEMBLY OF REAR LEFT SIDE SHOWN
 REAR RIGHT SIDE ASSEMBLY SYMMETRICAL

TOLERANCES (EXCEPT AS NOTED)		JERR-DAN CORP. GREENCASTLE, PA.		SCALE	DRAWN BY	DATE
DECIMAL	MIL'S	SEE 8/11	SCALE	1:2	ELK	
3 PLACE - ANG	2 PLACE - ANG					DWN NO. 3550
ANGULAR			TITLE	MUDFLAP INSTL. QP40		
40° 30'			DATE	2-208-200016 2-208-200015		ORIGINAL
REV	ERN	DESCRIPTION	DATE	DRN	OSDECOR	DRAWING NO. D2-638-000006



Identification 3 Light Bar Installation

***** Engineering Bill of Materials ****

** Report Excludes Shrinkage.

Effective as of 08/01/05

Item: 2590000164

LIGHT INSTALL IDENTIFICATION 3 BAR

From Item: 2590000164

To Item: 2590000164

Reference: B/3774E

Last Changed Date:

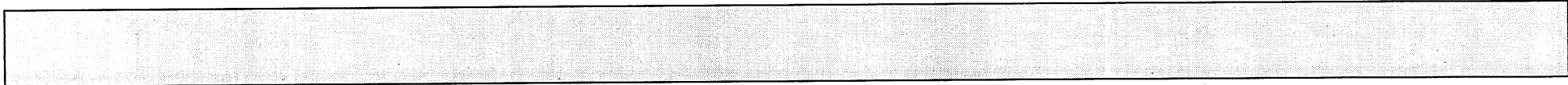
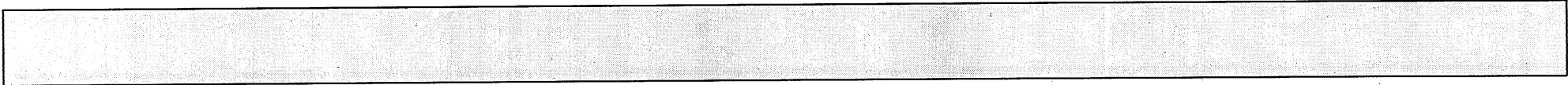
Revision #0/0

Quantity	1	Receive into Whse: MYPT	BIN: WA03	UOM: PC
----------	---	-------------------------	-----------	---------

Ball Dr	Bin								
-oon Sz	Component	Type	Location	Description	QtyPer	UOM	Reference	Effectivity	
===	==	=====	=====	=====	=====	===	=====	=====	=====
01	A 7590000193	P	d13 e-floor g0	LIGHT ID LAMP BAR TRUCK LITE P/N 15747R	1.000	PC		-	
02	N 7114141018	P	000101 A128	CAPSCREW .25"-20NC X 1.25" BH SH SS	2.000	PC		-	
03	N 7950140143	P	000102 x01	FLATWASHER 0.25 NOM NARROW SS	2.000	PC		-	
04	N 7660142601	P	a23	LOCKNUT .25"-20NC GR5 HEX NYLOC	2.000	pc		-	

*** End of Item ***

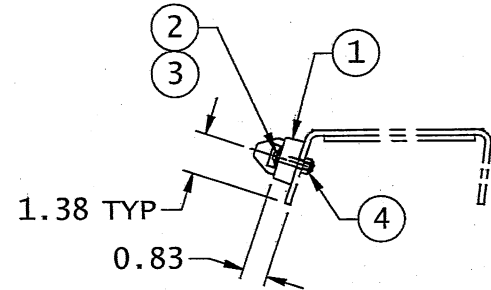
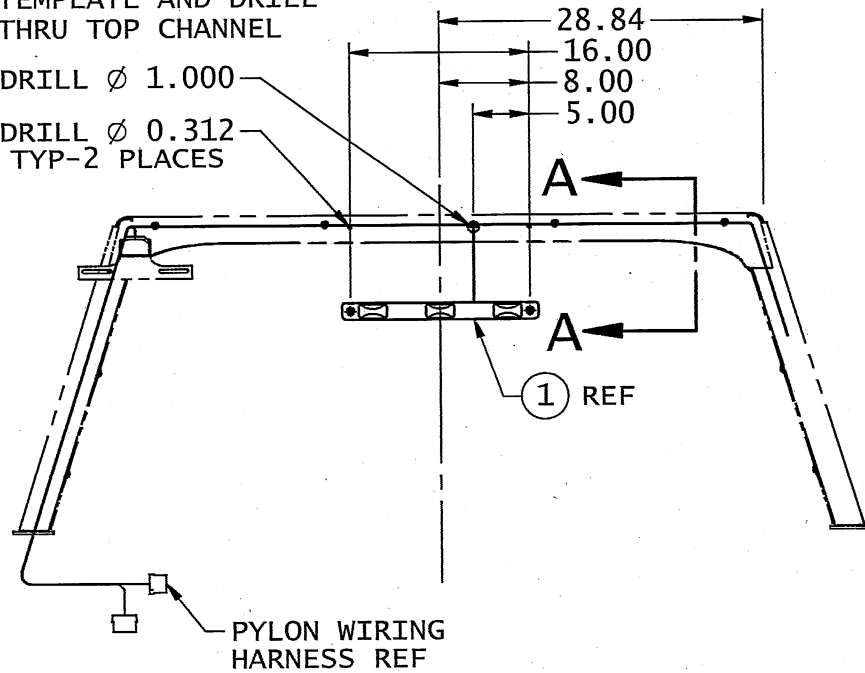
*** End of Report ***



USE ITEM 2 AS A
TEMPLATE AND DRILL
THRU TOP CHANNEL

DRILL \varnothing 1.000

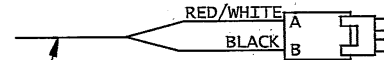
DRILL \varnothing 0.312
TYP-2 PLACES



SECTION A-A

CAVITY	CIRCUIT	GA
A	POSITIVE	16
B	NEGATIVE	16

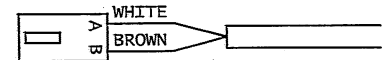
CONNECTOR - 12015792
SEAL - 12015323
TERMINAL - 12124580



(1) REF

CAVITY	CIRCUIT	GA	FUNCTION
A	9	16	GROUND
B	5	16	MARKER

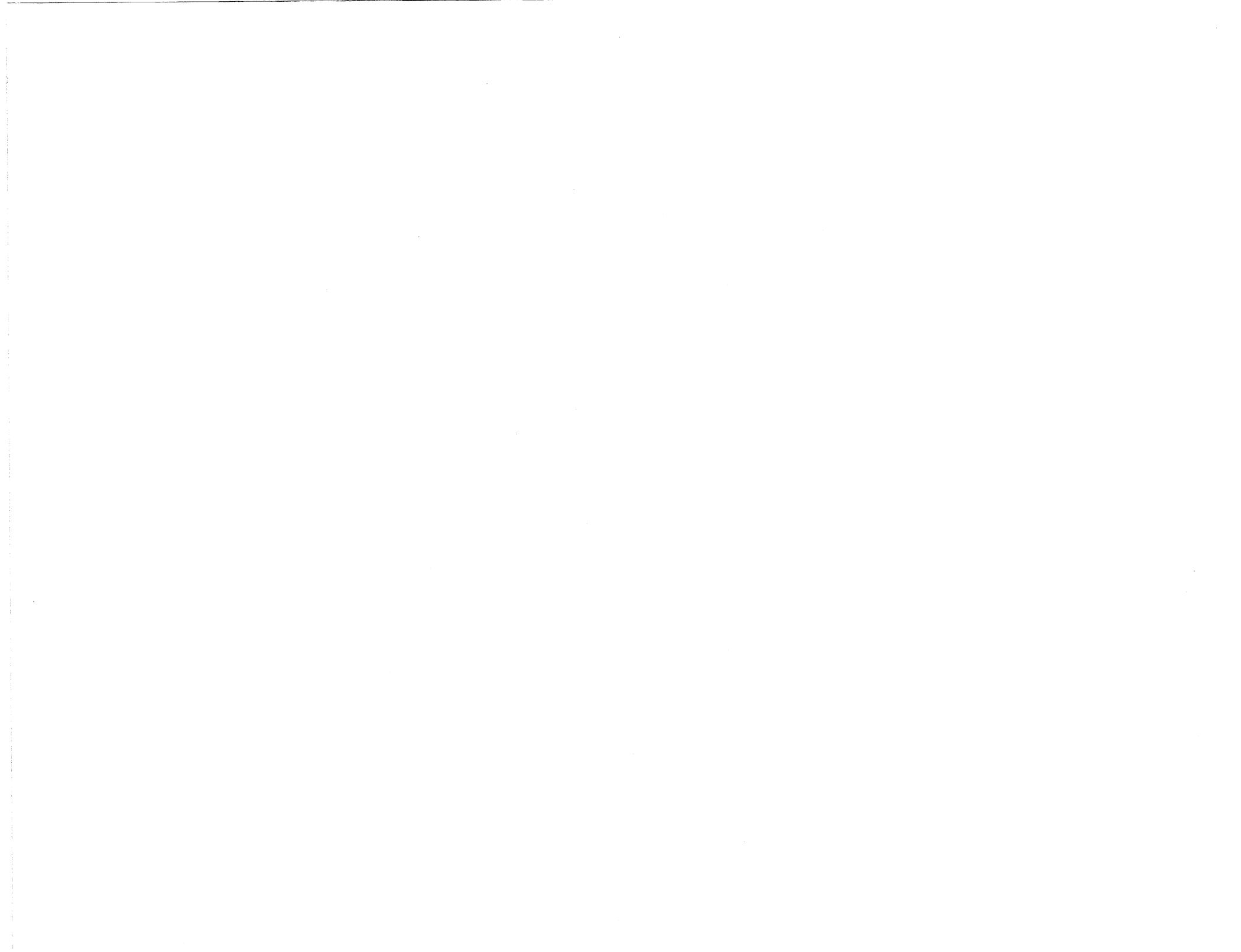
CONNECTOR - 12010973
TERMINAL - 12124582
SEAL - 12015359



PYLON WIRING HARNESS REF

JERR-DAN
An Oshkosh Truck Corporation Company

<p>PROPRIETARY AND CONFIDENTIAL INFORMATION:</p> <p>THIS DRAWING AND SUBJECT MATTER CONTAINED ARE THE SOLE AND EXCLUSIVE PROPERTY OF JERR-DAN CORPORATION. THIS COPY IS LOANED WITH THE UNDERSTANDING THAT IT OR THE SUBJECT MATTER CONTAINED WILL NOT BE DISCLOSED TO ANY OTHER PARTY WITHOUT THE EXPRESS WRITTEN PERMISSION OF JERR-DAN CORPORATION. ACCEPTANCE OF THIS COPY SHALL BE CONSTRUED AS ACCEPTANCE OF THE FORGOING CONDITION.</p>	<p>IF IN DOUBT ASK. DO NOT SCALE DRAWING. REMOVE ALL BURRS AND SHARP CORNERS.</p>	<p>MAT'L SEE B/M</p>	SHEET 1 OF 1
			WEIGHT ? #
<p>TOLERANCES UNLESS OTHERWISE SPECIFIED 2 PLACE DEC ± 0.062 3 PLACE DEC ± 0.015 ANGLE DIM $\pm 0.5^\circ$ N/A TO MATERIAL THICKNESS</p>		<p>TITLE LIGHT INSTALL IDENTIFICATION 3 BAR</p>	
<p>REVIZONE ERN</p>	<p>DESCRIPTION</p>	<p>DATE</p>	<p>BY</p>
<p>SCALE NTS</p>		<p>ERN 3774</p>	<p>SIZE DWG NO</p>
<p>DATE 03/23/05</p>		<p>DRAWN SMB</p>	<p>B 2-590-000164 00</p>



Tow Ball Bracket

***** Engineering Bill of Materials *****

** Report Excludes Shrinkage.

Effective as of 08/01/05

Item: 3590800104

HITCH ASSY TOW BALL MPL-40

From Item: 3590800104

To Item: 3590800104

Reference: C/3774C

Last Changed Date:

Revision #0/0

BIN: WA03

UOM: PC

Quantity

1

Receive into Whse: MYPT

Ball Dr

Bin

-oon Sz

Component

Type

Location

Description

QtyPer UOM

Reference

Effectivity

====

==

=====

=====

=====

=====

=====

=====

01

C

3178000399

M

WA03

BRACKET WELD TOW BALL HITCH

1.000 PC

-

02

B

3691000195

M

021205 WA00

PIN WELD TOW HITCH

2.000 PC

-

03

N

7691000027

P

021205 f15

PIN LINCH W/CHAIN - 1.563" LG

2.000 pc

-

04

A

7330000424

P

a06

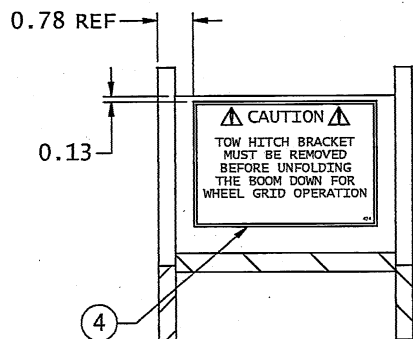
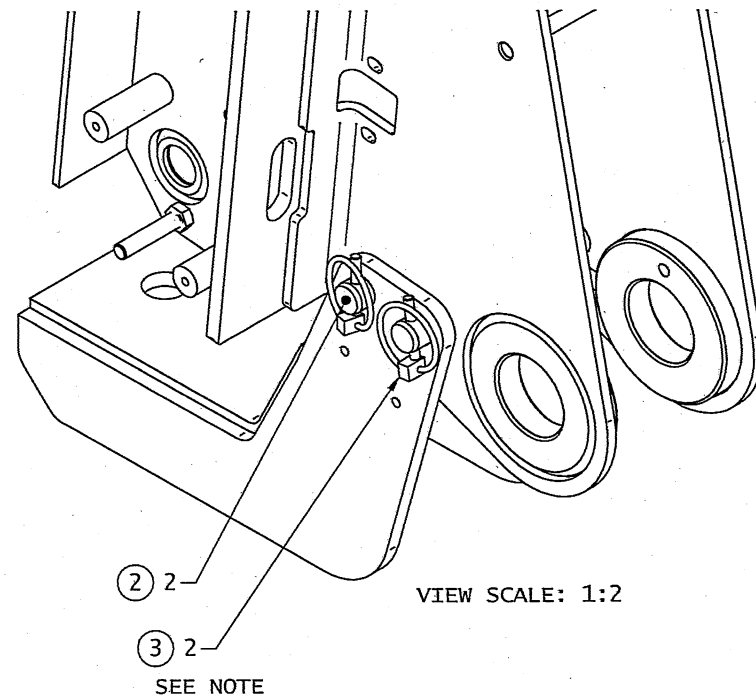
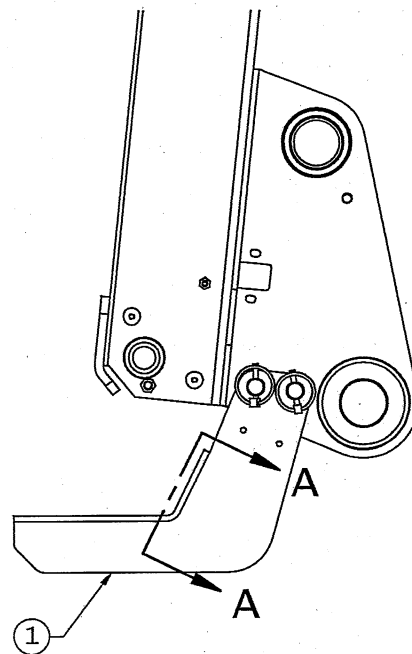
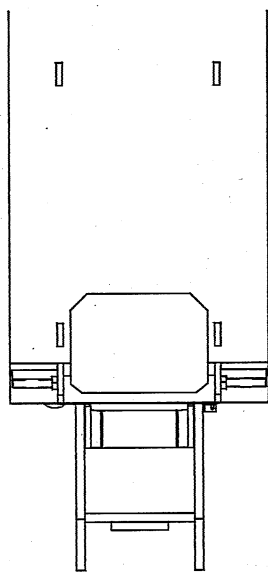
DECAL TOW HITCH CAUTION

1.000 PC

-

*** End of Item ***

*** End of Report ***



LOCATE DECAL (ITEM #4)
CENTERED AS SHOWN

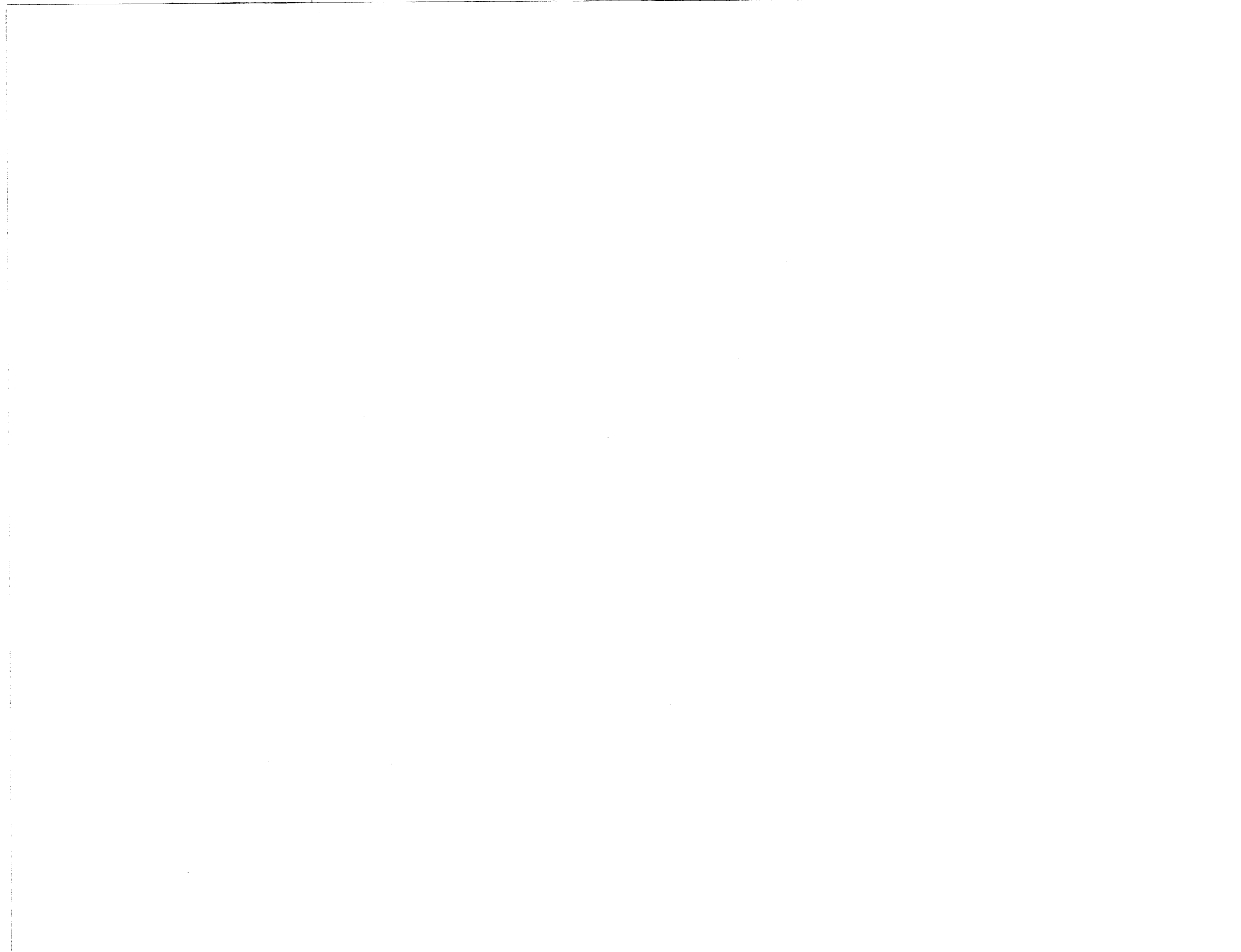
SECTION A-A
VIEW SCALE: 1:2

NOTE:
CHAIN AND COTTER PIN NOT SHOWN FOR ITEM #3. INSERT COTTER PINS INTO RETAINER HOLES OF ITEM #1.

COMPATIBLE TOW BALLS (REF)
1.88" DIA J/D# 7-056-000007
2.00" DIA J/D# 7-056-000008

REV	ZONE	ERN	DESCRIPTION	DATE	BY	1	2	3	4

PROPRIETARY AND CONFIDENTIAL INFORMATION. THIS DRAWING AND SUBJECT MATTER CONTAINED ARE THE SOLE AND EXCLUSIVE PROPERTY OF JERR-DAN CORPORATION. THIS COPY IS LOANED WITH THE UNDERSTANDING THAT IT OR THE SUBJECT MATTER CONTAINED WILL NOT BE DISCLOSED TO ANY OTHER PARTY WITHOUT THE EXPRESS WRITTEN PERMISSION OF JERR-DAN CORPORATION. ACCEPTANCE OF THIS COPY SHALL BE CONSTRUED AS ACCEPTANCE OF THE FOREGOING CONDITION.		IF IN DOUBT ASK. DO NOT SCALE DRAWING. REMOVE ALL BURRS AND SHARP CORNERS.	MAT'L SEE BOM SHEET 1 OF 1 WEIGHT ? #
TOLERANCES UNLESS OTHERWISE SPECIFIED 2 PLACE DEC ±0.002 3 PLACE DEC ±0.015 ANGLE DIM ±0.5° N/A TO MATERIAL THICKNESS		JERR-DAN An Oshkosh Truck Corporation Company	
TITLE HITCH ASSY TOW BALL MPL-40		DATE 02/25/05 ERN 3774 SIZE C DWG NO 3-590-800104 REV 00	



Cable Tensioner Installation



***** Engineering Bill of Materials *****

** Report Excludes Shrinkage.

Effective as of 08/05/05

Item: 3249000022

CABLE TENS ASSY, H200

From Item: 3249000022

To Item: 3249000022

Last Changed Date:

Reference:C/3774C

Revision #0/0

BIN: WA03

UOM: PC

Quantity 1

Receive into Whse: MYPT

Ball Dr

Bin

-oon Sz Component Type Location

Description

QtyPer UOM

Reference

Effectivity

====

====

====

====

====

====

01 N 7249000006 P m01

LEVEL WINDER FOR H200 RAMSEY #256048

2.000 PC

-

*** End of Item ***

*** End of Report ***

NOTE: ALL MOUNTING HARDWARE AND
INSTALLATION INSTRUCTIONS
INCLUDED WITH LEVEL WINDER (ITEM 1)

5.82 TYP

15° ON
BARE DRUM

HALF LOOPS ON ENDS OF SPRING
TANGS MUST SNAP INTO PLACE
OVER CROSSBAR OF TENSIONER

WINCH CABLE REF

WINCH BASKET REF

BOOM REF

LOWER TENSIONER BAR MUST
NOT TOUCH CABLE WRAPPED
AROUND DRUM BARREL

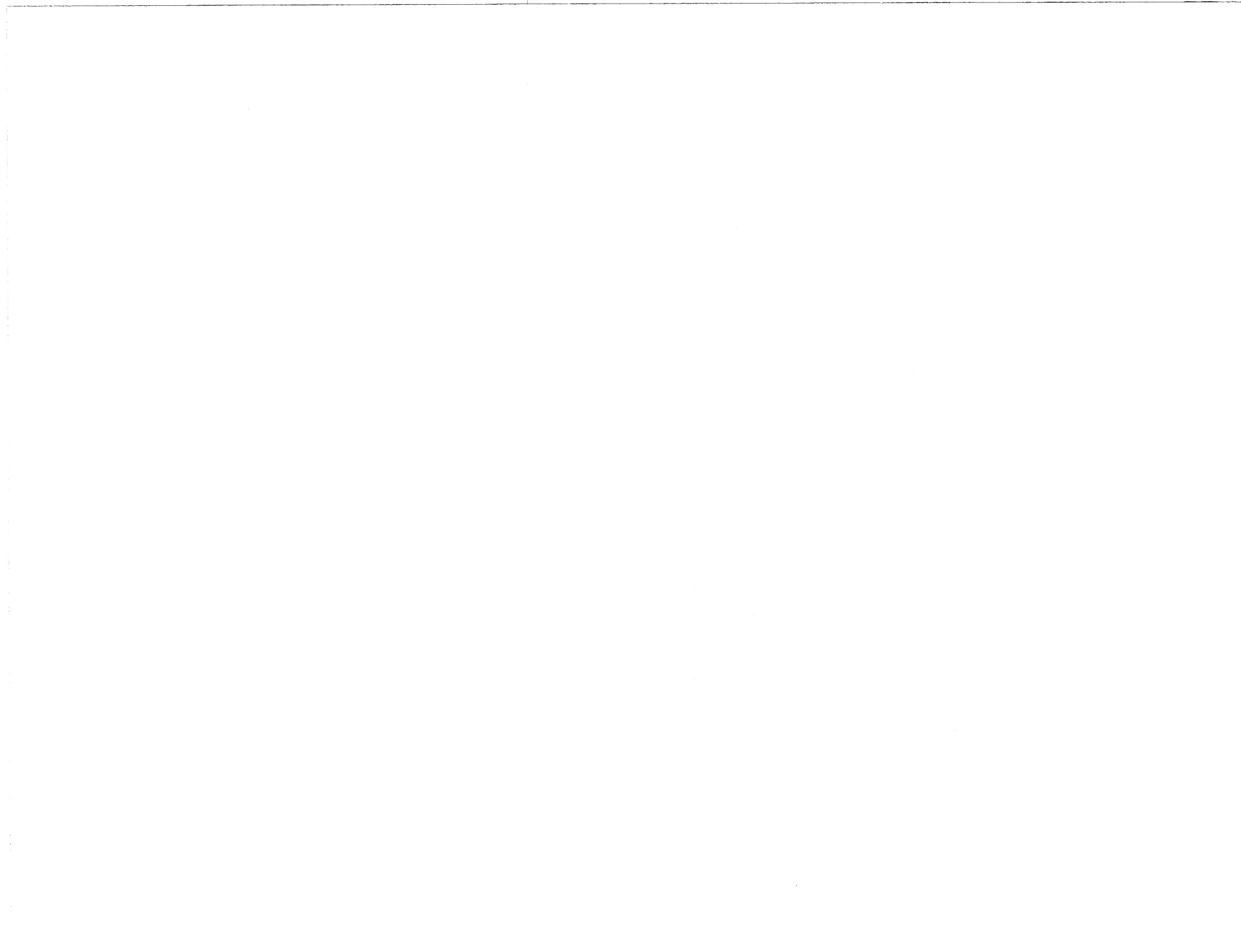
SECTION **A - A**

WINCH REF
RAMSEY HD234 LH & RH
(7-970-000103 & 7-970-000104)

JERR-DAN CORP
1080 HYKES ROAD GREENCASTLE, PA 17225

<small>PROPRIETARY AND CONFIDENTIAL INFORMATION.</small> THIS DRAWING AND SUBJECT MATTER CONTAINED ARE THE SOLE AND EXCLUSIVE PROPERTY OF JERR-DAN CORPORATION. THIS COPY IS LOANED WITH THE UNDERSTANDING THAT IT OR THE SUBJECT MATTER CONTAINED WILL NOT BE DISCLOSED TO ANY OTHER PARTY WITHOUT THE EXPRESS WRITTEN PERMISSION OF JERR-DAN CORPORATION. ACCEPTANCE OF THIS COPY SHALL BE CONSTRUED AS ACCEPTANCE OF THE FOREGOING CONDITIONS.	<small>IF IN DOUBT ASK. DO NOT SCALE DRAWING. REMOVE ALL BURRS AND SHARP CORNERS.</small> TOLERANCES UNLESS OTHERWISE SPECIFIED 2 PLACE DEC ±0.062 3 PLACE DEC ±0.025 ANGLE DIM ±0.5° N/A TO MATERIAL THICKNESS	MAT'L SEE B/M	SHEET 1 OF 1
		WEIGHT ? #	
TITLE CABLE TENS ASSY MPL-40 RAMSEY HD234		SCALE 0.31	ERN 3774
DATE 1/27/05	DRANN SMB	SIZE C	DWG NO 3-249-000022
			REV 00

REV	DATE	BY	DESCRIPTION



Tunnel Toolbox Installation

***** Engineering Bill of Materials *****

** Report Excludes Shrinkage.

Effective as of 08/04/05

Item: 2509740039

TUNNEL TOOLBOX INSTL MPL 40 24" WIDE

From Item: 2509740039

To Item: 2509740039

Reference:D/3774E

Last Changed Date:

Revision #0/1/3774

Quantity	1	Receive into Whse: MYPT	BIN: WA03	UOM: PC
----------	---	-------------------------	-----------	---------

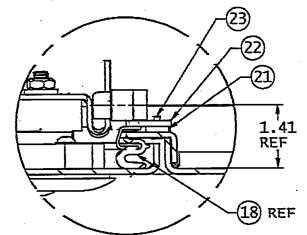
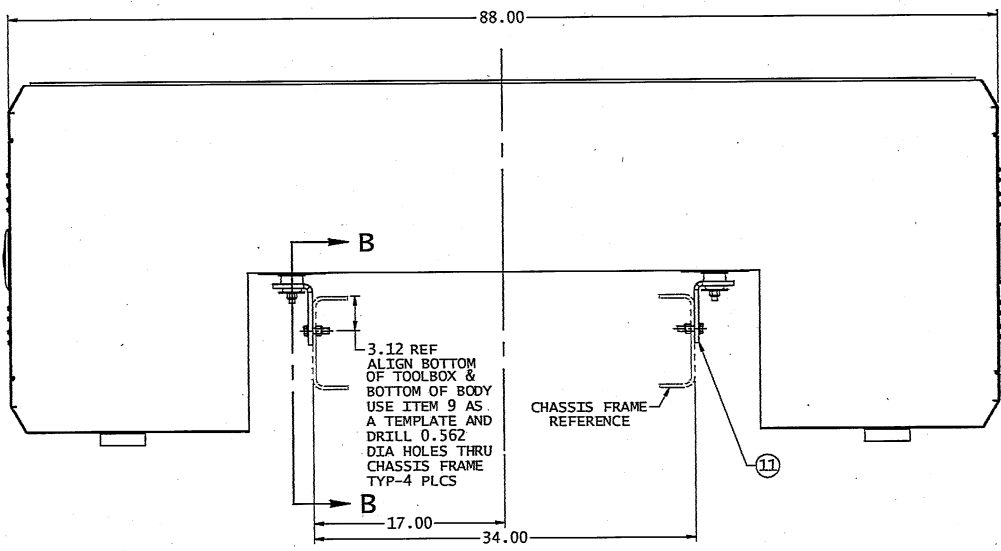
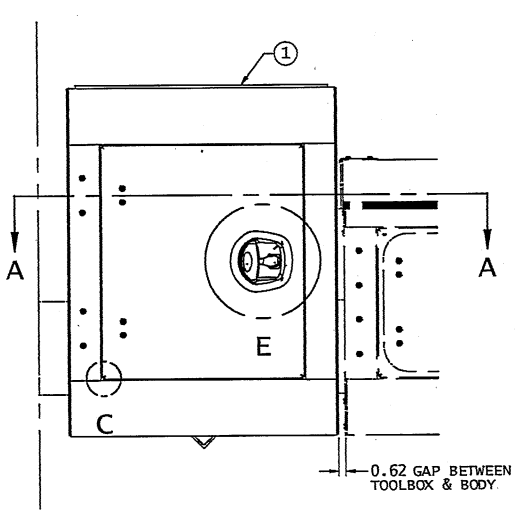
Ball Dr	Bin						
-oon Sz Component Type Location	Description	QtyPer	UOM	Reference	Effectivity		
====	=====	=====	====	=====	=====		
01 D 3899000121	M WA03			TUNNEL TOOLBOX WELD MPL 40 24"	1.000	PC	-
02 N 7636000005	P 101806 c12 h07			MOUNT CENTER BONDED RUBBER	4.000	pc	-
03 N 7949000013	P 101806 c25 104			WASHER 2.38" DIA. RUBBER HEAD	4.000	pc	-
04 N 7949000012	P 101806 c25			WASHER 2.25" DIA. RUBBER TAIL	4.000	pc	-
05 N 7115182650	P 080305 a59 x01			CAPSCREW .50"-13NC X 3.25" HEX HEAD	4.000	pc	-
06 N 7115181650	P 030601 a54			CAPSCREW 0.50"-13NC X 2.00" HEX HEAD	4.000	PC	-
07 N 7950180153	P 000104 x01			FLATWASHER .50" NOM HARDENED	8.000	pc	-
08 N 7660182601	P 000105 x01			LOCKNUT .50"-13NC GR5 HEC NYLOC	8.000	PC	-
09 C 4017000674	M t01 WA00			ANGLE 0.38 x 8.32 x 23.38	2.000	PC	-
10 B 4679000249	M WA03			PAD 0.19 x 19.31 x 23.25 RUBBER	2.000	PC	-
11 B 4679000250	M WA03			PAD 0.19 x 21.50 x 46.00 RUBBER - CENTER	1.000	PC	-
12 B 7555000012	P m09			HINGE DOOR S/S	4.000	PC	-
13 N 7114140818	P 000108 A125 x0			CAPSCREW 0.25"-20 X 1.00" SS BT HD	16.000	PC	-
14 A 7949000056	P a13			WASHER NYLON 0.50 OD x 0.25 x 0.03THK	16.000	PC	-
15 N 7950140161	P 000104 A96			FLATWASHER .25" NOM WIDE - PLATED	16.000	pc	-
16 N 7660142601	P a23			LOCKNUT .25"-20NC GR5 HEX NYLOC	16.000	pc	-
17 D 4686000208	M AS14			PANEL 0.12 x 18.92 x 21.93 DOOR TBX	2.000	PC	-
18 B 4632000053	M WA03			SEAL DOOR x 69.00	2.000	PC	-
19 C 7585000019	P n-floor			LATCH ERGONOMIC T HANDLE LH 1-8400-L-31	1.000	PC	-
20 C 7585000020	P n-floor			LATCH ERGONOMIC T HANDLE RH 1-8400-R-31	1.000	PC	-
21 A 4062000569	M WA01			BAR 0.12 x 0.50 x 4.00 ALUM	2.000	PC	-
22 A 4706003611	M AS13			PLATE 10GA X 1.00 X 4.00 SS	2.000	PC	-
23 N 7759000006	P 000104 c20			POP RIVET .13"DIA X .50" GRIP ALUM	4.000	pc	-
24 N 7632046140	P			MOULDING #1750 G-DYNAMIC - 140" LG	1.000	ft	-

*** End of Item ***

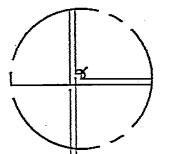
*** End of Report ***

TUNNEL TOOLBOX INSTALL 24" WIDE MPL-40

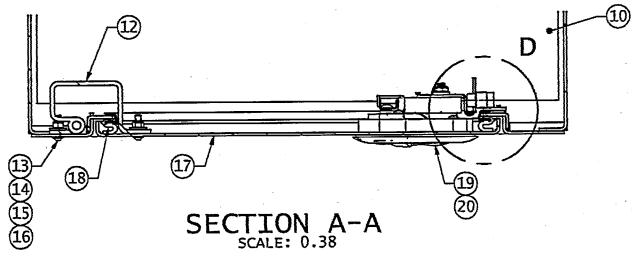
DWG NO 2-509-740039 REV 01



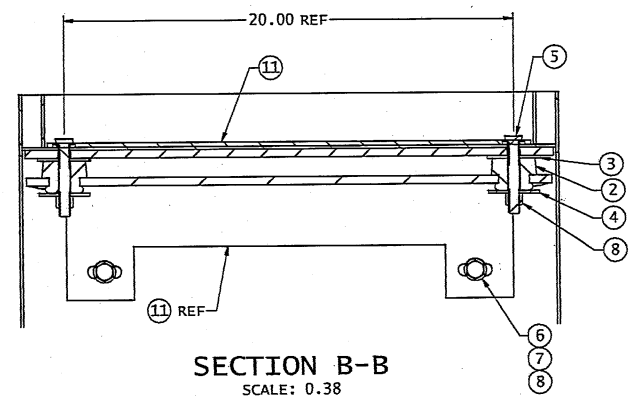
DETAIL D
SCALE: 0.75
ADJUST LATCH SO THAT WHEN DOOR IS CLOSED IT IS FLUSH WITH THE FRONT OF TOOLBOX



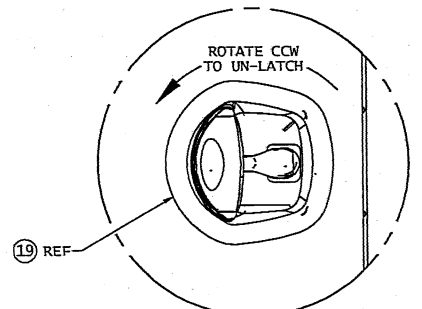
DETAIL C
SCALE: 0.75



SECTION A-A
SCALE: 0.38



SECTION B-B
SCALE: 0.38



DETAIL E
SCALE: 0.50
LH LATCH SHOWN
RH SIDE ROTATION OPPOSITE
ALL HARDWARE TO INSTALL LATCH IS INCLUDED

- NOTES:
- ITEM 24 NOT SHOWN FOR CLARITY. LOCATE MouldING BETWEEN TUNNEL TOOLBOX AND FRONT OF BODY. ADHESIVE SIDE TO WRECKER BODY.
 - LOCATE ITEM 10 & 11 IN BOTTOM OF TOOLBOX TO PROTECT PAINT.

THIS DRAWING AND SUBJECT MATTER CONTAINED HEREIN ARE THE SOLE AND EXCLUSIVE PROPERTY OF JERR-DAN CORPORATION. THIS COPY IS LOANED TO YOU BY JERR-DAN CORPORATION. IT WILL NOT BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT THE EXPRESS WRITTEN PERMISSION OF JERR-DAN CORPORATION.		IF IN DOUBT ASK TO GET SCALE DRAWING. REMOVE ALL SPURS AND SHARP CORNERS.	REV'L SEE B/M	SHEET 1 OF 1
D1 ALL 3774	REDRAWN IN SOLID EDGE, ADDED 2 ITEMS FROM TOOLBOX ASBY 2-89-000122 W/ NEW LATCH STRECKER PLATES	DATE 03-15-05	TITLE TUNNEL TOOLBOX INSTALL 24" WIDE MPL-40	WEIGHT ? #
REVISED BY	DESCRIPTION	DATE	SCALE 0.10	ISN 3774
3	3	03-15-05	DATE 12/22/04	DRAWN ELS
2	2	03-15-05	DWG NO D 2-509-740039	REV 01
1	1	03-15-05	DRAWN ELS	REV 01

Switch Panel Installation

***** Engineering Bill of Materials *****

** Report Excludes Shrinkage.

Effective as of 08/01/05

Item: 3870000012

SWITCH PANEL ASSY 3 FUNC UNDERDASH QP

From Item: 3870000012

To Item: 3870000012

Reference: X0748/3325-N

Last Changed Date:

Revision #0/1/3774

Quantity	1	Receive into Whse: HYKS	BIN:	UOM: PC
----------	---	-------------------------	------	---------

Ball Dr	Bin							
-oon Sz	Component	Type	Location	Description	QtyPer	UOM	Reference	Effectivity
---	---	-----	-----	-----	-----	---	-----	-----
01	C 7870000053	P	010301 e08 f05	SWITCH PANEL #9800343	1.000	PC		-
02	N 7346000039	P	d14 g-floor j0	TUBING .25"ID HS W/ADHESIVE - 48" LG	2.000	pc		-
03	N 7345001614	P		CONNECTOR 18-22 GA NON-INSUL BUTT	1.000	pc		-
04	N 7345001914	P	022506 c19 j16	TERMINAL #123005 10-12 NON-INSULATED	1.000	pc		-
05	NOT	F		*****ITEM NOT REQUIRED*****	1.000	PC		-
06	NOT	F		*****ITEM NOT REQUIRED*****	1.000	PC		-
07	NOT	F		*****ITEM NOT REQUIRED*****	1.000	PC		-
08	NOT	F		*****ITEM NOT REQUIRED*****	1.000	PC		-
09	NOT	F		*****ITEM NOT REQUIRED*****	1.000	PC		-

*** End of Item ***

*** End of Report ***

--

--

--

--

***** Engineering Bill of Materials *****

** Report Excludes Shrinkage.

Effective as of 08/01/05

Item: 3870000013

SWITCH PANEL ASSY 5 FUNC UNDERDASH QP

From Item: 3870000013

To Item: 3870000013

Reference: X0748/3325-N

Last Changed Date:

Revision #0/1/3774

BIN:

UOM: PC

Quantity 1

Receive into Whse: HYKS

Ball Dr

Bin

-oon	Sz	Component	Type	Location	Description	QtyPer	UOM	Reference	Effectivity
---	==	=====		=====	=====	=====	==	=====	=====
01	C	7870000063	P	e07 j63	SWITCH PANEL TSD 5 BUTTON #9900193	1.000	PC		-
02	N	7346000039	P	d14 g-floor j0	TUBING .25"ID HS W/ADHESIVE - 48" LG	2.000	pc		-
03	N	7345001614	P		CONNECTOR 18-22 GA NON-INSUL BUTT	1.000	pc		-
04	N	7345001914	P	022506 c19 j16	TERMINAL #123005 10-12 NON-INSULATED	1.000	pc		-
05	A	7330000288	P	012222 c06	DECAL SWITCH BOX LABEL INSERT SHEET	1.000	ea		-
06	NOT		F		*****ITEM NOT REQUIRED*****	1.000	PC		-
07	NOT		F		*****ITEM NOT REQUIRED*****	1.000	PC		-
08	NOT		F		*****ITEM NOT REQUIRED*****	1.000	PC		-
09	NOT		F		*****ITEM NOT REQUIRED*****	1.000	PC		-

*** End of Item ***

*** End of Report ***

***** Engineering Bill of Materials *****

** Report Excludes Shrinkage.

Effective as of 08/01/05

Item: 3870000014

SWITCH PANEL ASSY 5 FUNC INDASH QP FORD

From Item: 3870000014

To Item: 3870000014

Reference: X0748/3325-N

Last Changed Date:

Revision #0/1/3774

BIN:

UOM: PC

Quantity 1

Receive into Whse: HYKS

Ball Dr

Bin

-oon	Sz	Component	Type	Location	Description	QtyPer	UOM	Reference	Effectivity
===	==	=====		=====	=====	=====	===	=====	=====
01	B	7870000089	P	101306 c01 e08	SWITCH PANEL IN-DASH 5 FUNCTION	1.000	PC		-
02	N	7346000039	P	d14 g-floor j0	TUBING .25"ID HS W/ADHESIVE - 48" LG	2.000	pc		-
03	N	7345001614	P		CONNECTOR 18-22 GA NON-INSUL BUTT	2.000	pc		-
04	N	7345001914	P	022506 c19 j16	TERMINAL #123005 10-12 NON-INSULATED	1.000	pc		-
05		NOT	F		*****ITEM NOT REQUIRED*****	1.000	PC		-
06	N	7345001910	P	j16 x01	TAB #193005 .25" 10-12 NON-INSUL (F)	2.000	pc		-
07	N	7345001710	P	c20 j19	TAB #192005 .25" 14-16 NON-INSUL (F)	3.000	pc		-
08		NOT	F		*****ITEM NOT REQUIRED*****	1.000	PC		-
09		NOT	F		*****ITEM NOT REQUIRED*****	1.000	PC		-

*** End of Item ***

*** End of Report ***

***** Engineering Bill of Materials *****

** Report Excludes Shrinkage.

Effective as of 08/01/05

Item: 3870000015

SWITCH PANEL ASSY 6 FUNC INDASH QP FORD

From Item: 3870000015

To Item: 3870000015

Reference: X0748/3325-N

Last Changed Date: 07/02/02

Revision #0/1/3774

BIN:

UOM: PC

Quantity

1

Receive into Whse: HYKS

Ball Dr

Bin

-oon Sz Component Type

Location

Description

QtyPer UOM

Reference

Effectivity

=== ==

=====

=====

=====

=====

=====

=====

=====

=====

=====

=====

=====

=====

=====

=====

=====

=====

=====

=====

=====

=====

=====

=====

=====

=====

=====

=====

=====

=====

=====

01	B	7870000091	P		SWITCH PANEL, IN-DASH , 6 FUNCTION,	1.000	PC		-
02	N	7346000039	P	d14 g-floor j0	TUBING .25"ID HS W/ADHESIVE - 48" LG	2.000	pc		-
03	N	7345001614	P		CONNECTOR 18-22 GA NON-INSUL BUTT	2.000	pc		-
04	N	7345001914	P	022506 c19 j16	TERMINAL #123005 10-12 NON-INSULATED	1.000	pc		-
05		NOT	F		*****ITEM NOT REQUIRED*****	1.000	PC		-
06	N	7345001910	P	j16 x01	TAB #193005 .25" 10-12 NON-INSUL (F)	2.000	pc		-
07	N	7345001710	P	c20 j19	TAB #192005 .25" 14-16 NON-INSUL (F)	4.000	pc		-
08		NOT	F		*****ITEM NOT REQUIRED*****	1.000	PC		-
09		NOT	F		*****ITEM NOT REQUIRED*****	1.000	PC		-

*** End of Item ***

*** End of Report ***

***** Engineering Bill of Materials ****

** Report Excludes Shrinkage.

Effective as of 08/01/05

Item: 3870000018

SWITCH ASSY NO SWITCH PANEL MPL-40

From Item: 3870000018

To Item: 3870000018

Reference: X0748/3774E

Last Changed Date:

Revision #0/1/3774

BIN: WA03

UOM: PC

Quantity 1

Receive into Whse: MYPT

Ball Dr

Bin

-oon Sz Component Type Location

Description

QtyPer UOM

Reference

Effectivity

==== == =====

=====

=====

=====

=====

=====

01	B	2870000008	M	RA08	SWITCH INST SINGLE ROCKER W/ LED INDICA	1.000	PC		-
02	N	7346000039	P	d14 g-floor j0	TUBING .25"ID HS W/ADHESIVE - 48" LG	2.000	pc		-
03		NOT	F		*****ITEM NOT REQUIRED*****	1.000	PC		-
04		NOT	F		*****ITEM NOT REQUIRED*****	1.000	PC		-
05		NOT	F		*****ITEM NOT REQUIRED*****	1.000	PC		-
06		NOT	F		*****ITEM NOT REQUIRED*****	1.000	PC		-
07		NOT	F		*****ITEM NOT REQUIRED*****	1.000	PC		-
08		NOT	F		*****ITEM NOT REQUIRED*****	1.000	PC		-
09		NOT	F		*****ITEM NOT REQUIRED*****	1.000	PC		-

*** End of Item ***

*** End of Report ***

***** Engineering Bill of Materials *****

** Report Excludes Shrinkage.

Effective as of 08/01/05

Item: 3870000019

SWITCH ASSY 4 FUNC INDASH OEM O5 FORD

From Item: 3870000019

To Item: 3870000019

Reference: X0748/3774E

Last Changed Date:

Revision #0/1/3774

BIN: WA03

UOM: PC

Quantity	1	Receive into Whse: MYPT
----------	---	-------------------------

Ball Dr	Sz	Component	Type	Bin	Description	QtyPer	UOM	Reference	Effectivity
====	==	=====		=====	=====	=====	===	=====	=====
01		NOT		F	*****ITEM NOT REQUIRED*****	1.000	PC		-
02	N	7346000039		P	d14 g-floor j0 TUBING .25"ID HS W/ADHESIVE - 48" LG	2.000	pc		-
03	N	7345001614		P	CONNECTOR 18-22 GA NON-INSUL BUTT	3.000	pc		-
04	N	7345001914		P	022506 c19 j16 TERMINAL #123005 10-12 NON-INSULATED	1.000	pc		-
05		NOT		F	*****ITEM NOT REQUIRED*****	1.000	PC		-
06		NOT		F	*****ITEM NOT REQUIRED*****	1.000	PC		-
07		NOT		F	*****ITEM NOT REQUIRED*****	1.000	PC		-
08		NOT		F	*****ITEM NOT REQUIRED*****	1.000	PC		-
09		NOT		F	*****ITEM NOT REQUIRED*****	1.000	PC		-

*** End of Item ***

*** End of Report ***

--

--

--

--



***** Engineering Bill of Materials *****

** Report Excludes Shrinkage.

Effective as of 08/01/05

Item: 3870000020

SWITCH ASSY 6 FUNC INDASH 05 FORD

From Item: 3870000020

To Item: 3870000020

Reference: X0748/3774E

Last Changed Date:

Revision #0/1/3774

Quantity	1	Receive into Whse: MYPT	BIN: WA03	UOM: PC
----------	---	-------------------------	-----------	---------

Ball Dr	Bin	Description	QtyPer	UOM	Reference	Effectivity
-oon Sz Component Type Location						
=== == =====	=====	=====	=====	===	=====	=====
01	B 7870000117	P SWITCH PANEL IN-DASH 6 FUNCTION THERMAL	1.000	PC		-
02	N 7346000039	P d14 g-floor j0 TUBING .25"ID HS W/ADHESIVE - 48" LG	2.000	pc		-
03	N 7345001614	P CONNECTOR 18-22 GA NON-INSUL BUTT	2.000	pc		-
04	N 7345001914	P 022506 c19 j16 TERMINAL #123005 10-12 NON-INSULATED	1.000	pc		-
05	NOT	F *****ITEM NOT REQUIRED*****	1.000	PC		-
06	N 7345001910	P j16 x01 TAB #193005 .25" 10-12 NON-INSUL (F)	2.000	pc		-
07	N 7345001710	P c20 j19 TAB #192005 .25" 14-16 NON-INSUL (F)	4.000	pc		-
08	NOT	F *****ITEM NOT REQUIRED*****	1.000	PC		-
09	NOT	F *****ITEM NOT REQUIRED*****	1.000	PC		-

*** End of Item ***

*** End of Report ***

--

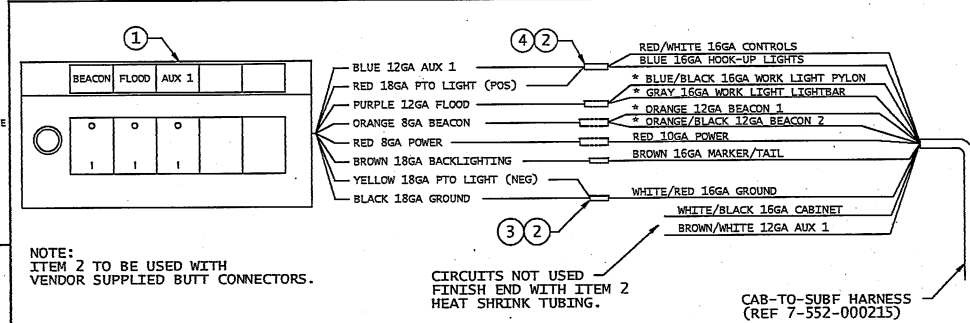
--

--

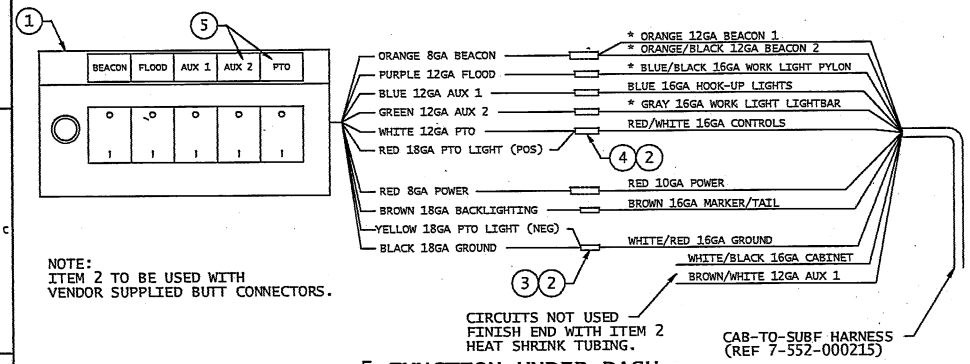
--

ELECTRICAL ASSY SWITCH PANEL SELF LOADER

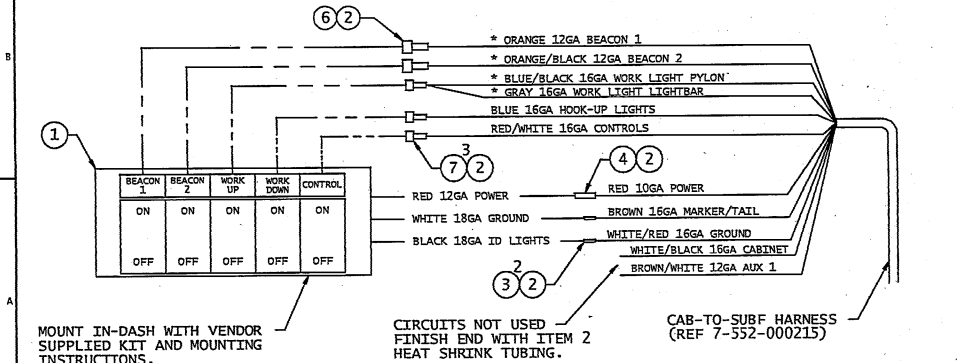
DWG NO **5-264-000748** REV **01**



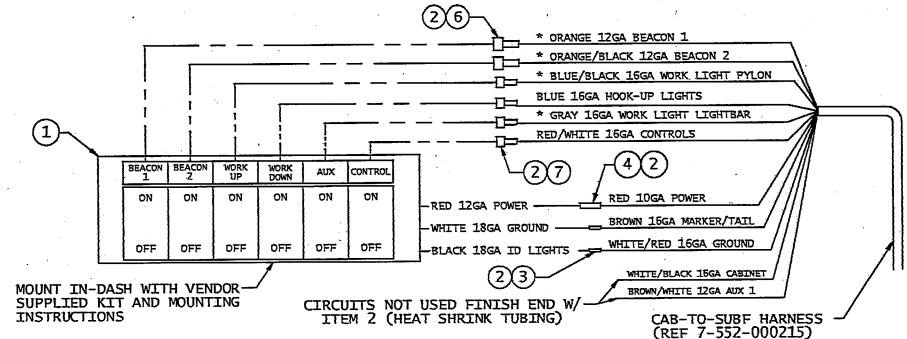
3 FUNCTION UNDER DASH
(REF 7-870-000053)



5 FUNCTION UNDER DASH
(REF 7-870-000063)



5 FUNCTION IN DASH FORD
(2004 MODEL REF 7-870-000089)



6 FUNC IN DASH FORD
(2004 MODEL REF 7-870-000091)
(2005 MODEL REF 7-870-000117)

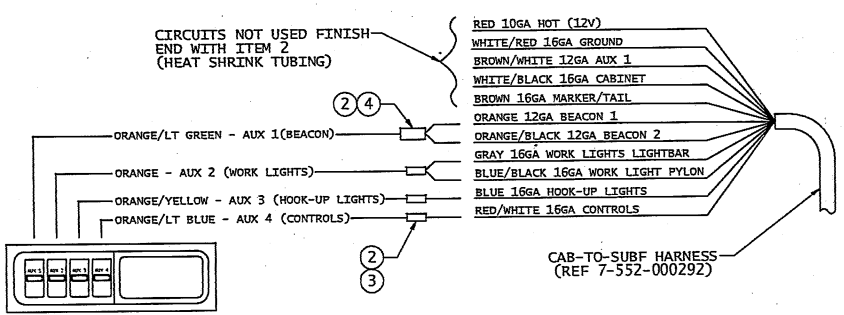
CIRCUIT	GA	COLOR	FUNCTION
18	16	GRAY	WORK LIGHTS, LIGHTBAR
17	12	BROWN/WHITE	AUX 1
16	16	WHITE/RED	GROUND
15	16	BROWN/BLACK	CLUTCH PUMP
14	16	RED/WHITE	CONTROLS
13	10	RED	HOT (12V)
12	12	ORANGE	BEACON 1
11	12	ORANGE/BLACK	BEACON 2
10	16	BLUE/BLACK	WORK LIGHTS, PYLON
9	10	WHITE	GROUND
7	16	BLUE	HOOK-UP LIGHTS
6	16	WHITE/BLACK	CABINET
5	16	BROWN	MARKER/TAIL

PART #	DESCRIPTION
3-870-000019	SWITCH PANEL ASSY 4 FUNC IN-DASH (OEM) FORD
3-870-000018	SWITCH PANEL ASSY NO SWITCH PANEL MPL-40
3-870-000017	SWITCH PANEL ASSY 4 FUNC IN-DASH (OEM) FORD
3-870-000016	SWITCH PANEL ASSY NO SWITCH PANEL
3-870-000020	SWITCH PANEL ASSY 6 FUNC INDASH (2005) FORD
3-870-000015	SWITCH PANEL ASSY 6 FUNC INDASH (2004) FORD
3-870-000014	SWITCH PANEL ASSY 5 FUNC INDASH (2004) FORD
3-870-000013	SWITCH PANEL ASSY 5 FUNC UNDER-DASH
3-870-000012	SWITCH PANEL ASSY 3 FUNC UNDER-DASH

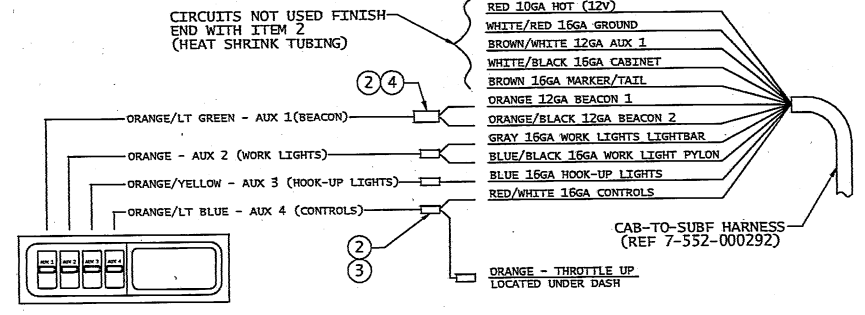
NOTE:
OPTIONAL ITEMS, WIRE AS REQUIRED

REVISION IN SOLID BOLD, ADDED MPL-40 ASSY'S AND UPDATED QP-40 ASSY'S. ADDED 03-870-000017, 03-870-000018, 03-870-000019 & 03-870-000020.	07/29/09 JSM	DATE 187	THIS DRAWING AND RELATED MATTER IS THE PROPERTY OF JERRID-DAN CORP. IT IS TO BE USED ONLY FOR THE PURPOSES SPECIFIED HEREON. IT IS TO BE KEPT IN CONFIDENTIALITY AND NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM.
JERRID-DAN CORP 2000 WYOMING ROAD GREENSBORO, NC 27409	TITLE ELECTRICAL ASSY SWITCH PANEL SELF LOADER	SHEET 1 OF 2	DRAWN BY D 5-264-000748 01

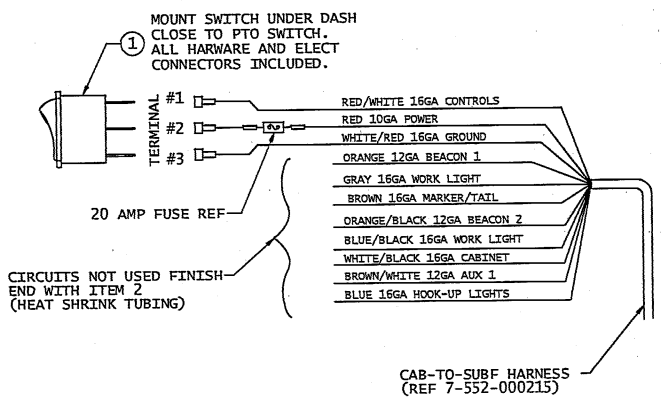
ELECTRICAL ASSY SWITCH PANEL SELF LOADER DWG NO 5-264-000748 REV 01



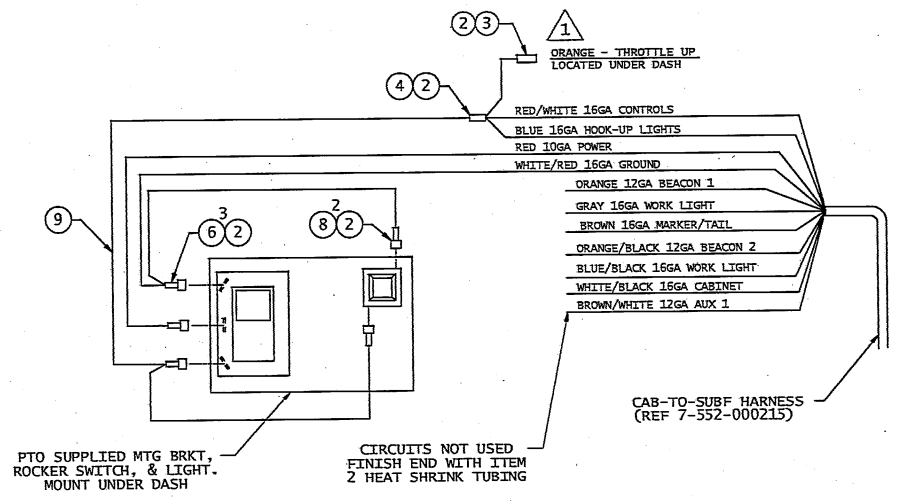
1 4 FUNCTION IN DASH (OPTIONAL 2005 FORD OEM) MPL-40 ONLY



1 4 FUNCTION IN DASH (OPTIONAL 2005 FORD OEM) QP-40 ONLY



1 NO SWITCH PANEL (REF 2-870-000008) MPL-40 ONLY



NO SWITCH PANEL QP-40 ONLY

01 ALL 3774 REDWASH IN SOLID EDGE, ADDED NEW QP-40 ASSY 03-870-000017, AND NEW ASSY'S 5-264-000018, & 5-870-000019.		03/28/05 SHM	DATE	BY
DESCRIPTION		DATE	BY	BY
TITLE		DATE	BY	BY
ELECTRICAL ASSY SWITCH PANEL SELF LOADER		02/12/04	DRW	01

JERR-DAN CORP
 308 WYOMING ROAD, PIRRIEWISSE, PA 17229

IF IN DOUBT ASK DO NOT SOLID WASHING REMOVE ALL SURFS AND SHOWN DIMENSIONS

THIS DRAWING AND ALL DIMENSIONS CONTAINED HEREON ARE THE PROPERTY OF JERR-DAN CORPORATION. THIS COPY IS LOANED TO THE PURCHASER AND WILL NOT BE REPRODUCED IN ANY MANNER WITHOUT THE WRITTEN PERMISSION OF JERR-DAN CORPORATION. ACCEPTANCE OF THIS COPY SHALL BE CONSIDERED AS ACCEPTANCE OF THE FOREGOING CONDITIONS.

NO DIMENSIONS UNLESS OTHERWISE SPECIFIED
 2 PLACE DEC DEC
 3 PLACE THN THN
 4 PLACE THN THN
 5 PLACE THN THN
 6 PLACE THN THN
 7 PLACE THN THN
 8 PLACE THN THN
 9 PLACE THN THN

DATE 02/12/04 DRAWN SHM

SHEET 2 OF 2
 WEIGHT 7 #

REV 01

Emergency Light Bar Installation

***** Engineering Bill of Materials *****

** Report Excludes Shrinkage.

Effective as of 08/01/05

Item: 2590000162

LIGHT INSTALL 60" HALOGEN FED SIG MPL-40

From Item: 2590000162

To Item: 2590000162

Reference: X0827/3774E

Last Changed Date:

Revision #0/0

BIN: WA03

UOM: PC

Quantity 1

Receive into Whse: MYPT

Ball Dr

Bin

-oon	Sz	Component	Type	Location	Description	QtyPer	UOM	Reference	Effectivity
===	==	=====		=====	=====	=====	===	=====	=====
01	N	7590000236	P	loft u01	LIGHTBAR 60" FEDERAL SIGNAL W/ D.O.T.	1.000	PC		-
02	B	4178000402	M	100201 h06 RA0	BRACKET 10GA x 1.50 x 5.45 LIGHTBAR MNT	2.000	PC		-
03	N	7115181050	P	080305 a48 x01	CAPSCREW .50"-13NC X 1.25" HEX HEAD	2.000	PC		-
04	N	7660182601	P	000105 x01	LOCKNUT .50"-13NC GR5 HEC NYLOC	2.000	PC		-
05	N	7346000039	P	d14 g-floor j0	TUBING .25"ID HS W/ADHESIVE - 48" LG	.125	pc		-

*** End of Item ***

*** End of Report ***

***** Engineering Bill of Materials ****

** Report Excludes Shrinkage.

Effective as of 08/01/05

Item: 2590000163

LIGHT INSTALL 60" STROBE FED SIG MPL-40

From Item: 2590000163

To Item: 2590000163

Reference: X0827/3774E

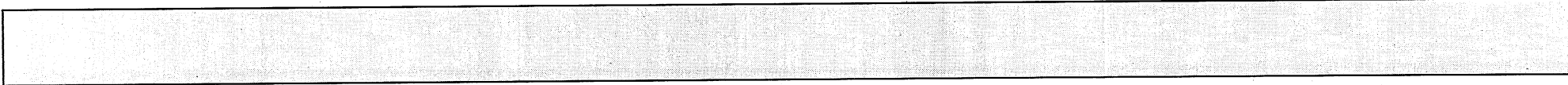
Last Changed Date:

Quantity	1	Receive into Whse: MYPT	Revision #0/0	BIN: WA03	UOM: PC
----------	---	-------------------------	---------------	-----------	---------

Ball Dr	Bin							
-oon Sz	Component	Type	Location	Description	QtyPer	UOM	Reference	Effectivity
---	---	-----	-----	-----	-----	---	-----	-----
01	B 7590000229	P	loft SR-Annex	LIGHTBAR 60" 6-STRB/4-FLSHR (FED SIG)	1.000	PC		-
02	B 4178000402	M	100201 h06 RA0	BRACKET 10GA x 1.50 x 5.45 LIGHTBAR MNT	2.000	PC		-
03	N 7115181050	P	080305 a48 x01	CAPSCREW .50"-13NC X 1.25" HEX HEAD	2.000	PC		-
04	N 7660182601	P	000105 x01	LOCKNUT .50"-13NC GR5 HEC NYLOC	2.000	PC		-
05	N 7346000039	P	d14 g-floor j0	TUBING .25"ID HS W/ADHESIVE - 48" LG	.125	pc		-

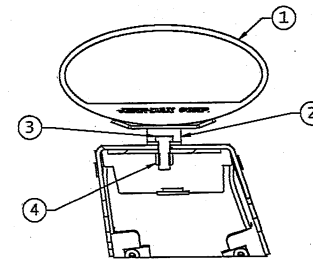
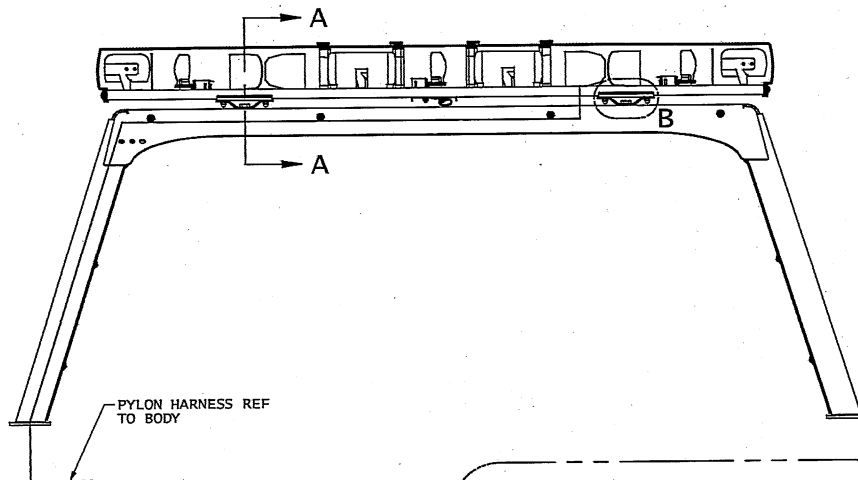
*** End of Item ***

*** End of Report ***

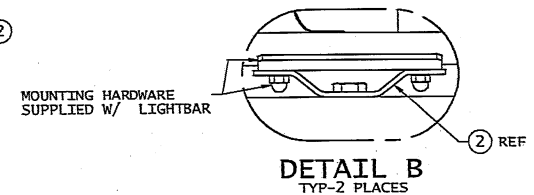


LIGHT INSTALL EMERGENCY BAR MPL-40

DWG NO **5-264-000827** REV **00**



SECTION A-A



WIRE HARNESS INFO.

INCOMING CABLE COLOR	OPTION	WIRE INFO
WHITE	COMMON GROUND	10 GA. WIRE
ORANGE	BEACON 1	14 GA. WIRE
ORANGE/BLACK	BEACON 2	14 GA. WIRE
BROWN	MARKER/TAIL	16 GA. WIRE
YELLOW	LH STOP/TURN	16 GA. WIRE
GREEN	RH STOP/TURN	16 GA. WIRE
GRAY	WORKLIGHT LIGHTBAR	16 GA. WIRE
PURPLE/WHITE	LEFT TURN (FOREIGN)	16 GA. WIRE
BLUE/WHITE	RIGHT TURN (FOREIGN)	16 GA. WIRE

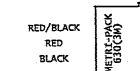
LIGHT BAR WIRE INFO.

INCOMING CABLE COLOR	OPTION	WIRE INFO
BLACK	COMMON GROUND	10 GA. WIRE
RED	OUTER ROTATORS (120 TPL.)	14 GA. WIRE
RED/BLACK	CENTER ROTATORS (175 TPL.)	14 GA. WIRE
YELLOW	TAIL-LIGHTS / D.O.T. STRIP	16 GA. WIRE
ORANGE	DRIVERS-SIDE BRAKE/TURN	16 GA. WIRE
WHITE	PASSENGER-SIDE BRAKE/TURN	16 GA. WIRE
YELLOW/BLACK	WORKLIGHTS	16 GA. WIRE
BLUE	NOT USED	16 GA. WIRE
BLUE/BLACK	NOT USED	16 GA. WIRE

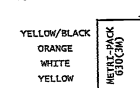
SUPPLIED WITH LIGHT BAR CONNECTOR: 12015792 (16GA)
TERMINAL: 12124580 (16GA)
TERMINAL SEAL: 12015359 (16GA)



SUPPLIED WITH LIGHT BAR CONNECTOR: 12064735 (14GA)
TERMINAL: 12064736 (10GA)
TERMINAL SEAL: 12059259 (14GA)
TERMINAL SEAL: 12059257 (10GA)
LOCK (TPA): 12045699



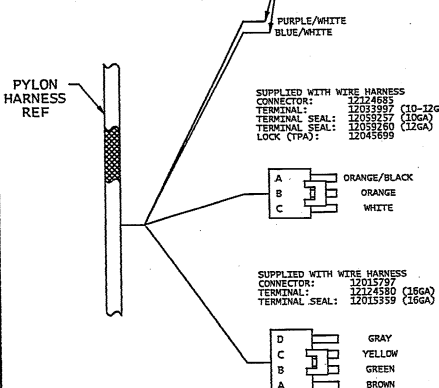
SUPPLIED WITH LIGHT BAR CONNECTOR: 12010974 (16GA)
TERMINAL: 12124580 (16GA)
TERMINAL SEAL: 12015359 (16GA)



LIGHT BAR WIRE INFO.

INCOMING CABLE COLOR	OPTION	WIRE
BLACK	COMMON GROUND	10 GA. WIRE
RED	ALL STROBE HEADS	14 GA. WIRE
RED/BLACK	ALL FLASHERS	14 GA. WIRE
YELLOW	CLEARANCE	16 GA. WIRE
ORANGE	L.H. STOP/TURN	16 GA. WIRE
WHITE	R.H. STOP/TURN	16 GA. WIRE
YELLOW/BLACK	WORKLIGHTS	16 GA. WIRE
LT BLUE	AUX 2	16 GA. WIRE
BLUE/BLACK	OPTIONAL	16 GA. WIRE

NOTE: TERMINATE ALL UNUSED WIRE ENDS WITH ITEM 8, HEAT SHRINK TUBING

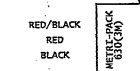


PYLON HARNESS TO LIGHTBAR HARNESS

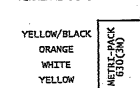
SUPPLIED WITH LIGHT BAR CONNECTOR: 12015792 (16GA)
TERMINAL: 12124580 (16GA)
TERMINAL SEAL: 12015359 (16GA)



SUPPLIED WITH LIGHT BAR CONNECTOR: 12064735 (14GA)
TERMINAL: 12064736 (10GA)
TERMINAL SEAL: 12059259 (14GA)
TERMINAL SEAL: 12059257 (10GA)
LOCK (TPA): 12045699



SUPPLIED WITH LIGHT BAR CONNECTOR: 12010974 (16GA)
TERMINAL: 12124580 (16GA)
TERMINAL SEAL: 12015359 (16GA)



2-590-000162 HALOGEN LIGHT WIRING TO PYLON HARNESS

2-590-000163 STROBE LIGHT WIRING TO PYLON HARNESS

22-590-000162 LIGHT INSTL 60" BAR HALOGEN FED SIG MPL-40
22-590-000163 LIGHT INSTL 60" BAR STROBE FED SIG MPL-40

JERRIDAN
Aeromarine Products Division

REVISION	DESCRIPTION	DATE	BY
1

DATE	BY	CHKD	APP'D
03/23/05

ITEM	DESCRIPTION	QTY	UNIT
1

Tow Sling Installation

***** Engineering Bill of Materials *****

** Report Excludes Shrinkage.

Effective as of 11/28/05

Item: 2509610059

TOW SLING INSTALL MPL-40 SINGLE LINE

From Item: 2509610059

To Item: 2509610059

Reference: X/00824/3774C Last Changed Date: 11/04/05

Revision #D/3/3904

Quantity	1	Receive into Whse: MYPT	BIN: WA03	UOM: PC
----------	---	-------------------------	-----------	---------

Ball Dr	-oon Sz	Component	Type	Bin Location	Description	QtyPer	UOM	Reference	Effectivity
===	==	=====		=====	=====	=====	===	=====	=====
01	B	4178000621	M	WA03	BRACKET 0.31 x 10.26 x 13.06	2.000	PC	3858	08/16/05-
02	B	3309000007	M	090203 WA03	U-JOINT WELDMENT	2.000	PC		-
03		7115223806	P	080303 g04 WA0	BOLT .63"-11NC X 4.75" HEX SHOULDER	2.000	pc		-
04	N	7660202601	P	080304 MDF1E W	LOCKNUT .63"-11NC NYLON INSERT ZINC PLAT	2.000	PC		-
05	C	3020000007	M	090204 WA03	HOLD BACK ARM ASSEMBLY	2.000	PC	3858	08/16/05-
06	B	4706005225	M	WA03	PLATE 0.25 x 3.38 x 5.25	1.000	PC	3904	11/22/05-
07		7105223250	P	080303 WA00C	CAPSCREW .75"-16NF X 4.00" HEX HEAD	2.000	pc	3904	11/22/05-
08	A	7661000017	P	080305 WA00C	LOCKNUT .75"-16NF X .625"HT TORQUE	2.000	pc		-
09	C	4178000622	M	WA03	BRACKET 0.31 x 2.12 x 10.68	2.000	PC	3858	08/16/05-
10	N	7115161064	P	000108 WA00A	BOLT .38"-16NC X 1.25 CARRIAGE	4.000	PC	3858	08/16/05-
11	N	7950160161	P	000104 14ASB W	FLATWASHER .38" NOM WIDE - PLATED	4.000	PC	3858	08/16/05-
12	A	4679000276	P	d01	PAD 0.75 x 1.63 x 3.25 UHMW	1.000	PC	3904	11/22/05-
13	N	7790161253	P	000105 x01	SCREW .38"-16NC X .75" TAP TITE	1.000	PC	3904	11/22/05-
14		DEL	M		*****ITEM DELETED*****	1.000	PC	3858	08/16/05-
15	A	7691000053	P	f15	PIN, HITCH w/ LANYARD .75 DIA x 3" rev02	2.000	PC	3774	03/28/05-
16		DEL	M		*****ITEM DELETED*****	1.000	PC	3774	03/28/05-
17	D	3500800073	M	090203 WA00	TOW SLING HEAD WELD & ASSY	1.000	PC		-
18		7822000003	P	090203 m02 WA0	SLING CABLE BELT - 8" X 42"	2.000	PC		-
19	B	4062000556	M	090203 WS6A	BAR 0.25 x 1.75 x 8.00	2.000	PC	3774	03/18/05-
20	N	7118163218	P	WA00C	CAPSCREW 0.38-16 x 4.00 BT HD SOC	6.000	PC		-
21	N	7660162601	P	000105 14ASB A	LOCKNUT .38"-16NC GR5 NYLOC	20.000	pc	3858	08/16/05-
22		DEL	M		*****ITEM DELETED*****	1.000	PC	3858	08/16/05-
23		DEL	M		*****ITEM DELETED*****	1.000	PC	3858	08/16/05-
24		DEL	M		*****ITEM DELETED*****	1.000	PC	3858	08/16/05-
25	B	3017000008	M	090203 WS6B	ANGLE WELD ANCHOR	1.000	PC		-
26	B	4706000727	M	090203 WS6A	PLATE 0.25 x 5.00 x 31.00	1.000	PC		-
27	N	7115161250	P	000102 14ASB M	CAPSCREW .38"-16NC X 1.50" HEX HEAD	10.000	PC	3858	08/16/05-
28		7804000001	P	010205 g09	SHACKLE 5/8" GALV. ANCHOR 4.5TON	1.000	PC		-
29		DEL	M		*****ITEM DELETED*****	1.000	PC	3858	08/16/05-
30		DEL	M		*****ITEM DELETED*****	1.000	PC	3858	08/16/05-
31		DEL	M		*****ITEM DELETED*****	1.000	PC	3858	08/16/05-



***** Engineering Bill of Materials *****

** Report Excludes Shrinkage.

Effective as of 11/28/05

Item: 2509610059

TOW SLING INSTALL MPL-40 SINGLE LINE

From Item: 2509610059

To Item: 2509610059

Reference: X/00824/3774C Last Changed Date: 11/04/05

Revision #D/3/3904

Quantity	1	Receive into Whse: MYPT	BIN: WA03	UOM: PC
----------	---	-------------------------	-----------	---------

Ball Dr	Bin								
-oon Sz	Component	Type	Location	Description	QtyPer	UOM	Reference	Effectivity	
===	==	=====	=====	=====	=====	==	=====	=====	=====
32	DEL	M		*****ITEM DELETED*****	1.000	PC	3858	08/16/05-	
33	DEL	M		*****ITEM DELETED*****	1.000	PC	3858	08/16/05-	
34	DEL	M		*****ITEM DELETED*****	1.000	PC	3858	08/16/05-	
35	C 4178000624	M	MDF1	BRACKET 0.38 x 4.68 x 6.80 LH	1.000	PC	3858	08/16/05-	
36	C 4178000625	M	MDF1	BRACKET 0.38 x 4.68 x 6.80 RH	1.000	PC	3858	08/16/05-	
37	DEL	M		*****ITEM DELETED*****	1.000	PC	3858	08/16/05-	
38	8632000002	R	e12	TRIM .25"EDGE-BLACK VINYL #1350-B-2X1/4A	2.380	FT	3858	08/16/05-	
39	B 7262000010	P	m07 n01	RACK 7 CHAIN 0.31 X 8' W/J&T HOOK	2.000	PC	3774	03/21/05-	
40	A 7330000556	P	c02	DECAL TOW SLING POSITION INDICATOR	2.000	PC	3858	08/16/05-	

*** End of Item ***

*** End of Report ***

--

--

--

--

***** Engineering Bill of Materials *****

** Report Excludes Shrinkage.

Effective as of 11/28/05

Item: 2509610047

TOW SLING INSTALLATION MPL-40 DUAL LINE

From Item: 2509610047

To Item: 2509610047

Reference: X/00824/3774C Last Changed Date: 11/04/05

Revision #D/3/3904

Quantity	1	Receive into Whse: MYPT	BIN: WA03	UOM: PC
----------	---	-------------------------	-----------	---------

Ball Dr	-oon Sz	Component	Type	Bin Location	Description	QtyPer	UOM	Reference	Effectivity
===	==	=====		=====	=====	=====	===	=====	=====
01	B	4178000621	M	WA03	BRACKET 0.31 x 10.26 x 13.06	2.000	PC	3858	08/16/05-
02	B	3309000007	M	090203 WA03	U-JOINT WELDMENT	2.000	PC		-
03		7115223806	P	080303 g04 WA0	BOLT .63"-11NC X 4.75" HEX SHOULDER	2.000	pc		-
04	N	7660202601	P	080304 MDF1E W	LOCKNUT .63"-11NC NYLON INSERT ZINC PLAT	2.000	PC		-
05	C	3020000007	M	090204 WA03	HOLD BACK ARM ASSEMBLY	2.000	PC	3858	08/16/05-
06	B	4706005225	M	WA03	PLATE 0.25 x 3.38 x 5.25	1.000	PC	3904	11/22/05-
07		7105223250	P	080303 WA00C	CAPSCREW .75"-16NF X 4.00" HEX HEAD	2.000	pc	3904	11/22/05-
08	A	7661000017	P	080305 WA00C	LOCKNUT .75"-16NF X .625"HT TORQUE	2.000	pc		-
09	C	4178000622	M	WA03	BRACKET 0.31 x 2.12 x 10.68	2.000	PC	3858	08/16/05-
10	N	7115161064	P	000108 WA00A	BOLT .38"-16NC X 1.25 CARRIAGE	4.000	PC	3858	08/16/05-
11	N	7950160161	P	000104 14ASB W	FLATWASHER .38" NOM WIDE - PLATED	8.000	PC	3858	08/16/05-
12	A	4679000276	P	d01	PAD 0.75 x 1.63 x 3.25 UHMW	1.000	PC	3904	11/22/05-
13	N	7790161253	P	000105 x01	SCREW .38"-16NC X .75" TAP TITE	1.000	PC	3904	11/22/05-
14		DEL	M		*****ITEM DELETED*****	1.000	PC	3858	08/16/05-
15	A	7691000053	P	f15	PIN, HITCH w/ LANYARD .75 DIA x 3" rev02	2.000	PC	3774	03/28/05-
16		DEL	M		*****ITEM DELETED*****	1.000	PC	3774	03/28/05-
17	D	3500800073	M	090203 WA00	TOW SLING HEAD WELD & ASSY	1.000	PC		-
18		7822000003	P	090203 m02 WA0	SLING CABLE BELT - 8" X 42"	2.000	PC		-
19	B	4062000556	M	090203 WS6A	BAR 0.25 x 1.75 x 8.00	2.000	PC	3774	03/18/05-
20	N	7118163218	P	WA00C	CAPSCREW 0.38-16 x 4.00 BT HD SOC	6.000	PC		-
21	N	7660162601	P	000105 14ASB A	LOCKNUT .38"-16NC GR5 NYLOC	20.000	pc	3858	08/16/05-
22		DEL	M		*****ITEM DELETED*****	1.000	PC	3858	08/16/05-
23		DEL	M		*****ITEM DELETED*****	1.000	PC	3858	08/16/05-
24		DEL	M		*****ITEM DELETED*****	1.000	PC	3858	08/16/05-
25	B	3017000008	M	090203 WS6B	ANGLE WELD ANCHOR	1.000	PC		-
26	B	4706000727	M	090203 WS6A	PLATE 0.25 x 5.00 x 31.00	1.000	PC		-
27	N	7115161250	P	000102 14ASB M	CAPSCREW .38"-16NC X 1.50" HEX HEAD	10.000	PC	3858	08/16/05-
28		7804000001	P	010205 g09	SHACKLE 5/8" GALV. ANCHOR 4.5TON	2.000	PC		-
29		DEL	M		*****ITEM DELETED*****	1.000	PC	3858	08/16/05-
30		DEL	M		*****ITEM DELETED*****	1.000	PC	3858	08/16/05-
31		DEL	M		*****ITEM DELETED*****	1.000	PC	3858	08/16/05-

***** Engineering Bill of Materials ****

** Report Excludes Shrinkage.

Effective as of 11/28/05

Item: 2509610047

TOW SLING INSTALLATION MPL-40 DUAL LINE

From Item: 2509610047

To Item: 2509610047

Reference: X/00824/3774C Last Changed Date: 11/04/05

Revision #D/3/3904

Quantity	1	Receive into Whse: MYPT	BIN: WA03	UOM: PC
----------	---	-------------------------	-----------	---------

Ball Dr	Sz	Component	Type	Bin Location	Description	QtyPer	UOM	Reference	Effectivity
---	--	-----		-----	-----	-----	---	-----	-----
32	DEL		M		*****ITEM DELETED*****	1.000	PC	3858	08/16/05-
33	DEL		M		*****ITEM DELETED*****	1.000	PC	3858	08/16/05-
34	DEL		M		*****ITEM DELETED*****	1.000	PC	3858	08/16/05-
35	C	4178000624	M	MDF1	BRACKET 0.38 x 4.68 x 6.80 LH	1.000	PC	3858	08/16/05-
36	C	4178000625	M	MDF1	BRACKET 0.38 x 4.68 x 6.80 RH	1.000	PC	3858	08/16/05-
37	DEL		M		*****ITEM DELETED*****	1.000	PC	3858	08/16/05-
38		8632000002	R	e12	TRIM .25"EDGE-BLACK VINYL #1350-B-2X1/4A	2.380	FT	3858	08/16/05-
39	B	7262000010	P	m07 n01 RACK 7	CHAIN 0.31 X 8' W/J&T HOOK	2.000	PC	3774	03/21/05-
40	A	7330000556	P	c02	DECAL TOW SLING POSITION INDICATOR	2.000	PC	3858	08/16/05-

*** End of Item ***

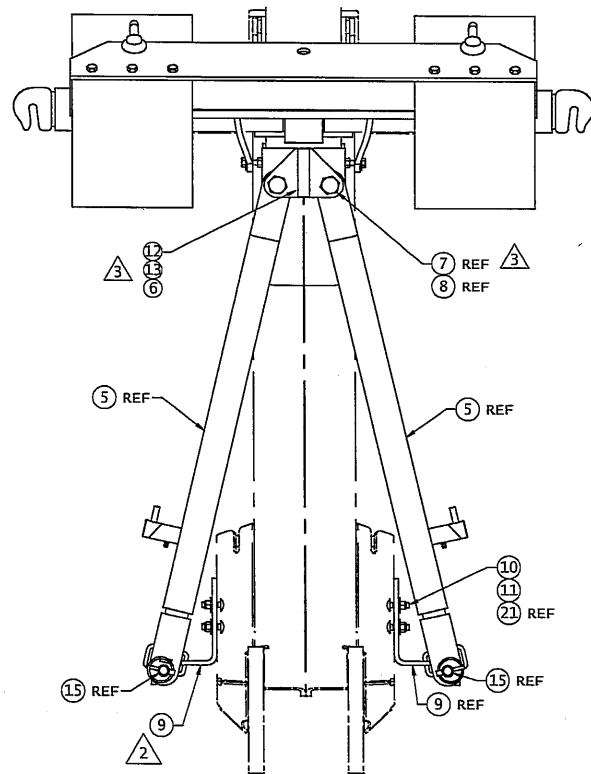
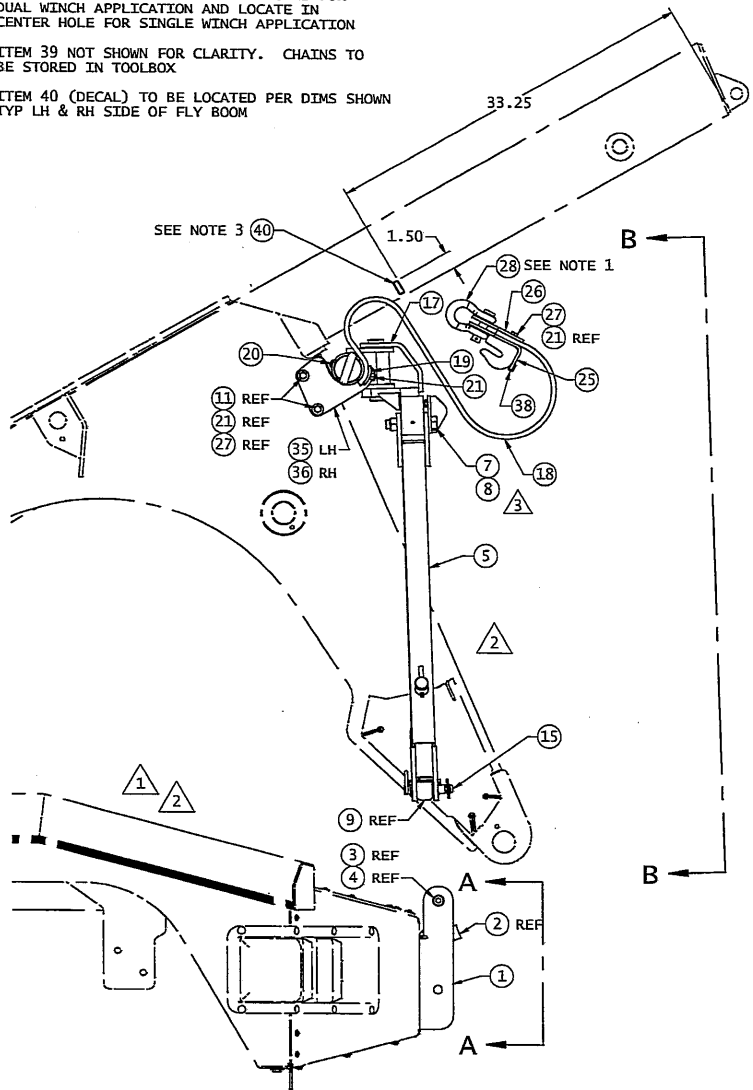
*** End of Report ***

TOW SLING INSTALLATION MPL-40

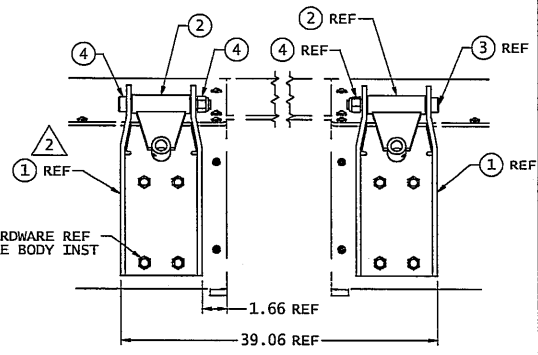
DWG NO 5-264-000824 REV 03

NOTES:

1. LOCATE ITEM 28 IN TWO OUTSIDE HOLES FOR DUAL WINCH APPLICATION AND LOCATE IN CENTER HOLE FOR SINGLE WINCH APPLICATION
2. ITEM 39 NOT SHOWN FOR CLARITY. CHAINS TO BE STORED IN TOOLBOX
3. ITEM 40 (DECAL) TO BE LOCATED PER DIMS SHOWN TYP LH & RH SIDE OF FLY BOOM



SECTION B-B



SECTION A-A

2-509-610047	TOW SLING INSTALL DUAL LINE MPL-40
2-509-610059	TOW SLING INSTALL SINGLE LINE MPL-40

01 1 20 1550 REED STOPS AS IS AND IS UPDATED ITEM #7.		01 2 03 1550 THIS DRAWING AND RELATED MATTER CONTAINING THE TITLE AND EXCEPTIVE PROPERTY OF JERR-DAN CORPORATION. THIS COPY IS LOANED WITH THE UNDERSTANDING THAT IT IS TO BE RETURNED WITH CARE AND WITHOUT THE EXPRESS WRITTEN PERMISSION OF JERR-DAN CORPORATION. UNLESS OTHERWISE STATED, THIS COPY SHALL BE CONSIDERED AS ACCEPTANCE OF THE EXISTING CONDITION.		01 3 03 1550 CHANGED POSITION OF TOW SLING HOLD BACK ARM. ARM WERE STORED ON DECK. SIMPLIFIED TOW SLING HEAD STOWAGE BENT ON SHIP BOW. CHANGED ITEM 1 TO ADD HOLES FOR D-RING OPTION.		01 4 03 1550 CHANGED ITEM #10 TO REFLECT ITEM #10.		01 5 03 1550 CHANGED ITEM #10 TO REFLECT ITEM #10.		01 6 03 1550 CHANGED ITEM #10 TO REFLECT ITEM #10.		01 7 03 1550 CHANGED ITEM #10 TO REFLECT ITEM #10.		01 8 03 1550 CHANGED ITEM #10 TO REFLECT ITEM #10.		01 9 03 1550 CHANGED ITEM #10 TO REFLECT ITEM #10.		01 10 03 1550 CHANGED ITEM #10 TO REFLECT ITEM #10.		01 11 03 1550 CHANGED ITEM #10 TO REFLECT ITEM #10.		01 12 03 1550 CHANGED ITEM #10 TO REFLECT ITEM #10.		01 13 03 1550 CHANGED ITEM #10 TO REFLECT ITEM #10.		01 14 03 1550 CHANGED ITEM #10 TO REFLECT ITEM #10.		01 15 03 1550 CHANGED ITEM #10 TO REFLECT ITEM #10.		01 16 03 1550 CHANGED ITEM #10 TO REFLECT ITEM #10.		01 17 03 1550 CHANGED ITEM #10 TO REFLECT ITEM #10.		01 18 03 1550 CHANGED ITEM #10 TO REFLECT ITEM #10.		01 19 03 1550 CHANGED ITEM #10 TO REFLECT ITEM #10.		01 20 03 1550 CHANGED ITEM #10 TO REFLECT ITEM #10.		01 21 03 1550 CHANGED ITEM #10 TO REFLECT ITEM #10.		01 22 03 1550 CHANGED ITEM #10 TO REFLECT ITEM #10.		01 23 03 1550 CHANGED ITEM #10 TO REFLECT ITEM #10.		01 24 03 1550 CHANGED ITEM #10 TO REFLECT ITEM #10.		01 25 03 1550 CHANGED ITEM #10 TO REFLECT ITEM #10.		01 26 03 1550 CHANGED ITEM #10 TO REFLECT ITEM #10.		01 27 03 1550 CHANGED ITEM #10 TO REFLECT ITEM #10.		01 28 03 1550 CHANGED ITEM #10 TO REFLECT ITEM #10.		01 29 03 1550 CHANGED ITEM #10 TO REFLECT ITEM #10.		01 30 03 1550 CHANGED ITEM #10 TO REFLECT ITEM #10.		01 31 03 1550 CHANGED ITEM #10 TO REFLECT ITEM #10.		01 32 03 1550 CHANGED ITEM #10 TO REFLECT ITEM #10.		01 33 03 1550 CHANGED ITEM #10 TO REFLECT ITEM #10.		01 34 03 1550 CHANGED ITEM #10 TO REFLECT ITEM #10.		01 35 03 1550 CHANGED ITEM #10 TO REFLECT ITEM #10.		01 36 03 1550 CHANGED ITEM #10 TO REFLECT ITEM #10.		01 37 03 1550 CHANGED ITEM #10 TO REFLECT ITEM #10.		01 38 03 1550 CHANGED ITEM #10 TO REFLECT ITEM #10.		01 39 03 1550 CHANGED ITEM #10 TO REFLECT ITEM #10.		01 40 03 1550 CHANGED ITEM #10 TO REFLECT ITEM #10.		01 41 03 1550 CHANGED ITEM #10 TO REFLECT ITEM #10.		01 42 03 1550 CHANGED ITEM #10 TO REFLECT ITEM #10.		01 43 03 1550 CHANGED ITEM #10 TO REFLECT ITEM #10.		01 44 03 1550 CHANGED ITEM #10 TO REFLECT ITEM #10.		01 45 03 1550 CHANGED ITEM #10 TO REFLECT ITEM #10.		01 46 03 1550 CHANGED ITEM #10 TO REFLECT ITEM #10.		01 47 03 1550 CHANGED ITEM #10 TO REFLECT ITEM #10.		01 48 03 1550 CHANGED ITEM #10 TO REFLECT ITEM #10.		01 49 03 1550 CHANGED ITEM #10 TO REFLECT ITEM #10.		01 50 03 1550 CHANGED ITEM #10 TO REFLECT ITEM #10.		01 51 03 1550 CHANGED ITEM #10 TO REFLECT ITEM #10.		01 52 03 1550 CHANGED ITEM #10 TO REFLECT ITEM #10.		01 53 03 1550 CHANGED ITEM #10 TO REFLECT ITEM #10.		01 54 03 1550 CHANGED ITEM #10 TO REFLECT ITEM #10.		01 55 03 1550 CHANGED ITEM #10 TO REFLECT ITEM #10.		01 56 03 1550 CHANGED ITEM #10 TO REFLECT ITEM #10.		01 57 03 1550 CHANGED ITEM #10 TO REFLECT ITEM #10.		01 58 03 1550 CHANGED ITEM #10 TO REFLECT ITEM #10.		01 59 03 1550 CHANGED ITEM #10 TO REFLECT ITEM #10.		01 60 03 1550 CHANGED ITEM #10 TO REFLECT ITEM #10.		01 61 03 1550 CHANGED ITEM #10 TO REFLECT ITEM #10.		01 62 03 1550 CHANGED ITEM #10 TO REFLECT ITEM #10.		01 63 03 1550 CHANGED ITEM #10 TO REFLECT ITEM #10.		01 64 03 1550 CHANGED ITEM #10 TO REFLECT ITEM #10.		01 65 03 1550 CHANGED ITEM #10 TO REFLECT ITEM #10.		01 66 03 1550 CHANGED ITEM #10 TO REFLECT ITEM #10.		01 67 03 1550 CHANGED ITEM #10 TO REFLECT ITEM #10.		01 68 03 1550 CHANGED ITEM #10 TO REFLECT ITEM #10.		01 69 03 1550 CHANGED ITEM #10 TO REFLECT ITEM #10.		01 70 03 1550 CHANGED ITEM #10 TO REFLECT ITEM #10.		01 71 03 1550 CHANGED ITEM #10 TO REFLECT ITEM #10.		01 72 03 1550 CHANGED ITEM #10 TO REFLECT ITEM #10.		01 73 03 1550 CHANGED ITEM #10 TO REFLECT ITEM #10.		01 74 03 1550 CHANGED ITEM #10 TO REFLECT ITEM #10.		01 75 03 1550 CHANGED ITEM #10 TO REFLECT ITEM #10.		01 76 03 1550 CHANGED ITEM #10 TO REFLECT ITEM #10.		01 77 03 1550 CHANGED ITEM #10 TO REFLECT ITEM #10.		01 78 03 1550 CHANGED ITEM #10 TO REFLECT ITEM #10.		01 79 03 1550 CHANGED ITEM #10 TO REFLECT ITEM #10.		01 80 03 1550 CHANGED ITEM #10 TO REFLECT ITEM #10.		01 81 03 1550 CHANGED ITEM #10 TO REFLECT ITEM #10.		01 82 03 1550 CHANGED ITEM #10 TO REFLECT ITEM #10.		01 83 03 1550 CHANGED ITEM #10 TO REFLECT ITEM #10.		01 84 03 1550 CHANGED ITEM #10 TO REFLECT ITEM #10.		01 85 03 1550 CHANGED ITEM #10 TO REFLECT ITEM #10.		01 86 03 1550 CHANGED ITEM #10 TO REFLECT ITEM #10.		01 87 03 1550 CHANGED ITEM #10 TO REFLECT ITEM #10.		01 88 03 1550 CHANGED ITEM #10 TO REFLECT ITEM #10.		01 89 03 1550 CHANGED ITEM #10 TO REFLECT ITEM #10.		01 90 03 1550 CHANGED ITEM #10 TO REFLECT ITEM #10.		01 91 03 1550 CHANGED ITEM #10 TO REFLECT ITEM #10.		01 92 03 1550 CHANGED ITEM #10 TO REFLECT ITEM #10.		01 93 03 1550 CHANGED ITEM #10 TO REFLECT ITEM #10.		01 94 03 1550 CHANGED ITEM #10 TO REFLECT ITEM #10.		01 95 03 1550 CHANGED ITEM #10 TO REFLECT ITEM #10.		01 96 03 1550 CHANGED ITEM #10 TO REFLECT ITEM #10.		01 97 03 1550 CHANGED ITEM #10 TO REFLECT ITEM #10.		01 98 03 1550 CHANGED ITEM #10 TO REFLECT ITEM #10.		01 99 03 1550 CHANGED ITEM #10 TO REFLECT ITEM #10.		01 100 03 1550 CHANGED ITEM #10 TO REFLECT ITEM #10.	
--	--	---	--	--	--	---	--	---	--	---	--	---	--	---	--	---	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	---	--

JERR-DAN
An American Corporation

TOW SLING INSTALLATION MPL-40
SCALE 0.25
DATE 2/10/05
DRAWN SMS
D 5-264-000824 03

Tow Dolly Installation



Miscellaneous Lighting

***** Engineering Bill of Materials *****

** Report Excludes Shrinkage.

Effective as of 08/01/05

Item: 2590000126

LIGHT INSTALL PYLON WORK

From Item: 2590000126

To Item: 2590000126

Reference: B/3325-N

Last Changed Date:

Revision #0/0

BIN:

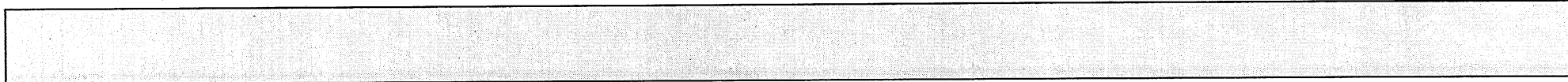
UOM: PC

Quantity 1 Receive into Whse: HYKS

Ball Dr	Bin							
-oon Sz	Component	Type	Location	Description	QtyPer	UOM	Reference	Effectivity
---	---	-----	-----	-----	-----	---	-----	-----
01	A 7590000144	P	100901	e-floor LIGHT 4X6 HALOGEN WORK #74001-00 12V	2.000	PC		-
02	N 7346000039	P	d14 g-floor j0	TUBING .25"ID HS W/ADHESIVE - 48" LG	1.000	pc		-

*** End of Item ***

*** End of Report ***

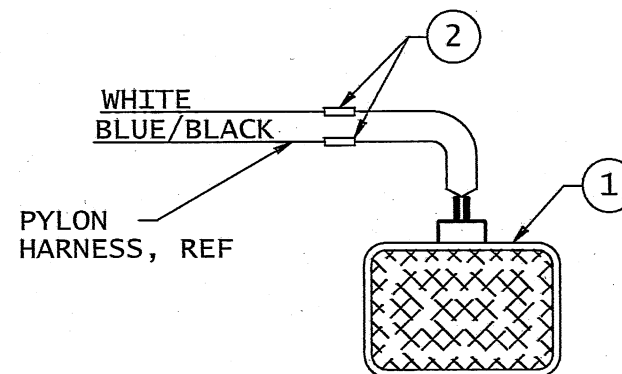
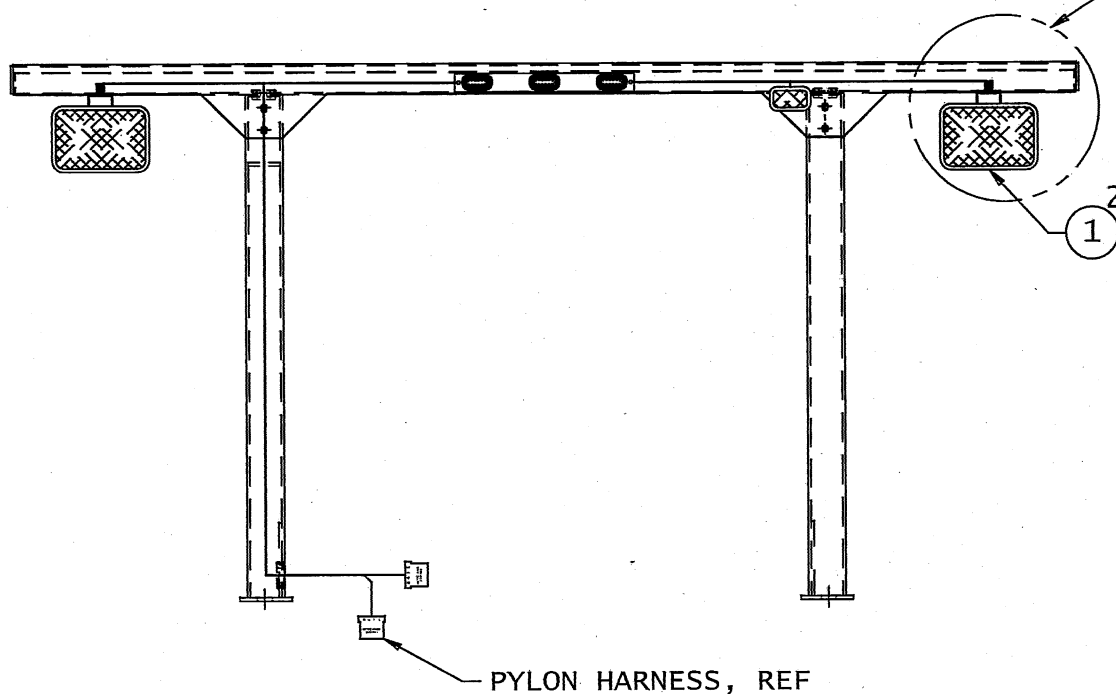


GENERAL NOTES

DO NOT SCALE DRAWING
BREAK SHARP CORNERS

M DENOTES "CRITICAL"
DIMENSION AND MUST
BE CONTROLLED BY
STATISTICAL ANALYSIS

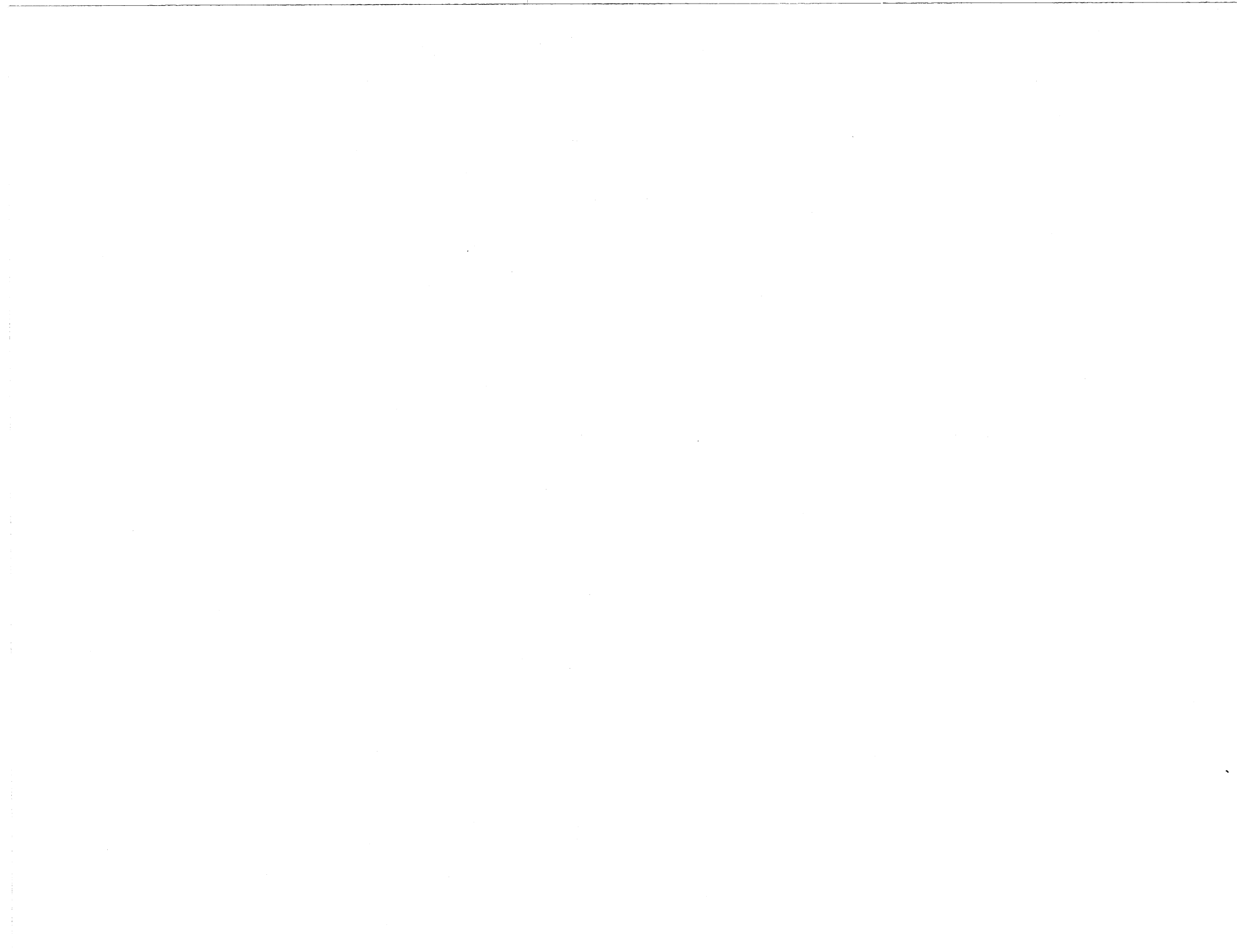
DETAIL **A**



DETAIL **A**

REV	ERN	DESCRIPTION	DATE	DRN

TOLERANCES (EXCEPT AS NOTED)		JERR-DAN CORP. GREENCASTLE, PA.	
DECIMAL	MAT'L SEE B/M	SCALE	DRAWN BY RMF
2 PLACE .062		0.13	ERN NO. 3325
3 PLACE .015			
ANGULAR	TITLE LIGHT ASSY, PYLON WORK LIGHTS		
±0° 30'	DATE	NEXT ASS'Y	ORIGINAL
LIMITS ARE TO BE NON-ACCUMULATIVE PER A LINE OF DIMENSIONS.	6/24/02	~	
		DRAWING NO.	B2-590-000126



Miscellaneous Accessories

***** Engineering Bill of Materials *****

** Report Excludes Shrinkage.

Effective as of 09/30/05

Item: 3178000445

BRKT ASSY FOLD DOWN LIGHT BAR

From Item: 3178000445

To Item: 3178000445

Reference:D/3847

Last Changed Date:

Revision #0/0

Quantity	1	Receive into Whse: MYPT	BIN: WA03	UOM: PC
----------	---	-------------------------	-----------	---------

Ball Dr	Sz	Component	Type	Bin Location	Description	QtyPer	UOM	Reference	Effectivity
---	--	-----		-----	-----	-----	---	-----	-----
01	B	3178000443	M	WA03	BRKT WELD FOLD DOWN LIGHT BAR BOTTOM	2.000	PC		-
02	A	4090000012	M	WA03	BELT 0.12 x 2.00 x 6.38	2.000	PC		-
03	N	7115161250	P	000102	CAPSCREW .38"-16NC X 1.50" HEX HEAD	8.000	PC		-
04	N	7950160161	P	000104 x01	FLATWASHER .38" NOM WIDE - PLATED	8.000	PC		-
05	N	7660162601	P	000105 x01	LOCKNUT .38"-16NC GR5 NYLOC	8.000	pc		-
06	B	3178000444	M	WA03	BRKT WELD FOLD DOWN LIGHT BAR TOP	2.000	PC		-
07	A	7585000001	P	100605 c12	FLEXIBLE DRAW LATCH, T-HANDLE STYLE	2.000	PC		-
08		7114100518	P		CAPSCREW #10-24NC x .62" SS HEX SH BT HD	4.000	PC		-
09	N	7950100103	P		FLATWASHER, #10 REG. SS	4.000	PC		-
10	N	7660102604	P	022603 a21	LOCKNUT #10-24UNC SS	4.000	PC		-
11	N	7690144800	P	a05	PIN 0.25 X 3.00 CLEVIS PLATED	2.000	PC		-
12	N	7690000810	P	000107 c14	PIN 0.063 X 0.50 COTTER	2.000	PC		-

*** End of Item ***

*** End of Report ***

--

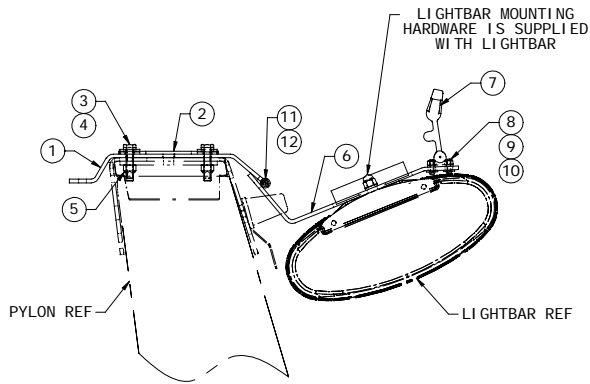
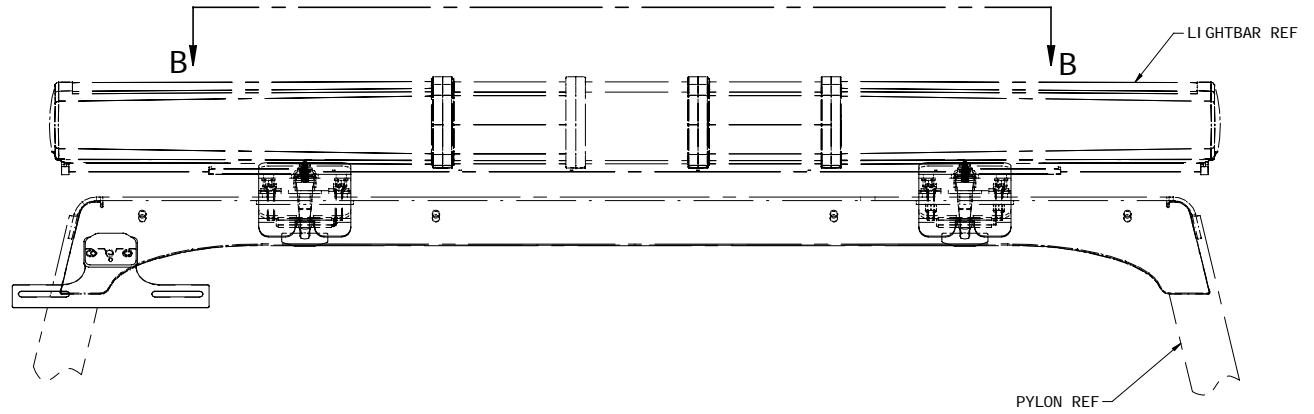
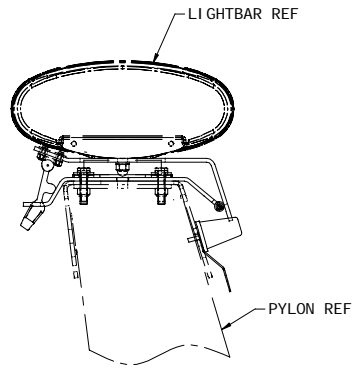
--

--

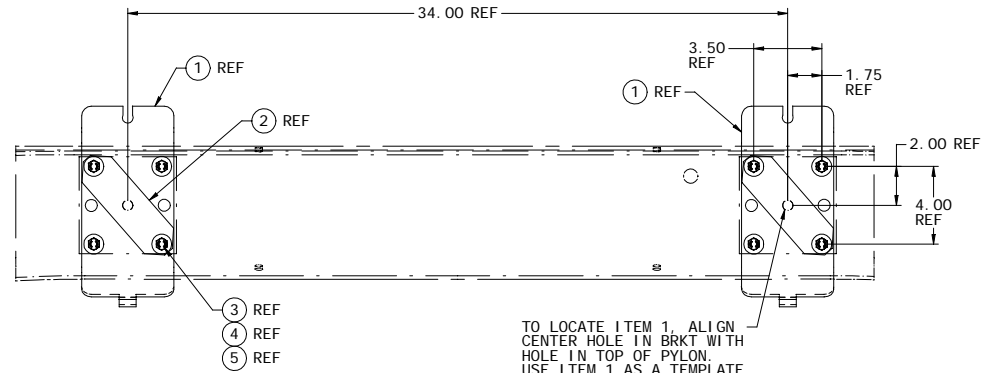
BRKT ASSY FOLD DOWN LIGHT BAR

DWG NO
3-178-000445

REV



FOLDED DOWN POSITION



TO LOCATE ITEM 1, ALIGN CENTER HOLE IN BRKT WITH HOLE IN TOP OF PYLON. USE ITEM 1 AS A TEMPLATE AND DRILL \varnothing 0.406 HOLES QTY-4 PLACES

SECTION B-B
ITEMS 6-12 AND LIGHTBAR
REF NOT SHOWN FOR CLARITY

JERR-DAN
An Oshkosh Truck Company

<small>PROTECTIVE ENVIRONMENTAL INFORMATION</small> THIS DRAWING AND SUBJECT MATTER CONTAINED HEREIN IS UNCLASSIFIED EXCEPT WHERE SHOWN OTHERWISE. IT IS THE PROPERTY OF JERR-DAN CORPORATION. THIS COPY IS LOANED TO THE REQUESTING PARTY AND IT OR THE SUBJECT MATTER CONTAINED HEREIN SHALL NOT BE DISCLOSED TO ANY OTHER PARTY WITHOUT THE EXPRESS WRITTEN PERMISSION OF JERR-DAN CORPORATION. ACCEPTANCE OF THIS COPY SHALL BE CONSIDERED AS ACCEPTANCE OF THE FORGED CONDITION.	<small>IF IN DOUBT ASK</small> DO NOT SCALE DRAWING. REMOVE ALL BURRS AND SHARP CORNERS.	<small>TELE-DRAWING UNLESS OTHERWISE SPECIFIED</small> 2 FORCE DEC 50 562 3 PLACE DEC 40 015 4 PLACE DEC 40 217 5 PLACE DEC 40 217 6/A TO MATERIAL THICKNESS	MAT'L: SEE B/M	SHEET 1 OF 1
			TITLE: BRKT ASSY FOLD DOWN LIGHT BAR	BEIGHT 7 #
SCALE: 0.31	ERN 3847	DATE: 4/15/05	DRAWN: SMG	PART NO: 3-178-000445

REV	DESCRIPTION	DATE	BY

***** Engineering Bill of Materials *****

** Report Excludes Shrinkage.

Effective as of 01/12/06

Item: 2178000036

BRACKET INST MOTORCYCLE TOW

From Item: 2178000036

To Item: 2178000036

Last Changed Date:

Reference: D/3895

Revision #070

Quantity	1	Receive into Whse: MYPT	BIN: WA03	UOM: PC
----------	---	-------------------------	-----------	---------

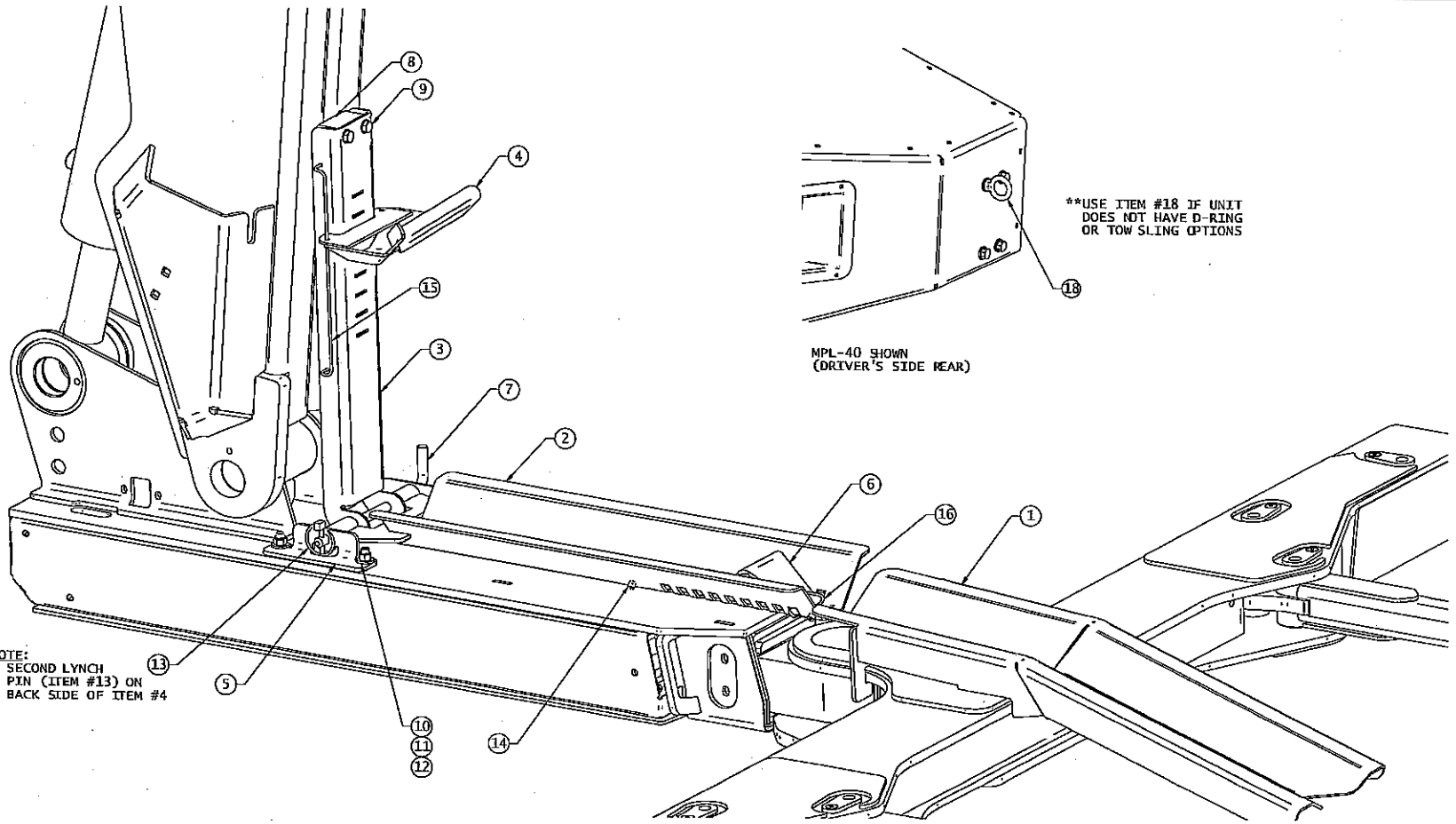
Ball Dr	oon Sz	Component	Type	Bin Location	Description	QtyPer	UOM	Reference	Effectivity
====	==	=====		=====	=====	=====	==	=====	=====
01	D	3178000470	M	WA03	BRACKET WELD MOTORCYCLE REAR RAMP	1.000	PC		-
02	D	3178000468	M	WA03	BRACKET WELD MOTORCYCLE BOOM LOWER	1.000	PC		-
03	C	4263000710	M	WA03	CHANNEL 3.5 x 1.50 x 0.19 x 22.00	1.000	PC		-
04	B	3178000469	M	WA03	BRACKET WELD MOTORCYCLE TIRE STOP	1.000	PC		-
05	B	4178000636	M	WA03	BRACKET 0.19 x 2.62 x 6.00	2.000	PC		-
06	B	4178000639	M	WA03	BRACKET 0.19 x 3.50 x 5.55	1.000	PC		-
07	B	4691000547	M	WA03	PIN 0.50 DIA x 10.25	1.000	PC		-
08	A	4679000275	M	WA03	PAD 1.00 x 1.44 x 2.50	1.000	PC		-
09	N	7790161253	P	000105 x01	SCREW .38"-16NC X .75" TAP TITE	2.000	PC		-
10	N	7115161064	P	000108 WA00A	BOLT .38"-16NC X 1.25 CARRIAGE	4.000	PC		-
11	N	7950160161	P	000104 14ASB M	FLATWASHER .38" NOM WIDE - PLATED	4.000	PC		-
12	N	7660162601	P	000105 14ASB A	LOCKNUT .38"-16NC GR5 NYLOC	4.000	pc		-
13	A	7691000047	P	a25 f15	PIN LYNCH 0.25 DIA x 1.56 LG #63-02	2.000	PC		-
14	A	7819000012	P	c11	SLEEVE COMPRESSION 1/8 I.D. x 5/16 ALUM	4.000	PC		-
15	A	4248000002	M	WA03	WIRE ROPE 3/32 DIA VINYL COATED x 19.5	1.000	PC		-
16	A	4248000003	M	WA03	WIRE ROPE 3/32 DIA VINYL COATED x 14.5	1.000	PC		-
17	N	7577000375	P	A-FLOOR	TIE DOWN KIT MOTORCYCLE	1.000	PC		-
18	A	7120000052	P	a21	BOLT EYE 0.50-13NC x 1.50 CROSBY #S279	2.000	PC		-

*** End of Item ***

*** End of Report ***

BRACKET INST MOTORCYCLE TOW

DWG NO 2-178-000036 REV 00



NOTE:
SECOND LYNCH
PIN (ITEM #13) ON
BACK SIDE OF ITEM #4

**USE ITEM #18 IF UNIT
DOES NOT HAVE D-RING
OR TOW SLING OPTIONS

MPL-40 SHOWN
(DRIVER'S SIDE REAR)

ITEM #17 (MOTORCYCLE TIE DOWN KIT) NOT SHOWN

<p>JERR-DAN Attachment Point Division</p>		<p>DWG NO 2-178-000036</p>	<p>REV 00</p>
<p>IF IN DOUBT ASK OUR OFF-SHALE BRANCHES FOR ALL SIZES AND WEIGHTS.</p>		<p>DATE 11/29/05</p>	<p>SHEET 1 OF 2</p>
<p>IF IN DOUBT ASK OUR OFF-SHALE BRANCHES FOR ALL SIZES AND WEIGHTS.</p>		<p>TITLE BRACKET INST MOTORCYCLE TOW</p>	<p>DATE 11/29/05</p>
<p>IF IN DOUBT ASK OUR OFF-SHALE BRANCHES FOR ALL SIZES AND WEIGHTS.</p>		<p>DATE 11/29/05</p>	<p>DWG NO 2-178-000036</p>

