

HEAVY DUTY UNDERLIFT

HDUL-450

PARTS MANUAL

JERR-DAN[®]

An Oshkosh Corporation Company

1080 Hykes Road
Greencastle, PA 17225
Phone (717) 597-7111
www.jerr-dan.com

5-376-000127
Rev 00 - June 01, 2009

© 2009 Jerr-Dan Corporation. All Rights Reserved.

This manual covers the following Jerr-Dan Model:

HDUL-450 Heavy Duty Underlift

Jerr-Dan Corporation strives to provide information that is accurate, complete and useful. Descriptions and illustrative material contained within this manual are as accurate as known at the time of publication and are subject to change, without notice, as a result of continuous product improvements. Jerr-Dan reserves the right to amend the information in this document at any time without prior notice.

Information contained in this manual reflects how this vehicle was built at the factory. Modifications or additions by the distributor or owner are not reflected in this manual.

When ordering parts, please refer to your unit's Sales Order Number, Serial Number and Model Number.
This information can be found on the aluminum tag riveted to unit.

SERIAL NO. _____
MODEL NO. _____
UNDER LIFT
UNDER LIFT RATINGS (MAXIMUM)
EXTENDED _____ LBS
RETRACTED _____ LBS
WINCH RATING
SAE J706 RATING _____ LBS
EACH DRUM _____ LBS
CABLE/WIRE ROPE
SIZE _____ FT
TYPE _____
WORKING LOAD LIMIT _____ LBS
WARNING
READ OPERATOR'S MANUAL AND FAMILIARIZE YOURSELF WITH THE OPERATION PRIOR TO USING THIS EQUIPMENT. KNOW THE LOADS BEING MOVED. DO NOT EXCEED RATED CAPACITIES.
WARNING
ALL RATINGS ARE BASED ON THE STRUCTURAL DESIGN OF THE ABOVE MODEL. ACTUAL TOWING AND RECOVERY CAPACITY MAY BE LIMITED BY THE RATINGS OF THE CHASSIS AND EQUIPMENT SELECTED.
MANUFACTURED BY: JERR-DAN CORPORATION 1800 HYPER ROAD GREENCASTLE, PA 17225 1-800-524-5868

Additional or replacement manuals can be ordered by calling Jerr-Dan Parts at 717-597-7111.
Price and availability will be quoted at time of the request.

Please report comments and/or errors by contacting Jerr-Dan Corporation's Technical Publications Department by e-mail at technicalpublications@jerr-dan.com or by FAX on 717-593-2362.

Manufactured under one or more of the following patents: 5,823,735 and 6,036,428 with other Patents Pending.

Jerr-Dan and the Jerr-Dan logo are registered trademarks of Jerr-Dan Corporation, Greencastle, PA USA.

The material in this document is confidential and the property of Jerr-Dan Corporation. No part of this document may be photocopied, reproduced or translated to another language without the express written consent of Jerr-Dan Corporation.

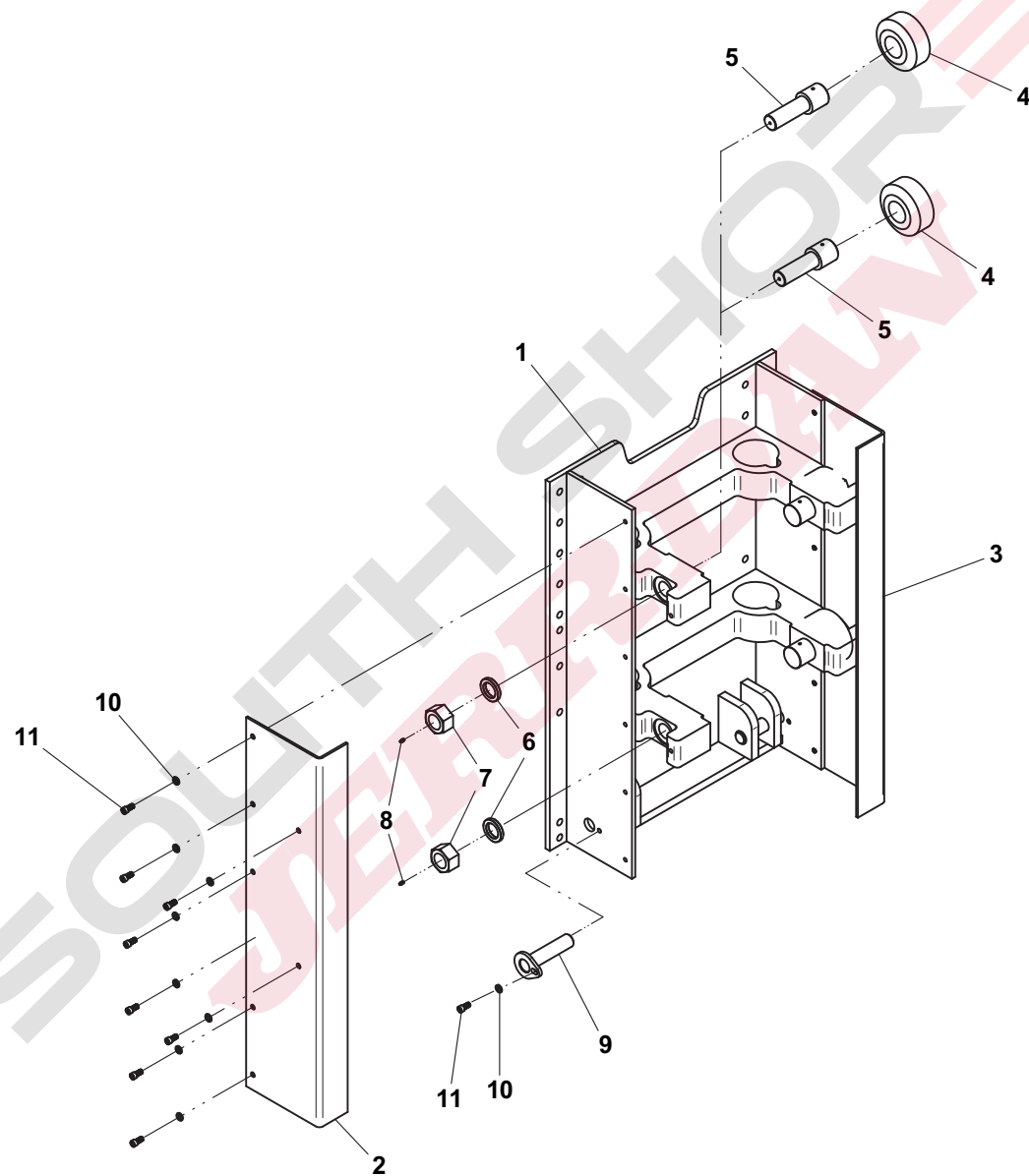
INDEX

DESCRIPTION	PAGE
Mast Assembly	4 - 5
Vertical Boom Assembly	6 - 7
Boom Assembly	8 - 9
Crossbar Assembly	10 - 11
Hydraulic Valve and Lines - PTO Driven	12 - 15
Hydraulic Valve and Lines - DC Powered	16 - 17
5th Wheel Mount Assembly	18 - 19
Permanent Mount Assembly	20 - 21
Frame Forks	22 - 23
Heavy Duty Tire Lift	24 - 25
Jack Stand Assembly	26 - 27
Winch	28 - 33
Remote Control	34 - 35
Decals	36 - 37

MAST ASSEMBLY

ITEM	PART NO.	DESCRIPTION	QTY
1	9505000001	Mount Weldment	1
2	9505000002	Mount Cover, Left	1
3	9505000003	Mount Cover, Right	1
4	9505000004	Track Roller	4
5	9505000005	Roller Pin	4
6	9505000006	Roller Pin Lockwasher	4
7	9505000007	Roller Pin Nut	4
8	9505000008	Grease Fitting	4
9	9505000009	Lift Cylinder Pin	2
10	9505000011	Lockwasher	18
11	9505000010	Sockethead Capscrew	18

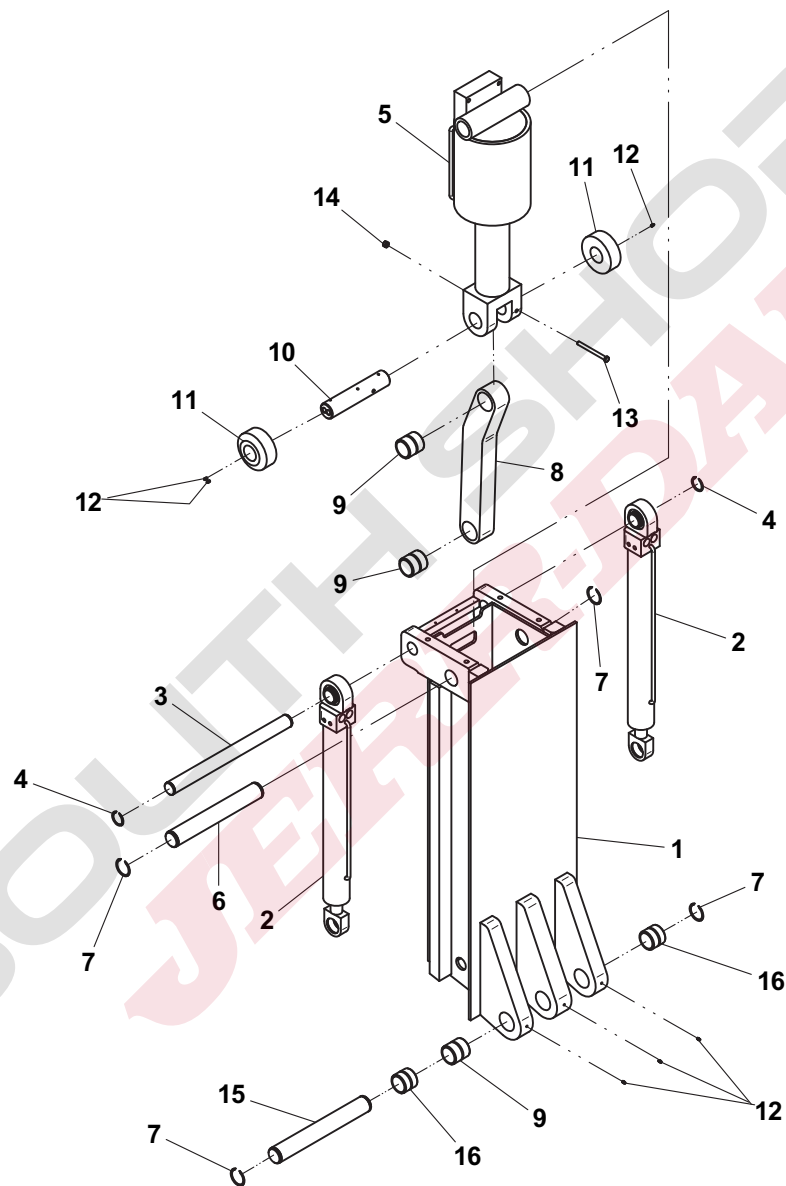
MAST ASSEMBLY



VERTICAL BOOM ASSEMBLY

ITEM	PART NO.	DESCRIPTION	QTY
1	9505000013	Vertical Boom Weldment	1
2	9505000015	Lift Cylinder	2
3	9505000018	Tilt Cylinder Pin (Upper)	1
4	9505000023	Snap Ring (Medium)	2
5	9505000014	Tilt Cylinder	1
6	9505000019	Tilt Cylinder Pin (Upper)	1
7	9505000024	Snap Ring (Large)	2
8	9505000016	Tilt Link	1
9	9505000022	Main Bushing	3
10	9505000017	Tilt Cylinder Pin (Lower)	1
11	9505000004	Track Roller	2
12	9505000008	Grease Fitting	6
13	9505000025	Link Lockbolt	1
14	9505000026	Link Locknut	1
15	9505000020	Boom Pivot Pin	1
16	9505000021	Vertical Boom Outer Bushing	2

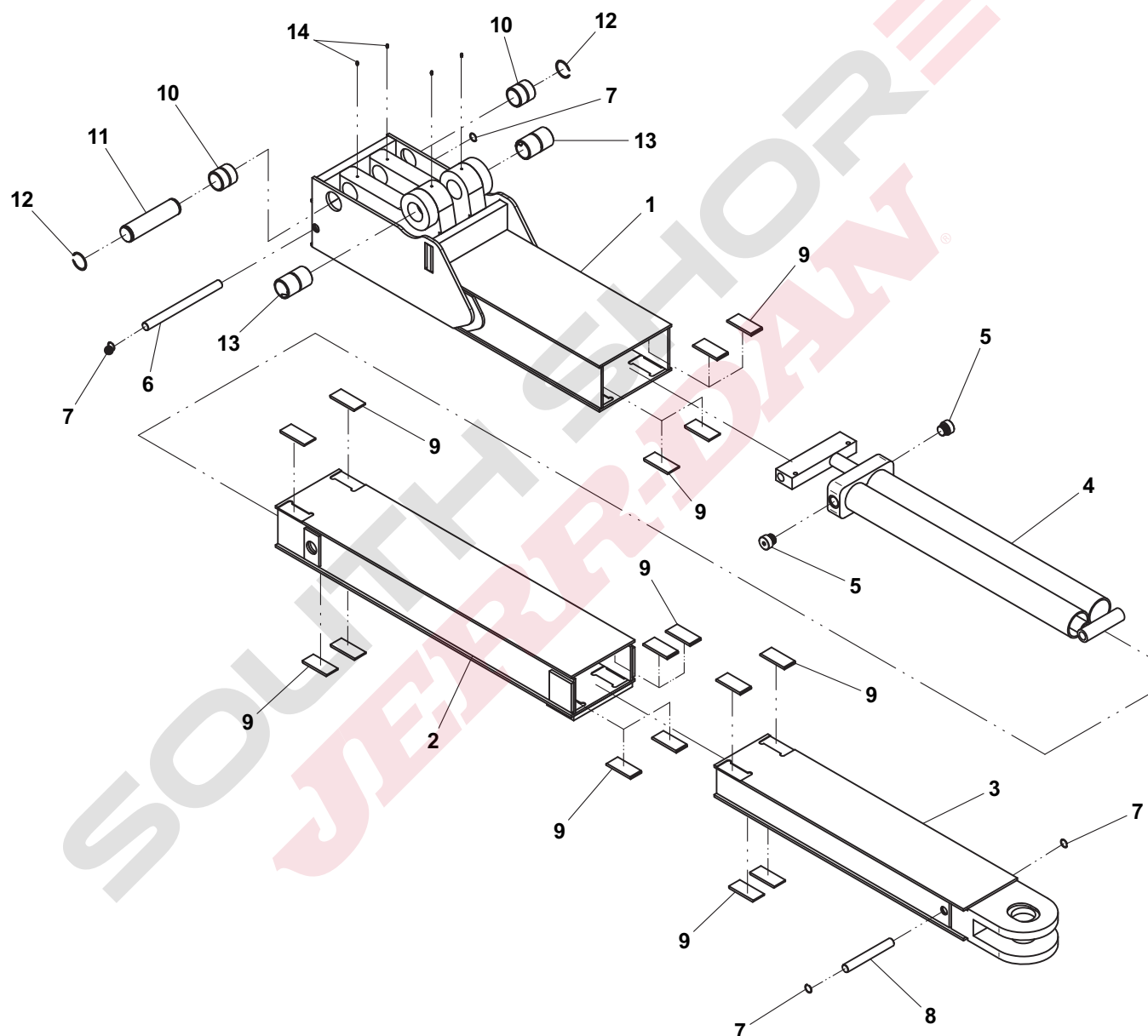
VERTICAL BOOM ASSEMBLY



BOOM ASSEMBLY

ITEM	PART NO.	DESCRIPTION	QTY
1	9505000027	Inner Boom Weldment	1
2	9505000028	Middle Boom Weldment	1
3	9505000029	Outer Boom Weldment	1
4	9505000031	Boom Cylinder	1
5	9505000032	Boom Cylinder Trunion Pin	2
6	9505000037	Boom Cylinder Pin (Port End)	1
7	9505000043	Snap Ring (Small)	4
8	9505000038	Boom Cylinder Pin (Rod End)	1
9	9505000041	Wear Pad	16
10	9505000022	Main Bushing	2
11	9505000036	Boom To Link Pin	1
12	9505000024	Snap Ring (Large)	2
13	9505000042	Inner Boom Rear Bushing	2
14	9505000008	Grease Fitting	4

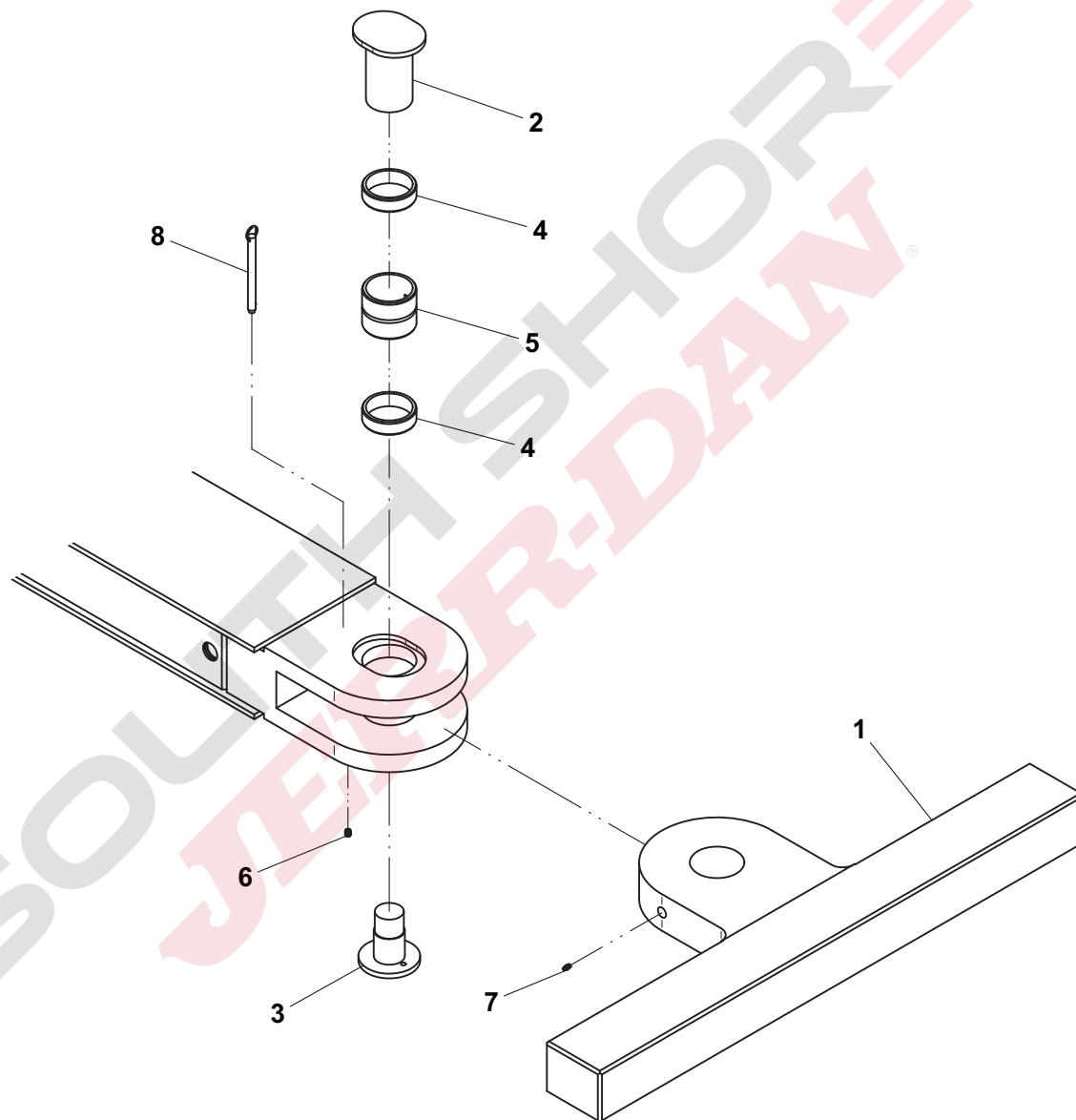
BOOM ASSEMBLY



CROSSBAR ASSEMBLY

ITEM	PART NO.	DESCRIPTION	QTY
1	9505000030	Crossbar	1
2	9505000033	Pivot Pin (Upper)	1
3	9505000034	Pivot Pin (Lower)	1
4	9505000039	Pivot Pin Upper/Lower Bushing	2
5	9505000040	Pivot Pin Middle Bushing	1
6	9505000035	Pivot Pin Set Screw	1
7	9505000008	Grease Fitting	1
8	7691000021	Crossbar Lock Pin	1

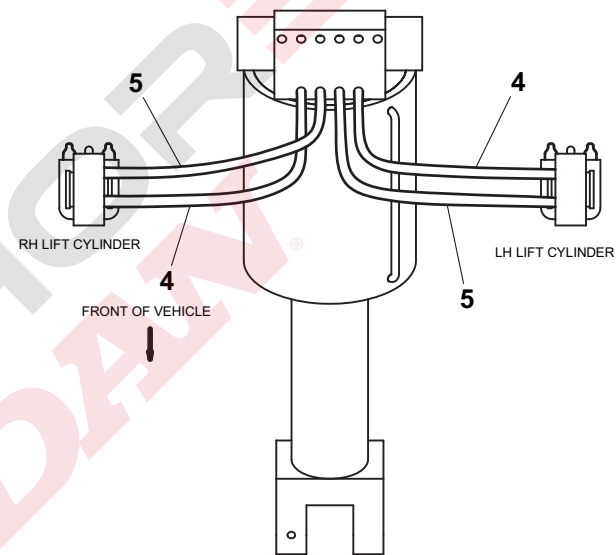
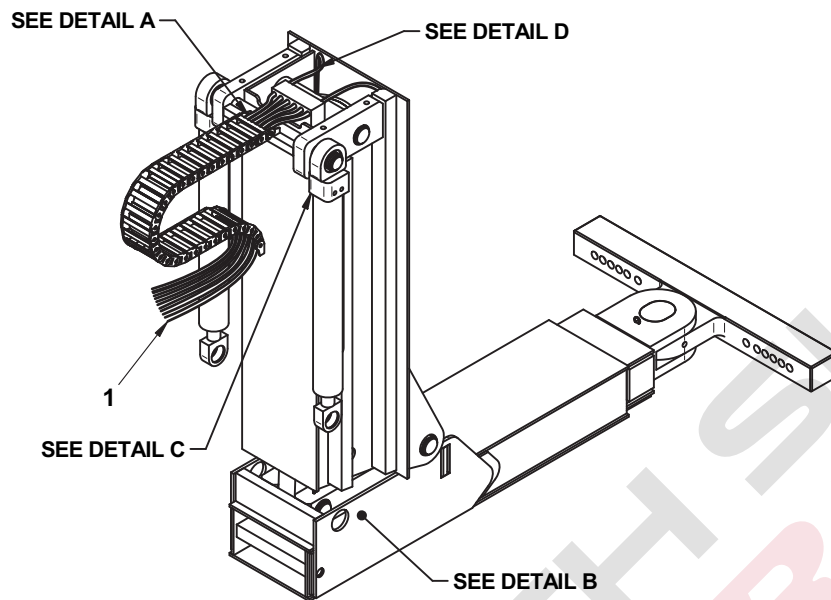
CROSSBAR ASSEMBLY



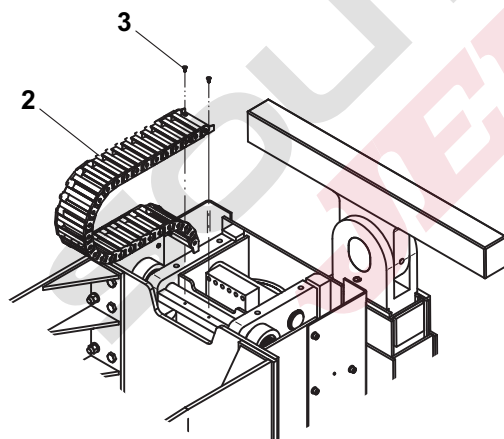
HYDRAULIC VALVE AND LINES - PTO DRIVEN

ITEM	PART NO.	DESCRIPTION	QTY
1	7570000039	Hose Assembly	6
2	7505000008	Hose Track - Large	1
3	7120000078	Capscrew, M6 x 12 mm	4
4	4568111012	Hose Assembly	2
5	4568111013	Hose Assembly	2
6	7505000005	Hose Assembly	2
7	7505000003	Tube Assembly	2
8	7505000018	Clamp	2
9	7505000017	Bulkhead Fitting	2
10	7505000004	Hose Assembly	2
11	7505000007	Hose Track - Small	2
12	7120000079	Capscrew, M6 x 10 mm	8
13	7935000365	Control Valve (w/o winch option)	1
	7935000366	Control Valve (w/ winch option)	1
14	7120000077	Capscrew, M8 x 20 mm	4
15	7949000043	Lockwasher, M8	4
16	7949000044	Flatwasher, M8	4

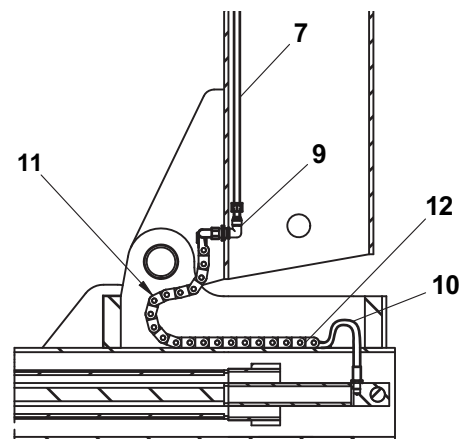
HYDRAULIC VALVE AND LINES - PTO DRIVEN



DETAIL C



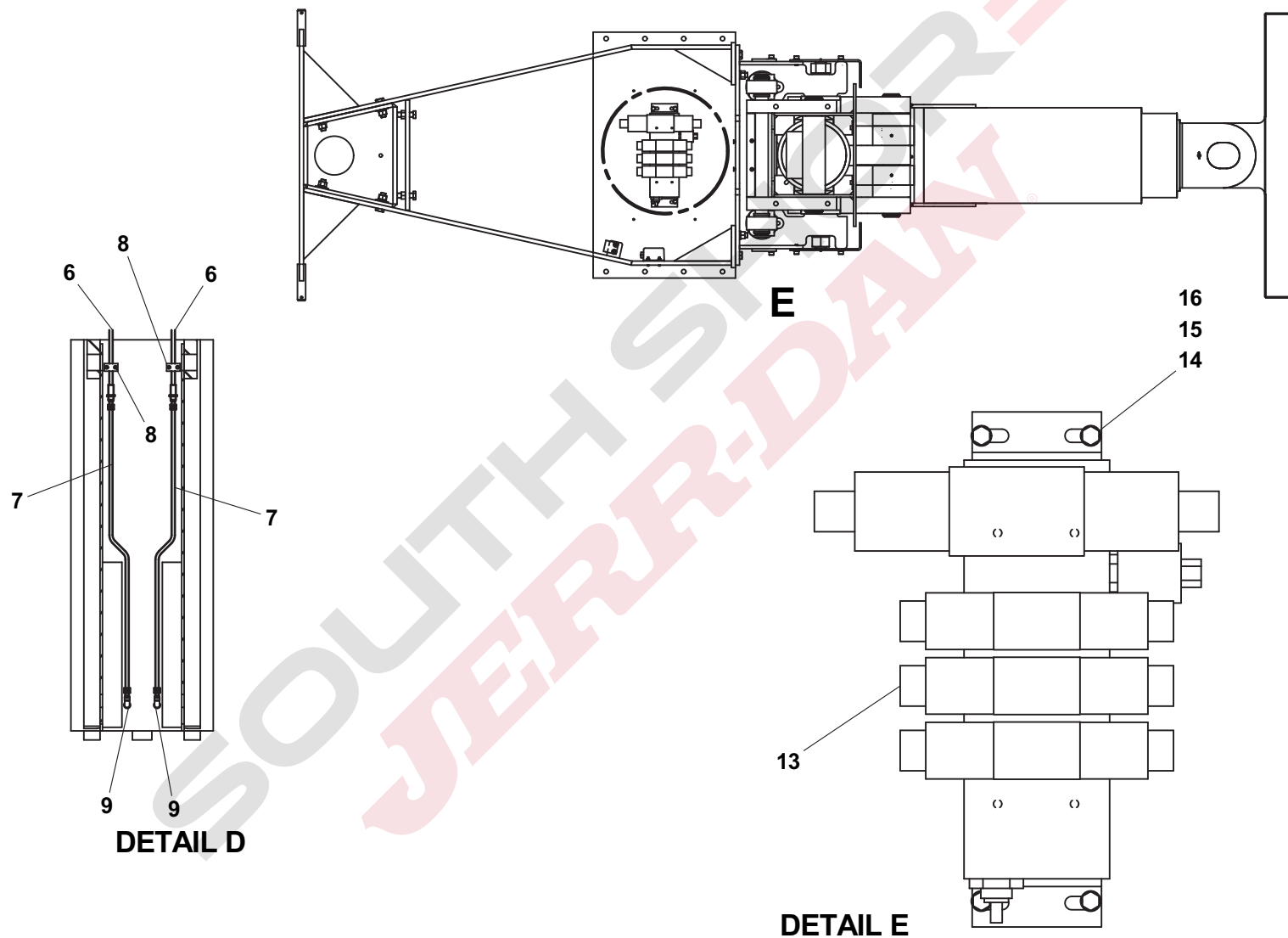
DETAIL A



DETAIL B

THIS PAGE INTENTIONALLY LEFT BLANK

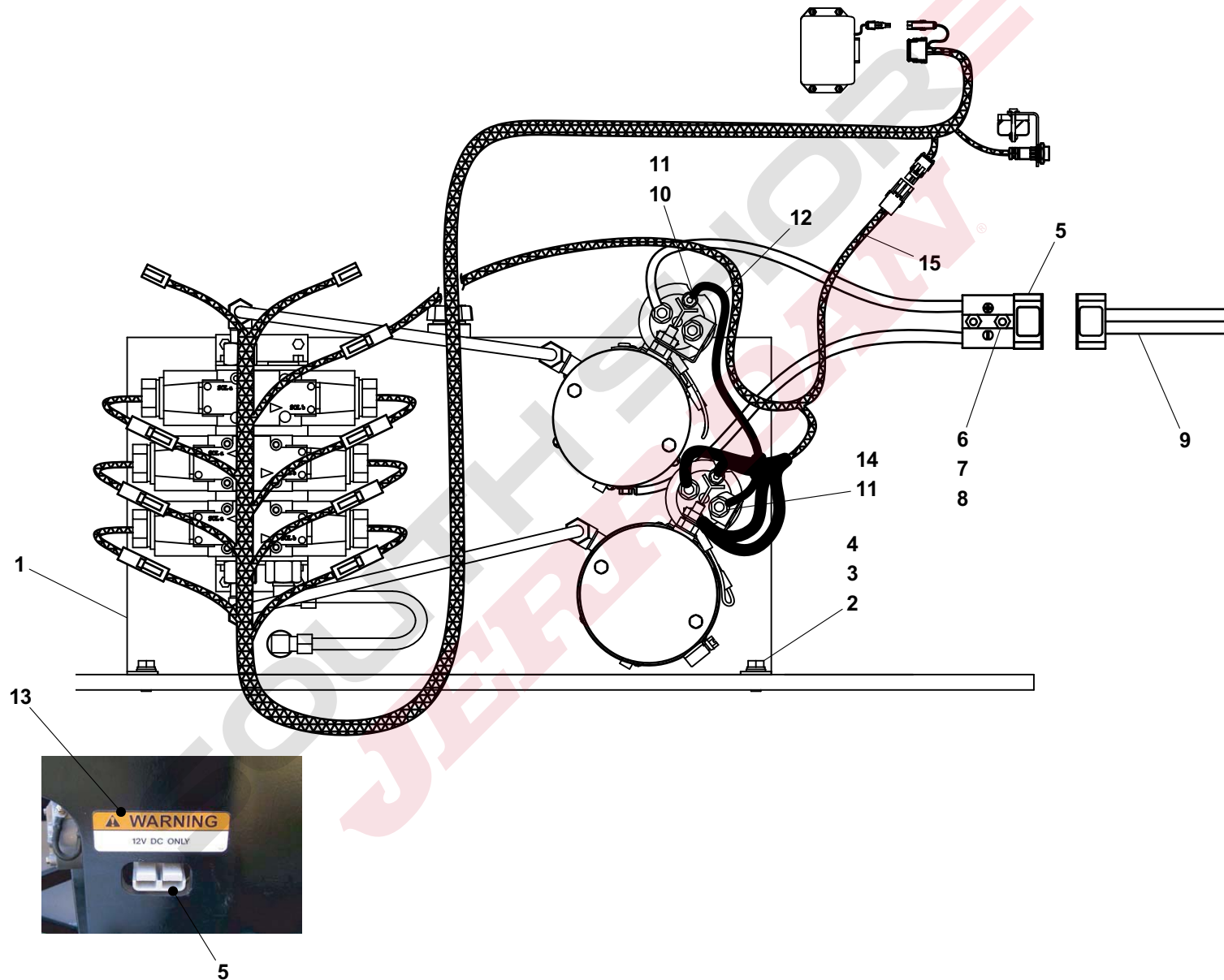
HYDRAULIC VALVE AND LINES - PTO DRIVEN



HYDRAULIC VALVE AND LINES - DC POWERED

ITEM	PART NO.	DESCRIPTION	QTY
1	7505000022	DC Pump Assembly	1
2	7120000077	Capscrew, M8 x 20 mm	4
3	7949000043	Lockwasher, M8	4
4	7949000044	Flatwasher, M8	4
5	7505000010	Power Cable	1
6	7115141050	Capscrew, 0.25-20NC x 1.25"	2
7	7950140161	Flatwasher, 0.25" ID	2
8	7660142601	Locknut, 0.25"-20NC	2
9	7505000009	Power Cable Assembly	1
10	7345211902	Ring Terminal	1
11	7346000039	Tubing	48"
12	8977010300	Wire	1'
13	7330000768	Decal	1
14	7345241902	Ring Terminal	1
15	7552000439	Harness	1

HYDRAULIC VALVE AND LINES - DC POWERED



5TH WHEEL MOUNT ASSEMBLY

ITEM	PART NO.	DESCRIPTION	QTY
1	9505000051	Gooseneck Weldment	1
2	9505000052	Adjustment Box Weldment	1
3	7115222050	Capscrew, 0.75"-10NC x 2.50"	34
4	7950220161	Flatwasher, 0.75" ID	32
5	7950220000	Lockwasher, 0.75" ID	8
6	7660220001	Nut, 0.75"-10NC	34
7	9505000053	Angle	2
8	7115201250	Capscrew, 0.62"-11NC x 1.50"	8
9	7950200000	Lockwasher, 0.62" ID	8
10	7660200001	Nut, 0.62"-11NC	8
11	9505000069	Link Mount	2
12	7505000001	Tension Link	2
13	7691000082	Lynch Pin	4
14	7330000770	Decal	2

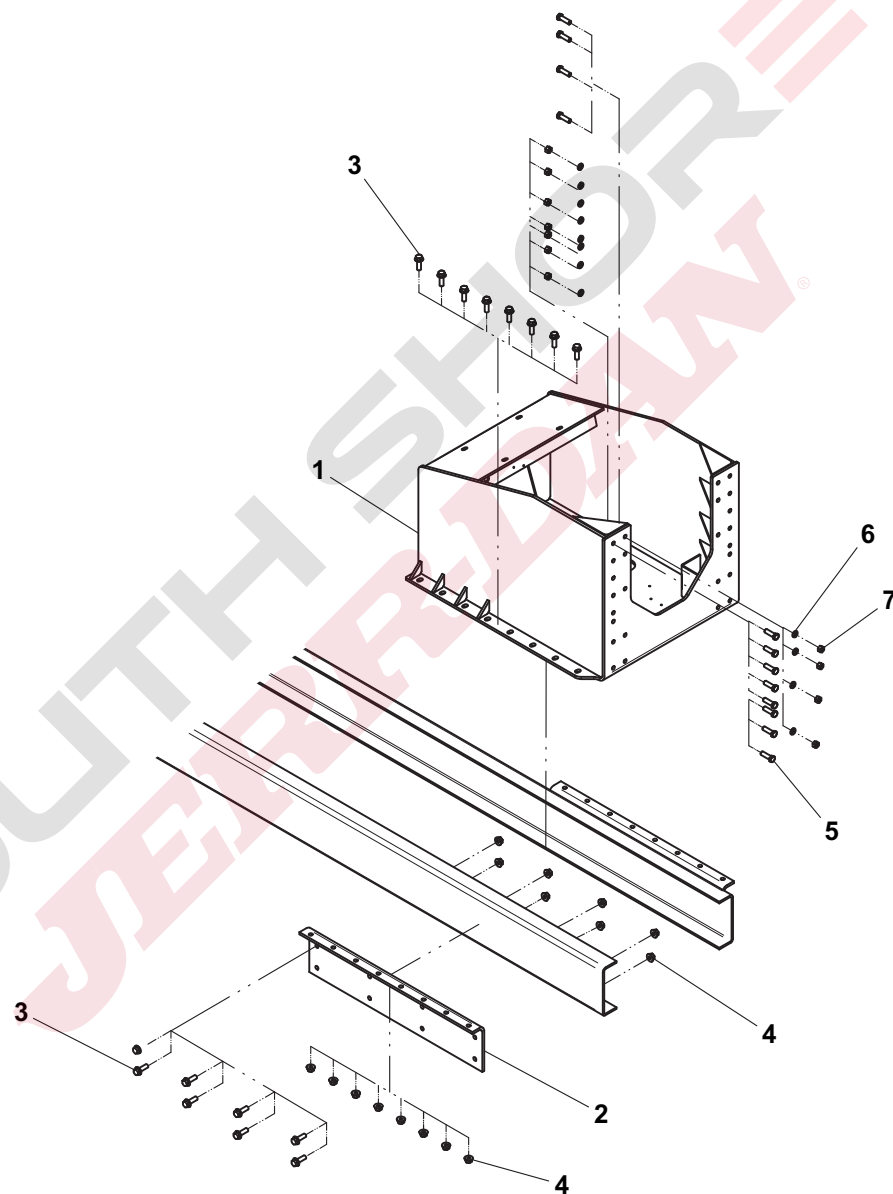
5TH WHEEL MOUNT ASSEMBLY



PERMANENT MOUNT ASSEMBLY

ITEM	PART NO.	DESCRIPTION	QTY
1	3505000019	Permanent Mount Weldment	1
2	4706006054	Plate	2
3	7118221816	Capscrew, 0.75"-10NC x 2.25"	32
4	7660222308	Locknut, 0.75"-10NC	32
5	7115222050	Capscrew, 0.75"-10NC x 2.50"	24
6	7950220000	Flatwasher, 0.75" ID	24
7	7660220001	Nut, 0.75"-10NC	24

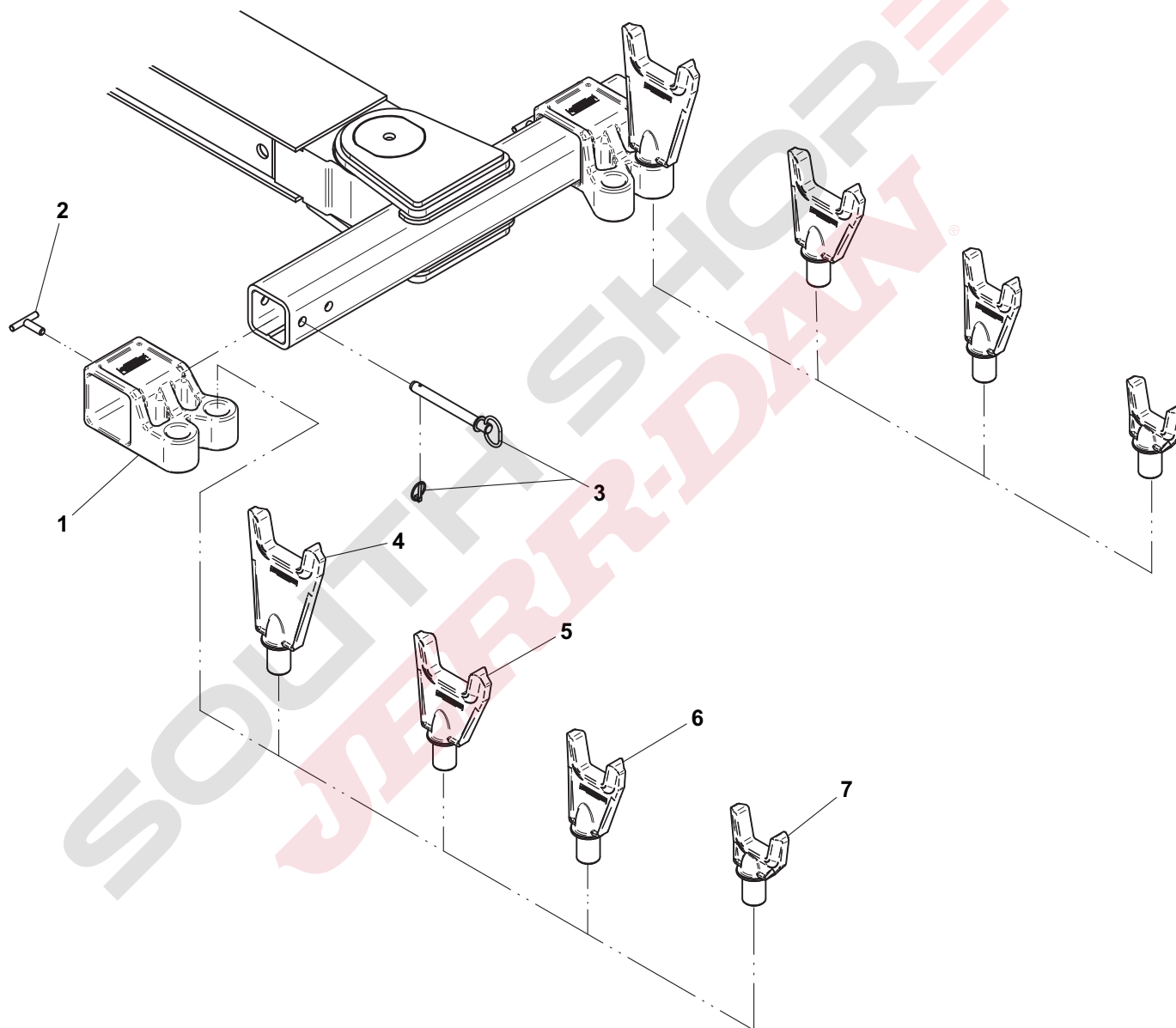
PERMANENT MOUNT ASSEMBLY



FRAME FORKS

ITEM	PART NO.	DESCRIPTION	QTY
1	3505000010	Fork Adapter	2
2	3551000036	'T' Handle	2
3	7691000021	Hitch Pin	2
4	7454000004	4-1/2" Long Fork	2
5	7454000003	4-1/2" Medium Fork	2
6	7454000005	3" Medium Fork	2
7	7454000006	3" Short Fork	2

FRAME FORKS

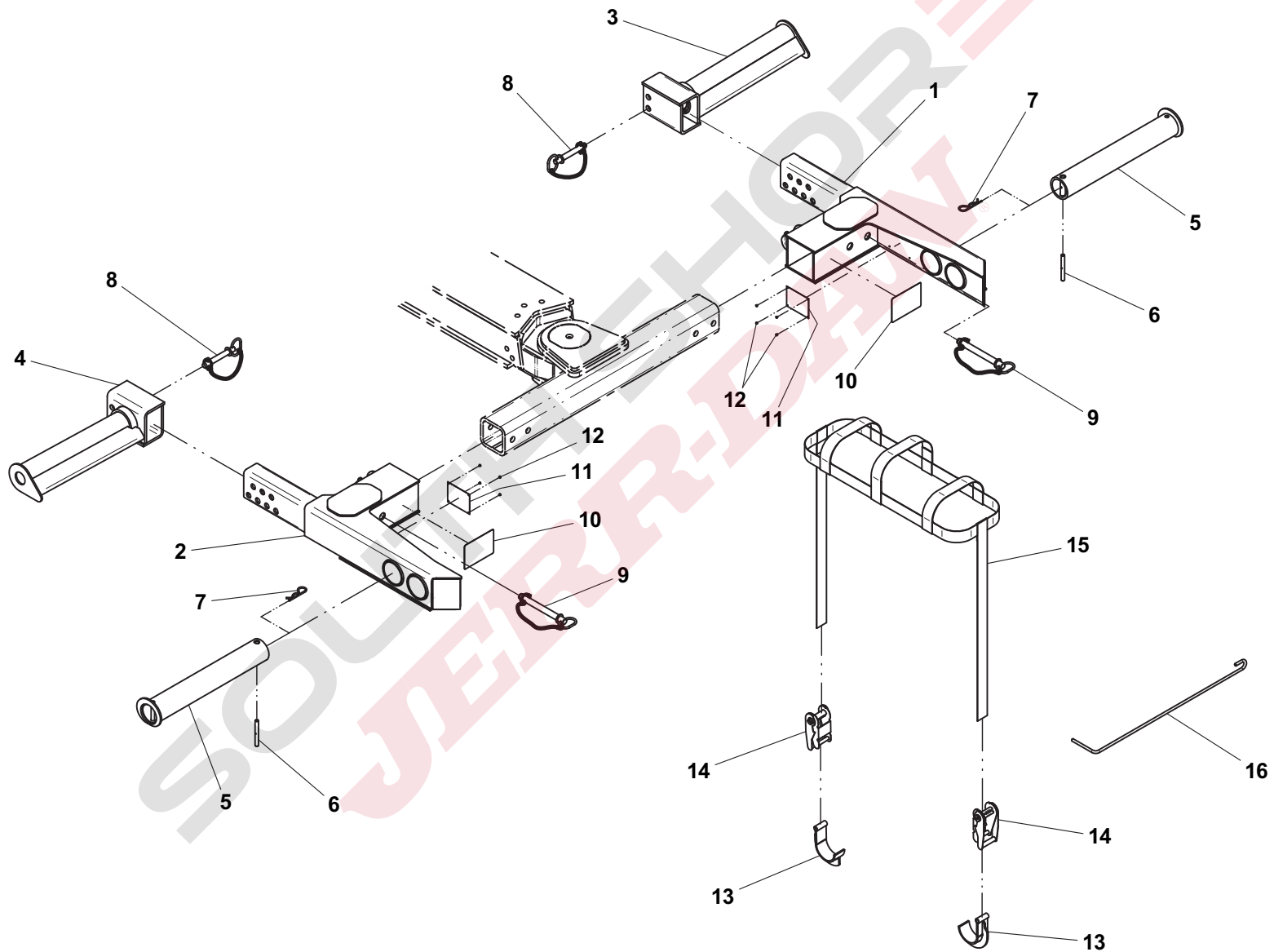


HEAVY DUTY TIRE LIFT

ITEM	PART NO.	DESCRIPTION	QTY
1	3484000048*	Grid Weld RH	1
2	3484000049*	Grid Weld LH	1
3	3020000120	Arm Weld RH	1
4	3020000119	Arm Weld LH	1
5	3912000038	Tube Weld	2
6	4691000274	Pin	2
7	7691000020	Hairpin	2
8	7691000026	Hitchpin	2
9	7691000021	Hitchpin	2
10	7330000278	Decal - Caution	2
11	7330000277	Decal - Rating	2
12	7759000004	Pop Rivet	8
13	3561000008	Hook	4
14	7894000028	Ratchet	4
15	7894000037	Strap	2
16	4561000012	Pull Hook	1

* Also requires grid modification 3505000009.

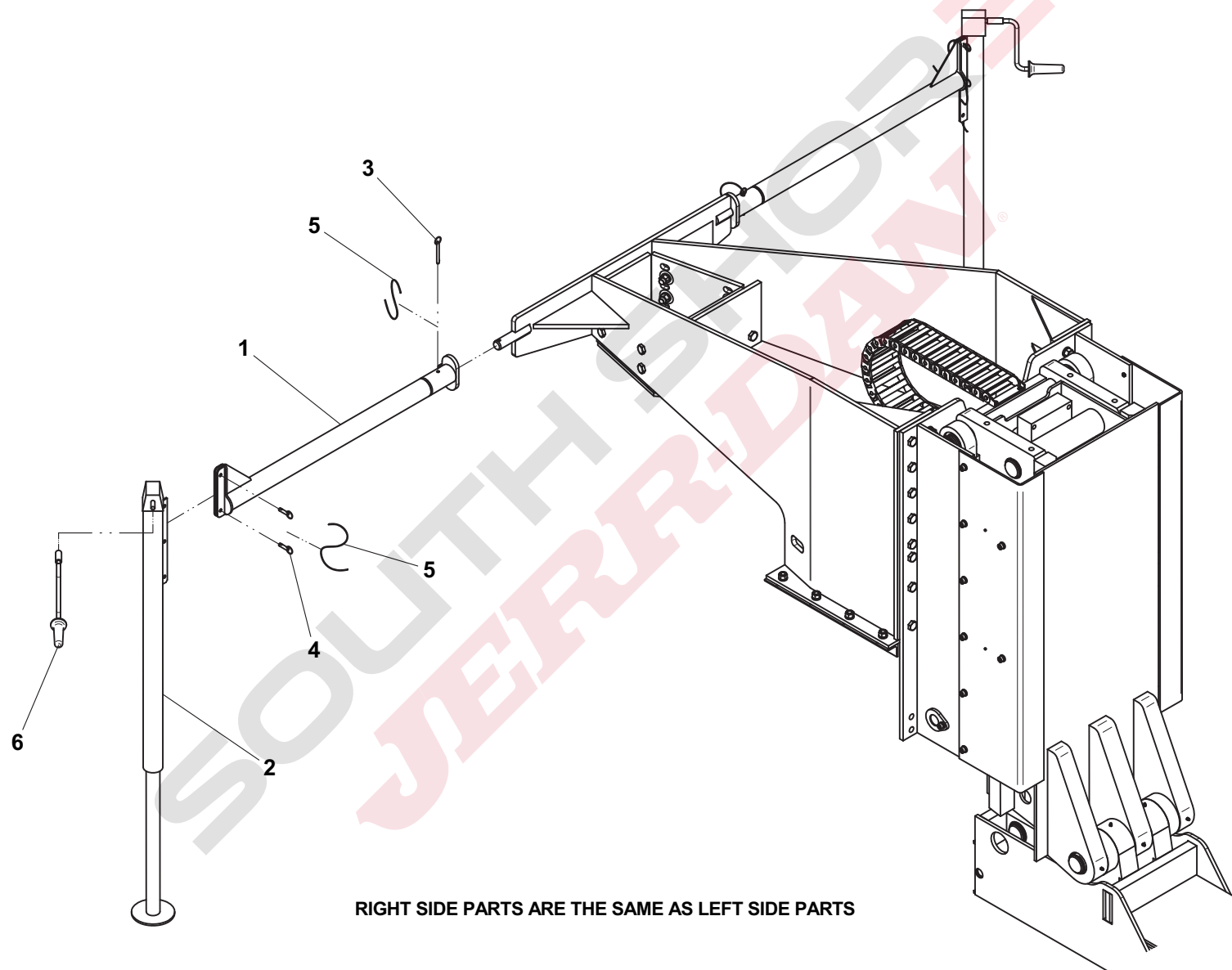
HEAVY DUTY TIRE LIFT



JACK STAND

ITEM	PART NO.	DESCRIPTION	QTY
1	9505000063	Jack Arm	2
2	9505000064	Jack	2
3	7691000083	Quick Pin	2
4	7691000084	Quick Pin	4
5	7248000152	Lanyard	4
6	9505000068	Jack Crank Handle	2

JACK STAND



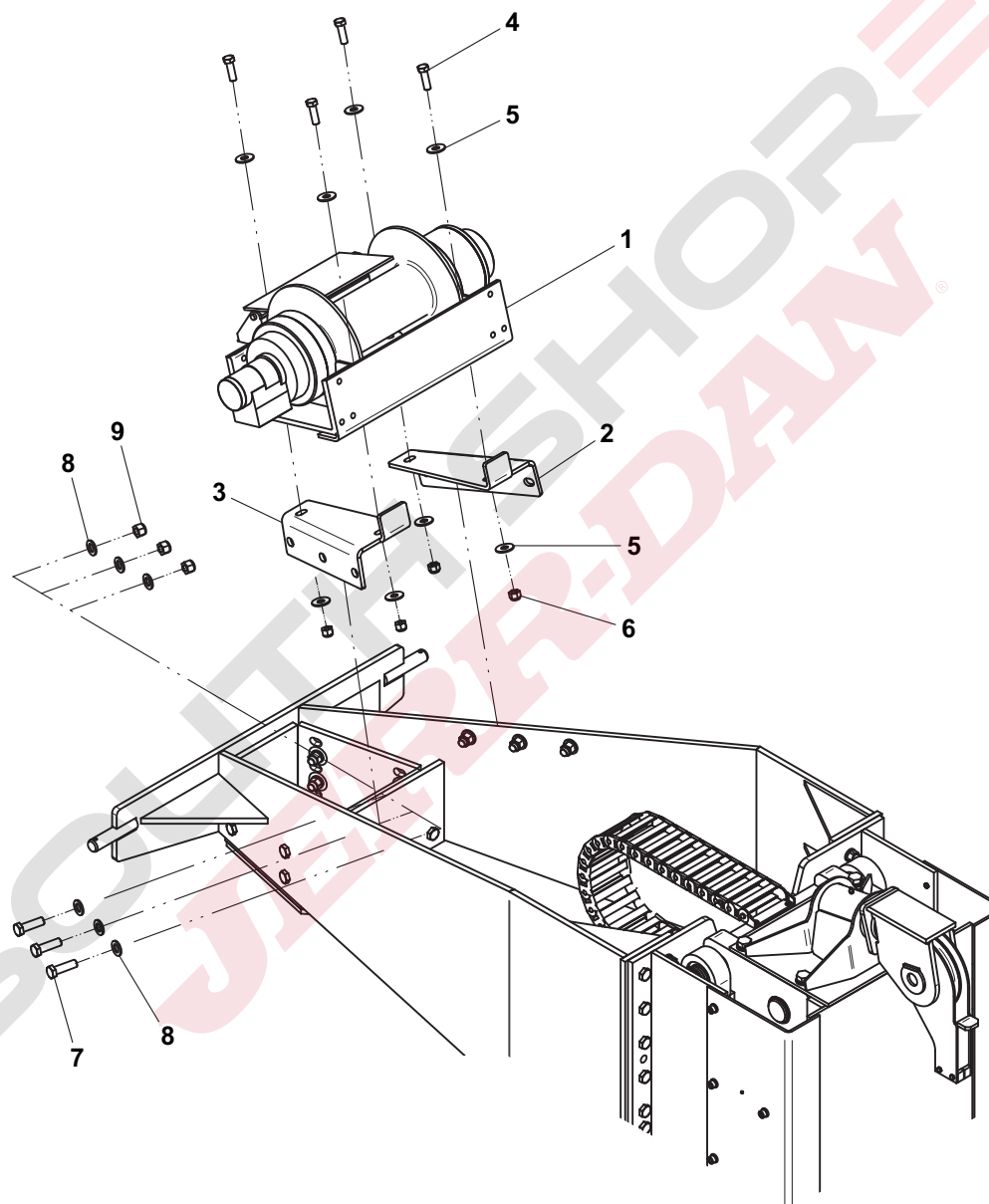
RIGHT SIDE PARTS ARE THE SAME AS LEFT SIDE PARTS

WINCH

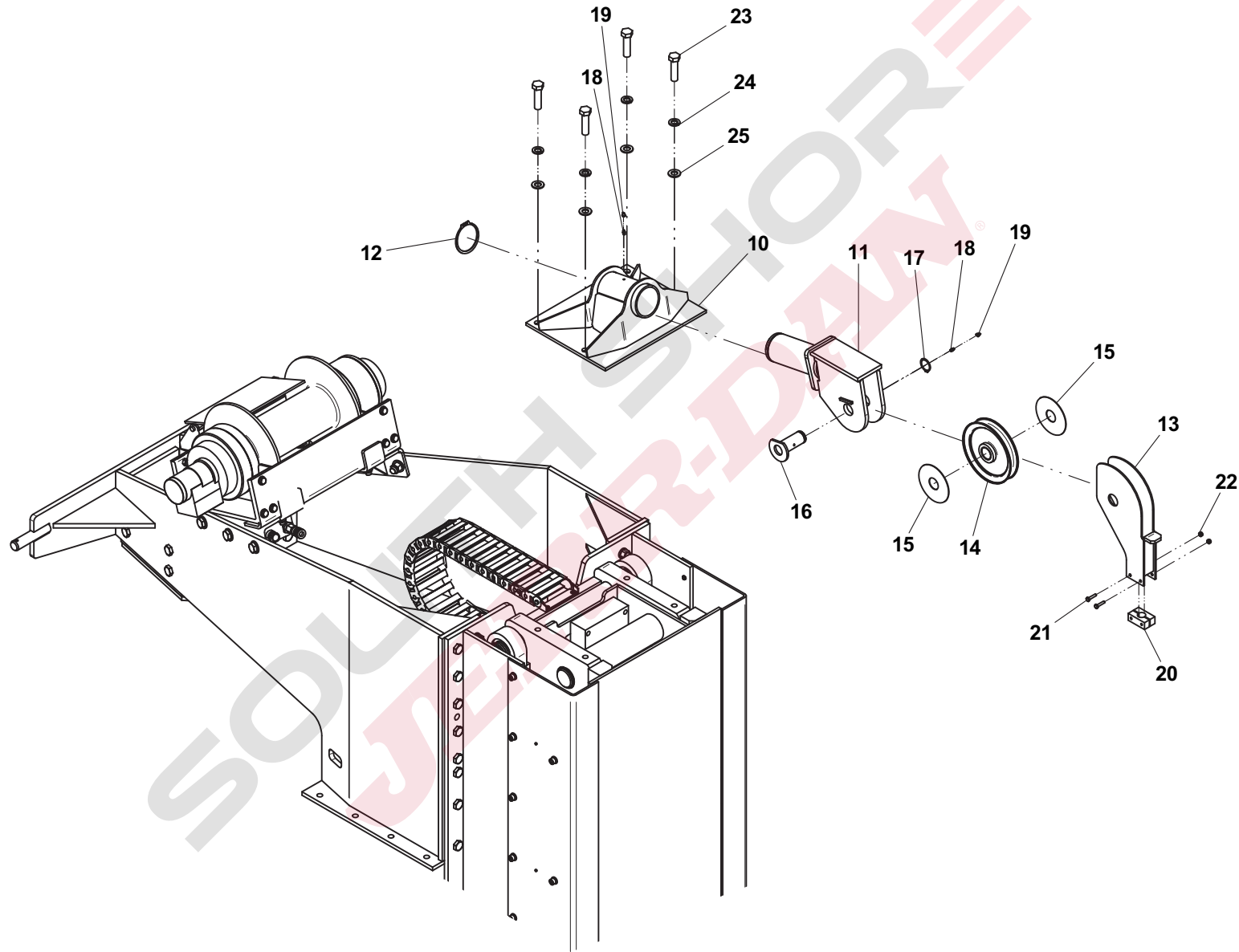
ITEM	PART NO.	DESCRIPTION	QTY	ITEM	PART NO.	DESCRIPTION	QTY
1	7970000134	Winch	1	34	7443000139	90° Fitting	5
2	3505000011	Winch Mount - LH	1	35	7295000029	Air Regulator	1
3	3505000012	Winch Mount - RH	1	36	7470000006	Air Pressure Gauge	1
4	7115201650	Capscrew, 0.63"-11NC x 2.00"	4	37	7565000016	Airline Tubing	10ft
5	7950200152	Flatwasher, 0.62" ID	8	38	8977010103	2 Conductor Cable	8ft
6	7660202601	Locknut, 0.62"-11NC	4	39	7345001704	Terminal	3
7	7115222050	Capscrew, 0.75"-10NC x 2.50"	6	40	7346000039	Tubing	1
8	7950220141	Flatwasher, 0.75" ID	12	41	7346000099	Terminal	2
9	7660222601	Locknut, 0.75"-10NC	6	42	7346000037	Wire Seal	2
10	3249000048*	Sheave Support Weldment	1	43	7445080845	Elbow	1
11	3249000015*	Sheave	1	44	4567132065	Hose	1
12	7754000049*	Retaining Ring	1	45	7445080843	Adapter	1
13	3249000012*	Cable Guide Weldment	1	46	4567130060	Hose	1
14	7809000006*	Sheave	1	47	7274000040	Clamp	2
15	4949000045*	Washer	2	48	7115161250	Capscrew, 0.38"-16NC x 1.50"	1
16	3691000169*	Pin Weldment	1	49	7950160161	Flatwasher, 0.38" ID	2
17	7754000058*	Retaining Ring	1	50	7660162601	Locknut, 0.38"-16NC	1
18	7440030000*	Grease Fitting	2	51	7445081043	Adapter	1
19	7253000002*	Cap	2	52	7330000825	Decal - Tensioner Air Pressure	1
20	4249000002*	Cable Guide	2	53	7330000262	Decal - Winch Warning	2
21	7115142050*	Capscrew, 0.25"-20NC x 2.50"	2	54	7330000253	Decals - Wire Rope Caution	2
22	7660142604*	Locknut, 0.25"-20NC	2	55	7248000130	Wire Rope	1
23	7120000076	Capscrew, M12 x 37mm	4				
24	7949000041	Lockwasher, M20	4				
25	7949000042	Flatwasher, M20	4				
26	7312000017	Quick Disconnect Coupling	1				
27	7446502518	Bulkhead Fitting	1				
28	7446040435	Straight Fitting	1				
29	7935000119	Valve	1				
30	7114061210	Capscrew, #6-32NC x 1.50"	2				
31	7660062604	Locknut, #6-32NC	2				
32	7443000152	Plug	1				
33	7443000173	90° Fitting	2				

* Also included with 3505000016, Sheave Assembly

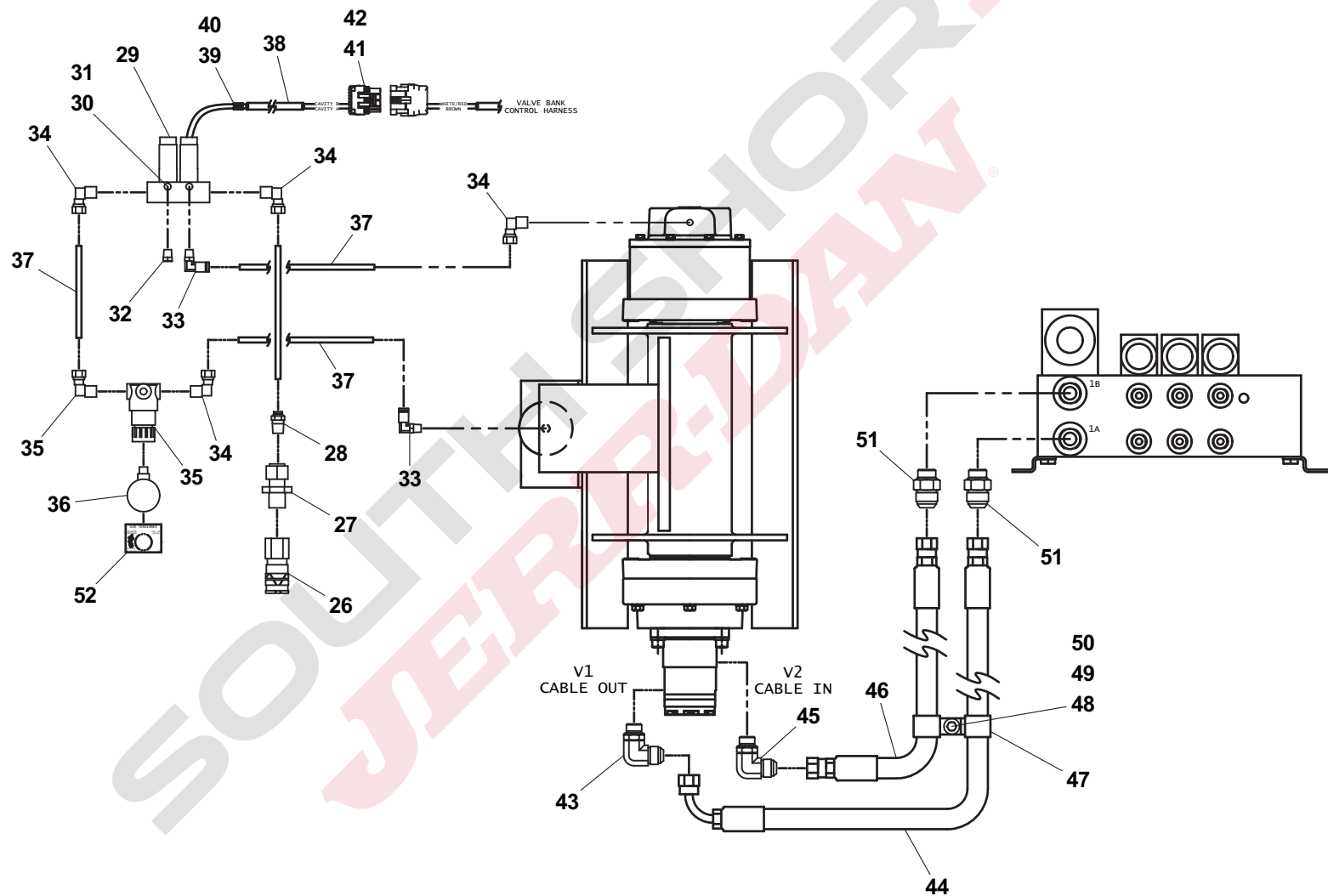
WINCH



Item # 22, Wire Rope, not shown

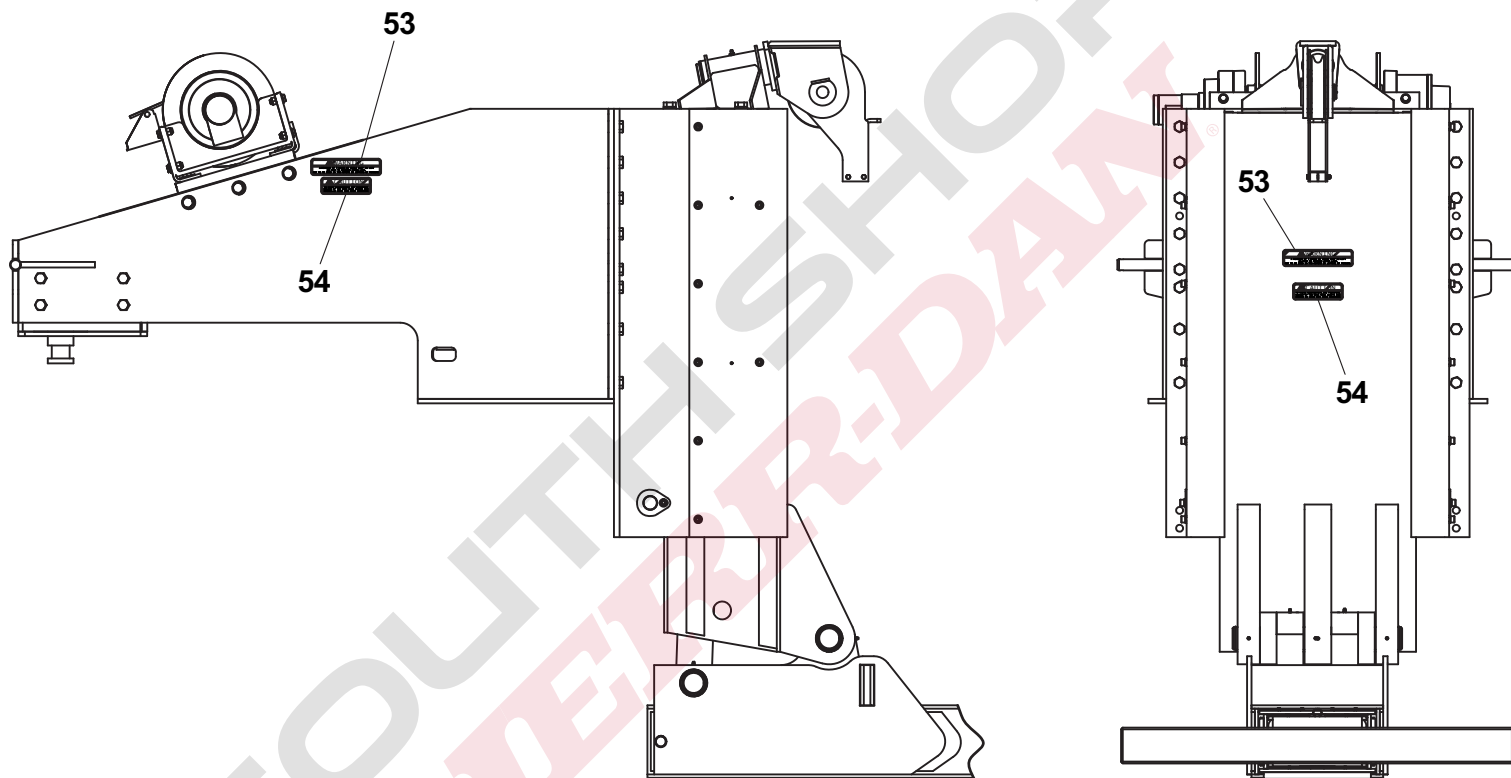
WINCH

WINCH



THIS PAGE INTENTIONALLY LEFT BLANK

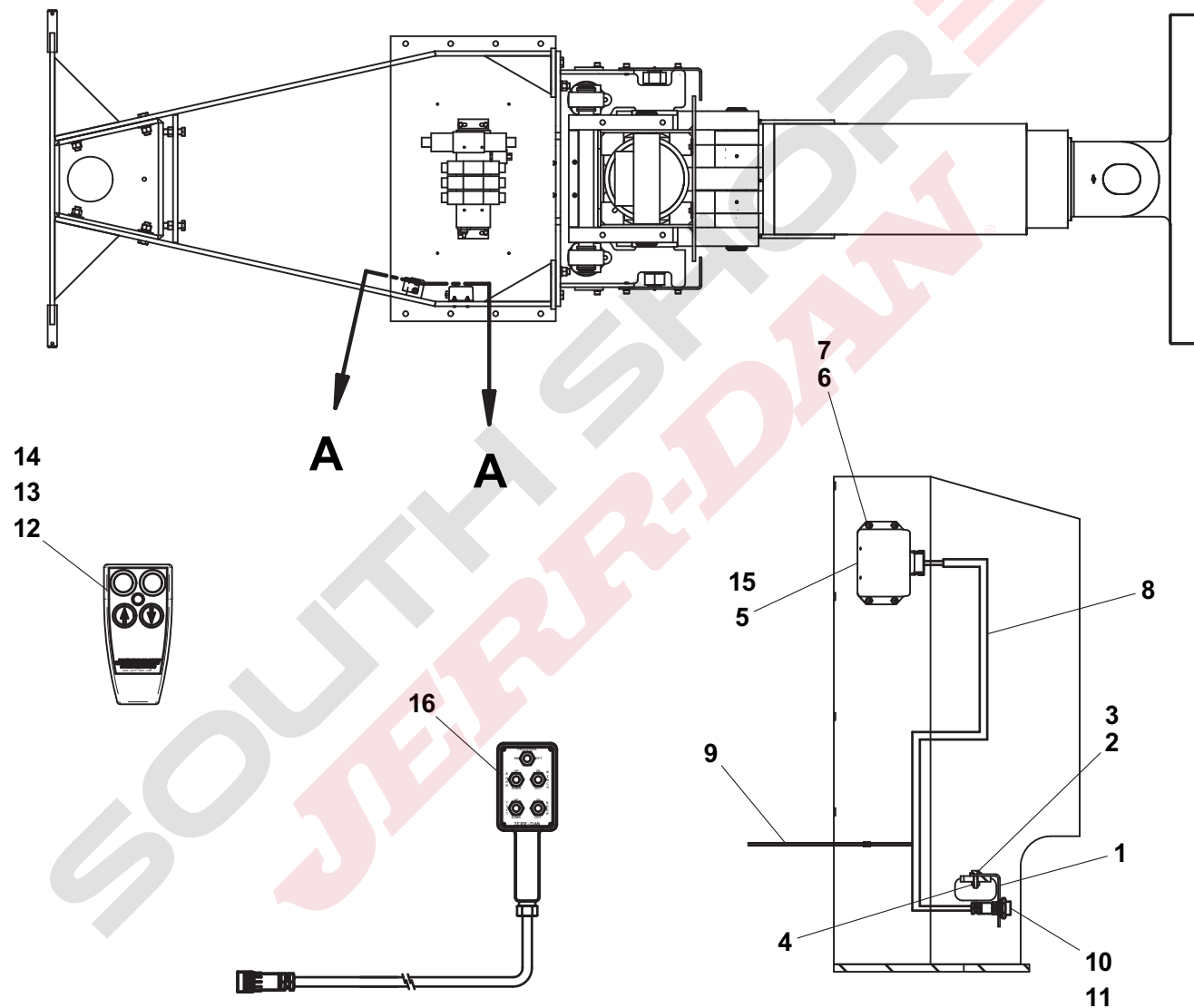
WINCH



REMOTE CONTROL

ITEM	PART NO.	DESCRIPTION	QTY
1	4178000807	Bracket	1
2	7115140850	Capscrew, 0.25-20NC x 1.00"	2
3	7950140161	Flatwasher, 0.25" ID	2
4	7660142601	Locknut, 0.25"-20NC	2
5	7295000134	Controller	1
6	7114101018	Capscrew, #10-24NC x 1.25"	4
7	7660102604	Locknut, #10-24NC	4
8	7552000432	Harness - Controller	1
9	7552000151	Harness - Remote Power	1
10	7346000068	Dust Cap	1
11	7759000016	Pop Rivet	1
12	9295310059	Transmitter	1
13	9295310030	Belt Clip	1
14	9295310029	Rubber Boot	1
15	9295310058	Receiver	1
16	7295000136	Wired Remote Controller	1

REMOTE CONTROL

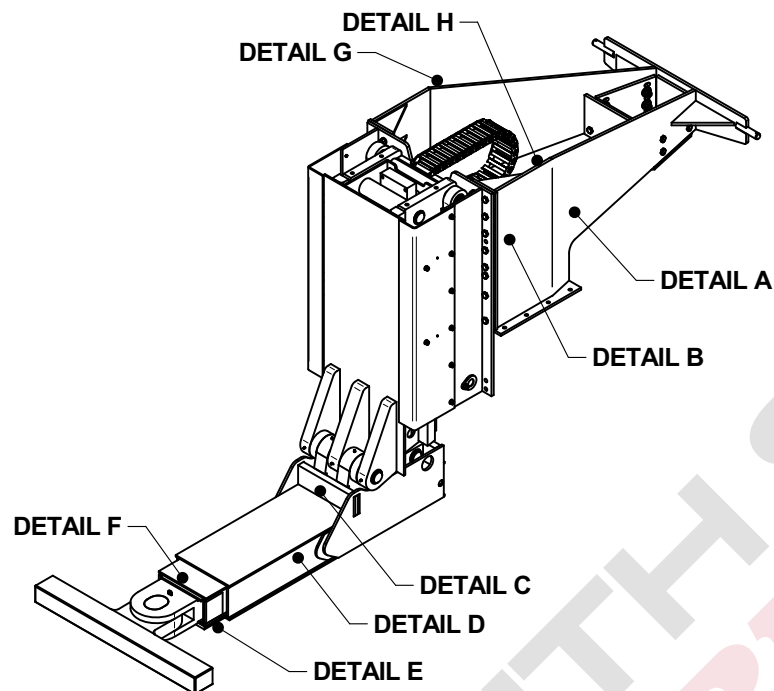


SECTION A-A

DECALS

ITEM	PART NO.	DESCRIPTION	QTY
1	7330000772	Jerr-Dan Logo	2
2	7330000767	Decal - HDUL-450 Logo	2
3	7330000771	Decal - Lubrication	1
4	7330000766	Decal - Safety Chains	2
5	7330000037	Decal - Moving Parts	5
6	7330000200	Decal - Operator's Pre-Transport Checklist	2
7	7330000199	Decal - Authorized Personnel	2
8	7330000211	Decal - Safety Chains	2
9	7330000139	Decal - Checklist Reminder	2
10	7330000765	Serial Number / Rating Placard	1
11	7330000769	Decal - Safety Pin	1
12	7759000006	Pop Rivet, 0.12" Dia	4

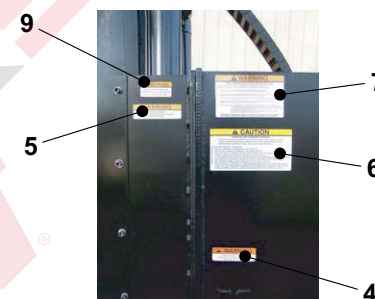
DECALS



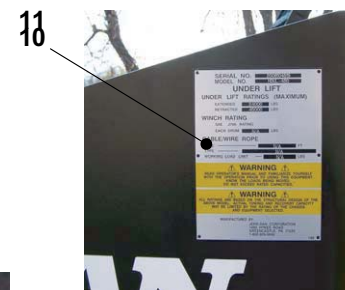
DETAIL A
TYP-BOTH SIDES



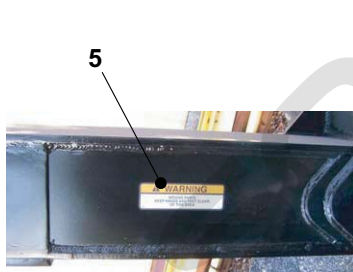
DETAIL C



DETAIL B
TYP-BOTH SIDES



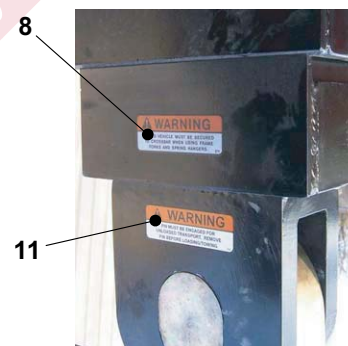
DETAIL G



DETAIL D
TYP-BOTH SIDES



DETAIL E



DETAIL F



DETAIL H
TYP-BOTH SIDES

THIS PAGE INTENTIONALLY LEFT BLANK