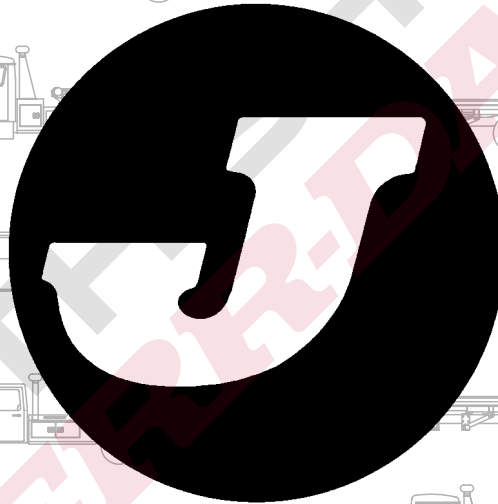


\$35.00



HEAVY DUTY WRECKER OPERATIONS, MAINTENANCE, AND PARTS MANUAL



JERR-DAN[®]
CORP.

1080 Hykes Road
Greencastle, PA 17225

Phone (717) 597-7111

BA-AA

Part Number 5-376-000055
Rev. 0



FOREWORD

This manual is intended to serve as a guide to the owner and operator in the safe operation and optimum performance of this Jerr-Dan® equipment.

Establishment of good operating habits and familiarity with the equipment and its capabilities combined with good judgement are essential.

Before attempting to operate the unit carefully read all sections of this manual.

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Date _____



JERR-DAN[®]

1080 Hykes Road Greencastle, PA 17225
(717) 597-7111

LIMITED WARRANTY

Coverage and Procedures

Like our wheel lift and car carrier products, Jerr-Dan warranty programs are designed for the long haul.

Whether you own a wheel lift or car carrier, you are assured that your equipment is of the highest quality, and is covered under this limited warranty.*

Our one-year unlimited mileage plan is offered for wheel lifts and car carriers. This warranty is designed for the most comprehensive protection of your specific equipment.

WHEEL LIFT:

The Jerr-Dan one-year warranty covers material and workmanship including the following:

- I. Body
- II. Substructure
- III. Wheel lift assembly
- IV. Wrecker boom assembly
- V. Winch and winch components (excluding cable)
- VI. Hydraulics
- VII. Electrical wiring assembly

CAR CARRIERS:

The Jerr-Dan one-year warranty covers material and workmanship including the following:

- I. Deck
- II. Winch and winch components (excluding cable)
- III. Substructure
- IV. Hydraulics
- V. Electrical wiring assembly

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Procedures for warranty coverage:

1. Contact your selling distributor.
2. If necessary, contact Jerr-Dan for the distributor nearest you - Call 1-800-926-9666.
3. If necessary, Jerr-Dan may authorize repair by a qualified equipment service center. Under these arrangements, it will be necessary to obtain an estimate of repairs before any work is performed. Send estimate of repair cost to:

Jerr-Dan Corporation
Warranty Department
1080 Hykes Road
Greencastle, PA 17225

Be sure to include your daytime phone number.

4. Authorization for repairs under this limited warranty will be provided by telephone within 24 hours of receipt of valid warranty claims and confirmed by letter or fax.
- *5. This outlines the Jerr-Dan One-Year Warranty Plan. Coverage does not include damages caused by excessive abuse or consequential damages resulting from the lack of proper service, maintenance or need for repairs. All plans begin at original retail purchase date.

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JERR-DAN®

1080 Hykes Road Greencastle, PA 17225
(717) 597-7111

LIMITED WARRANTY

Manufacturer's Warranty. Manufacturer's sole warranty shall be the following, which Distributor shall make on behalf of Manufacturer by conspicuous notice in writing accompanying each contract or memorandum of sale:

1. Warranty. Jerr-Dan Corporation, ("Manufacturer") warrants each new product made by it to be free from defects in material or workmanship for one year from the date of initial sale, lease, rental, or other disposition of such product, and agrees only to repair or replace at its own expense, f.o.b. the place or places of manufacture, at manufacturer's option, any part or parts of the product found to be defective in material or workmanship, provided Manufacturer is notified of such defect or defects within the one year warranty period and given a reasonable time to correct the defect. In no case, shall the warranty extend to defects in materials, components, or services furnished by third parties. Defects caused by chemical action, or the presence of abrasive materials and defects arising following the operation beyond rated capacity or the improper use or application of any Products shall not be considered defects within the scope of the foregoing warranty. If any repairs or alterations are made or any parts are replaced during the period covered by any warranty above mentioned by other than an authorized Manufacturer's Distributor in accordance with authorized Manufacturer's service manuals or with other than parts, accessories, or attachments authorized by Manufacturer for use in its products, customer shall pay for all such repairs or parts without recourse against Manufacturer, and Manufacturer shall be relieved of responsibility for fulfillment of this warranty with respect to parts or components of all repairs, alterations or replacements so made. No claims for labor shall be considered unless authorized by Manufacturer.

2. Disclaimer as to Consequential or Special Damages. Under no circumstances shall Manufacturer be liable for any consequential or special damage which any person, firm, corporation, or other entity may suffer or claim to suffer or incur or claim to incur as a result of any defect in the product or in any correction or alteration thereof made or furnished by Manufacturer or others. "Consequential" or "special damages" as used herein includes but is not limited to costs of transportation, lost sales, lost orders, lost profits, lost income, increased overhead, labor and material costs and cost of manufacturing variances and operational inefficiencies.

3. Maximum Liability. The maximum liability of Manufacturer under the exclusive warranty set forth herein shall be the amount paid to Manufacturer by the vendor of the component with respect to the product to which such vendor warranty applies.

4. Limitation of Liability. The limitation of liability provisions herein shall apply to any and all claims or suits brought against Manufacturer, including any claim based upon negligence, breach of contract, breach of warranty, strict liability or any other theories upon which liability may be asserted against Manufacturer.

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5. Exclusive and Entire Warranty. The warranty constitutes Manufacturer's entire warranty as to the product and it is expressly agreed that the remedies of dealer and those claiming under dealer as stated in this warranty are exclusive. Manufacturer does not assume (and has not authorized any other person to assume on its behalf) any other warranty or liability in connection with any product covered by this warranty.

MANUFACTURER EXPRESSLY DISCLAIMS ANY AND ALL OTHER WARRANTIES OF ANY KIND WHATSOEVER AS TO THE PRODUCT FURNISHED HEREUNDER, INCLUDING BUT NOT LIMITED TO EXPRESS OR IMPLIED WARRANTIES AS TO MERCHANTABILITY, FITNESS FOR PARTICULAR PURPOSES SOLD, DESCRIPTION OR QUALITY OF THE PRODUCT FURNISHED HEREUNDER.

6. Notice of Occurrence. This warranty shall be void if, upon the occurrence of any incident involving any product made by Manufacturer, and resulting in any personal injury or property damage, customer shall fail to notify Manufacturer within 24 hours of such occurrence or permit Manufacturer audit representatives to have immediate access to such product and to all records of and within the control of the customer and/or distributor relating to the product and the occurrence.

7. Filing of Warranty Claim. Upon notifying the Manufacturer of a failure, the Manufacturer or its representative will verbally authorize and confirm by letter the repairs to be made. Verbal authorization will require the following information:

- A) Owner's name and telephone number.
- B) The dealer's name from whom it was purchased.
- C) The Manufacturer's unit serial number.
- D) Telephone number of the party making the repairs.
- E) The part numbers needed to make repairs.
- F) Owner to be informed of C.O.D. on parts, 50% to assure return of defective parts.

At this time, the Manufacturer will ship as soon as practical the parts needed to make the repair. Included with the parts will be the invoice for the parts and a Request for Warranty form, with the Warranty Return Tags.

The vehicle owner/dealer will complete the Request for Warranty form and the Warranty Return Tag marked "Return with Shipping Notice". Both documents should be attached to the shipping notice and returned to the Manufacturer by mail. The parts to be returned shall be tagged with the Warranty Return Tag (more than one part pertaining to the same warranty claim shall be identified with the same warranty claim number - see number on Warranty Return Tag). All parts under this claim shall be returned to the Manufacturer pre-paid for warranty evaluation.

Upon receiving the part or parts for warranty evaluation, the part will be inspected and tested. After being inspected and tested, the decision to honor or deny warranty claim shall be based on analysis of all available information.

When warranty is honored, the Manufacturer will reimburse the owner/dealer in the amount agreed to by both parties.

If warranty is denied, the owner and distributor will be notified in writing of the decision and a full explanation for the decision will be given.

8. Manufacturer may at any time amend the foregoing form of warranty without prior notice.

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SAFETY (GENERAL)

The safe operation of your HDL is your responsibility. Read this manual and the truck manufacturer's manual and thoroughly understand them. You can be held legally responsible for injuries or damage resulting from unsafe operating practices.

The manufacturer's recommendations for operating this wrecker can help you avoid unsafe practices and their bad consequences. These recommendations are contained in this manual.

Jerr-Dan Corporation is not responsible for the results of any unsafe practice of wrecker operators or for the failure of the wrecker or its accessories resulting from improper maintenance.

The danger from a vehicle does not cease when it is disabled or wrecked. Recovering or towing vehicles can be dangerous too! The danger threatens wrecker operators and everyone else close by. As a wrecker operator you must develop an awareness of the hazards involved. You must use every safeguard within reason to prevent injuries.

For each step in operating your wrecker develop the habit of asking yourself if it is safe to proceed. Carefully check all rigging before starting a heavy lift or pull.

We cannot warn you of all the possible dangers you will encounter, but we will tell you of the most common hazards that we know about. We also recommend that you receive specialized and advanced training from a professional Towing and Recovery instructor before operating any recovery equipment.



WARNING

**ONLY AUTHORIZED AND TRAINED
PERSONNEL SHOULD BE PERMITTED TO
OPERATE THIS WRECKER UNSUPERVISED.**

IN ORDER TO BE SUFFICIENTLY TRAINED TO OPERATE THIS
WRECKER, A PERSON MUST HAVE, AS A MINIMUM, THE
FOLLOWING QUALIFICATIONS:

1. SATISFACTORILY PERFORMED ALL WRECKER
MANEUVERS AND FUNCTIONS UNDER THE
SUPERVISION OF FULLY TRAINED PERSONNEL.
2. HAVE COMPLETELY READ AND UNDERSTAND THE
OPERATIONS, MAINTENANCE, AND PARTS,
MANUAL(S) IN THEIR ENTIRETY FOR THIS
WRECKER.
3. HAVE COMPLETELY READ ALL WARNINGS AND
PRECAUTIONS ON THIS WRECKER.
4. HAVE HAD EXPLAINED TO THEM THE HAZARDS OF
MOVING THE PARTICULAR MATERIALS THEY WILL
BE LOADING OR UNLOADING.
5. UNDERSTAND THE HAZARDS OF OPERATING AT A
PARTICULAR JOB SITE, INCLUDING
 - ... THE IMPORTANCE OF STAYING WELL CLEAR
OF ALL ELECTRICAL LINES,
 - ... GIVING CONSIDERATION TO GROUND
CONDITIONS SUCH AS IRREGULAR
CONTOURS, ICE, WATER, OR MUD,
 - ... ANY OTHER CONDITIONS WHICH MAY
INTERFERE WITH ORDINARY CAREFUL
OPERATION OF THIS WRECKER.

**UNTRAINED OPERATORS SUBJECT
THEMSELVES AND OTHERS TO DEATH OR
SERIOUS INJURY AND MAY CAUSE SERIOUS
DAMAGE TO PROPERTY.**



DO NOT EXCEED THE FOLLOWING RATINGS:

HDL500/280

BOOM RATING:

SAE Rating - Boom elevated at 30° Angle¹

Retracted	50,000 lbs.
Extended	16,000 lbs.

WINCH RATING: (Standard Ramsey Worm Gear)²

Each Drum	25,000 lbs.
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WINCH RATING: (Optional Ramsey Planetary Gear)²

Each Drum	25,000 lbs.
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WIRE ROPE: (Standard Winch)

Working Limit Each Line	11,770 lbs.
Construction	6 x 37 EIP IWRC
Diameter	5/8 inch
Standard Length	200 Feet

WIRE ROPE: (Optional Winch)

Working Limit Each Line	11,770 lbs.
Construction	6 x 37 EIP IWRC
Diameter	5/8 inch
Standard Length	250 Feet

UNDER LIFT RATING:

Full Retracted	28,000 lbs. ³
Full Extended	14,000 lbs. ³
Tow Rating	80,000 lbs.

HEAVY DUTY TIRE LIFT RATING (OPTION):

Lifting Capacity (Each Arm)	7,000 lbs.
Lifting Capacity (Total)	14,000 lbs.
Towing Capacity (Maximum) ⁴	42,000 lbs.



5th WHEEL PLATE (OPTION):

Lifting Capacity 15,000 lbs.
Towing Capacity 25,000 lbs.

PINTLE HOOK BALL HITCH (OPTION):

2 in. Ball Hitch 10,000 lbs. (GTW)
Pintle Hook 16,000 lbs. (GTW)

GROSS TRAILER WEIGHT 3,000 Maximum Vertical Load

- ¹ SAE J2512: Surface Vehicle Recommended Practices - Towing Equipment Ratings and Practices
- ² SAE J706: Surface Vehicle Recommended Practices - Rating of Winches
- ³ Rating Using Axle And Spring Lift Tools
- ⁴ THE TOWING CAPACITY SHOULD NOT EXCEED THE GROSS COMBINED WEIGHT RATING (GCWR) OF THE TOWING VEHICLE OR 42,000 LBS. (GCW) GROSS COMBINED WEIGHT OF THE TOWED VEHICLE, WHICHEVER IS LOWER.

MAXIMUM LIFTING CAPACITY - THE MAXIMUM LOAD THAT CAN BE LIFTED.

GROSS COMBINED WEIGHT RATING (GCWR) - THE VALUE SPECIFIED BY THE VEHICLE MANUFACTURER AS GCW.

GROSS TRAILER WEIGHT (GTW) - THE MAXIMUM TRAILER WEIGHT WITH LOAD.

GROSS COMBINED WEIGHT (GCW) - ACTUAL WEIGHT OF THE ENTIRE VEHICLE AT THE GROUND WITH TRAILER OR TRAILERS, INCLUDING VEHICLE EQUIPMENT, DRIVER, PASSENGER, FUEL AND PAYLOAD (EVERYTHING THAT MOVES WITH THE VEHICLE).

NOTE

These ratings apply to the structural design of the HDL500/280 only and may be limited by the axle rating and gross vehicle weight rating of the truck chassis. CHECK TRUCK MANUAL FOR SPECIFIC GVW & AXLE RATINGS. ALSO REFERENCE THE CERTIFICATION DECAL AFFIXED TO DRIVER'S SIDE DOOR JAMB.



DO NOT EXCEED THE FOLLOWING RATINGS:

HDL600/350

BOOM RATING:

SAE Rating - Boom elevated at 30° Angle¹

Retracted	60,000 lbs.
Extended	22,000 lbs.

WINCH RATING: (Standard Ramsey Worm Gear)²

Each Drum	25,000 lbs.
-----------------	-------------

WINCH RATING: (Optional dp Planetary Gear)²

Each Drum	35,000 lbs.
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WIRE ROPE: (Standard Winch)

Working Limit Each Line	11,770 lbs.
Construction	6 x 37 EIP IWRC
Diameter	5/8 inch
Standard Length	200 Feet

WIRE ROPE: (Optional Winch)

Working Limit Each Line	11,770 lbs.
Construction	6 x 37 EIP IWRC
Diameter	5/8 inch
Standard Length	250 Feet

WIRE ROPE: (Optional Winch)

Working Limit Each Line	16,800 lbs.
Construction	6 x 37 EIP IWRC
Diameter	3/4 inch
Standard Length	200 Feet

UNDER LIFT RATING:

Full Retracted	35,000 lbs. ³
Full Extended	16,000 lbs. ³
Tow Rating	80,000 lbs.



HEAVY DUTY TIRE LIFT RATING (OPTION):

Lifting Capacity (Each Arm) 7,000 lbs.
Lifting Capacity (Total) 14,000 lbs.
Towing Capacity (Maximum)⁴ 42,000 lbs.

5th WHEEL PLATE (OPTION):

Lifting Capacity 15,000 lbs.
Towing Capacity 25,000 lbs.

PINTLE HOOK BALL HITCH (OPTION):

2 in. Ball Hitch 10,000 lbs. (GTW)
Pintle Hook 16,000 lbs. (GTW)

GROSS TRAILER WEIGHT 3,000 Maximum Vertical Load ®

- ¹ SAE J2512: Surface Vehicle Recommended Practices - Towing Equipment Ratings and Practices
- ² SAE J706: Surface Vehicle Recommended Practices - Rating of Winches
- ³ Rating Using Axle And Spring Lift Tools
- ⁴ THE TOWING CAPACITY SHOULD NOT EXCEED THE GROSS COMBINED WEIGHT RATING (GCWR) OF THE TOWING VEHICLE OR 42,000 LBS. (GCW) GROSS COMBINED WEIGHT OF THE TOWED VEHICLE, WHICHEVER IS LOWER.

MAXIMUM LIFTING CAPACITY - THE MAXIMUM LOAD THAT CAN BE LIFTED.

GROSS COMBINED WEIGHT RATING (GCWR) - THE VALUE SPECIFIED BY THE VEHICLE MANUFACTURER AS GCW.

GROSS TRAILER WEIGHT (GTW) - THE MAXIMUM TRAILER WEIGHT WITH LOAD.

GROSS COMBINED WEIGHT (GCW) - ACTUAL WEIGHT OF THE ENTIRE VEHICLE AT THE GROUND WITH TRAILER OR TRAILERS, INCLUDING VEHICLE EQUIPMENT, DRIVER, PASSENGER, FUEL AND PAYLOAD (EVERYTHING THAT MOVES WITH THE VEHICLE).

NOTE

These ratings apply to the structural design of the HDL600/350 only and may be limited by the axle rating and gross vehicle weight rating of the truck chassis. CHECK TRUCK MANUAL FOR SPECIFIC GVW & AXLE RATINGS. ALSO REFERENCE THE CERTIFICATION DECAL AFFIXED TO DRIVER'S SIDE DOOR JAMB.



DO NOT EXCEED THE FOLLOWING RATINGS:

HDL700/350

BOOM RATING:

SAE Rating - Boom elevated at 30° Angle¹

Retracted	70,000 lbs.
Extended	22,000 lbs.

WINCH RATING: (Standard Ramsey Worm Gear)²

Each Drum	25,000 lbs.
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WINCH RATING: (Optional dp Planetary Gear)²

Each Drum	35,000 lbs.
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WIRE ROPE: (Standard Winch)

Working Limit Each Line	11,770 lbs.
Construction	6 x 37 EIP IWRC
Diameter	5/8 inch
Standard Length	200 Feet

WIRE ROPE: (Optional Winch)

Working Limit Each Line	11,770 lbs.
Construction	6 x 37 EIP IWRC
Diameter	5/8 inch
Standard Length	250 Feet

WIRE ROPE: (Optional Winch)

Working Limit Each Line	16,800 lbs.
Construction	6 x 37 EIP IWRC
Diameter	3/4 inch
Standard Length	200 Feet

UNDER LIFT RATING:

Full Retracted	35,000 lbs. ³
Full Extended	16,000 lbs. ³
Tow Rating	80,000 lbs.



HEAVY DUTY TIRE LIFT RATING (OPTION):

Lifting Capacity (Each Arm) 7,000 lbs.
Lifting Capacity (Total) 14,000 lbs.
Towing Capacity (Maximum)⁴ 42,000 lbs.

5th WHEEL PLATE (OPTION):

Lifting Capacity 15,000 lbs.
Towing Capacity 25,000 lbs.

PINTLE HOOK BALL HITCH (OPTION):

2 in. Ball Hitch 10,000 lbs. (GTW)
Pintle Hook 16,000 lbs. (GTW)

GROSS TRAILER WEIGHT 3,000 Maximum Vertical Load ®

- ¹ SAE J2512: Surface Vehicle Recommended Practices - Towing Equipment Ratings and Practices
- ² SAE J706: Surface Vehicle Recommended Practices - Rating of Winches
- ³ Rating Using Axle And Spring Lift Tools
- ⁴ THE TOWING CAPACITY SHOULD NOT EXCEED THE GROSS COMBINED WEIGHT RATING (GCWR) OF THE TOWING VEHICLE OR 42,000 LBS. (GCW) GROSS COMBINED WEIGHT OF THE TOWED VEHICLE, WHICHEVER IS LOWER.

MAXIMUM LIFTING CAPACITY - THE MAXIMUM LOAD THAT CAN BE LIFTED.

GROSS COMBINED WEIGHT RATING (GCWR) - THE VALUE SPECIFIED BY THE VEHICLE MANUFACTURER AS GCW.

GROSS TRAILER WEIGHT (GTW) - THE MAXIMUM TRAILER WEIGHT WITH LOAD.

GROSS COMBINED WEIGHT (GCW) - ACTUAL WEIGHT OF THE ENTIRE VEHICLE AT THE GROUND WITH TRAILER OR TRAILERS, INCLUDING VEHICLE EQUIPMENT, DRIVER, PASSENGER, FUEL AND PAYLOAD (EVERYTHING THAT MOVES WITH THE VEHICLE).

NOTE

These ratings apply to the structural design of the HDL700/350 only and may be limited by the axle rating and gross vehicle weight rating of the truck chassis. CHECK TRUCK MANUAL FOR SPECIFIC GVW & AXLE RATINGS. ALSO REFERENCE THE CERTIFICATION DECAL AFFIXED TO DRIVER'S SIDE DOOR JAMB.



DO NOT EXCEED THE FOLLOWING RATINGS:

HDUL530

WINCH RATING: (Optional dp Planetary Gear) ¹
Each Drum 35,000 lbs.

WIRE ROPE: (Optional 35,000 lbs. dp Planetary Winch)
Working Limit Each Line 11,770 lbs.
Construction 6 x 37 EIP IWRC
Diameter 5/8 inch
Standard Length 250 Feet

WINCH RATING: (Optional dp Planetary Gear) ¹
Each Drum 50,000 lbs.

WIRE ROPE: (Optional 50,000 lbs. dp Planetary Winch)
Working Limit Each Line 16,800 lbs.
Construction 6 x 37 EIP IWRC
Diameter 3/4 inch
Standard Length 220 Feet

UNDER LIFT RATING:
Full Retracted 53,000 lbs.²
Full Extended 17,000 lbs.²
Tow Rating 80,000 lbs.

HEAVY DUTY TIRE LIFT RATING (OPTION):
Lifting Capacity (Each Arm) 7,000 lbs.
Lifting Capacity (Total) 14,000 lbs.
Towing Capacity (Maximum)³ 42,000 lbs.

5th WHEEL PLATE (OPTION):
Lifting Capacity 15,000 lbs.
Towing Capacity 25,000 lbs.



PINTLE HOOK BALL HITCH (OPTION):

2 in. Ball Hitch 10,000 lbs. (GTW)
Pintle Hook 16,000 lbs. (GTW)

GROSS TRAILER WEIGHT 3,000 Maximum Vertical Load

- ¹ SAE J2512: Surface Vehicle Recommended Practices - Towing Equipment Ratings and Practices
- ² Rating Using Axle And Spring Lift Tools
- ³ THE TOWING CAPACITY SHOULD NOT EXCEED THE GROSS COMBINED WEIGHT RATING (GCWR) OF THE TOWING VEHICLE OR 42,000 LBS. (GCW) GROSS COMBINED WEIGHT OF THE TOWED VEHICLE, WHICHEVER IS LOWER.

MAXIMUM LIFTING CAPACITY - THE MAXIMUM LOAD THAT CAN BE LIFTED.

GROSS COMBINED WEIGHT RATING (GCWR) - THE VALUE SPECIFIED BY THE VEHICLE MANUFACTURER AS GCW.

GROSS TRAILER WEIGHT (GTW) - THE MAXIMUM TRAILER WEIGHT WITH LOAD.

GROSS COMBINED WEIGHT (GCW) - ACTUAL WEIGHT OF THE ENTIRE VEHICLE AT THE GROUND WITH TRAILER OR TRAILERS, INCLUDING VEHICLE EQUIPMENT, DRIVER, PASSENGER, FUEL AND PAYLOAD (EVERYTHING THAT MOVES WITH THE VEHICLE).

NOTE

These ratings apply to the structural design of the HDUL530 only and may be limited by the axle rating and gross vehicle weight rating of the truck chassis. CHECK TRUCK MANUAL FOR SPECIFIC GVW & AXLE RATINGS. ALSO REFERENCE THE CERTIFICATION DECAL AFFIXED TO DRIVER'S SIDE DOOR JAMB.



DO NOT EXCEED THE FOLLOWING RATINGS:

HDUL565

WINCH RATING: (Optional dp Planetary Gear)¹
Each Drum 35,000 lbs.

WIRE ROPE: (Optional 35,000 lbs. dp Planetary Winch)
Working Limit Each Line 11,770 lbs.
Construction 6 x 37 EIP IWRC
Diameter 5/8 inch
Standard Length 250 Feet

WINCH RATING: (Optional dp Planetary Gear)¹
Each Drum 50,000 lbs.

WIRE ROPE: (Optional 50,000 lbs. dp Planetary Winch)
Working Limit Each Line 16,800 lbs.
Construction 6 x 37 EIP IWRC
Diameter 3/4 inch
Standard Length 220 Feet

UNDER LIFT RATING:
Full Retracted 56,500 lbs.²
Full Extended 17,600 lbs.²
Tow Rating 80,000 lbs.

HEAVY DUTY TIRE LIFT RATING (OPTION):
Lifting Capacity (Each Arm) 7,000 lbs.
Lifting Capacity (Total) 14,000 lbs.
Towing Capacity (Maximum)³ 42,000 lbs.

5th WHEEL PLATE (OPTION):
Lifting Capacity 15,000 lbs.
Towing Capacity 25,000 lbs.



PINTLE HOOK BALL HITCH (OPTION):

2 in. Ball Hitch 10,000 lbs. (GTW)
Pintle Hook 16,000 lbs. (GTW)

GROSS TRAILER WEIGHT 3,000 Maximum Vertical Load

- ¹ SAE J2512: Surface Vehicle Recommended Practices - Towing Equipment Ratings and Practices
- ² Rating Using Axle And Spring Lift Tools
- ³ THE TOWING CAPACITY SHOULD NOT EXCEED THE GROSS COMBINED WEIGHT RATING (GCWR) OF THE TOWING VEHICLE OR 42,000 LBS. (GCW) GROSS COMBINED WEIGHT OF THE TOWED VEHICLE, WHICHEVER IS LOWER.

MAXIMUM LIFTING CAPACITY - THE MAXIMUM LOAD THAT CAN BE LIFTED.

GROSS COMBINED WEIGHT RATING (GCWR) - THE VALUE SPECIFIED BY THE VEHICLE MANUFACTURER AS GCW.

GROSS TRAILER WEIGHT (GTW) - THE MAXIMUM TRAILER WEIGHT WITH LOAD.

GROSS COMBINED WEIGHT (GCW) - ACTUAL WEIGHT OF THE ENTIRE VEHICLE AT THE GROUND WITH TRAILER OR TRAILERS, INCLUDING VEHICLE EQUIPMENT, DRIVER, PASSENGER, FUEL AND PAYLOAD (EVERYTHING THAT MOVES WITH THE VEHICLE).

NOTE

These ratings apply to the structural design of the HDUL565 only and may be limited by the axle rating and gross vehicle weight rating of the truck chassis. CHECK TRUCK MANUAL FOR SPECIFIC GVW & AXLE RATINGS. ALSO REFERENCE THE CERTIFICATION DECAL AFFIXED TO DRIVER'S SIDE DOOR JAMB.



DO NOT EXCEED THE FOLLOWING RATINGS:

HDL1100/530

BOOM RATING:

SAE Rating - Boom elevated at 30° Angle¹

Retracted 110,000 lbs.
Extended 44,000 lbs.

WINCH RATING: (Standard dp Planetary Gear)²

Each Drum 50,000 lbs.

WIRE ROPE: (Standard Winch)

Working Limit Each Line 16,800 lbs.
Construction 6 x 37 EIP IWRC
Diameter 3/4 inch
Standard Length 250 Feet

UNDER LIFT RATING: (Standard)

Full Retracted 53,000 lbs.³
Full Extended 17,000 lbs.³
Tow Rating 80,000 lbs.

HEAVY DUTY TIRE LIFT RATING (OPTION):

Lifting Capacity (Each Arm) 7,000 lbs.
Lifting Capacity (Total) 14,000 lbs.
Towing Capacity (Maximum)⁴ 42,000 lbs.

5th WHEEL PLATE (OPTION):

Lifting Capacity 15,000 lbs.
Towing Capacity 25,000 lbs.

PINTLE HOOK BALL HITCH (OPTION):

2 in. Ball Hitch 10,000 lbs. (GTW)
Pintle Hook 16,000 lbs. (GTW)

GROSS TRAILER WEIGHT 3,000 Maximum Vertical Load



- ¹ SAE J2512: Surface Vehicle Recommended Practices - Towing Equipment Ratings and Practices
- ² SAE J706: Surface Vehicle Recommended Practices - Rating of Winches
- ³ Rating Using Axle And Spring Lift Tools
- ⁴ THE TOWING CAPACITY SHOULD NOT EXCEED THE GROSS COMBINED WEIGHT RATING (GCWR) OF THE TOWING VEHICLE OR 42,000 LBS. (GCW) GROSS COMBINED WEIGHT OF THE TOWED VEHICLE, WHICHEVER IS LOWER.

MAXIMUM LIFTING CAPACITY - THE MAXIMUM LOAD THAT CAN BE LIFTED.

GROSS COMBINED WEIGHT RATING (GCWR) - THE VALUE SPECIFIED BY THE VEHICLE MANUFACTURER AS GCW.

GROSS TRAILER WEIGHT (GTW) - THE MAXIMUM TRAILER WEIGHT WITH LOAD.

GROSS COMBINED WEIGHT (GCW) - ACTUAL WEIGHT OF THE ENTIRE VEHICLE AT THE GROUND WITH TRAILER OR TRAILERS, INCLUDING VEHICLE EQUIPMENT, DRIVER, PASSENGER, FUEL AND PAYLOAD (EVERYTHING THAT MOVES WITH THE VEHICLE).

NOTE

These ratings apply to the structural design of the HDL1100/530 only and may be limited by the axle rating and gross vehicle weight rating of the truck chassis. CHECK TRUCK MANUAL FOR SPECIFIC GVW & AXLE RATINGS. ALSO REFERENCE THE CERTIFICATION DECAL AFFIXED TO DRIVER'S SIDE DOOR JAMB.



DO NOT EXCEED THE FOLLOWING RATINGS:

HDL1100/565

BOOM RATING:

SAE Rating - Boom elevated at 30° Angle¹

Retracted 110,000 lbs.
Extended 44,000 lbs.

WINCH RATING: (Standard dp Planetary Gear)²

Each Drum 50,000 lbs.

WIRE ROPE: (Standard Winch)

Working Limit Each Line 16,800 lbs.
Construction 6 x 37 EIP IWRC
Diameter 3/4 inch
Standard Length 250 Feet

UNDER LIFT RATING:

Full Retracted 56,500 lbs.³
Full Extended 17,600 lbs.³
Tow Rating 80,000 lbs.

HEAVY DUTY TIRE LIFT RATING (OPTION):

Lifting Capacity (Each Arm) 7,000 lbs.
Lifting Capacity (Total) 14,000 lbs.
Towing Capacity (Maximum)⁴ 42,000 lbs.

5th WHEEL PLATE (OPTION):

Lifting Capacity 15,000 lbs.
Towing Capacity 25,000 lbs.

PINTLE HOOK BALL HITCH (OPTION):

2 in. Ball Hitch 10,000 lbs. (GTW)
Pintle Hook 16,000 lbs. (GTW)

GROSS TRAILER WEIGHT 3,000 Maximum Vertical Load



- ¹ SAE J2512: Surface Vehicle Recommended Practices - Towing Equipment Ratings and Practices
- ² SAE J706: Surface Vehicle Recommended Practices - Rating of Winches
- ³ Rating Using Axle And Spring Lift Tools
- ⁴ THE TOWING CAPACITY SHOULD NOT EXCEED THE GROSS COMBINED WEIGHT RATING (GCWR) OF THE TOWING VEHICLE OR 42,000 LBS. (GCW) GROSS COMBINED WEIGHT OF THE TOWED VEHICLE, WHICHEVER IS LOWER.

MAXIMUM LIFTING CAPACITY - THE MAXIMUM LOAD THAT CAN BE LIFTED.

GROSS COMBINED WEIGHT RATING (GCWR) - THE VALUE SPECIFIED BY THE VEHICLE MANUFACTURER AS GCW.

GROSS TRAILER WEIGHT (GTW) - THE MAXIMUM TRAILER WEIGHT WITH LOAD.

GROSS COMBINED WEIGHT (GCW) - ACTUAL WEIGHT OF THE ENTIRE VEHICLE AT THE GROUND WITH TRAILER OR TRAILERS, INCLUDING VEHICLE EQUIPMENT, DRIVER, PASSENGER, FUEL AND PAYLOAD (EVERYTHING THAT MOVES WITH THE VEHICLE).

NOTE

These ratings apply to the structural design of the HDL1100/565 only and may be limited by the axle rating and gross vehicle weight rating of the truck chassis. CHECK TRUCK MANUAL FOR SPECIFIC GVW & AXLE RATINGS. ALSO REFERENCE THE CERTIFICATION DECAL AFFIXED TO DRIVER'S SIDE DOOR JAMB.



MANUFACTURED BY: _____

DATE OF MANUFACTURE _____ mo. _____ yr.

INCOMPLETE VEHICLE MANUFACTURED BY: _____

DATE INC. VEH. MFD. _____ mo. _____ yr.

GVWR _____

GAWR FRONT _____ with
_____ tires,
_____ rims, @ _____ psi cold _____

GAWR INTERMEDIATE (1) _____ with
_____ tires,
_____ rims, @ _____ psi cold _____

GAWR INTERMEDIATE (2) _____ with
_____ tires,
_____ rims, @ _____ psi cold _____

GAWR REAR _____ with
_____ tires,
_____ rims, @ _____ psi cold _____

Conformity of the chassis-cab to Federal Motor Vehicle Safety Standards, which have been previously fully certified by the incomplete vehicle manufacturer or intermediate vehicle manufacture, has not been affected by final-stage manufacture. The vehicle has been completed in accordance with the prior manufacturer's instructions, where applicable. This vehicle conforms to all other applicable Federal Motor Vehicle Safety Standards in effect in:

_____ mo. _____ yr.

VEHICLE IDENTIFICATION NUMBER: _____

VEHICLE TYPE: _____

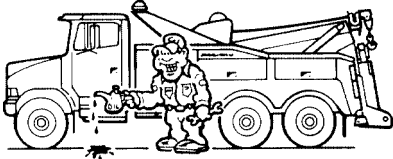
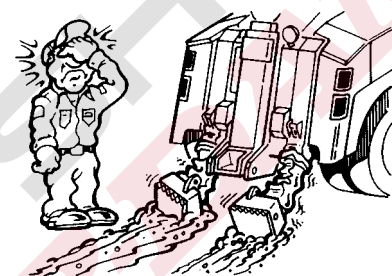
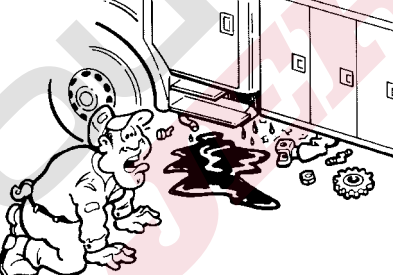
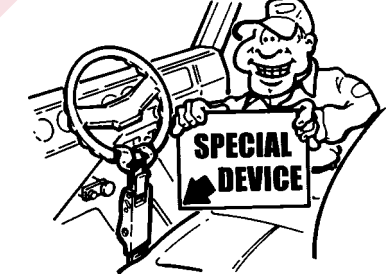
Certification Decal

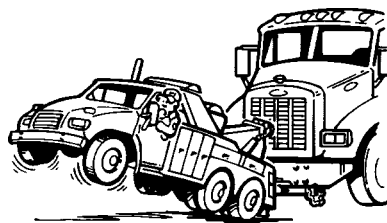


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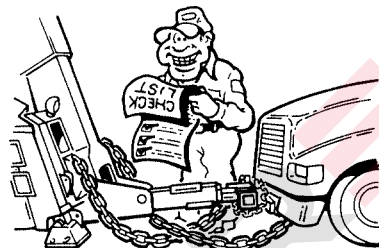
Rev. _____

Date _____

 • Don't use a recovery vehicle that has not been properly maintained. Pay special attention to the mounting bolts, and lubrication of moving parts.	 • Don't lower the rear hydraulic stabilizers unless the area under them is clear. Pay particular attention to keeping this area clear.
 • Don't use rear spades on paved surfaces unless you are willing to accept responsibility for damage to such surfaces.	 • Don't move the recovery vehicle while rear hydraulic stabilizers are extended. Damage is very likely to occur.
 • Don't operate the wrecker's engine faster than recommended. Excessive speeds can damage PTO, hydraulic pumps, and winches.	 • Don't rely on anti-theft steering locks to secure the steering wheel. Use a special steering wheel clamping device designed for this purpose.



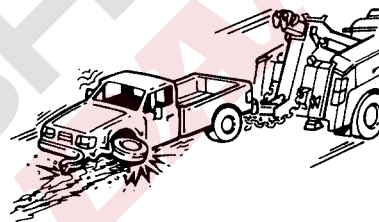
- Don't tow a vehicle that reduces the weight on the front wheels of the wrecker more than 50 percent.



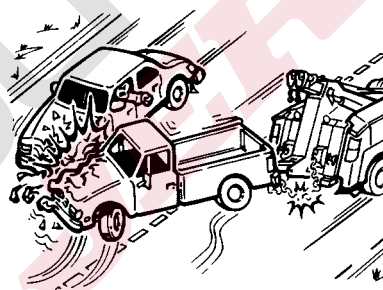
- After you have hooked up a vehicle for towing, don't start the tow until you have double checked the hook-up, installed safety chains, and released the parking brakes of the towed vehicle.



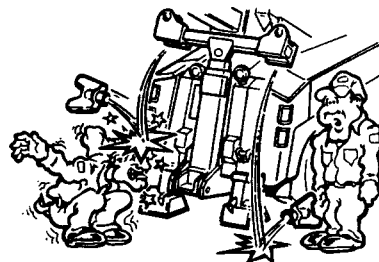
- Don't travel with the PTO engaged. Damage to the hydraulic components will occur. Engage it only while operating the controls.



- Don't tow a vehicle on its front wheels if they are damaged.



- Don't tow a vehicle on its front wheels unless the steering wheel is secured with the front wheels straight ahead.

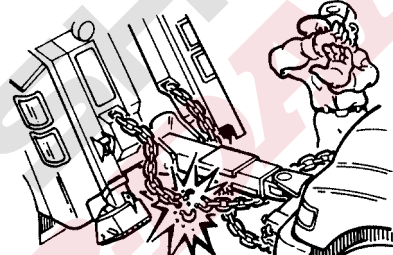


- Never fold the boom up into storage position without removing the towing adapters.

SAFETY CHAINS MUST BE USED WHEN TOWING AND TRANSPORTING

Safety chains are provided for use with your new Jerr-Dan Recovery Vehicle. Periodically inspect all chains for any signs of fatigue or damage. Don't overlook the hooks; be sure they have not been bent or deformed. If chain or hook damage is noted, they must be replaced before being used. **Do not use safety chains for recovery operations.**

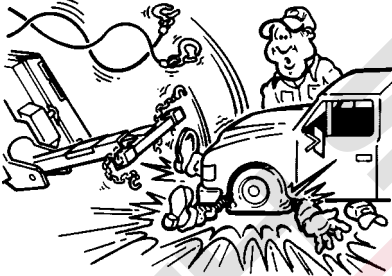
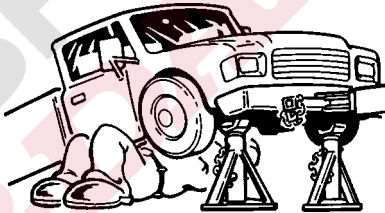
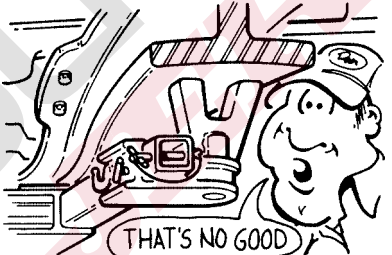
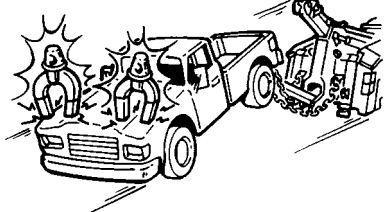
Many states require that the towed vehicle be secured to the wrecker body with safety chains. Check your local regulations and use your safety chains. Safety chains are provided for use with your new JERR-DAN.

 • Never attach the chain hooks in such a way as to damage brake lines or other functional parts.	 • Check that the chain does not become over tensioned when raising the towed vehicle to the towing position or during the towing operation.
 • Keep in mind that driving over bumps and hollows and around corners will tend to tighten or loosen the chains.	 • Always use two safety chains when towing all vehicles, regardless of distance.

LIFT SAFETY

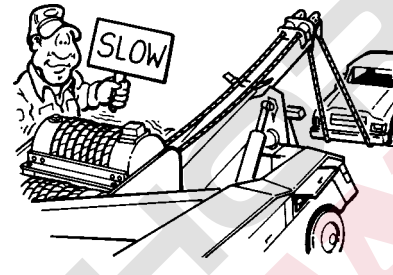
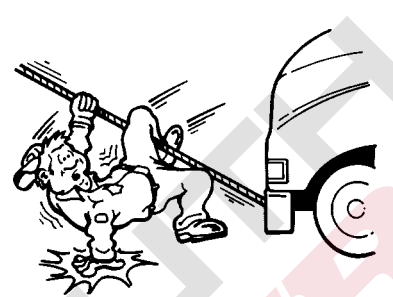
Careful consideration of the immediate surrounding conditions such as the weather, terrain, type or condition of the vehicle to be recovered and the condition and experience of the operator is foremost to the safety and success of the operation.

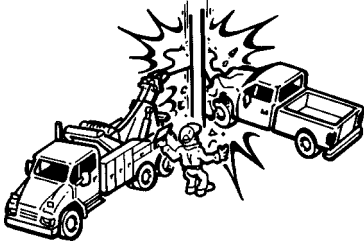
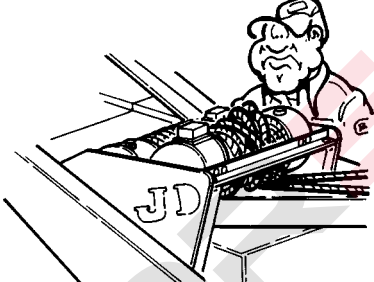
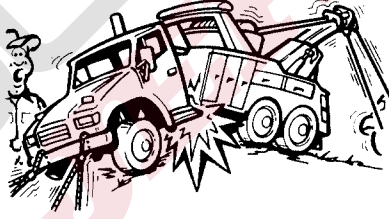
Your is unique. It not only can make lifts from level surfaces, our boom tilt feature allows pickup of vehicles that are parked on both inclines and declines.

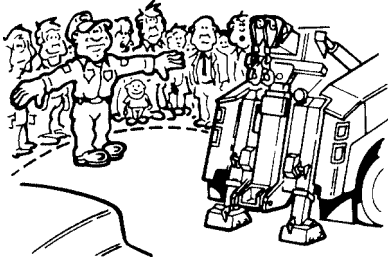
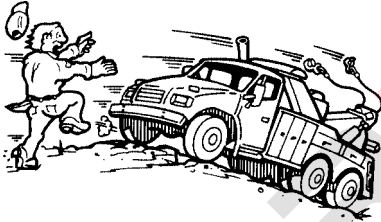
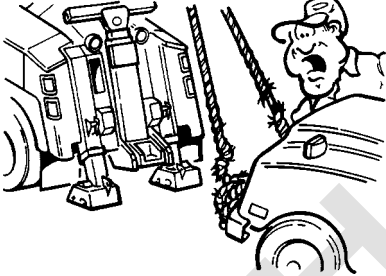
 • You should never make a lift or movement while close to or under the vehicle being lifted!	 • Always use jack stands to support the vehicle if it is necessary to work under it.
 • Don't use towing forks that are not of proper size for the pickup requirements.	 • Magnetic towing lights are required in many areas and are always recommended for safe tows.

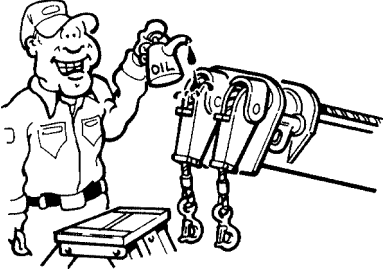
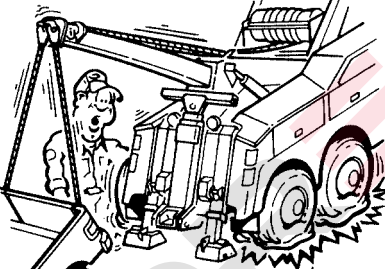
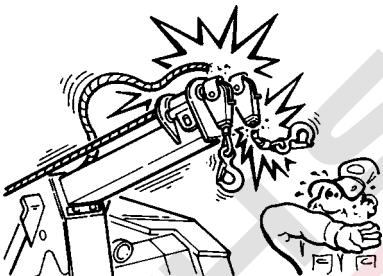
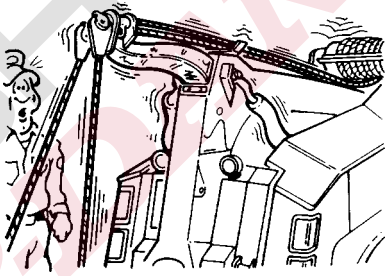
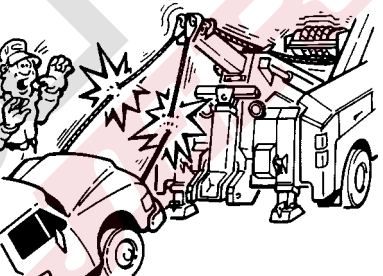
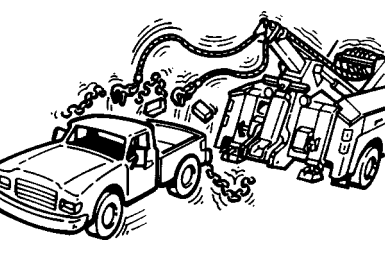
BOOM SAFETY

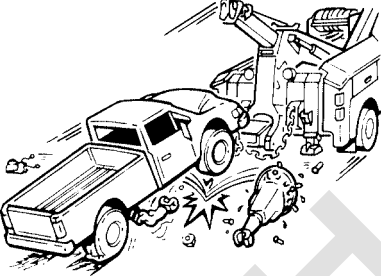
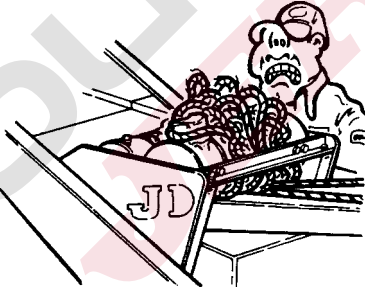
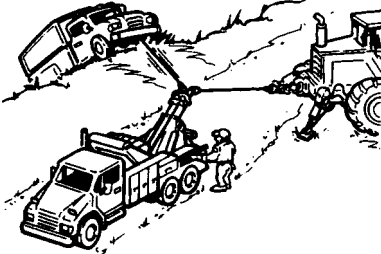
Your is equipped with a wrecker boom and the following safety procedures must be observed:

 • Jog the winch control lever to be sure of complete engagement of the clutch gears before making a lift or pull.	 • Take up the wire rope cable slowly and be sure the hook is securely set.
 • Never stand on or straddle a working wire rope.	 • Be sure of your lift or pull and do not exceed the working limit of the wire rope or hook. Rig to keep the estimated amount of pull well within equipment ratings. Use wire rope breaking strength ratings only for selecting replacement wire rope.

 • Never lift or pull over or around a sharp obstacle.	 • Never allow the wire rope to cross wrap (criss-cross) on the winch drum. Crushing of the wire rope can cause premature wire rope failure.
 • Never completely unwind wire rope from a winch while loaded. Always be sure that a minimum of five (5) wraps of wire rope are on the drum at all times.	 • Never make a lift or pull with the cable attached to light gauge or sheet metal parts; use the frame or major structural members.
 • Never tie down the front end of your wrecker for recovery work of heavy lifts. You will likely damage the truck frame if you do.	 • Don't disengage the winch drum clutch while the wire rope is loaded.

 • Don't permit bystanders in the area while performing recovery work.	 • Be sure all brakes and locks are properly set on the recovery vehicle.
 • Never wrap the wire rope around frames or cross members. Use chains and hook the wire rope to the chains.	 • Never under any circumstances use the winch or boom to lift people!
 • Don't use damaged wire ropes on your wrecker. Become familiar with the various types of wire rope damage and periodically inspect the entire wire rope for wear and corrosion. Never use wire rope menders. Replace with similar rated wire rope and hooks.	 • Death or Serious Injury can occur when working near power lines. Be sure that exact locations of overhead power lines, and other obstructions or hazards are known.

 • Lubricate and maintain both the wire rope and winch on regular intervals. (See maintenance charts.)	 • Avoid using the boom raise or boom up control to lift a load. This causes undue stress and weight loading on the rear axle. Use the winch to lift the load.
 • Don't continue to wind in wire rope after the hook is against the boom end.	 • Care should be taken when retracting the boom extension while under load.
 • All boom placement functions should be made with the winch wire ropes set in "free spool" to avoid over tensioning or breaking the winch wire ropes.	 • After rigging wire ropes, don't begin pulling without rechecking connections. Make sure that all wire ropes and snatch blocks are securely attached and cannot accidentally pull loose.

 • Don't expect your wrecker to tow loads equal to the wrecker ratings. Wrecker ratings apply to loads imposed during recovery with the wrecker properly stabilized.	 • Don't exceed ratings of booms, wire ropes, snatch blocks, or winches. Stay within nameplate ratings. Note that boom ratings decrease significantly as the boom is extended.
 • Don't tow a vehicle on its drive wheels unless steps have been taken to protect its transmission and differential. Follow the recommendations of the vehicle manufacturer. As an alternative, use a towing dolly.	 • Don't drive with the wrecker boom extended.
 • To avoid birdnesting and premature failure of the wire rope, always keep tension on the wire rope when winding or unwinding.	 • When making a pull to the side, always apply an equal load in the opposite direction of the pull to stabilize the wrecker.

SAFETY WARNING DECALS

As an extra safety precaution, you have specific safety and warning decals affixed to prominent locations. These decals must not be obliterated, removed or painted over. They are there to remind and protect the operator.

SERIAL NO. _____
MODEL NO. _____

UNDER LIFT
UNDER LIFT RATINGS (MAXIMUM)
EXTENDED _____ LBS.
RETRACTED _____ LBS.

WRECKER BOOM
BOOM RATINGS (MAXIMUM)
TOW RATING - BOOM AT 30° ANGLE
EXTENDED _____ LBS.
RETRACTED _____ LBS.
TOW RATING - BOOM AT 90° ANGLE
EXTENDED _____ LBS.
RETRACTED _____ LBS.

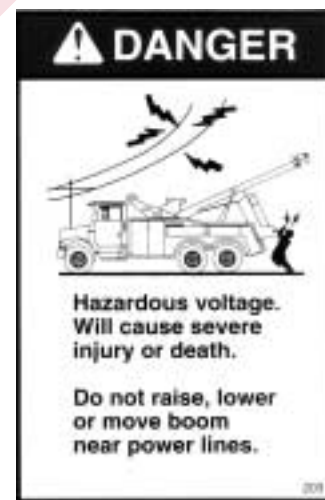
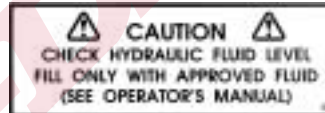
WINCH RATING
EACH DRUM _____ LBS.

WIRE ROPE
SIZE _____ FT.
TYPE _____
WORKING 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 CAPACITY OF
AVERAGE MODEL. ACTUAL TOWING AND RECOVERY CAPACITY
MAY BE LIMITED BY THE CAPACITY OF THE CHAINS
AND EQUIPMENT SELECTED.

MANUFACTURED BY:
 JERR-DAN CORPORATION
1080 HYKES ROAD
GREENCASTLE, PA. 17325
1-800-820-9080



OPERATOR'S PRE-TRANSPORT CHECKLIST



REVIEW THIS CHECKLIST BEFORE EACH TOW. FAILURE TO FOLLOW CHECKLIST COULD CREATE A DANGEROUS CONDITION FOR YOU, OTHER MOTORISTS AND PEDESTRIANS, AND MIGHT RESULT IN SERIOUS INJURY OR DEATH.

VEHICLE ON UNDER LIFT - CHECKLIST:

- HEED ALL WARNINGS ON EQUIPMENT AND CONTROLS.
- DO YOU HAVE TURNING CLEARANCE FOR TOWED VEHICLE?
- ARE BOTH SAFETY CHAINS ATTACHED FROM TOWING TRUCK TO TOWED VEHICLE?
- IS THERE SUFFICIENT GROUND CLEARANCE FOR TOWED VEHICLE?
- IS THE UNDER LIFT RETRACTED AS CLOSE AS POSSIBLE TO OBTAIN MAXIMUM WEIGHT DISTRIBUTION?
- ARE CHAINS SECURED FIRMLY AROUND THE AXLE OR THE FRAME OF THE TOWED VEHICLE?
- ARE AUXILIARY TOWING LIGHTS ATTACHED TO TOWED VEHICLE?
- DO NOT OVERLOAD. STOP VEHICLE AT ONCE AND REARRANGE LOAD IF YOU NOTICE FRONT END OF TRUCK FEELS LIGHT OR BOUNCES EXCESSIVELY OR IF STEERING FEELS EXCESSIVELY LIGHT. LOSS OF VEHICLE CONTROL CAN RESULT FROM AN OVERLOAD AND CAN CAUSE A SERIOUS ACCIDENT.

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ONLY AUTHORIZED AND TRAINED PERSONNEL SHOULD BE PERMITTED TO OPERATE THIS WRECKER UNSUPERVISED.

IN ORDER TO BE SUFFICIENTLY TRAINED TO OPERATE THIS WRECKER, A PERSON MUST HAVE, AS A MINIMUM, THE FOLLOWING QUALIFICATIONS:

1. SATISFACTORILY PERFORMED ALL WRECKER MANEUVERS AND FUNCTIONS UNDER THE SUPERVISION OF FULLY TRAINED PERSONNEL.
2. HAVE COMPLETELY READ AND UNDERSTAND THE OPERATIONS, MAINTENANCE, AND PARTS MANUAL(S) IN THEIR ENTIRETY FOR THIS WRECKER.
3. HAVE COMPLETELY READ ALL WARNINGS AND PRECAUTIONS ON THIS WRECKER.
4. HAVE HAD EXPLAINED TO THEM THE HAZARDS OF MOVING THE PARTICULAR MATERIALS THEY WILL BE LOADING OR UNLOADING.
5. UNDERSTAND THE HAZARDS OF OPERATING AT A PARTICULAR JOB SITE, INCLUDING:
 - ...THE IMPORTANCE OF STAYING WELL CLEAR OF ALL ELECTRICAL LINES.
 - ...GIVING CONSIDERATION TO GROUND CONDITIONS SUCH AS IRREGULAR CONTOURS, ICE, WATER, OR MUD.
 - ...ANY OTHER CONDITIONS WHICH MAY INTERFERE WITH ORDINARY CAREFUL OPERATION OF THIS WRECKER.

UNTRAINED OPERATORS SUBJECT THEMSELVES AND OTHERS TO DEATH OR SERIOUS INJURY AND MAY CAUSE SERIOUS DAMAGE TO PROPERTY.

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WARNING



A MINIMUM OF 5 WRAPS OF CABLE MUST BE LEFT ON DRUM TO ACHIEVE RATED LOAD.
NOT TO BE USED IN THE MOVING OR LIFTING OF PERSONS.

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TOWED VEHICLE MUST BE SECURED TO CROSSBAR WHEN USING FRAME FORKS AND SPRING HANGERS

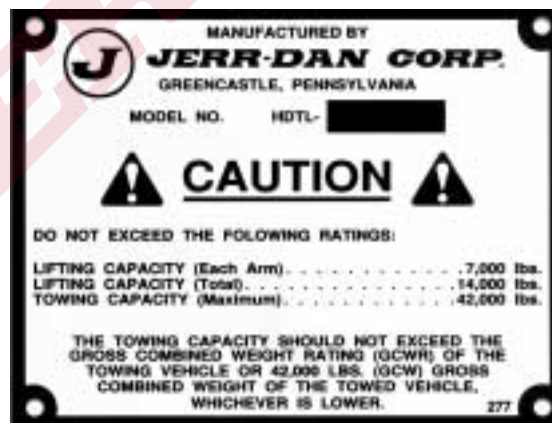
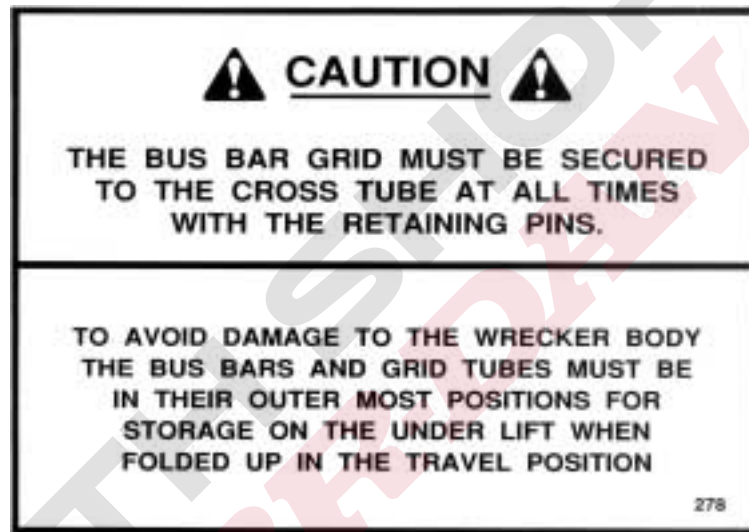
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Rev. _____

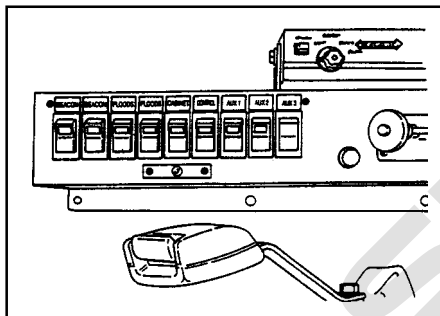
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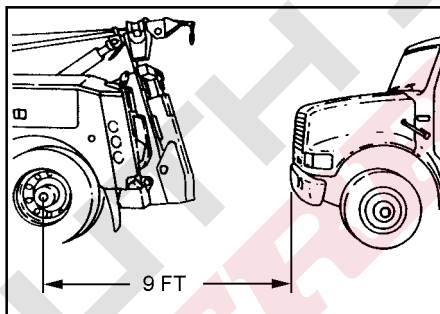
UNDER LIFT OPERATION

Your HDL is one of the most useful and efficient towing and recovery vehicles available. It is hydraulically powered and careful consideration should be given to the selection of commands. You can afford to work smart, the vehicle will do most of the work for you.

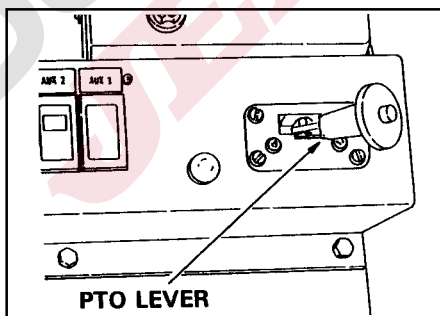
Follow these simple steps:



1. Turn on the safety and work lights. (Switches located on panel on the floor beside the driver's seat.) If the remote hand controller is going to be used the CONTROL switch must be turned "ON".



2. Using the rear axle as a guide, position the recovery vehicle within nine (9) ft. of the subject casualty vehicle and as close to the direction of the pull as possible.



3. Place the recovery vehicle's transmission gear selector into neutral and set the parking brakes.
4. Engage the power take-off (PTO) by moving the control lever. See PTO operator's manual. **NEVER TRAVEL WITH THE POWER TAKE-OFF CONTROL ENGAGED.** This could result in damage to the PTO unit and the recovery vehicle's transmission.

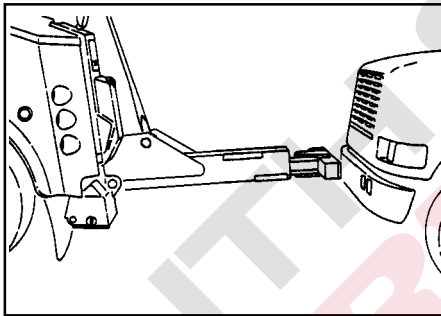
5. Adjust the electronic or manual throttle control to elevate the engine speed to approximately 1000-1200 R.P.M. of P.T.O. output shaft speed for optimum performance.



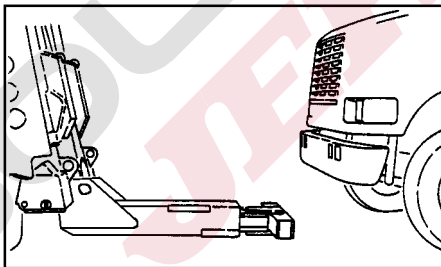
CAUTION:

Never exceed 1200 R.P.M. When your hook up is complete, reset the engine idle to normal.

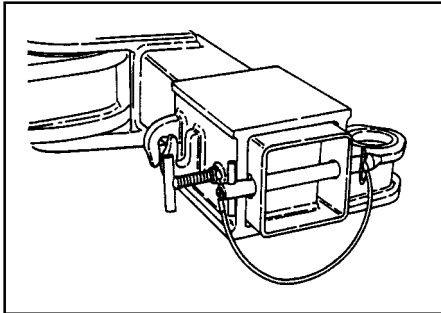
6. Confirm the recovery vehicle's position in relation to the casualty vehicle to be towed. Nine (9) ft. is recommended. Reposition the HDL700/350 if necessary. ***Be sure the casualty vehicle is not in gear or park. Keep the brake set.***



7. Using the tilt function, unfold the under lift boom down until it is in the horizontal position.



8. Lower the under lift boom to about one (1) in. from the ground and swing the crossbar parallel to the casualty vehicle.

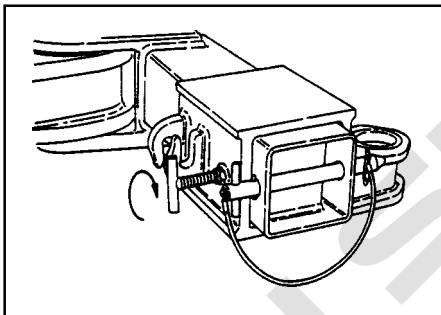


9. Attach the lift receivers to the crossbar by sliding them over the ends of the crossbar. Install the retaining pin into the end of the crossbar and secure with the safety pin.



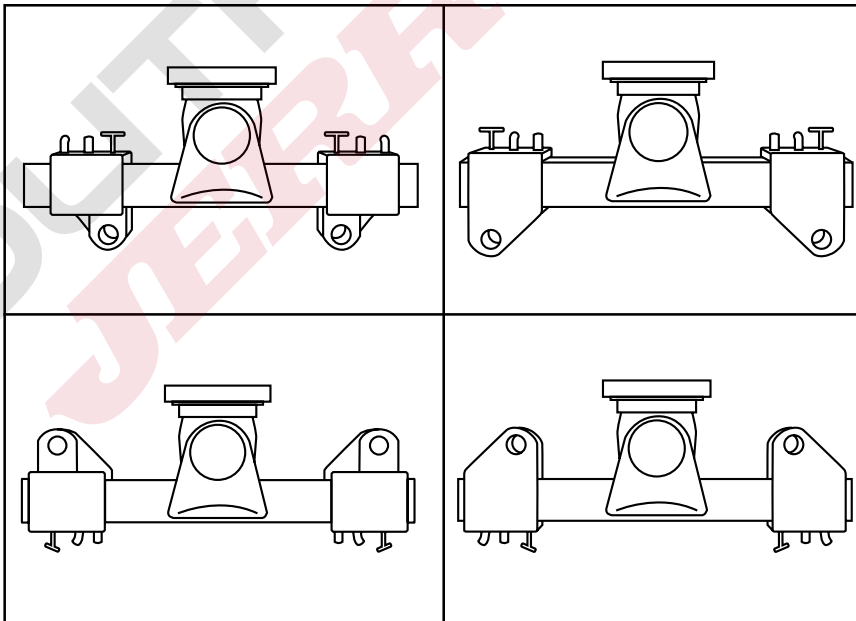
CAUTION:

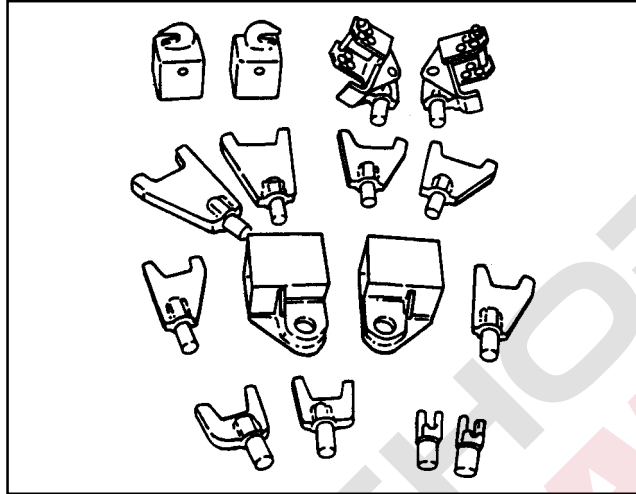
The retaining pins must be in place during all towing applications.



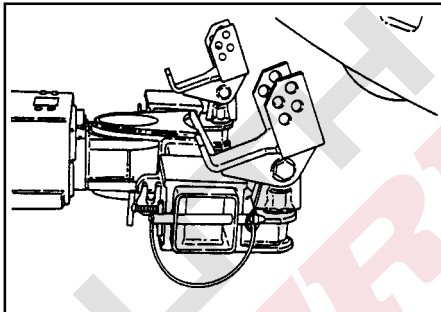
10. Adjust the lift receivers on the crossbar to the desired position and tighten the "T" handles to secure the receivers on the crossbar.

Various Positions for Lift Receiver Use

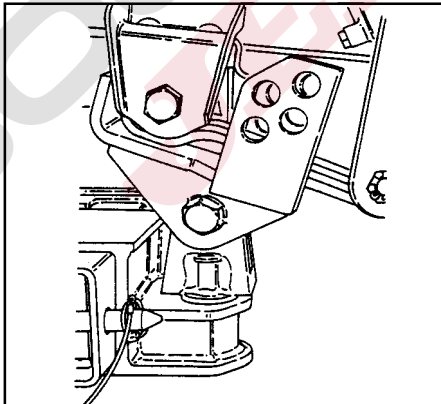


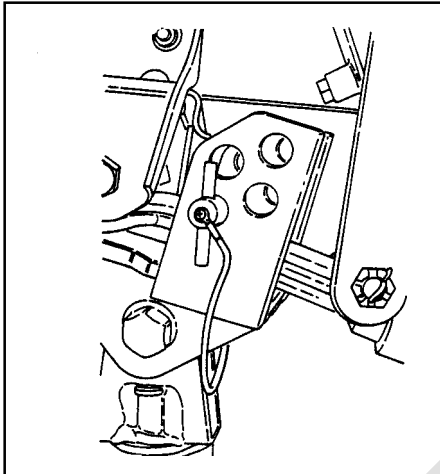


SPRING BRACKETS



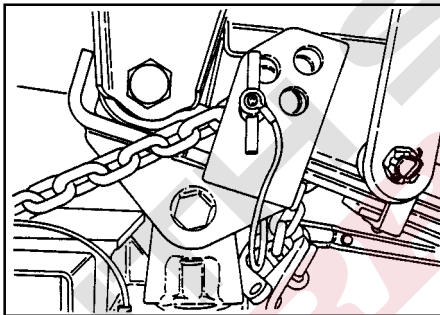
1. Insert the spring brackets into the receivers that you put onto the crossbar.
2. Extend the under lift boom under the casualty vehicle so that the spring brackets are in the proper position for lifting. Make sure that the spring brackets are against the front part of the spring hanger as shown. **At the same time make sure you are not attaching the spring brackets to any steering components.**





3. Raise the boom to lift the casualty vehicle slightly.

4. Secure the casualty vehicle to the spring brackets with the retaining pins and safety pins.



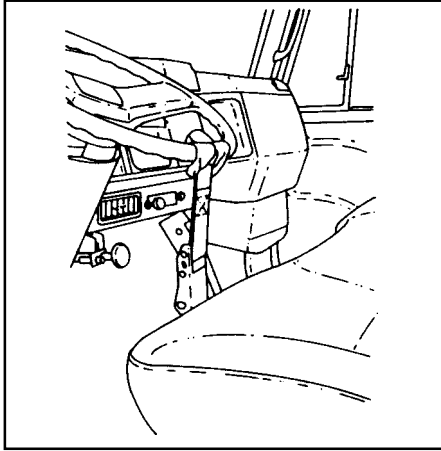
5. Secure the casualty vehicle to the crossbar with chains and a chain binder.

6. After securing the casualty vehicle and before making the final lift, check to be sure that the casualty's parking brake is released, the transmission is in neutral, and the wheels are straight.



CAUTION:

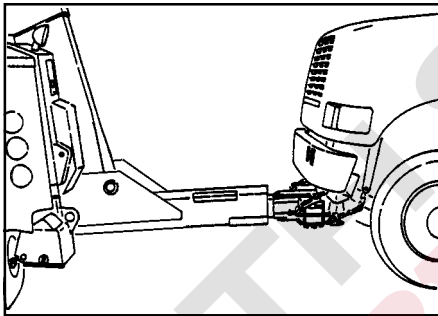
If vehicle to be towed is on a slope, do not release the brake until the load is secured.



7. It is recommended that the steering wheel be secured by a steering wheel strap for any front or rear tow.

8. With the vehicle in neutral and the parking brake released, you can move the vehicle safely up, down, in or out. All of these movements are hydraulically controlled.

9. Power retract the under lift until the casualty vehicle is about three (3) to four (4) feet from the back of the recovery vehicle. Leave enough room to maneuver around corners without corner binding or causing contact between the two (2) vehicles. **Be sure that the fly boom is extended at least four (4) in. from the middle boom section to ensure unobstructed cross-bar pivoting.**



10. Raise the casualty vehicle into the final towing position observing the far end for sufficient ground clearance. It is possible to set the rear of a front lifted vehicle completely onto the ground, causing damage. Take irregular road surfaces into consideration. Observe the lift function from the side and away from both vehicles if possible.

NOTE:

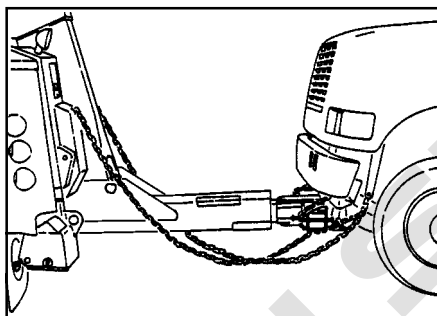
Boom should be as close to horizontal as possible. You will have better turning and maneuvering capabilities and it will prolong the life of your under lift and pivot pin.



CAUTION:

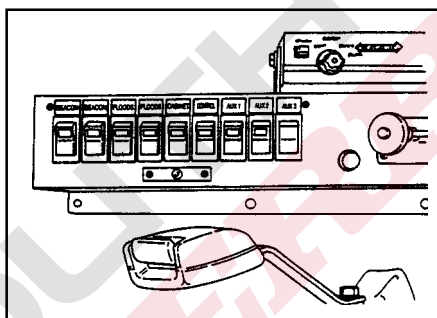
Always follow the chassis manufacturer's recommended procedures for towing. Remove drive lines and drive shafts as directed. Many vehicles can be severely damaged unless these components are removed prior to towing.

11. Be sure to maintain sufficient ground clearances with the bottom of the casualty vehicle.



12. Attach the safety chains and auxiliary towing lights.

13. Hook-up and connect air and braking systems.



14. If the remote hand controller was used, turn the CONTROL switch "OFF". (Switch is located on panel on the floor.)



WARNING:

Never fold the boom up into the storage position without removing the towing adapters from the crossbar receivers.

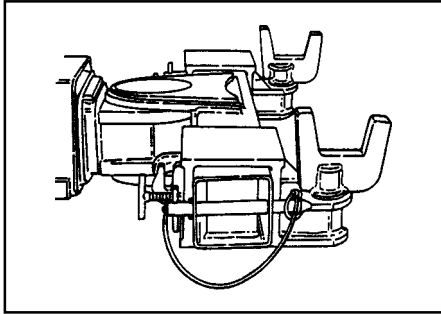


CAUTION:

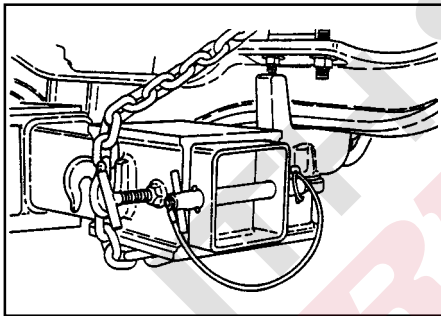
The use of secondary tie-down chains is recommended. Install the tie-down chains between the axle or substantial chassis component and the towbar.



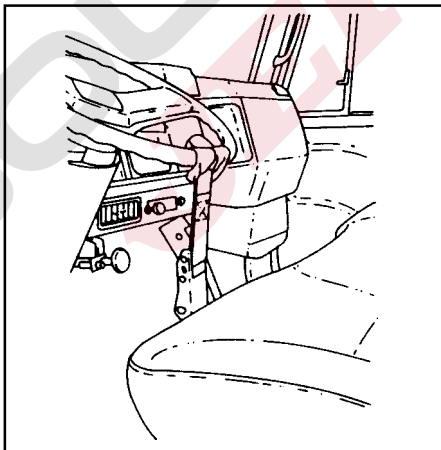
FRAME FORKS



1. Choose the frame forks that are best suited to your needs and insert them into the receivers on the crossbar.
2. Extend the under lift boom under the vehicle so that the frame forks are in the proper position for lifting. **At the same time make sure you are not attaching the frame forks to any steering components.**



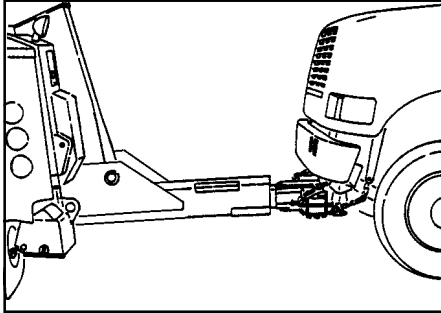
3. Raise the boom to lift the casualty slightly.
4. Secure the casualty vehicle to the crossbar with chains and a chain binder.
5. After securing the casualty vehicle and before making the final lift, check to be sure that the casualty's parking brake is released, the transmission is in neutral, and the wheels are straight.



CAUTION:

If vehicle to be towed is on a slope, do not release the brake until the load is secured.

6. It is recommended that the steering wheel be secured by a steering wheel strap for any front or rear tow.

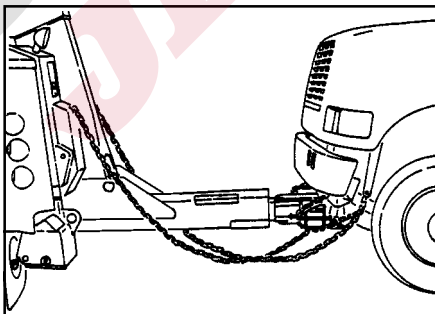


7. With the vehicle in neutral and the parking brake released, you can move the vehicle safely up, down, in or out. All of these movements are hydraulically controlled.

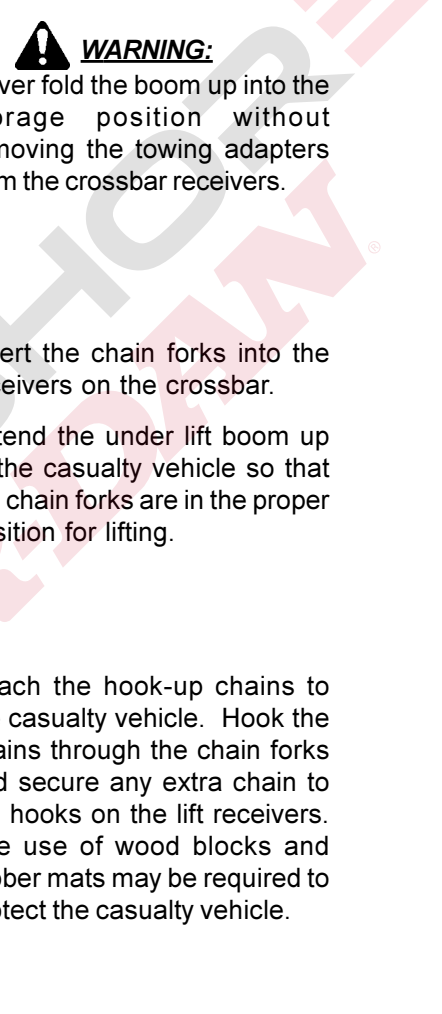
8. Power retract the under lift until the casualty vehicle is about three (3) to four (4) feet from the back of the recovery vehicle. Leave enough room to maneuver around corners without corner binding or causing contact between the two (2) vehicles. **Be sure that the fly boom is extended at least four (4) in. from the middle boom section to ensure unobstructed cross-bar pivoting.**
9. Raise the casualty vehicle into towing position observing the far end for sufficient ground clearance. It is possible to set the rear of a front lifted vehicle completely onto the ground, causing damage. Take irregular road surfaces into consideration. Observe the lift function from the side and away from both vehicles if possible.

NOTE:

Boom should be as close to horizontal as possible. You will have better turning and maneuvering capabilities and it will prolong the life of your under lift and pivot pin.



10. Be sure to maintain sufficient ground clearances with the bottom of the casualty vehicle.
11. Attach the safety chains and magnetic towing lights.
12. Hook-up and connect air and braking systems.



-  **WARNING:**
- Never fold the boom up into the storage position without moving the towing adapters from the crossbar receivers.
- Insert the chain forks into the receivers on the crossbar.
- Extend the under lift boom up to the casualty vehicle so that the chain forks are in the proper position for lifting.
- Attach the hook-up chains to the casualty vehicle. Hook the chains through the chain forks and secure any extra chain to the hooks on the lift receivers. The use of wood blocks and rubber mats may be required to protect the casualty vehicle.

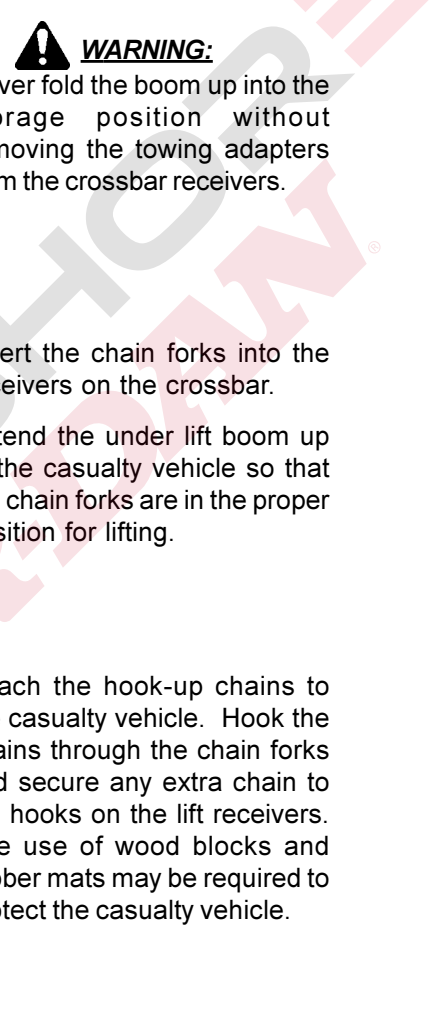
 WARNING:

Never fold the boom up into the storage position without moving the towing adapters from the crossbar receivers.

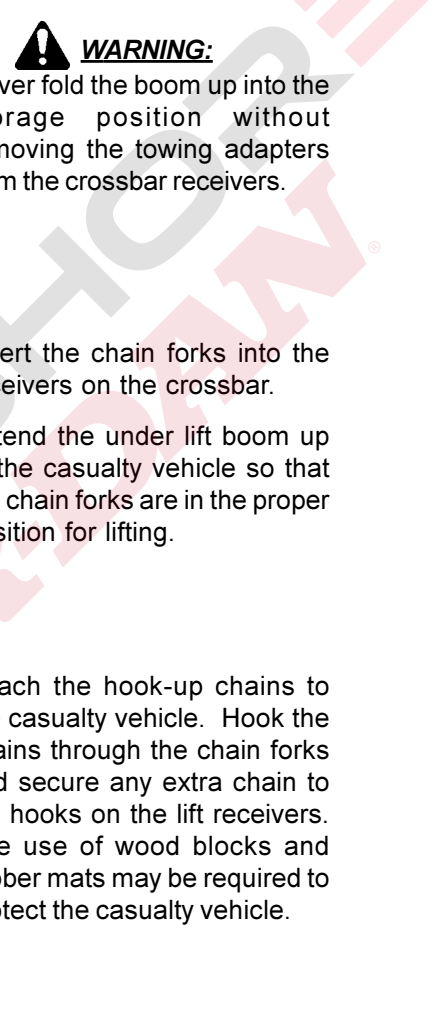
Insert the chain forks into the receivers on the crossbar.

Extend the under lift boom up to the casualty vehicle so that the chain forks are in the proper position for lifting.

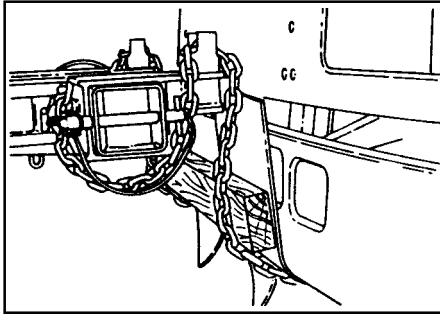
Attach the hook-up chains to the casualty vehicle. Hook the chains through the chain forks and secure any extra chain to the hooks on the lift receivers. The use of wood blocks and rubber mats may be required to protect the casualty vehicle.



-  **WARNING:**
- Never fold the boom up into the storage position without moving the towing adapters from the crossbar receivers.
- Insert the chain forks into the receivers on the crossbar.
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-  **WARNING:**
- Never fold the boom up into the storage position without moving the towing adapters from the crossbar receivers.
- Insert the chain forks into the receivers on the crossbar.
- Extend the under lift boom up to the casualty vehicle so that the chain forks are in the proper position for lifting.
- Attach the hook-up chains to the casualty vehicle. Hook the chains through the chain forks and secure any extra chain to the hooks on the lift receivers. The use of wood blocks and rubber mats may be required to protect the casualty vehicle.

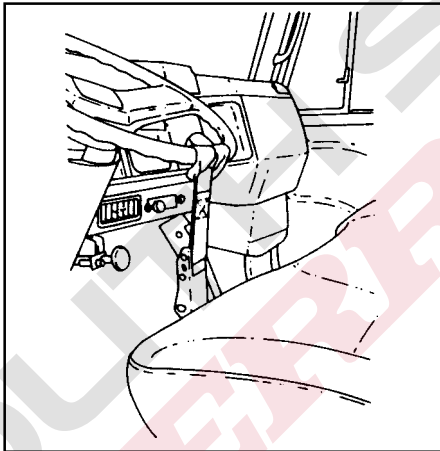


4. Raise the boom to lift the casualty vehicle slightly. At the same time make sure that you are not going to damage any components.
5. Before making the final lift, check to be sure that the casualty's parking brake is released, the transmission is in neutral, and the wheels are straight.

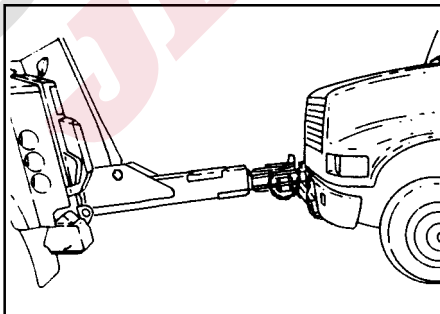


CAUTION:

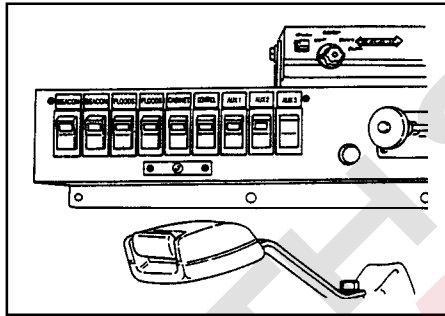
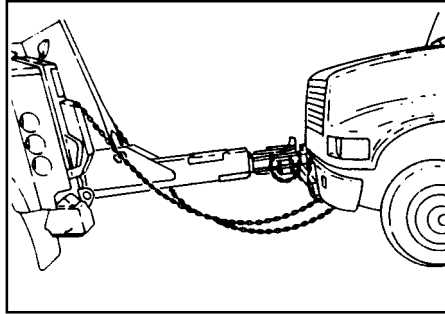
If vehicle to be towed is on a slope, do not release the brake until the load is secured.



6. It is recommended that the steering wheel be secured by a steering wheel strap for any front or rear tow.
7. With the vehicle in neutral and the parking brake released, you can move the vehicle safely up, down, in or out. All of these movements are hydraulically controlled.



8. Power retract the under lift until the casualty vehicle is about three (3) to four (4) feet from the back of the recovery vehicle. Leave enough room to maneuver around corners without corner binding or causing contact between the two (2) vehicles. **Be sure that the fly boom is extended at least four (4) in. from the middle boom section to ensure unobstructed cross-bar pivoting.**



9. Raise the casualty vehicle into towing position observing the far end for sufficient ground clearance. It is possible to set the rear of a front lifted vehicle completely onto the ground, causing damage. Take irregular road surfaces into consideration.

NOTE:

Boom should be as close to horizontal as possible. You will have better turning and maneuvering capabilities and it will prolong the life of your under lift and pivot pin.

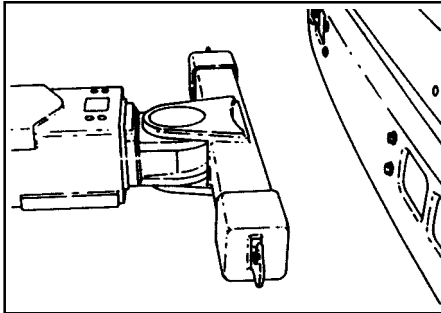
10. Be sure to maintain sufficient ground clearances with the bottom of the casualty vehicle.
11. Attach the safety chains and auxiliary towing lights.
12. Hook-up and connect air and braking systems.
13. If the remote hand controller was used, turn the CONTROL switch "OFF". (Switch is located on panel on the floor.)



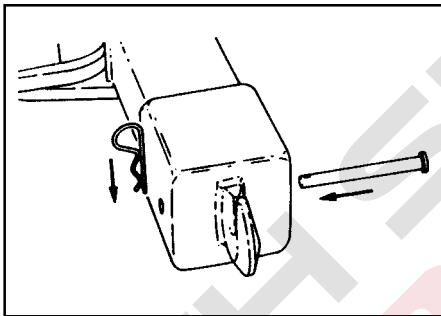
WARNING:

Never fold the boom up into the storage position without removing the towing adapters from the crossbar receivers.

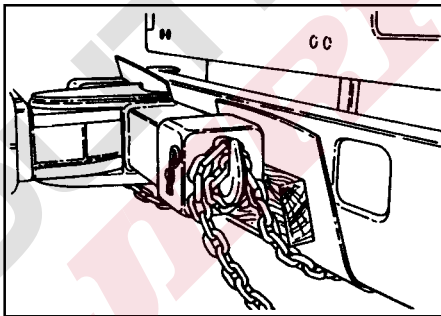
CHAIN HOOK ADAPTERS



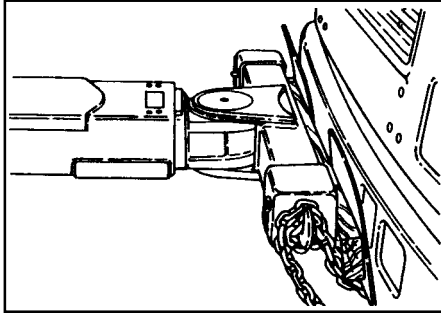
1. Slide the chain hook adapters onto the crossbar.



2. Install the retaining pin from the back side of the crossbar through the adapter and crossbar and install the hair pin.
3. Extend the under lift boom up to the casualty vehicle so that the chain hook adapters are in the proper position for lifting.



4. Attach hook-up chains to the casualty vehicle. Fasten the chains in the hooks on the end of the adapters and wrap the chain around the bottom of the hook. Secure the remaining chain.
5. Raise the boom to lift the casualty vehicle slightly. At the same time make sure that you are not going to damage any components.

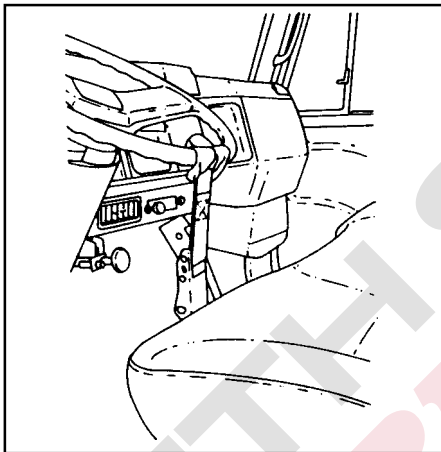


6. Before making the final lift, check to be sure that the casualty's parking brake is released, the transmission is in neutral, and the wheels are straight.

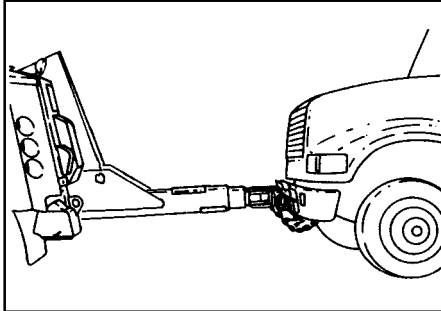


CAUTION:

If vehicle to be towed is on a slope, do not release the brake until the load is secured.



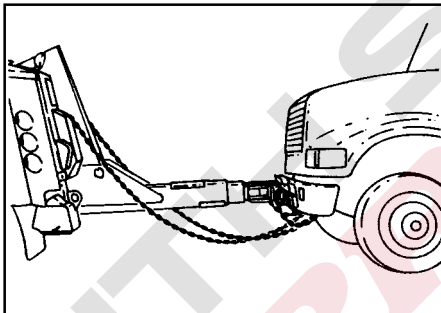
7. It is recommended that the steering wheel be secured by a steering wheel strap for any front or rear tow.
8. With the vehicle in neutral and the parking brake released, you can move the vehicle safely up, down, in or out. All of these movements are hydraulically controlled.
9. Power retract the under lift until the casualty vehicle is about three (3) to four (4) feet from the back of the recovery vehicle. Leave enough room to maneuver around corners without corner binding or causing contact between the two (2) vehicles. **Be sure that the fly boom is extended at least four (4) in. from the middle boom section to ensure unobstructed cross-bar pivoting.**



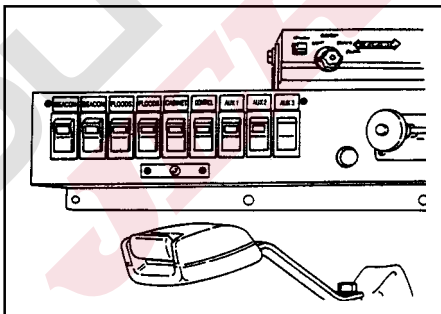
10. Raise the casualty vehicle into towing position observing the far end for sufficient ground clearance. It is possible to set the rear of a front lifted vehicle completely onto the ground, causing damage. Take irregular road surfaces into consideration.

NOTE:

Boom should be as close to horizontal as possible. You will have better turning and maneuvering capabilities and it will prolong the life of your under lift and pivot pin.



11. Be sure to maintain sufficient ground clearances with the bottom of the casualty vehicle.
12. Attach the safety chains and auxiliary towing lights.
13. Hook-up and connect air and braking systems.



14. If the remote hand controller was used, turn the CONTROL switch "OFF". (Switch is located on panel on the floor.)

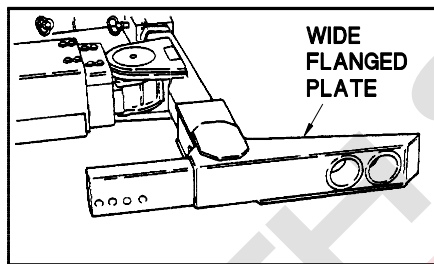
HEAVY DUTY TIRE LIFT (OPTIONAL)

DO NOT EXCEED THE FOLLOWING RATINGS:

Lifting Capacity (Each Arm)	7,000 lbs.
Lifting Capacity (Total) ²	14,000 lbs.
Towing Capacity (Maximum) ¹	42,000 lbs.

¹ THE TOWING CAPACITY SHOULD NOT EXCEED THE GROSS COMBINED WEIGHT RATING (GCWR) OF THE TOWING VEHICLE OR 42,000 LBS. (GCW) GROSS COMBINED WEIGHT OF THE TOWED VEHICLE, WHICHEVER IS LOWER.

² **MAXIMUM LIFTING CAPACITY** - THE MAXIMUM LOAD THAT CAN BE LIFTED.

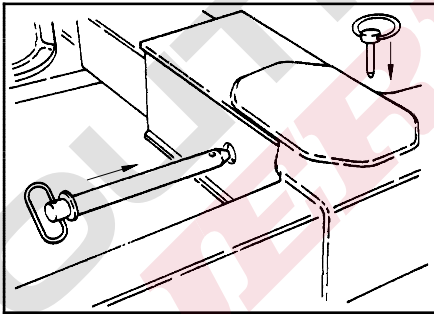


1. Slide the tire lift grid onto the crossbar.

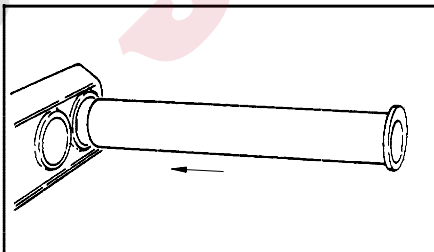


CAUTION:

Make sure that the tire lift Grid is installed as shown with the wide flanged plate on top. The flanges are marked with an "L" for left hand and an "R" for right hand.



2. Install the retaining pin from the back side of the crossbar through the grid and crossbar and secure with the pin.



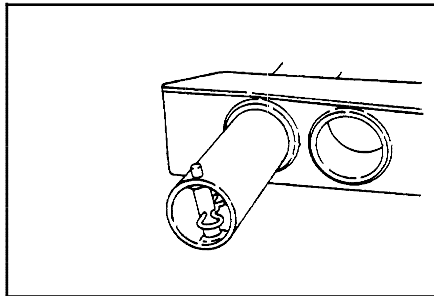
3. Insert the round tube into the desired position in the grid.



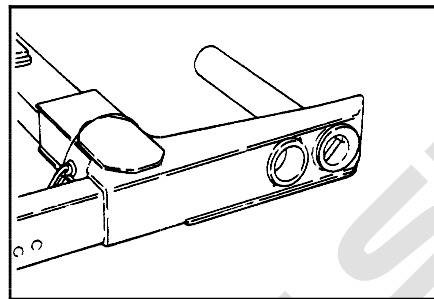
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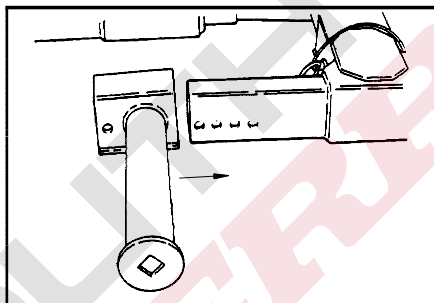
Date _____



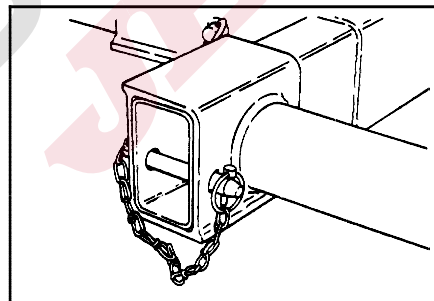
4. Install the retaining pin and hairpin.



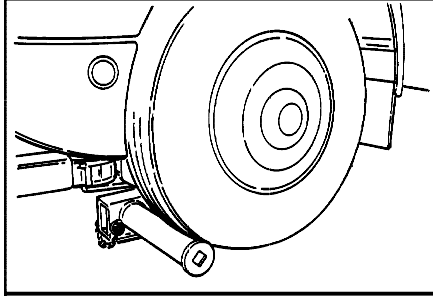
5. Retract the tube inward to the loading position.



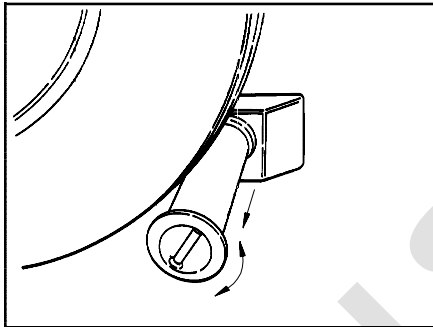
6. Slide the arm weldment over the end of the grid and adjust to the desired position for loading.



7. Install the retaining pin through the grid and arm weldment and secure with the pin.



8. Extend the under lift under the casualty vehicle so that the arm makes contact with the front of the tires. **At the same time make sure that you are not going to damage any under body components.**

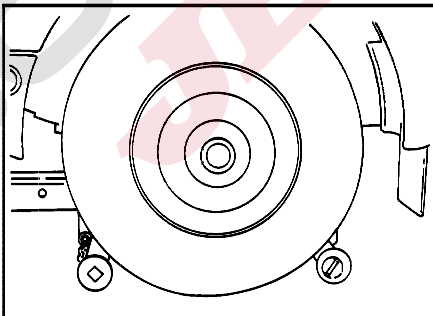


9. Using the pulling tool, extend the round tube to capture the back of the tire. After extending the tube, make sure that the flanged edge of the tube is turned up to prevent the tire from sliding off the end of the tube.

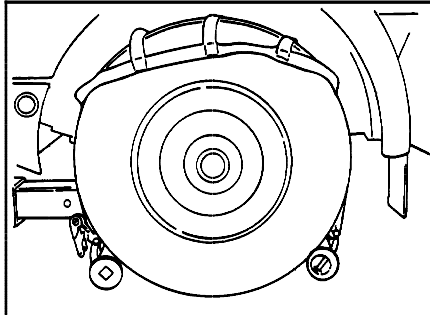


CAUTION:

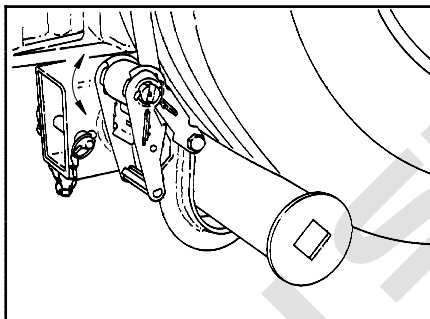
When lifting a vehicle that has dual tires from the rear ,only extend the round tube out to capture the inside tire. The flanged edge of the tube must be between the tires and turned up to prevent the tire from sliding off the end of the tube.



10. Raise the boom to lift the casualty vehicle slightly. At the same time make sure that you are not going to damage any components.



11. Attach the hook end of the tie-down strap to the round tube behind the tire. Pull the strap up and cover the tire and attach the hook on the ratchet end of the strap to the arm in front of the tire.

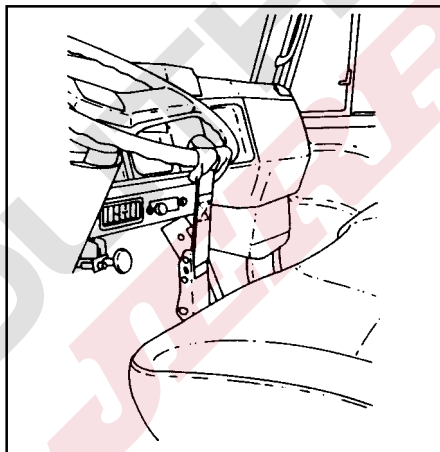


12. Take up the slack in the strap by ratcheting the takeup spool arm. Continue until the tires show some compression.



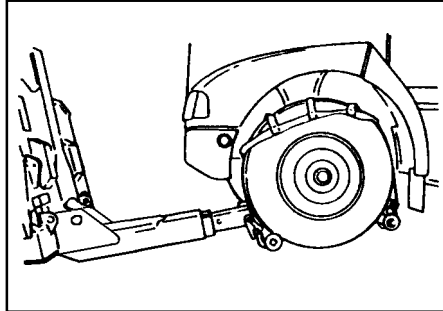
CAUTION:

If vehicle to be towed is on a slope, do not release the brake until the load is secured.



13. Always secure the steering wheel with a steering wheel strap for any front or rear tow.

14. With the vehicle in neutral and the parking brake released, you can move the vehicle safely up, down, in or out. All of these movements are hydraulically controlled.

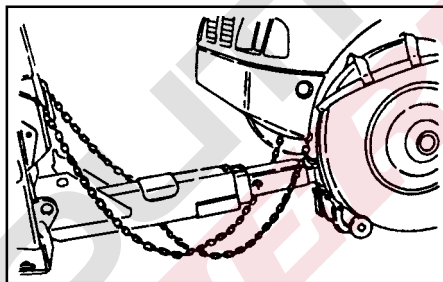


15. Power retract the under lift until the casualty vehicle is about three (3) to four (4) feet from the back of the recovery vehicle. Leave enough room to maneuver around corners without corner binding or causing contact between the two (2) vehicles. **Be sure that the fly boom is extended at least four (4) in. from the middle boom section to ensure unobstructed cross-bar pivoting.**

16. Raise the casualty vehicle into towing position observing the far end for sufficient ground clearance. It is possible to set the rear of a front lifted vehicle completely onto the ground, causing damage. Take irregular road surfaces into consideration.

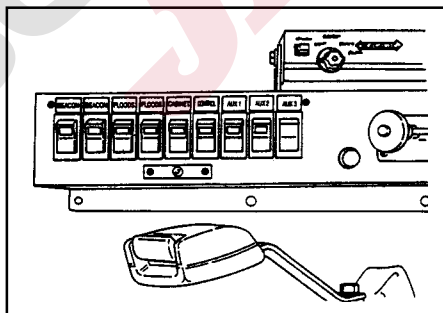
NOTE:

Boom should be as close to horizontal as possible. You will have better turning and maneuvering capabilities and it will prolong the life of your under lift and pivot pin.



17. Be sure to maintain sufficient ground clearances with the bottom of the casualty vehicle.

18. Attach the safety chains and auxiliary towing lights.



19. Hook-up and connect air and braking systems.

20. If the remote hand controller was used, turn the CONTROL switch "OFF". (Switch is located on panel on the floor.)

 WARNING:

Do not use the tire lift if the tire(s) of the casualty vehicle are flat or if there is damage to the wheels or suspension.

 CAUTION:

The tire lift and grid tubes must be in their outermost positions for storage on the under lift when folded up in the travel position to avoid damage to the body.

 CAUTION:

Retighten the tie-down straps periodically during a tow as the tires settle into the grid from towing.

 CAUTION:

The use of secondary tie-down chains is recommended. Fit the secondary tie-down chains to the axle (not to any part of the suspension or body which will rise and fall with the suspension) arranged so as to hold the wheel down in the grid and prevent it from jumping up, forwards, or backwards. Use load binders as required.

 CAUTION:

The use of trailer brakes or secondary braking devices while towing is recommended.

 CAUTION:

Do not tow any vehicle without safety chains being installed.

 CAUTION:

Always follow the chassis manufacturer's recommended procedures for towing. Remove drive lines and drive shafts as directed. Many vehicles can be severely damaged unless these components are removed prior to towing.

 CAUTION:

All products are subject to age, wear and deterioration, all of which cause a reduction in the products breaking strength capacity. It is recommended that all products be regularly inspected. Any worn, deformed, misused or overloaded products should be replaced immediately.

TRAILER 5TH WHEEL PLATE AND PINTLE HOOK BALL HITCH ADAPTER (OPTIONAL)

DO NOT EXCEED THE FOLLOWING RATINGS:

5TH WHEEL PLATE

LIFTING CAPACITY 15,000 lbs.

TOWING CAPACITY 25,000 lbs.

PINTLE HOOK BALL HITCH

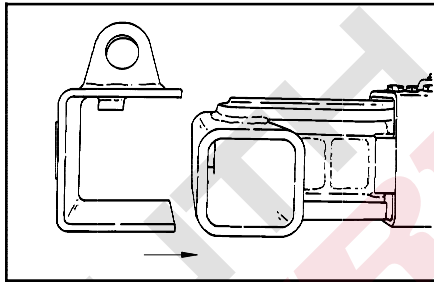
2 IN. BALL HITCH 10,000 lbs. (GTW)

PINTLE HOOK 16,000 lbs. (GTW)

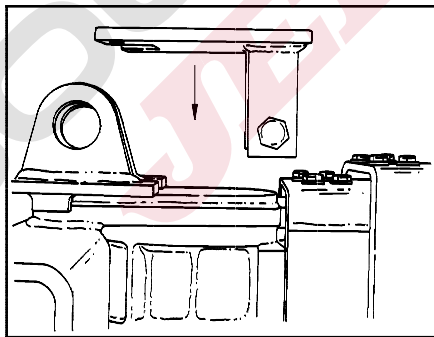
GROSS TRAILER WEIGHT 3,000 lbs.

MAXIMUM VERTICAL LOAD

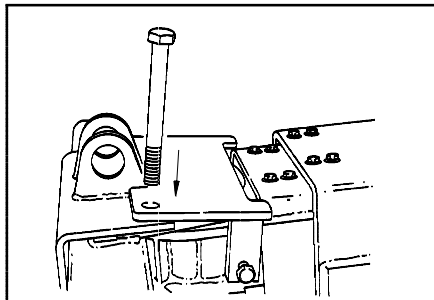
GROSS TRAILER WEIGHT (GTW) - THE MAXIMUM TRAILER WEIGHT WITH LOAD.



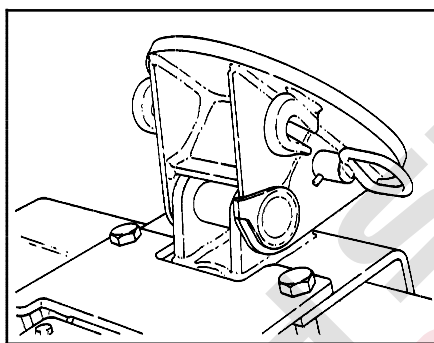
1. Slide the 5th wheel plate adapter onto the crossbar pivot.



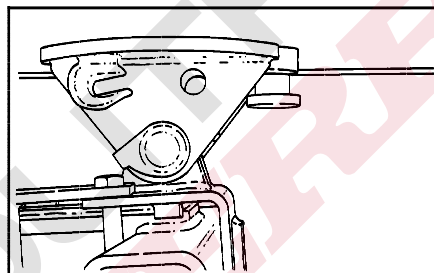
2. Install the keeper bracket down onto the crossbar pivot adapter.



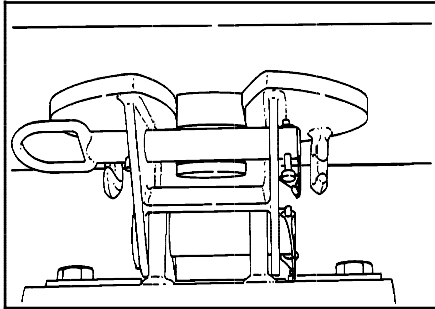
3. Install the retaining bolts thru the keeper bracket and into the adapter. Tighten the retaining bolts.



4. Install the 5th wheel plate onto the adapter with the attaching pin. Secure the attaching pin with the linchpin.
5. Remove the king pin locking pin from the 5th wheel plate and position the recovery vehicle in front of the casualty and in-line with the king pin.



6. Extend the under lift up to the king pin.



7. Engage the 5th wheel plate with the king pin. Install the king pin locking pin and linchpin.
8. Connect the air lines from the recovery vehicle to the casualty trailer to release the trailer brakes.
9. Raise the trailer jack stands.
10. Attach the safety chains.



CAUTION:

If the trailer to be towed is on a slope, do not release the brake until the load is secured.



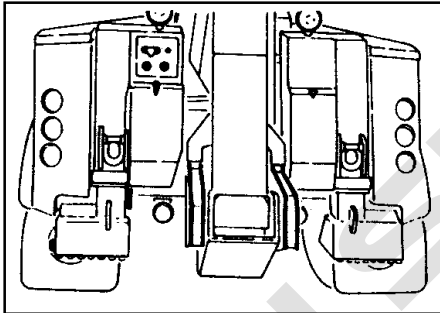
CAUTION:

Always install safety chains before towing any vehicle.

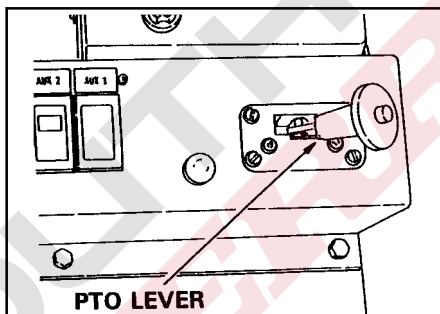
REAR HYDRAULIC STABILIZERS

Your HDL is equipped with rear hydraulic stabilizers. The stabilizers serve two purposes. First, they may be used as a chassis support when lifting heavy loads which would otherwise cause the front axle of the vehicle to lift off the ground. Second, they can be used to provide a resistance to winching forces. **USE CAUTION AND GOOD JUDGEMENT!**

Follow these simple steps:



1. Position the recovery vehicle as close as possible to the work and set the parking brakes and place the transmission in neutral.



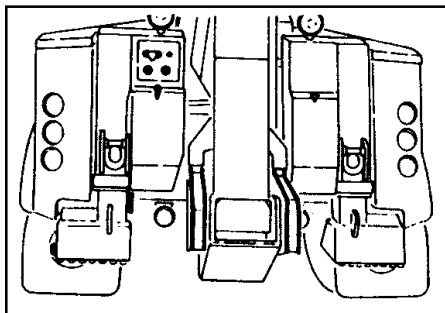
2. Engage the power take-off (PTO). See PTO operator's instruction manual.

3. Adjust the electronic or manual throttle control to elevate the engine speed to approximately 1000-1200 R.P.M. of P.T.O. output shaft speed for optimum performance.



CAUTION:

Never exceed 1200 R.P.M. When your hook up is complete, reset the engine idle to normal.



4. Using the control levers, lower the stabilizers to the ground. The stabilizers work independently from each other so that they can be used on uneven ground.

 CAUTION:

Do not attempt to use the stabilizers to level the recovery vehicle chassis or raise the rear of the recovery vehicle off of the ground. Damage to the chassis can occur. Use wood blocks under the tires to level the vehicle if necessary prior to lowering the stabilizers.

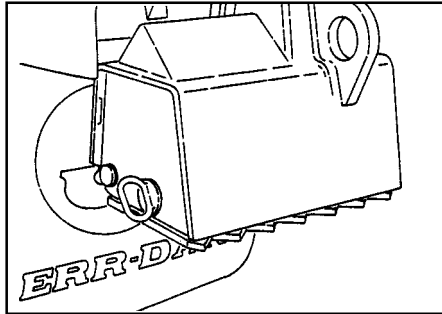
 WARNING:

Area should be clear of feet when lowering the rear stabilizers.

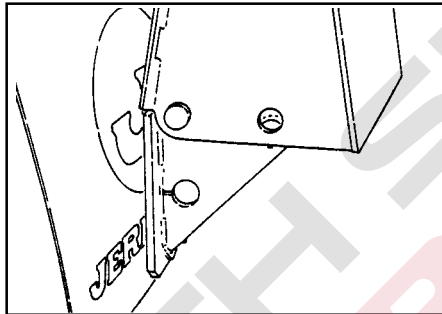
 CAUTION:

Do not move the recovery vehicle with the stabilizers on the ground or damage to the chassis can occur.

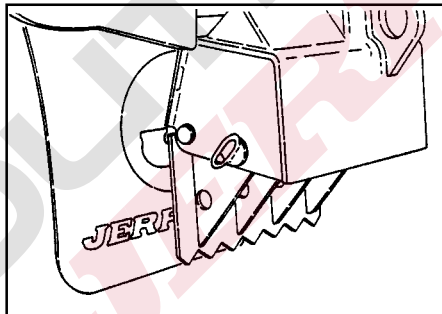
INTEGRAL SPADES



1. Remove the safety pin and spade retaining pin.



2. Allow the integral spade to swing down exposing the spade blades.



3. Line up holes and insert spade retaining pin and safety pin.

CAUTION:

Do not attempt to use the stabilizers to level the recovery vehicle chassis or raise the rear of the recovery vehicle off of the ground. Damage to the chassis can occur. Use wood blocks under the tires to level the vehicle if necessary prior to lowering the stabilizers.

NOTE:

When the spade is on the ground the eye plate on the back side of the stabilizers can be used for the attachment of snatch blocks or to terminate the wire rope hook during winching operations.



WARNING:

Area should be clear of feet when lowering the rear stabilizers.



CAUTION:

Do not move the recovery vehicle with the stabilizers on the ground or damage to the chassis can occur.



CAUTION:

Do not use spades on pavement or concrete. Damage to the pavement or concrete may result.

WRECKER BOOM OPERATION

The wrecker boom is probably one of the most useful accessories on your HDL. It allows the operator to perform lifting and retrieval tasks that cannot be performed in any other way. Safe operation of the wrecker boom demands knowledge of the controls and the boom functions. Review the boom safety section of this manual and **USE CAUTION AND GOOD JUDGEMENT!**

Position the recovery vehicle to best take advantage of the leverage the boom affords. A vertical lift is the best and most efficient, so attempt to place the boom over the work. This reduces the chance of the work breaking free and swinging during the lift. Place the recovery vehicle as close as possible to the work. A shorter boom extension will result in less rear axle loading. When pulling, align the recovery vehicle with the work so that the direction of pull is in line with the length of the truck. Always use more stabilizing lines than pull lines. If the front wheels of the recovery vehicle raise completely from the ground.

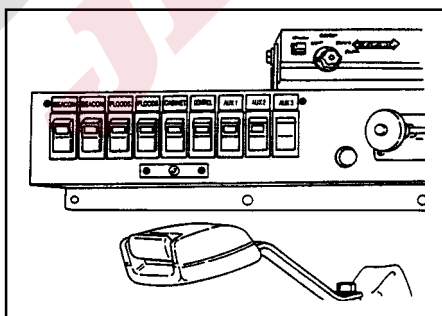
Stop! And Re-Rig.



WARNING:

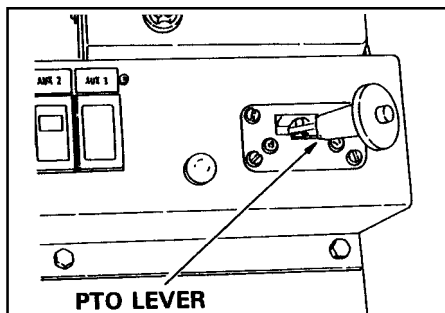
Do not exceed the working limit of the wire rope. Use snatch blocks and multiple lines to reduce the load on the wire rope. Always apply an equal load in the opposite direction of the pull to stabilize the load.

When making a heavy lift or pull with the wrecker boom, the following steps should be taken:



1. Position the recovery vehicle as close as possible to the work and set the parking brakes and place the transmission in neutral.
2. Turn "ON" the CONTROL switch if the remote hand controller is going to be used.



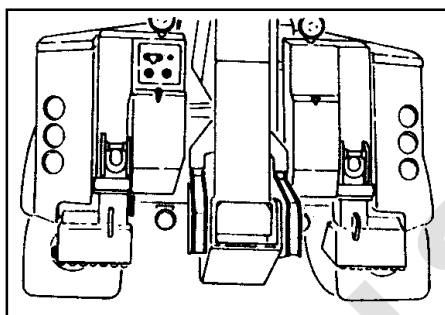


3. Engage the power take-off (PTO). See PTO operator's instruction manual. Adjust the electronic or manual throttle control to elevate the engine speed to approximately 1000-1200 rpm of P.T.O. output shaft speed for optimum performance.



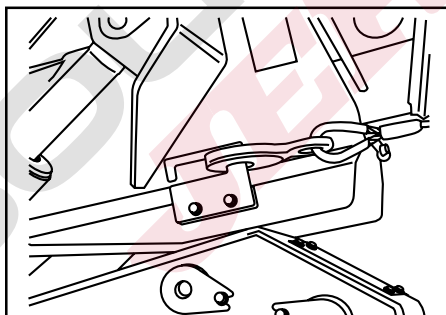
CAUTION:

Never exceed 1200 R.P.M. When your hook up is complete, reset the engine idle to normal.

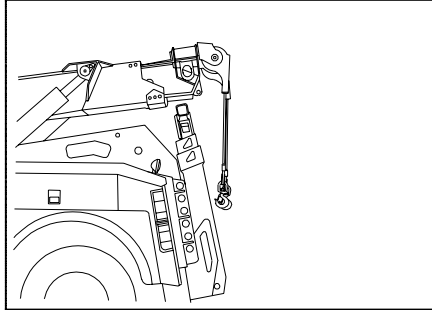


4. Confirm that the recovery vehicle is positioned properly and rests on firm ground. The stabilizers or spades can be lowered to provide additional support if necessary.

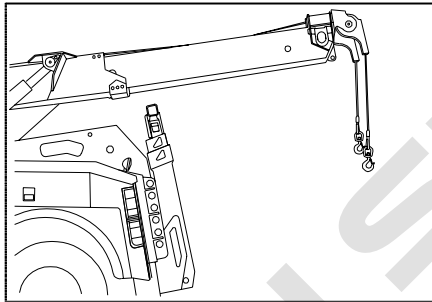
5. Using the winch control levers, unwind some wire rope from the winches to relieve the pressure on the winch free-spool device.
6. Pull the winch free-spool knobs to the "out" position to set both boom winches into the "free spool" mode.



7. Wearing gloves, unhook the wire ropes from their stored position. Moving the boom head with the wire rope locked can result in damage to both the wire ropes and the boom. Carefully observe the winch drums when beginning to extend the boom to be sure both winches are free-spooling.



8. Position the boom head by using the boom up and down lever and the boom in and out lever.



9. Manually, "free-spool" enough wire rope to make the hook-up being sure that a minimum of five (5) wraps remains on the cable drums.



WARNING:

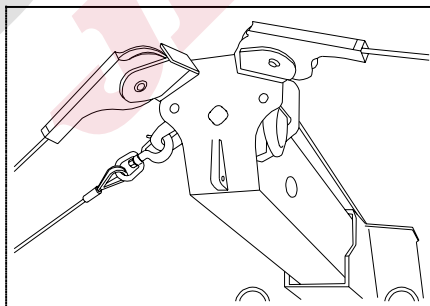
Wear gloves to protect hands from wire ropes.



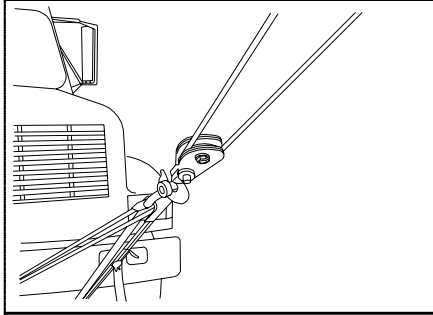
CAUTION:

To avoid birdnesting and premature failure of the wire rope, always keep tension on the wire rope when winding or unwinding.

10. Make the hook-up in such a way as to afford an even pull on both wire ropes. Over stressing one wire rope can happen if care isn't taken in hook placement.

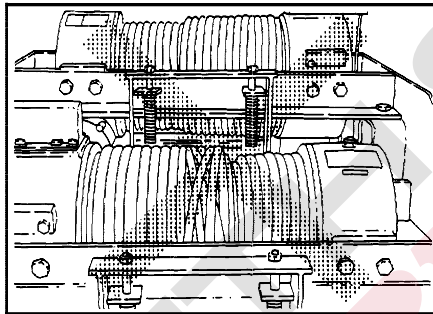


11. If a heavy lift or pull is to be made additional cable lines may be necessary. **Always use more stabilizing lines than pull lines. RIG FOR SAFETY.**

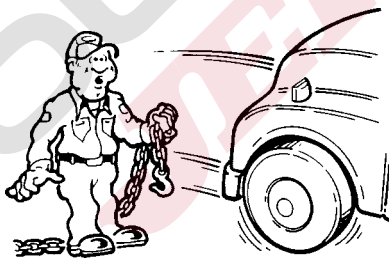


12. DO NOT EXCEED THE WORKING LIMIT OF THE WIRE ROPE. When making a recovery and pulling to the side, always apply an equal or lesser load in the opposite direction of the pull to stabilize the load.

13. The use of snatch blocks and multiple lines will allow you to pull, stabilize the recovery vehicle, and minimize deflection of the wrecker boom.

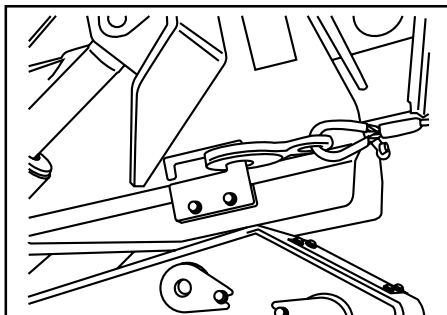


14. Push the winch free-spool knobs to the in position to re-engage the winch. Slowly take up the slack in the wire ropes. Inspect the hook-up points for slippage before continuing the lift or pull. Manually control each winch to ensure wire ropes are stressed evenly. As the wire rope is retrieved, be sure it doesn't criss-cross on the spool.



15. Complete the lift or pull being sure the work is placed in a stable location where it won't slip or roll. If there is any question about stability, use blocks or tie the work down before removing wire rope and chains.

16. Using the winch controls, unwind enough wire rope to remove the hooks or chains and remove them carefully. Avoid straddling the wire rope.



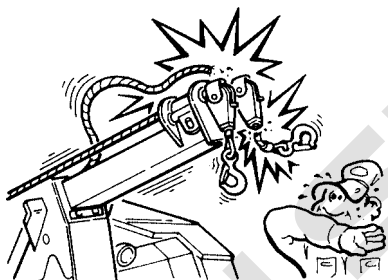
17. Respool both wire ropes and take this opportunity to inspect them for damage.

18. Retract and lower the boom to normal horizontal position and carefully snug up any loose wire rope.



CAUTION:

Don't stress the wire rope by over retrieving or tightening and exceeding the working limit. Over stressing the wire rope beyond its working limit can cause damage resulting in premature wire rope failure.



MAINTENANCE AND LUBRICATION

Your HDL has been designed to give you excellent service and long life but like all equipment, it requires proper and periodic maintenance. The truck chassis itself is on a maintenance schedule recommended by the manufacturer. Follow these guidelines and protect your vehicle warranty. There are a number of different lubricants used on your HDL and the following chart details the proper lubricant and the most common brands and specification which meet the requirements.

Use only safe practices when maintaining this equipment. Always shut off the engine before reaching into pinch areas.

Inspect the vehicle and under lift system periodically for damage or evidence of pending failure. Damaged or broken parts should be replaced immediately. Never operate a machine which is known to be defective or operating improperly. The cause of any binding or leakage should be determined immediately and the problem promptly fixed.

Critical wear points on your HDL must be lubricated at regular intervals. Sliding surfaces are to be cleaned and coated with a heavy grease periodically. Cleaning every month is recommended for normal highway operations, but this frequency will vary appreciably with the type of service. Sliding on dirty wear surfaces will cause rapid wear. Fittings on linkage pivots should be greased every two (2) months, again depending upon usage. The following chart and diagram shows the location of these points, and when and what type of lubricant to use.

Check the hydraulic oil level bi-monthly or after any leakage. A sight glass has been provided on the hydraulic tank. The proper oil level is best checked with all cylinders fully retracted. Use 5W20 Dual Range hydraulic oil. (Automatic transmission fluid may be used in the hydraulic system if necessary.)

The hydraulic filters located on the return side of the hydraulic tank come equipped with restriction indicator gauges. The gauges show the operator the condition of the filter elements. When the needle reaches the red band (25 psi), the filter is starting to bypass and the element needs to be changed. Failure to change the element will result in premature wear and/or failure of any or all of the hydraulic components. **Only check gauges with hydraulic fluid at operating temperatures. Cold oil is more dense and will give a false indicator gauge reading.**



If a cylinder seal leaks, disassemble the cylinder and ascertain the cause of the leak. Small scores caused by chips or contaminated fluid can usually be worked out with fine emery cloth to avoid repetition of the trouble. Whenever any seal replacement is necessary, it is always advisable to replace all seals in that component. These seals are available in kits. Also, thoroughly clean all components before reassembly.

The body of your Jerr-Dan has been built from high strength aluminum and composite material which has been carefully assembled in our factory. To keep it clean and free of dirt use any non-abrasive soap or detergent recommended for automotive finishes. Use a soft cloth or sponge and finish with a thorough rinsing. Drying with a soft cloth or chamois will prevent spotting or streaking. A coat of automotive wax is recommended.

The HDL is mounted to the truck chassis by bolts. These bolts are torqued at the factory to 300 ft. lbs. We recommend that these bolts be re-torqued within the first 30 days and periodic inspection and retorquing of these bolts as required thereafter. Replace any broken or damaged bolts immediately.

The HDL1100/530 and HDL1100/565 wrecker boom has adjustable shim plugs in it that keep the fly boom travel straight and parallel with in the outer boom. Periodically adjust and tighten the shims as they wear. These are located at the sheave end of the wrecker boom, and inside the wrecker boom in the internal end of the fly boom.



TIGHTENING TORQUES (FOOT-POUNDS) FOR SCREWS AND NUTS			
SIZE INCHES (MM)	 GRADE 2	 GRADE 5	 GRADE 8
1/4 (6.350)	6	8	10
5/16 (7.938)	10	14	19
3/8 (9.525)	17	27	33
7/16 (11.112)	28	45	60
1/2 (12.700)	45	68	90
9/16 (14.288)	63	100	120
5/8 (15.875)	90	135	180
3/4 (19.050)	145	230	310
7/8 (22.225)	145	380	500
1 (25.400)	220	570	760

- All torque values shown are for bolts (cap screws) and nuts that are either zinc-plated or lubricated.
- Torques shown above apply to screws and nuts used for assembly and installation of all wrecker components.
- Different torque values may be given in instructions for certain components due to short thread engagement or low-strength internal threads.
- When nuts are used, tighten nuts to torques shown (screws or bolts should be held but not turned).
- Retighten nuts of all mounting screws that secure the wrecker and wrecker-body within two weeks after they are first installed on the vehicle. Thereafter, inspect such screws and nuts visually once every month and after each job imposing extremely heavy loads on the equipment. Periodically recheck all accessible screws and nuts for proper tightness.
- Converting ft/lbs to Nm (Newton metres) can be accomplished by using the following:

Multiply: by: to get:
 ft/lbs x 1.3558 = Nm (Newton metres)



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OILS AND GREASES

The following oils and greases are suitable for use with your Jerr-Dan.

Company

Product

HYDRAULIC OILS

- | | |
|-----------------------------|----------------------|
| 1. Drydene Dual Range | Hydraulic Fluid 5w20 |
| 2. Sun Refining & Marketing | 2105 Hydraulic |
| 3. D.A. Lubricants | 5w20 HiVi |
| 4. Texaco | Rando HDAZ |
| 5. Mobil Oil Corp. | DTE 15 |
| 6. Amoco Oil Co. | Rykon MV |
| 7. Citgo | A/W All Temp |

GREASES

- | | |
|------------|----------------|
| 1. Drydene | HD Lithium EP2 |
| 2. Gulf | Crown EP2 |
| 3. Amoco | Amolith EP2 |
| 4. Shell | Alvania EP2 |
| 5. Texaco | Marfax EP2 |
| 6. Mobil | Mobilux EP2 |
| 7. Sunoco | Prestige EP2 |

WINCH AND GEAR LUBE

- | | |
|-------------|--|
| 1. Phillips | 140 wt. EP Gear Lube 93301
(or approved equivalent) |
|-------------|--|



WIRE ROPE HANDLING AND INSPECTION



WARNING

Wire Rope WILL FAIL if worn-out, overloaded, misused, damaged, improperly maintained or abused.

Wire rope failure may cause serious injury or death!

Protect yourself and others:

- ALWAYS INSPECT wire rope for WEAR, DAMAGE or ABUSE BEFORE USE.
- NEVER USE wire rope that is WORN-OUT, DAMAGED or ABUSED.
- NEVER OVERLOAD a wire rope.
- INFORM YOURSELF: Read and understand manufacturer's literature or "Wire Rope and Sling Safety Bulletin".
- REFER TO APPLICABLE CODES, STANDARDS and REGULATIONS for INSPECTION REQUIREMENTS and REMOVAL CRITERIA.

A new wire rope requires a break in period. Run the wire rope through several cycles at low speeds gradually increasing the load on the wire rope. Make sure that the wraps of the wire rope are tight and evenly wound on the winch drum. A loose wire rope on the winch drum will cause crushing of the wire rope when heavy loads are applied.

All wire rope in continuous service should be observed during normal operation and visually inspected on a weekly basis. A complete and thorough inspection of all ropes in use must be made at least once a month and all rope which has been idle for a period of a month or more should be given a thorough inspection before it is put back into service. All inspections should be the responsibility of and performed by an appointed competent person with the training and experience to look for deterioration of the wire rope.



It is good practice , where the equipment is consistently in use, to give the rope a certain length of service, several hundred hours, several weeks or months and then renew the rope regardless of it's condition. This method eliminates the risk of fatigue causing rope failure.

Any deterioration, resulting in a suspected loss of original rope strength, should be carefully examined and determination made as to whether further use of the wire rope would constitute a safety hazard.

There are certain points along any given rope which should be given more attention than others, since some areas will be subjected to greater stresses, forces, and hazards. Some of these areas include at the winch drum, at the boom sheaves and at the end attachments.

All products are subject to age, wear and deterioration, all of which cause a reduction in the products breaking strength capacity.

Probably the most common sign of rope deterioration and approaching failure is broken wires. Inspection criteria are specific as to the number of broken wires allowable under various circumstances. It is important that a diligent search be made for broken wires, particularly in critical areas. Inspection of wire rope ends should include hooks and thimbles.

Any wire ropes that have been abraded, crushed, kinked or twisted should be replaced.

Wire rope should be routinely cleaned of any and all debris. Grit and gravel can quickly reduce a wire ropes life. A wire rope should be well lubricated so that it can act and perform as it was designed. Lubrication keeps a wire rope flexible and free from rust.

Consult the manufactuerer or your local distributor for the proper replacement wire rope.



HDL500/280 LUBRICATION POINTS

The following lubrication charts are located inside the tool box door on the driver's side of the HDL body.

298					
 LUBRICATION CHART JERR-DAN®					
INTERVAL (HOURS)	REF NO.	IDENTIFICATION	SERVICE	LUBRICANT	NO. OF POINTS
WEEKLY	1	CABLE	OIL	ENGINE OIL	2
50 OR BI-MONTHLY	2	WINCH GEAR BOX	CHECK	MPG	2
	3	NYLATRON PADS	COAT		3
	4	WINCH CASE BREATHERS	CHECK		2
100 OR MONTHLY	5	BOOM PIVOT	LUBE	MPG	1
	6	WRECKER BOOM EXT. CYLINDER	LUBE	MPG	2
	7	WRECKER BOOM LIFT CYLINDER	LUBE	MPG	4
	8	*D*-RING	LUBE	MPG	2
	9	WRECKER BOOM SHEAVE HEAD	LUBE	MPG	2
	10	SHEAVE PIN	LUBE	MPG	2
	11				
	12				
	13	UNDERLIFT TILT CYLINDER	LUBE	MPG	2
	14	UNDERLIFT PIVOT	LUBE	MPG	3
	15	UNDERLIFT EXTEND CYLINDER	LUBE	MPG	1
	16	CROSSTUBE PIVOT	LUBE	MPG	1
	17	SPADE EXTEND CYLINDER	LUBE	MPG	4
250 OR SEMI- ANNUALLY	18	SPADE CLAW PIVOT	LUBE	MPG	2
	19	HYDRAULIC RESERVOIR	CHECK	GL 5 #140	2
	20	CONTROL VALVE HANDLES	CLEAN & OIL		9
	21	HYDRAULIC FILTER	DRAIN & FILL CHANGE		2
1000 OR YEARLY	19	HYDRAULIC RESERVOIR	DRAIN & FILL	•	1
	22	MAGNETIC PLUG	CLEAN		1
	23	RESERVOIR STRAINER	CLEAN		2

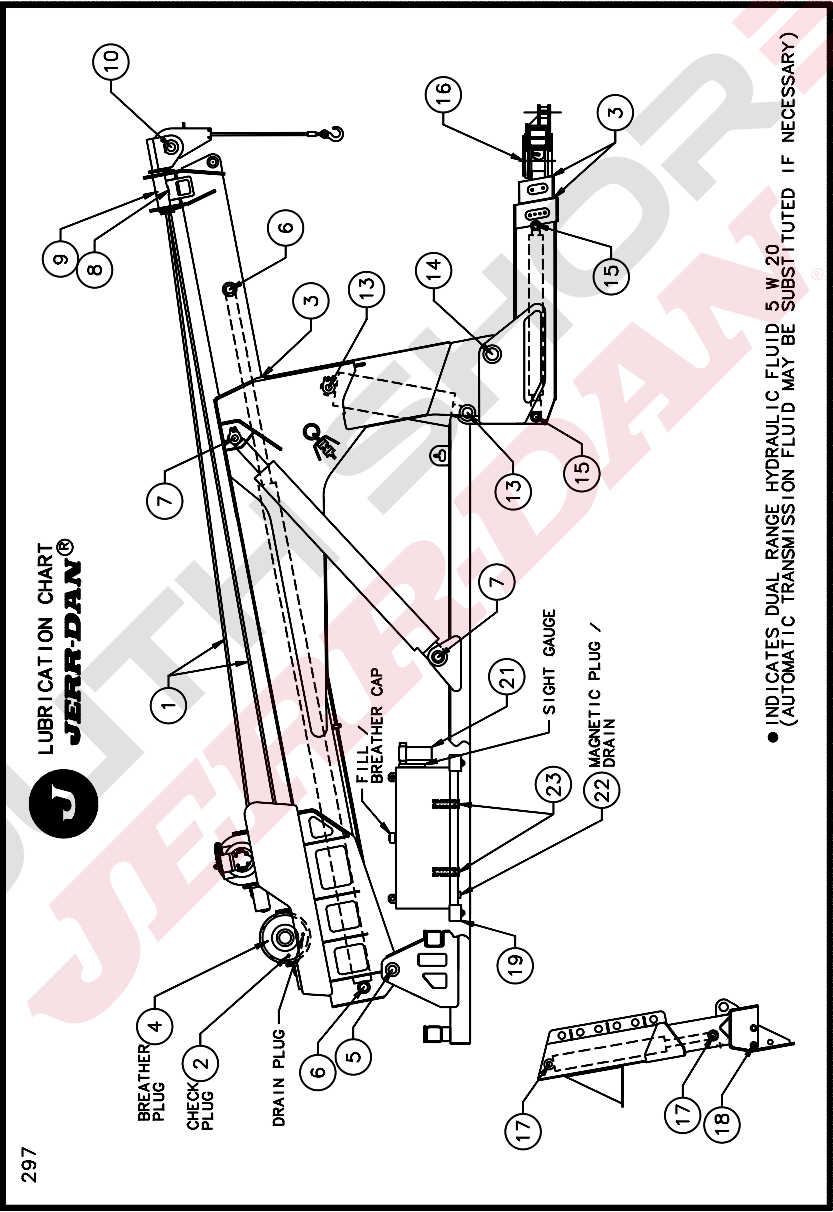


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HDL500/280 LUBRICATION POINTS



HDL600/350 LUBRICATION POINTS

The following lubrication charts are located inside the tool box door on the driver's side of the HDL body.

298  LUBRICATION CHART JERR-DAN®					
INTERVAL (HOURS)	REF NO.	IDENTIFICATION	SERVICE	LUBRICANT	NO. OF POINTS
WEEKLY	1	CABLE	OIL	ENGINE OIL	2
50 OR BI-MONTHLY	2	WINCH GEAR BOX	CHECK		2
	3	NYLATRON PADS	COAT	MPG	3
	4	WINCH CASE BREATHERS	CHECK		2
100 OR MONTHLY	5	BOOM PIVOT	LUBE	MPG	1
	6	WRECKER BOOM EXT. CYLINDER	LUBE	MPG	2
	7	WRECKER BOOM LIFT CYLINDER	LUBE	MPG	4
	8	*D*-RING	LUBE	MPG	2
	9	WRECKER BOOM SHEAVE HEAD	LUBE	MPG	2
	10	SHEAVE PIN	LUBE	MPG	2
	11				
	12				
	13	UNDERLIFT TILT CYLINDER	LUBE	MPG	2
	14	UNDERLIFT PIVOT	LUBE	MPG	3
	15	UNDERLIFT EXTEND CYLINDER	LUBE	MPG	1
	16	CROSSTUBE PIVOT	LUBE	MPG	1
	17	SPADE EXTEND CYLINDER	LUBE	MPG	4
	18	SPADE CLAW PIVOT	LUBE	MPG	2
	19	HYDRAULIC RESERVOIR	CHECK		
	20	CONTROL VALVE HANDLES	CLEAN & OIL	ENGINE OIL	9
250 OR SEMI- ANNUALLY	2	WINCH GEAR BOX	DRAIN & FILL	GL 5 #140	2
	21	HYDRAULIC FILTER	CHANGE		2
1000 OR YEARLY	19	HYDRAULIC RESERVOIR	DRAIN & FILL	•	1
	22	MAGNETIC PLUG	CLEAN		1
	23	RESERVOIR STRAINER	CLEAN		2

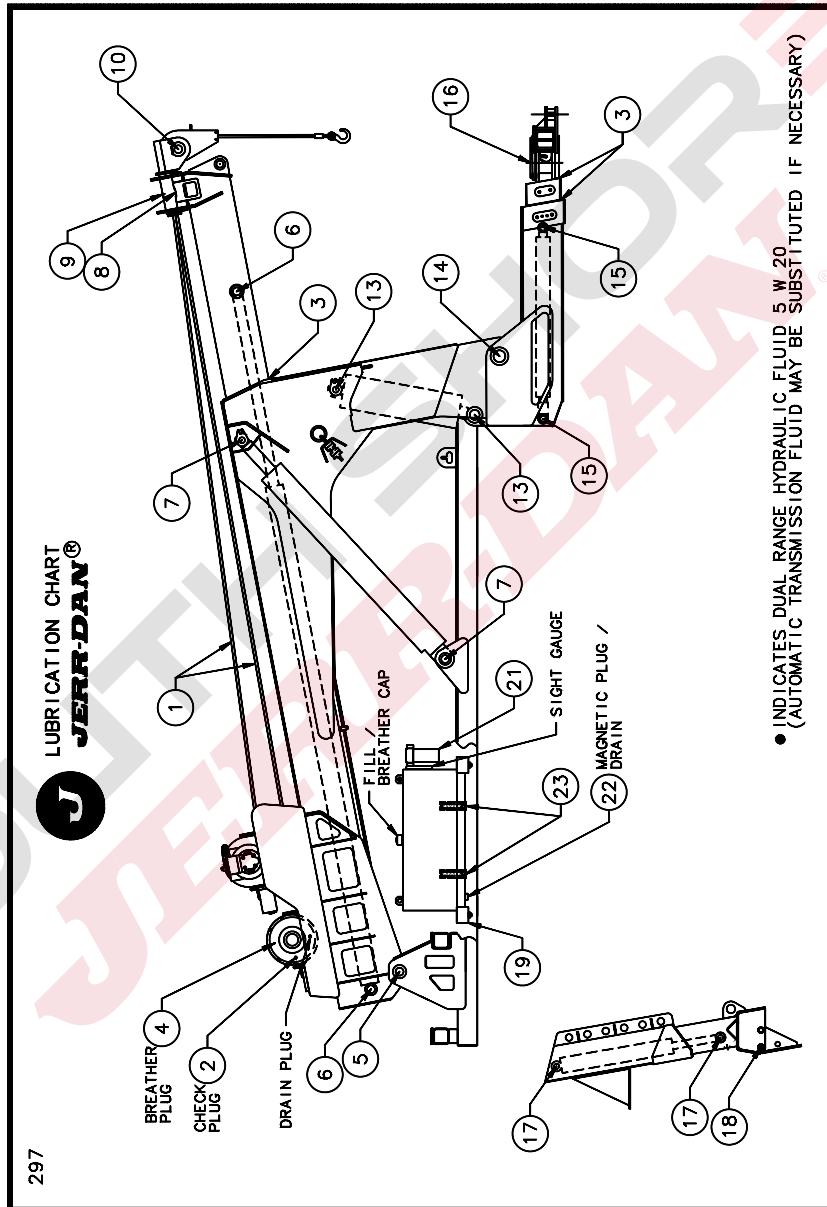


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HDL600/350 LUBRICATION POINTS



HDL700/350 LUBRICATION POINTS

The following lubrication charts are located inside the tool box door on the driver's side of the HDL body.

270  LUBRICATION CHART JERR-DAN® WRECKER					
INTERVAL (HOURS)	REF. NO.	IDENTIFICATION	SERVICE	LUBRICANT	NO. OF POINTS
WEEKLY	1	CABLE	OL	ENGINE OIL	2
50 OR BI-MONTHLY	2	WINCH GEAR BOX	CHECK		2
	3	HYLATOR PADS	COAT	MPG	3
	4	WINCH CASE BREATHERS	CHECK		4
100 OR MONTHLY	5	BOOM PIVOT	LUBE	MPG	1
	6	WRECKER BOOM EXT. CYLINDER	LUBE	MPG	1
	7	WRECKER BOOM LIFT CYLINDER	LUBE	MPG	4
	8	"D" RING	LUBE	MPG	2
	9	WRECKER BOOM SHEAVE HEAD	LUBE	MPG	2
	10	SHEAVE PIN	LUBE	MPG	2
	11	UNDERLIFT LIFT BOOM	LUBE	MPG	1
	12	UNDERLIFT LIFT CYLINDER	LUBE	MPG	2
	13	UNDERLIFT TILT CYLINDER	LUBE	MPG	2
	14	UNDERLIFT PIVOT	LUBE	MPG	3
	15	UNDERLIFT EXTEND CYLINDER	LUBE	MPG	1
	16	CROSS TUBE PIVOT	LUBE	MPG	1
	17	SPADE EXTEND CYLINDER	LUBE	MPG	4
	18	SPADE CLAW PIVOT	LUBE	MPG	2
	19	HYDRAULIC RESERVOIR	CHECK		
	20	CONTROL VALVE HANDLES	CLEAN & OIL	ENGINE OIL	8
250 OR SEMI- ANNUALLY	2	WINCH GEAR BOX	DRAIN & FILL	GL S #140	2
	21	HYDRAULIC FILTER	CHANGE		2
1000 OR YEARLY	19	HYDRAULIC RESERVOIR	DRAIN & FILL	"	1
	22	MAGNETIC PLUG	CLEAN		1
	23	RESERVOIR STRAINER	CLEAN		2

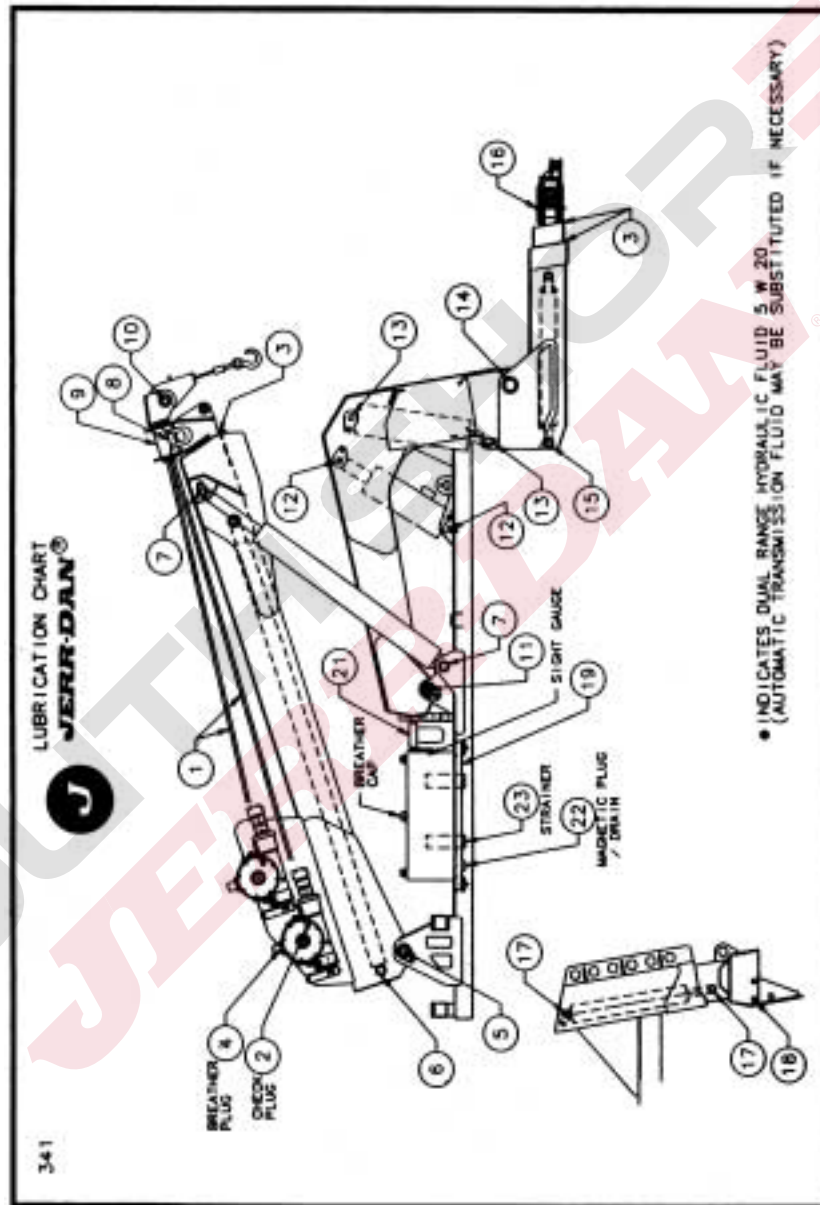


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Date _____

HDL700/350 LUBRICATION POINTS



HDUL530 LUBRICATION POINTS

The following lubrication charts are located inside the tool box door on the driver's side of the HDL body.

270  LUBRICATION CHART JERR-DAN® WRECKER					
INTERVAL (HOURS)	REF. NO.	IDENTIFICATION	SERVICE	LUBRICANT	NO. OF POINTS
WEEKLY	1	CABLE	OIL	EMGHE OIL	3
50 OR BI-MONTHLY	2	WINCH GEAR BOX	CHECK		2
	3	HYLAKRON PADS	COAT	MPG	3
	4	WINCH CASE BREATHERS	CHECK		4
100 OR MONTHLY	5	BOOM PIVOT	LUBE	MPG	1
	6	WRECKER BOOM EXT. CYLINDER	LUBE	MPG	1
	7	WRECKER BOOM LIFT CYLINDER	LUBE	MPG	4
	8	"D" RING	LUBE	MPG	3
	9	WRECKER BOOM SHEAVE HEAD	LUBE	MPG	3
	10	SHEAVE PIN	LUBE	MPG	2
	11	UNDERLIFT LIFT BOOM	LUBE	MPG	1
	12	UNDERLIFT LIFT CYLINDER	LUBE	MPG	3
	13	UNDERLIFT TILT CYLINDER	LUBE	MPG	2
	14	UNDERLIFT PIVOT	LUBE	MPG	3
	15	UNDERLIFT EXTEND CYLINDER	LUBE	MPG	1
	16	CROSSTUBE PIVOT	LUBE	MPG	1
	17	SPADE EXTEND CYLINDER	LUBE	MPG	4
	18	SPADE CLAW PIVOT	LUBE	MPG	3
	19	HYDRAULIC RESERVOIR	CHECK		
	20	CONTROL VALVE HANDLES	CLEAN & OIL	EMGHE OIL	8
250 OR SEMI- ANNUALLY	2	WINCH GEAR BOX	DRAIN & FILL	GL S #148	2
	21	HYDRAULIC FILTER	CHANGE		2
1000 OR YEARLY	19	HYDRAULIC RESERVOIR	DRAIN & FILL	*	1
	22	MAGNETIC PLUG	CLEAN		1
	23	RESERVOIR STRAINER	CLEAN		2

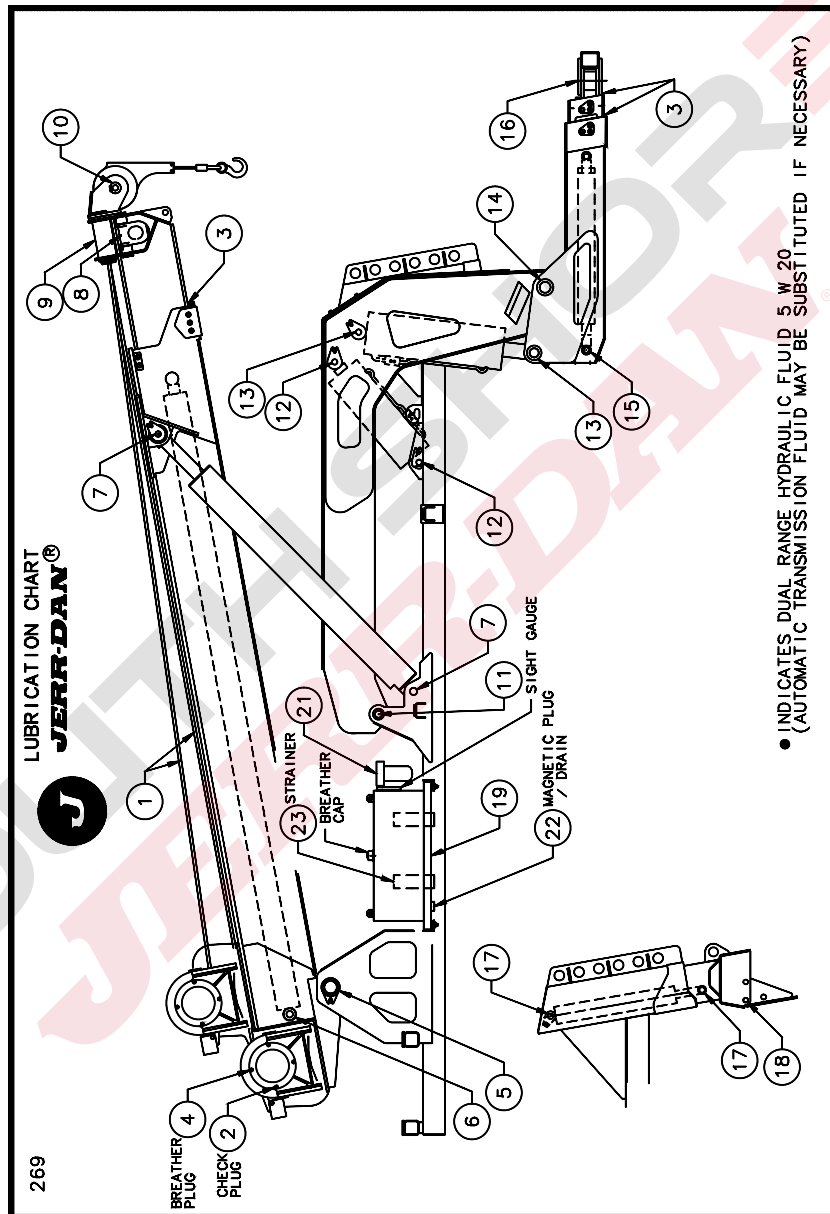


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Date _____

HDUL530 LUBRICATION POINTS



HDUL565 LUBRICATION POINTS

The following lubrication charts are located inside the tool box door on the driver's side of the HDL body.

270  LUBRICATION CHART JERR-DAN® WRECKER					
INTERVAL (HOURS)	REF. NO.	IDENTIFICATION	SERVICE	LUBRICANT	NO. OF POINTS
WEEKLY	1	CABLE	OIL	ENGINE OIL	2
50 OR BI-MONTHLY	2	WINCH GEAR BOX	CHECK		2
	3	HYLAXTRON PADS	COAT	MPG	3
	4	WINCH CASE BREATHERS	CHECK		4
100 OR MONTHLY	5	BOOM PIVOT	LUBE	MPG	1
	6	WRECKER BOOM EXT. CYLINDER	LUBE	MPG	1
	7	WRECKER BOOM LIFT CYLINDER	LUBE	MPG	4
	8	"D" RING	LUBE	MPG	2
	9	WRECKER BOOM SHEAVE HEAD	LUBE	MPG	2
	10	SHEAVE PIN	LUBE	MPG	2
	11	UNDERLIFT LIFT BOOM	LUBE	MPG	1
	12	UNDERLIFT LIFT CYLINDER	LUBE	MPG	2
	13	UNDERLIFT TILT CYLINDER	LUBE	MPG	2
	14	UNDERLIFT PIVOT	LUBE	MPG	2
	15	UNDERLIFT EXTEND CYLINDER	LUBE	MPG	1
	16	CROSSTUBE PIVOT	LUBE	MPG	1
	17	SPADE EXTEND CYLINDER	LUBE	MPG	4
	18	SPADE CLAW PIVOT	LUBE	MPG	2
	19	HYDRAULIC RESERVOIR	CHECK		
	20	CONTROL VALVE HANDLES	CLEAN & OIL	ENGINE OIL	8
250 OR SEMI- ANNUALLY	2	WINCH GEAR BOX	DRAIN & FILL	GL S #140	2
	21	HYDRAULIC FILTER	CHANGE		2
1000 OR YEARLY	19	HYDRAULIC RESERVOIR	DRAIN & FILL	*	1
	22	MAGNETIC PLUG	CLEAN		1
	23	RESERVOIR STRAINER	CLEAN		2

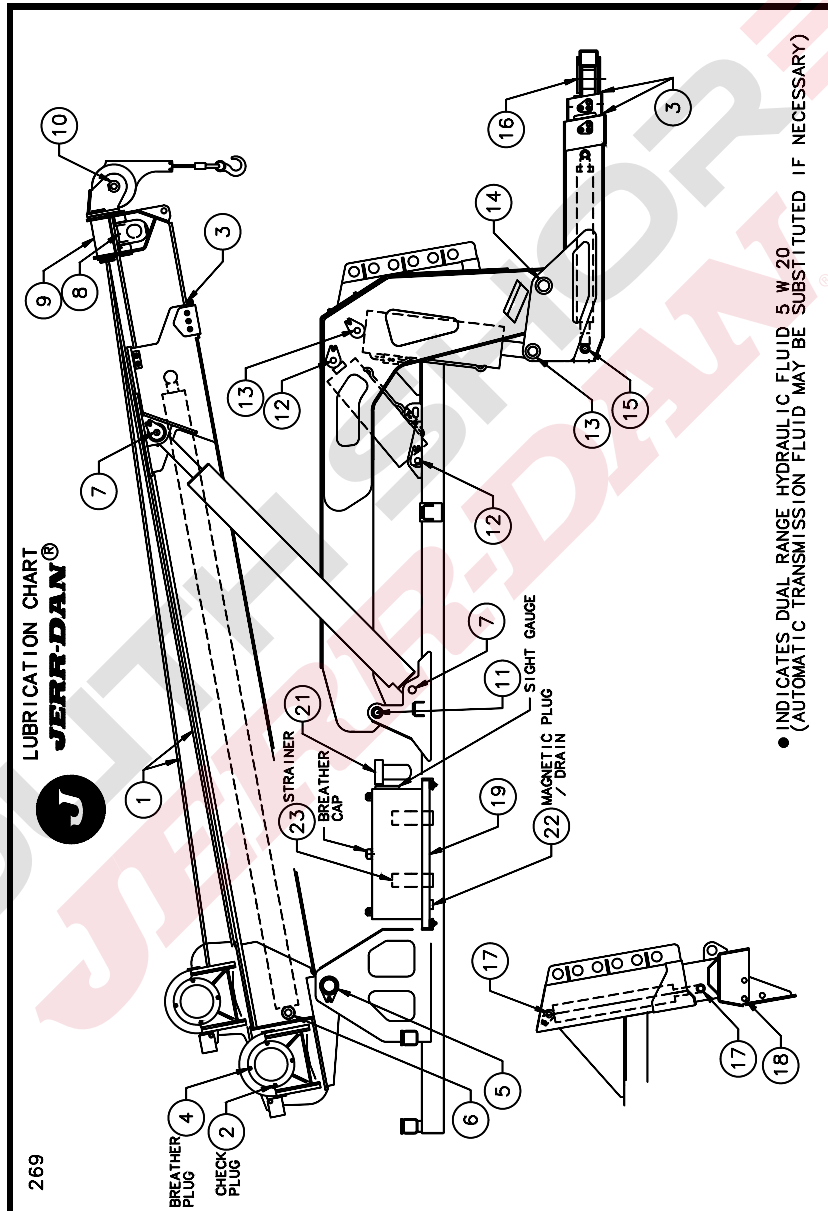


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HDUL565 LUBRICATION POINTS



HDL1100/530 LUBRICATION POINTS

The following lubrication charts are located inside the tool box door on the driver's side of the HDL body.

270  LUBRICATION CHART JERR-DAN® WRECKER					
INTERVAL (HOURS)	REF. NO.	IDENTIFICATION	SERVICE	LUBRICANT	NO. OF POINTS
WEEKLY	1	CABLE	OIL	ENGINE OIL	2
50 OR BI-MONTHLY	2	WINCH GEAR BOX	CHECK		2
	3	MYLATRON PADS	COAT	MPG	3
	4	WINCH CASE BREATHERS	CHECK		4
100 OR MONTHLY	5	BOOM PIVOT	LUBE	MPG	1
	6	WRECKER BOOM EXT. CYLINDER	LUBE	MPG	1
	7	WRECKER BOOM LIFT CYLINDER	LUBE	MPG	4
	8	"D" RING	LUBE	MPG	2
	9	WRECKER BOOM SHEAVE HEAD	LUBE	MPG	2
	10	SHEAVE PIN	LUBE	MPG	2
	11	UNDERLIFT LIFT BOOM	LUBE	MPG	1
	12	UNDERLIFT LIFT CYLINDER	LUBE	MPG	2
	13	UNDERLIFT TILT CYLINDER	LUBE	MPG	2
	14	UNDERLIFT PIVOT	LUBE	MPG	3
	15	UNDERLIFT EXTEND CYLINDER	LUBE	MPG	1
	16	CROSSTUBE PIVOT	LUBE	MPG	1
	17	SPADE EXTEND CYLINDER	LUBE	MPG	4
	18	SPADE CLAW PIVOT	LUBE	MPG	2
	19	HYDRAULIC RESERVOIR	CHECK		
	20	CONTROL VALVE HANDLES	CLEAN & OIL	ENGINE OIL	8
250 OR SEMI- ANNUALLY	2	WINCH GEAR BOX	DRAIN & FILL	GL S #140	2
	21	HYDRAULIC FILTER	CHANGE		2
1000 OR YEARLY	19	HYDRAULIC RESERVOIR	DRAIN & FILL	*	1
	22	MAGNETIC PLUG	CLEAN		1
	23	RESERVOIR STRAINER	CLEAN		2

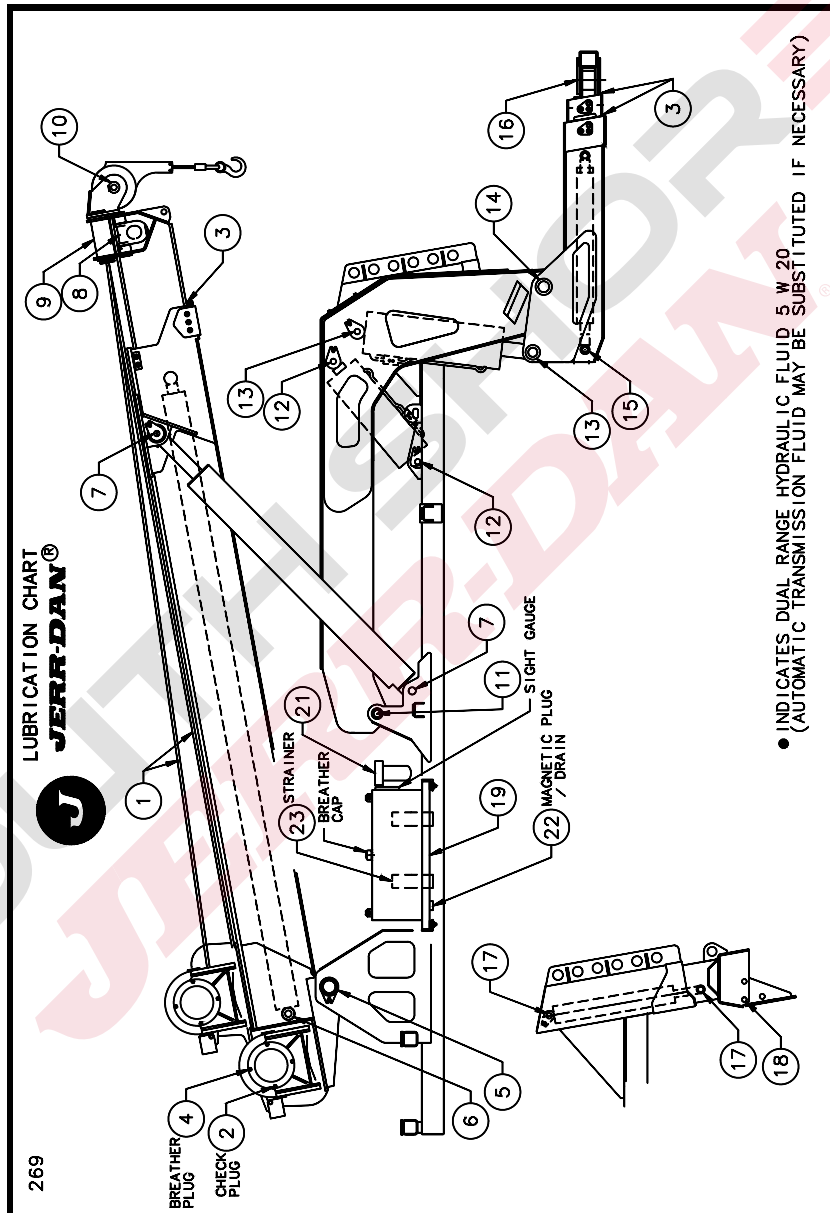


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HDL1100/530 LUBRICATION POINTS



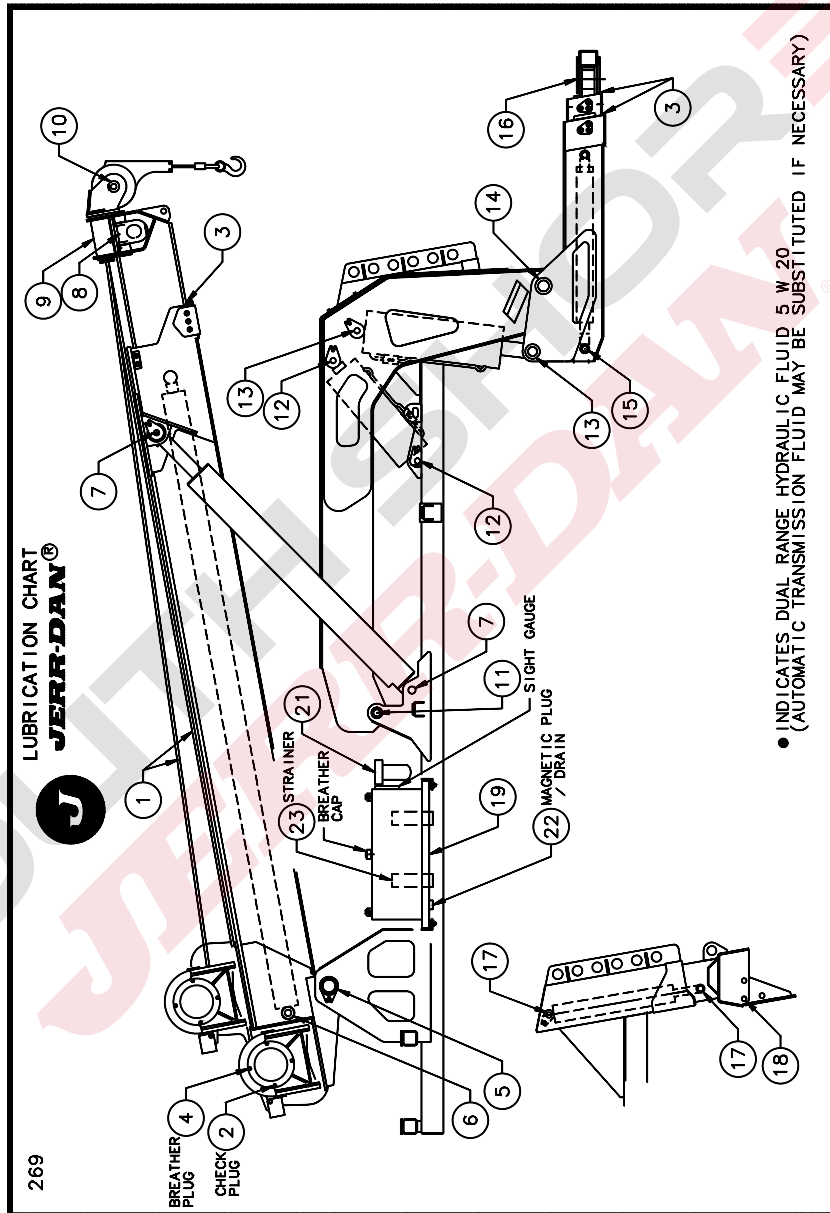
HDL1100/565 LUBRICATION POINTS

The following lubrication charts are located inside the tool box door on the driver's side of the HDL body.

270 LUBRICATION CHART JERR-DAN® WRECKER					
INTERVAL (HOURS)	REF. NO.	IDENTIFICATION	SERVICE	LUBRICANT	NO. OF POINTS
WEEKLY	1	CABLE	OIL	ENGINE OIL	2
50 OR BI-MONTHLY	2	WINCH GEAR BOX	CHECK		2
	3	HYLAFRON PADS	COAT	MPG	2
	4	WINCH CASE BREATHERS	CHECK		4
100 OR MONTHLY	5	BOOM PIVOT	LUBE	MPG	1
	6	WRECKER BOOM EXT. CYLINDER	LUBE	MPG	1
	7	WRECKER BOOM LIFT CYLINDER	LUBE	MPG	4
	8	"D" RING	LUBE	MPG	2
	9	WRECKER BOOM SHEAVE HEAD	LUBE	MPG	2
	10	SHEAVE PIN	LUBE	MPG	2
	11	UNDERLIFT LIFT BOOM	LUBE	MPG	1
	12	UNDERLIFT LIFT CYLINDER	LUBE	MPG	2
	13	UNDERLIFT TILT CYLINDER	LUBE	MPG	2
	14	UNDERLIFT PIVOT	LUBE	MPG	2
	15	UNDERLIFT EXTEND CYLINDER	LUBE	MPG	1
	16	CROSSWISE PIVOT	LUBE	MPG	1
	17	SPADE EXTEND CYLINDER	LUBE	MPG	4
	18	SPADE CLAW PIVOT	LUBE	MPG	2
	19	HYDRAULIC RESERVOIR	CHECK		
	20	CONTROL VALVE HANDLES	CLEAN & OIL	ENGINE OIL	8
250 OR SEMI- ANNUALLY	2	WINCH GEAR BOX	DRAIN & FILL	GL S #140	2
	21	HYDRAULIC FILTER	CHANGE		2
1000 OR YEARLY	19	HYDRAULIC RESERVOIR	DRAIN & FILL	*	1
	22	MAGNETIC PLUG	CLEAN		1
	23	RESERVOIR STRAINER	CLEAN		2



HDL1100/565 LUBRICATION POINTS



TROUBLE SHOOTING

You probably won't require anything but preventive maintenance to keep your HDL running, however, the following chart should help you isolate and correct minor problems if they occur with use. Any service work on the hydraulic system should be performed by qualified mechanics.

HYDRAULIC SYSTEM

Problem	Cause	Solution
Slow operation	a. Low engine RPM b. Low oil level c. Blocked or restricted hose d. Dirty hydraulic oil e. Hydraulic pump worn f. Frozen hydraulic lines	a. Speed up engine b. Check level and fill with the specified oil c. Inspect: remove blockage d. Drain, flush and refill with clean oil, replace filter e. Rebuild or replace f. Thaw and remove water
Valve handle sticks tight or frozen	a. Insufficient lubrication b. Broken centering spring or clogged with foreign material	a. Lubricate per lube chart b. Inspect, clean or replace
Valve leaks	a. Defective seals	a. Inspect and replace
Cylinder leaks	a. Defective seals or rods	a. Inspect and replace
Erratic cylinder function	a. Air in the system b. Defective pump (pulsating)	a. Cycle hydraulic system 10 to 15 times to remove air b. Replace if necessary
Remote hand controller fails to respond	a. Electric power turned off b. Discharged battery c. Defective battery d. Emergency - Off switch depressed	a. Turn on CONTROL power switch in cab b. Charge battery c. Replace d. Release/pull switch on transmitter

P.T.O. FUNCTIONING IMPROPERLY

Problem	Cause	Solution
Cable tight or frozen	a. Cable kinked or bent b. Cable and PTO connection not adjusted properly c. Mounting bracket nuts are over tightened at P.T.O.	a. Straighten or replace b. Inspect and adjust c. Loosen if necessary
Rattling noise in P.T.O.	a. P.T.O. backlash too loose (Consult P.T.O. Manual)	a. Shims must be removed



TROUBLESHOOTING

P.T.O. FUNCTIONING IMPROPERLY

Problem	Cause	Solution
Howling noise in P.T.O.	a. P.T.O. backlash too tight (Consult P.T.O. Manual)	a. Shims must be added
Gear oil leak between P.T.O. and pump	a. Defective shaft seal	a. Remove and replace
P.T.O. will not engage or disengage	a. Cable and PTO connection not adjusted properly b. Defective shifter cover	a. Inspect and adjust b. Inspect and replace

HYDRAULIC PUMP

Problem	Cause	Solution
Pump noisy (Cavitation)	a. Low oil supply b. Heavy oil c. Dirty oil filter d. Restriction in suction line e. Pump worn	a. Fill to proper level b. Fill with proper oil (See chart) c. Replace filter d. Clean out and remove e. Repair or replace
Pump slow or fails to respond	a. Low oil supply	a. Fill to proper level
Oil heating up	a. Foreign material lodged in relief valve b. Using too light oil c. Dirty oil d. Oil level too low e. Pump worn (slippage)	a. Inspect and remove/replace filter b. Drain and refill with clean oil c. Drain, flush and refill with clean oil/replace filter d. Fill to proper level e. Repair or replace
Oil foaming	a. Air leaking into suction line b. Wrong kind of oil c. Oil level too low	a. Tighten all connections b. Drain and refill with non-foaming type of hydraulic oil (See lube chart) Replace filter c. Refill to proper level
Hydraulic oil leak between P.T.O. and pump	a. Defective shaft seal	a. Replace shaft seal
Pump leaks at front and rear covers	a. Defective seals	a. Replace seals

TROUBLESHOOTING

WINCH FUNCTIONING IMPROPERLY

Problem	Cause	Solution
Winch screeches during operation	a. Insufficient lubrication	a. Lubricate per lube chart
Winch will not pull load or take in wire rope	a. Free-spooling device not engaged	a. Engage
	b. Sheared keys or broken coupling	b. Inspect or replace
	c. Hydraulic pump worn	c. Inspect and replace
Free-spool device	a. No air pressure	a. Turn truck on
	b. Insufficient air pressure	b. Allow truck to run
	c. Defective pressure switch	c. Inspect and replace
	d. Leaking air line	d. Inspect and replace
Cable tensioner device non-functional	a. No air pressure	a. Turn truck on
	b. Insufficient air pressure	b. Allow truck to run
	c. Defective pressure switch	c. Inspect and replace
	d. Leaking air line	d. Inspect and replace
Cable speed shift nonfunctional	a. No air pressure	a. Turn truck on
	b. Insufficient air pressure	b. Allow truck to run
	c. Defective pressure switch	c. Inspect and replace
	d. Leaking air line	d. Inspect and replace

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.



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SOUTH SHORE
JERR-DAN®



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WHEEL LIFT SYSTEM PARTS

Subframe Installation	B-2
Under Lift Boom Installation	B-6
Under Lift Boom Assembly	
(Units Built Starting with Serial Number 20010111035	B-9
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Under Lift Tilt Cylinders (7330000039)	B-14
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Under Lift Extension Cylinder (7330000041)	B-22

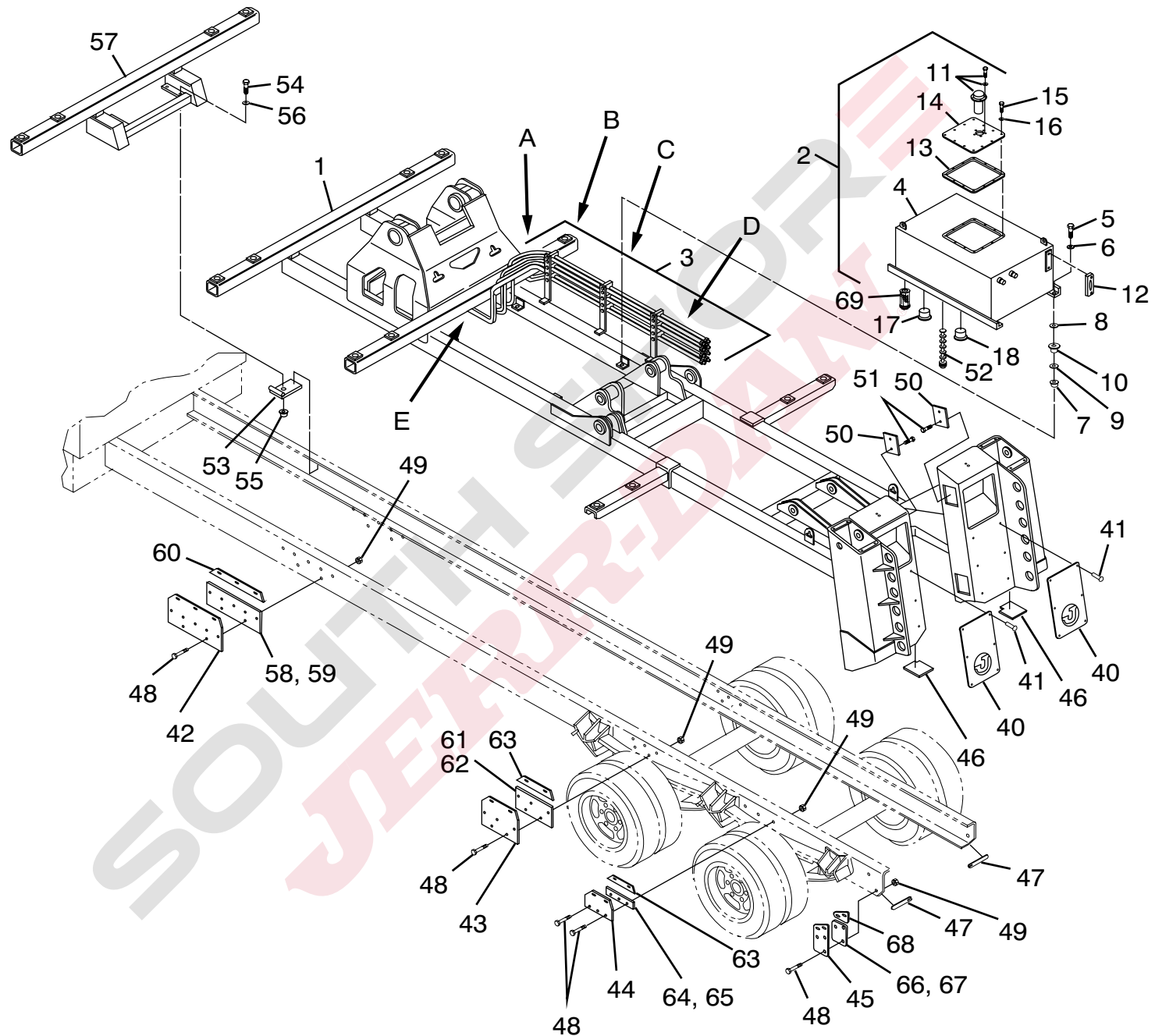
PARTS LIST — SUBFRAME INSTALLATION

Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
1	3868000185	Subframe Weld 110" Body	1	37	7209000032	Bushing	6
	3868000207	Subframe Weld 146" Body	1	38	7443000210	Fitting	2
2	2507650009	Hydraulic Tank Install	1	39	7443000209	Fitting	6
3	3912000009	Tube Assy Subframe	1	40	4706002491	Plate	2
4	3750000021	Hydraulic Tank	1	41	7759000012	Rivet	12
5	7115181850	Capscrew	4	42	4706002489	Mounting Plate	2
6	7950180141	Flatwasher	4	43	4706002725	Mounting Plate	2
7	7660182601	Locknut	4	44	4706002490	Mounting Plate	2
8	7949000015	Washer	4	45	4706002554	Mounting Plate	2
9	7949000016	Washer	4	46	4706002557	Plate	2
10	7636000006	Mount Center Bonded	4	47	4062000324	Bar	2
11	7183000002	Assy Weatherproof Breather Cap	1	48	7118221816	Capscrew	36
12	7470000003	Gauge	1	49	7660222308	Locknut	36
13	7796000051	Gasket Oil Tank Cover	1	50	4679000127	Pad	4
14	4706002235	Hydraulic Cover	1	51	7115160423	Capscrew	8
15	7115140650	Capscrew	12	52 ¹	7701000025	Magnetic Plug	1
16	7950140000	Lockwasher	12	53	3274000011	Toolbox Clamp	4
17	7444120014	Plug	1	54	7115182050	Capscrew	4
18	7444160011	Plug	1	55	7660182301	Locknut	4
19	7912000101	Tube Assy	1	56	7950180252	Flatwasher	4
20	7912000100	Tube Assy	1	57	3868000157	Subframe Weld Stand Alone	1
21	7912000095	Tube Assy	1	58 ²	4706002493	Plate .25 Thk	2
22	7912000094	Tube Assy	1	59 ²	4706002492	Plate .13 Thk	2
23	7912000103	Tube Assy	1	60 ²	4706002163	Plate	2
24	7912000102	Tube Assy	1	61 ²	4706002495	Plate .25 Thk	2
25	7912000104	Tube Assy	2	62 ²	4706002494	Plate .13 Thk	2
26	7274000030	Clamp	16	63 ²	4706002555	Plate	4
27	7274000049	Clamp	6	64 ²	4706001776	Plate .25 Thk	2
28	7445121225	Union Bulkhead	2	65 ²	4706001773	Plate .13 Thk	2
29	7661000022	Nut	36	66 ²	4706002142	Plate .25 Thk	2
30	7661000027	Nut	18	67 ²	4706002141	Plate .13 Thk	2
31	7007000036	Adapter	19	68 ²	4706002556	Plate	2
32	7115150650	Capscrew	36	69 ¹	7430000007	Filter	1
33	7115150850	Capscrew	18				
34	7950150000	Washer	54				
35	7209000023	Bushing	8				
36	7209000024	Bushing	16				

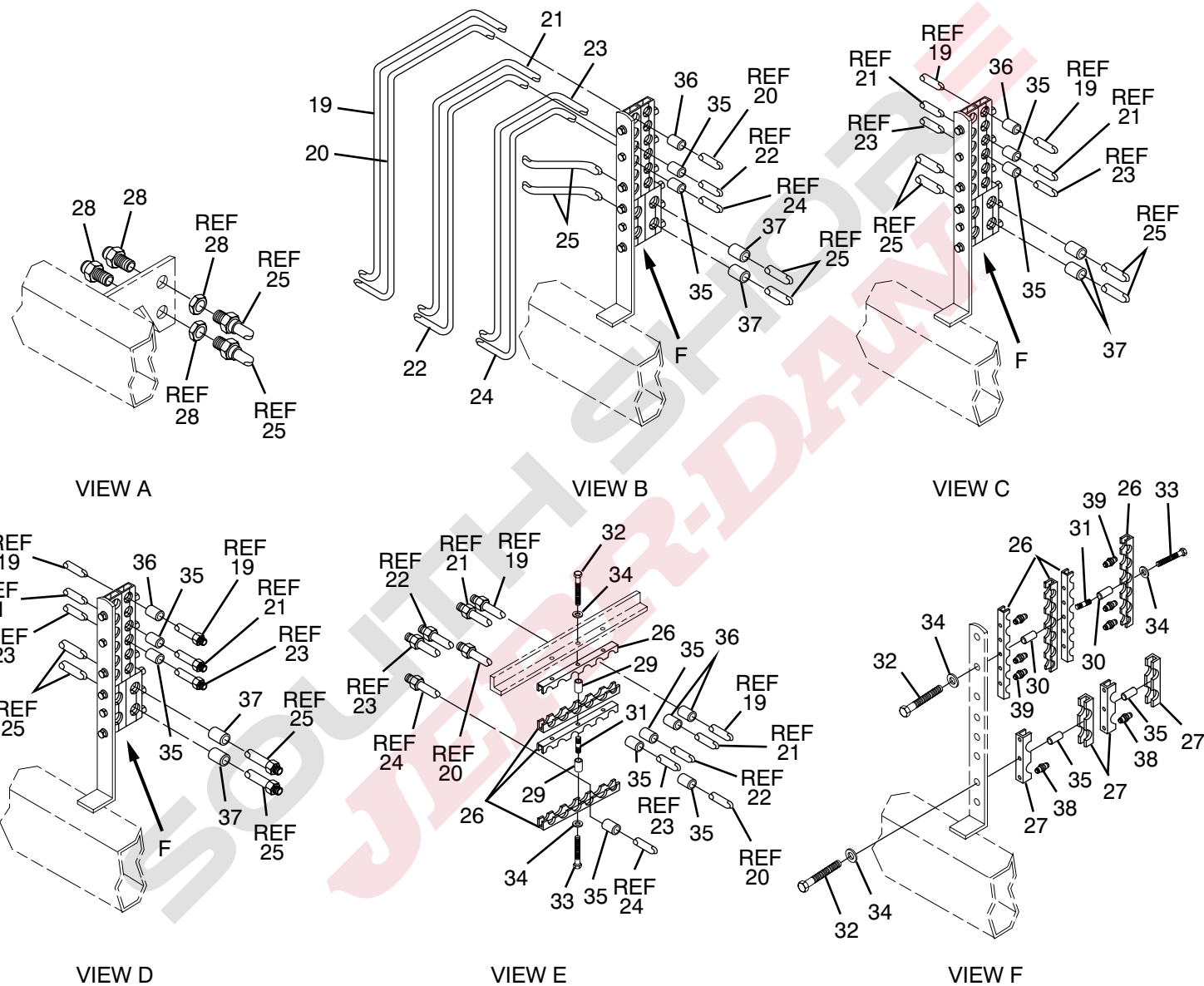
¹Available in Assembly 3750000022

²Available in Kit 3577000046

SUBFRAME INSTALLATION



SUBFRAME INSTALLATION



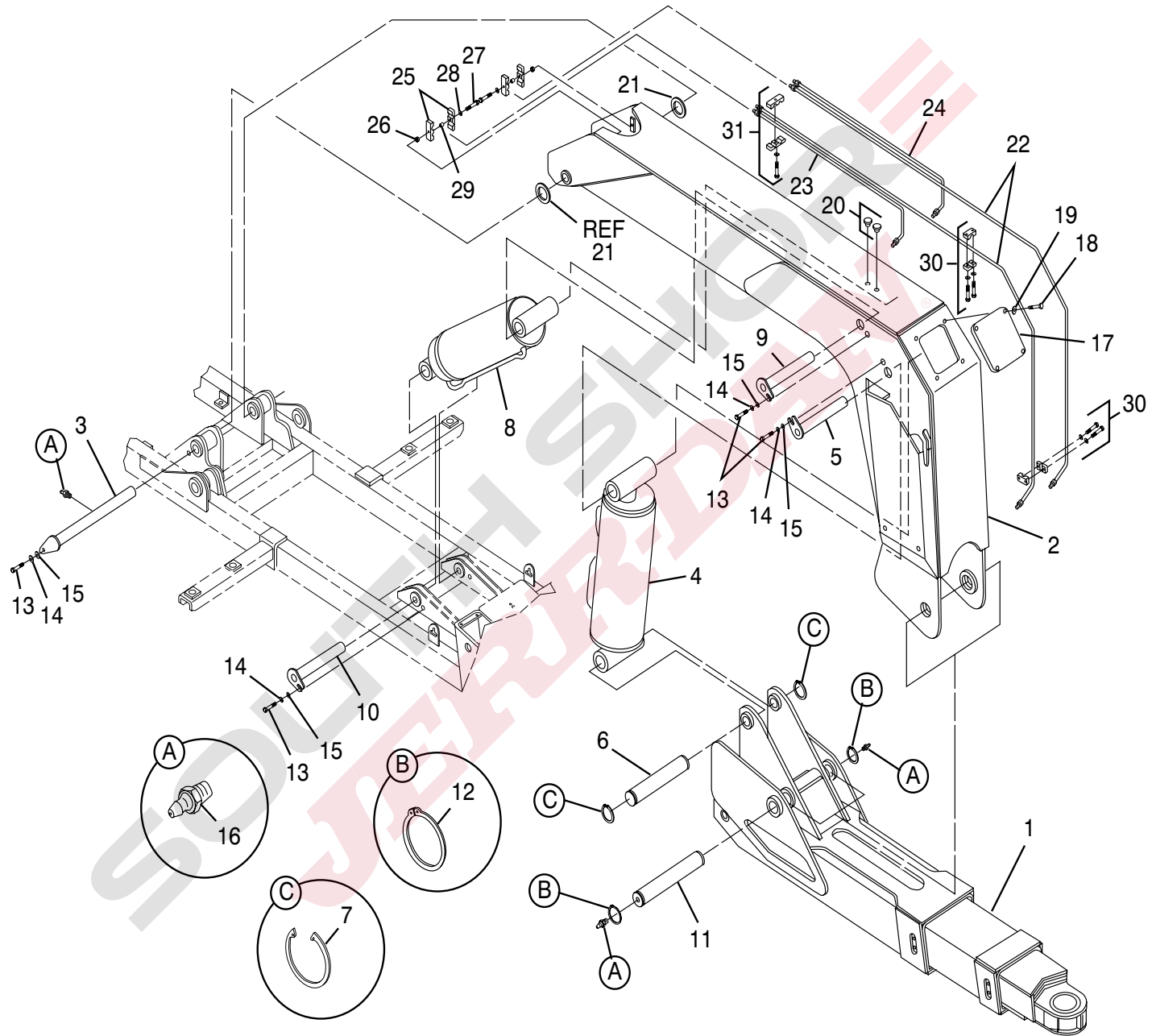
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SOUTH SHORE
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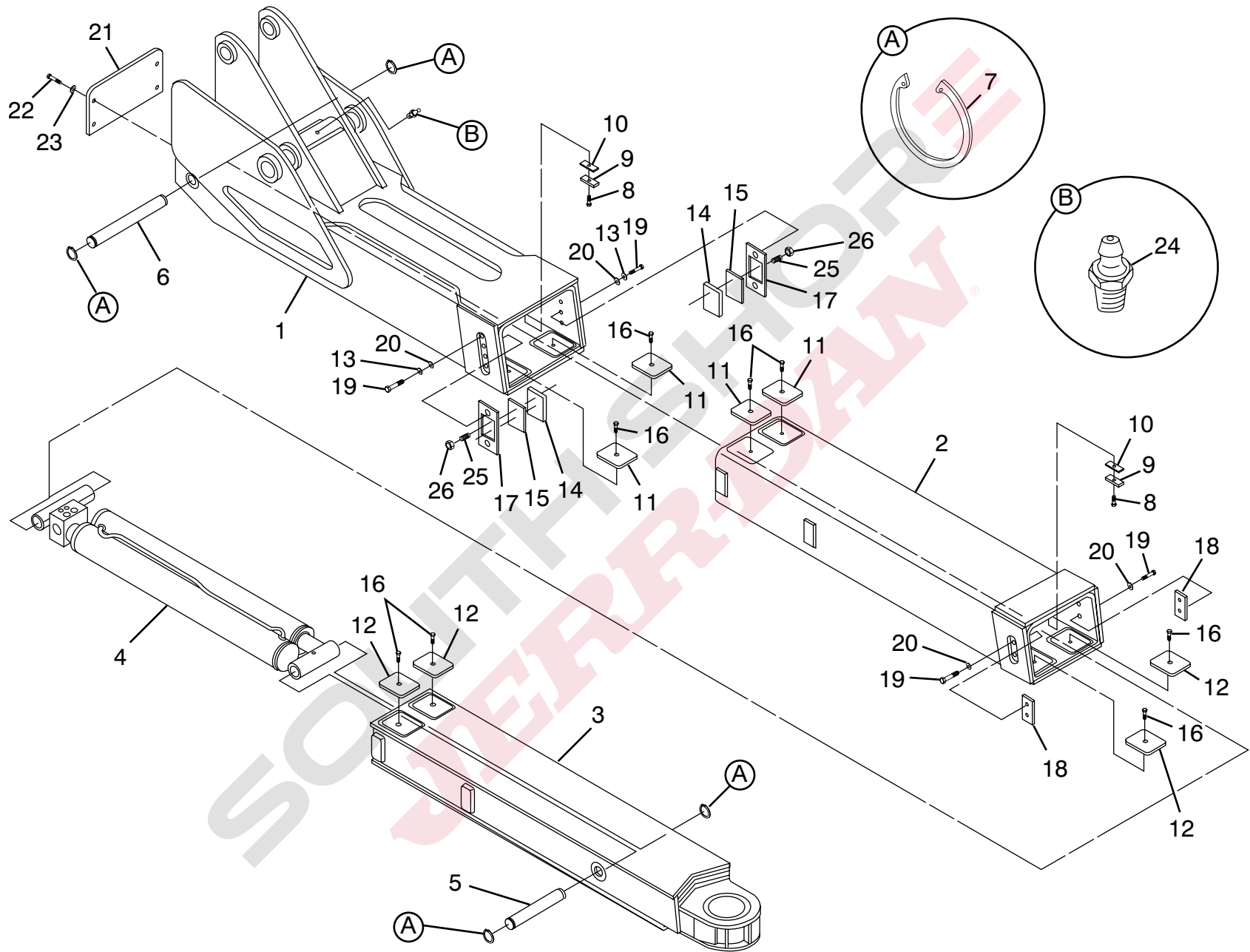
PARTS LIST — UNDER LIFT BOOM INSTALLATION

Ref. No.	Part No.	Description	Qty.
1	3170000160	Assembly 30T Underlift	1
2	3170000181	Lift Boom Weld	1
3	3691000170	Pin Weldment	1
4	7320000039	Underlift Cylinder Tilt	1
5	3691000160	Pin Weldment	1
6	4691000317	Pin Weldment	1
7	7754000051	Ring Retaining	2
8	7320000040	Lift Cylinder	1
9	3691000171	Pin Weldment	1
10	3691000152	Pin Weldment	1
11	4691000311	Pin	1
12	7754000018	Ring Retaining	2
13	7115180850	Capscrew	4
14	7950180000	Lockwasher	4
15	7950180161	Flatwasher	4
16	7440030000	Grease Fitting	4
17	4706002206	Cover	1
18	7115161250	Capscrew	4
19	7950160000	Lockwasher	4
20	7189000017	Bumper	2
21	4949000031	Washer .063 Thk	2
	4949000032	Washer .093 Thk	
22	7912000110	Tube Assembly	2
23	7912000111	Tube Assembly	1
24	7912000112	Tube Assembly	1
25	7274000048	Clamp	2
26	7661000022	Nut	6
27	7115150650	Hex Head Capscrew	8
28	7950150000	Washer	8
29	7209000025	Bushing	4
30	7274000051	Clamp	4
31	7274000052	Clamp	4

UNDER LIFT BOOM INSTALLATION



UNDER LIFT BOOM ASSEMBLY



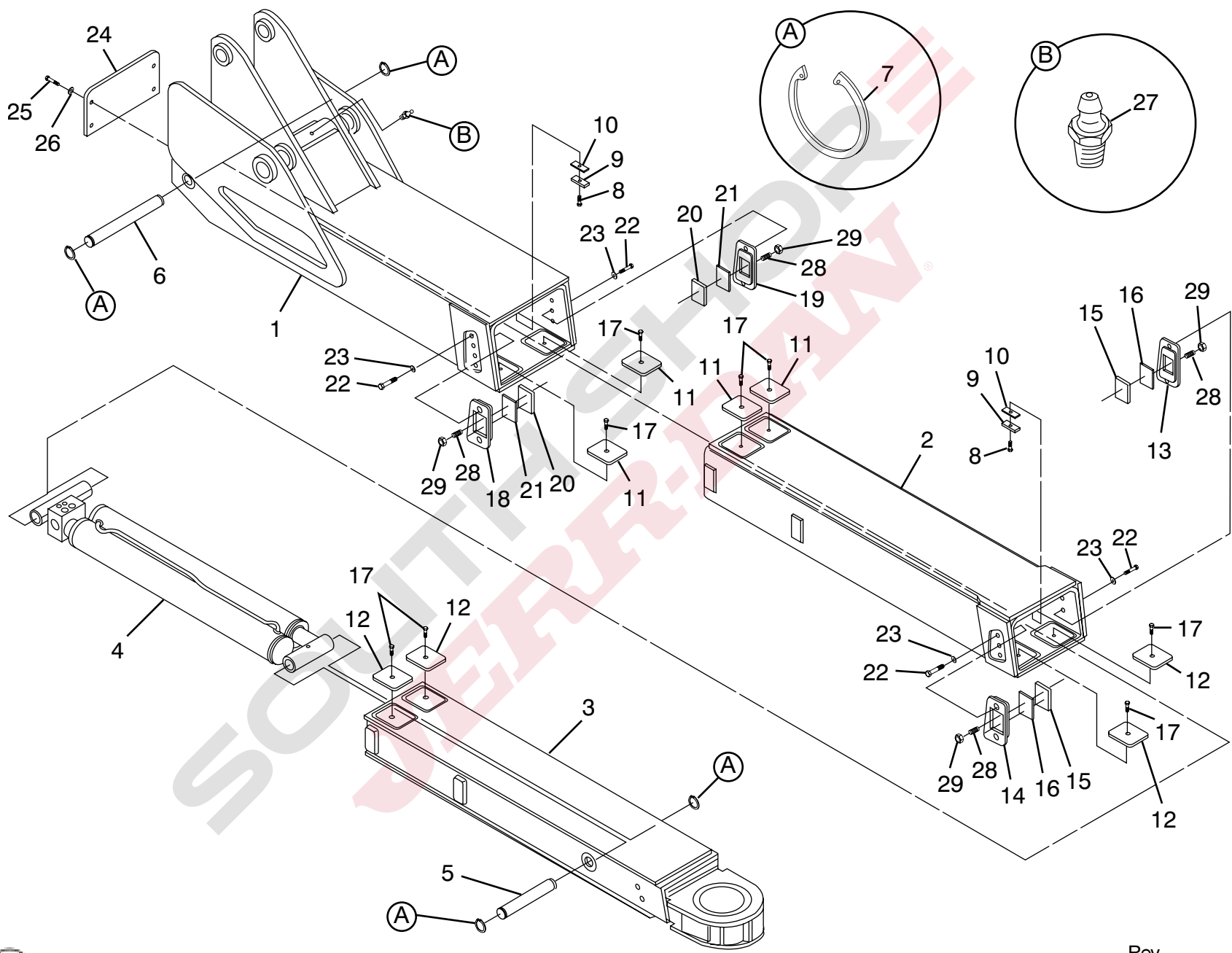
PARTS LIST — UNDER LIFT BOOM ASSEMBLY

Ref. No.	Part No.	Description	Qty.
1	3170000153	Boom Weld Base	1
2	3170000152	Boom Weld Mid	1
3	3170000151	Boom Weld Fly	1
4	7320000034	Extension Cylinder	1
5	4691000318	Pin	1
6	4691000316	Pin	1
7	7754000043	Ring Internal Snap	4
8	7114140518	Capscrew	2
9	4679000159	Pad	2
10	4706002461	Plate	2
11	4679000161	Pad	4
12	4679000158	Pad	4
13	7950180000	Lockwasher	4
14	4679000164	Pad	2
15	4706002460	Plate	2
16	7114140418	Capscrew	8
17	4706002463	Plate	2
18	4706002462	Plate	2
19	7105180850	Capscrew	8
20	7950180153	Flatwasher	8
21	4706002467	Plate	1
22	7115140650	Capscrew	4
23	7950140000	Lockwasher	4
24	7440030000	Grease Fitting	1
25	7785181640	Set Screw	4
26	7660180230	Nut Jam	4

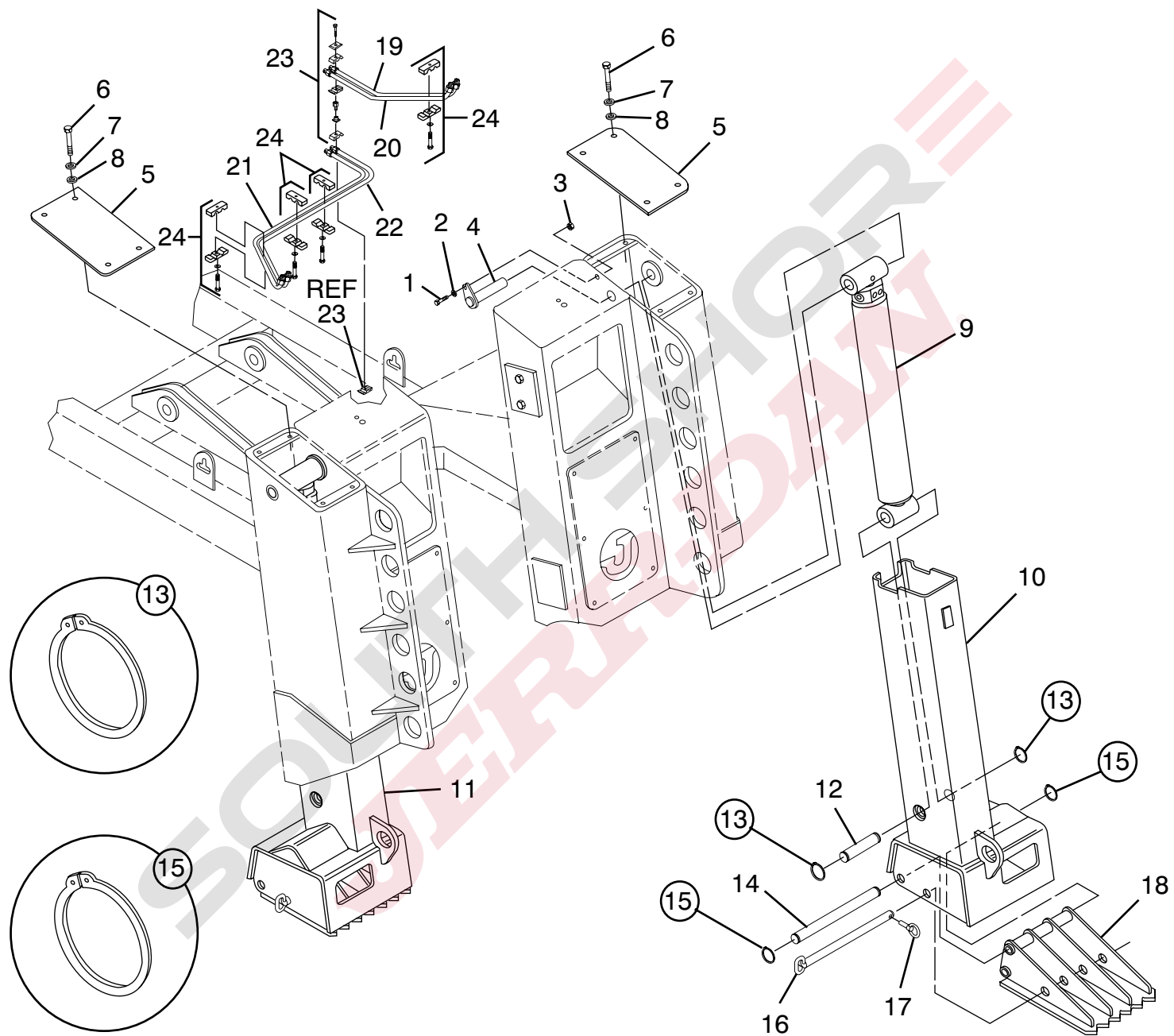
**PARTS LIST — UNDER LIFT BOOM ASSEMBLY
(UNITS BUILT STARTING WITH S/N 2001011035)**

Ref. No.	Part No.	Description	Qty.
1	3170000224	Boom Weld Base	1
2	3170000223	Boom Weld Mid	1
3	3170000221	Boom Weld Fly	1
4	7320000041	Cylinder U/L Extend	1
5	4691000318	Pin	1
6	4691000316	Pin	1
7	7754000043	Ring Internal Snap	4
8	7114140518	Capscrew	2
9	4679000159	Pad	2
10	4706002461	Plate	2
11	4679000161	Pad	4
12	4679000158	Pad	4
13	3706000177	Pad Keeper, LH	1
14	3706000178	Pad Keeper, RH	1
15	4679000206	Pad	2
16	4706003144	Plate	2
17	7114140418	Capscrew	8
18	3706000179	Pad Keeper, LH	1
19	3706000180	Pad Keeper, RH	1
20	4679000205	Pad	2
21	4706003143	Plate	2
22	7105180850	Capscrew	8
23	7950180153	Flatwasher	8
24	4706002467	Plate	1
25	7115140650	Capscrew	4
26	7950140000	Lockwasher	4
27	7440030000	Grease Fitting	1
28	7786000008	Set Screw	6
29	7660180230	Jam Nut	6

UNDER LIFT BOOM ASSEMBLY (UNITS BUILT STARTING WITH S/N 2001011035)



HYDRAULIC SPADE ASSEMBLY



PARTS LIST —HYDRAULIC SPADE ASSEMBLY

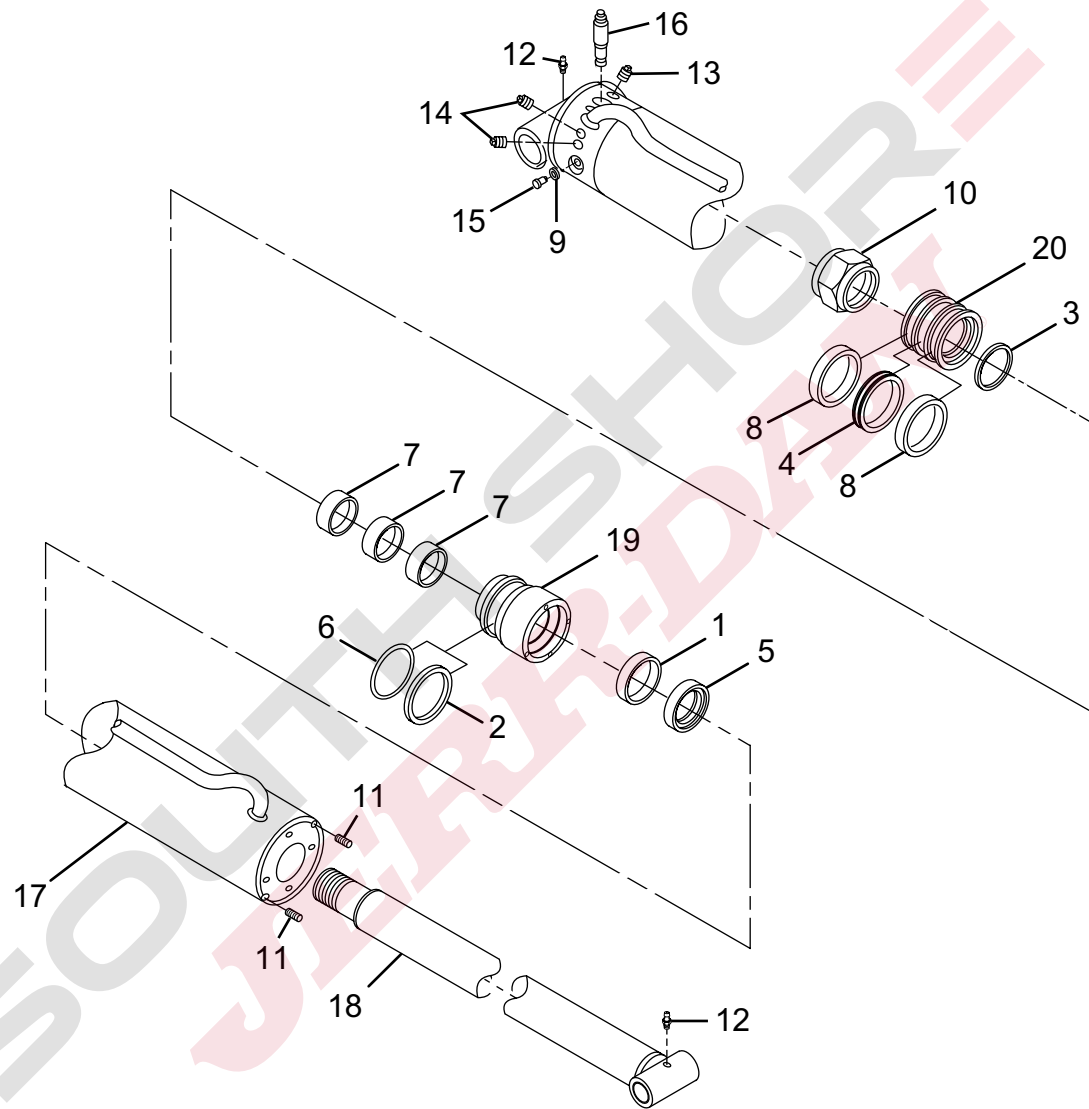
Ref. No.	Part No.	Description	Qty.
1	7115161250	Capscrew	2
2	7950160151	Flatwasher	2
3	7660162601	Locknut	2
4	3691000139	Pin	2
5	4706002468	Plate	2
6	7114140518	Capscrew	8
7	7950140000	Lockwasher	8
8	7950140141	Flatwasher	8
9	7320000006	Cylinder Spade	2
10	3263000068	Channel Weld RH	1
11	3263000067	Channel Weld LH	1
12	4691000207	Pin	2
13	7754000033	Ring Retaining	4
14	4691000200	Pin	2
15	7754000008	Retaining Ring	4
16	3691000126	Pin	2
17	7691000019	Pin Lynch	2
18	3706000113	Spade Foot Weld	2
19	7912000119	Tube Assy	1
20	7912000120	Tube Assy	1
21	7912000121	Tube Assy	1
22	7912000122	Tube Assy	1
23	7274000064	Clamp	1
24	7274000050	Clamp	5

PARTS LIST — UNDER LIFT TILT CYLINDERS
7320000039

Ref. No.	Part No.	Description	Qty.
1	9796250071*	Seal	1
2	9754250043*	Back-Up	1
3	9796250062*	O-Ring	1
4	9796250113*	Seal	1
5	9796250114*	Wiper	1
6	9796250117*	O-Ring	1
7	9754250018*	Wear Ring	3
8	9754250045*	Wear Ring	2
9	9796250079	Washer	1
10	9661250017	Locknut	1
11	9786250008	Setscrew	2
12	7440030000	Lube Fitting	2
13	9701250007	Port Plug	2
14	9701250017	Port Plug	2
15	9701250005	Bleeder Plug	1
16	9935250032	Counterbalance Valve	1
17	9912250017	Tube Assy	1
18	9763250021	Rod Assy	1
19	9553250013	Head	1
20	9698250014	Piston	1

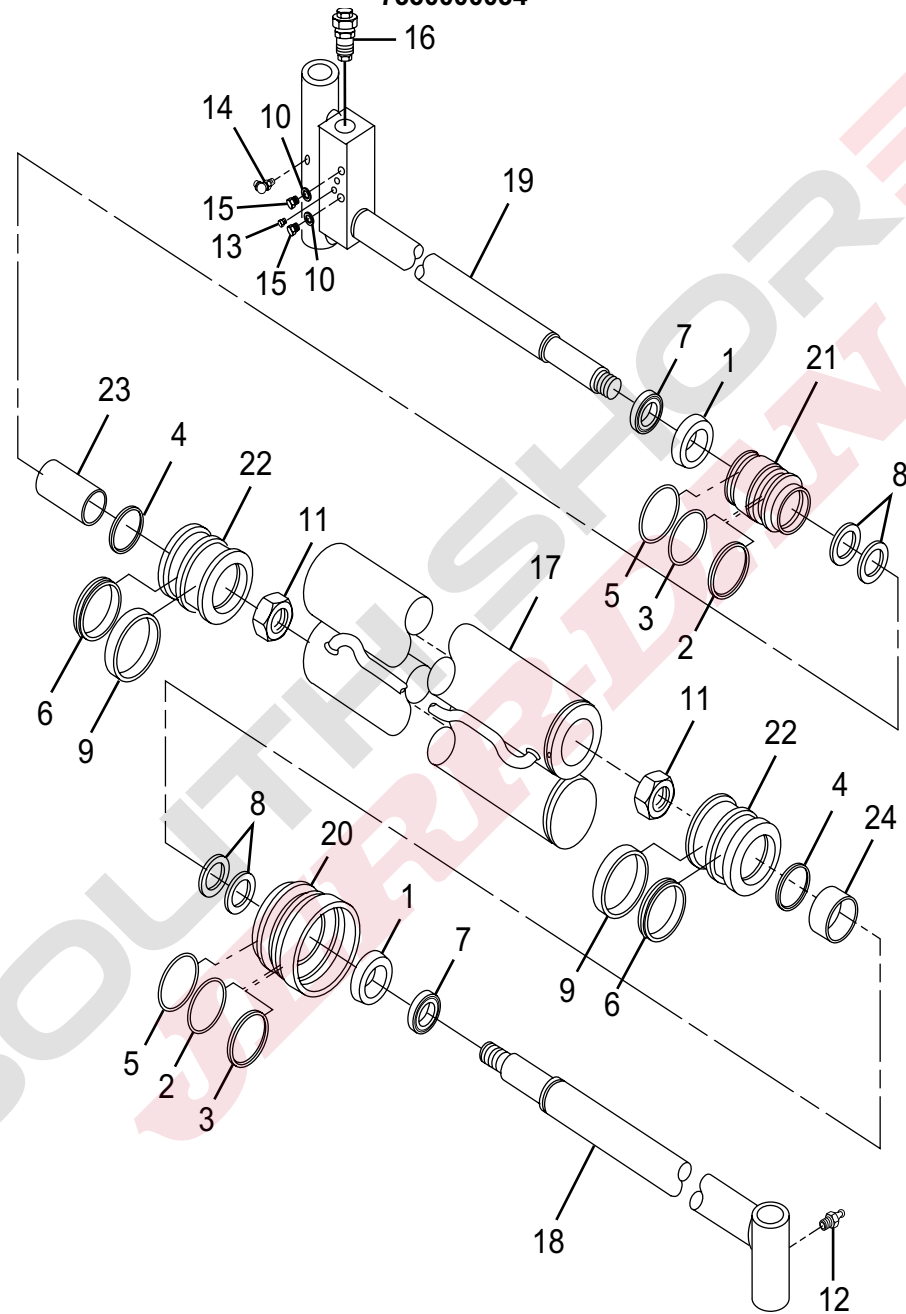
*Available only in Service Kit #7577250204

UNDER LIFT TILT CYLINDERS
7320000039



UNDER LIFT EXTENSION CYLINDER

7330000034



PARTS LIST — UNDER LIFT EXTENSION CYLINDER
7330000034

Ref. No.	Part No.	Description	Qty.
1	9796250069*	Seal	2
2	9796250109*	O-Ring	2
3	9754250042*	Back-Up	2
4	9796250110*	O-Ring	2
5	9796250111*	O-Ring	2
6	9796250112*	Seal	2
7	9796250116*	Wiper	2
8	9754250015*	Wear Ring	4
9	9754250044*	Wear Ring	2
10	9796250079	Washer Seal	2
11	9661250020	Locknut	2
12	7440030000	Lube Fitting	1
13	9701250007	Port Plug	2
14	7440030400	Lube Fitting	1
15	9701250005	Bleeder Plug	2
16	9935250025	Cartridge Check Kit	1
17	9912250015	Tube Assy	1
18	9763250016	Rod Assy	1
19	9763250017	Rod - Tube Assy	1
20	9553250011	Head	1
21	9553250012	Head	1
22	9698250013	Piston	2
23	9831250015	Spacer	1
24	9831250016	Spacer	1

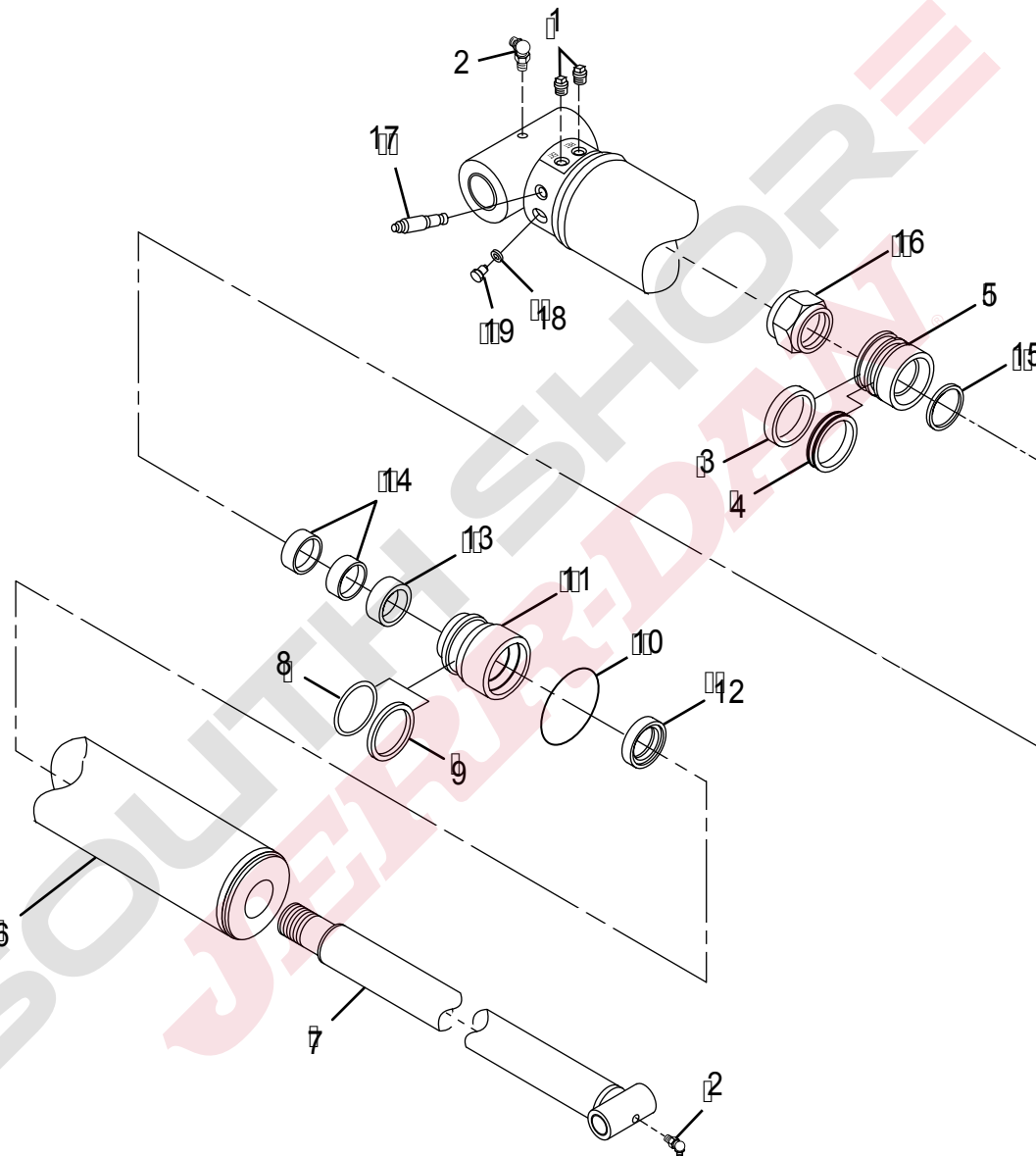
*Available only in Service Kit #7577250203

**PARTS LIST — SPADE CYLINDER
7320000006**

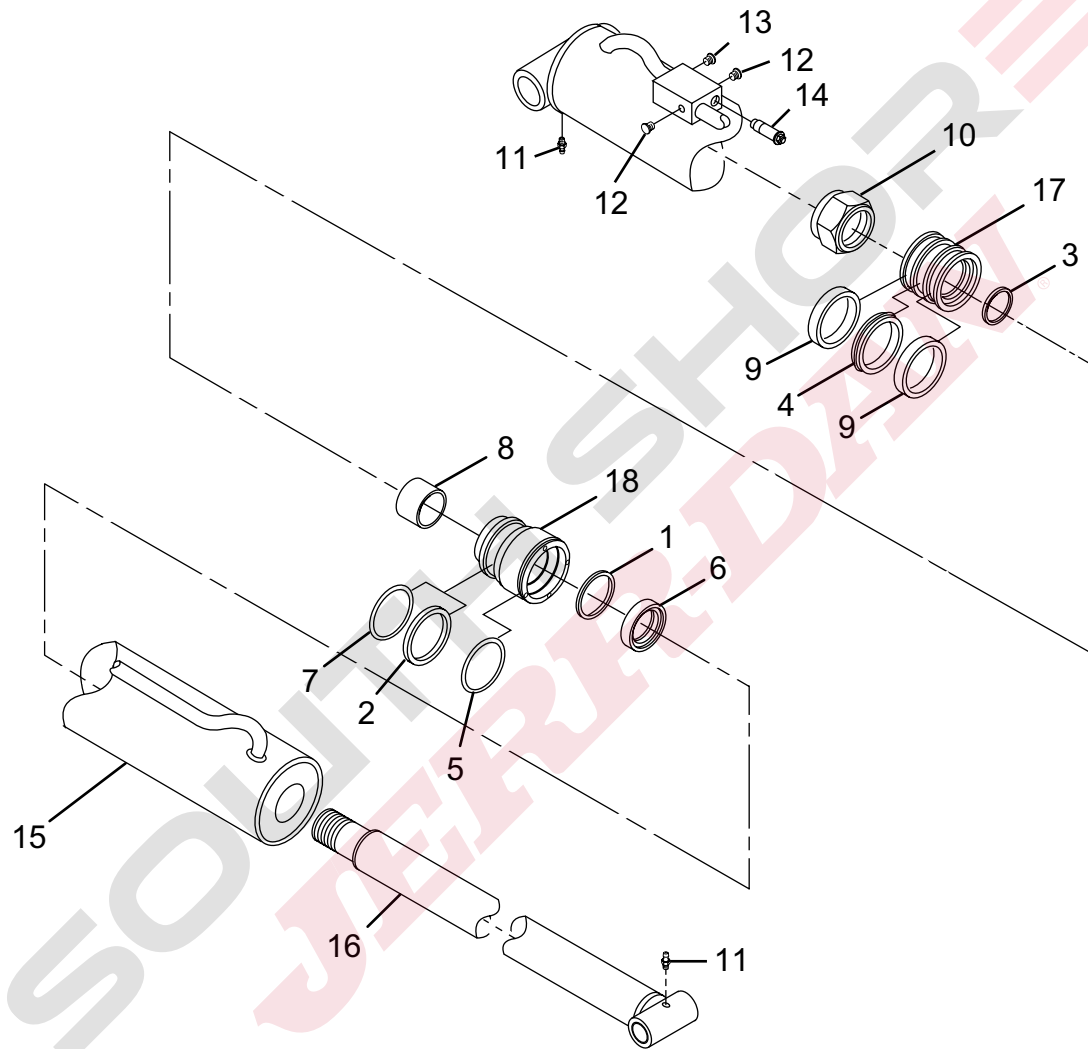
Ref. No.	Part No.	Description	Qty.
1	9701250007	Port Plug	2
2	7440030400	Lube Fitting	2
3	9754250014*	Wear Ring	1
4	9796250073*	Seal	1
5	9698250007	Piston	1
6	9912250004	Tube Assy	1
7	9763250009	Rod Assy	1
8	9796250057*	O-Ring	1
9	9754250009*	Back-up	1
10	9796250066*	O-Ring	1
11	9553250009	Head	1
12	9796250080*	Wiper	1
13	9796250069*	Seal	1
14	9754250015*	Wear Ring	2
15	9796250061*	O-Ring	1
16	9661250016	Locknut	1
17	7935000139	Counterbalance Valve	2
18	9796250079*	Washer Seal	2
19	9701250005	Bleeder Plug	2

* Available only in Service Kit #7577000167

SPADE CYLINDER
7320000006



UNDERLIFT LIFT CYLINDER
7320000040



PARTS LIST — UNDERLIFT LIFT CYLINDER
7320000040

Ref. No.	Part No.	Description	Qty.
1	9796250071*	Seal	1
2	9754250043*	Back-Up	1
3	9796250062*	O-Ring	1
4	9796250113*	Seal	1
5	9796250124*	O-Ring	1
6	9796250114*	Wiper	1
7	9796250117*	O-Ring	1
8	9754250018*	Wear Ring	3
9	9754250045*	Wear Ring	4
10	9661250017	Locknut	1
11	7440030000	Lube Fitting	2
12	9701250007	Port Plug	2
13	9701250017	Port Plug	1
14	9935250032	Counterbalance Valve	1
15	9912250018	Tube Assy	1
16	9763250022	Rod Assy	1
17	9698250017	Piston	1
18	9553250014	Head	1

*Available only in Service Kit #7577250255



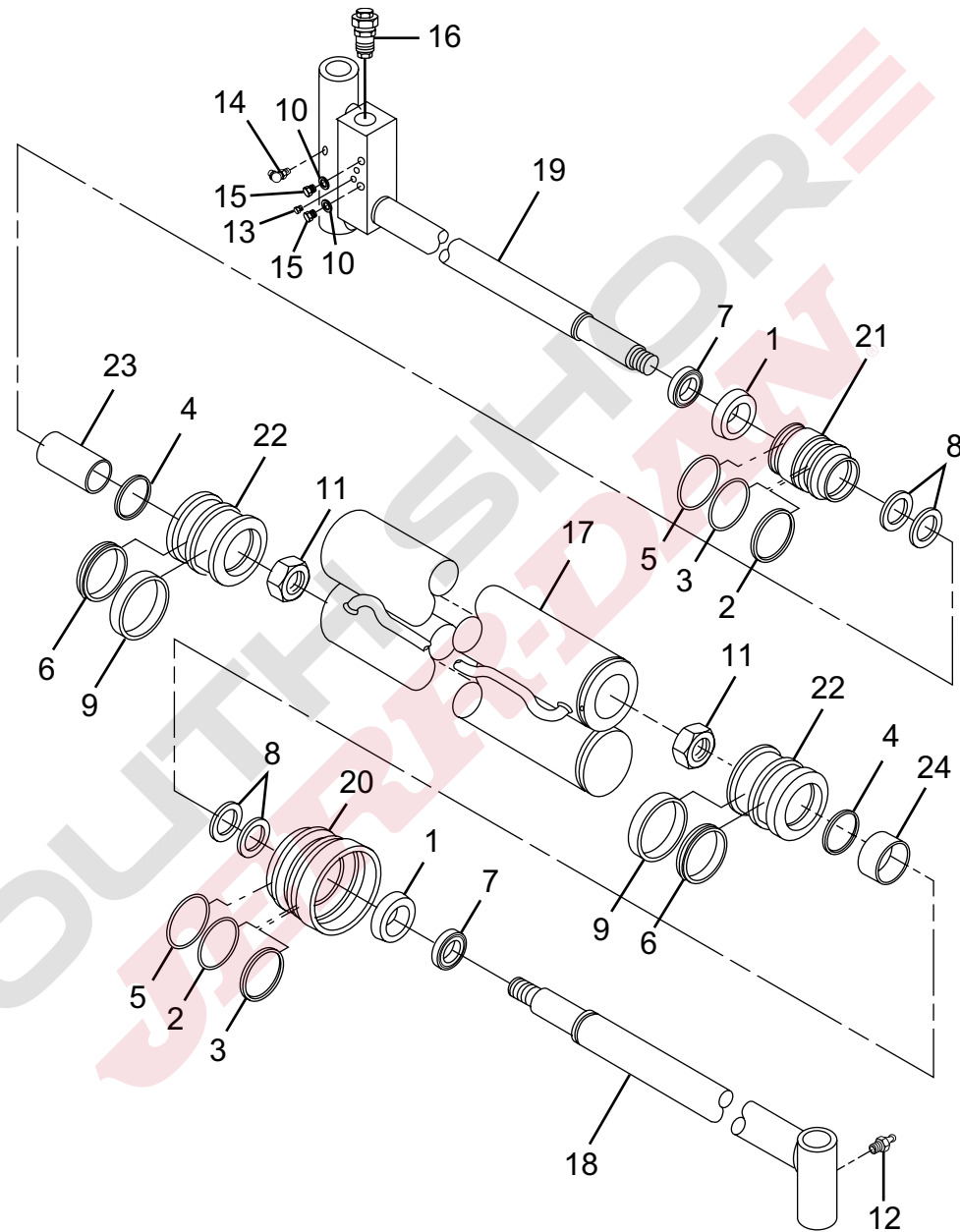
PARTS LIST — UNDER LIFT EXTENSION CYLINDERS

7330000041

Ref. No.	Part No.	Description	Qty.
1	9796250069*	Seal	2
2	9796250109*	O-Ring	2
3	9754250042*	Back-Up	2
4	9796250110*	O-Ring	2
5	9796250111*	O-Ring	2
6	9796250112*	Seal	2
7	9796250116*	Wiper	2
8	9754250015*	Wear Ring	4
9	9754250044*	Wear Ring	2
10	9796250079	Washer Seal	2
11	9661250020	Locknut	2
12	7440030000	Lube Fitting	1
13	9701250007	Port Plug	2
14	7440030400	Lube Fitting	1
15	9701250005	Bleeder Plug	2
16	9935250025	Cartridge Check Kit	1
17	9912250019	Tube Assy	1
18	9763250024	Rod Assy	1
19	9763250023	Rod - Tube Assy	1
20	9553250011	Head	1
21	9553250012	Head	1
22	9698250013	Piston	2
23	9831250015	Spacer	1
24	9831250016	Spacer	1

*Available only in Service Kit #7577250203

PARTS LIST — UNDER LIFT EXTENSION CYLINDER
7330000041



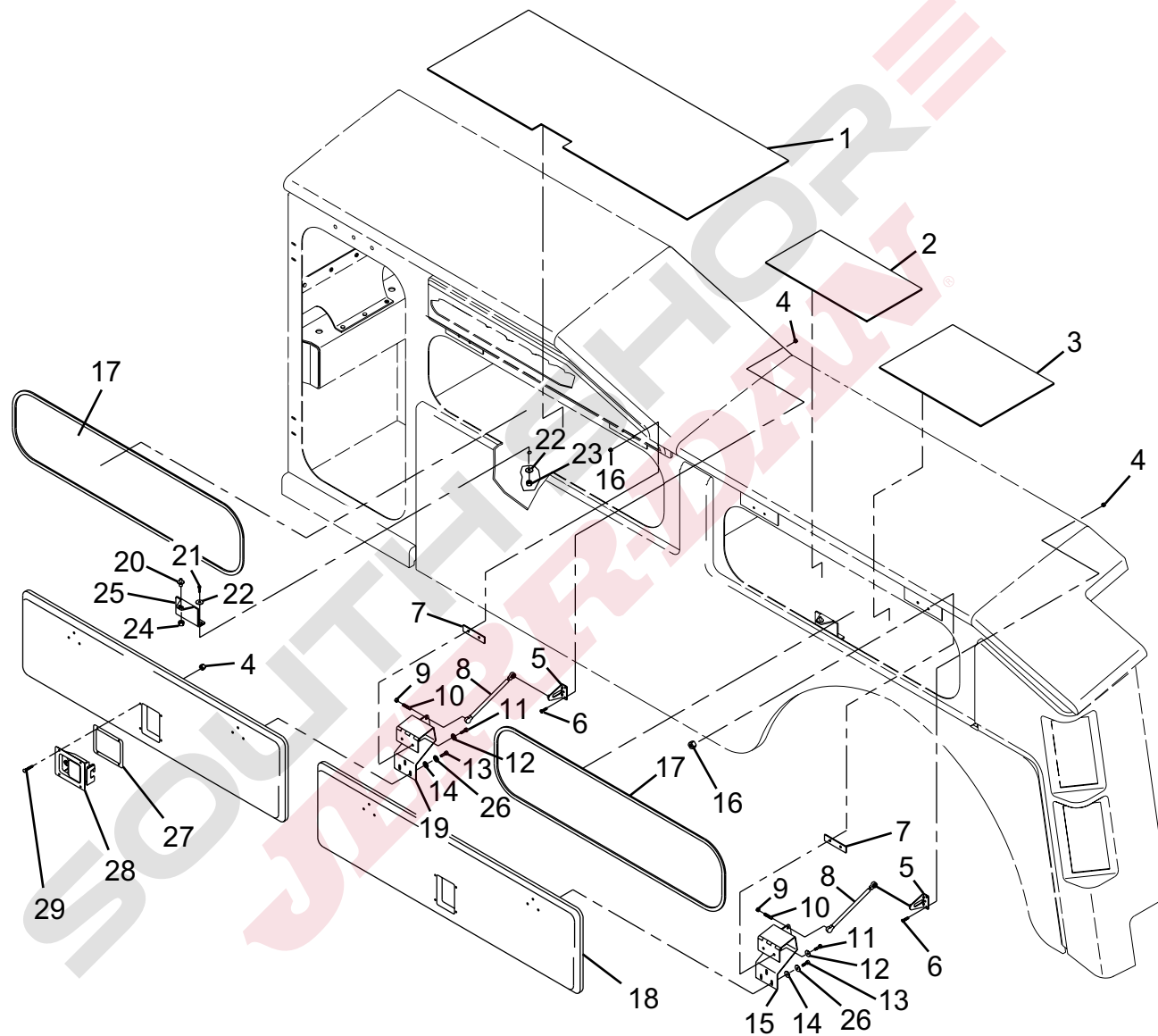
BODY PARTS

86" Body	C-2
146" Body	C-18
Tunnel Toolbox – 24	C-34
Tunnel Toolbox – 49"	C-36
Stand-Alone Toolbox – 24"	C-40
Stand-Alone Toolbox – 49"	C-44
3/4 Height Tunnel Toolbox – 24	C-48
3/4 Height Stand-Alone Toolbox – 24	C-50
Headboard/Light Pylon	C-52
Controls Assembly	C-54
Body Lights	C-60

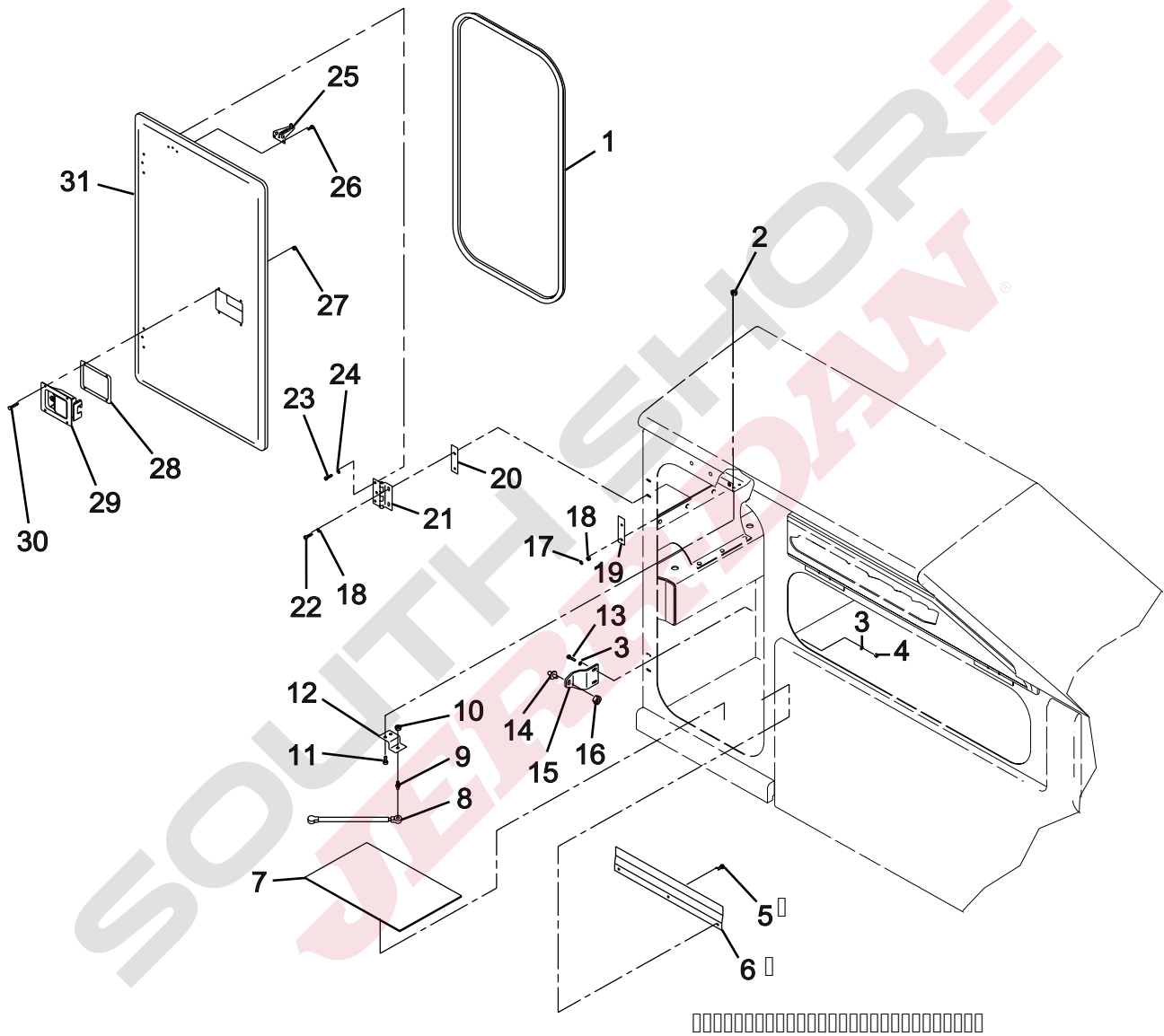
PARTS LIST — 86" BODY - DOOR AND HARDWARE ASSEMBLY

Ref. No.	Part No.	Description	Qty.
1	4679000117	Rubber Pad	2
2	4679000119	Rubber Pad	2
3	4679000131	Rubber Pad	2
4	7660102601	Locknut	40
5	7178000023	Bracket	8
6	7114100618	Capscrew	16
7	4062000174	Bar	4
8	7843000022	Spring	8
9	7660152601	Locknut	8
10	7865000001	Ball Stud	8
11	7115140650	Capscrew	16
12	7950140161	Flatwasher	16
13	7114140518	Capscrew	24
14	7949000025	Lockwasher	24
15	3555000007	Hinge Weldment	4
16	7660142601	Locknut	16
17	4632000013	Door Seal	4
18	4686000074	Horizontal Door	4
19	3555000008	Hinge Weldment	4
20	7585000004	Latch Striker	4
21	7115161050	Capscrew	8
22	7950160161	Flatwasher	16
23	7660162601	Locknut	8
24	7661000021	Locknut	4
25	4178000225	Bracket	4
26	7950100151	Flatwasher	24
27	7796000038	Gasket	4
28	7595000005	Rotary Latch	4
29	7790101276	Pan Head Screw	16

BODY - DOOR AND HARDWARE ASSEMBLY



86" BODY - DOOR AND HARDWARE ASSEMBLY



PARTS LIST — 86" BODY - DOOR AND HARDWARE ASSEMBLY

Ref. No.	Part No.	Description	Qty.
1	4632000012	Door Seal	2
2	7660152601	Locknut	4
3	7650160141	Flatwasher	6
4	7660162601	Locknut	4
5	7790141251(B)	Hex Head Screw	3
6	4811000135(B)	Sheet	1
7	4679000118(A)	Rubber Pad	1
	4679000114(B)	Rubber Pad	1
8	7843000020	Spring	2
9	7865000001	Ball Stud	2
10	7660152601	Locknut	2
11	7115150650	Capscrew	4
12	4178000240	Bracket	2
13	7115161050	Capscrew	4
14	7585000004	Latch Striker	2
15	4178000225	Bracket	2
16	7661000021	Locknut	2
17	7660142601	Locknut	8
18	7950140161	Flatwasher	16
19	4062000173	Bar	4
20	4812000052	Shim	4
21	7555000002	Hinge	4
22	7114140818	Capscrew	8
23	7114140418	Capscrew	12
24	7949000025	Washer	12
25	7178000023	Ball Stud Bracket	2
26	7114100418	Capscrew	6
27	7660102601	Nut	8
28	7796000038	Gasket	2
29	7595000005	Rotary Latch	2
30	7790101276	Capscrew	8
31	4686000072(A)	Panel Door - LH	1
	4686000073(B)	Panel Door - RH	1

A - Applies to Left Side Only.

B - applies to Right Side Only.

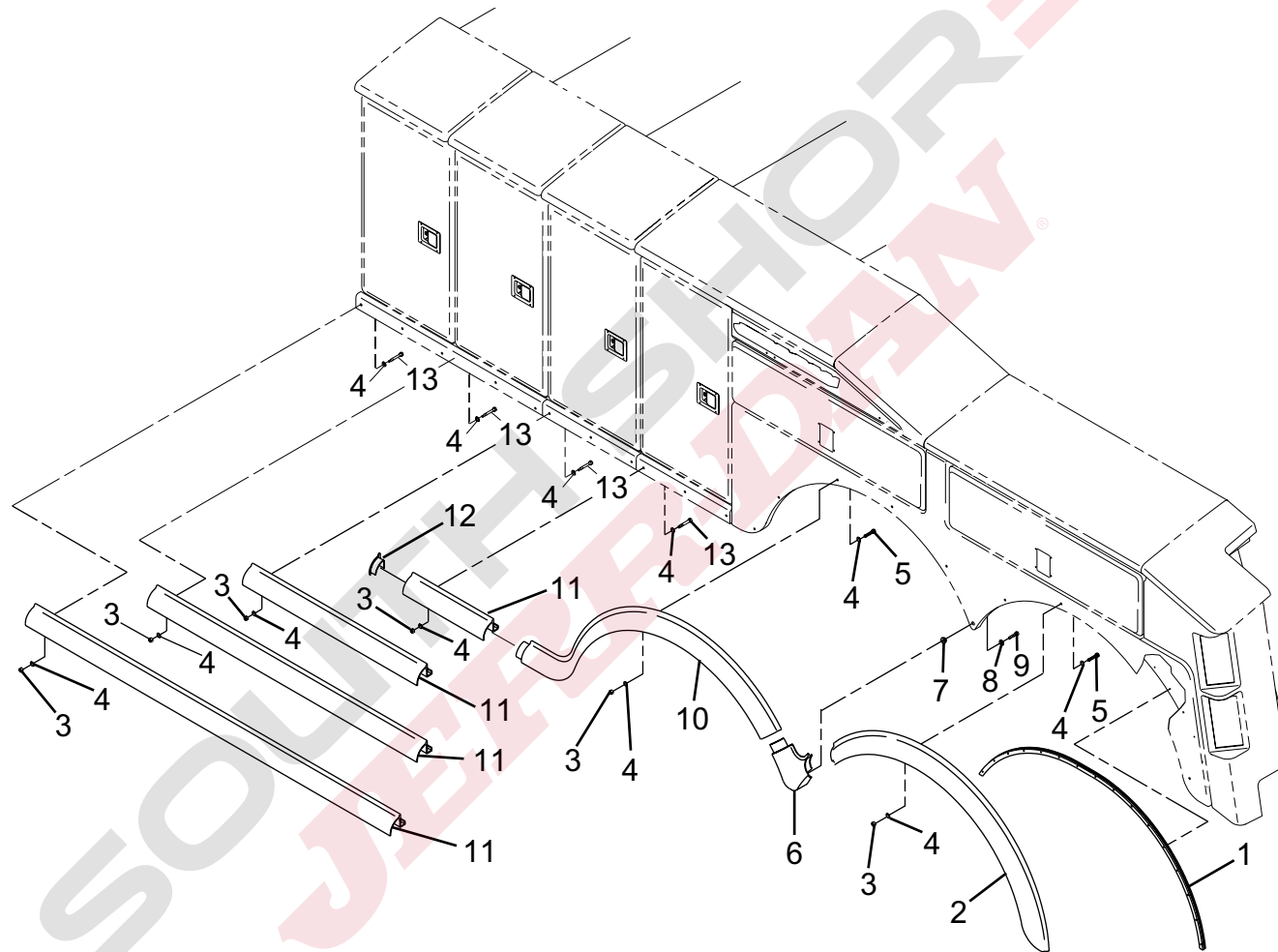


PARTS LIST — 86" BODY FLARE INSTALLATION TANDEM AXLE

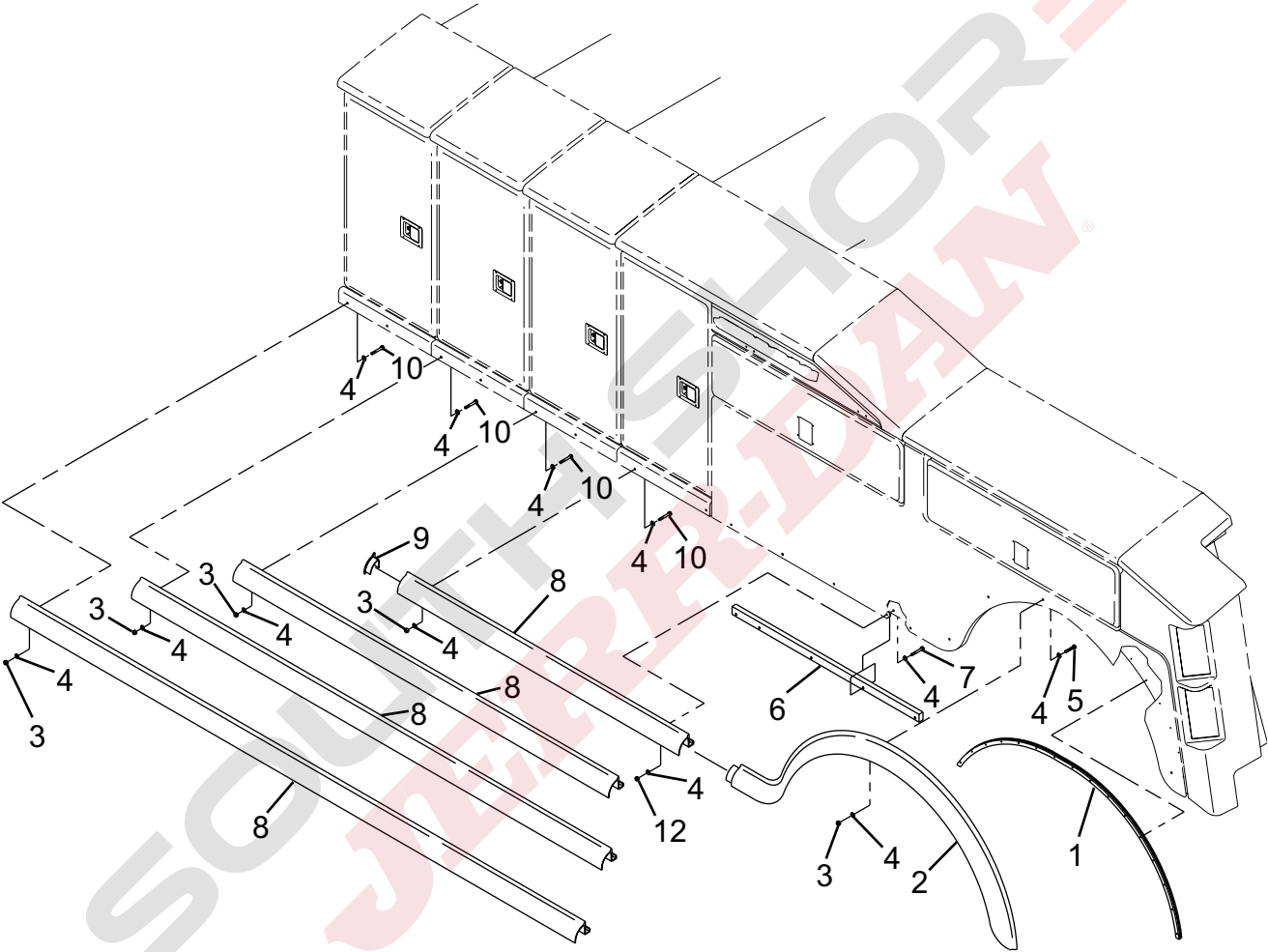
Ref. No.	Part No.	Description	Qty.
1	7002000187	Rubber Fender Flare	2 Pair
2	4415000019	Wheelwell Flare - LH 52" Axle Spread	1
	4415000030	Wheelwell Flare - LH 58.5" Axle Spread	
	4415000017	Wheelwell Flare - RH 52" Axle Spread	1
	4415000028	Wheelwell Flare - RH 58.5" Axle Spread	
3	7660142601	Locknut	*
4	7950140151	Flatwasher	*
5	7111141050	Capscrew	10
6	7415000010	Flare Junction Panel - 52" Axle Spread	2
	7415000011	Flare Junction Panel - 58.5 Axle Spread	
7	4636000032	Rubber Mount	2
8	7949000022	Fender Washer	2
9	7790142051	Capscrew	2
10	4415000018	Wheelwell Flare - LH 52" Axle Spread	1
	4415000029	Wheelwell Flare - LH 58.5" Axle Spread	
	4415000016	Wheelwell Flare - RH 52" Axle Spread	1
	4415000027	Wheelwell Flare - RH 58.5" Axle Spread	
11	4415000020	22.50" Body Flare	2
	4415000024	44.50" Body Flare	
	4415000025	68.75" Body Flare	
	4415000026	93.00" Body Flare	
12	7415000013	Cap - RH	1
	7415000014	Cap - LH	1
13	7115141850	Capscrew	*

*Quantity varies according to Body Length

86" BODY FLARE INSTALLATION TANDEM AXLE



86" BODY FLARE INSTALLATION SINGLE AXLE



PARTS LIST — 86" BODY FLARE INSTALLATION SINGLE AXLE

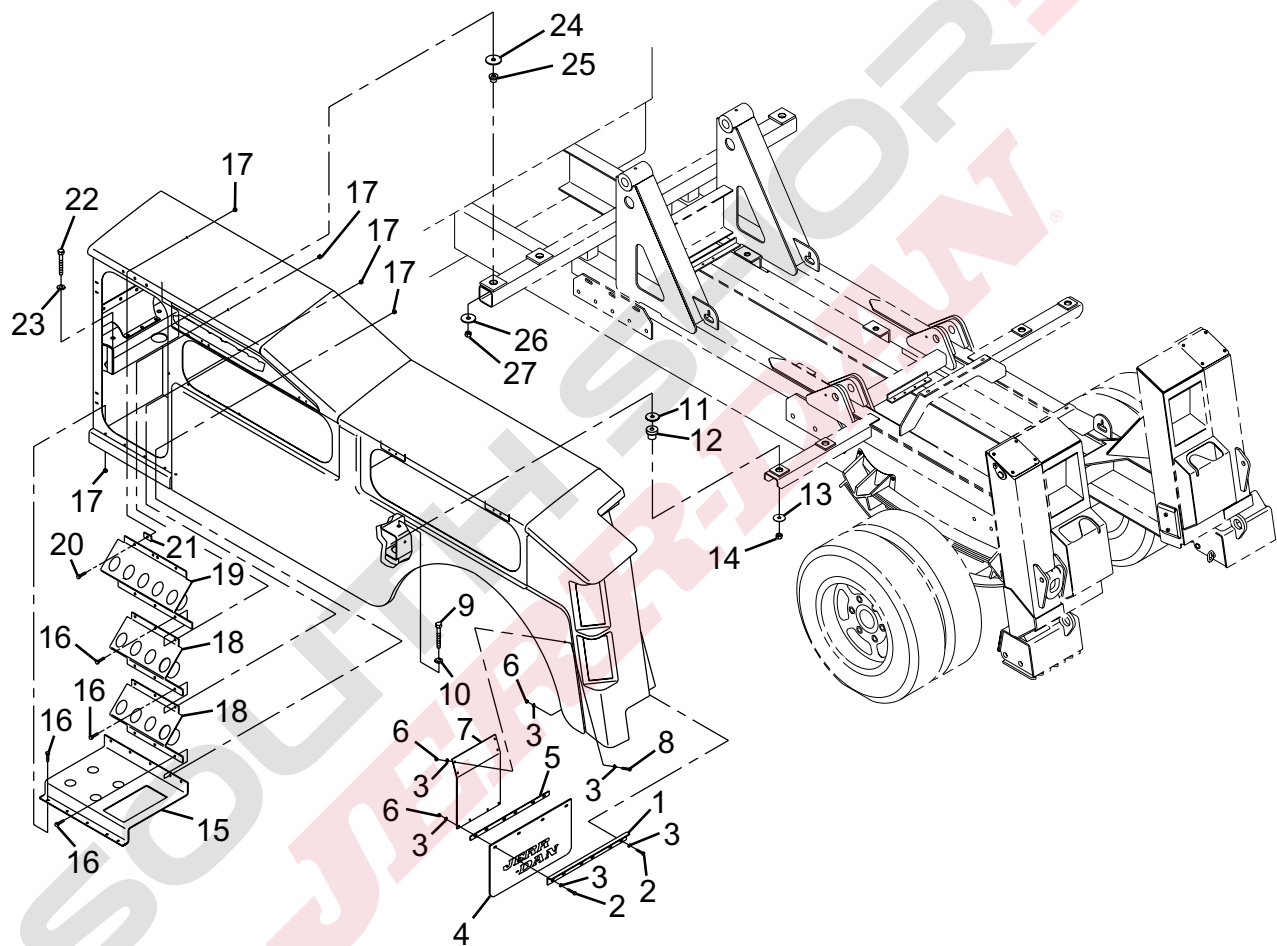
Ref. No.	Part No.	Description	Qty.
1	7002000187	Rubber Fender Flare	1 Pair
2	7415000008	Wheelwell Flare - LH	1
	7415000007	Wheelwell Flare - RH	1
3	7660142601	Locknut	*
4	7950140151	Flatwasher	*
5	7111141050	Capscrew	10
6	4831000068	Spacer	2
7	7115142050	Capscrew	10
8	4415000015	72.25" Body Flare	2
	4415000021	96.50" Body Flare	
	4415000022	120.75" Body Flare	
	4415000023	145.00" Body Flare	
9	7415000013	Cap - RH	1
	7415000014	Cap - LH	1
10	7115141850	Capscrew	*

*Quantity varies according to body length

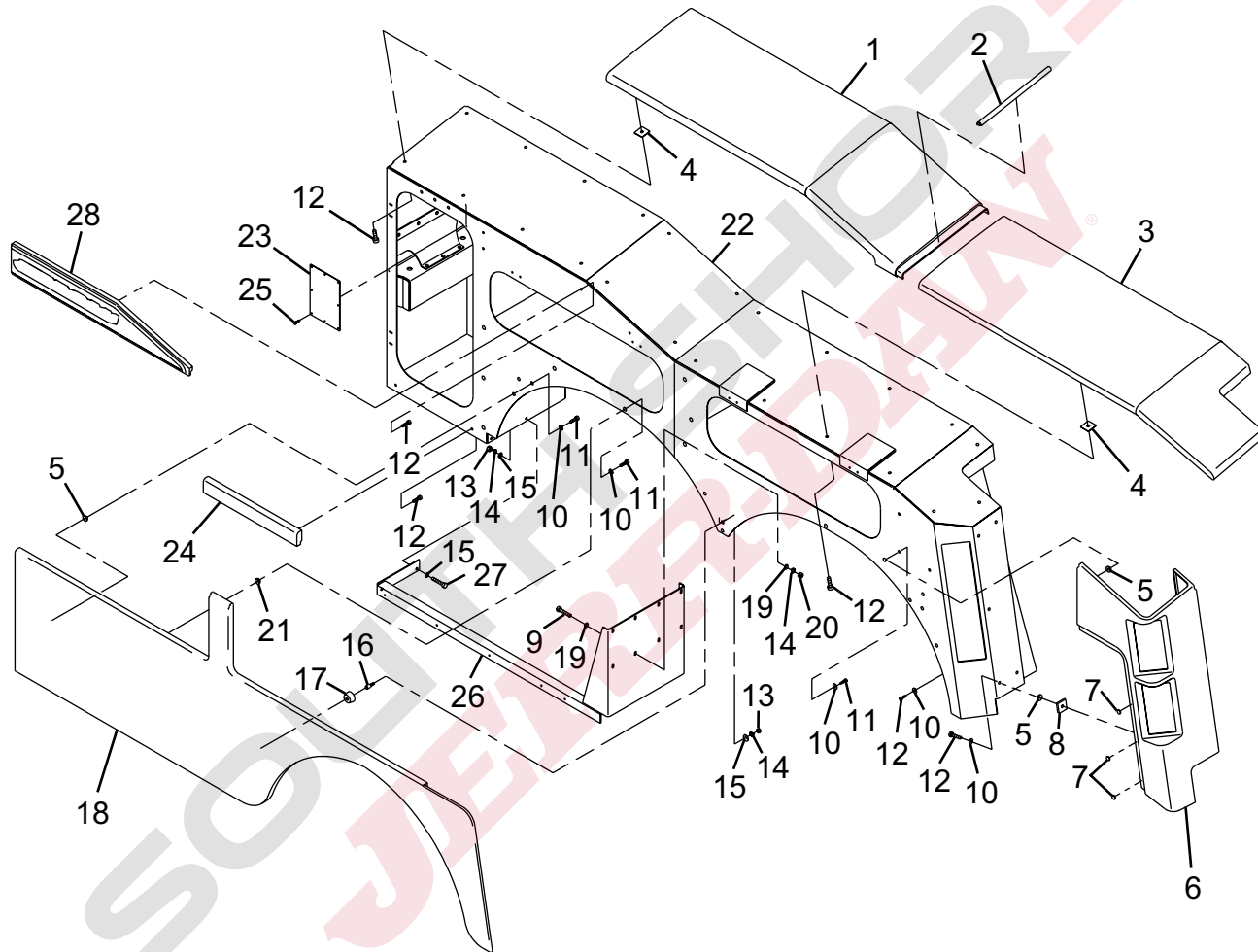
**PARTS LIST — 86" BODY, MUDFLAP AND
TOOLHOLDERS INSTALLATION**

Ref. No.	Part No.	Description	Qty.
1	4017000719	Angle	2
2	7118151250	Capscrew	12
3	7950150151	Flatwasher	40
4	7638000007	Mud Flap	2
5	4706001815	Plate	2
6	7660152601	Locknut	20
7	4178000242	Bracket	2
8	7115150850	Capscrew	8
9	7115202850	Capscrew	4
10	7950200161	Flatwasher	4
11	7949000019	Snub Head Washer	4
12	7636000008	Mount	4
13	7949000020	Snub Tail Washer	4
14	7660200001	Nut	4
15	3178000222	Basetool Holder	1
16	7115160850	Capscrew	16
17	7660160001	Nut	19
18	3178000221	Intermediate Tool Holder	2
19	3178000220	Top Tool Holder	1
20	7115161050	Capscrew	3
21	4812000047	Shim	1
22	7115223250	Capscrew	4
23	7950220161	Flatwasher	4
24	7949000017	Washer	4
25	7636000007	Mount	4
26	7949000018	Washer	4
27	7660220001	Nut	4

86" BODY, MUDFLAP AND TOOLHOLDERS INSTALLATION



86" BODY PANEL - 1 AXLE



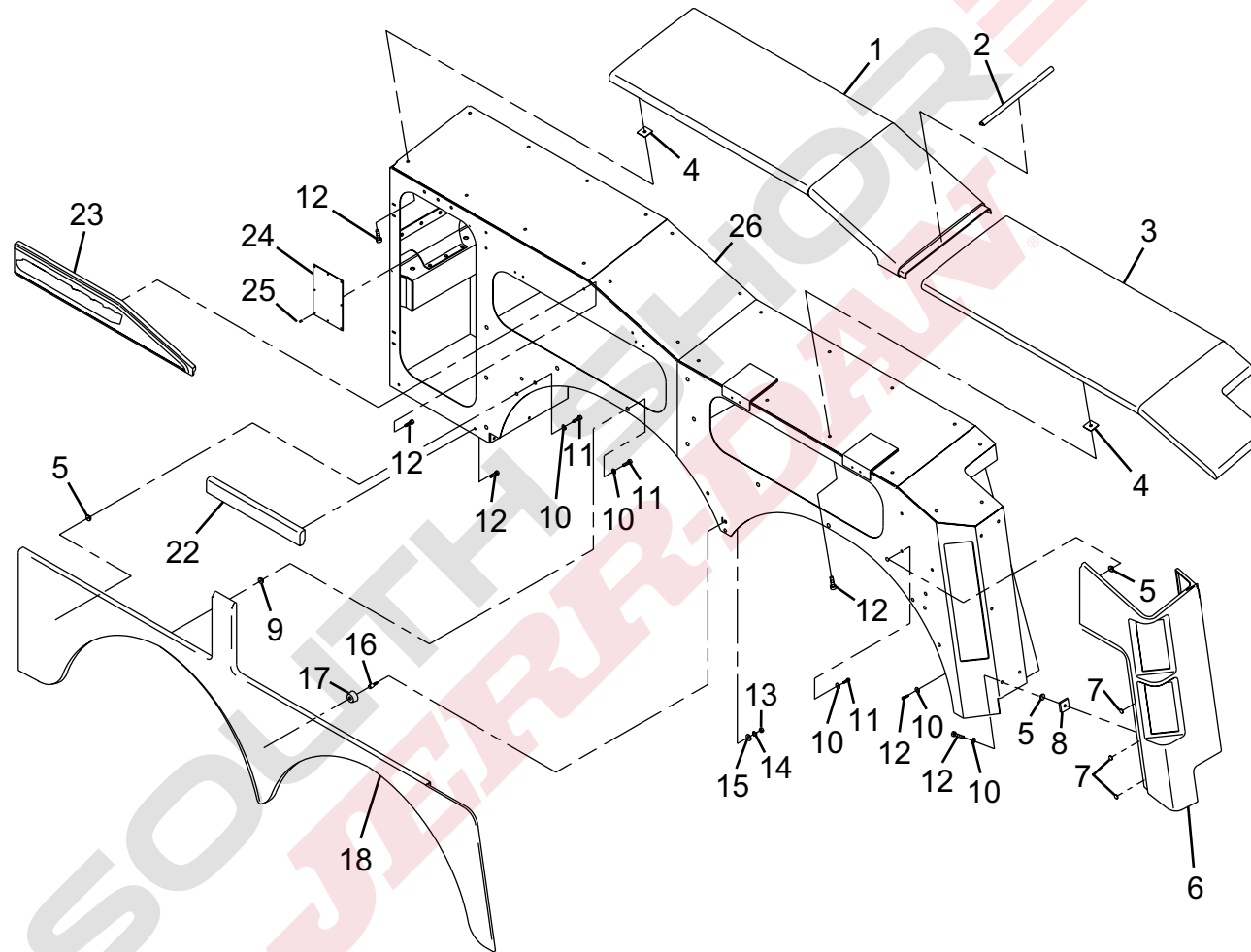
PARTS LIST – 86” BODY PANEL - 1 AXLE

Ref. No.	Part No.	Description	Qty.
1	7686000009	Front Cap Panel - RH	1
	7686000010	Front Cap Panel - LH	1
2	7632046022	Moulding	2
3	7686000017	Rear Cap Panel - RH	1
	7686000018	Rear Cap Panel - LH	1
4	4679000120	Rubber Pad	46
5	4636000031	Rubber Mount	40
6	7686000013	Tail Light Panel - RH	1
	7686000014	Tail Light Panel - LH	1
7	7189000015	Bumper	6
8	4679000121	.25 Rubber Pad	10
	4679000122	.38 Rubber Pad	10
9	7115161250	Capscrew	16
10	7949000022	Fender Washer	58
11	7790142051	Hex Hd Screw	54
12	7790141251	Hex Hd Screw	56
13	7660160001	Nut	10
14	7950160000	Lockwasher	26
15	7950160161	Flatwasher	14
16	4691000245	Pin	6
17	4636000033	Rubber Mount	6
18	4686000076	Wheel Well Panel - RH	1
	4686000075	Wheel Well Panel - LH	1
19	7950160151	Flatwasher	32
20	7660160000	Nut	16
21	4636000032	Rubber Mount	14
22	3503080003	Body Assy - RH	1
	3503080002	Body Assy - LH	1
23	4811000091	Sheet	2
24	7686000019	Filler Strip Panel	2
25	7790100856	Screw	16
26	3017000027	Bracket Weldment - RH	1
	3017000026	Bracket Weldment - LH	1
27	7115161050	Capscrew	4
28	7686000015	Logo Panel - RH	1
	7686000016	Logo Panel - LH	1

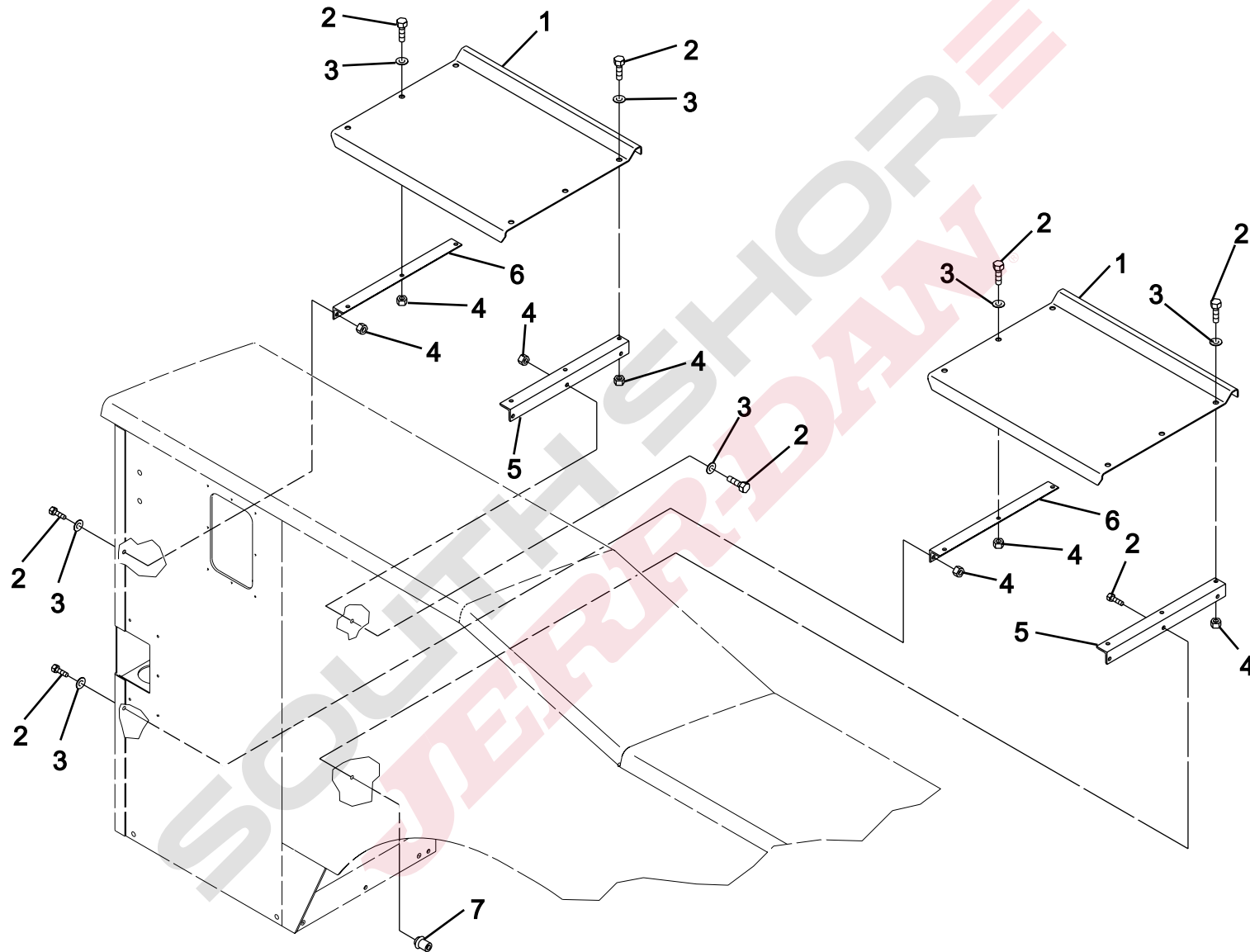
PARTS LIST – 86” BODY PANEL - 2 AXLES

Ref. No.	Part No.	Description	Qty.
1	7686000009	Front Cap Panel - RH	1
	7686000010	Front Cap Panel - LH	1
2	7632046022	Moulding	2
3	7686000017	Rear Cap Panel - RH	1
	7686000018	Rear Cap Panel - LH	1
4	4679000120	Rubber Pad	46
5	4636000031	Rubber Mount	40
6	7686000013	Tail Light Panel - RH	1
	7686000014	Tail Light Panel - LH	1
7	7189000015	Bumper	6
8	4679000121	.25 Rubber Pad	10
	4679000122	.38 Rubber Pad	10
9	4636000032	Rubber Mount	14
10	7949000022	Fender Washer	58
11	7790142051	Hex Hd Screw	54
12	7790141251	Hex Hd Screw	54
13	7660160001	Nut	6
14	7950160000	Lockwasher	6
15	7950160161	Flatwasher	6
16	4691000245	Pin	6
17	4636000033	Rubber Mount	6
18	4686000078	Wheel Well Panel - RH 52" Axle Spread	1
	4686000079	Wheel Well Panel - RH 58.5" Axle Spread	
	4686000077	Wheel Well Panel - LH 52" Axle Spread	1
	7686000080	Wheel Well Panel - LH 58.5" Axle Spread	
22	7686000019	Filler Strip Panel	2
23	7686000015	Logo Panel - RH	1
	7686000016	Logo panel - LH	1
24	4811000091	Sheet	2
25	7790100856	Screw	16
26	3503080003	Body Assy - RH	1
	3503080002	Body Assy - LH	1

86" BODY PANEL - 2 AXLES



BRACKET ASSEMBLY



PARTS – BRACKET ASSEMBLY

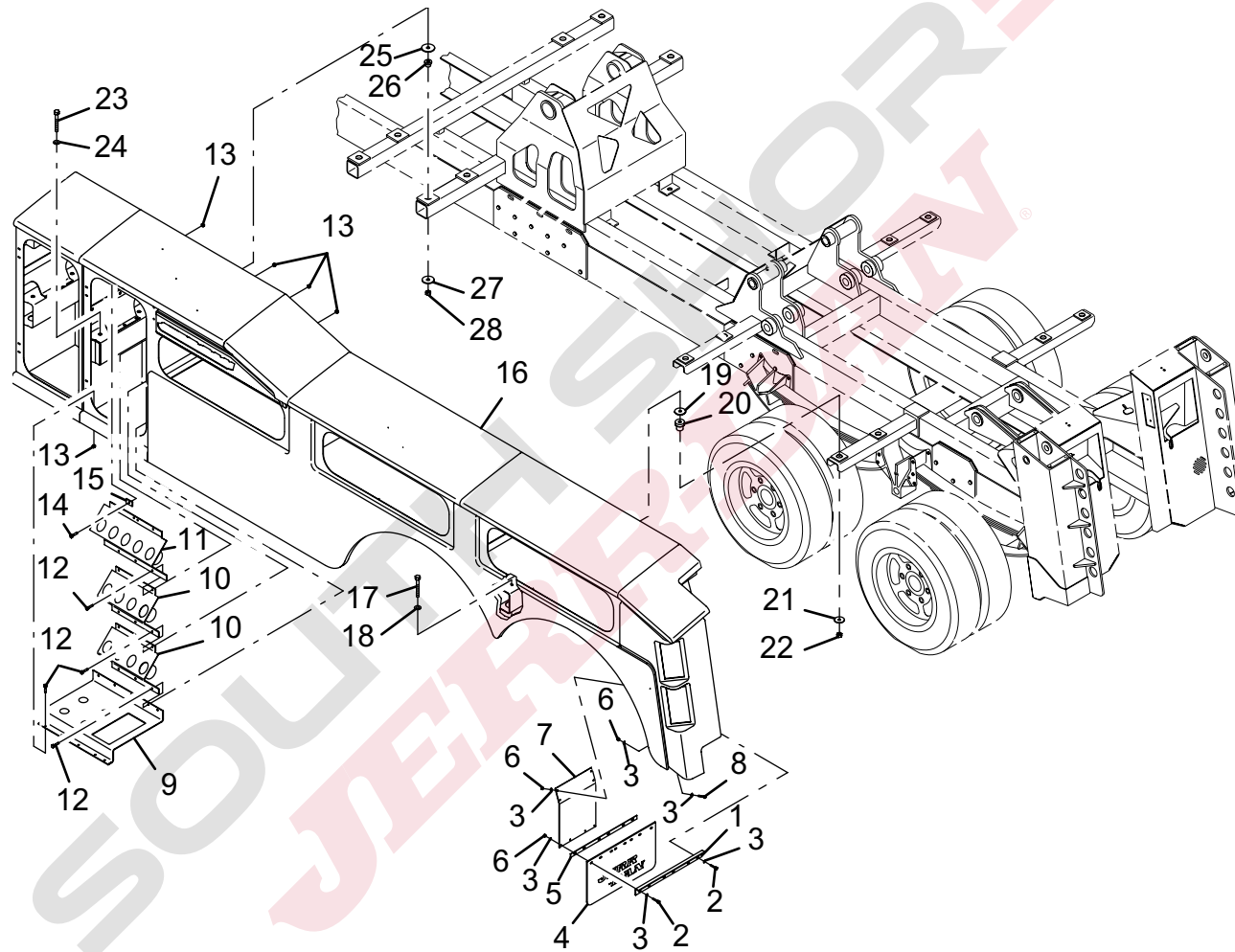
Ref. No.	Part No.	Description	Qty.
1	4811000142	Sheet	2
2	7115160850	Capscrew	24
3	7950160161	Flatwasher	21
4	7660160001	Nut	21
5	4017000727	Angle, LH	2
6	4017000714	Angle, RH	2
7	7661000003	Rivnut	3

SOUTH SHORE
JERR-DAN®

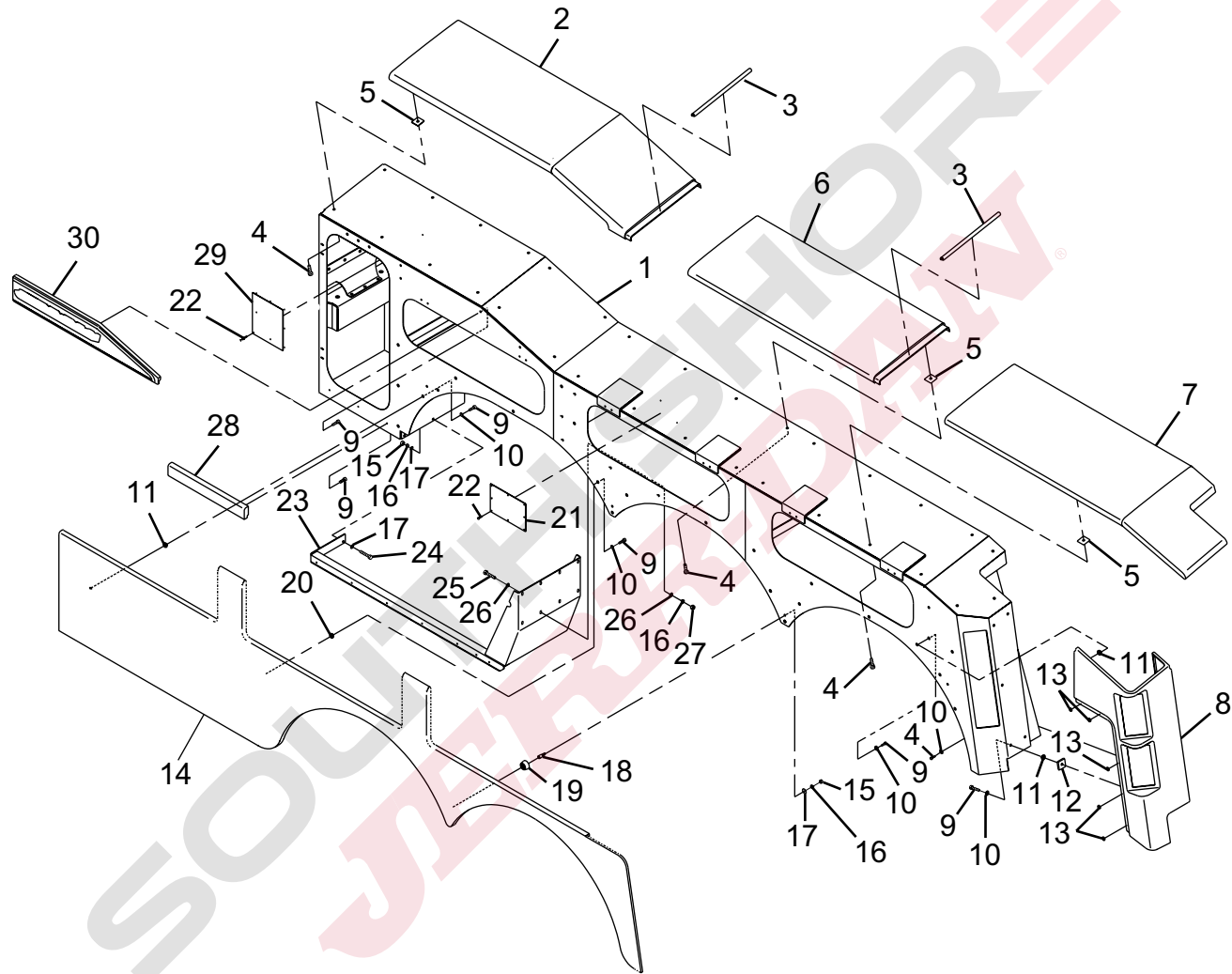
**PARTS LIST — 146" BODY, MUDFLAP AND TOOLHOLDERS
INSTALLATION**

Ref. No.	Part No.	Description	Qty.
1	4017000719	Angle	2
2	7118151250	Capscrew	12
3	7950150151	Flatwasher	40
4	7638000007	Mudflap	2
5	4706001815	Plate	2
6	7660152601	Locknut	20
7	4178000242	Bracket	2
8	7115150850	Capscrew	8
9	3178000222	Basetool Holder	1
10	3178000221	Intermediate Tool Holder	2
11	3178000220	Top Tool Holder	1
12	7115160850	Capscrew	16
13	7660160001	Nut	19
14	7115161050	Capscrew	3
15	4812000047	Shim	1
16	3502080063	St. Alone Body Assy, 52" Tandem, LH	1
	3502080064	St. Alone Body Assy, 52" Tandem, RH	1
	3502080065	St. Alone Body Assy, 58.5" Tandem, LH	1
	3502080066	St. Alone Body Assy, 58.5" Tandem, RH	1
	3502080067	St. Alone Body Assy, 52" Tri Axle, LH	1
	3502080068	St. Alone Body Assy, 52" Tri Axle, RH	1
	3502080069	St. Alone Body Assy, 58.5" Tri Axle, LH	1
	3502080070	St. Alone Body Assy, 58.5" Tri Axle, RH	1
17	7115202850	Capscrew	8
18	7950200161	Flatwasher	8
19	7949000019	Washer	8
20	7636000008	Mount	8
21	7949000020	Washer	8
22	7660200001	Nut	8
23	7115223250	Capscrew	8
24	7950220161	Flatwasher	8
25	7949000017	Washer	8
26	7636000007	Mount	8
27	7949000018	Washer	8
28	7660220001	Nut	8

146" BODY, MUDFLAP AND TOOLHOLDERS INSTALLATION



146" BODY PANEL - TANDEM AXLE



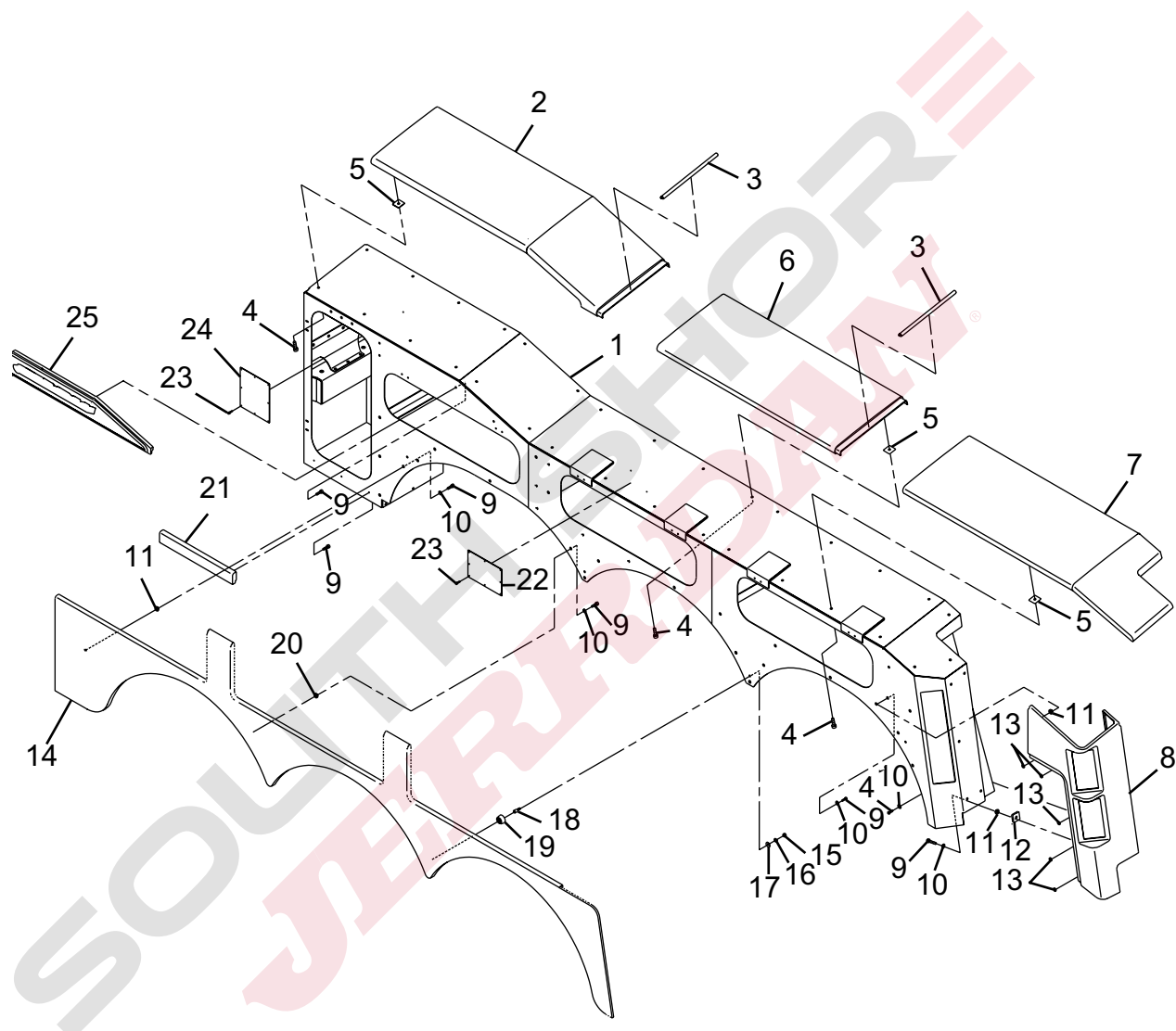
PARTS LIST — 146" BODY PANEL - TANDEM AXLE

Ref. No.	Part No.	Description	Qty.
1	3502080047	Body Assy, LH	1
	3502080048	Body Assy, RH	1
2	7686000010	Front Cap Panel, LH	1
	7686000009	Front Cap Panel, RH	1
3	7632046022	Moulding	4
4	7790141251	Hex Hd Screw	68
5	4679000120	Pad	62
6	7686000025	Top Cap Panel, LH	1
	7686000024	Top Cap Panel, RH	1
7	7686000018	Rear Cap Panel, LH	1
	7686000017	Rear Cap Panel, RH	1
8	7686000014	Tail Light Panel, LH	1
	7686000013	Tail Light Panel, RH	1
9	7790142051	Hex Hd Screw	94
	7790141651	Hex Hd Screw (Alternate Part)	94
10	7949000022	Fender Washer	82
11	4636000031	Rubber Mount	44
12	4679000122	.38 Rubber Pad	10
	4679000121	.25 Rubber Pad (Alternate Part)	10
13	7189000015	Bumper	10
14	4686000089	52" Wheelwell Panel, LH	1
	4686000090	52" Wheelwell Panel, RH	1
	4686000093	58.5" Wheelwell Panel, LH	1
	4686000094	58.5" Wheelwell Panel, RH	1
15	7660160001	Nut	12
16	7950160000	Lockwasher	12
17	7950160161	Flatwasher	16
18	4691000245	Pin	8
19	4636000033	Rubber Mount	8
20	4636000032	Rubber Mount	34
21	4811000091	Sheet	2
22	7790100856	Screw	32
23	3017000028	Bracket Weldment, LH	1
	3017000029	Bracket Weldment, RH	1
24	7115161050	Capscrew	4
25	7115161250	Capscrew	16
26	7950160151	Flatwasher	32
27	7660160000	Nut	16
28	7686000019	Filler Strip Panel	2
29	4811000221	Sheet	2
30	7686000016	Logo Panel, LH	1
	7686000015	Logo Panel, RH	1

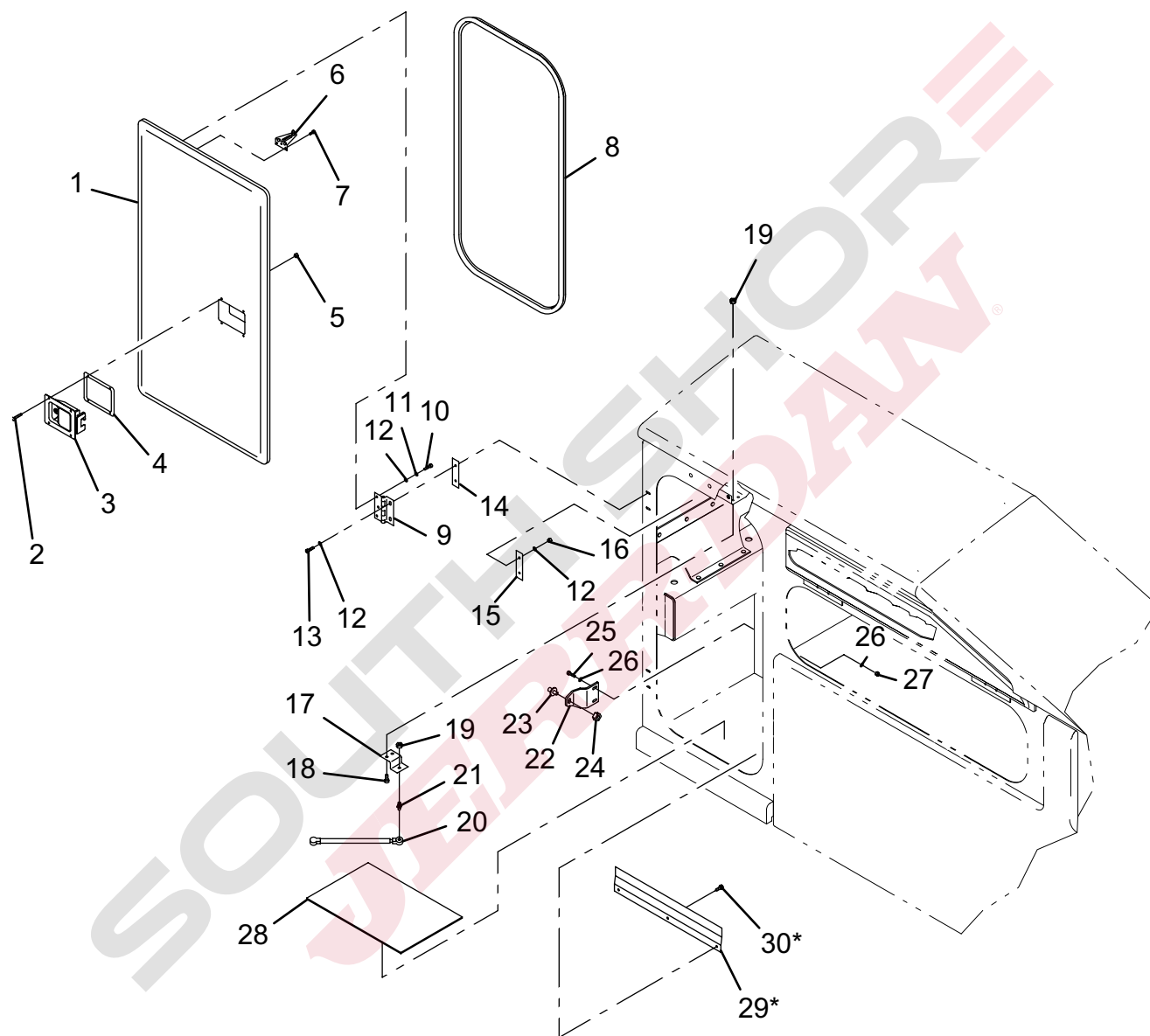
PARTS LIST — 146" BODY PANEL - TRIPLE AXLE

Ref. No.	Part No.	Description	Qty.
1	3502080047	Body Assy, LH	1
	3502080048	Body Assy, RH	1
2	7686000010	Front Cap Panel, LH	1
	7686000009	Front Cap Panel, RH	1
3	7632046022	Moulding	4
4	7790141251	Hex Hd Screw	68
5	4679000120	Pad	62
6	7686000025	Top Cap Panel, LH	1
	7686000024	Top Cap Panel, RH	1
7	7686000018	Rear Cap Panel, LH	1
	7686000017	Rear Cap Panel, RH	1
8	7686000014	Tail Light Panel, LH	1
	7686000013	Tail Light Panel, RH	1
9	7790142051	Hex Hd Screw	94
	7790141651	Hex Hd Screw (Alternate Part)	94
10	7949000022	Fender Washer	82
11	4636000031	Rubber Mount	44
12	4679000122	.38 Rubber Pad	10
	4679000121	.25 Rubber Pad (Alternate Part)	10
13	7189000015	Bumper	10
14	4686000091	52" Wheelwell Panel, LH	1
	4686000092	52" Wheelwell Panel, RH	1
	4686000095	58.5" Wheelwell Panel, LH	1
	4686000096	58.5" Wheelwell Panel, RH	1
15	7660160001	Nut	8
16	7950160000	Lockwasher	8
17	7950160161	Flatwasher	8
18	4691000245	Pin	8
19	4636000033	Rubber Mount	8
20	4636000032	Rubber Mount	34
21	7686000019	Filler Strip Panel	2
22	4811000091	Sheet	2
23	7790100856	Screw	32
24	4811000221	Sheet	2
25	7686000016	Logo Panel, LH	1
	7686000015	Logo Panel, RH	1

146" BODY PANEL - TRIPLE AXLE



146" BODY - DOOR AND HARDWARE ASSEMBLY



*APPLIES TO RIGHT SIDE ONLY

PARTS LIST — 146" BODY - DOOR AND HARDWARE ASSEMBLY

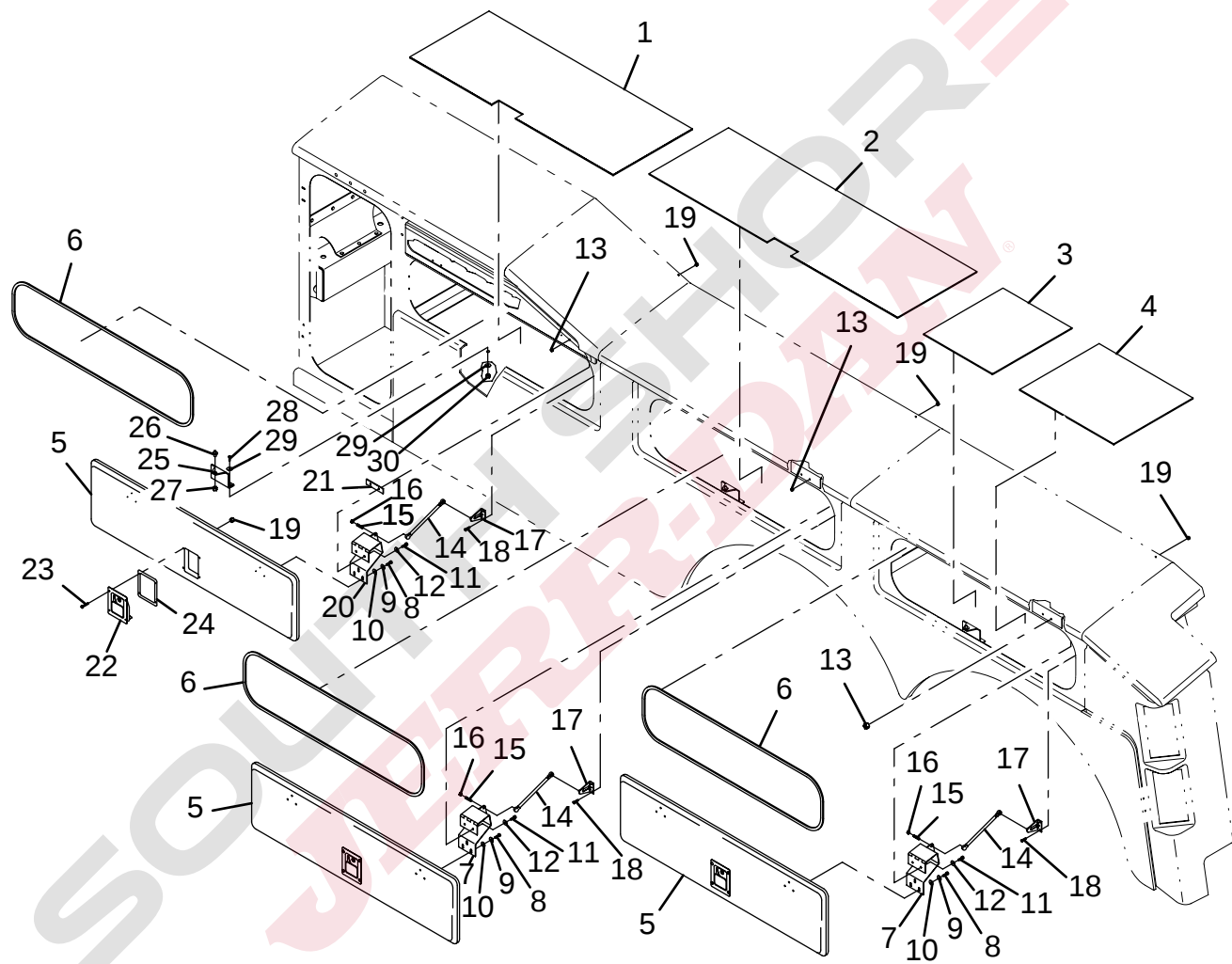
Ref. No.	Part No.	Description	Qty.
1	4686000072	Panel Door, LH	1
	4686000073	Panel Door, RH	1
2	7114100818	Capscrew	8
3	7595000005	Paddle Latch	2
4	7796000038	Gasket	2
5	7660102601	Nut	8
6	7178000023	Ball Stud Bracket	2
7	7114100418	Capscrew	6
8	4632000012	Door Seal	2
9	7555000002	Hinge	4
10	7114140418	Capscrew	12
11	7949000025	Lockwasher	12
12	7950140161	Flatwasher	28
13	7114140818	Capscrew	8
14	4812000052	Shim	4
15	4062000173	Bar	4
16	7660142601	Locknut	8
17	4178000240	Bracket	2
18	7115150650	Capscrew	4
19	7660152601	Locknut	6
20	7843000020	Spring	2
21	7865000001	Ball Stud	2
22	4178000225	Bracket	2
23	7585000004	Latch Striker	2
24	7661000021	Locknut	2
25	7115161050	Capscrew	4
26	7950160141	Washer	6
27	7660162601	Locknut	2
28	4679000118	Rubber Pad, LH	1
	4679000114	Rubber Pad, RH	1
29	4811000135(A)	Sheet	1
30	7790141651(A)	Hex Head Screw	3

A – Applies to Right Side only

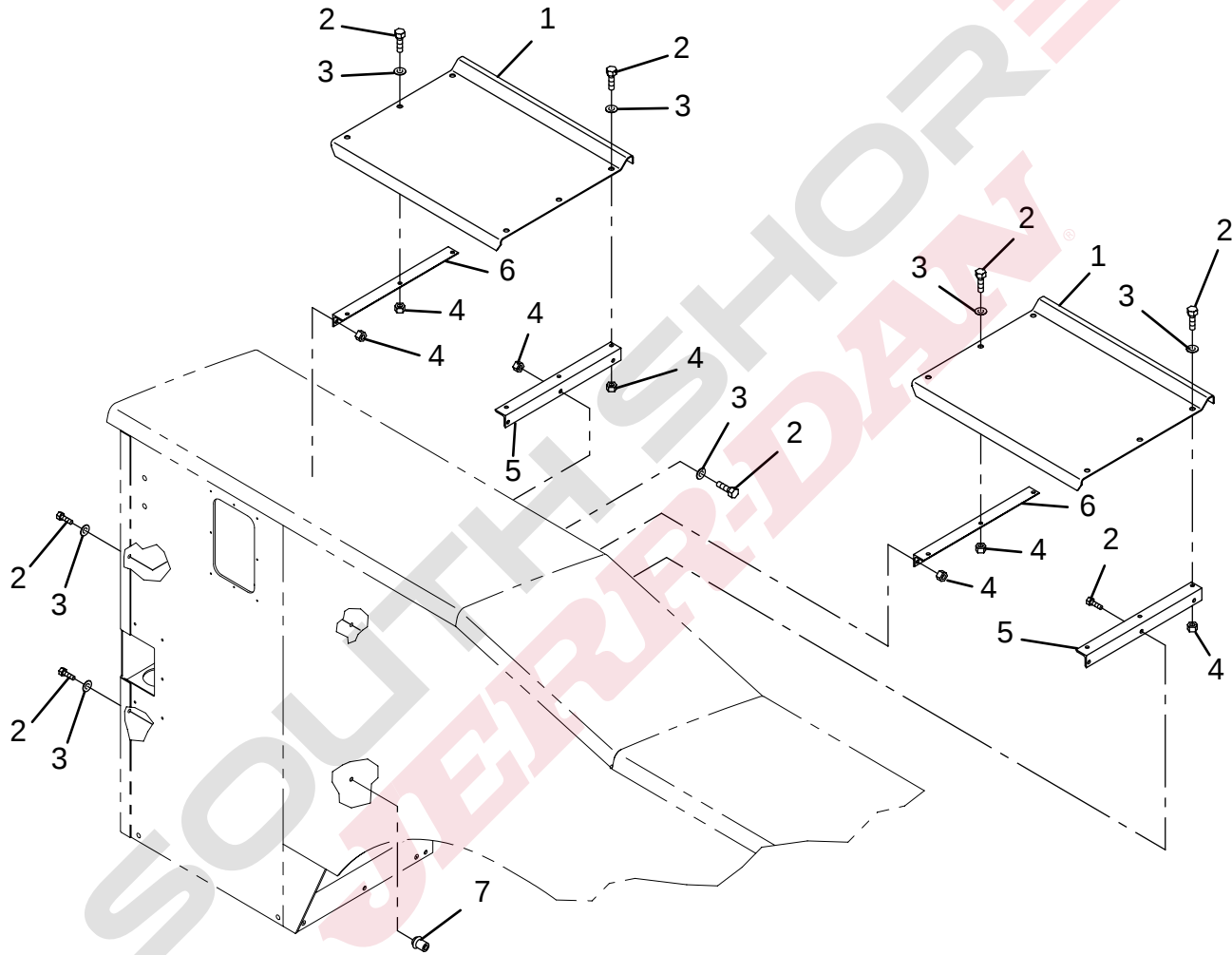
PARTS LIST — 146" BODY - DOOR AND HARDWARE ASSEMBLY

Ref. No.	Part No.	Description	Qty.
1	4679000117	Rubber Pad	2
2	4679000142	Rubber Pad	2
3	4679000143	Rubber Pad	2
4	4679000141	Rubber Pad, LH	1
	4679000144	Rubber Pad, RH	1
5	4686000074	Horizontal Door	6
6	4632000013	Door Seal	6
7	3555000007	Hinge Weldment	8
8	7114140518	Capscrew	36
9	7949000025	Lockwasher	36
10	7950100151	Flatwasher	36
11	7115140650	Capscrew	24
12	7950140161	Flatwasher	24
13	7660142601	Locknut	24
14	7843000022	Spring	12
15	7865000001	Ball Stud	12
16	7660152601	Locknut	12
17	7178000023	Bracket	12
18	7114100618	Capscrew	36
19	7660102601	Nut	60
20	3555000008	Hinge Weldment	4
21	4062000174	Bar	4
22	7595000005	Paddle Latch	6
23	7114100818	Capscrew	24
24	7796000038	Gasket	6
25	4178000225	Bracket	6
26	7585000004	Latch Striker	6
27	7661000021	Locknut	6
28	7115161050	Capscrew	12
29	7950160161	Flatwasher	24
30	7660162601	Locknut	12

146" BODY - DOOR AND HARDWARE ASSEMBLY



SHELF ASSEMBLY



PARTS LIST — SHELF ASSEMBLY

Ref. No.	Part No.	Description	Qty.
1	4811000142	Sheet	2
2	7115160850	Capscrew	24
3	7950160161	Flatwasher	21
4	7660160001	Nut	21
5	4017000727	Angle, LH	2
6	4017000714	Angle, RH	2
7	7661000003	Rivnut	3

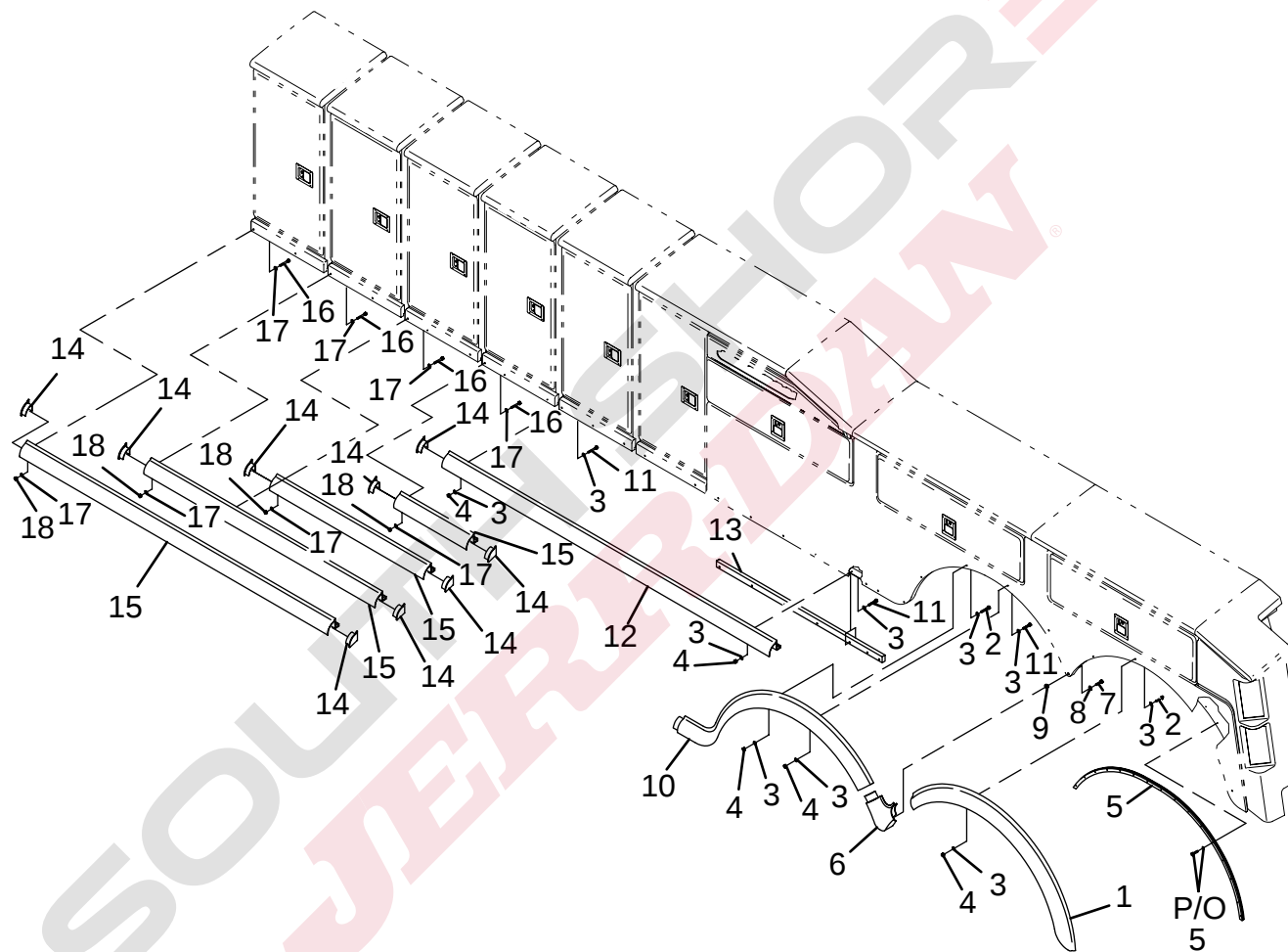
SOUTH SHORE
JERR-DAN®

PARTS LIST — 146" BODY FLARE INSTALLATION TANDEM AXLE

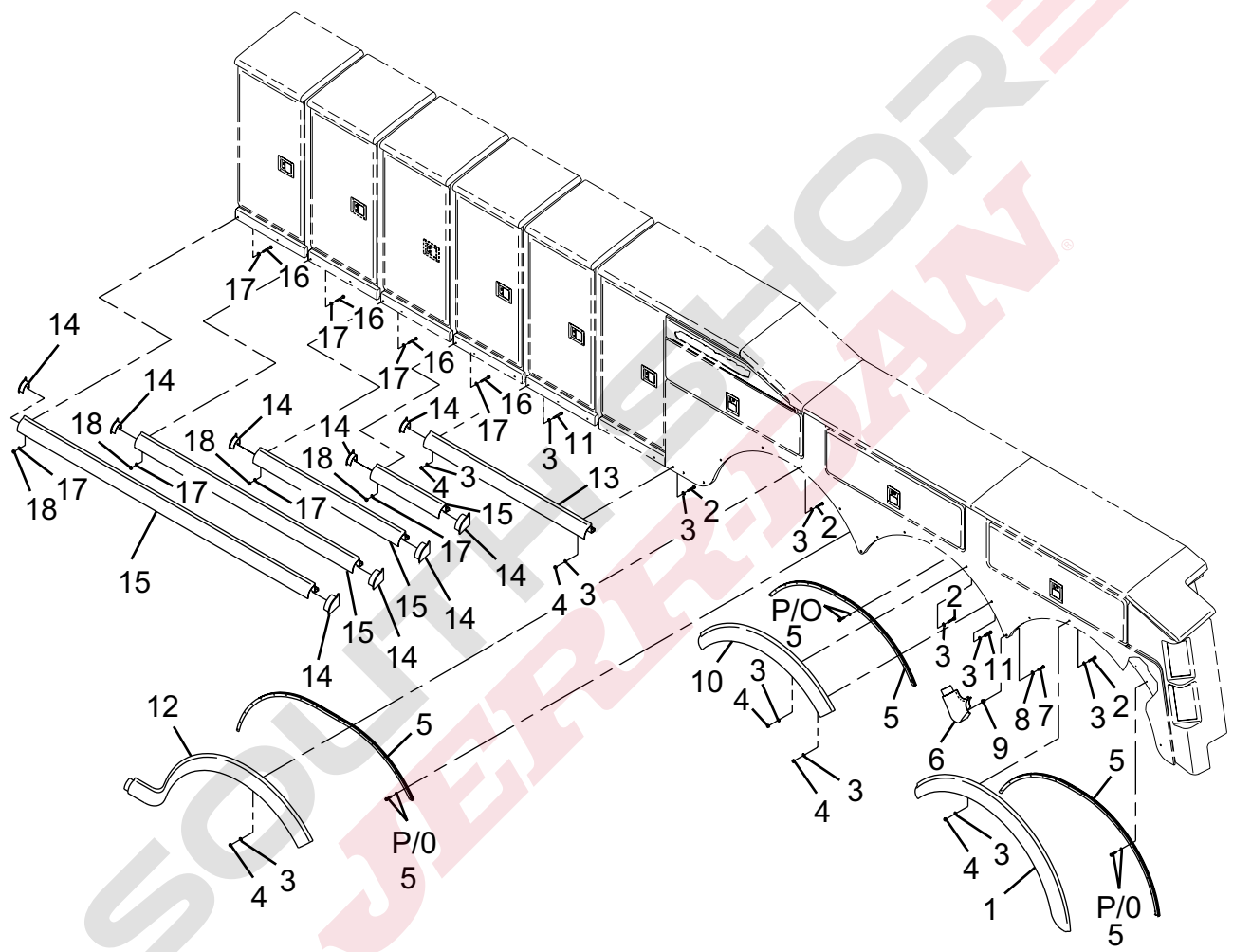
Ref. No.	Part No.	Description	Qty.
1	4415000019	52" Wheelwell Flare, LH	1
	4415000017	52" Wheelwell Flare, RH	1
	4415000030	58.5" Wheelwell Flare, LH	1
	4415000028	58.5" Wheelwell Flare, RH	1
2	7111141050	Capscrew	16
3	7950140151	Flatwasher	80
4	7660142601	Locknut	40
5	7002000187	Rubber Fender Flares	2 pr
6	7415000010	52" Flare Junction Panel	2
	7415000011	58.5" Flare Junction Panel	2
7	7790142051	Hex Hd Screw	2
8	7949000022	Fender Washer	2
9	4679000148	Isolator Pad	2
10	4415000018	52" Wheelwell Flare, LH	1
	4415000016	52" Wheelwell Flare, RH	1
	4415000029	58.5" Wheelwell Flare, LH	1
	4415000027	58.5" Wheelwell Flare, RH	1
11	7115141850	Capscrew	24
12	4415000036	52" Wheelwell Body Flare	2
	4415000038	58.5" Wheelwell Body Flare	2
13	4831000070	Spacer	2
14	7415000014	Cap, LH	3
	7415000013	Cap, RH	3
15	4415000045	1 Toolbox Flare	2
	4415000046	2 Toolbox Flare	2
	4415000015	3 Toolbox Flare	2
	4415000021	4 Toolbox Flare	2
16	7115141850	Capscrew	*
17	7950140151	Flatwasher	*
18	7660142601	Locknut	*

* Quantity varies according to body length.

146" BODY FLARE INSTALLATION TANDEM AXLE



146" BODY FLARE INSTALLATION TRIPLE AXLE



PARTS LIST — 146" BODY FLARE INSTALLATION TRIPLE AXLE

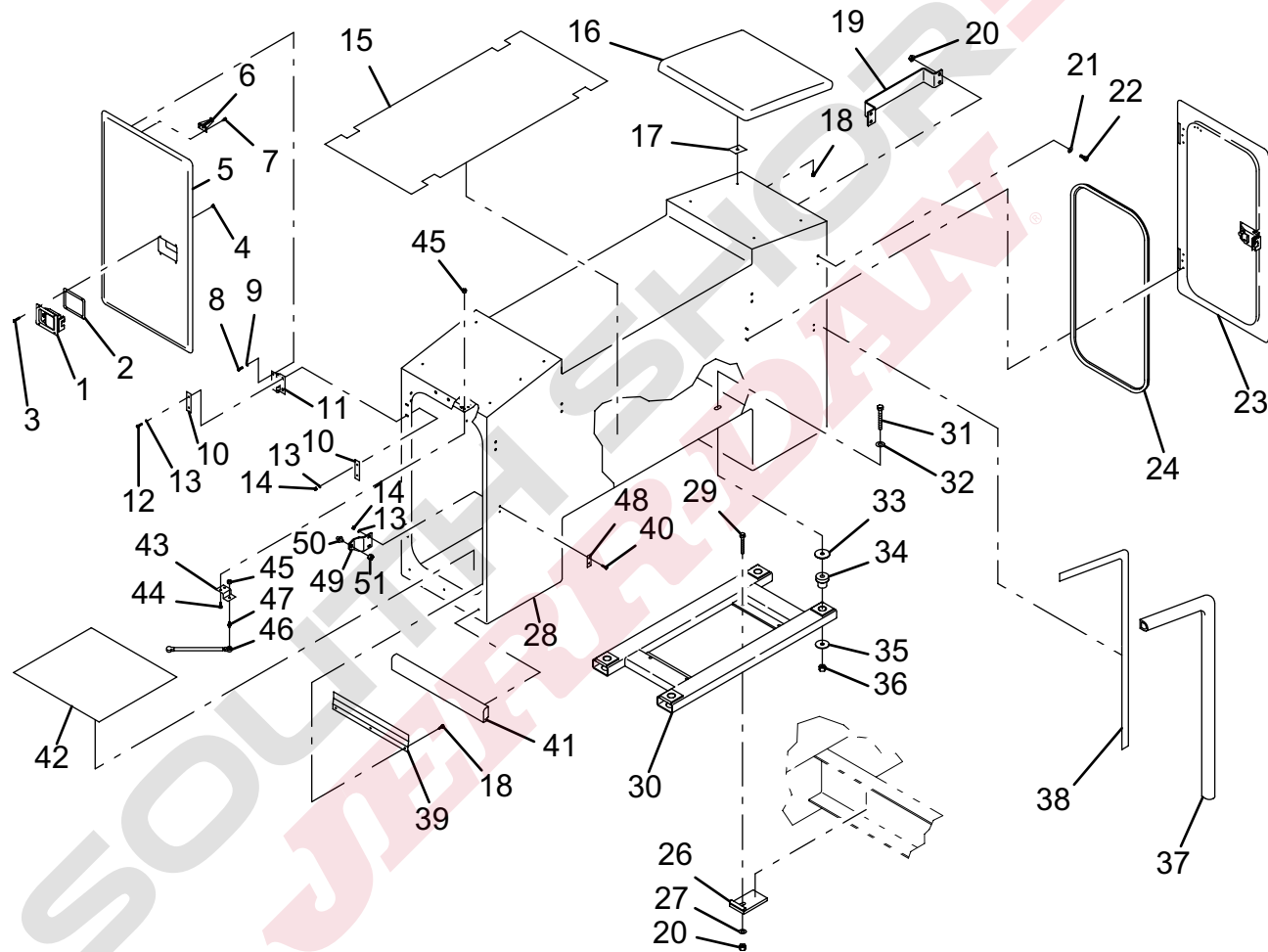
Ref. No.	Part No.	Description	Qty.
1	4415000019	52" Wheelwell Flare, LH	1
	4415000017	52" Wheelwell Flare, RH	1
	4415000030	58.5" Wheelwell Flare, LH	1
	4415000028	58.5" Wheelwell Flare, RH	1
2	7111141050	Capscrew	26
3	7950140151	Flatwasher	76
4	7660142601	Locknut (52" Wheelwell Flare)	38
		Locknut (58.5" Wheelwell Flare)	40
5	7002000187	Rubber Fender Flares	3 pr
6	7415000010	52" Flare Junction Panel	4
	7415000011	58.5" Flare Junction Panel	4
7	7790142051	Hex Hd Screw	4
8	7949000022	Fender Washer	4
9	4679000148	Isolator Pad	4
10	4415000043	52" Wheelwell Flare	2
	4415000044	58.5" Wheelwell Flare	2
11	7115141850	Capscrew (52" Wheelwell Flare)	12
		Capscrew (58.5" Wheelwell Flare)	14
12	4415000018	52" Wheelwell Flare, LH	1
	4415000016	52" Wheelwell Flare, RH	1
	4415000029	58.5" Wheelwell Flare, LH	1
	4415000027	58.5" Wheelwell Flare, RH	1
13	4415000040	52" Wheelwell Body Flare	2
	4415000042	58.5" Wheelwell Body Flare	2
14	7415000014	Cap, LH	3
	7415000013	Cap, RH	3
15	4415000045	1 Toolbox Flare	2
	4415000046	2 Toolbox Flare	2
	4415000015	3 Toolbox Flare	2
	4415000021	4 Toolbox Flare	2
16	7115141850	Capscrew	*
17	7950140151	Flatwasher	*
18	7660142601	Locknut	*

* Quantity varies according to body length.

PARTS LIST — TUNNEL TOOLBOX - 24

Ref. No.	Part No.	Description	Qty.
1	7595000005	Rotary Latch	2
2	7796000038	Gasket	2
3	7790101276	Pan Head Screw	8
4	7660102601	Locknut	8
5	4686000072	Door Panel LH	1
6	7178000022	Bracket	2
7	7114100418	Capscrew	6
8	7114140418	Capscrew	12
9	7950140500	Lockwasher	12
10	4812000052	Shim	10
11	7555000002	Hinges	4
12	7114140818	Capscrew	8
13	7950140161	Flatwasher	20
14	7660142601	Locknut	12
15	4679000116	Rubber Pad	1
16	7686000008	Top Cap Panel	2
17	4679000120	Rubber Pad	8
18	7790141651	Hex Head Screw	14
19	4178000229	Bracket	4
20	7660182301	Locknut	20
21	7950180153	Flatwasher	16
22	7115181050	Capscrew	16
23	4686000073	Door Panel RH	1
24	4632000012	Seal	2
26	3274000011	Clamp Weldment	4
27	7950180252	Flatwasher	4
28	3503740030	Toolbox Body Assembly	1
29	7115182050	Capscrew	4
30	3911000033	Tube Weldment	1
31	7115202850	Capscrew	4
32	7950200161	Flatwasher	4
33	7949000020	Washer	4
34	7636000008	Mount	4
35	7949000020	Washer	4
36	7660200001	Hex Nut	4
37	8632000008	Rubber Seal	12 ft.
38	7796000002	Seal	12 ft.
39	4811000135	Alum Sheet	2
40	7115140850	Hex Head Capscrew	4
41	7686000019	Filler Strip Panel	2
42	4679000115	Rubber Pad	2
43	4178000240	Bracket	2
44	7115150650	Hex Head Capscrew	4
45	7660152601	Locknut	6
46	7843000020	Gas Spring	2
47	7865000001	Ball Stud	2
48	4062000174	Bar	2
49	4178000222	Bracket	2
50	7585000004	Latch Striker	2
51	7661000021	Locknut	2

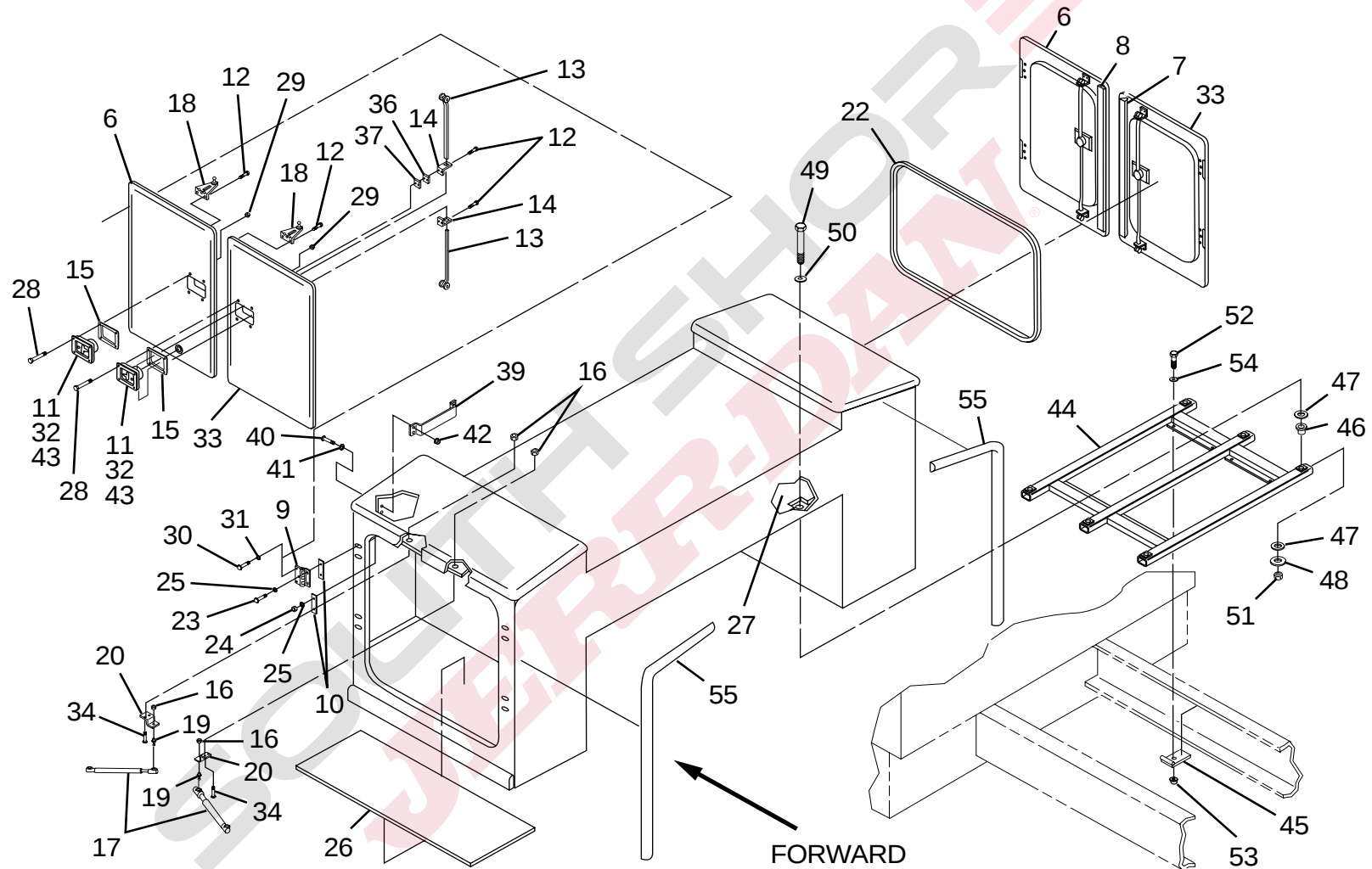
TUNNEL TOOLBOX - 24



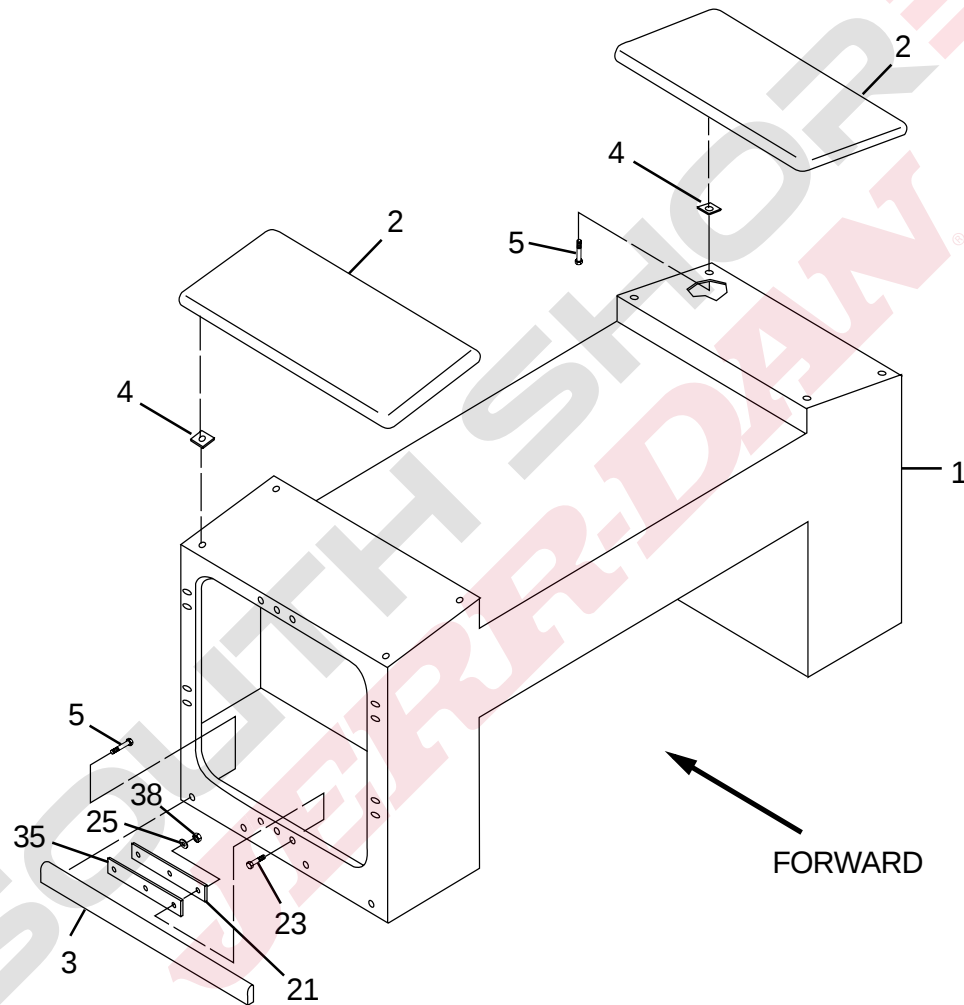
PARTS LIST – TUNNEL TOOLBOX - 49"

Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
1	3502740106	Toolbox Body Assembly	1	29	7660102601	Nut	16
2	7686000050	Toolbox Cap	2	30	7114140418	Capscrew	24
3	7686000057	Filler Strip	2	31	7950140500	Lockwasher	24
4	4679000120	Rubber Pad	12	32	7831000040	Spacer	8
5	7790141651	Hex Head Screw	20	33	4686000134	Door Panel, RH	2
6	4686000133	Door Panel, LH	2	34	7115150650	Hex Head Capscrew	8
7	4632000025	Seal Door Vertical	2	35	4062000368	Bar	4
8	4811000355	Alum Sheet	2	36	4811000336	Alum Sheet	8
9	7555000002	Hinges	8	37	4811000337	Alum Sheet	8
10	4812000052	Shim	16	38	7660140001	Nut	12
11	7585000011	Latch	4	39	4178000229	Bracket	4
12	7114100418	Capscrew	28	40	7115181050	Hex Head Capscrew	16
13	7585000010	Latch	8	41	7950180153	Flatwasher	16
14	4178000337	Bracket	8	42	7660182301	Locknut	16
15	7796000031	Gasket	4	43	7690000810	Cotter Pin	8
16	7660152601	Locknut	12	44	3911000053	Tube Weld	1
17	7843000020	Gas Spring	4	45	3274000011	Toolbox Clamp Weldment	6
18	7178000023	Ball Stud Bracket	4	46	7636000008	Center Bonded Mount	6
19	7865000001	Thread Ball Stud	4	47	7949000019	Snub Head Washer	24
20	4178000240	Bracket	4	48	7949000020	Snub Tail Washer	6
21	4811000335	Alum Sheet	4	49	7115202850	Hex Head Capscrew	6
22	4632000024	Seal Door	2	50	7950200161	Flatwasher	6
23	7114141018	Capscrew	28	51	7660200001	Nut	6
24	7660142601	Locknut	16	52	7115182050	Hex Head Capscrew	6
25	7950140161	Flatwasher	56	53	7660182301	Locknut	6
26	4679000181	Pad	2	54	7950180252	Flatwasher	6
27	4679000188	Rubber Pad	2	55	8632000011	Seal	12 ft.
28	7114100818	Capscrew	16				

TUNNEL TOOLBOX - 49"

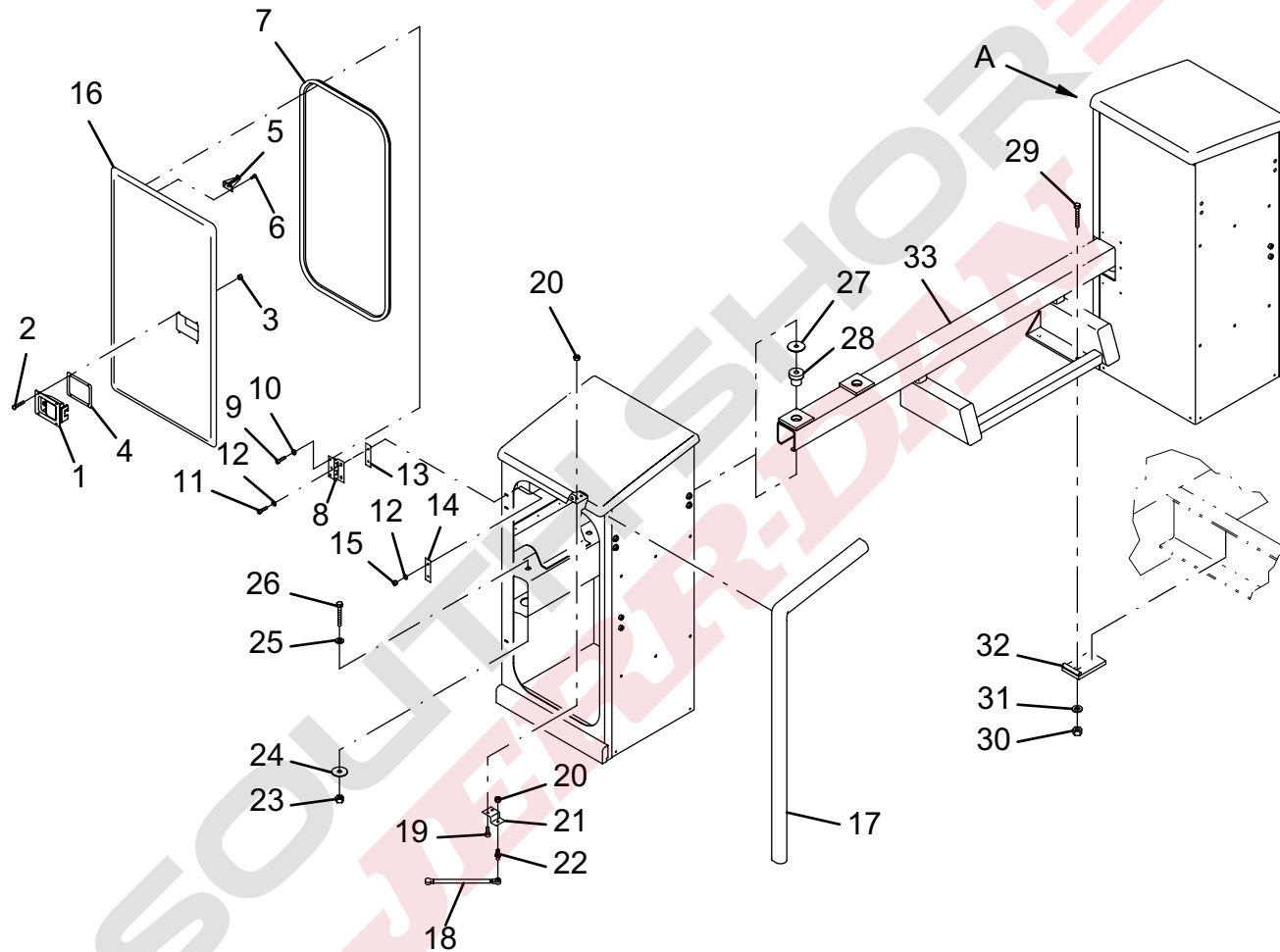


TUNNEL TOOLBOX - 49"

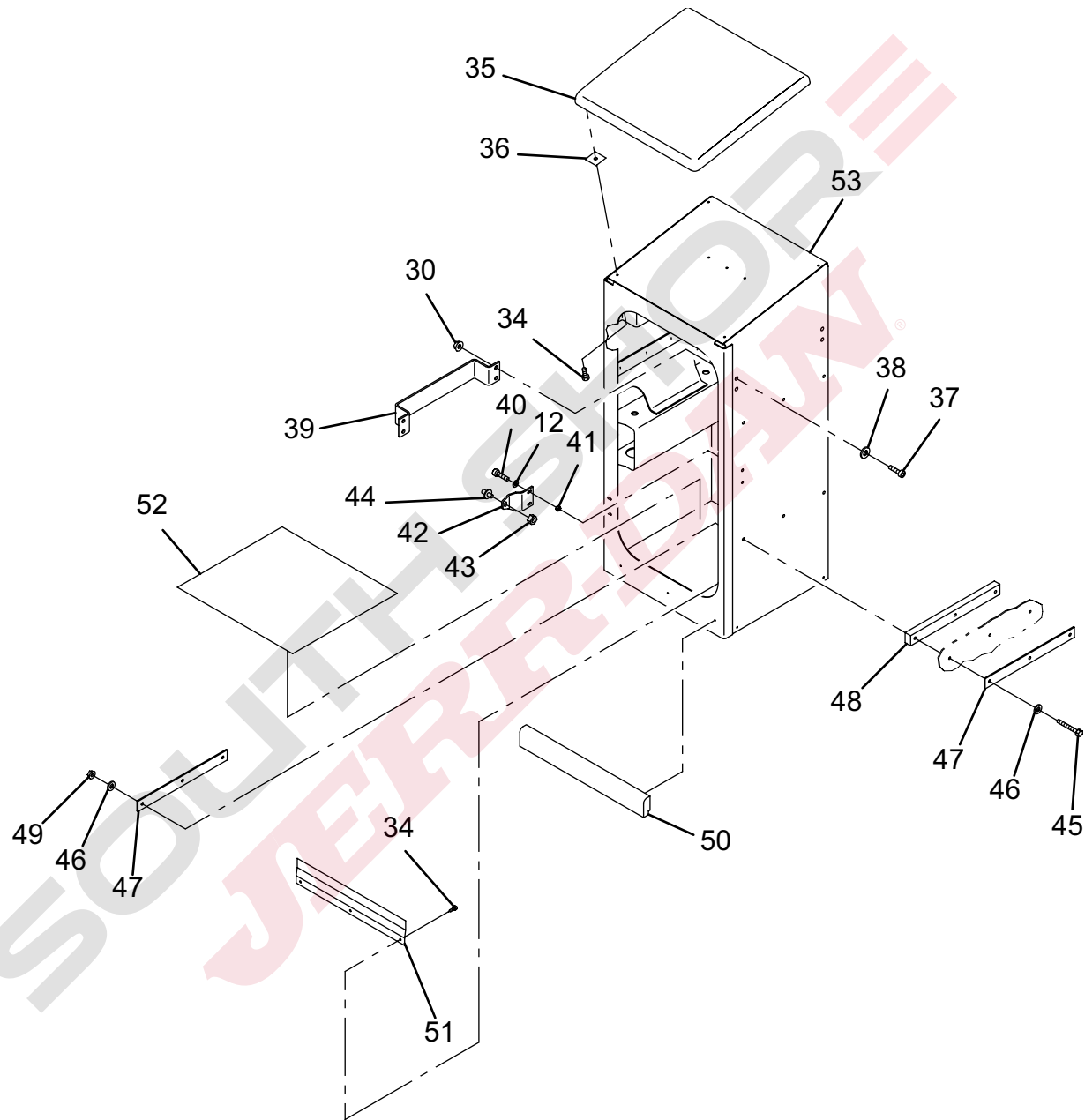


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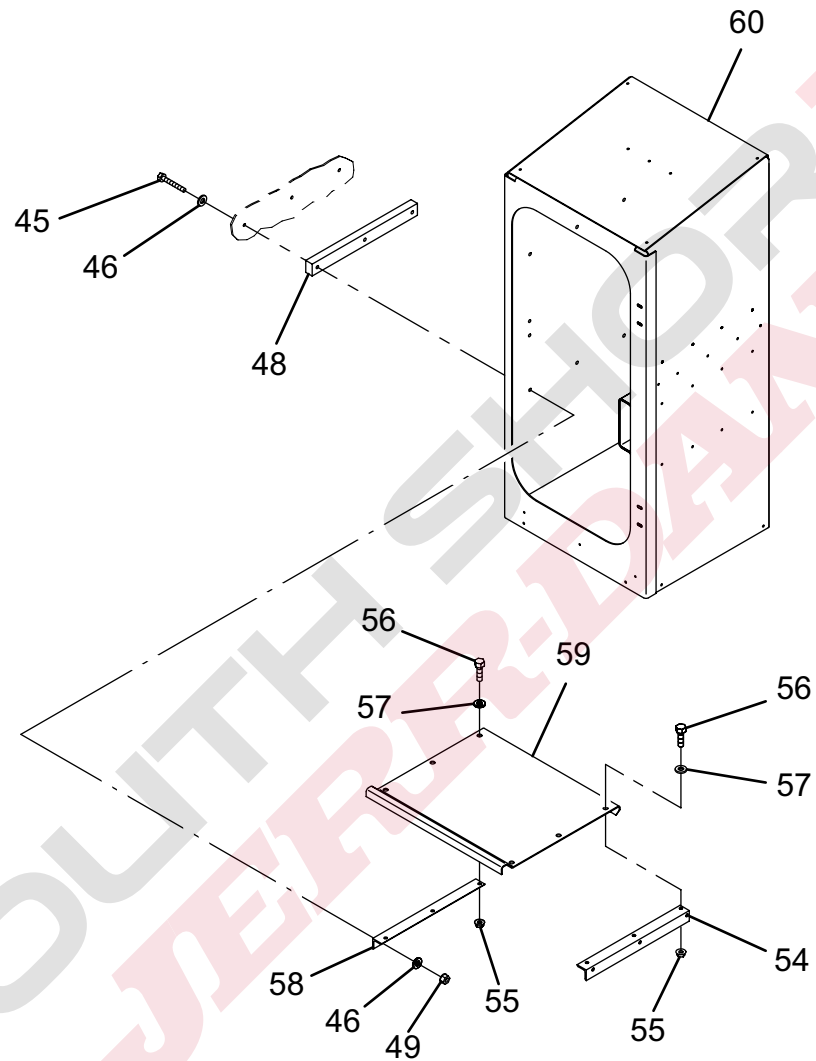
24" STAND-ALONE TOOLBOX - DOOR AND HARDWARE ASSEMBLY



24" STAND-ALONE TOOLBOX - DOOR AND HARDWARE ASSEMBLY



24" STAND-ALONE TOOLBOX - DOOR AND HARDWARE ASSEMBLY



DETAIL A

PARTS LIST — 24" STAND-ALONE TOOLBOX - DOOR AND HARDWARE ASSEMBLY

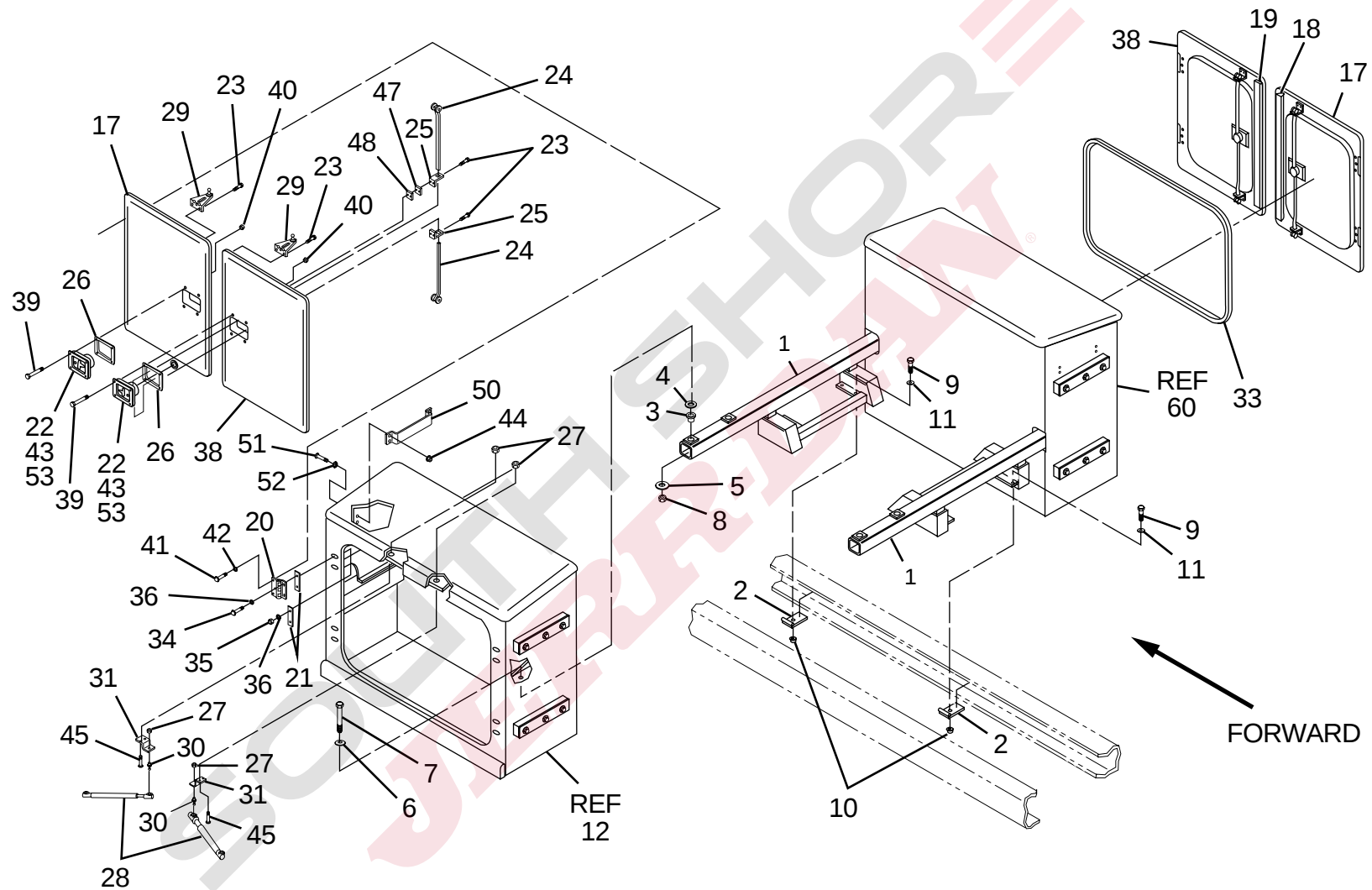
Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
1	7595000005	Latch Paddle	2	34	7790141651	Screw	14
2	7114100818	Capscrew	8		7790142051	Screw (use with 4679000121)	14
3	7660102601	Nut	8	35	7686000008	Toolbox Cap	2
4	7796000038	Gasket	2	36	4679000120	Rubber Pad	8
5	7178000023	Bracket Ball Stud	2		4679000121	Rubber Pad (use with 7790142051)	8
6	7114100418	Capscrew	6	37	7115181050	Capscrew	8
7	4632000012	Seal	2	38	7950180153	Flatwasher	8
8	7555000002	Hinge	4	39	4178000270	Bracket	2
9	7114140418	Capscrew	12	40	7115140850	Capscrew	4
10	7949000025	Lockwasher	12	41	7413000002	Nutsert	4
11	7114140818	Capscrew	8	42	4178000222	Bracket	2
12	7950140161	Flatwasher	20	43	7661000021	Locknut	2
13	4812000052	Shim	4	44	7585000004	Latch Striker	2
14	4062000173	Bar	4	45	7115162250	Capscrew	12
15	7660142601	Locknut	8	46	7950160161	Flatwasher	24
16	4684000072	Panel Door	2	47	4062000243	Backing Bar	8
17	8632000011	Rubber	2	48	4679000136	Pad	4
18	7843000020	Spring Gas	2	49	7660160001	Nut	12
19	7115150650	Capscrew	4	50	7686000019	Filler Strip	2
20	7660152601	Locknut	6	51	4811000135	Sheet	2
21	4178000240	Bracket	2	52	4679000115	Pad Rubber	2
22	7865000001	Ball Stud	2	53	3502740071	Box Bondment, LH	2
23	7660220001	Nut	4	54	4017000727	Angle, LH	2
24	7949000018	Washer	4	55	7660160001	Nut	18
25	7950220161	Flatwasher	4	56	7115160850	Capscrew	18
26	7115223250	Capscrew	4	57	7950160161	Flatwasher	18
27	7949000017*	Washer	8	58	4017000714	Angle, RH	2
28	7636000007	Mount	4	59	4811000217	Sheet	2
29	7115182050	Capscrew	4	60	3502740072	Stand Alone Box Bondment, RH	1
30	7660182301	Locknut	12				
31	7950180252	Flatwasher	4				
32	3274000011	Clamp Weldment	4				
33	3868000157	Subframe Weldment	1				

* 4 Required, install additional washers to set height of toolbox when misalignment occurs.

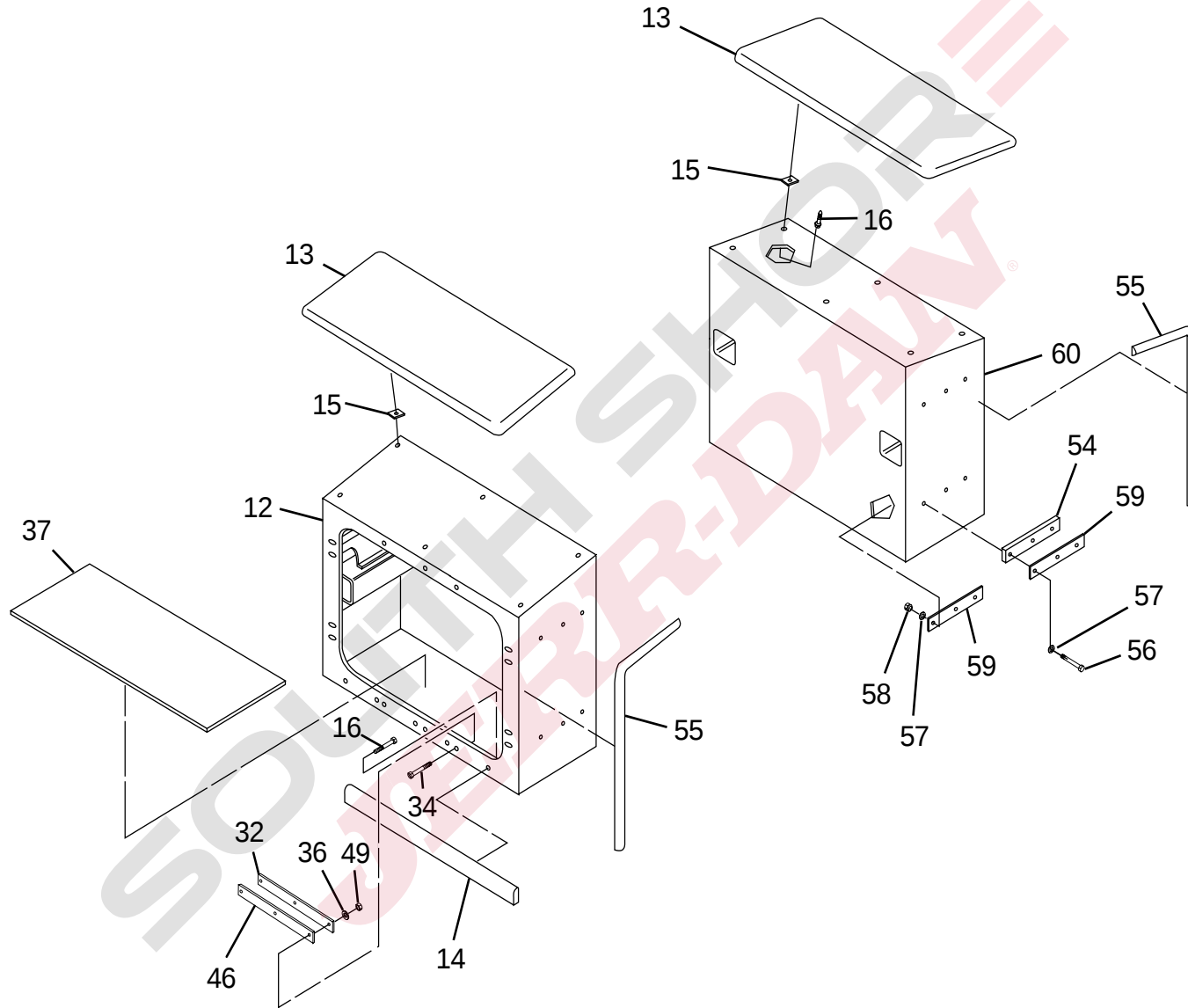
PARTS LIST – STAND-ALONE TOOLBOX - 49”

Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
1	3868000157	Subframe Weld	4	31	4178000240	Bracket	4
2	3274000011	Toolbox Clamp Weldment	8	32	4811000335	Alum Sheet	4
3	7636000007	Mount	8	33	4632000024	Seal	2
4	7949000017	Washer Head	8	34	7114141018	Capscrew	28
5	7949000018	Washer Tail	16	35	7660142601	Locknut	16
6	7950220161	Flatwasher	8	36	7950140161	Flatwasher	56
7	7115223250	Hex Head Capscrew	8	37	4679000181	Pad	2
8	7660220001	Nut	8	38	4686000134	Door Panel, RH	2
9	7115182050	Hex Head Capscrew	8	39	7114100818	Capscrew	16
10	7660182301	Locknut	8	40	7660102601	Nut	16
11	7950180252	Flatwasher	8	41	7114140418	Capscrew	24
12	3502740111	Toolbox Assy LH	1	42	7950140500	Lockwasher	24
13	7686000050	Panel Composite - Toolbox Cap	1	43	7831000040	Spacer	8
14	7686000057	Panel Composite - Filler Strip	2	44	7660182301	Locknut	16
15	4679000120	Rubber Pad	12	45	7115150650	Hex Head Capscrew	8
16	7790141651	Hex Head Screw	20	46	4062000368	Bar	4
17	4686000133	Door Panel, LH	2	47	4811000336	Alum Sheet .06 Thk	8
18	4632000025	Seal	2	48	4811000337	Alum Sheet .13 Thk	8
19	4811000355	Alum Sheet	2	49	7660140001	Nut	12
20	7555000002	Hinges	8	50	4178000341	Bracket	4
21	4812000052	Shim	16	51	7115181050	Hex Head Capscrew	16
22	7585000011	Latch	4	52	7950180153	Flatwasher	16
23	7114100418	Capscrew	28	53	7690000810	Cotter Pin	4
24	7585000013	Latch Roller	8	54	4679000136	Wear Pad	4
25	4178000337	Bracket	8	55	8632000011	Rubber Seal	12 ft.
26	7796000031	Gasket	4	56	7115162250	Hex Head Capscrew	12
27	7660152601	Locknut	12	57	7950160161	Flatwasher	24
28	7843000020	Gas Spring	4	58	7660160001	Nut	12
29	7178000023	Ball Stud Bracket	4	59	4062000243	Backing Bar	8
30	7865000001	Thread Ball Stud	4	60	3502740116	Toolbox Assy RH	1

STAND-ALONE TOOLBOX - 49"



STAND-ALONE TOOLBOX - 49"



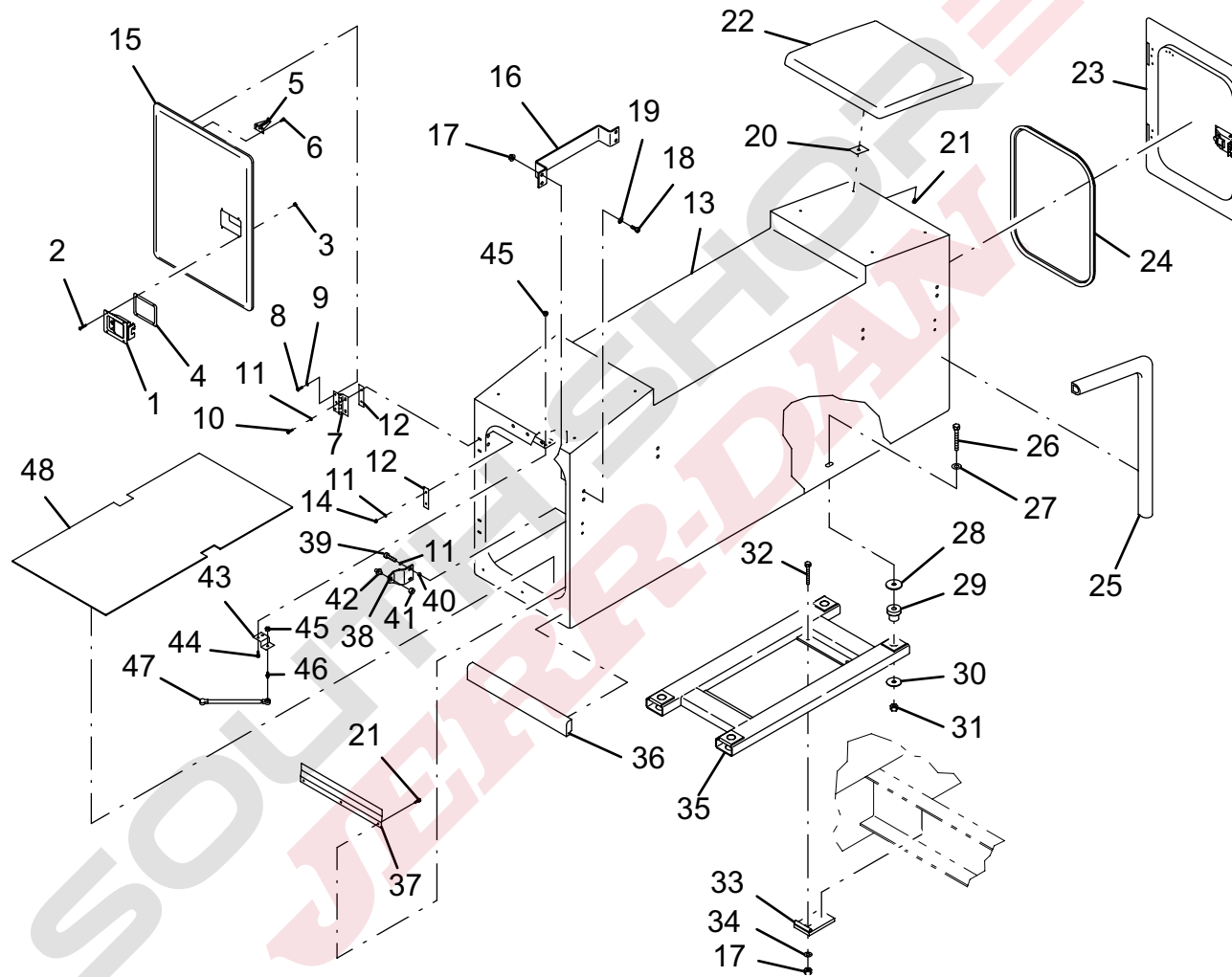
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PARTS LIST — 3/4 HEIGHT TUNNEL TOOLBOX - 24

Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
1	7595000005	Latch Paddle	2	26	7115202850	Capscrew	4
2	7114100818	Capscrew	8	27	7950200161	Flatwasher	4
3	7660102601	Nut	8	28	7949000019*	Washer	16
4	7796000038	Gasket	2	29	7636000008	Mount	4
5	7178000023	Bracket Ball Stud	2	30	7949000020*	Washer	8
6	7114100418	Capscrew	6	31	7660200001	Nut	4
7	7555000002	Hinge	4	32	7115182050	Capscrew	4
8	7114140418	Capscrew	12	33	3274000011	Clamp Weldment	4
9	7950140500	Lockwasher	12	34	7950180252	Flatwasher	4
10	7114140818	Capscrew	8	35	3911000033	Tube Weldment	1
11	7950140161	Flatwasher	20	36	7686000019	Filler Strip	2
12	4812000052	Shim	8	37	4811000135	Sheet	2
13	3503740015	Box Bondment	1	38	4178000222	Bracket	2
14	7660142601	Locknut	8	39	7115140850	Capscrew	4
15	4686000085	Panel Door, LH	1	40	7413000002	Nutsert	4
16	4178000229	Bracket	4	41	7661000021	Locknut	2
17	7660182301	Locknut	20	42	7585000004	Latch Striker	2
18	7115181050	Capscrew	16	43	4178000250	Bracket	2
19	7950180153	Flatwasher	16	44	7115150650	Capscrew	4
20	7686000008	Toolbox Cap	2	45	7660152601	Locknut	6
21	7790141651	Screw	14	46	7865000001	Ball Stud	2
	7790142051	Screw (use with 4679000121)	14	47	7843000020	Spring Gas	2
22	4679000120	Rubber Pad	8	48	4679000133	Pad Rubber	2
	4679000121	Rubber Pad (use with 7790142051)	8				
23	4686500086	Panel Door, RH	1				
24	4632000014	Seal	2				
25	8632000011	Rubber	2				

* 4 Required, install additional washers to set height of toolbox when misalignment occurs.

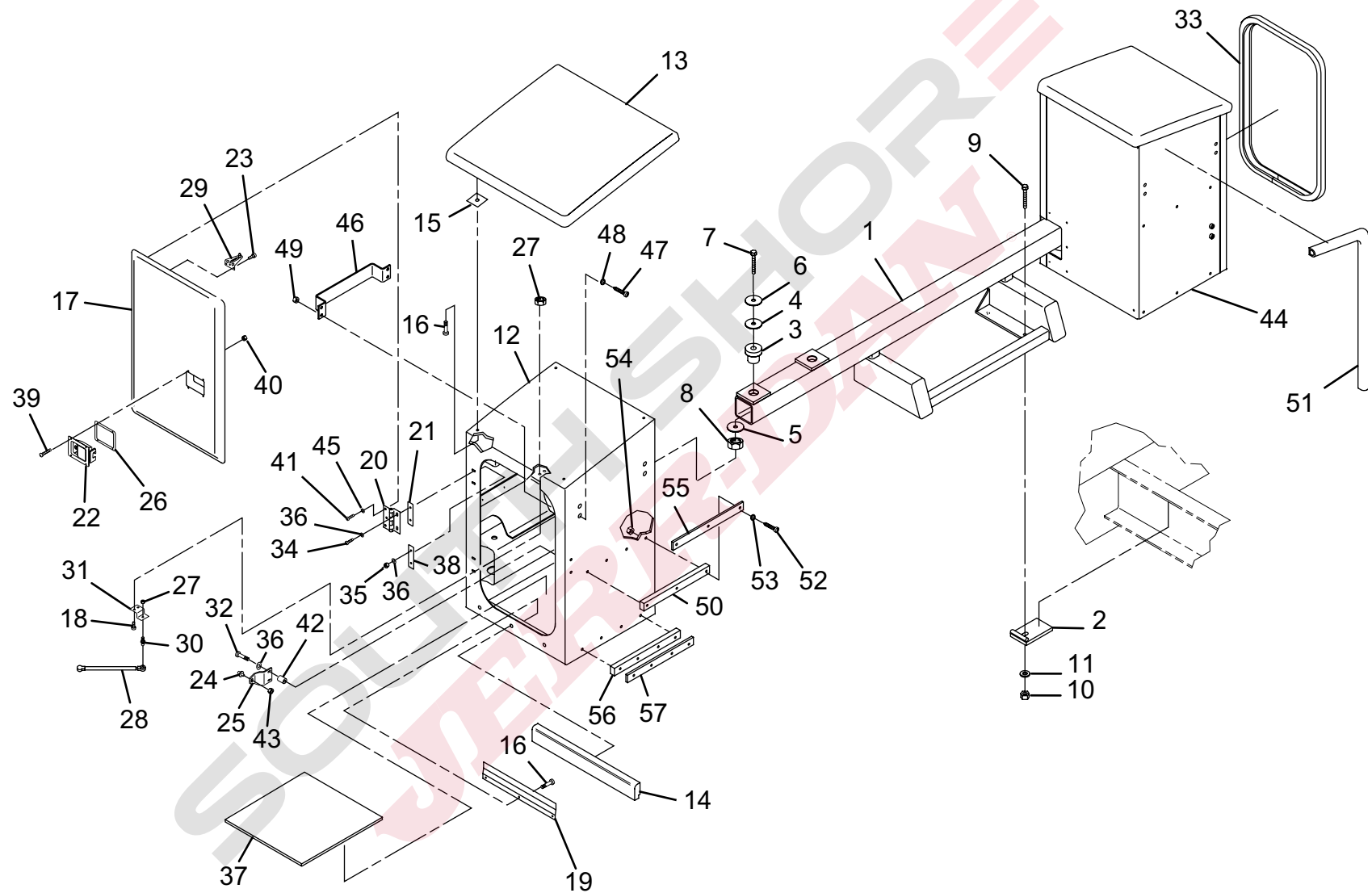
3/4 HEIGHT TUNNEL TOOLBOX - 24



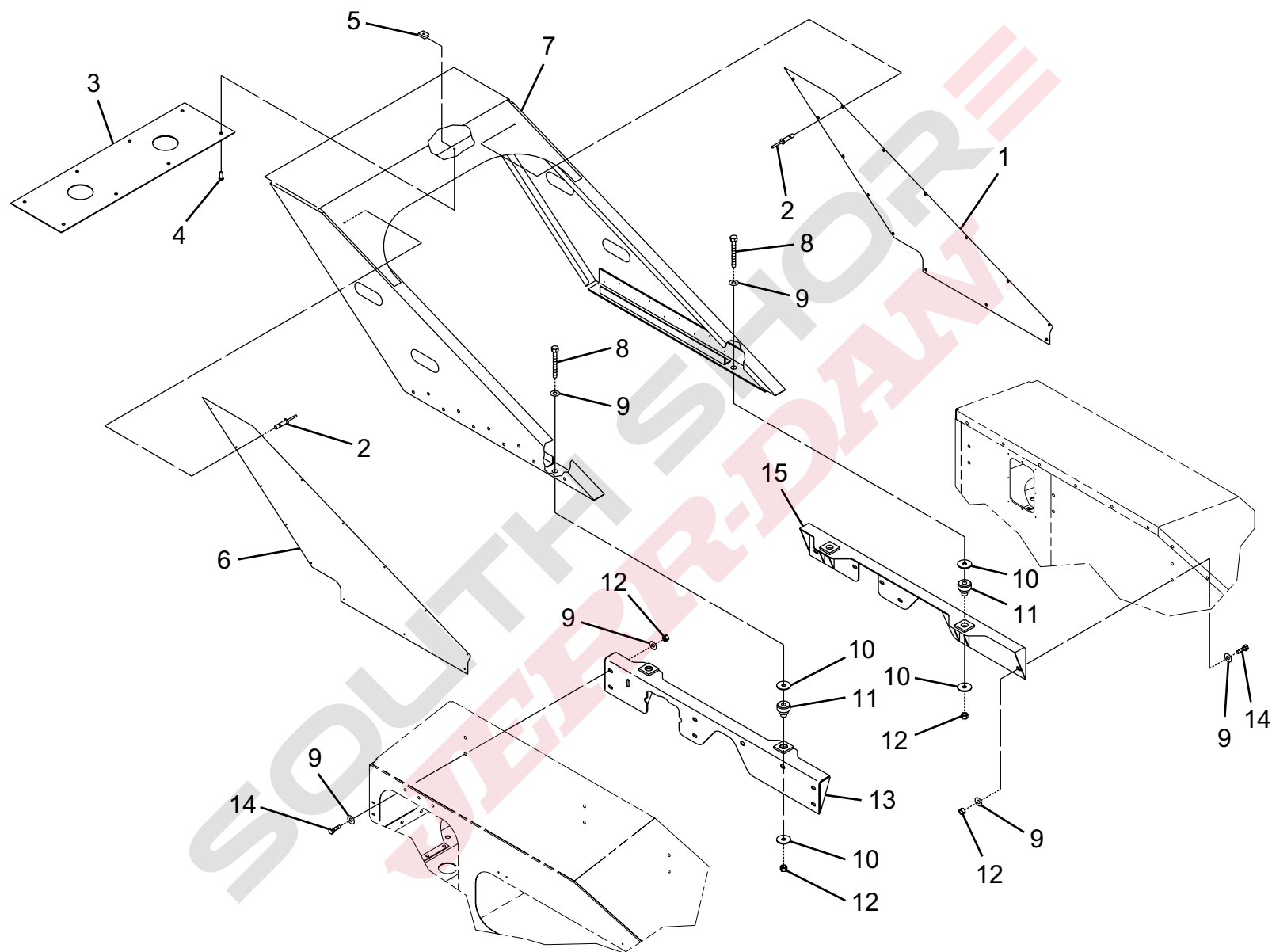
PARTS LIST — 3/4 HEIGHT STAND-ALONE TOOLBOX - 24

Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
1	3868000157	Subframe Weld	1	31	4178000240	Bracket	2
2	3274000011	Clamp Weldment	4	32	7115140850	Hex Head Capscrew	4
3	7636000007	Mount	4	33	4632000012	Seal	2
4	7949000017	Washer Head	8	34	7114140818	Capscrew	8
5	7949000018	Washer Tail	4	35	7660142601	Locknut	8
6	7950220161	Flatwasher	4	36	7950140161	Flatwasher	20
7	7115223250	Hex Head Capscrew	4	37	4679000115	Rubber Pad	2
8	7660220001	Nut	4	38	4062000173	Bar	4
9	7115182050	Hex Head Capscrew	4	39	7114100818	Capscrew	8
10	7660182301	Locknut	4	40	7660102601	Nut	8
11	7950180252	Flatwasher	4	41	7114140418	Capscrew	12
12	3502740096	Bondment LH	1	42	7413000002	Nutsert	4
13	7686000008	Panel Composite - Toolbox Cap	2	43	7661000021	Locknut	2
14	7686000019	Panel Composite - Filler Strip	2	44	3502740103	Bondment RH	1
15	4679000121	Rubber Pad	8	45	7949000025	Lockwasher	12
16	7790142051	Hex Head Screw	14	46	4178000270	Bracket	4
17	4686000072	Panel Door	2	47	7115181050	Hex Head Capscrew	16
18	7115150650	Hex Head Capscrew	4	48	7950180153	Flatwasher	16
19	4811000341	Alum Sheet	2	49	7660182301	Locknut	16
20	7555000002	Hinges	4	50	4679000186	Spacer Pad	2
21	4812000052	Shim	4	51	8632000011	Rubber Seal	10 ft.
22	7595000005	Latch Paddle	2	52	7115162250	Hex Head Capscrew	14
23	7114100418	Capscrew	6	53	7950160161	Flatwasher	28
24	7585000004	Latch Striker	2	54	7660160001	Nut	14
25	4178000222	Bracket	2	55	4062000374	Alum Bar	4
26	7796000038	Gasket	2	56	4679000187	Spacer Pad	2
27	7660152601	Locknut	6	57	4062000375	Alum Bar	2
28	7843000020	Gas Spring	2				
29	7178000023	Ball Stud Bracket	2				
30	7865000001	Thread Ball Stud	2				

3/4 HEIGHT STAND-ALONE TOOLBOX - 24



HEADBOARD/LIGHT PYLON



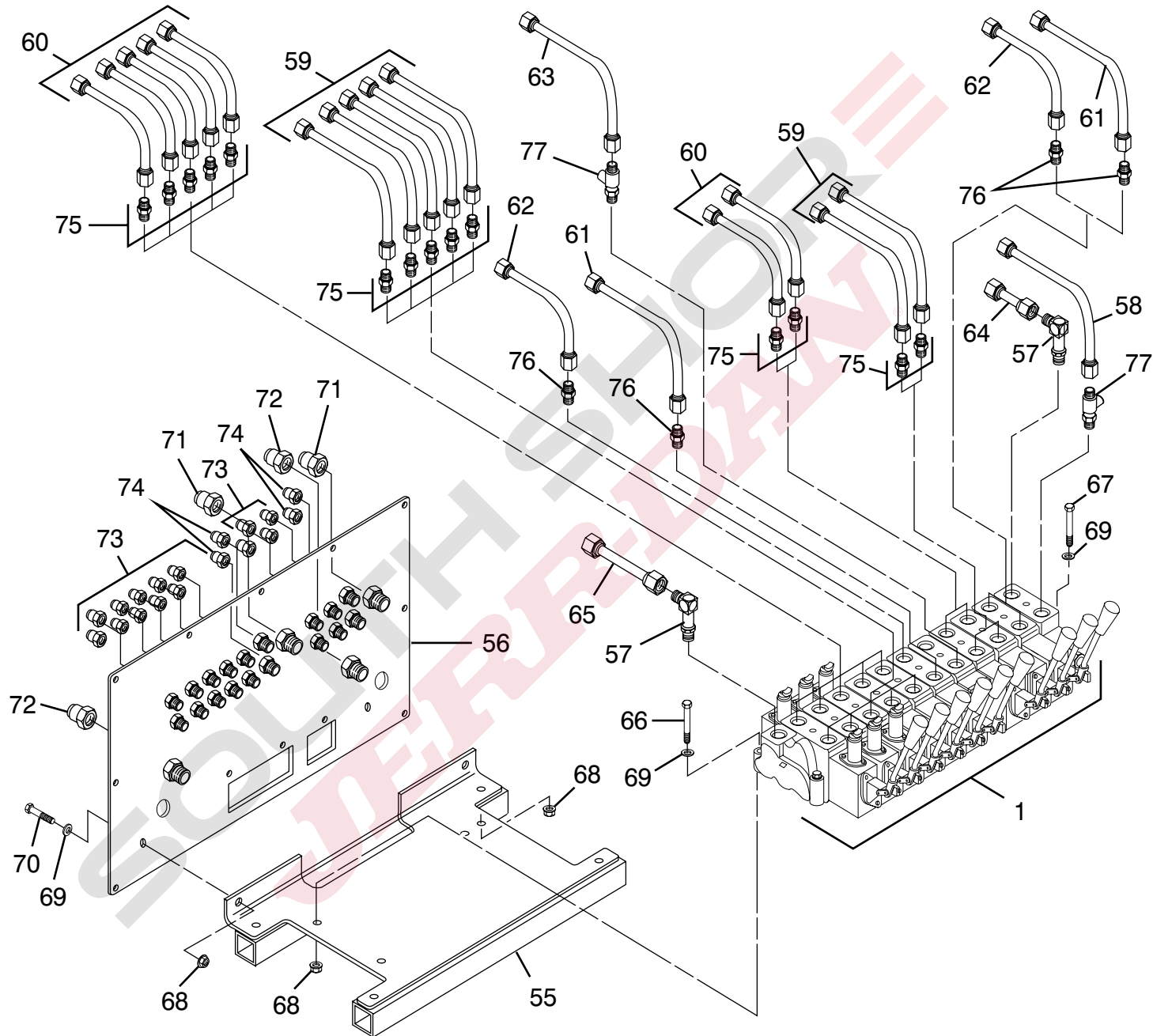
PARTS LIST — HEADBOARD/LIGHT PYLON

Ref. No.	Part No.	Description	Qty.
1	4707000109	Plate, RH - 39" High Headboard	1
	4707000107	Plate, RH - 29" High Headboard	
2	7759000008	Rivet - 39" High Headboard	28
	7759000008	Rivet - 29" High Headboard	26
3	4707000105	Plate	1
4	7114140518	Capscrew	8
5	7661000019	U-Nut	8
6	4707000108	Plate, LH - 39" High Headboard	1
	4707000106	Plate, LH - 29" High Headboard	
7	3241000079	Headboard Assembly - 39"	1
	3241000077	Headboard Assembly - 29"	
8	7115182850	Capscrew	4
9	7950180161	Flatwasher	24
10	7949000021	Washer	8
11	7636000009	Mount	4
12	7660182601	Locknut	16
13	3178000242	Bracket Weldment, LH	1
14	7115181250	Capscrew	12
15	3178000243	Bracket Weldment, RH	1

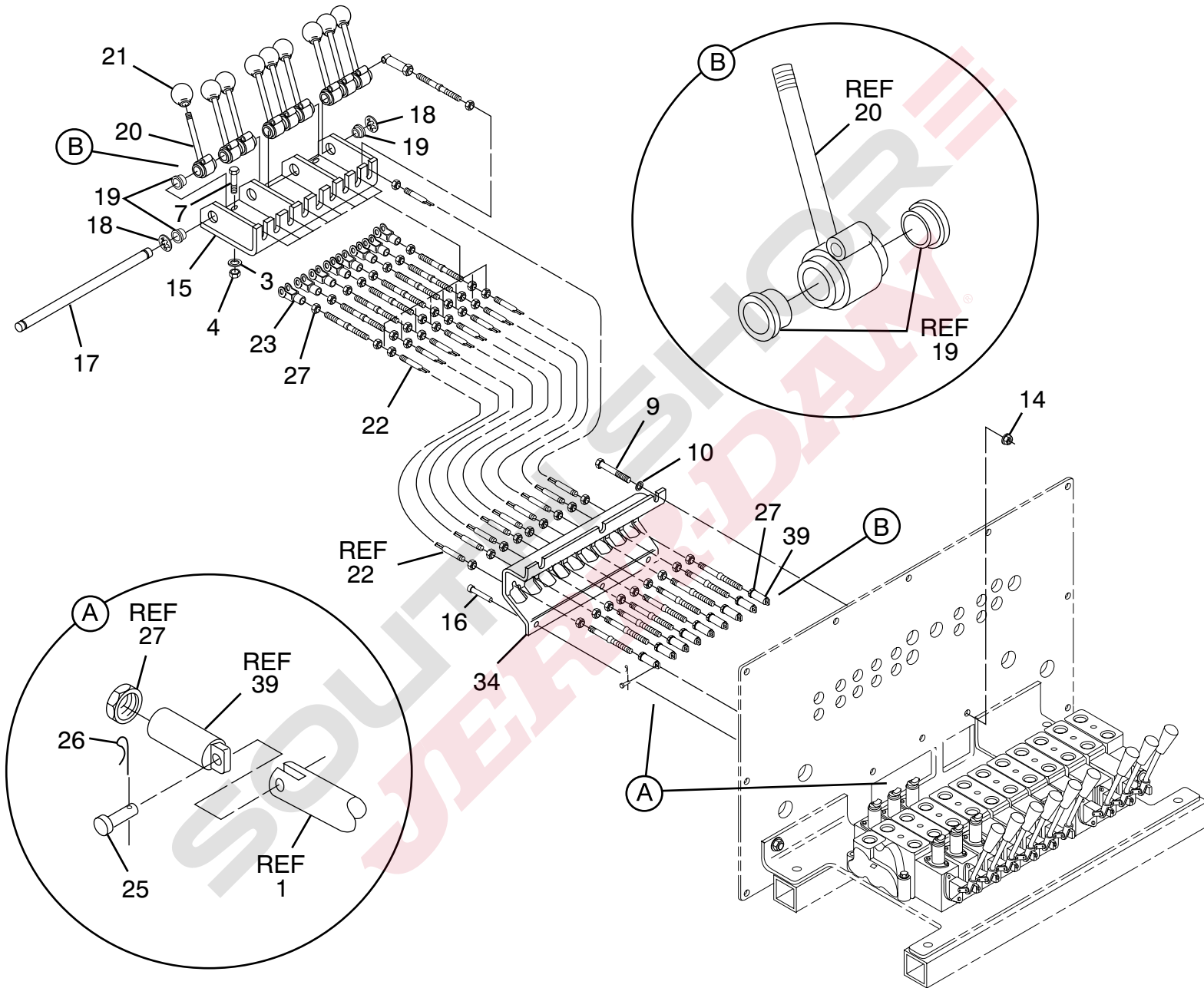
PARTS LIST — CONTROLS ASSEMBLY

Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
1	4935000096	Control Valve	1	40	7330000199	Decal Authorized Personnel Warning	2
2	7115162850	Hex Head Capscrew	4	41	7330000262	Decal Winch Warning	2
3	7950160161	Flatwasher	40	42	7330000200	Decal Checklist	2
4	7660162601	Locknut	17	43	7330000253	Decal Wire Rope Caution	2
5	4706002745	Plate	1	44	7330000306	Decal LH Controls	1
6	7115161450	Hex Head Capscrew	3	45	7330000302	Decal Upper Rear	1
7	7115161050	Hex Head Capscrew	10	46	7330000304	Decal Lower Rear	1
8	7660160000	Nut	3	47	7330000299	Decal Upper Front	1
9	7115140850	Hex Head Capscrew	7	48	7330000300	Decal Lower Front	1
10	7950140161	Flatwasher	26	49	7330000256	Decal Pressure	1
11	7661000006	Nut	14	50	7330000257	Decal Pressure	1
12	7796000012	Seal	8 ft.	51	7330000245	Decal Front Winch	1
13	3686000016	Panel Weldment	1	52	7330000246	Decal Rear Winch	1
14	7660142601	Locknut	6	53	7330000249	Decal Winch Freespool	2
15	3178000260	Weldment	1	54	7330000184	Decal Throttle	1
16	7790141056	Screw	13	55	3177000042	Weldment	1
17	4806000018	Shaft	1	56	4706002748	Plate	1
18	7754000009	Retaining Ring	2	57	7443000211	Fitting, 90°	2
19	7082000005	Bearing	20	58	7912000092	Tube Assy	1
20	3551000038	Handle	9	59	7912000089	Tube Assy	7
21	7551000002	Knob	9	60	7912000088	Tube Assy	7
22	7248000053	Cable	9	61	7912000087	Tube Assy	2
23	7990000003	End Yoke	9	62	7912000086	Tube Assy	2
24	4309000001	Coupling	3	63	7912000093	Tube Assy	1
25	7690141200	Pin	9	64	7912000090	Tube Assy	1
26	7690000810	Cotter Pin	9	65	7912000091	Tube Assy	1
27	7660140230	Nut	18	66	7115162250	Hex Head Capscrew	2
28	7111140813	Screw	10	67	7115161450	Hex Head Capscrew	1
29	4638000003	Brush	1	68	7660162601	Locknut	5
30	4411000113	Extrusion Brush Holder	1	69	7950160161	Flatwasher	5
31	7115140650	Hex Head Capscrew	3	70	7115161050	Hex Head Capscrew	2
32	4706002746	Plate	1	71	7445121225	Union Bulkhead	2
33	4706002497	Plate	1	72	7445161625	Union Bulkhead	2
34	4706002747	Plate	1	73	7445080825	Union Bulkhead	14
35	4679000119	Rubber Pad	1	74	7445101025	Union Bulkhead	4
36	4679000131	Rubber Pad	1	75	7445081043	Adapter	14
37	4679000143	Rubber Pad	1	76	7445101043	Adapter	4
38	4679000144	Rubber Pad	1	77	7445121248	Fitting, Tee	2
39	4309000002	Cable Coupling	6				

CONTROLS ASSEMBLY



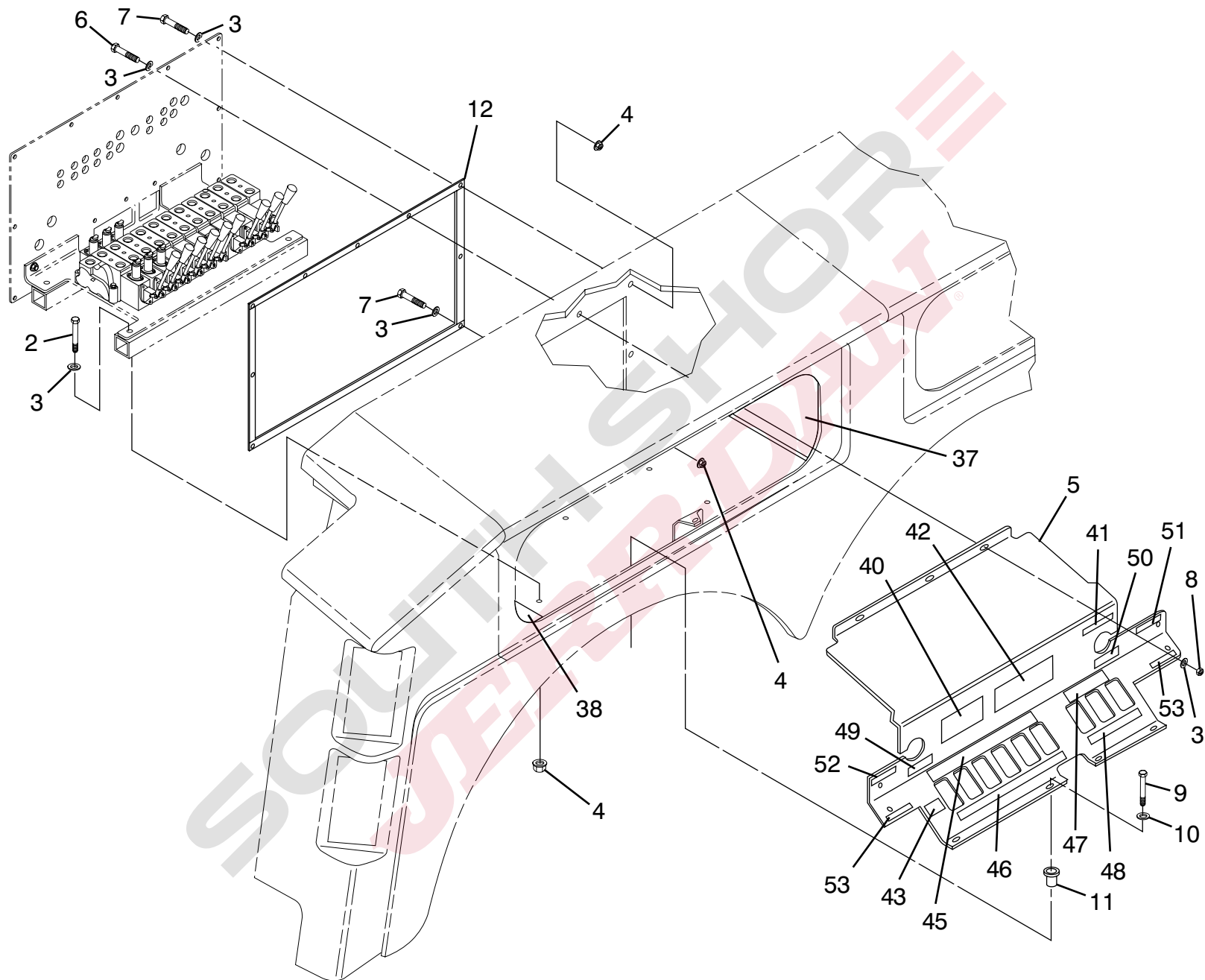
CONTROLS ASSEMBLY



This exploded view diagram illustrates the assembly of a vehicle interior trim component. The main assembly is shown in a perspective view, with various sub-components and fasteners labeled with numbers 10 through 54. The components include:

- 10:** Screws used for fastening various panels and trim pieces.
- 11:** A screw used for fastening the lower trim piece.
- 13:** A trim piece located at the bottom of the assembly.
- 14:** A trim piece located in the center of the assembly.
- 16:** A trim piece located on the left side of the assembly.
- 28:** Screws used for fastening the lower trim piece.
- 29:** A trim piece located on the right side of the assembly.
- 30:** A trim piece located on the right side of the assembly.
- 31:** A trim piece located on the right side of the assembly.
- 32:** A trim piece located at the bottom of the assembly.
- 33:** A trim piece located on the left side of the assembly.
- 35:** A trim piece located in the center of the assembly.
- 36:** A trim piece located on the right side of the assembly.
- 40:** A trim piece located in the center of the assembly.
- 41:** A trim piece located on the left side of the assembly.
- 42:** A trim piece located in the center of the assembly.
- 43:** A trim piece located in the center of the assembly.
- 44:** A trim piece located at the bottom of the assembly.
- 54:** A trim piece located on the left side of the assembly.

CONTROLS ASSEMBLY



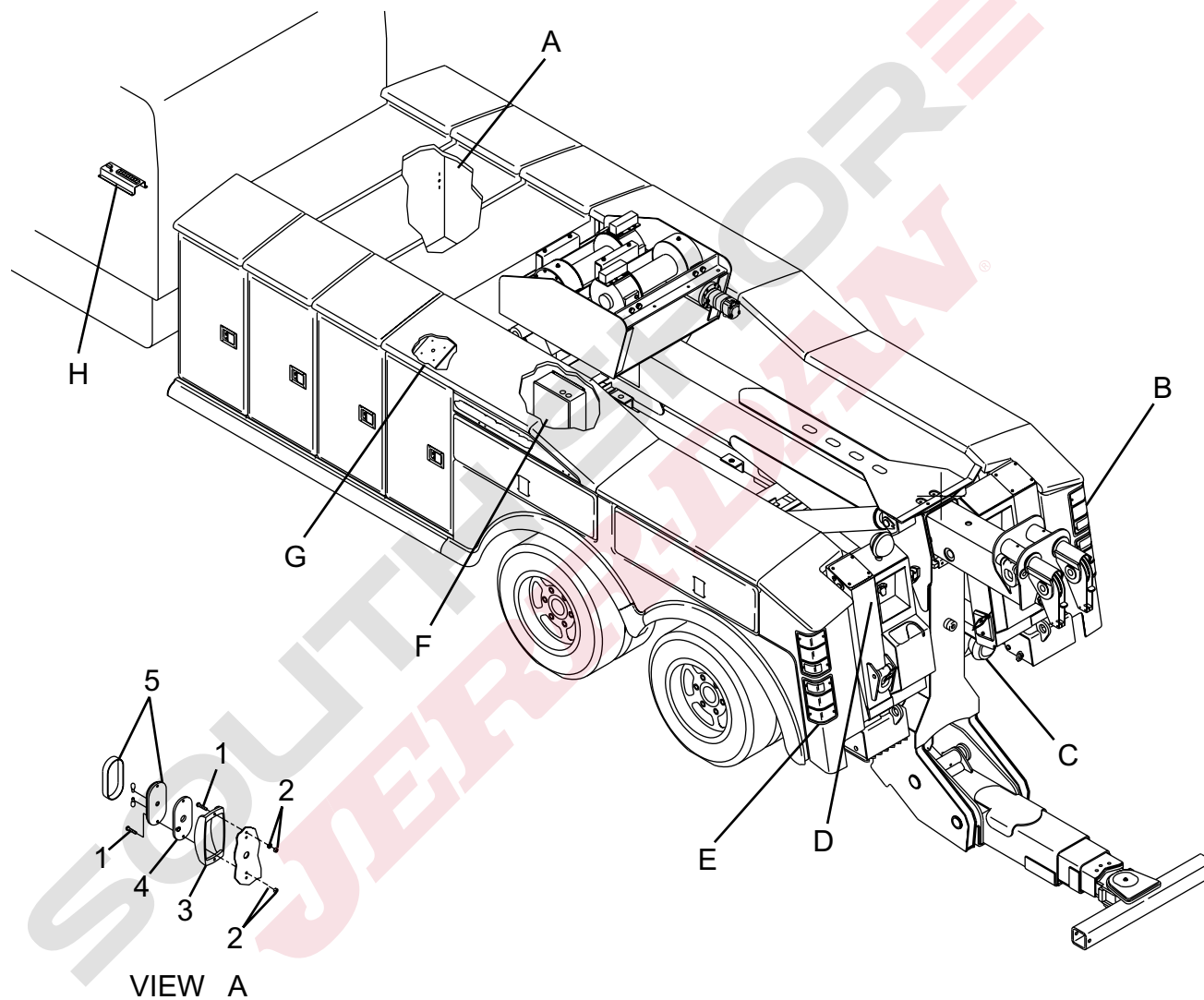
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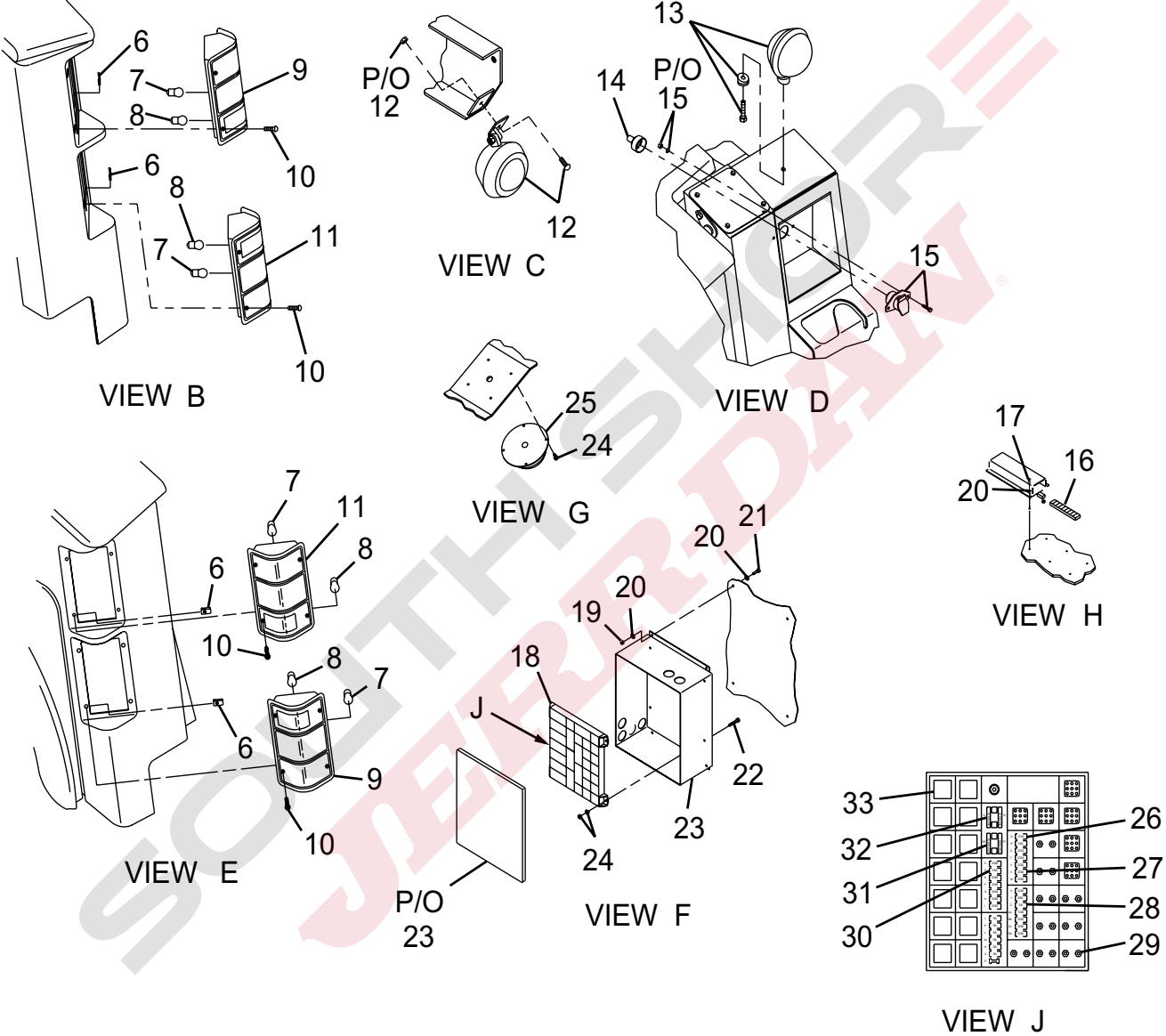
PARTS LIST — BODY LIGHTS - 86"

Ref. No.	Part No.	Description	Qty.
1	7114100610	Screw	8
2	7661000002	Hex Nut w/Lockwasher	12
3	7346000077	Guard	2
4	7346000076	Gasket	2
5	7590000104	Light	2
6	7661000024	Nut	16
7	7188000001	Bulb	4
8	7188000002	Bulb	4
9	7590000092	Tail Light	2
10	7114101210	Screw	16
11	7590000093	Tail Light	2
12	7590000011	Light	2
13	7590000096	Light	2
14	7346000078	Boot	1
15	7346000055	Socket	1
16	7870000042	Switch Panel	1
17	7790141651	Screw	6
18	7870000044	Power Dist. Panel	1
19	7660142601	Locknut	4
20	7950140151	Flatwasher	10
21	7115140650	Capscrew	4
22	7112101411	Screw	4
23	4346000003	Junction Box	1
24	7790100856	Screw	32
25	7590000094	Light Assembly w/Switch	8
26	7457000011	Fuse, 10 Amp	3
27	7457000012	Fuse, 20 Amp	16
28	7457000019	Fuse, 5 Amp	6
29	7661000023	Nut w/Ext Lockwasher	18
30	7457000006	Fuse, 15 Amp	1
31	7457000023	Fuse, 20 Amp	2
32	7457000013	Fuse, 15 Amp	2
33	7740000001	Relay	14

BODY LIGHTS - 86"



BODY LIGHTS - 86"



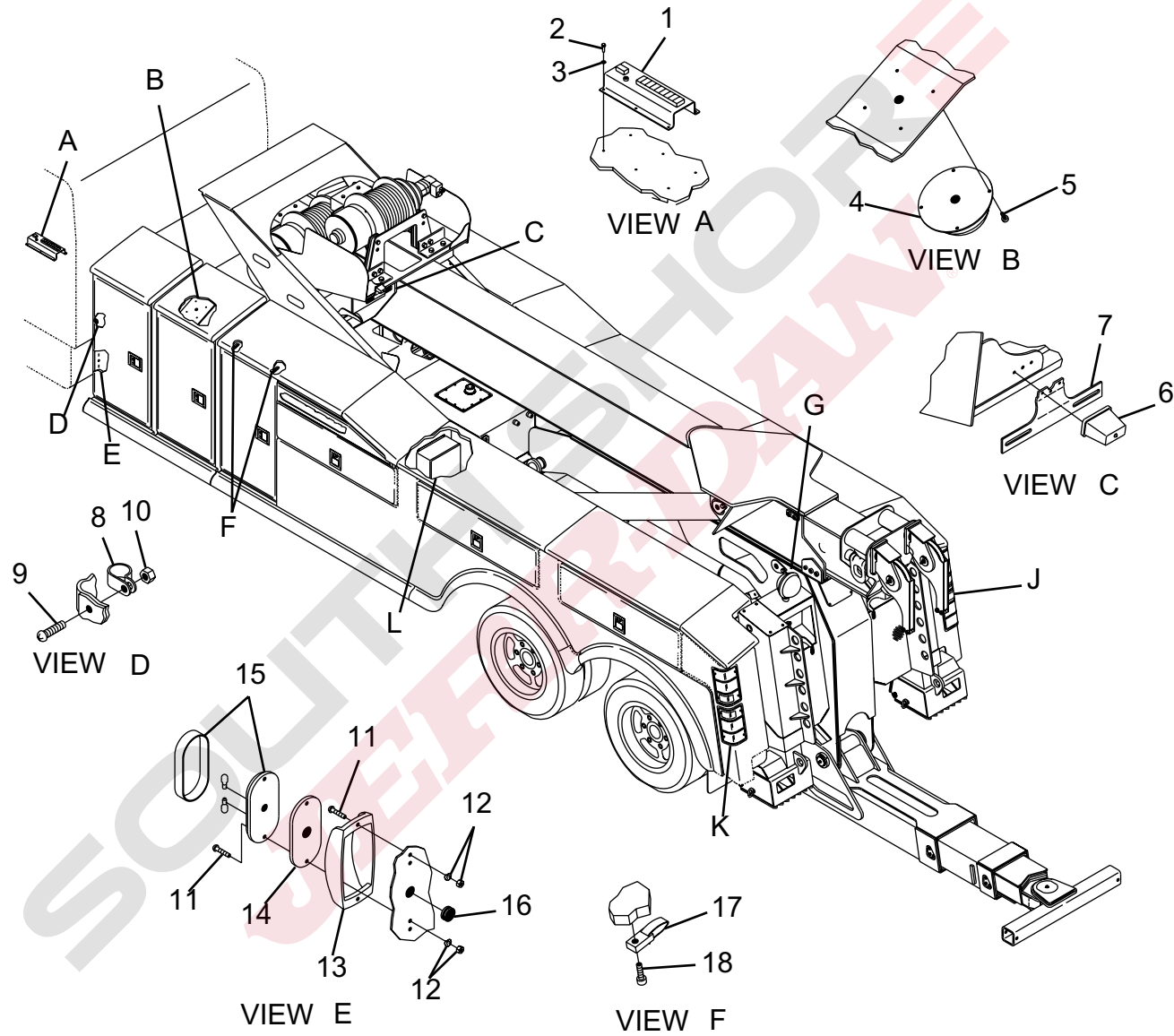
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PARTS LIST — BODY LIGHTS - 146"

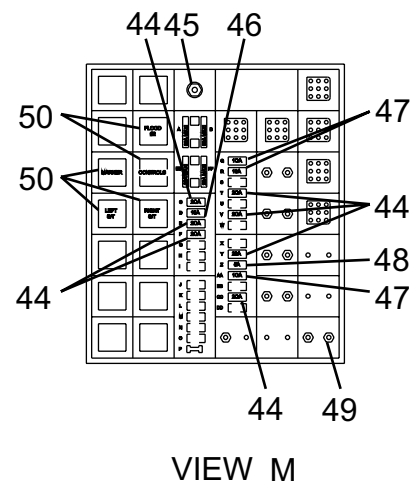
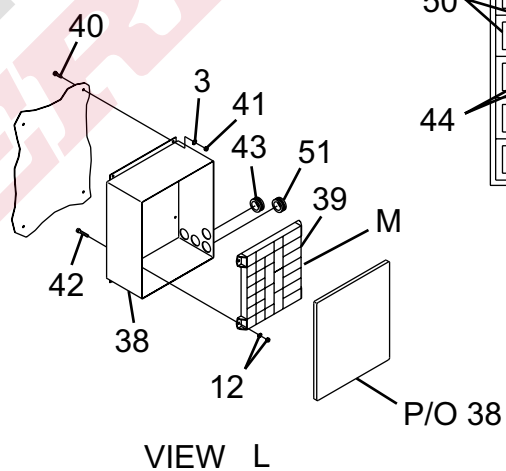
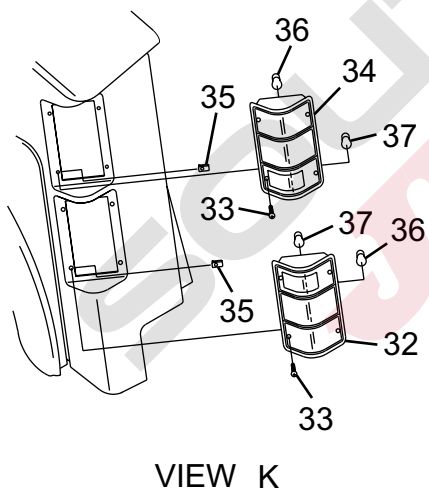
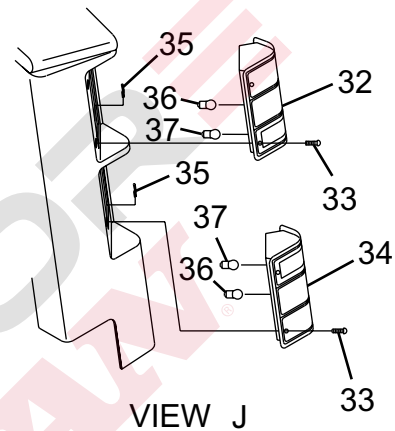
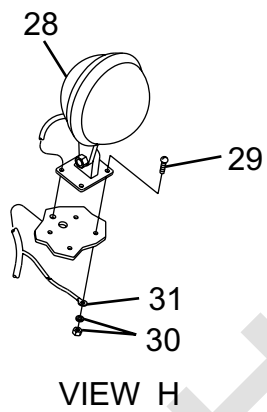
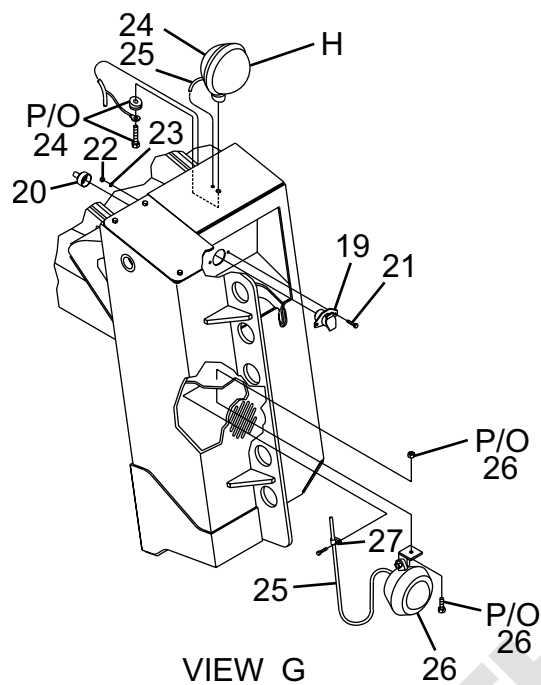
Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
1	7870000042	Switch Panel	1	28	7590000126*	Chrome Work Light	2
2	7790141651	Hex Head Screw	6	29	7120000028*	Screw	8
3	7950140151	Flatwasher	10	30	7661000023*	Nut w/Lockwasher	10
4	7590000094	Light Assembly w/Switch	14	31	7345211702*	Ring Terminal	2
5	7790100856	Screw	56	32	7590000092	Tail Light, RH	2
6	7590000105	License Plate Light	1	33	7114101210	Screw	16
7	7178000025	License Plate Bracket	1	34	7590000093	Tail Light, LH	2
8	7274000036	Clamp	8	35	7661000024	Nut	16
9	7114100618	Capscrew	8	36	7188000001	Bulb	4
10	7660102601	Nut	8	37	7188000002	Bulb	4
11	7114100610	Screw	8	38	4346000004	Junction Box	1
12	7661000002	Nut w/Lockwasher	12	39	7870000044	Power Dist. Panel	1
13	7346000077	Guard	2	40	7115140650	Capscrew	4
14	7346000076	Gasket	2	41	7660142601	Locknut	4
15	7590000104	Light	2	42	7115101411	Screw	4
16	7493000017	Grommet	2	43	7493000014	Grommet	3
17	7894000031	Cable Tie	4	44	7457000012	20 Amp Fuse	7
18	7790141656	Screw	4	45	7115140425	Screw	1
19	7346000055	Socket	1	46	7457000006	15 Amp Fuse	1
20	7346000078	Socket Boot	1	47	7457000011	10 Amp Fuse	3
21	7115150864	Carriage Bolt	2	48	7457000019	5 Amp Fuse	1
22	7950150161	Flatwasher	2	49	7661000023	Nut w/Lockwasher	11
23	7660152601	Locknut	2	50	7740000001	Relay	5
24	7590000096	Chrome Work Light	2	51	7493000011	Grommet	3
25	8597650002	Loom	3 ft.				
26	7590000089	Rubber Housed Multi-Purpose Light	2				
27	7274000026	Clamp	10				

* Available only in Deluxe Hook-up Light Option

BODY LIGHTS - 146"



BODY LIGHTS -146"



**UNDERLIFT
GRID PARTS**

Cross Tube Installation D-2

Frame Fork Assembly D-5

Heavy Duty Tire Lift Assembly D-6

Pintle Hook Assembly D-9

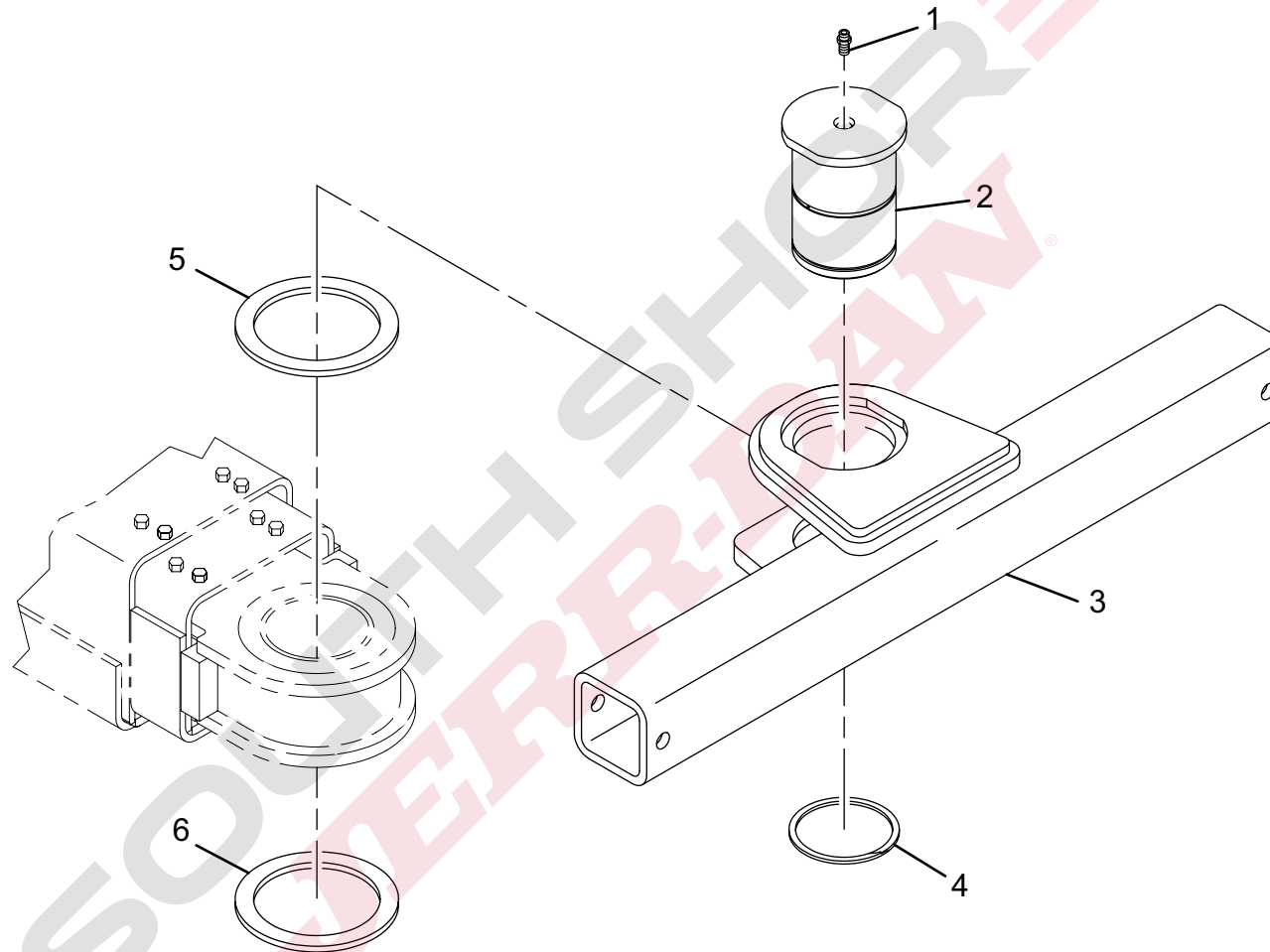
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PARTS LIST — CROSSTUBE INSTALLATION

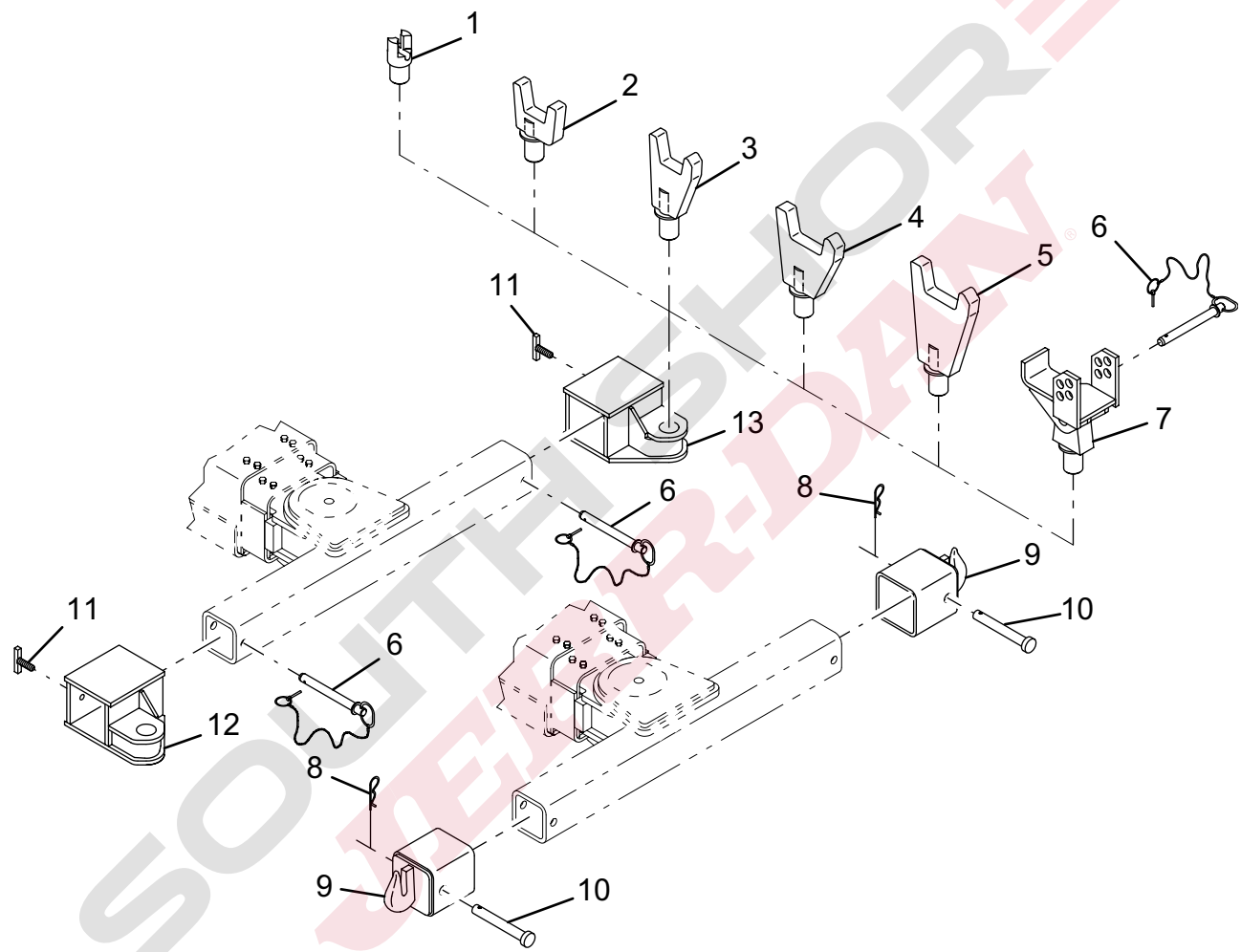
Ref. No.	Part No.	Description	Qty.
1	7440003000	Grease Fitting	1
2	4691000242	Pivot Pin	1
3	3913000049	Crosstube Weldment	1
4	7754000042	Retaining Ring	1
5	4949000041	Shim	1
6	4949000042	Shim	1

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CROSSTUBE INSTALLATION



FRAME FORK ASSEMBLY



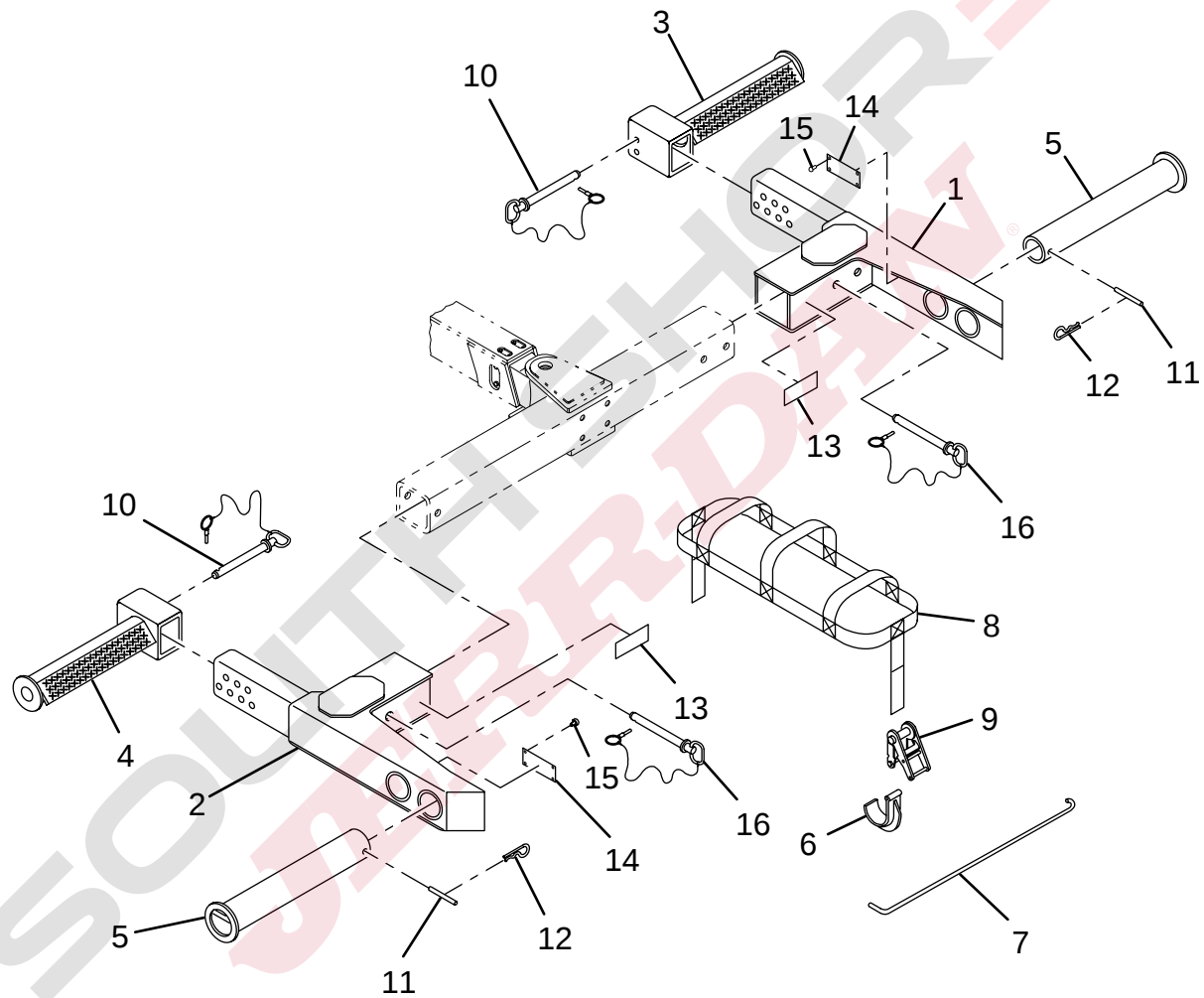
PARTS LIST — FRAME FORK ASSEMBLY

Ref. No.	Part No.	Description	Qty.
1	4007000007	Chain Adapter (Optional)	2
2	3454000006	Short Fork Weldment	2
3	3454000005	Narrow Fork Weldment	2
4	3454000003	Wide Fork Weldment	2
5	3454000004	Long Fork Weldment	2
6	7691000021	Hitch Pin	4
7	3178000226	Spring Lift Bracket	2
8	7691000020	Hairpin	2
9	3007000004	Chain Adapter	2
10	7691000022	Clevis Pin	2
11	3551000036	T-Handle Weldment	2
12	3007000007	Lift Receiver, RH	1
13	3007000006	Lift Receiver, LH	1
14	7262000026	Safety Chain (Not Shown)	2

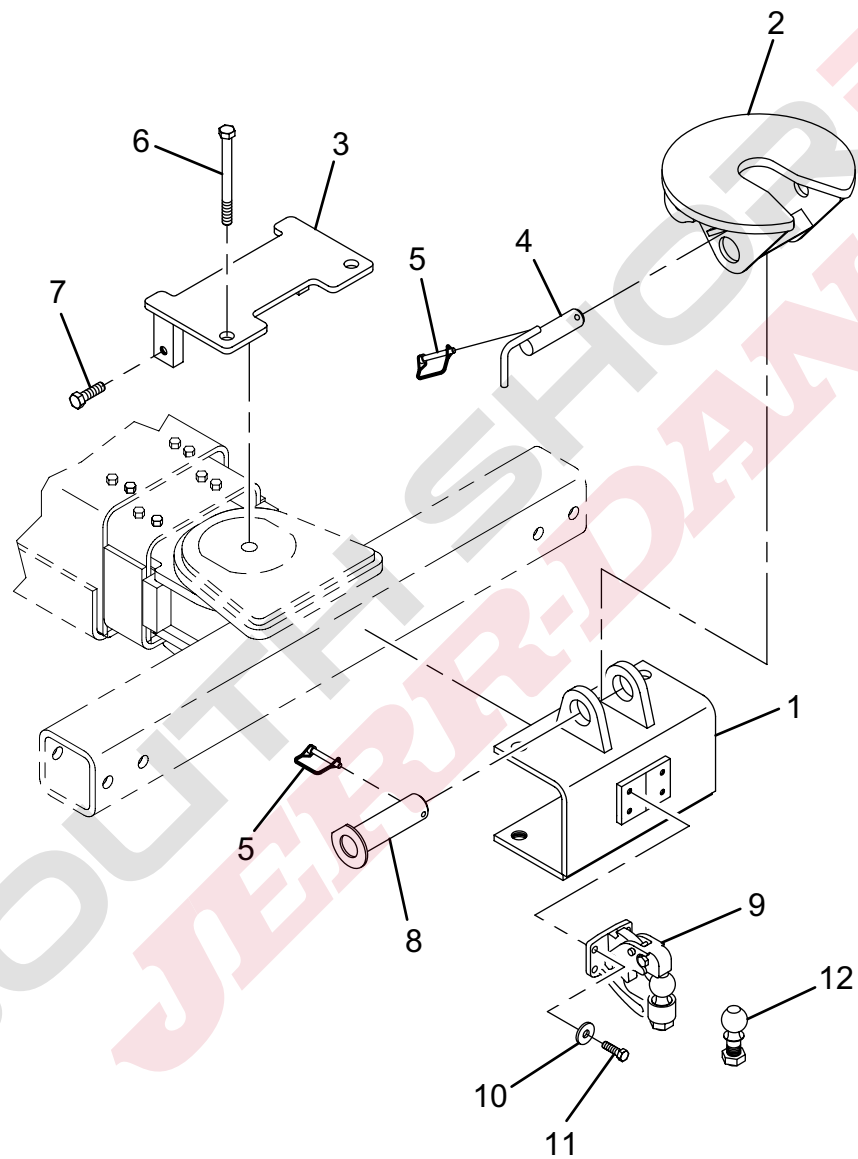
PARTS LIST — HEAVY DUTY TIRE LIFT ASSEMBLY

Ref. No.	Part No.	Description	Qty.
1	3484000048	Grid Weld RH	1
2	3484000049	Grid Weld LH	1
3	3020000082	Arm Weld RH	1
4	3020000081	Arm Weld LH	1
5	3913000055	Tube Weldment	2
6	3561000008	Hook Weldment	4
7	4561000012	Pull Hook	1
8	7894000037	Tie Strap - Yellow	2
	7894000041	Tie Strap - Orange	
9	7894000028	Ratchet Tie Strap	4
10	7691000026	Hitchpin	2
11	4691000274	Pin	2
12	7691000020	Hairpin	2
13	7330000278	Decal Bar Caution	4
14	7330000277	Placard	2
15	7759000004	Pop Rivet	8
16	7691000021	Pin	2

HEAVY DUTY TIRE LIFT ASSEMBLY



5TH WHEEL AND PINTLE HOOK ADAPTER



PARTS LIST — 5TH WHEEL AND PINTLE HOOK ADAPTER

Ref. No.	Part No.	Description	Qty.
1	3178000240	Adapter Bracket	1
2	3178000239	5th Wheel Plate Bracket	1
3	3706000080	Adapter Bracket Plate	1
4	3691000145	5th Wheel Pin	1
5	7691000025	Snap Pin	2
6	7118267250	Capscrew	2
7	7118221650	Capscrew	2
8	3691000144	Pin	1
9	7561000020	Dual Purpose Hitch with 2" Ball (Domestic)	1
	7561000022	Dual Purpose Hitch with 50mm Ball (Foreign)	1
10	7950180000	Lockwasher	4
11	7115181250	Capscrew	4
12	7056000003	1 7/8" Ball Replacement	1
	7056000004	2" Ball Replacement	
	7056000005	2 5/16" Ball Replacement	
	7056000006	50mm Ball Replacement	

WRECKER BOOM PARTS

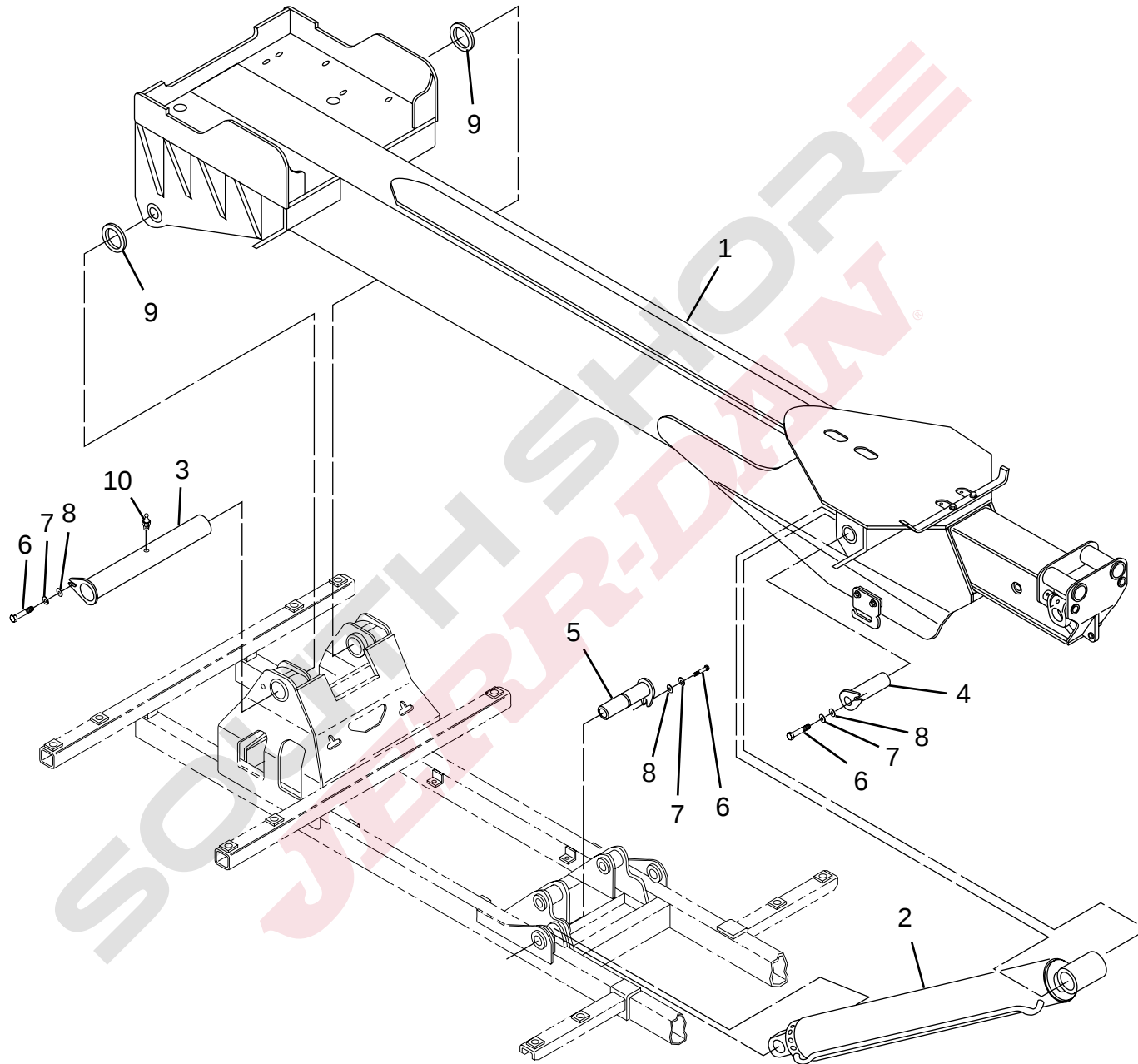
Boom Installation	E-2
Boom Assembly	E-5
Boom Lift Cylinders (7320000032)	E-6
Boom Extension Cylinders (7320000031)	E-9
25,000 LB Winch Installation	E-10
35,000 LB Winch Installation	E-13
25,000 LB Winch Parts	E-14
35,000 LB Winch Parts	E-17

PARTS LIST — BOOM INSTALLATION

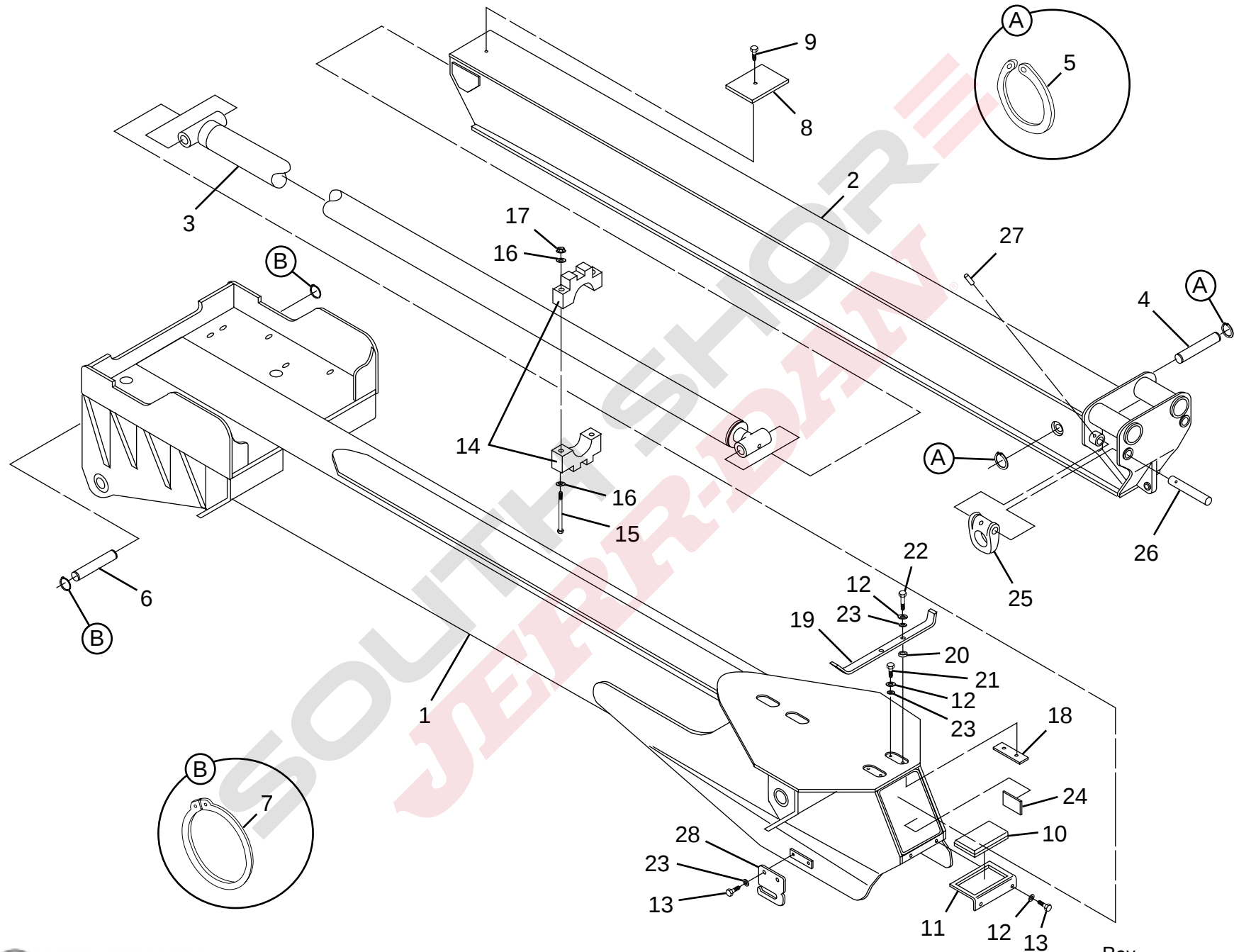
Ref. No.	Part No.	Description	Qty.
1	3170000183	Boom Assembly 35T	1
2	7320000032	Cylinder	2
3	3691000163	Pin Weld	1
4	3691000161	Pin Weld	2
5	3691000162	Pin Weld	2
6	7115180850	Hex Head Capscrew	5
7	7950180000	Lockwasher	5
8	7950180161	Flatwasher	5
9	4949000031	Shim .06 Thk	2
	4949000032	Shim .09 Thk	
10	7440030000	Grease Fitting	1

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BOOM INSTALLATION



BOOM ASSEMBLY



PARTS LIST — BOOM ASSEMBLY

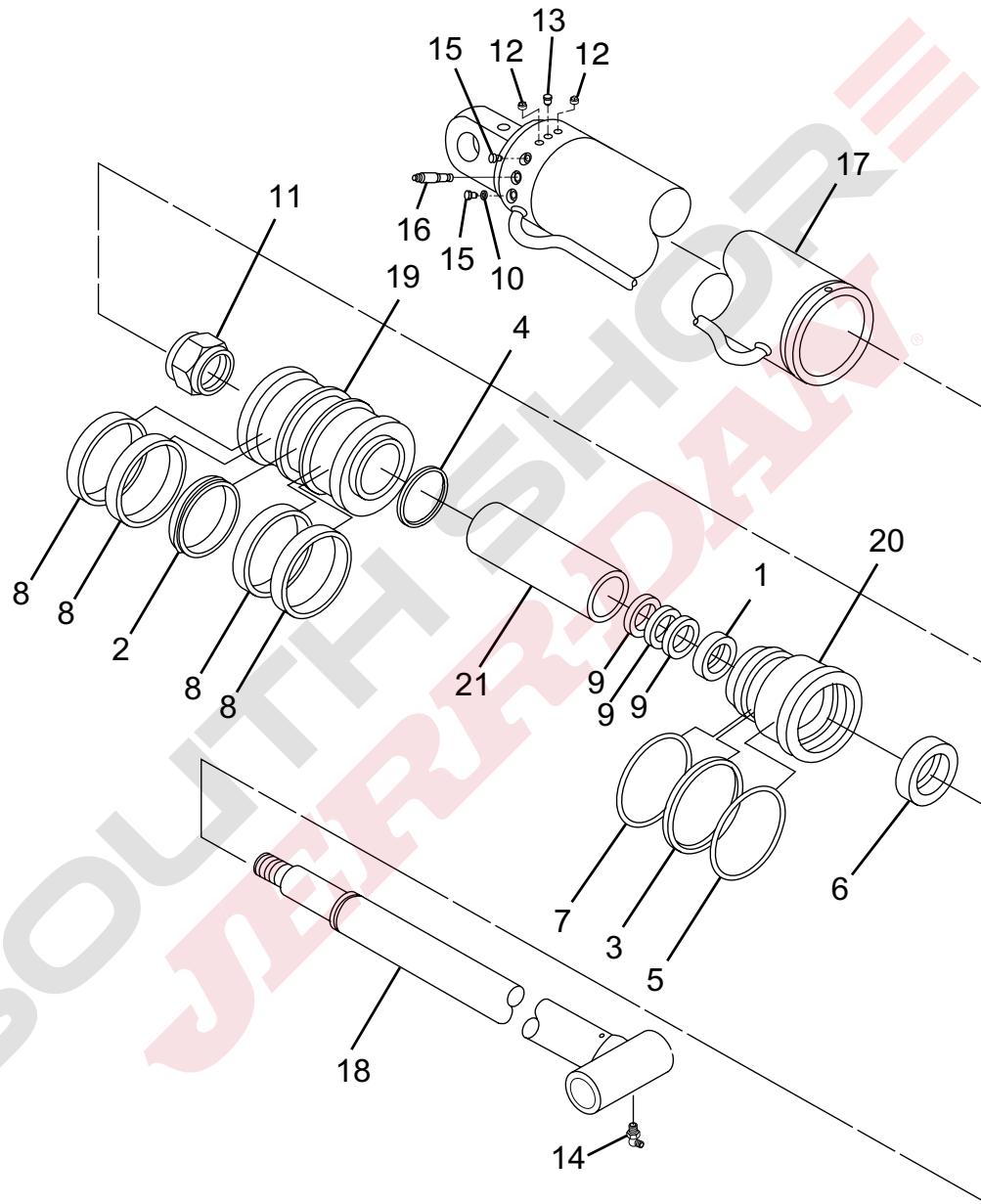
Ref. No.	Part No.	Description	Qty.
1	3170000182	Boom Weld Outer	1
2	3170000148	Boom Weld Inner	1
3	7320000031	Cylinder	1
4	4691000323	Pin	1
5	7754000061	Snap Ring	2
6	4691000208	Boom Barrel Pin	1
7	7754000048	Retaining Ring	2
8	4679000163	Pad	1
9	7114140418	Capscrew	1
10	4679000162	Pad	1
11	4706002435	Plate	1
12	7950180153	Flatwasher	6
13	7115180850	Hex Head Capscrew	6
14	4177000033	Support	2
15	7115164450	Hex Head Capscrew	2
16	7950160251	Flatwasher	4
17	7660161600	Locknut	2
18	4831000061	Spacer	2
19	4062000158	Bar	1
20	4831000064	Spacer	2
21	7115180750	Hex Head Capscrew	2
22	7115181450	Hex Head Capscrew	2
23	7950180000	Lockwasher	8
24	4679000168	Pad	2
25	4754000003	D-Ring	2
26	4691000243	Boom Nose	2
27	7690142845	Spring Pin	2
28	4706002856	Plate	2

**PARTS LIST — BOOM LIFT CYLINDER
7320000032**

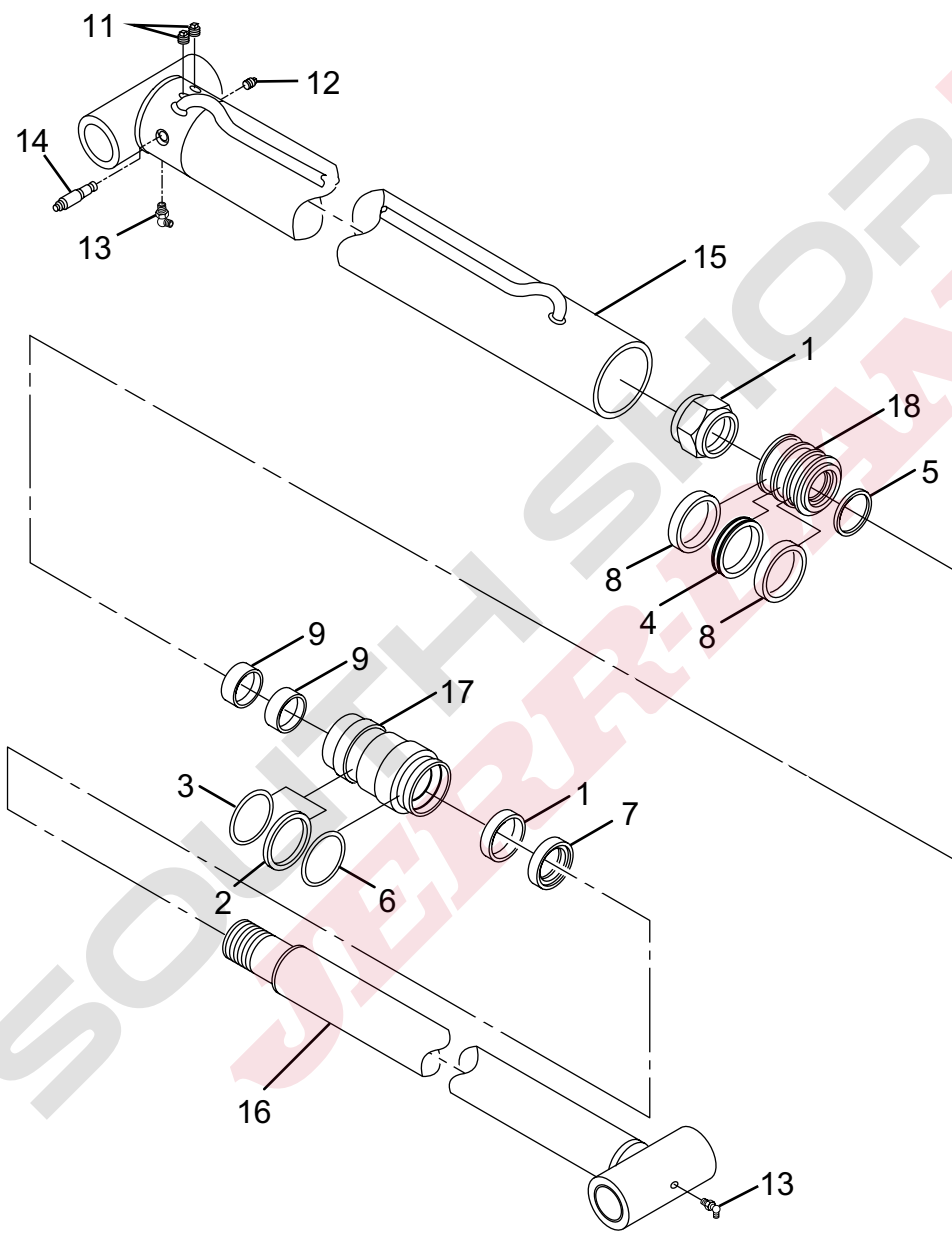
Ref. No.	Part No.	Description	Qty.
1	9796250071*	Seal	1
2	9796250075*	Seal	1
3	9754250013*	Back-Up	1
4	9796250062*	O-Ring	1
5	9796250063*	O-Ring	1
6	9796250114*	Wiper	1
7	9796250067*	O-Ring	1
8	9754250016*	Wear Ring	4
9	9754250018*	Wear Ring	3
10	9796250079*	Washer Seal	2
11	9661250017	Locknut	1
12	9701250007	Port Plug	2
13	9701250017	Port Plug	1
14	7440030400	Lube Fitting	2
15	9701250005	Bleeder Plug	2
16	9935250032	Counter Balance Valve	1
17	9912250013	Tube Assembly	1
18	9763250015	Rod Assembly	1
19	9698250003	Piston	1
20	9553250008	Head	1
21	9831250017	Spacer	1

*Available only in Service Kit #7577250191

BOOM LIFT CYLINDER
7320000032



BOOM EXTENSION CYLINDER
7320000031



**PARTS LIST — BOOM EXTENSION CYLINDER
7320000031**

Ref. No.	Part No.	Description	Qty.
1	9796250070*	Seal	1
2	9754250009*	Back-Up	1
3	9796250057*	O-Ring	1
4	9796250073*	Seal	1
5	9796250061*	O-Ring	1
6	9796250066*	O-Ring	1
7	9796250115*	Wiper	1
8	9754250014*	Wear Ring	2
9	9754250020*	Wear Ring	2
10	9661250016	Locknut	1
11	9701250007	Port Plug	2
12	9701250017	Port Plug	1
13	7440030400	Lube Fitting	2
14	9935250032	Counter Balance Valve	1
15	9912250014	Tube Assembly	1
16	9763250019	Rod Assembly	1
17	9553250010	Head	1
18	9698250012	Piston	1

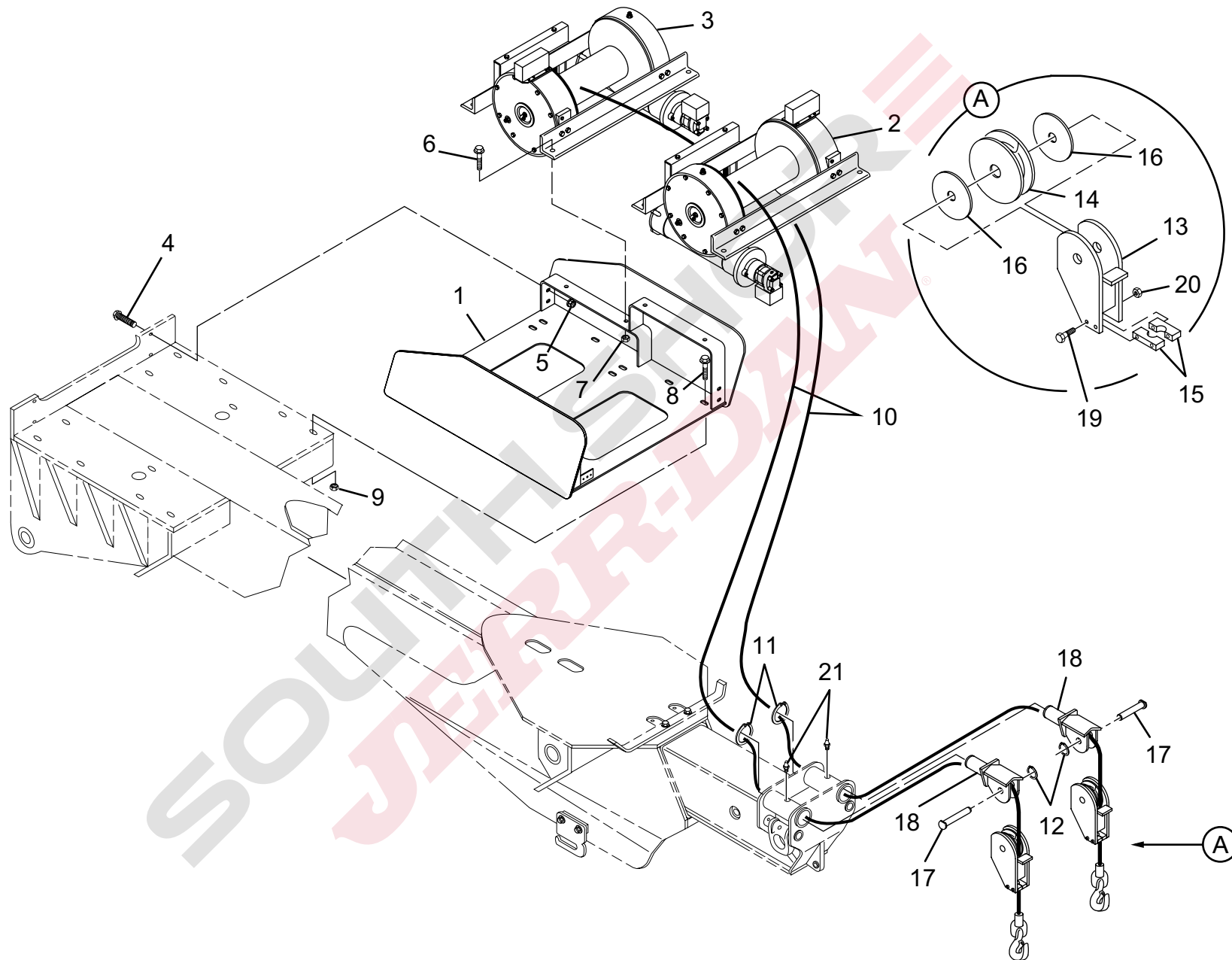
*Available only in Service Kit #7577250228



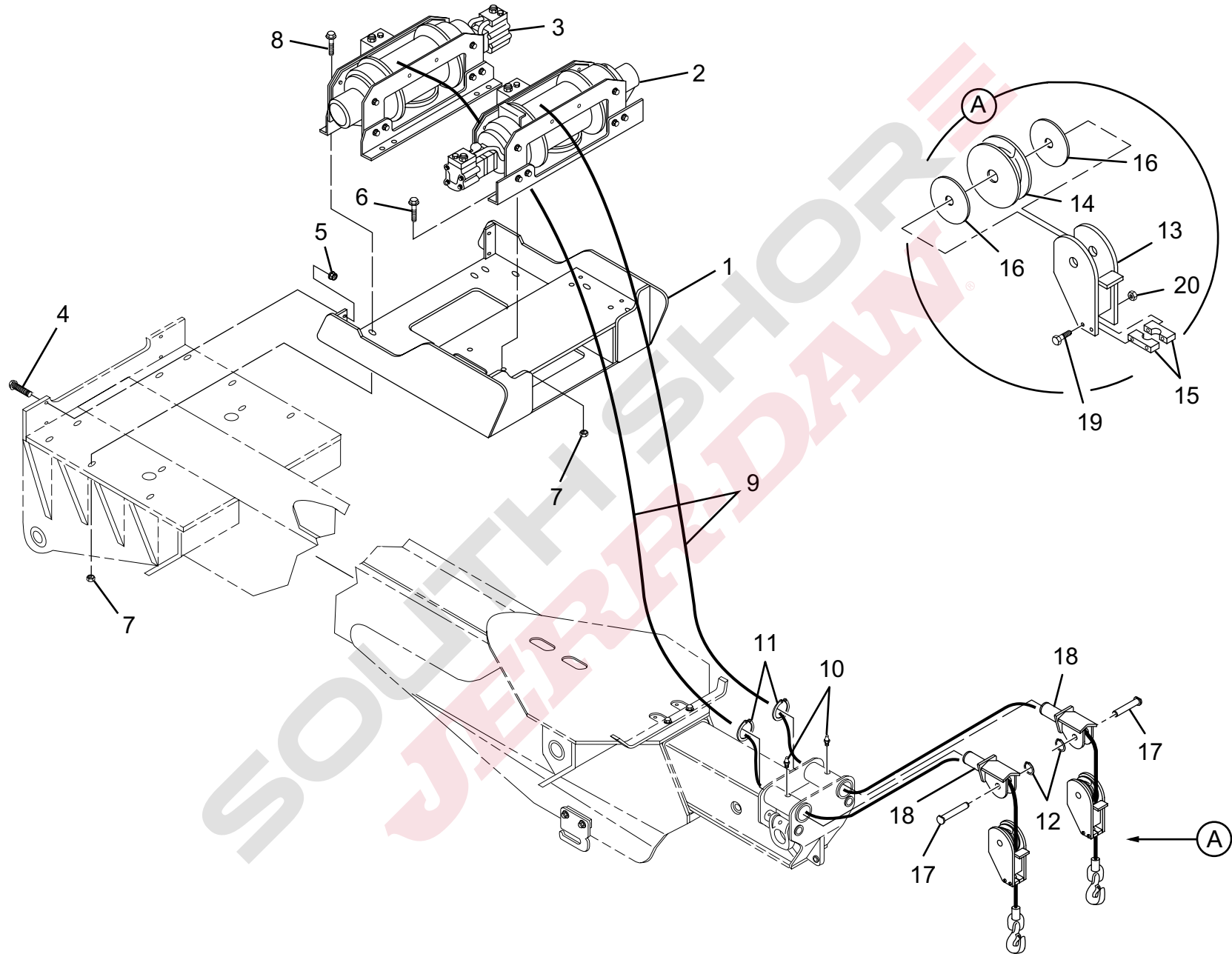
**PARTS LIST — 25,000 LB RAMSEY WORM GEAR WINCH
INSTALLATION**

Ref. No.	Part No.	Description	Qty.
1	3636000067	Worm Winch Mount	1
2	7970000078	Winch	1
3	7970000077	Winch	1
4	7118181016	Capscrew	4
5	7660182301	Locknut	4
6	7118221816	Capscrew	8
7	7660222308	Locknut	8
8	7118201616	Oxide	12
9	7661000018	Nut	12
10	7248000040	Cable 5/8" x 200'	2
11	7754000049	Retaining Ring	1
12	7754000048	Retaining Ring	2
13	3249000001	Cable Guide Weldment	2
14	7809000002	Sheave	2
15	4249000001	Cable Guide	4
16	4949000031	Shim .06 Thk	2
	4949000032	Shim .09 Thk	
17	3691000129	Sheave Pin Weldment	2
18	3249000010	Sheave Support Weldment	2
19	7115142050	Hex Head Capscrew	4
20	7660141600	Locknut	4
21	7440003000	Lube Fitting	2

25,000 LB RAMSEY WORM GEAR WINCH INSTALLATION



35,000 LB DP PLANETARY GEAR WINCH INSTALLATION (OPTIONAL)



**PARTS LIST — 35,000 LB DP PLANETARY WINCH
INSTALLATION (OPTIONAL)**

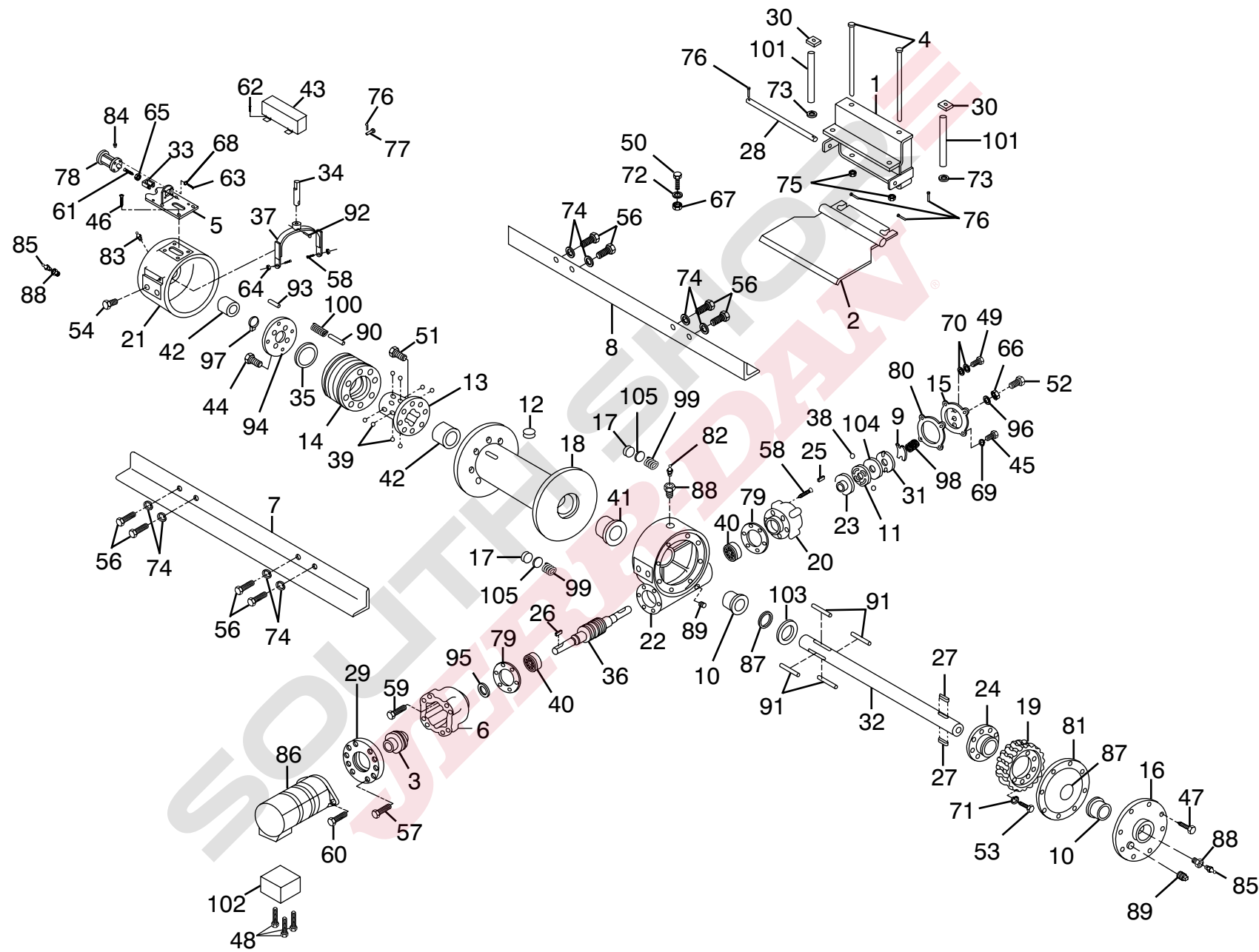
Ref. No.	Part No.	Description	Qty.
1	3636000068	Planetary Winch Mount	1
2	7970000067	Winch	1
3	7970000066	Winch	1
4	7118181016	Capscrew	4
5	7660182301	Locknut	4
6	7118201616	Capscrew	16
7	7661000018	Nut	22
8	7118202016	Bolt	6
9A	7248000037	Cable 5/8" x 250'	2
9B	7248000055	Cable 3/4" x 200'	2
10	7440003000	Lube Fitting	2
11	7754000049	Retaining Ring	2
12	7754000048	Retaining Ring	2
13A	3249000001	Cable Guide Weldment	2
13B	3249000012	Cable Guide Weldment	2
14A	7809000002	Sheave	2
14B	7809000006	Sheave	2
15A	4249000001	Cable Guide	4
15B	4249000002	Cable Guide	4
16A	4949000031	Washer .06 Thk	4
	4949000032	Washer .09 Thk	
16B	4949000045	Washer	4
17A	3691000129	Sheave Pin Weldment	2
17B	3691000169	Sheave Pin Weldment	2
18A	3249000010	Sheave Support Weldment	2
18B	3249000011	Sheave Support Weldment	2
19	7115142050	Hex Head Capscrew	4
20	7660141600	Locknut	4

A - USED AS STANDARD
B - USED AS OPTIONAL

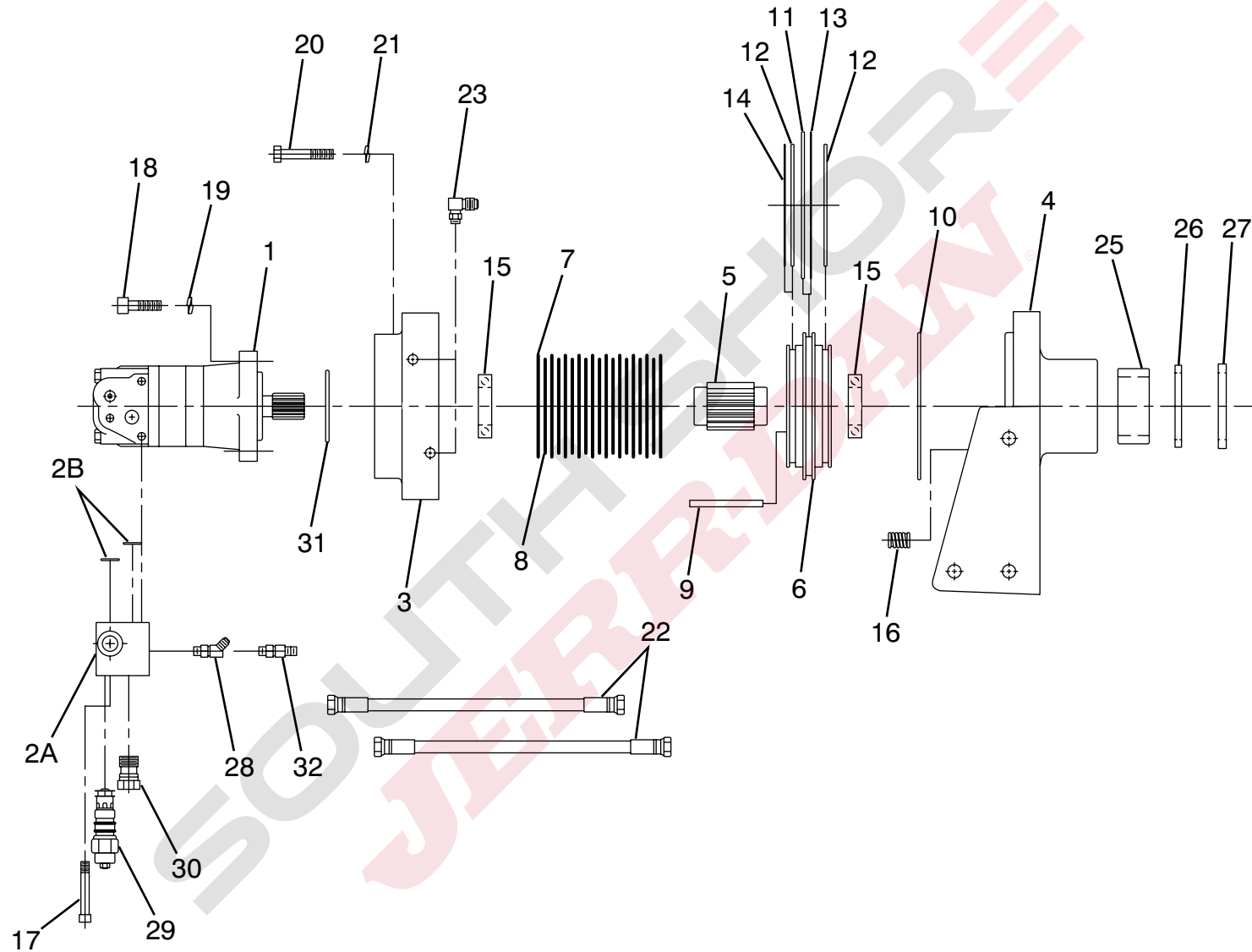
PARTS LIST — RAMSEY WORM GEAR WINCH PARTS

Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
1	9178960014	Bracket Assembly - Tensioner	1	54	9970414619	Capscrew	2
2	9706960045	Plate Tensioner	1	55	9120960037	Capscrew	4
3	9309960016	Coupling Assembly	1	56	9970414777	Capscrew	4
4	9763960020	Stud Assembly	2	57	9970414871	Capscrew	8
5	9178960015	Bracket Assembly - Air Cylinder	1	58	9970414897	Capscrew	8
6	9007960004	Adapter	1	59	9970414909	Capscrew	6
7	9017960006	Angle-Input Side	1	60	9120960027	Capscrew	2
8	9017960007	Angle-Brake Side	1	61	9786960009	Setscrew	1
9	9843960027	Spring Flat	1	62	9786960010	Screw	4
10	9209960027	Bushing	2	63	9786960011	Screw	4
11	9706960046	Cam Plate	1	64	9661960010	Nut	2
12	9970314010	Cable Anchor	1	65	9661960021	Nut	1
13	9970324151	Clutch	1	66	9970418067	Nut	1
14	9970324318	Locking Ring	1	67	9661960022	Nut	2
15	9314960023	Cover-Brake	1	68	9949960029	Lockwasher	4
16	9970328122	Cover-Gear Housing	1	69	9970418163	Lockwasher	4
17	9970330010	Shoe-Drag Brake	2	70	9970418184	Flatwasher	4
18	9970960022	Drum	1	71	9949960030	Lockwasher	8
19	9970334086	Gear RH	1	72	9949960031	Lockwasher	2
20	9560960016	Housing-Brake	1	73	9949960032	Washer	2
21	9970338235	Housing-Clutch	1	74	9970418249	Lockwasher	8
22	9970338242	Housing-Gear	1	75	9661960023	Nut	2
23	9309960013	Hub-Brake	1	76	9691960030	Cotter Pin	5
24	9970340068	Hub-Gear	1	77	9691960031	Clevis Pin	1
25	9970342053	Key	1	78	9320960001	Air Cylinder	1
26	9575960013	Key	1	79	9970442192	Gasket	2
27	9970342153	Key	2	80	9796960101	Gasket	1
28	9691960028	Pin-Pivot	1	81	9970442195	Gasket	1
29	9706960047	Plate-Hyd Adapter	1	82	9970456008	Fitting-Relief	1
30	9706960048	Plate-Spring	2	83	9970456031	Fitting Lub	1
31	9706960028	Plate-Retainer	1	84	9183960002	Vent-Breather	1
32	9806960022	Shaft-Drum	1	85	9443960008	Fitting-Lube	2
33	9277960009	Clevis	1	86	9626960019	Motor-Hyd	1
34	9806960023	Shifter Shaft	1	87	9796960122	Ring-Quad	2
35	9970362224	Spacer	1	88	9970468002	Reducer	3
36	9970368082	Worm Gear RH	1	89	9970468011	Pipe Plug	2
37	9970370047	Yoke	1	90	9970470042	Pin-Roll	4
38	9970400007	Ball-Brake	2	91	9970470044	Pin-Dowel	4
39	9970400011	Ball-Clutch	8	92	9691960029	Roll Pin	1
40	9970402045	Bearing-Ball	2	93	9970470056	Pin-Roll	4
41	9970412051	Bushing	1	94	9970474030	Plate-Retainer	1
42	9970412052	Bushing	2	95	9970486068	Seal-Oil	1
43	9560960017	Cover-Shifter	1	96	9796960123	Seal-Thread	1
44	9970414038	Capscrew	4	97	9970490025	Retainer Ring	1
45	7115150850	Capscrew	4	98	9970494010	Spring	1
46	9120960033	Capscrew	4	99	9970494022	Spring-Disc	2
47	9120960034	Capscrew	8	100	9970494069	Spring	4
48	7115160850	Capscrew	3	101	9843960033	Spring-Tensioner	2
49	9120960035	Capscrew	2	102	9935960033	Counterbalance Valve	1
50	7115181250	Capscrew	2	103	9970518016	Thrust Washer	1
51	9970414571	Capscrew	8	104	9180960011	Disc-Brake	1
52	9120960036	Capscrew	1	105	9970530094	Spacer-Brake	2
53	7108181650	Capscrew	8				

RAMSEY WORM GEAR



**MOTOR END INSTALLATION
35,000 LB PLANETARY WINCH**



**PARTS LIST — MOTOR END INSTALLATION
35,000 LB PLANETARY WINCH**

Ref. No.	Part No.	Description	Qty.
1	9626960018	Hydraulic Motor	1
2A	9935960027	Counterbalance Valve	1
2B	9796960088	O-Ring	2
3	9571960006	Housing-Brake	1
4	9177960004	Support-Motor End	1
5	9806960019	Brake Shaft	1
6	9698960008	Piston Brake	1
7	9706960023**	Plate-Disc	10
8	9706960025**	Brake Plate	9
9	9691960021	Dowel Pin	2
10	9796960092<	O-Ring	1
11	9796960091<	O-Ring	1
12	9796960086<	O-Ring	2
13	9754960025<	Ring Back-Up	1
14	9754960024<	Ring Back-Up	1
15	9082960013	Bearing	2
16	9843960024**	Spring Compression	12
17	7118162005	Capscrew	3
18	7118181205	Capscrew	2
19	7950180800	Lockwasher	2
20	7118172050	Hex Head Capscrew	6
21	7950170000	Lockwasher	6
22	9570960001	Hose	2
23	9443960007	Adapter	2
24	9330960007*	Warning Tag	1
25	9082960018	Bearing	1
26	9949960028	Washer	1
27	9796960121	Seal	1
28	7445040446	Adapter	1
29	9935960026	Cartridge Valve	1
30	9701960013	Plug Valve	1
31	9796960090	O-Ring	1
32	7445040443	Adapter	1

*Not shown on exploded drawing.

**These items sold in 9577960139 kit only.

<These items sold in 9577960120 kit only.

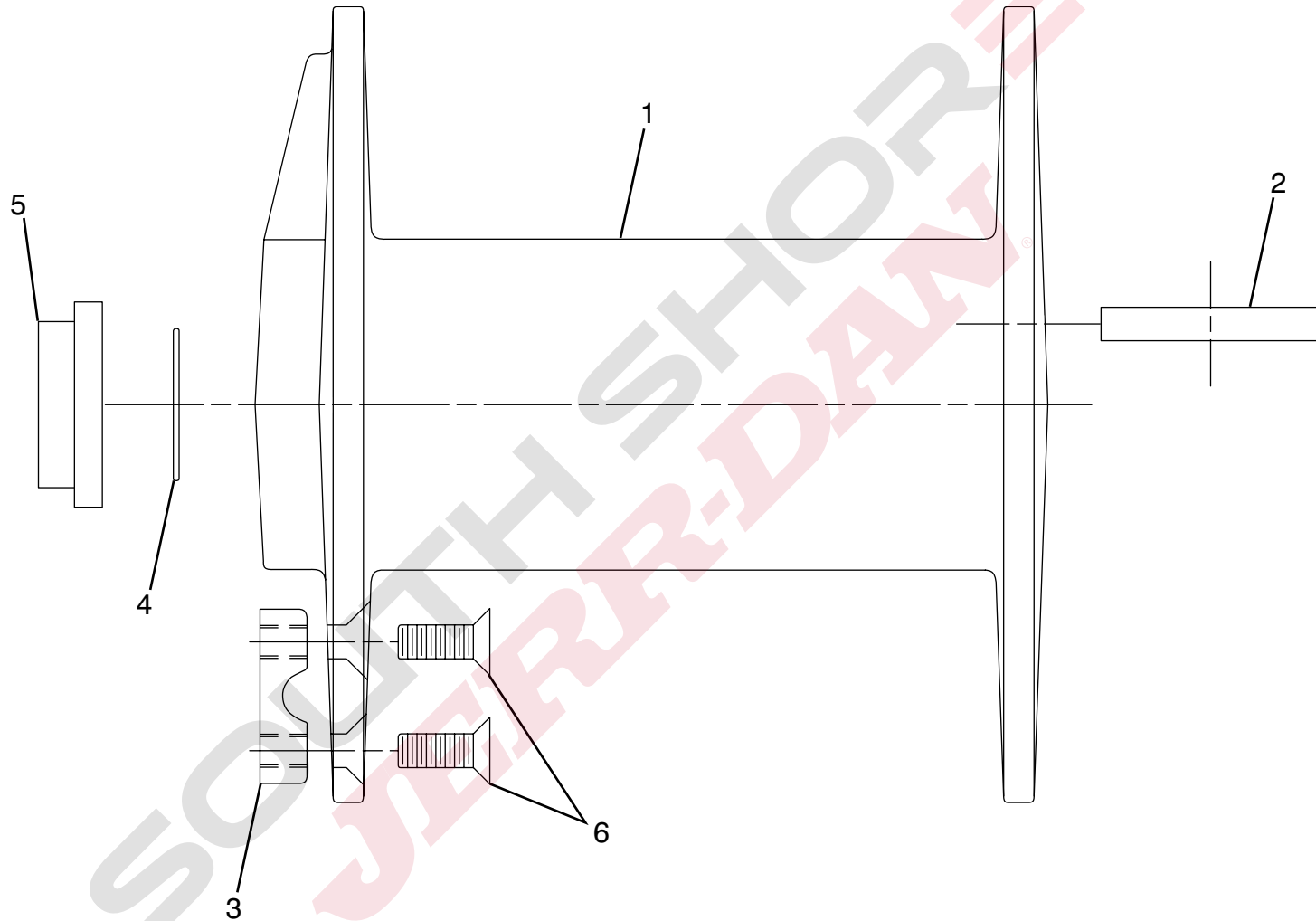


PARTS LIST — CABLE DRUM INSTALLATION
35,000 LB PLANETARY WINCH

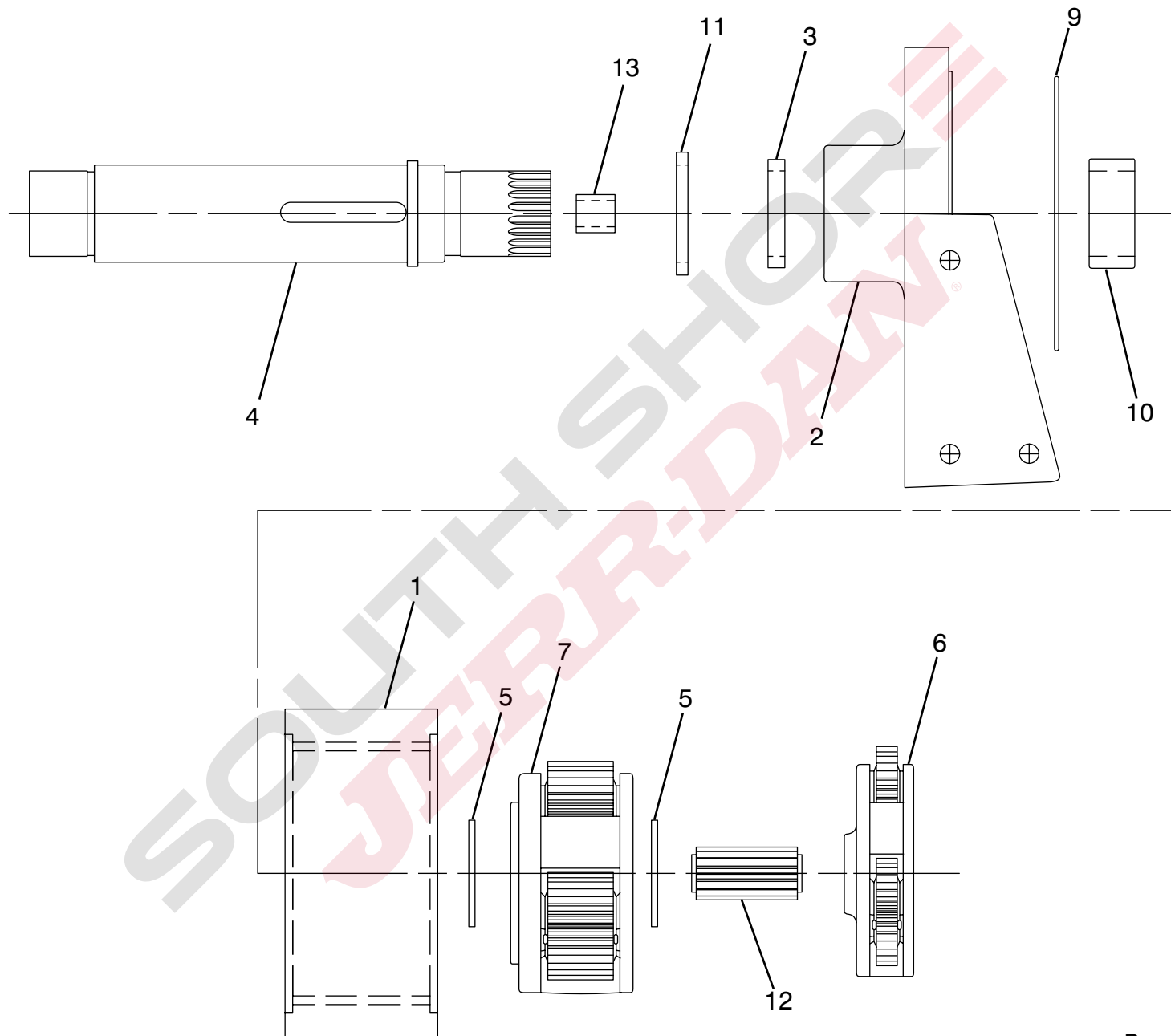
Ref. No.	Part No.	Description	Qty.
1	9970960020	Drum	1
2	9575960012	Key Drum	2
3	9280960002	Clip Cable	1
4	9796960089	O-Ring	1
5	9831960018	Spacer	1
6	7110201423	Capscrew	2

SOUTH SHORE
JERR-DAN®

CABLE DRUM INSTALLATION
35,000 LB PLANETARY WINCH



GEAR END INSTALLATION 35,000 LB PLANETARY WINCH



PARTS LIST — GEAR END INSTALLATION
35,000 LB PLANETARY WINCH

Ref. No.	Part No.	Description	Qty.
1	9472960056	Gear Ring	1
2	9177960003	Support Gear End	1
3	9949960028	Washer	1
4	9806960021	Shaft	1
5	9949960027	Washer	2
6	9472960052	Carrier Primary	1
7	9472960053	Carrier Secondary	1
8	9330960006*	Warning Label	1
9	9796960120	O-Ring	1
10	9082960018	Bearing	1
11	9796960121	Seal	1
12	9472960055	Gear	1
13	9209960025	Bushing	1

*Not shown on exploded drawing

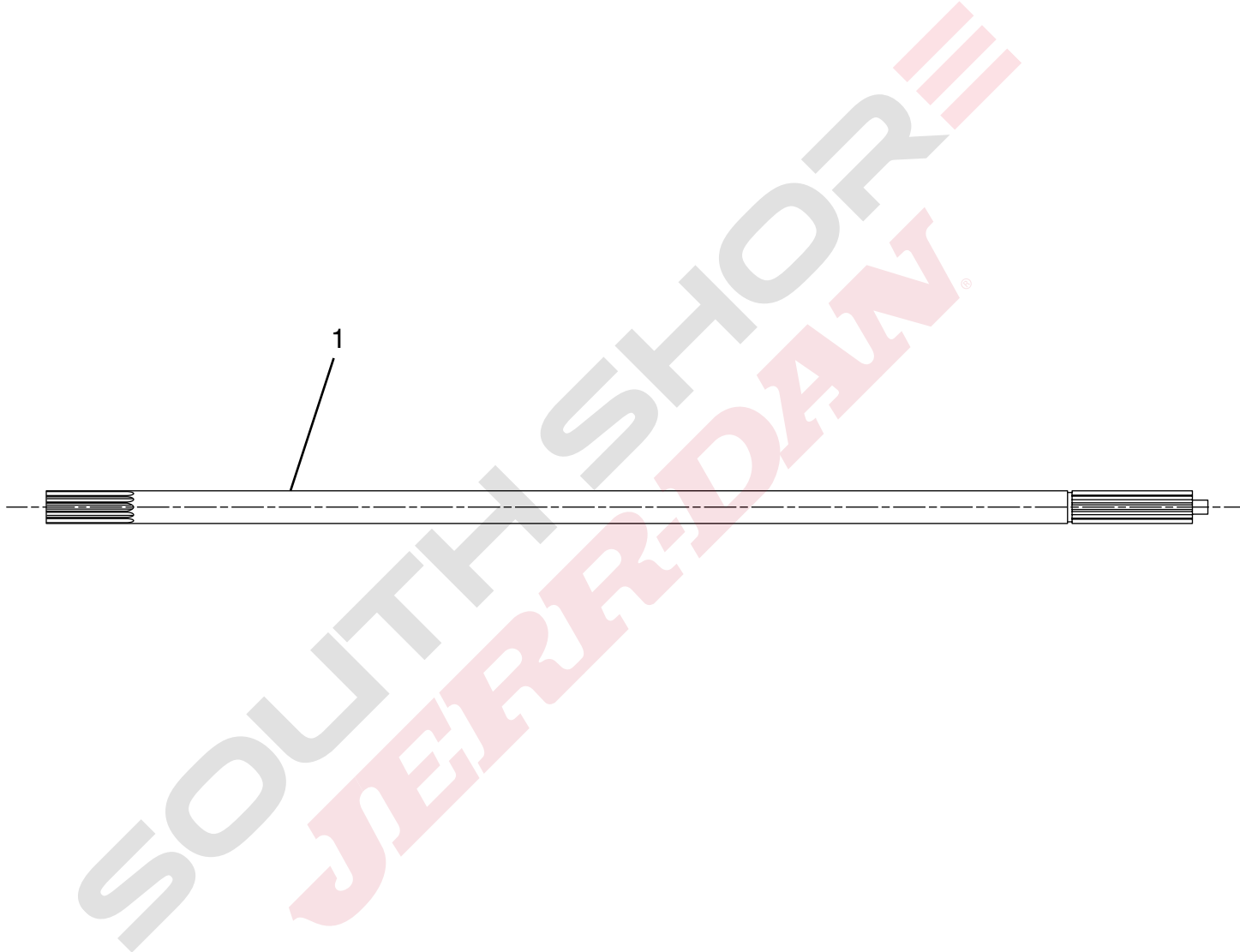
PARTS LIST — INPUT SHAFT INSTALLATION
35,000 LB PLANETARY WINCH

Ref. No.	Part No.	Description	Qty.
1	9806960020	Input Shaft	1

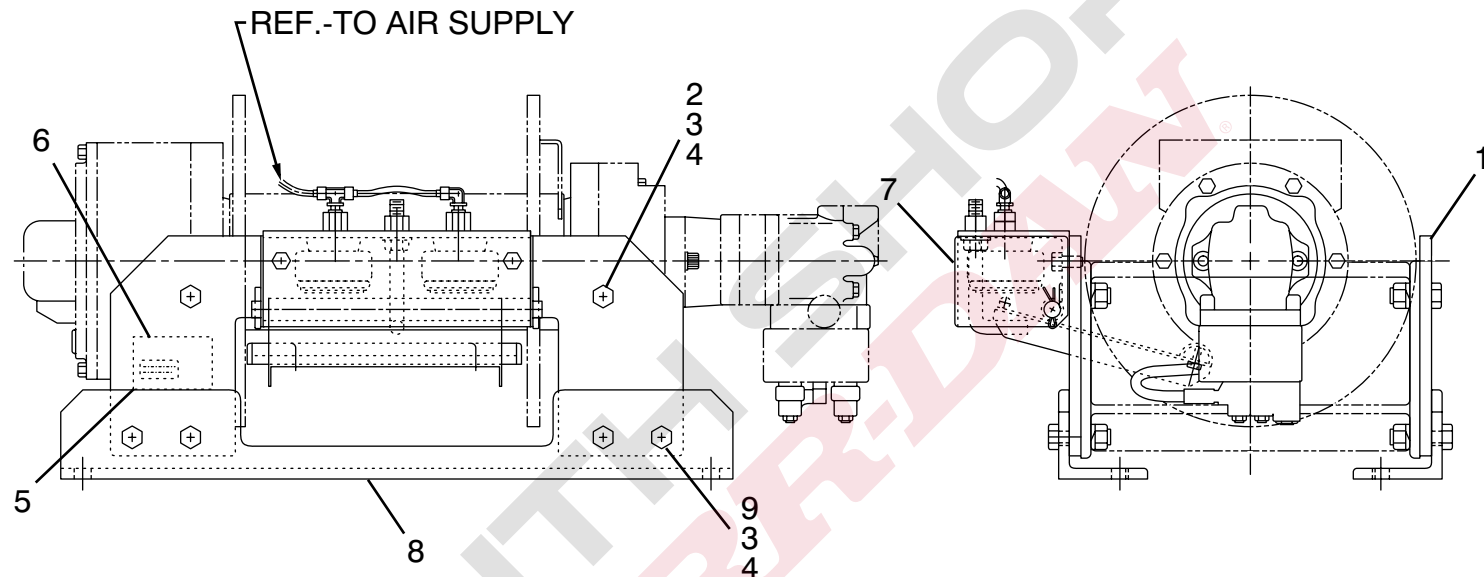
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INPUT SHAFT INSTALLATION
35,000 LB PLANETARY WINCH



**BASE MOUNT INSTALLATION
35,000 LB PLANETARY WINCH**



**PARTS LIST —BASE MOUNT INSTALLATION
35,000 LB PLANETARY WINCH**

Ref. No.	Part No.	Description	Qty.
1	9073960003	Base Mount	2
2	7115201850	Hex Head Capscrew	4
3	7660200001	Nut	12
4	7950200000	Washer	12
5	9759960001	Rivet	4
6	9706960026	Plate	1
7	9577960113	Kit Cable Hold Down	1
8	9073960004	Base Mount	2
9	7115202250	Hex Head Capscrew	8

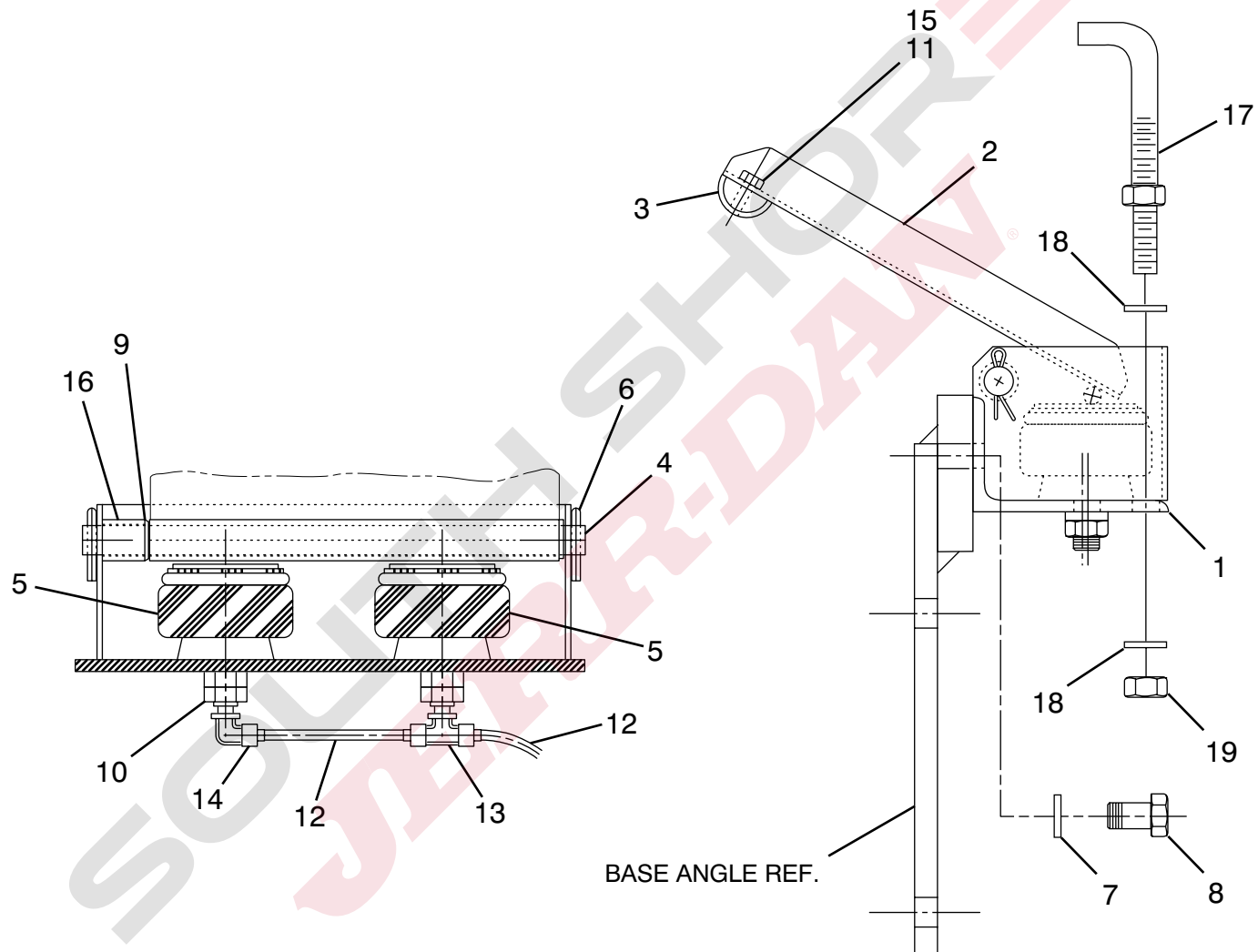
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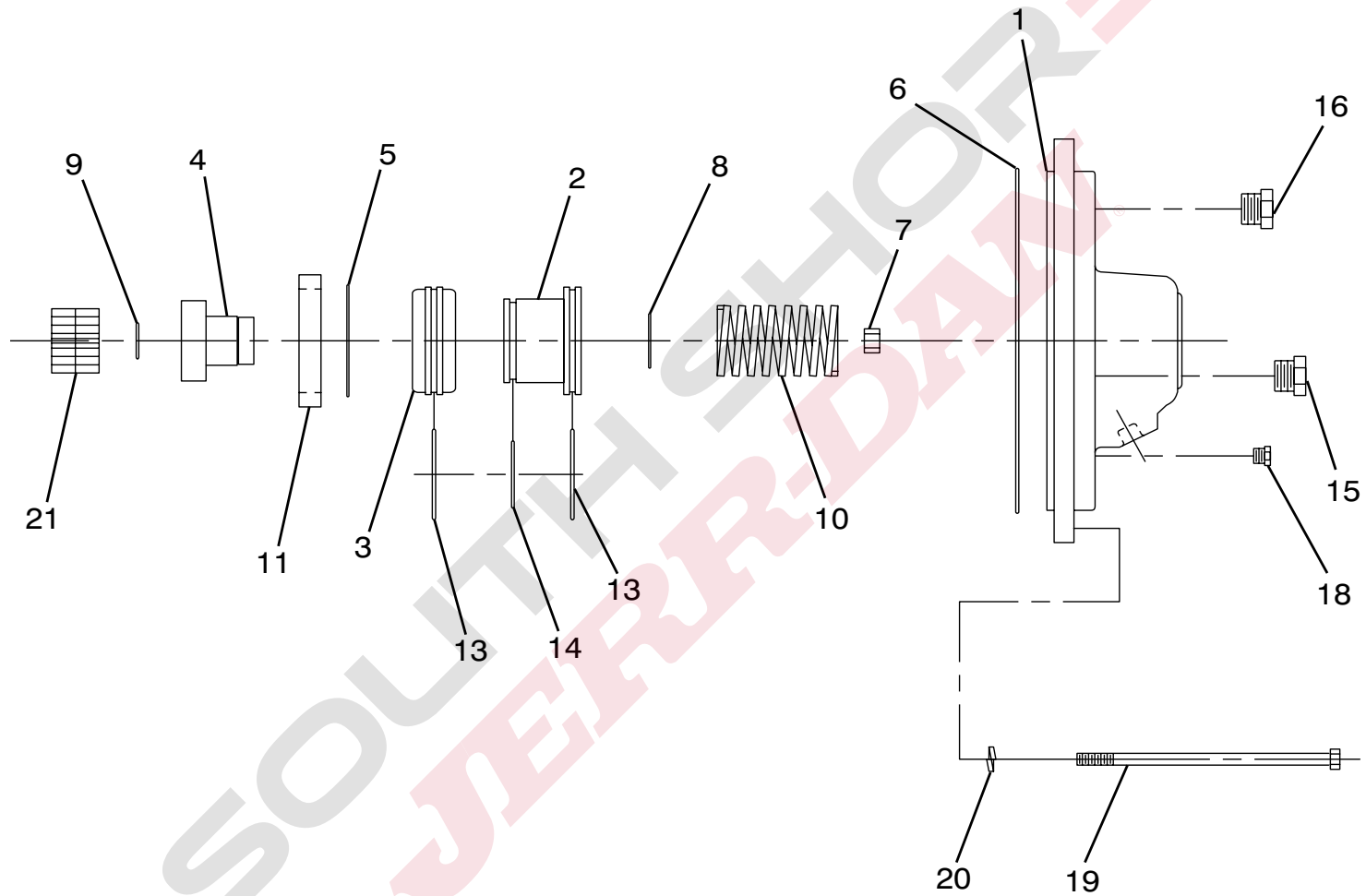
**PARTS LIST — KIT - CABLE HOLD DOWN
35,000 LB PLANETARY WINCH**

Ref. No.	Part No.	Description	Qty.
1	9178960011	Bracket	1
2	9020960002	Arm Pivot	1
3	9064960001	Bar Cable Hold Down	1
4	9691960019	Pin	1
5	9843960023	Spring	2
6	7690102410	Cotter Pin	2
7	7950180000	Lockwasher	2
8	7115181650	Hex Head Capscrew	2
9	9949960012	Washer	2
10	7660200200	Nut	4
11	7115150850	Hex Head Capscrew	2
12	9912960010	Tubing	1
13	7443000205	Adapter	1
14	7443000204	Adapter	1
15	7950150000	Lockwasher	2
16	9831960009	Spacer Pin	1
17	9120960019	Bolt Anchor	1
18	7950200151	Flatwasher	2
19	7660200001	Nut	1

**KIT - CABLE HOLD DOWN
35,000 LB PLANETARY WINCH**



GEAR END COVER INSTALLATION 35,000 LB PLANETARY WINCH



**PARTS LIST — GEAR END COVER INSTALLATION
35,000 LB PLANETARY WINCH**

Ref. No.	Part No.	Description	Qty.
1	9314960022	Cover Gear End	1
2	9698960016	Piston	1
3	9698960015	Cylinder Piston	1
4	9309960011	Coupling	1
5	9754960026	Retainer Ring	1
6	9796960120	O-Ring	1
7	9209960026	Bushing	1
8	9754960046	Retainer Ring	1
9	9754960047	Retainer Ring	1
10	9843960032	Compression Spring	1
11	9949960028	Washer	1
13	9796960119	O-Ring	2
14	9796960118	O-Ring	1
15	9701960011	Plug - O-Ring	1
16	9701960012	Plug - Socket Head	1
17	9701960018	Plug	1
18	9183960001*	Vent	1
19	7118165250	Hex Head Capscrew	12
20	7950160000	Washer	12
21	9472960054	Gear	1

*Not shown on exploded drawing.

SCHEMATICS

Hydraulic Lines and Fittings	F-2
Supply-Pressure-Return	F-6
Body Wiring 86"	F-8
Body Wiring 146"	F-12
Switch Panel Wiring	F-16
Remote Control Wiring	F-18
Pylon and Emergency Lights	F-21
Winch and Auxiliary Air Worm Gear Winch	F-22
Winch and Auxiliary Air Planetary Gear Winch	F-25
Glad Hands	F-26
Decal Installation	F-28

PARTS LIST — HYDRAULIC LINES AND FITTINGS

Ref. No.	Part No.	Description	Qty.
1	4569163034	Hose Assy	1
2	4569162034	Hose Assy	1
3	4570000126	Hose Assy	1
4	4570000127	Hose Assy	1
5	4570000128	Hose Assy	1
6	4570000129	Hose Assy	1
7	4569163040	Hose Assy	1
8	4569162040	Hose Assy	1
9A	4570000150	Hose Assy	2
9B	4570000130	Hose Assy	2
10A	4570000151	Hose Assy	2
10B	4570000131	Hose Assy	2
11A	4570000152	Hose Assy	1
11B	4570000132	Hose Assy	1
12A	4570000153	Hose Assy	1
12B	4570000133	Hose Assy	1
13A	4570000154	Hose Assy	1
13B	4570000134	Hose Assy	1
14A	4570000155	Hose Assy	1
14B	4570000135	Hose Assy	1
15	4569160048	Hose Assy	4
16	4570000136	Hose Assy	2
17	4570000137	Hose Assy	2
18	4570000138	Hose Assy	2
19	4570000139	Hose Assy	1
20	4570000140	Hose Assy	1
21	4567122029	Hose Assy	4
22	4570000141	Hose Assy	1
23	4570000142	Hose Assy	1
24	4570000143	Hose Assy	2
25	4567110028	Hose Assy	1
26	4567112024	Hose Assy	1
27	4567183061	Hose Assy	1
28	4567183040	Hose Assy	1
29	4569173054	Hose Assy	1
30	4569173040	Hose Assy	1
31	4567182024	Hose Assy	1
32	4567182029	Hose Assy	1
33	7445060643	Adapter	13
34	7443000109	Adapter	2
35	7445060637	Union	2
36	7445161620	Elbow	2
37	7470000004	Gage	2
38	7790060676	Screw	6
39	7445040421	Fitting	2
40	7443000207	Reducer	2
41	7445120042	Tube Nut	2
42	7445060645	Elbow	1
43	4570000144	Hose Assy	1
44	4570000145	Hose Assy	2
45	4570000146	Hose Assy	1
46	4570000147	Hose Assy	1
47	4570000148	Hose Assy	2
48	7430000004	Oil Filter	2
49	7443000150	Adapter	2
50	7470000002	Gauge	2

A - Used with Driver's Side Controls
B - Used without Driver's Side Controls



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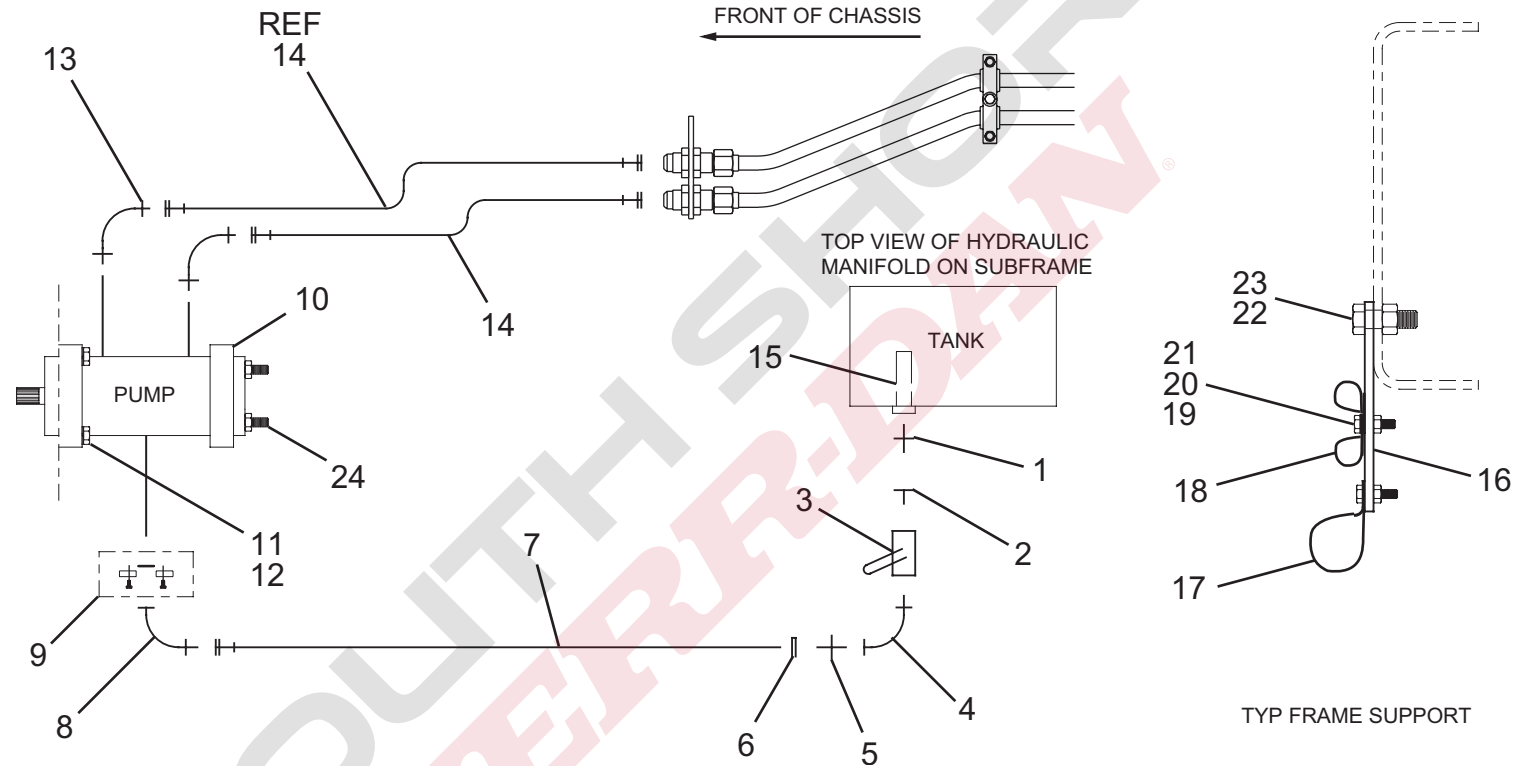
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PART LIST — SUPPLY - PRESSURE - RETURN

Ref. No.	Part No.	Description	Qty.
1	7650100137	Nipple	1
2	7444121050	Reducer Bushing	1
3	7935000116	Valve	1
4	7444121271	Elbow	1
5	7443000130	Hose	1
6	7274000028	Clamp	1
7	**	Suction Hose	
8	7443000222	Elbow	1
9	7577000213	Split Flange Fitting Kit	1
10	7724000044	Pump	1
11	7115181050	Hex Head Capscrew	2
12	7950180000	Lockwasher	2
13	7445121645	Elbow	2
14	**	Hose Assy	
15	7430000007	Tank Filter	1
16	4062000207	Bar	5
17	7274000007	Clamp	5
18	7274000008	Clamp	10
19	7115140850	Hex Head Capscrew	10
20	7950140152	Washer	10
21	7660142601	Locknut	10
22	7115181250	Hex Head Capscrew	5
23	7660000011	Nut	5
24	4178000248	Bracket Support	1

**Consult factory for part numbers and quantities

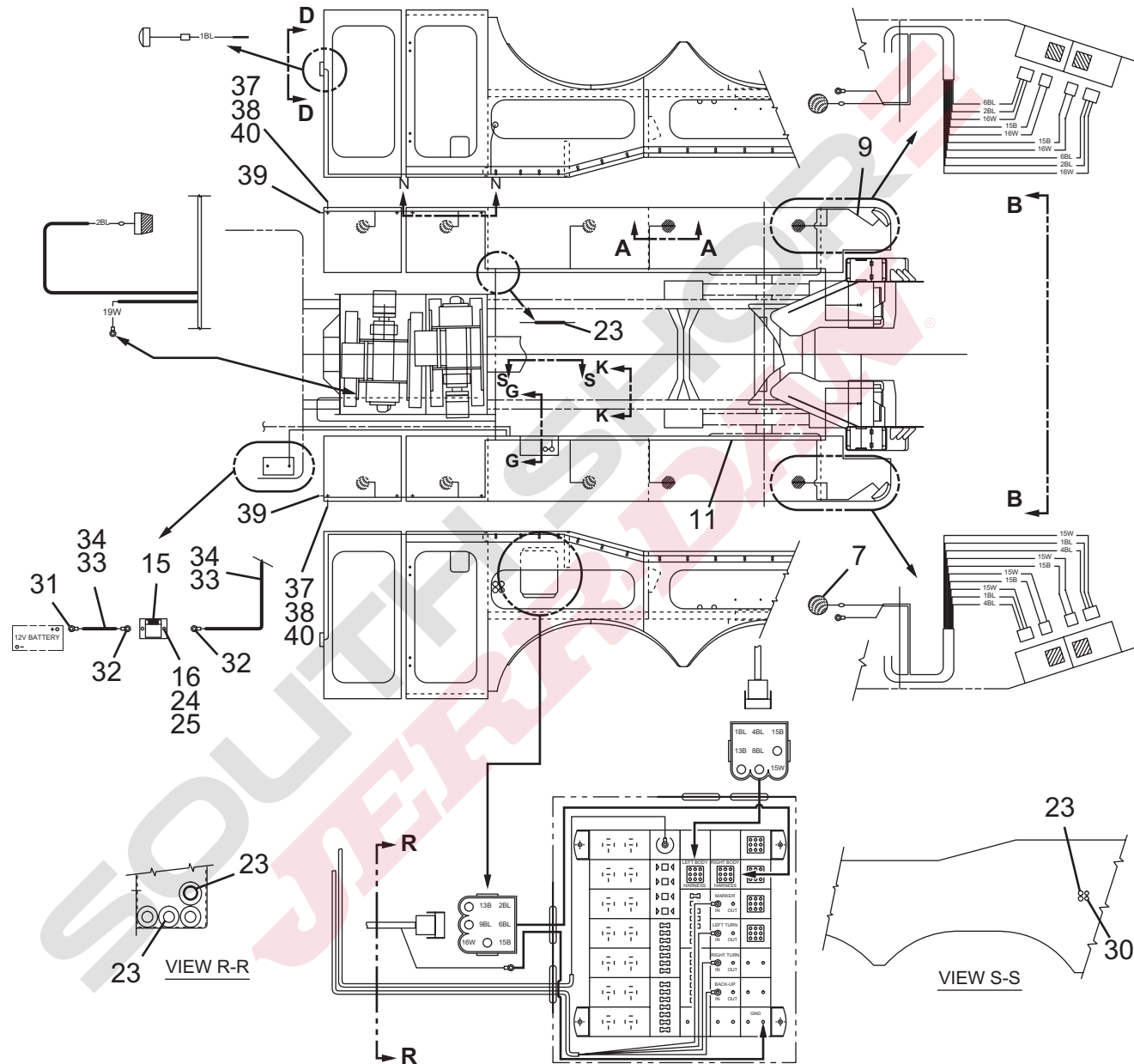
SUPPLY - PRESSURE - RETURN



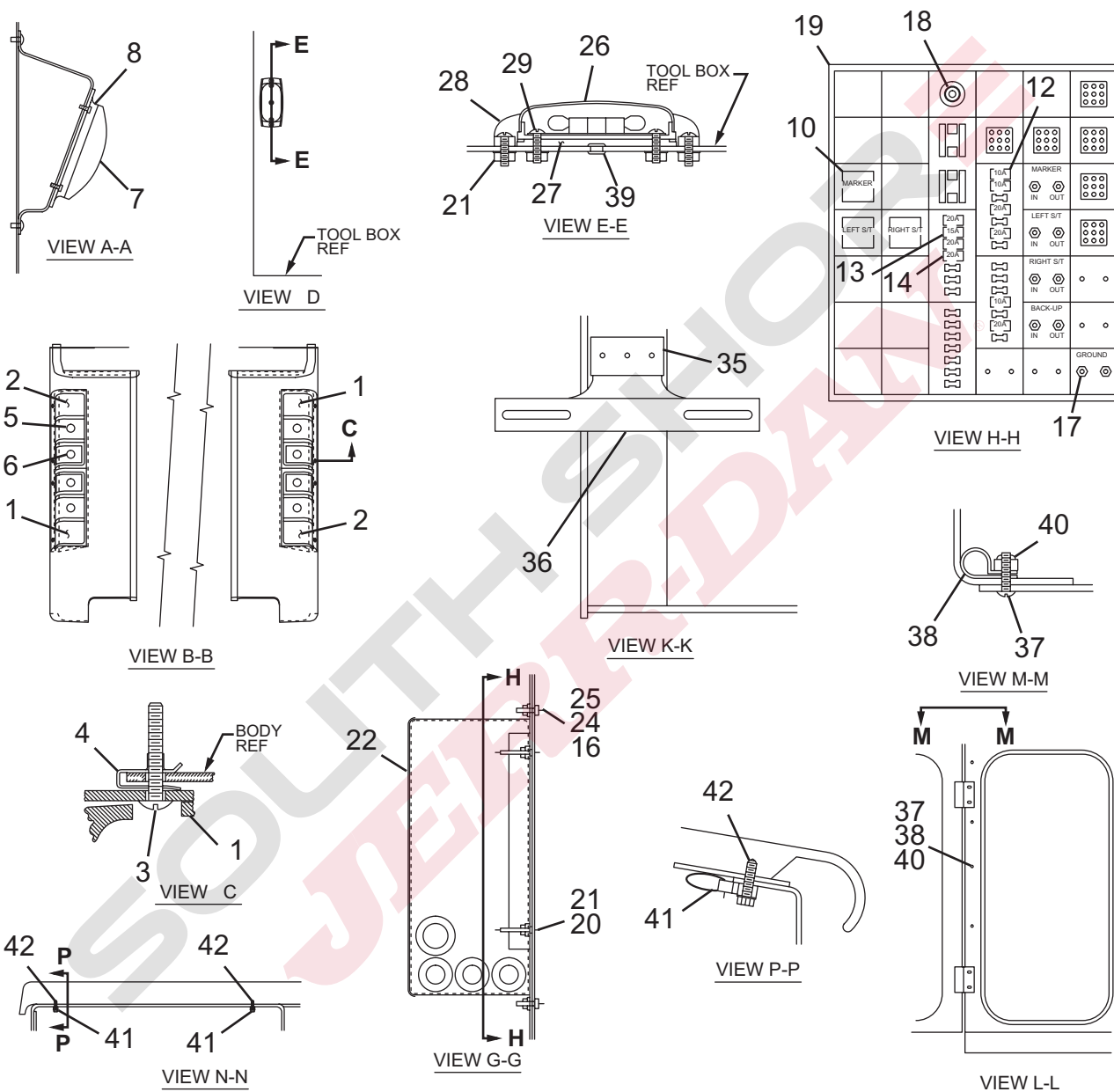
PART LIST — BODY WIRING - 86"

Ref. No.	Part No.	Description	Qty.
1	7590000092	Light RH	2
2	7590000093	Light LH	2
3	7114101210	Screw	16
4	7661000024	Nut	16
5	7188000001	Bulb Stop, Tail, Turn	4
6	7188000002	Bulb Back Up	4
7	7590000094	Compartment Light w/Switch	4
8	7790100856	Screw	16
9	7552000090	Wiring Harness - Right Side	1
10	7740000001	Relay	3
11	7552000146	Wiring Harness - Left Side	1
12	7457000011	Fuse 10 Amp	3
13	7457000006	Fuse 15 Amp	1
14	7457000012	Fuse 20 Amp	6
15	7870000043	Breaker 150 Amp	1
16	7115140650	Hex Head Capscrew	6
17	7661000023	Lockwasher	10
18	7115140425	Screw	1
19	7870000044	Switch Panel Power Distribution	1
20	7115101411	Screw	4
21	7661000002	Hex Nut	12
22	4346000003	Junction Box	1
23	7493000014	Grommet	3
24	7950140151	Flatwasher	6
25	7660142601	Locknut	6
26	7590000104	Light Clearance	2
27	7346000076	Gasket Clearance Light	2
28	7346000077	Guard Clearance Light	2
29	7114100610	Screw	8
30	7493000011	Grommet	3
31	7345242202	Terminal Ring	1
32	7345222202	Terminal Ring	3
33	7978000011	Cable Welding	25 ft.
34	8597650001	Loom	25 ft.
35	7590000105	Light License Plate	1
36	7178000025	Bracket License Plate	1
37	7114100618	Capscrew	8
38	7274000036	Clamp	8
39	7493000017	Grommet	2
40	7660102601	Nut	8
41	7894000031	Cable	4
42	7790141656	Screw	4
43	7345211702	Terminal Ring	5

BODY WIRING - 86"



BODY WIRING - 86"



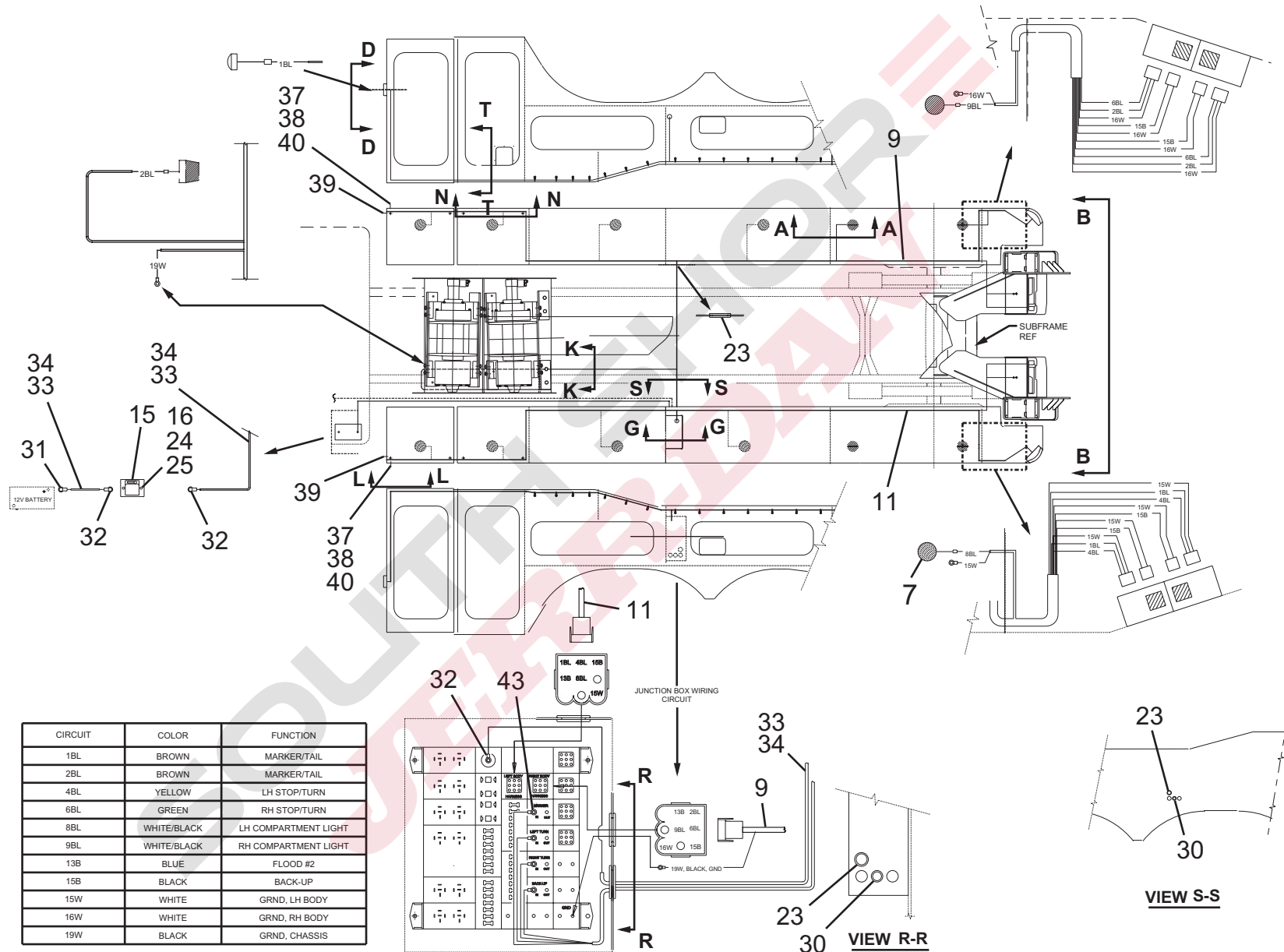
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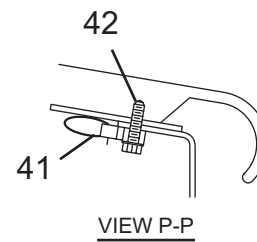
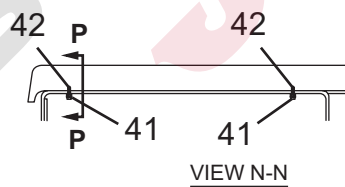
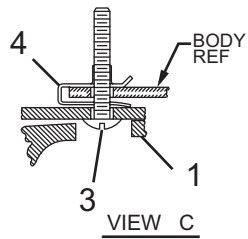
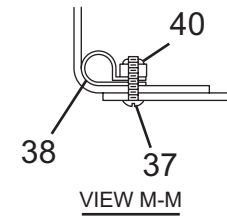
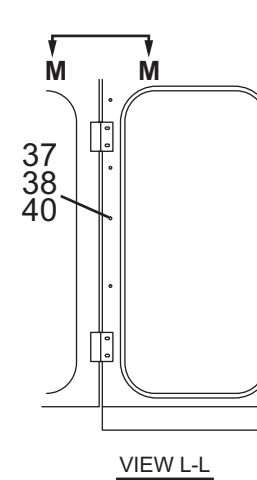
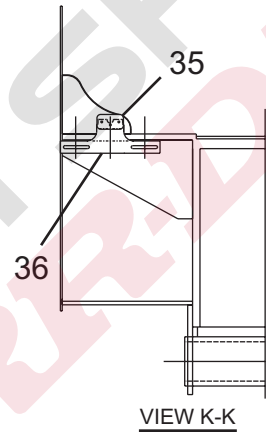
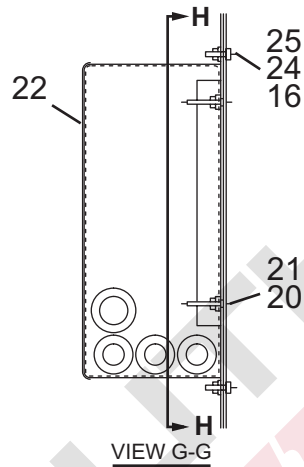
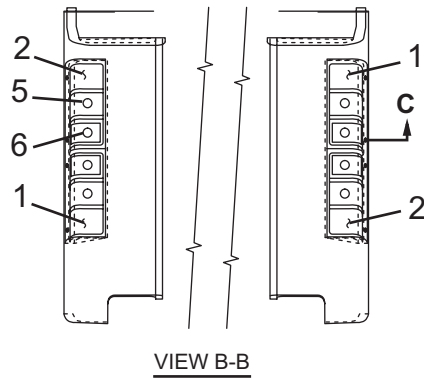
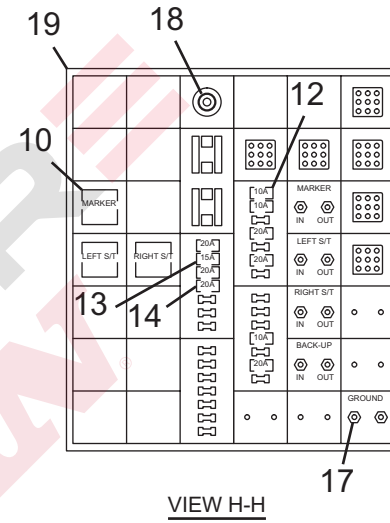
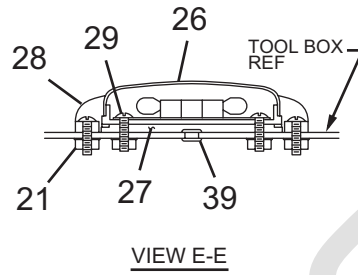
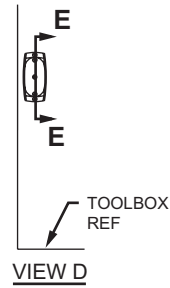
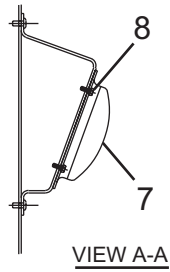
PARTS LIST — BODY WIRING - 146"

Ref. No.	Part No.	Description	Qty.
1	7590000092	Light RH	2
2	7590000093	Light LH	2
3	7114101210	Screw	16
4	7661000024	Nut	16
5	7188000001	Bulb Stop, Turn, Tail	4
6	7188000002	Bulb Back Up	4
7	7590000094	Compartment Light w/Switch	4
8	7790100856	Screw	16
9	7552000123	Body Harness RH	1
10	7740000001	Relay	3
11	7552000124	Body Harness LH	1
12	7457000011	Fuse 10 Amp	3
13	7457000006	Fuse 15 Amp	1
14	7457000012	Fuse 20 Amp	6
15	7870000043	Breaker 150 Amp	1
16	7115140650	Capscrew	6
17	7661000023	Lockwasher	10
18	7115140425	Screw	1
19	7870000044	Switch Panel Power Distribution	1
20	7115101411	Screw	4
21	7661000002	Hex Nut	12
22	4346000004	Junction Box	1
23	7493000014	Grommet	3
24	7950140151	(See 7950140141)	6
25	7660142601	Locknut	6
26	7590000104	Light Clearance	2
27	7346000076	Gasket Clearance Light	2
28	7346000077	Guard Clearance Light	2
29	7114100610	Screw	8
30	7493000011	Grommet	3
31	7345242202	Terminal Ring	1
32	7345222202	Terminal	3
33	7978000011	Cable Welding	25 ft.
34	8597650001	Loom	25 ft.
35	7590000105	Light License Plate	1
36	7178000025	Bracket License Plate	1
37	7114100618	Capscrew	8
38	7274000036	Clamp	8
39	7493000017	Grommet	2
40	7660102601	Nut	8
41	7894000031	Cable	4
42	7790141656	Screw	4
43	7345211702	Terminal	5

BODY WIRING - 146"



BODY WIRING - 146"



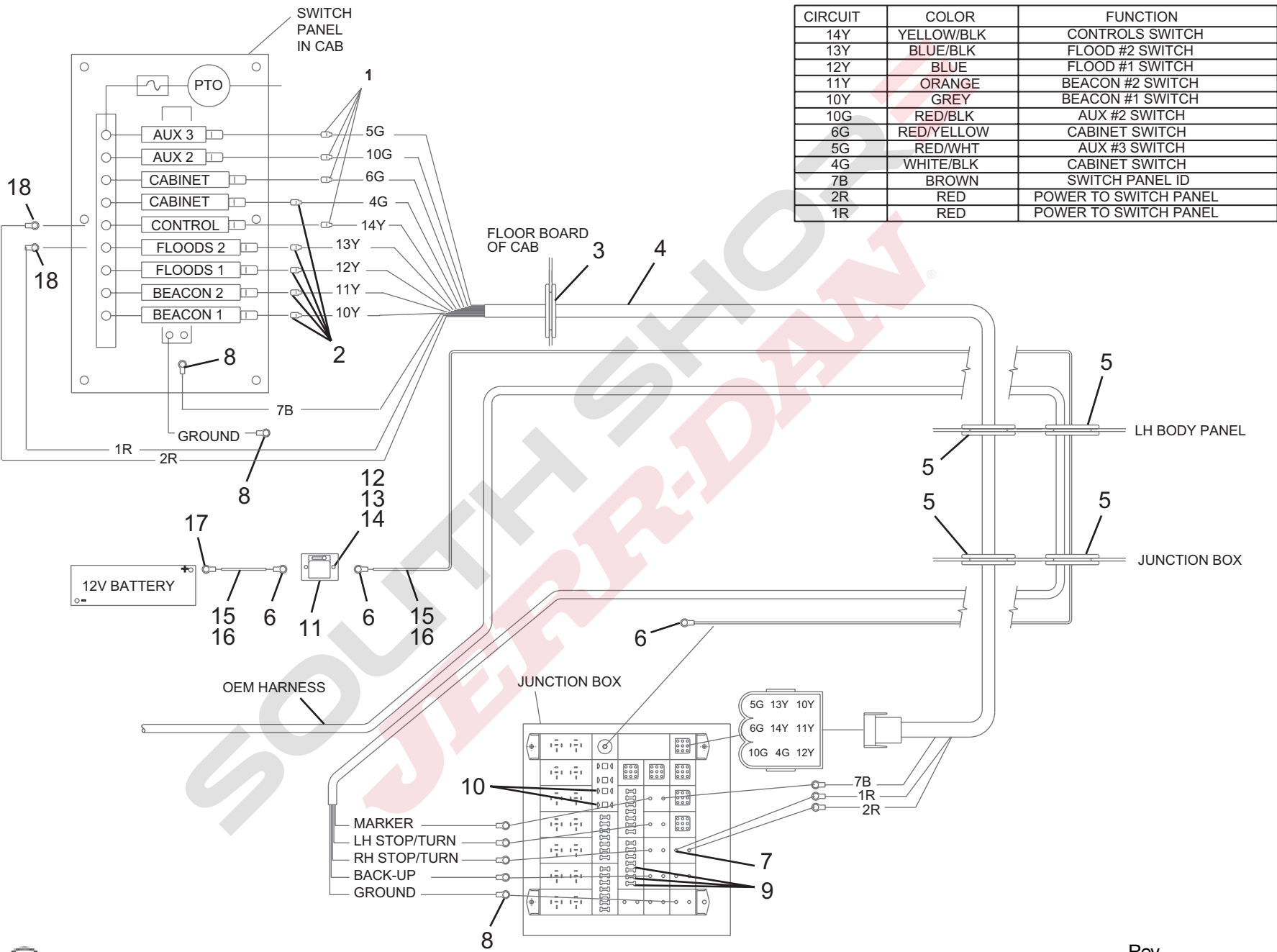
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PARTS LIST — SWITCH PANEL WIRING

Ref. No.	Part No.	Description	Qty.
1	7345001910	Tab	4
2	7345001710	Tab	5
3	7493000003	Grommet	1
4	7552000092	Switch Harness	1
5	7493000011	Grommet	5
6	7345222202	Ring Terminal	3
7	7661000023	Hex Nut w/ Lockwasher	6
8	7345211702	Ring Terminal	7
9	7457000012	20 Amp Fuse	3
10	7457000023	20 Amp Fuse	2
11	7870000043	Circuit Breaker	1
12	7950140151	Flatwasher	2
13	7660142601	Locknut	2
14	7115140650	Capscrew	2
15	7978000011	Cable	25 ft.
16	8597650001	Loom	25 ft.
17	7345242202	Ring Terminal	1
18	7345211902	Ring Terminal	2

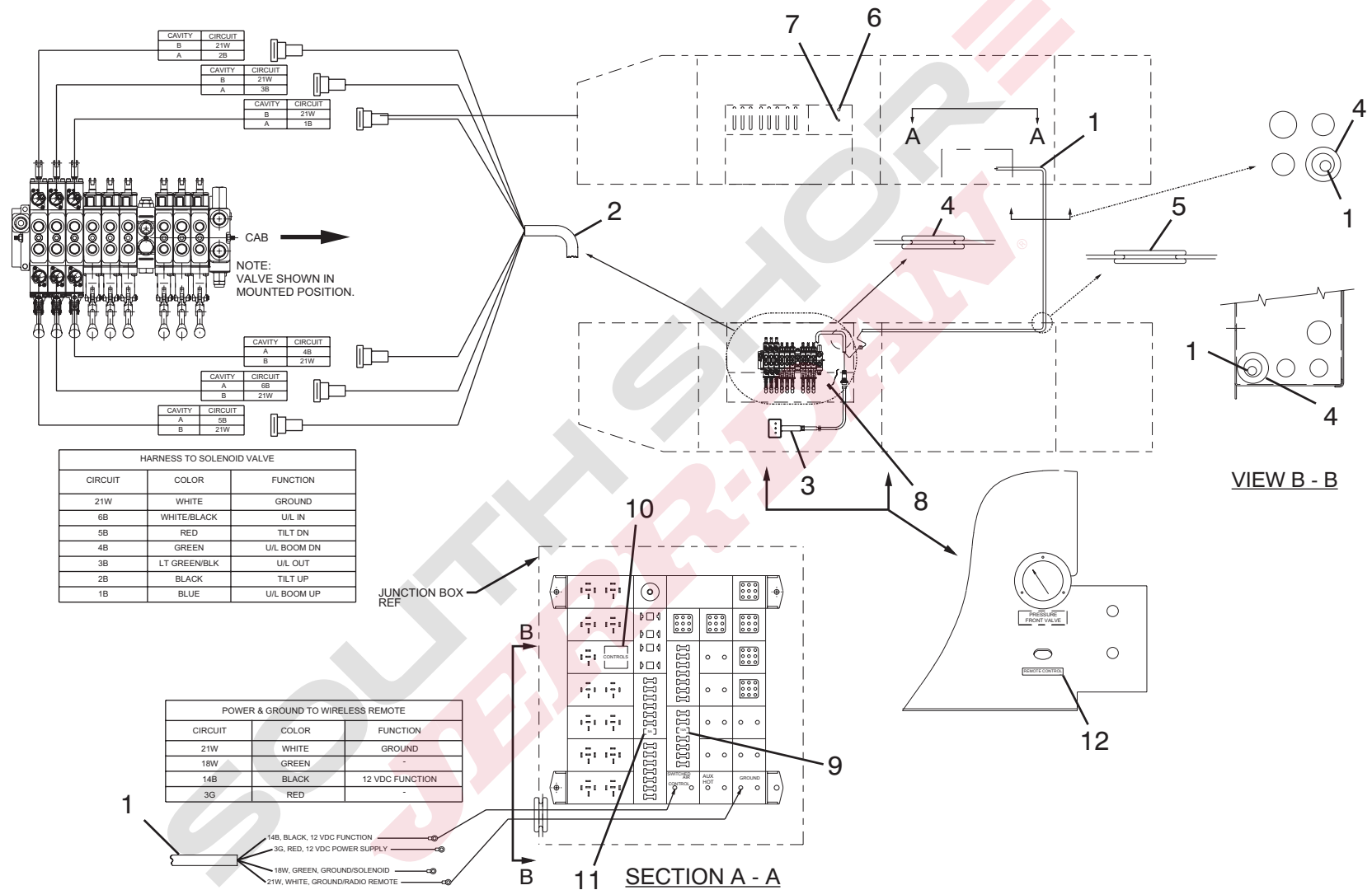
SWITCH PANEL WIRING



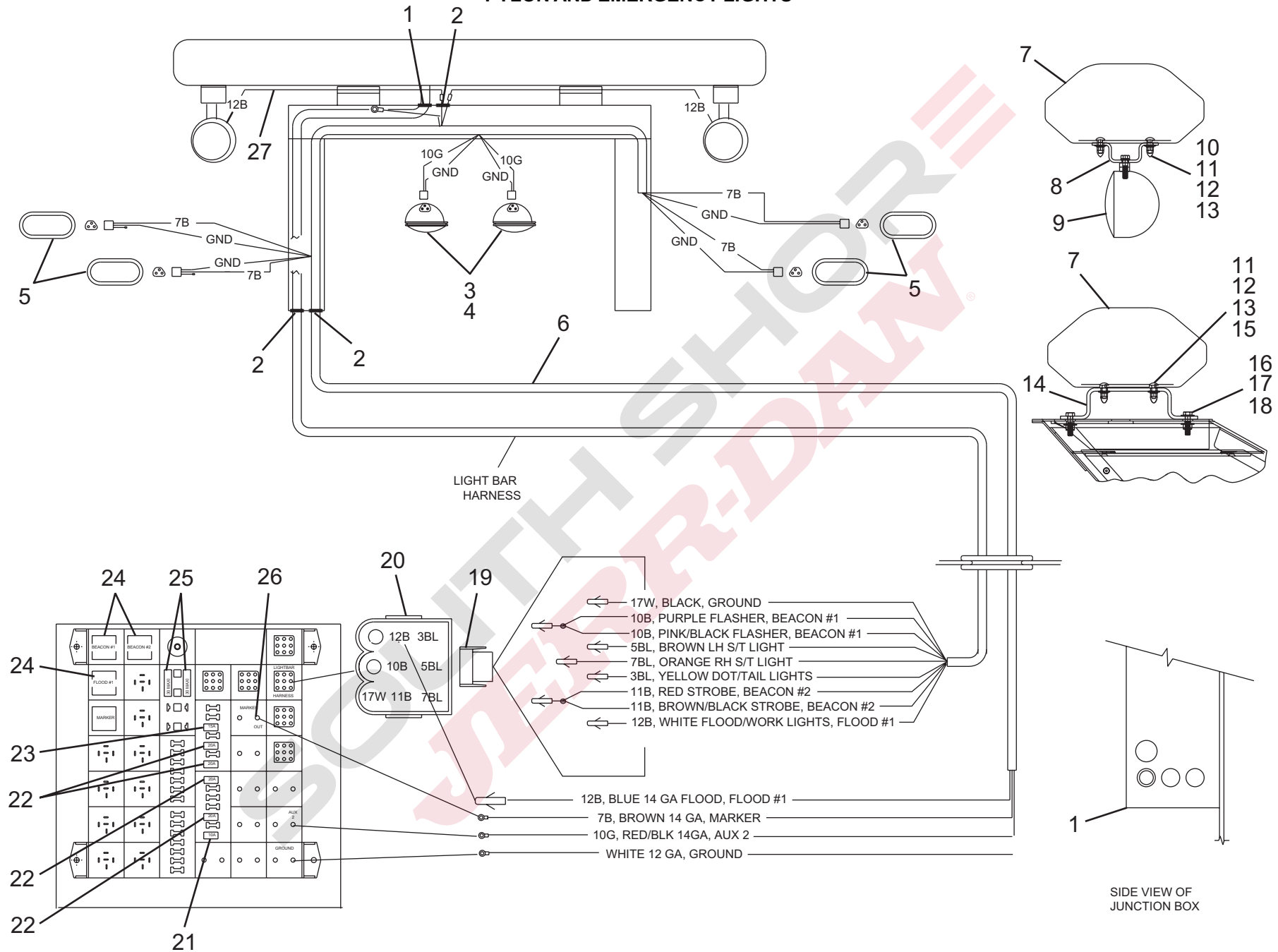
PARTS LIST — REMOTE CONTROL WIRING

Ref. No.	Part No.	Description	Qty.
1	7552000148	Harness Remote	1
2	7552000149	Harness Solenoid Control	1
3	7295000034	Controller Hand	1
4	7493000011	Grommet	3
5	7493000014	Grommet	1
6	7701000007	Plug	1
7	7701000032	Plug	1
8	7346000068	Dust Cap	1
9	7457000011	10 Amp Fuse	1
10	7740000001	Relay	1
11	7457000019	5 Amp Fuse	1
12	7330000247	Decal Remote Control	1

REMOTE CONTROL WIRING



PYLON AND EMERGENCY LIGHTS



SIDE VIEW OF
JUNCTION BOX

PARTS LIST — PYLON AND EMERGENCY LIGHTS

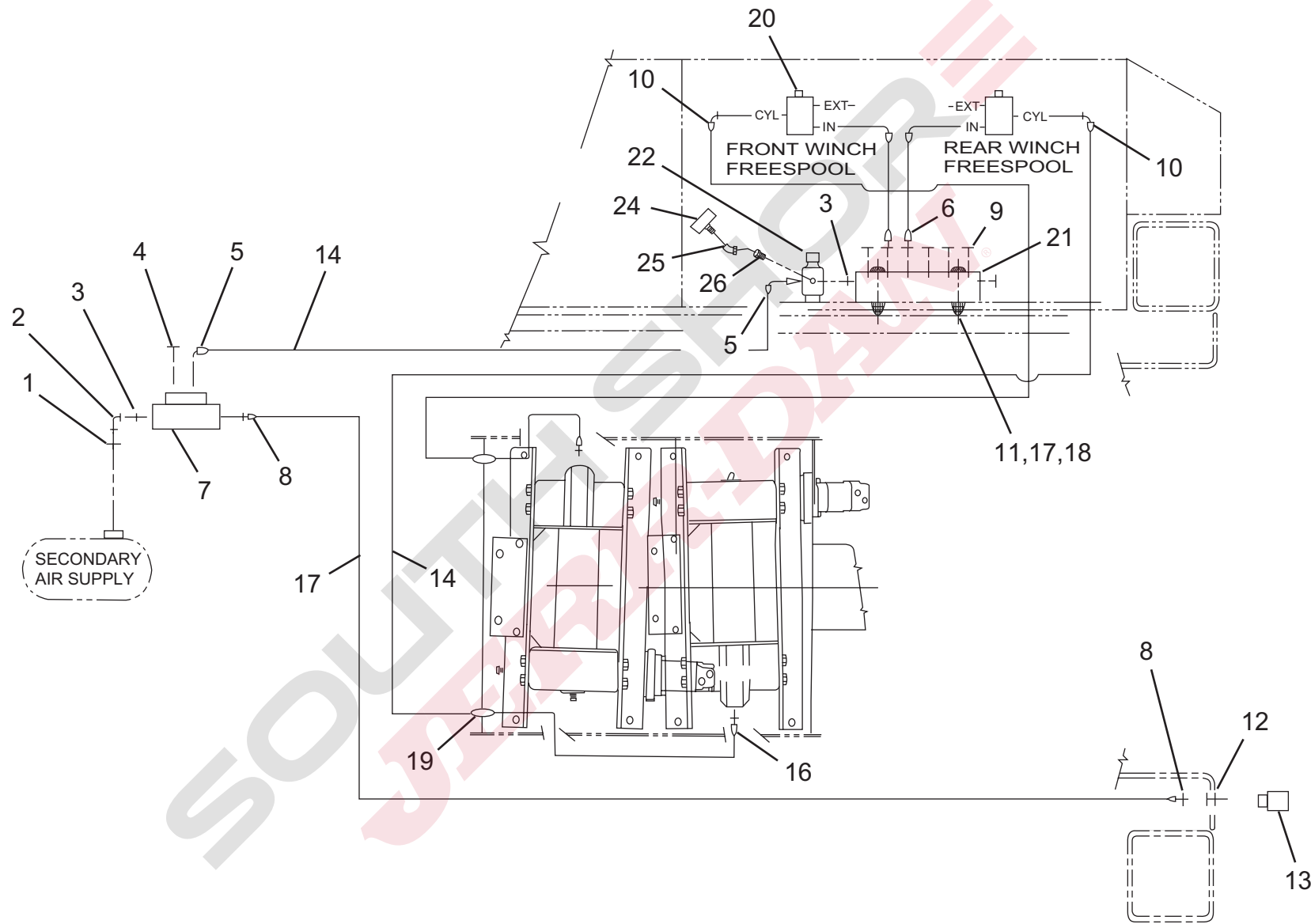
Ref. No.	Part No.	Description	Qty.
1	7493000011	Grommet	5
2	7493000003	Grommet	3
3	7590000127	Dome Light	2
4	7493000002	Grommet	2
5	7590000095	Marker Light Assembly	4
6	7552000125	Headboard/Work Light Harness	1
7	7590000157	Light Bar	1
8	4178000207	Bracket	2
9	7590000096	Work Light	2
10	7115150664	Carriage Bolt	4
11	7950150000	Lockwasher	8
12	7950150161	Flatwasher	8
13	7660152200	Acorn Nut	8
14	4178000234	Bracket	2
15	7115150864	Carriage Bolt	4
16	7115161250	Capscrew	8
17	7950160161	Flatwasher	16
18	7660162601	Locknut	8
19	7577000173	Plug Kit	1
20	7346000075*	Connector	1
21	7457000011	10 Amp Fuse	1
22	7457000012	20 Amp Fuse	4
23	7457000006	15 Amp Fuse	1
24	7740000001	Relay	3
25	7457000013	30 Amp Fuse	2
26	7661000023	Hex Nut w/Lockwasher	2
27	8594100002	Loom	6

* If alternative is used and lightbar not required, use this item.

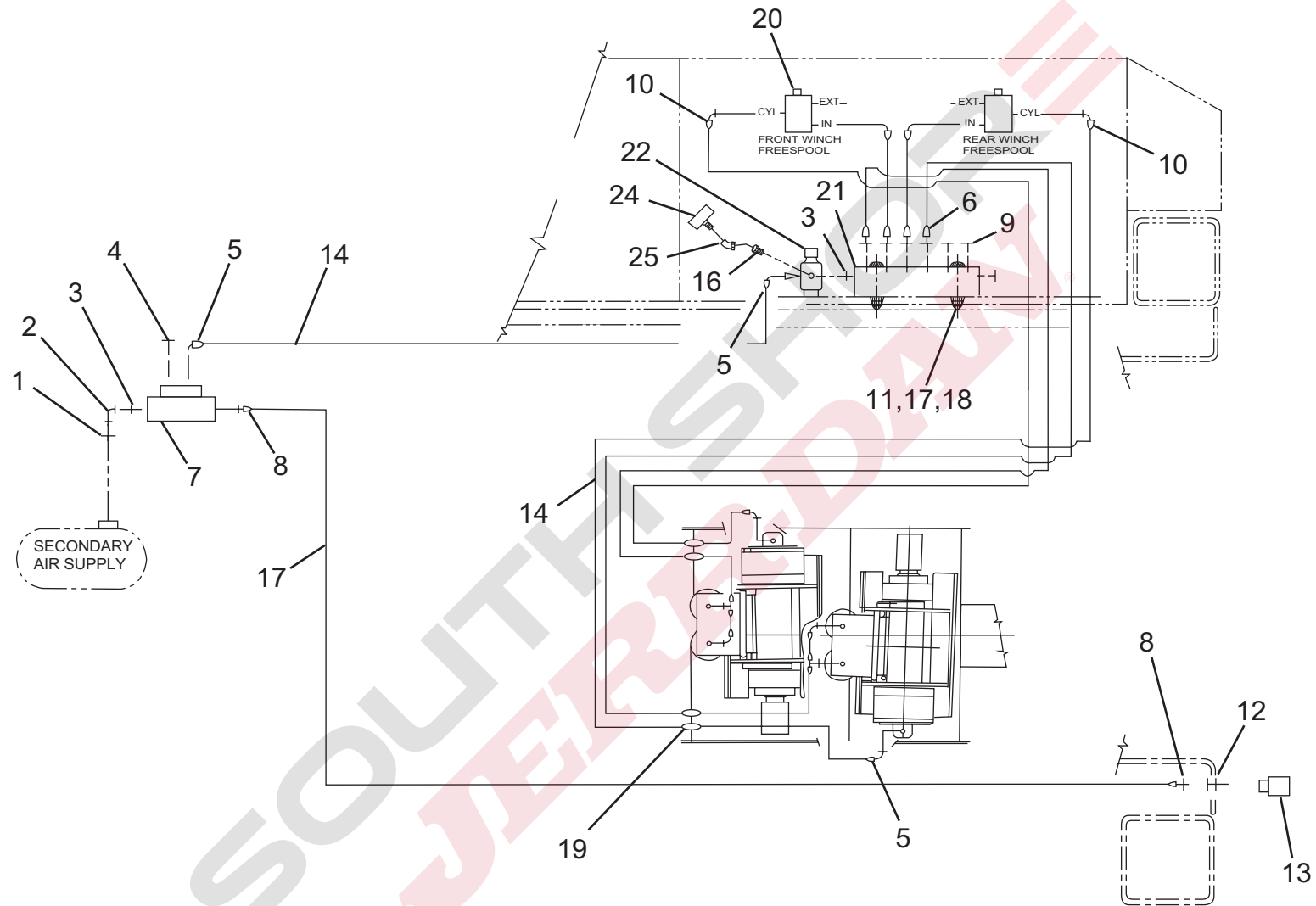
**PARTS LIST — WINCH AND AUXILIARY AIR
25,000 LB RAMSEY WORM GEAR**

Ref. No.	Part No.	Description	Qty.
1	7443000154	Bushing	1
2	7443000155	Fitting	1
3	7443000156	Nipple	2
4	7443000152	Plug	1
5	7443000139	Fitting	2
6	7443000138	Fitting	2
7	7935000120	Valve	1
8	7443000175	Tube Fitting	2
9	7444020013	Pipe Plug	5
10	7443000173	Tube Fitting	4
11	7950140161	Flatwasher	4
12	7446502518	Clamping Stud	1
13	7312000017	Coupling	1
14	7565000016	Air Line Tubing	75 ft.
15	7565000014	Air Line Tubing	25 ft.
16	7443000177	Tube Fitting	2
17	7115142450	Hex Head Capscrew	2
18	7660142601	Locknut	2
19	7443000178	Union	2
20	7935000136	Valve	2
21	4619000005	Air Manifold	1
22	7295000029	Air Regulator	1
23	7950140161	Flatwasher	4
24	7470000006	Air Pressure Gauge	1
25	7443000066	Fitting	1
26	7443000149	Bushing	1

WINCH AND AUXILIARY AIR 25,000 LB RAMSEY WORM GEAR



WINCH AND AUXILIARY AIR 35,000 LB DP PLANETARY GEAR



**PARTS LIST —WINCH AND AUXILIARY AIR
35,000 LB DP PLANETARY GEAR**

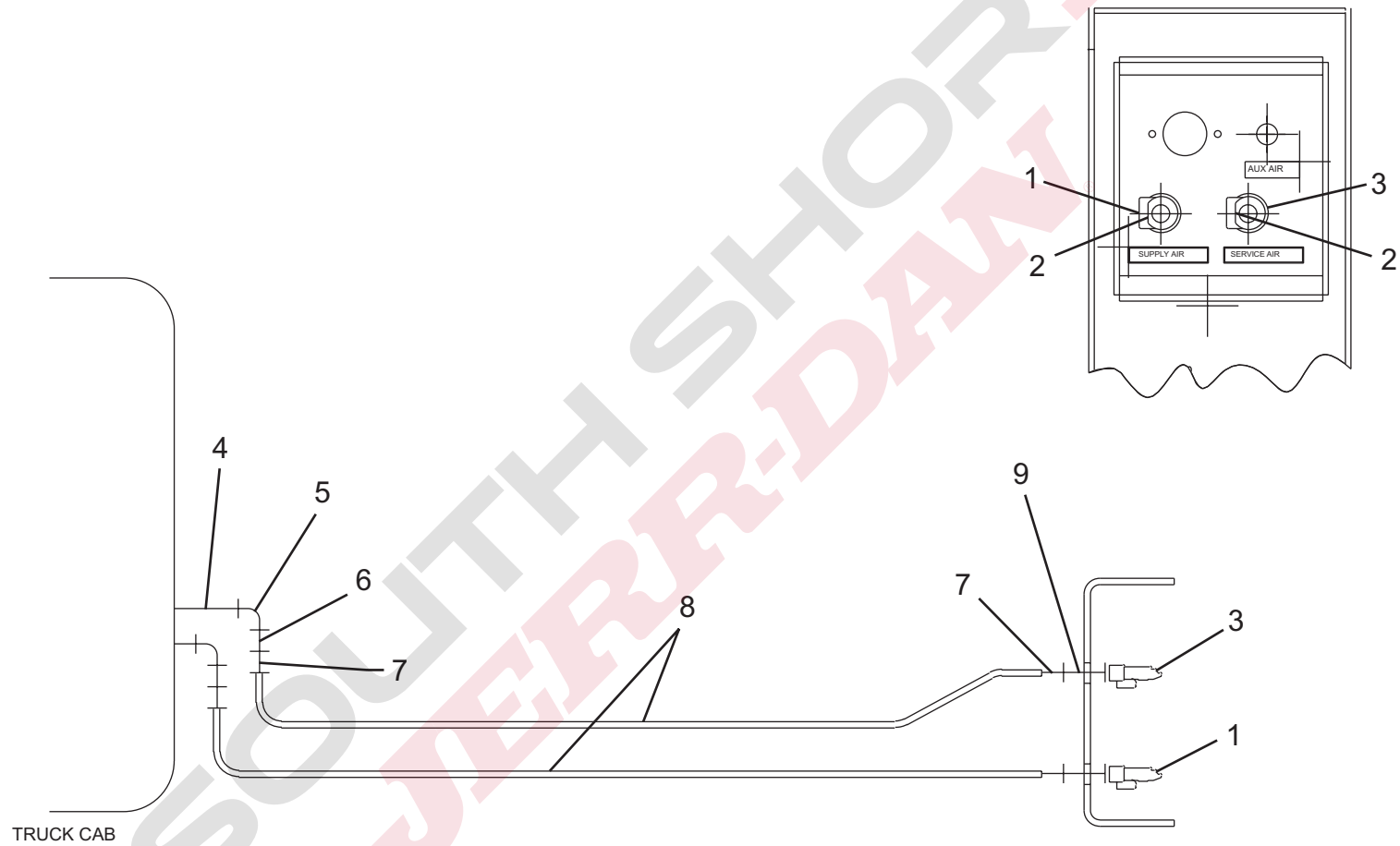
Ref. No.	Part No.	Description	Qty.
1	7443000154	Bushing	1
2	7443000155	Fitting	1
3	7443000156	Nipple	2
4	7443000152	Plug	1
5	7443000139	Fitting	4
6	7443000138	Fitting	4
7	7935000120	Valve	1
8	7443000175	Tube Fitting	2
9	7444020013	Pipe Plug	3
10	7443000173	Tube Fitting	4
11	7950140161	Flatwasher	4
12	7446502518	Clamping Stud	1
13	7312000017	Coupling	1
14	7565000016	Air Line Tubing	100 ft.
15	7565000014	Air Line Tubing	25 ft.
16	7443000149	Bushing	1
17	7115142450	Hex Head Capscrew	2
18	7660142601	Locknut	2
19	7443000178	Union	4
20	7935000136	Valve	2
21	4619000005	Air Manifold	1
22	7295000029	Air Regulator	1
23	7950140161	Flatwasher	4
24	7470000006	Air Pressure Gauge	1
25	7443000066	Fitting	1

PARTS LIST — GLAD HAND INSTALLATION

Ref. No.	Part No.	Description	Qty.
1	7312000016	Emergency Glad Hand	1
2	7577000145	Seal Kit	1
3	7312000015	Service Glad Hand	1
4	7443000145	Bushing	2
5	7443000146	Elbow	2
6	7443000148	Bushing	2
7	7446382506	Connector	4
8	7565000014	Air Line	50 ft.
9	7446502518	Clamping Stud	2

SOUTH SHORE
JERR-DAN®

GLAD HANDS



PARTS LIST — DECAL INSTALLATION

Ref. No.	Part No.	Description	Qty.
1	7330000211	Decal Safety Warning	1
2	7330000122	Nameplate	1
3	7330000037	Nameplate	2
4	7330000193	Decal Wheel Lift Caution	2
5	7330000202	Decal Shock Warning	1
6	7330000203	Decal "Warning-Power Lines"	2
7	7330000034	Nameplate	1
8	7330000108	Nameplate	2
9	7330000294	Decal Jerr-Dan Logo	2
10	7330000196	Decal Circle "J"	2
11	7330000341	Decal Lubrication	1
12	7330000189	Placecard	1
13	7330000143	Decal "Proudly Made in the USA"	1
14	7759000004	Pop Rivet	10
15	7330000284	Patent Placard	1
16	7330000207	Decal Fuse Panel Schematic	1
17	7330000208	Placard	1
18	7330000209	Placard	1
19	7330000210	Placard	1
20	7330000139	Decal Checklist	1
21	7330000270	Decal Lubrication Chart	1

DECAL INSTALLATION



1



2



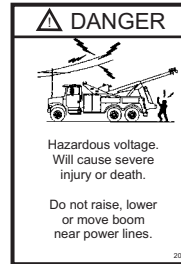
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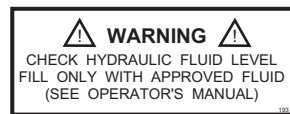
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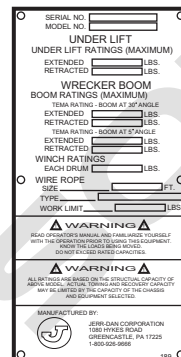
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9

LUBRICATION CHART					
JERR-DAN®					
HDL 1100 / 530					
WRECKER					
ITEM NO.	ITEM NAME	ITEM NO.	ITEM NAME	ITEM NO.	ITEM NAME
1	WRECKER BOOM	2	WRECKER BOOM	3	WRECKER BOOM
4	WRECKER BOOM	5	WRECKER BOOM	6	WRECKER BOOM
7	WRECKER BOOM	8	WRECKER BOOM	9	WRECKER BOOM
10	WRECKER BOOM	11	WRECKER BOOM	12	WRECKER BOOM
13	WRECKER BOOM	14	WRECKER BOOM	15	WRECKER BOOM
16	WRECKER BOOM	17	WRECKER BOOM	18	WRECKER BOOM
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22	WRECKER BOOM	23	WRECKER BOOM	24	WRECKER BOOM
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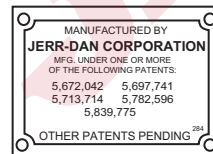
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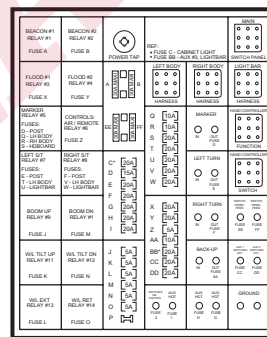
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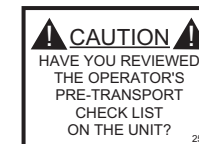
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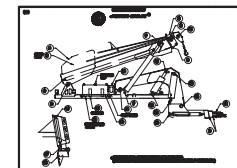
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11

DECALS NOT TO SCALE



DECAL INSTALLATION

