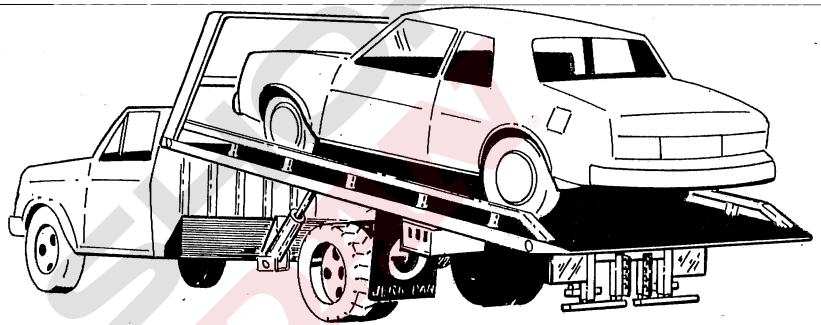




MEDIUM DUTY
WRANGLER/TRANSPORTER
SERIES

OPERATION, MAINTENANCE,
AND PARTS MANUAL



OPTIONS WHEEL LIFT TOW BAR
STD TOW BAR
IRL (FOR STD OR WHEEL LIFT TOW BAR)
REAR DOCK STABILIZER

JERR-DAN
CORP.

10,80 Hykes Road
Greencastle, PA 17225 Phone (717) 597,7111



FOREWORD

This manual is intended to serve as a guide to the owner and operator in the safe operation and optimum performance of Wrangler/Transporter roll backs.

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.



TABLE OF CONTENTS

Inspector's Certification	0.1
Delivery Prerequisite	0.1
Line Sheet	0.2
Warranty	0.3
Certification Notice	0.7
Safety	1.0
Decal Group	1.3
Operation	2.0
Maintenance & Lubrication	3.0
Lubrication Chart	3.1
Troubleshooting	3.2
Parts	
Final Assembly Basic Unit	4.2
Deck	4.3
Hydraulic Tow Bar with and without IRL	4.6
Hydraulic Components	4.7
Hydraulic Components with IRL Tow Bar	4.10
Lights and Wiring	4.12
Dual Controls	4.13
Subframe	4.15
Roll Back Cylinder	4.17
Tilt Cylinder	4.19
IRL Cylinder	4.21
Tilt Cylinder (Stabilizer)	4.23
Tow Bar Cylinder	4.25
Wheel Lift Tow Bar Cylinder	4.27
Winch Assembly (10,000 lb. Worm Drive Winch)	4.29
Hydraulic Wheel Lift Tow Bar Installation	
with and without IRL	4.32
Hydraulic Tow Bar Wheel Grid Assembly	4.33
Rear Dock Stabilizer	4.36
Winch Assembly (8,000 lb. Planetary Winch)	4.37

Rev. _ _ _

Date _ _ _

INSPECTOR'S CERTIFICATION

I certify that this unit, Sales Order No. _____, _____,

Serial No. _____, has been thoroughly tested in accordance with the Jerr-Dan inspection procedure manual and is free of defects.

Inspector's Signature

Date

DELIVERY-PREREQUISITE

I, the customer/driver, have been instructed in the proper use of this roll back body and am fully aware of the correct method of operation.

Customer's Signature

Date

LINE SHEET

Sales Order No. _____ Date _____

Serial No. _____ Model _____

PTO Model No. _____ % __ Shims _____

PTO Installed By _____

Pump Make _____ Model No. _____

Valve Make _____ No. of Sections _____

Filter Make _____ Model No. _____

Winch Make _____ \$1ze _____

Orbit Motor Make _____ Model No. _____

Upper Arm Size _____ Lower Arm Size _____

Tilt Cylinder No. _____

 Rollback Cylinder No. _____

IRL Cylinder No. _____

Cab Protector No. _____

Tow Bar Type _____ Capacity _____ lbs,

Tool Box No. _____

Special Options List

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

Rev. --

0.2

Date __ _



J'BHH-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

Procedures for warranty coverage:

1. Contact Jen-Dan for the warranty service center nearest you -
Call 1-800-926-9666.
2. If there is not an authorized Jerr-Dan warranty service center nearby, find a convenient, qualified non-Jerr-Dan service center and send in their estimate of repair cost before any work is performed to:

Jerr-Dan Corporation
A Subsidiary of Durakon Industries, Inc.
Warranty Department
1080 Hykes Road
Greencastle, PA 17225

Be sure to include your daytime phone number.

3. Authorization for repairs under this limited warranty will be provided by telephone within 24 hours of receipt of valid warranty claims.

*4. This outlines the Jerr-Dan One-Year Warranty, Plan. For exact coverages, please consult your limited warranty and/or vehicle service contract. 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.



J'ERR-DAN

1080 HYKES RD., 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.

Rev. _____

0.5

Date _____

• 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 prepaid 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.

NOTICE

MANUFACTURED BY:
JERR-DAN CORPORATION
GREENCASTLE, PENNSYLVANIA 17225

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 manufacturer, 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: _____

This certification sticker appears on every Jerr-Dan unit mounted on a new chassis and is required by law. Jerr-Dan Corporation will not certify any unit for a capacity greater than the chassis manufacturer's specified rating. The capacity ratings of Jerr-Dan units do not imply that vehicles can be used without regard to gross vehicle weight ratings (GVWR) or gross axle rating limitations.

The payload carrying capacity of any truck is determined by the GVWR of the cab chassis, the curb weight of the cab chassis and the weight of the body. It is important that you determine that your truck has satisfactory carrying capacity and axle ratings for your specific application. Jerr-Dan's authorized sales representatives are available to assist you in this regard.

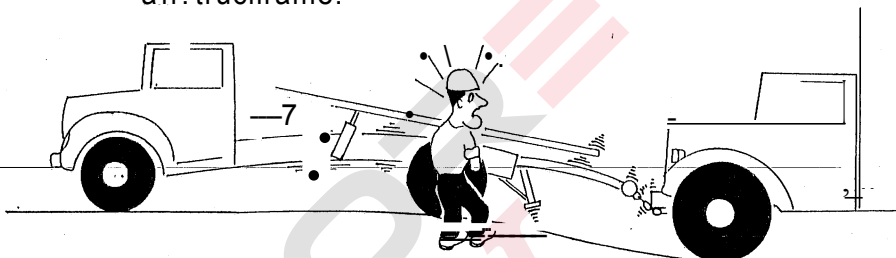


SAFETY

Safety is all important when working with machinery. Accidents happen when established safety practices have been overlooked.

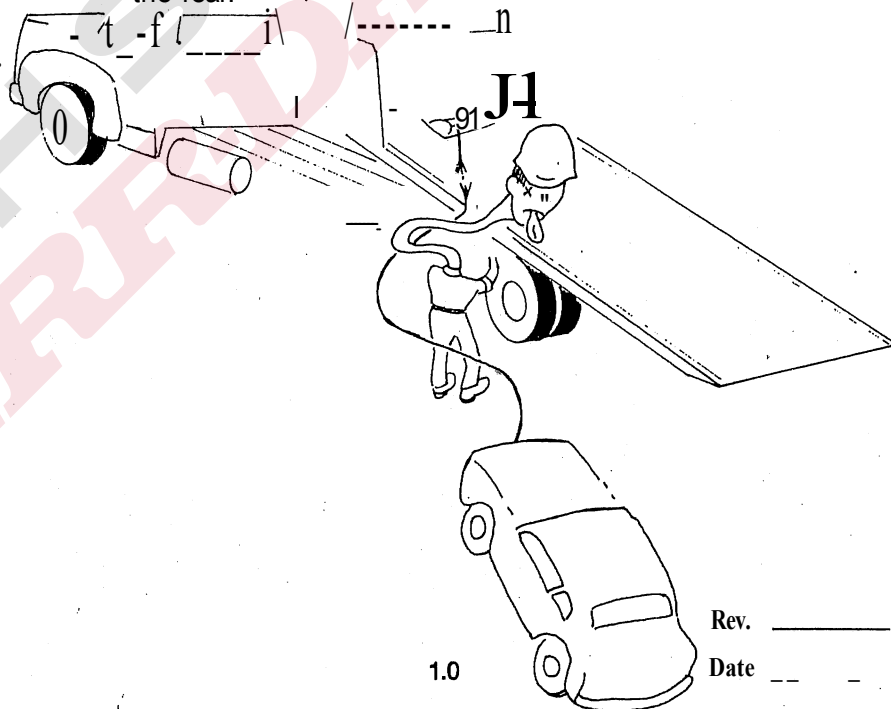
Read and practice all safety points listed in this manual. Safety is the prime responsibility of the operator.

1. Read operating and loading instructions thoroughly.
2. Always put bumper on the ground to support the body and truck frame.



3. Never exceed the rated capacity of the body or truck chassis or use tow bar/wheel lift without a vehicle on the deck.

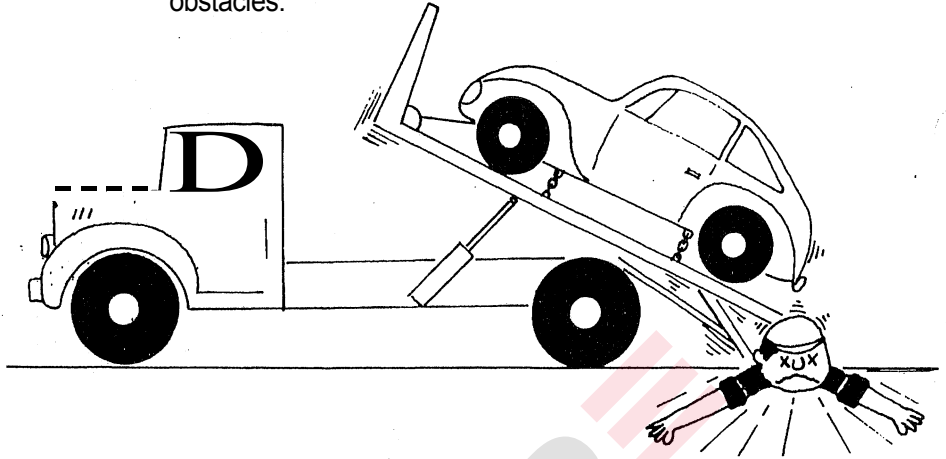
4. Never winch from the side of the bed: Winch only from the rear.



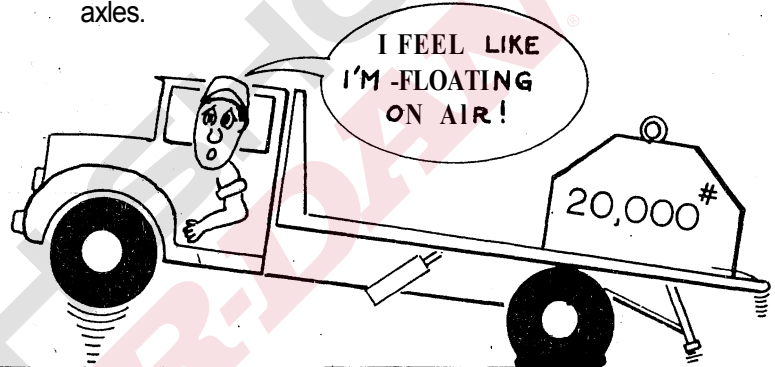
Rev. _____

Date ____

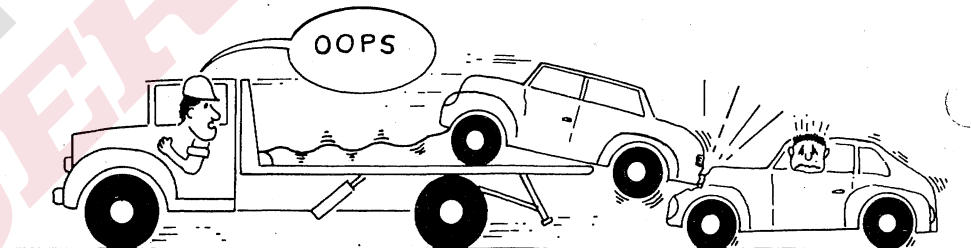
5. When loading the deck and operating the winch, make cert in the area behind the load is clear of personnel and obstacles.



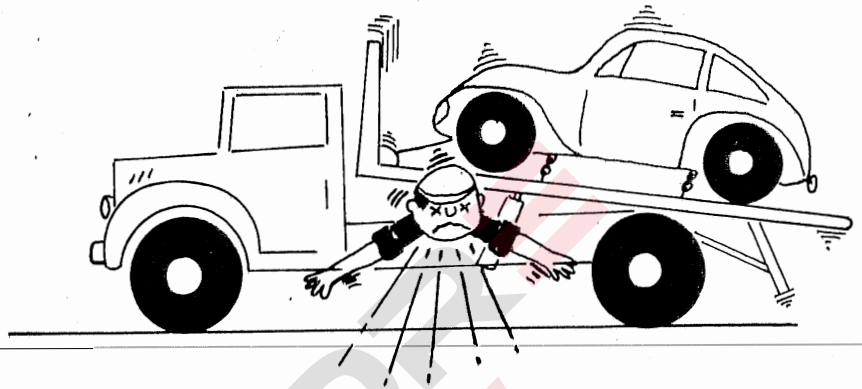
6. Always try to winch from the center of the load.
7. Distribute the load on the deck. Do not concentrate the load on one section of the deck or to the rear of the truck axles.



8. Secure cargo to the deck at both the front and rear before the truck is driven.



9. Observe all warning decals.
10. Read and follow tow bar instructions for proper towing.
11. Keep alert. Do not be distracted during any operating sequences.



12. Make sure you are clear of oncoming traffic. Dual controls (driver's side and passenger side) are standard on all Jerr-Dan Wranglerrrransporter Series units.
13. Use separatesafety chains from towed vehicle to subframe for STD tow bar and wheel lift tow bar.
14. Use wheel straps on wheel lift tow bar.
15. Do not work behind truck with vehicle on deck unless vehicle is secured at front of deck. (Do not rely on winch.)
16. Block up deck before performing any service or maintenance work under deck.
17. Observe tow bar rating. Overloading can cause unsafe steering and braking conditions.
18. Insure deck is in the locked position before traveling.
19. Maintain winch cable in good condition. Replace when worn, kinked or frayed. Do not use cable clamps.

.TERR-DAN

(LOGO)

CAPACITY

2500LB.

075

(TOW BAR CAPACITY)

LUBRICATION CHART JERR-DAN® WRANGLER TRANSPORTER					
INTERVAL (HOURS)	REF. NO.	IDENTIFICATION	SERVICE	LUBRICANT	N. OF POINTS
50 OR MONTHLY	15 12	CABLE TOW HANDLE	OIL OIL	ENGINE OIL ENGINE OIL	1 2
100 OR BI-MONTHLY	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15	1. TILT CYLINDER 2. WINCH 3. SLIDE BLOCKS 4. SUBFRAME PIVOT 5. VALVE SPOOLS 6. HOOD STRIPS 7. BODY GUIDE 8. HYD. RESERVOIR 9. PLUNGER 10. TOWBAR PIVOT 11. INT. CYLINDER 12. CONTROL HANDLE	LUBE LUBE COAT LUBE CLEAN & OIL COAT COAT CHECK LUBE LUBE LUBE LUBE	MFG MFG HFG ENGINE OIL " " MFG MFG MFG MFG	1 1 2 3 - 5 2 1 6 + 10
250 OR SEMI-ANNUALLY	16 17	16. WINCH BOX HYD. BREATHER 17. HYD. FILTER DECK STRINGER	CHECK CLEAN & OIL CHANGE COAT	GLS #140 ENGINE OIL " "	1 1 1 2
1000 OPERATING HOURS	2 8	2. WINCH BOX HYD. RESERVOIR	DRAIN-FILL DRAIN-FILL	GLS #140 " "	1 1

CHART COVERS .TERR-DAN DECK SYSTEM ONLY

1 INDICATES DUAL RANGE HYD. FLUID S W 20
 AUTO TRANS FLUID MAY BE SUBSTITUTED IF NECESSARY
 11 INDICATES LITHIUM BASE GREASE (NO GRAPHITE BASE)

(LUBRICATION CHART)

Rev. _____

Date _____

& i m m J l l m \$

OPERATING INSTRUCTIONS

- ALL OPERATORS SHOULD BE TRAINED AND UNDERSTAND THE OPERATOR'S MANUAL.
- ASSURE SAFETY OF ALL PERSONNEL.
- TILT ONLY WHEN DECAL ALIGNS WITH RED CONTROL HANDLE.
- ASSURE ENGAGEMENT OF WINCH DOGS.

& J'BRR-DAN WRANGLER

- COMPLY WITH ALL LOAD RATINGS.
- CAPACITY LOADS MUST BE UNIFORMLY DISTRIBUTED.
- ADEQUATELY SECURE ALL LOADS.
- USE SAFETY CHAIN FROM DECK TO TOMBAR TUBE (DURING TOMBAR USE).

STANDARD DECAL, RIGHT SIDE

OPERATING INSTRUCTIONS

- ALL OPERATORS SHOULD BE TRAINED AND UNDERSTAND THE OPERATOR'S MANUAL.
- ASSURE SAFETY OF ALL PERSONNEL.
- TILT ONLY WHEN DECAL ALIGNS WITH RED CONTROL HANDLE.
- ASSURE ENGAGEMENT OF WINCH DOGS.

JERR-DAN WRANGLER

- COMPLY WITH ALL LOAD RATINGS.
- CAPACITY LOADS MUST BE UNIFORMLY DISTRIBUTED.
- ADEQUATELY SECURE ALL LOADS.
- USE SAFETY CHAIN FROM DECK TO TOMBAR TUBE (DURING TOMBAR USE).
- DO NOT OPERATE IF DAMAGED OR DEFECTIVE.
- ASSURE PROPER MAINTENANCE.
- DISengage PTO BEFORE ENGAGING TRANSMISSION.

STANDARD DECAL, LEFT SIDE

\$ _ / _ m / - m l c H J l l m \$

OPERATING INSTRUCTIONS

- ASSURE SAFETY OF ALL PERSONNEL.
- TILT ONLY WHEN DECAL ALIGNS WITH RED CONTROL HANDLE.
- ASSURE ENGAGEMENT OF WINCH DOGS.

\$ J'BRR-DAN WRANGLER

- COMPLY WITH ALL LOAD RATINGS.
- CAPACITY LOADS MUST BE UNIFORMLY DISTRIBUTED.
- ADEQUATELY SECURE ALL LOADS.
- USE SAFETY CHAIN FROM DECK TO TOMBAR TUBE (DURING TOMBAR USE).
- DO NOT OPERATE IF DAMAGED OR DEFECTIVE.
- ASSURE PROPER MAINTENANCE.
- DISengage PTO BEFORE ENGAGING TRANSMISSION.

REAR DOCK STABILIZER DECAL, RIGHT SIDE

OPERATING INSTRUCTIONS

- ASSURE SAFETY OF ALL PERSONNEL.
- TILT ONLY WHEN DECAL ALIGNS WITH RED CONTROL HANDLE.
- ASSURE ENGAGEMENT OF WINCH DOGS.

\$ -TERR-DAN WRANGLER

- COMPLY WITH ALL LOAD RATINGS.
- CAPACITY LOADS MUST BE UNIFORMLY DISTRIBUTED.
- ADEQUATELY SECURE ALL LOADS.
- USE SAFETY CHAIN FROM DECK TO TOMBAR TUBE (DURING TOMBAR USE).
- DO NOT OPERATE IF DAMAGED OR DEFECTIVE.
- ASSURE PROPER MAINTENANCE.
- DISengage PTO BEFORE ENGAGING TRANSMISSION.

REAR DOCK STABILIZER DECAL, LEFT SIDE

Rev.

1.4

Date _ _ _

A WARNING

5 WRAPS MIN. OF CABLE MUST BE LEFT ON DRUM TO ACHIEVE RATED LOAD.

NOT TO BE USED IN THE MOVING OR LIFTING OF PERSONS.

(WINCH)

CAUTION

OIL LEVEL (1/4 FULL WITH CYLINDERS FULLY RETRACTED) MUST BE MAINTAINED

(HYDRAULIC OIL LEVEL)

MANUFACTURED BY
JERR-DAN CORPORATION
MFG. UNDER ONE OR MORE
OF THE FOLLOWING PATENTS:

3,159,294

3,430,792

3,450,282

CANADIAN PATENT 871,532 1971

(PATENT)

MANUFACTURED BY

JERR-DAN CORPORATION

GREENCASTLE, PENNSYLVANIA

SERIAL NO.

MODEL NO.

VEHICLE

IDENT. NO.

(SERIAL NUMBER)

SLIDE DECK UNTIL
ARROW ALIGNS WITH
RED HYO. LEVER
BEFORE TILTING



(DECK ALIGNMENT)

1.5

Rev. --

Date --

6 WARNING 6

DO NOT EXCEED
WHEELIFT/TOWBAR
CAPACITIES AS
OVERLOADING MAY RESULT
IN AN UNSAFE STEERING
AND/OR BRAKING
CONDITION.

098

(WHEEL LIFT WARNING)

CAPACITY

WHEEL · LIFT: 2,500 BS. AT FULL EXTENSION

TOW BAR: 3,500 LBS. AT 3 FT. EXTENSION

(WHEEL LIFT CAPACITY)

!! WARNING !!

VEHICLE MUST BE SECURED
TO WHEEL GRID USING BOTH TIE DOWN
STRAPS PRIOR TO LEAVING LOADING SITE.

036

(WHEEL LIFT WARNING)



OPERATION

A. Controls

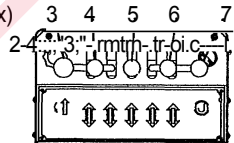
The operating controls for the deck are conveniently located in the control box at the sides of the deck on both the driver's and passenger's side.

All operators must be trained and understand the contents of the operator's manual before operating any controls.

Assure adequate operating clearance and the safety of all personnel before operating the rollback deck.

The following controls are provided on the WRANGLER/TRANSPORTER:

1. Power-take-off (push-pull knob in truck cab)
2. Auxiliary engine throttle control (twist knob in control box, driver's side only)
3. Rollback control (first handle in control box)
4. Tilt control (second handle in control box)
5. Winch control (third handle in control box)
6. Tow bar - Extend/Retract (fourth handle in control box)
- 6a. Stabilizer - Raise/Lower (fourth handle in control box)
7. Tow bar - Raise/Lower (fifth handle in control box)
- 7a. Not used with Stabilizer Option

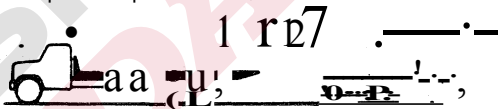


B. Tilting the Deck/Loading

1. Position

Park the truck with the rear of the deck approximately 12 feet from the object to be loaded and in line with that object.

- 1a. Set the parking brake.
- 1b. With the engine running, engage the PTO per instructions in the truck cab.
- 1c. Set the auxiliary throttle. After operating the unit several times, one will establish a feel for the optimum speed. **DO NOT OVERSPEED.**



2. Roll

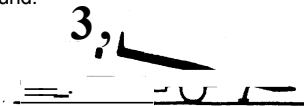
Raise the rollback handle and the deck will slide back. Roll the deck rearward approximately 12 inches to clear the mechanical hold downs at the front of the frame. A decal is provided on the rubrail to aid in determining the amount to roll. Align the decal pointer with the red control handle.

Q-#igzpt²....



3. Tilt

Raise the tilt control lever, raising the forward end of the deck until the rear bumper rests firmly on the ground.



Rev. _____

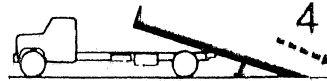
2.0

Date _____

4. Roll

Raise the roll handle and the deck will slide back. Continue this operation until the approach plate has contacted the ground.

Make sure that the rear bumper and the approach plate, are both in firm contact with the ground before loading. There should be an equal weight distribution between the rear bumper and the end of the deck.



5. Winch

Attach winch cable to object or vehicle to the "T" slots in the frame. If the vehicle does not have "T" slots attach "J" hooks to the vehicle's frame only. With the towed vehicle's transmission in neutral and brakes released, winch the vehicle onto the deck to its transport position. (See winch operating instructions.) Secure the load against movement in all directions. Set brakes if a vehicle.



CAUTION: Leave winch cable attached and taut. Anchor front of vehicle or load with safety chains to, keyslots provided in front of deck. Winch cable is not intended to tie down load.

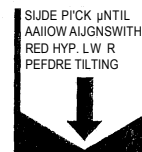
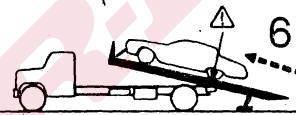
CAUTION: Always winch load onto deck, never drive a vehicle onto the tilted deck.

CAUTION: Make sure that the load is side-to-side centered.

6. Roll

Lower the roll control handle to roll the deck up the incline until the deck is in the proper position for tilting.

NOTE: The alignment decal on the rubrail must be even with the red control handle, or slightly behind that handle, when leveling the deck.



7. Tilt

Lower the front of the deck until the deck supports align with the wood strips on the frame.



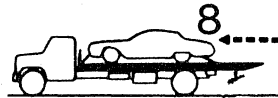
NOTE: The deck must not be fully forward when tilting or it will damage the hold downs.

Rev. _____

Date ____

8. Roll

Roll the deck forward until it is in the full forward position and under the hold downs.



9. Secure Load

Securely fasten the load to be transported with safety chains to keyslots provided in rear of deck. Set brakes (if a vehicle) and use wheel blocks and tie downs for safe transport.

NOTE: Use safety chain at front of load. Do not rely on winch cable alone.

10. Disconnect the power-take-off before engaging the transmission. Overspeeding of the pump will greatly shorten its life or ruin it completely.

C. Operating the Winch

1. Raise the winch control handle to power unreel the cable while a second person keeps the cable taut.

NOTE: If a one-man operation exists, disengage the spool and unreel the cable while keeping it taut. Re-engage the spool after unreeling and attaching the cable.

NOTE: The winch clutch allows rapid unspooling of the cable, from cable drum, for hooking onto the load. The clutch is operated by the shifter lever located on the side of the winch.

NOTE: TO DISENGAGE CLUTCH simply pull handle upward until trigger latches. With handle in the "OUT" position, cable may now be free-spoiled from drum.

NOTE: TO ENGAGE CLUTCH pull up on handle, squeeze trigger and release handle. The winch is now ready for pulling. DO NOT attempt to pull a load unless the handle is fully at the "IN" position.

NOTE: For units with the 8 ton deck option and a worm gear winch, the winch spool is engaged by pulling out on the vertical handle located on the driver's side of the vehicle. Push in on the vertical handle to disengage winch spool allowing the winch to free spool.

2. Lower the winch control handle to wind the cable and pull the load onto the deck.

CAUTION: Clutch must be totally engaged before starting winch.

CAUTION: Do not disengage clutch under load.

CAUTION: Also remember that cables can break, winches fail and hooks become disengaged. DO NOT WORK BELOW THE LOAD!

CAUTION: Replace cable when worn or damaged. Always wear gloves when handling cable. DO NOT USE CABLE CLAMPS.

CAUTION: Maintain a minimum of 5 turns of cable on the spool at all times. Also maintain a uniform wrap of the cable on the spool.

Rev. _____

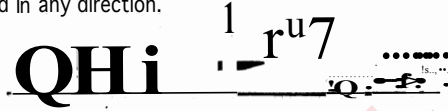
Date __ _

D. Tilting the Deck/Unloading

1. Position

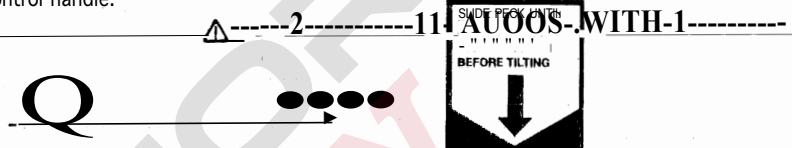
Park the truck with the rear of the deck approximately 12 feet from desired position of vehicle being unloaded.

- 1a. Set the parking brake.
- 1b. With the engine running, engage the PTO per instructions in the truck cab.
- 1c. Set the auxiliary throttle. After operating the unit several times one will establish a feel for the optimum speed. DO NOT OVERSPEED.
- 1d. Partially release bindings of the load but maintain restraint against movement of the load in any direction.



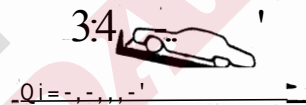
2. Roll

Raise the milback handle and the deck will slide back. Roll the deck rearward approximately 12 inches to clear the mechanical hold downs at the front of the frame. A decal is provided on the rubrail to aid in determining the amount to roll. Align the decal pointer with the red control handle.



3. Tilt

Raise the tilt control handle, raising the forward end of the deck until the rear bumper rests firmly on the ground.



4. Roll

Raise the roll handle and the deck will slide back. Continue this operation until the approach plate has contacted the ground.

Make sure that the rear bumper and the approach plate are both in firm contact with the ground before unloading. There should be an equal weight distribution between the rear bumper and the end of the deck.



5. Winch

Securely tighten the winch cable and finish unbinding the load. Winch off the load, (See winch operating Instructions.) Store the winch cable by fastening the hook to the deck and winching the cable taut.

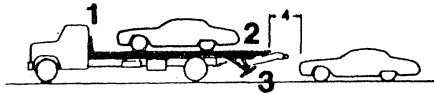
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• Rev. _____

Date ____

E. Operation of the Tow Bar (Option)

1. Position the truck approximately 4 feet ahead of the vehicle to be towed. Engage PTO and set truck's parking brake.
2. Raise the tow bar control handle to fully extend the tow bar.
3. Roll deck until red arrow is aligned with the red valve lever.



4. Tilt deck until tow bar is even with or below bumper of vehicle that is to be towed. Tow bar may now be positioned higher or lower by repositioning the pins above or below the support tube.
5. Attach chains with "J" hooks to appropriate frame members of vehicle to be towed and to tow bar straps. If tow bar straps are used it may be necessary to shorten them by wrapping them around the hitch bar and reconnecting chain.

4"

6. Level the main deck and check for adequate wheel clearance under towed vehicle. Check hitch bar location and be certain that it is even with or below bumper of towed vehicle. Retilt and readjust the chains and/or straps if necessary. Roll deck fully forward to engage hold downs.
7. Connect all electrical connections for lights of towed vehicle. Attach safety chains from the bumper to the tow bar.



NOTE: IRL option allows the tow bar to be raised or lowered independent of the deck for ease of operation.

CAUTION: Always tow with the tow bar fully extended.

CAUTION: Properly secure the vehicle being towed. Use separate safety chains from towed vehicle to truck sub-frame.

CAUTION: After unloading the vehicle being towed, retract the tow bar before tilting or rolling the deck.

CAUTION: When not in use, tow bar must be in upper position.

CAUTION: Always use safety pin while tow bar is being used. Premature wear will result to tow bar pivot and cylinder connections if safety pin is not used during towing of vehicle.

CAUTION: The tow bar option is designed for the transport of a second vehicle only. Under no circumstances should a single vehicle recovery be transported on the tow bar as it may cause unsafe steering and braking conditions. Single vehicle recovery should be on the deck only.

8. Disengage the PTO.

Rev. _____

Date _____

F. Operation of the Wheel Lift Tow Bar (Option)

The wheel lift tow bar allows a second vehicle to be towed damage free on its own suspension by utilizing a wheel grid similar to the Jerr-Dan HPL wheel lift. It may be purchased with or without the IRL (Independent Raise, Lower) feature. The wheel lift cross bar may also be used as a conventional tow bar for badly damaged or heavier vehicles.

CAUTION: Because of the additional boom extension and load point of the towed vehicle, the wheel lift tow bar places more load on the rear axle and unloads the front axle more than a conventional tow bar. Overloading wheel lift tow bar may result in unsafe steering and braking conditions and may damage truck frame. Also, never use wheel lift without a vehicle on the deck. Single vehicle recovery should utilize the deck only.

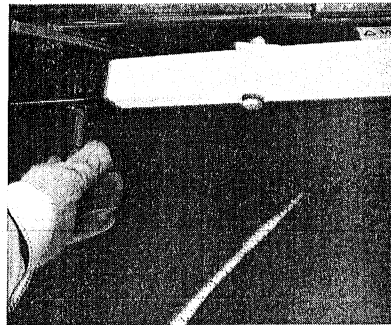


PHOTO #1

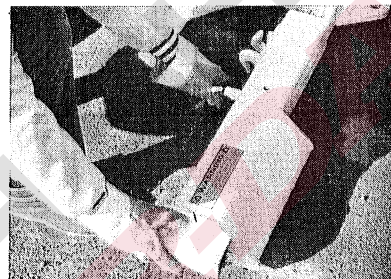


PHOTO #2

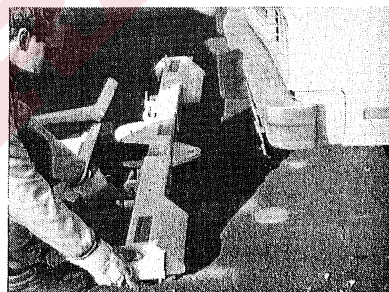


PHOTO #3

1. Position truck approximately 4 feet ahead of the vehicle to be towed.
2. Engage PTO and set truck parking brake.
3. Lower tow bar head to ground level using IRL feature or by action of deck as described in Section E. Operation of Tow Bar.
4. Unlock and remove the "L" arms from their holder by pulling and turning the "Cam" handle to the open position. (PHOTO #1)
5. Confirm the truck's position in relation to the vehicle to be towed. Three to four feet is recommended. Reposition the carrier if necessary. Be sure the towed vehicle is not in gear or park. Keep the brake set.
6. To set the grid width, loosen the "T" handle on the front of the grid arm and pull the grids out. Be sure both grids are an equal distance from the center of the boom and wide enough to allow the "L" arms to slide into their channels. Tighten the "T" handles to secure the grids. (PHOTO #2)
7. Lower the lift arm to about 1W' from the ground and swing the cross bar parallel to the tires. (PHOTO #3)
8. Extend the lift arm under the vehicle being sure that all undercarriage parts are cleared and that the front portion of the grid is in contact with both tires. Lower the grid fully to the ground. There is no reason for the operator to get under the vehicle.

Rev. _____

Date ____

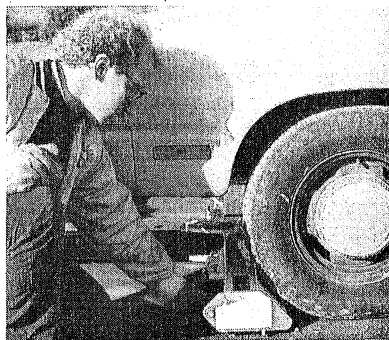


PHOTO #4

9. Visually inspect the tire to grid contact before proceeding. (PHOTO #4)

10. Retract the "Cam" handle, locking pin, on the grid by rotating it a half turn. It should remain in the open position. (PHOTO #5)

11. Take the "L" arms and slide them into the channels on the side of the grid plate. Insure that they are resting snugly against the tires.

With the "L" arms in close contact with the tires, reset the retaining pin by turning the "Cam" handle back to the original position. Be sure that the pin seats in one of the holes. The tires are now confined front and back. (PHOTO #6)



PHOTO #5

12. Before making the actual lift, check to be sure the towed vehicle's parking brakes aren't set, the transmission is in neutral, and the wheels are straight.

NOTE: If vehicle to be towed is on a slope, do not release the brake until the tiedown straps are installed. Observe the wheels in the grid for any slippage.

13. It is recommended that the steering wheel be secured by a steering wheel strap for front/rear end tows.

14. Lift the vehicle high enough to allow tires to clear ground.

15. Remove the tie down straps from tool boxes and attach the tie down straps. (See the following section on tie down straps.)



PHOTO #6

16. With the straps in place, the vehicle out of gear and the brakes released, you can move the vehicle safely up, down, in or out.

17. Raise the 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.

C)

18. Power retract the grid boom until the towed vehicle is about 3 to 4 feet from the back of the truck. Leave enough room to maneuver around corners without corner binding or causing contact between the two vehicles.

Be sure that the boom is extended at least 4" to insure unobstructed crossbar pivoting.

Rev. _____

Date _____

19. Be sure to maintain sufficient clearances with the bottom of the towed vehicle.
20. Attach the separate safety chains and magnetic towing lights.
21. Install safety pin to insure mechanism does not drift down during transit.

CAUTION: Always use safety pin while tow bar is being used. Premature wear will result to tow bar pivot and cylinder connections. If safety pin is not used during towing of vehicle.

TIE DOWN STRAPS

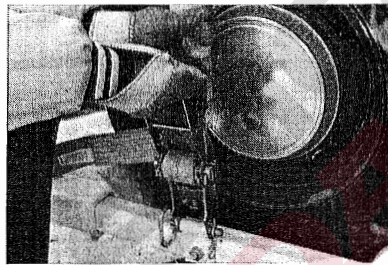
The wheel lift tow bar is supplied with a set of high strength polyester web tie down straps. They are to be used to secure wheels of the towed vehicle to the wheel lift grid, **NEVER TOW A VEHICLE WITHOUT THE TIE DOWN STRAPS INSTALLED.**

•The tie down strap assembly is comprised of 3 basic components:

1. The strap
2. The ratchet spool mechanism
3. The ratchet retaining pin and cotter key

The following steps should be followed to properly install the tie down straps:

USING THE RATCHET SPOOL MECHANISM

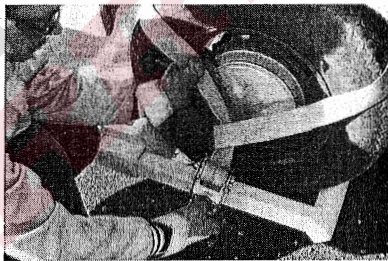


PHOTO#?

1. First the spool must be set into "free spool." This is done by pulling the lock bar out and swinging the handle upward until it rests in the free spool notch and then simply pulling out the amount of strap required to fit over the tire. (Photo #7)

2. Now pull on the lock bar and move it downward until it engages the ratchet teeth on the take up spool. (PHOTO#B)

By pushing and pulling the handle up and down, the strap will be wound onto the spool.



PHOTO#B

3. To release the ratchet, simply pull on the locking bar, disengaging the teeth and raise the handle to the "free spool" position.

INSTALLING THE TIE DOWN STRAP

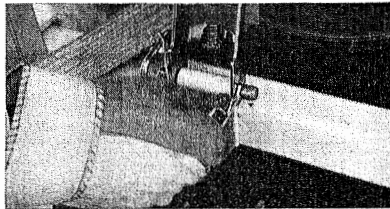


PHOTO #9

1. With the vehicle lifted just barely off the ground, attach the strap to the wheel grid as shown in the photo. Be sure the ratchet pin is secured with the hairpin cotter pin. (PHOTO #9)

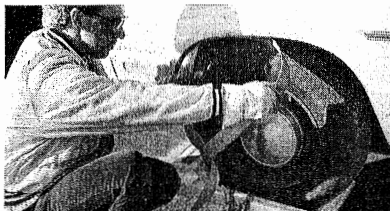


PHOTO #10

2. Release the ratchet spool and pull the webbed strap out and form a loop which will wrap around the tire. Be sure the loop is over approximately 1/2 of the tire. (PHOTO #10)

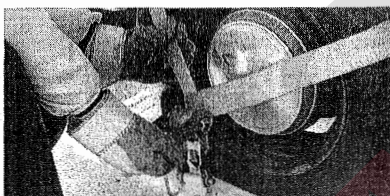


PHOTO #11

3. Take up the slack in the strap by ratcheting the takeup spool arm. Continue until the tires show some compression. (PHOTO #11)

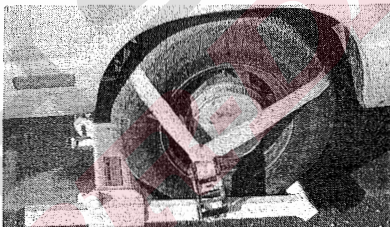


PHOTO #12

4. Raise the wheel grid to the towing position. RE-TIGHTEN THE RATCHET PERIODICALLY AS TIRE SETTLES IN GRID FROM TOWING. (PHOTO #12)

G. Operation of Rear Dock Stabilizer (Option)

1. With tip of deck adjacent to loading dock, engage PTO and set truck parking brake.
2. Using valve control handle lower stabilizer until it rests firmly on the ground.
3. Keep rear dock stabilizer in the full up position while traveling and loading the deck in the conventional manner.

MAINTENANCE AND LUBRICATION

Jerr-Dan rollback truck decks are designed for years of service with little maintenance. This small amount of maintenance, however, is *very* important for durability and for safe operation of the deck.

Maintenance is an owner/user responsibility as neither the manufacturer nor the distributor can normally control this function.

Use only safe practices when maintaining this equipment. Never get under a tilted deck unless it is adequately supported (don't rely on the hydraulic system). Always shut off the engine before reaching into pinch areas as when checking the hydraulic oil level or greasing under the deck. Maintain a clean shop for safety. Clean up spilled oil immediately.

Inspect the vehicle and deck 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.

Sliding surfaces are to be cleaned and coated with a heavy grease periodically. Cleaning every 6 months 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 2 months, again depending upon usage. See Lube Chart.

Check the hydraulic oil level bimonthly or after any leakage. Use 5W20 Dual Range hydraulic oil. (Automatic transmission fluid may be used in the hydraulic system if necessary.)

The proper oil level is best checked by rolling the deck back enough to gain access to the fill plug (unless the chassis configuration caused the oil tank to be mounted abnormally far to the rear). The oil tank should be about 2/3 full with the deck so positioned (shut off the engine after moving the deck). This will result in a 3/4 full tank with the cylinders fully retracted (deck fully forward). (Proper oil level is achieved when the hydraulic oil just covers the bottom of the screen in the filter neck.)

The hydraulic filter located on the return side of the hydraulic tank comes equipped with a restriction indicator gauge. This gauge shows the operator the condition of the filter element. 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 gauge 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 emory 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.

LUBRICATION CHART
J. SERR-DAN®
 WRANGLER
 TRANSPORTER

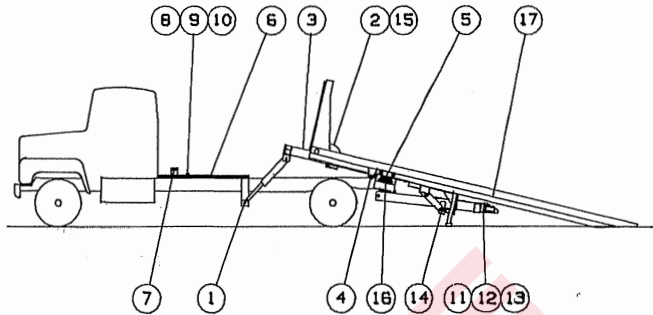


CHART COVERS SERR-DAN DECK SYSTEM ONLY

1 INDICATES DUAL RANGE HYD. FLUID 5 W 20
 AUTO TRANS FLUID MAY BE SUBSTITUTED IF NECESSARY

11 INDICATES LITHIUM BASE GREASE (NO GRAPHITE BASE)

INTERVAL HOURS	REF. NO.	IDENTIFICATION	SERVICE	LUBRICANT	NO. OF POINTS
50 OR MONTHLY	15 12	CABLE ADJ HANDLE	OIL OIL	ENGINE OIL ENGINE OIL	1 2
100 OR BI- MONTHLY	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16	WINDY CYLINDER WINDY WINDY BLOCKS SUB AME PIVOT VALVE SPOOLS WOOD STRIPS BODY GUIDE HYO RESERVOIR PLUNGER TDWBAR PIVOT IRL CYLINDER CONTROL HANDLE	LUBE LUBE COAT LUBE CLEAN & OIL COAT CHECK LUBE LUBE LUBE LUBE	MPG MPG MPG MPG ENGINE OIL MPG MPG MPG MPG MPG MPG MPG	1 2 12 2 3 • 5 2 2 1 4 1 4 6 - 10
250 OR SEMI- ANNUALLY	2 9 10 17	WINDY BOX HYO BREATHER HYO FILTER DECK STRINGER	CHECK CLEAN & OIL CHANGE COAT	GLS 11-40 ENGINE OIL GLS 11-40 ENGINE OIL	1 1 1 2
1000 OPERATING HOURS	2 a	WINDY BOX HYO RESERVOIR	DRAIN-FILL DRAIN-FILL	GLS 11-40 ENGINE OIL	1 1

TROUBLESHOOTING

PROBLEMS ENCOUNTERED WHILE UNIT IS IN TRANSIT

PROBLEM	CAUSE	SOLUTION
Looseness and rattling of deck	a. Loose Hold Down Blocks b. Rollback Cylinder Support not adjusted properly	a. Snug blocks against flange of "I" beam and tighten, b. snug rubber baiting against cylinder barrel and tighten,

WINCH FUNCTIONING IMPROPERLY

Winch screeches during operation	a. Insufficient lubrication	a. Lubricate per lube chart
Winch will not pull load on deck	a. Free spooling device disengaged b. Insufficient Relief Valve pressure c. Sheared keys or broken chain at coupling	a. Engage b. Reset to correct setting using gauge c. Inspect 11rd replace

Cable build-up on one side of spool or other	a. Off centered load	a. Recenter load If possible
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VALVE BANK FUNCTIONING IMPROPERLY

Valve bypasses oil or squeals during all operations	a. Insufficient relief valve setting b. Broken relief spring	a. Reset to correct setting using gauge b. Inspect and replace
Valve handles stick, tight or frozen	a. Insufficient lubrication b. Broken centering spring or clogged with dirt at bottom of spool	a. lubricate per lube chart b. Inspect, clean or replace
Valve leaks at top or bottom of spools	a. Defective seals	a. Replace

CYLINDERS FUNCTIONING IMPROPERLY

Cylinders leak oil	a. Defective seals or rod	a. Inspect and replace
Erratic operation of cylinders	a. Air In hydraulic system b. Defective pump (Pulsating)	a. Cycle hydraulic system 10, 15 times to remove air b. Replace If necessary

HYDRAULIC SYSTEM FUNCTIONING IMPROPERLY

Slow Operation	a. Low engine RPM b. Low oil level c. Blocked, restricted or collapsed hoses d. Dirty hydraulic oil e. Hydraulic pump worn f. Relief valve in valve bank bypassing	a. Speed up engine b. Reservoir should be full with cylinders retracted c. Inspect, remove blockage or reposition hoses affected d. Drain, flush and refill with clean oil e. Rebuild or replace f. 1) Reset to correct pressure using gauge 2) Check if relief spring is broken, Replace if necessary
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Rev. _____

Date _____

TROUBLESHOOTING

P.T.O. FUNCTIONING IMPROPERLY

PROBLEM	CAUSE	SOLUTION
Cable tight or frozen	a. Cable kinked or bent b. Cable and P.T.O. connection not adjusted properly c. Mounting bracket nuts are over tightened at P.T.O. knob	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	a. Shims must be removed (Consult P.T.O. manual)
Howling noise in P.T.O.	a. P.T.O. backlash too tight	a. Shims must be added (Consult P.T.O. manual)
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 P.T.O. connection not adjusted properly b. Defective shifter cover plate	a. Inspect and adjust b. Inspect and replace

HYDRAULIC PUMP FUNCTIONING IMPROPERLY

Cavitation: pump usually noisy	a. Low oil supply b. Heavy oil c. Dirty oil filter d. Restriction in suction line	a. Fill to proper level b. Fill with proper oil c. Clean or replace d. Remove
Pump takes too long to respond or fails to respond	a. Low oil supply b. Insufficient relief valve pressure c. Pump worn or damaged	a. Fill to proper level b. Reset to correct setting using gauge c. Repair or replace
Oil Heating up	a. Foreign material lodged in relief valve b. Using too light oil c. Dirty oil d. Oil level too low e. Insufficient relief valve pressure f. Relief valve pressure too high g. Pump worn (slippage)	a. Inspect and remove b. Drain and refill with clean oil c. Drain, flush, and refill with clean oil d. Fill to proper level e. Set to correct setting using gauge f. Same as "e" g. Repair or replace
Oil foaming	a. Air leaking into suction line from tank to pump b. Wrong kind of oil c. Oil level too low	a. Tighten all connections b. Drain and refill with non-foaming type hydraulic oil c. Fill 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



PARTS

To order repair parts, call or write Jerr-Dan Corp.
Parts Dept., 1080 Hykes Road, Greencastle, PA 17225,
Phone (717) 597-7111.

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

SOUTH SHORE
JERR-DAN

PARTS LIST- FINAL ASSEMBLY BASIC UNIT

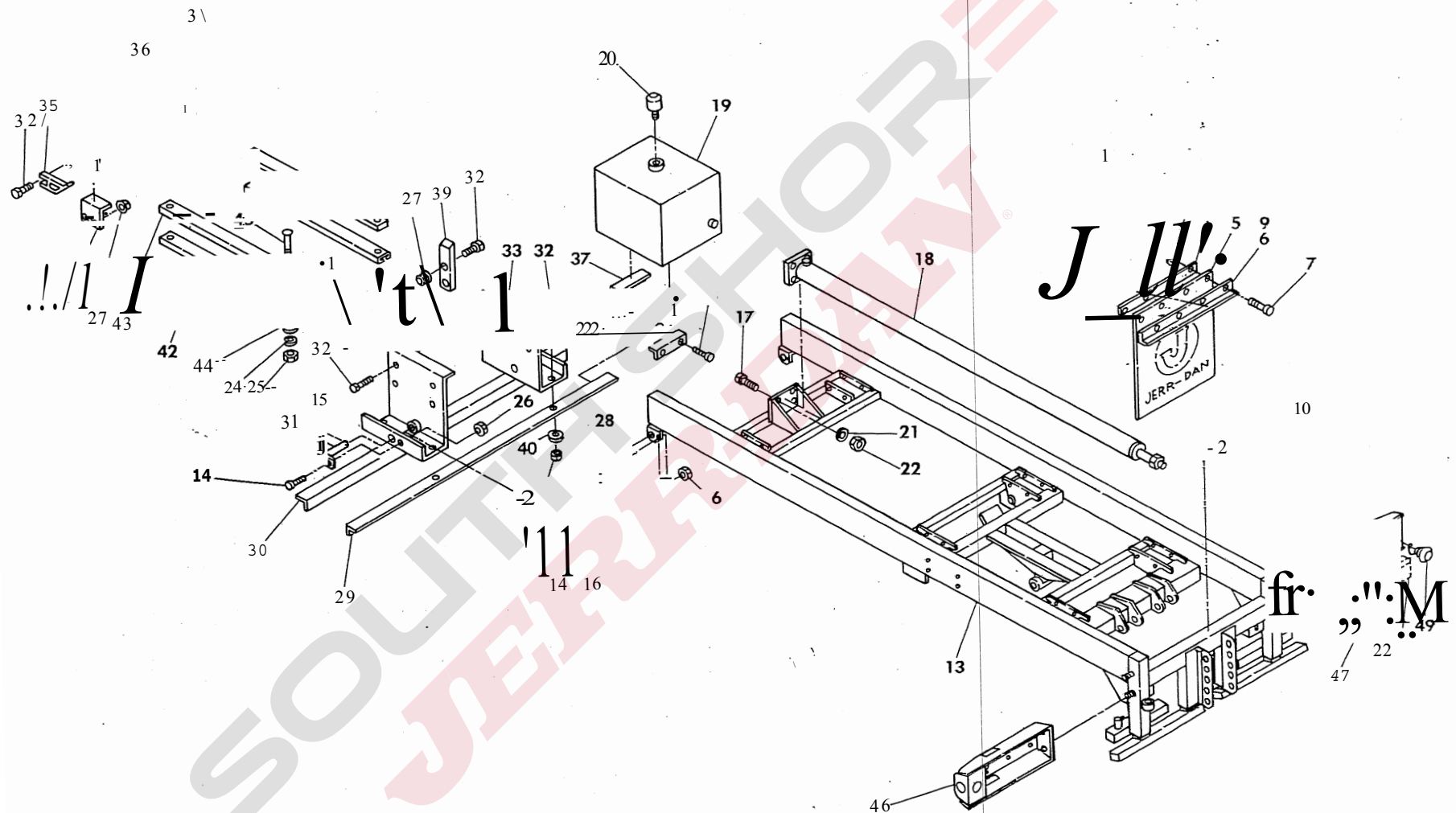
Ref. No.	Part No.	Description	Qty.
1	M-525-000085	Brace	2
2	7-660-150000	Hex Nut	8
3	7-950-150000	Lockwasher	8
4	B4-706-000112	Back-up Strip	2
5	D7-638-000011	Mud Flap	2
6	B4-017-000064	Right Mud Flap Angle	1
7	7-111-150813	Truss Head Screw	8
8	7-950-150161	Flatwasher	8
9'	B4-017-000065	Left Mud Flap Angle	1
10	M-533-1 a00080	Light Bar Angle	1
11	A7-590-000007	Light Bar	1
12	7-790-141056	Self Tapping Screw	2
13	D3-533-700020	Subframe (STD)	1
14	7-111-160850	Hex Head Bolt	4
15	7-690-144010	Cotter Pin	4
16	C1-700-100024	Tilt Cylinder	2
17	7-115-181450	Hex Head Bolt	4
18	C3-320-000015 (8' Stroke)	Rollback Cylinder	1
	C3-320-000026 (9' Stroke)	Rollback Cylinder	1
	C3-320-000035 (10' Stroke)	Rollback Cylinder	1
19	C3-750-000002	Oil Reservoir	1
20	B7-183-000002	Breather	1
21	7-950-180000	Lockwasher	8
22	7-660-180000	Hex Nut	8
23	7-111-181050	Hex Head Bolt	4
24	7-950-160000	Lockwasher	4
25	7-660-160000	Hex Nut	4
26	7-660-162300	Flanged Locknut	4
27	7-660-182333	Flanged Locknut	4
28	3-691-000070	Upper Tilt Cylinder Pin	2
29	84-017-000235	R.H. Saddle Angle	1
30	B4-017-000234	L.H. Saddle Angle	1
31	3-691-000069	Lower Tilt Cylinder Pin	1
32	7-105-181450	Hex Head Bolt	26
33	C3-178-000109	Saddle	2
34	B4-634-000401	Mounting Angle	2
35	87-258-000003	Hold-Down Block, L.H.	1
36	C2-533-100045	Hold-Down Base	1
37	B4-017-000063	Mounting Angle	2
38'	87-258-000002	Hold-Down Block, R.H.	1
39	A2-526-000175	Body Stay, R.H.	1
40	7-950-180153	Harden Washer	4
41	A2-526-000176	Body Stay, L.H.	1
42	4-533-1-00120	C-Channel (20' Deck)	2
	4-533-1-00137	C-Channel (22' Deck)	2
43	4-679-000021	Wood Block (20' Deck)	2
	4-679-000022	Wood Block (22' Deck)	2
44	7-950-160161	Flatwasher	4
45	7-111-163264	Carriage Bolt	4
46	D4-811-000003	Light Box	2
47	M-706-000243	Plate	2
48		Stop, Tail, Turn Light	2
49	7-590-000009	Red Light	2

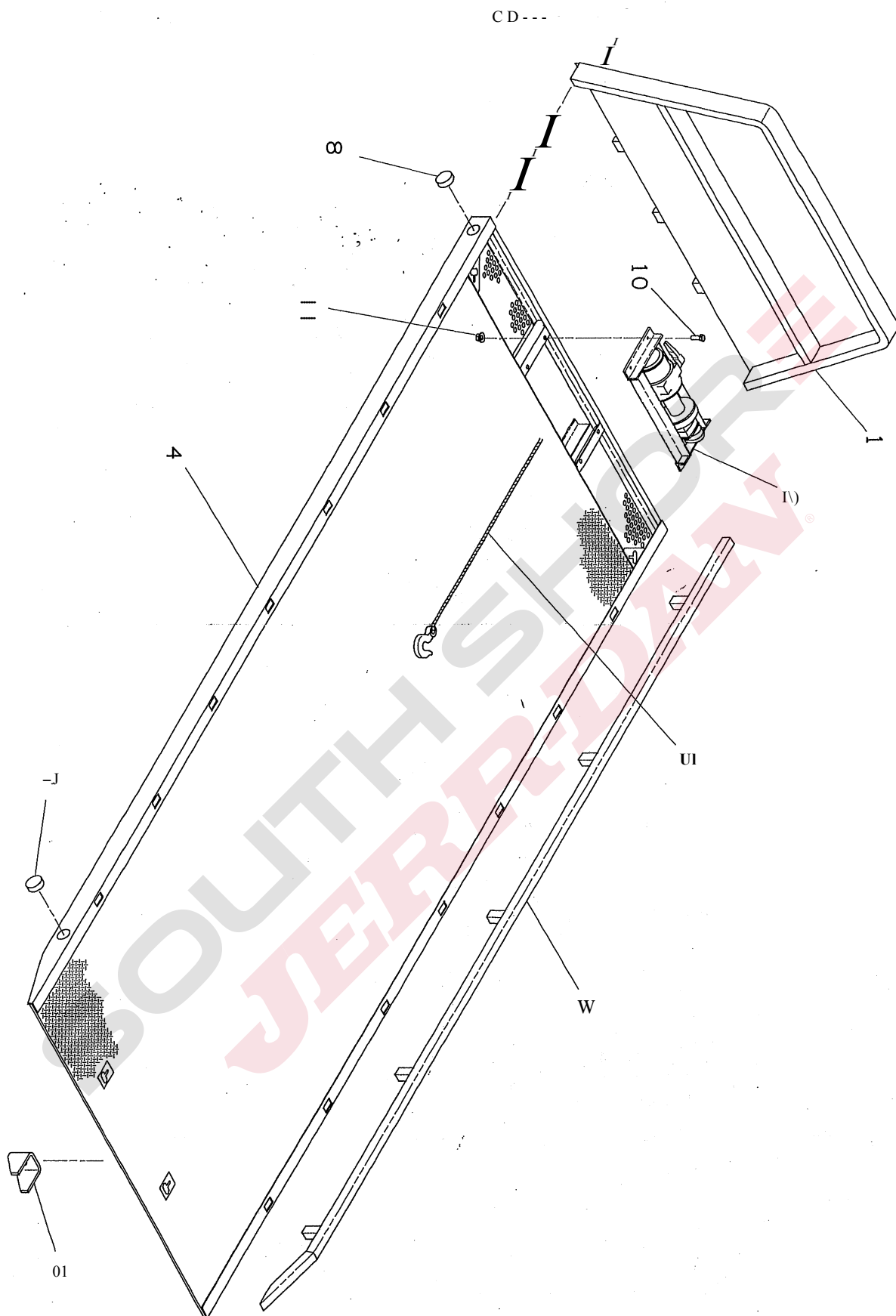
Rev. _____

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Date _____

FINAL ASSEMBLY BASIC UNIT





PARTS LIST- DECK

Ref. No.	Part No.	Description	Qty.
1	D3-241-000013	Cab Protector	1
2	07-970-000016	Winch Assembly	1
3	2-534-0-00076	Raised Rails (20' Deck)*	1pr.
	2-534-0-00077	Raised Rails (22' Deck)*	1pr.
4	**	Deck	
5	A7-248-000001	Winch Cable	1
6	B4-178-000120	Rod Mounting Bracket	1
7	7-590-000009	Red Light	2
8	7-590-000010	Amber Light	2
9	5-531-000023	Amber Reflector	2
10	7-115-181450	Hex Cap Screw	4
11	7-660-182301	Flanged Locknut	4

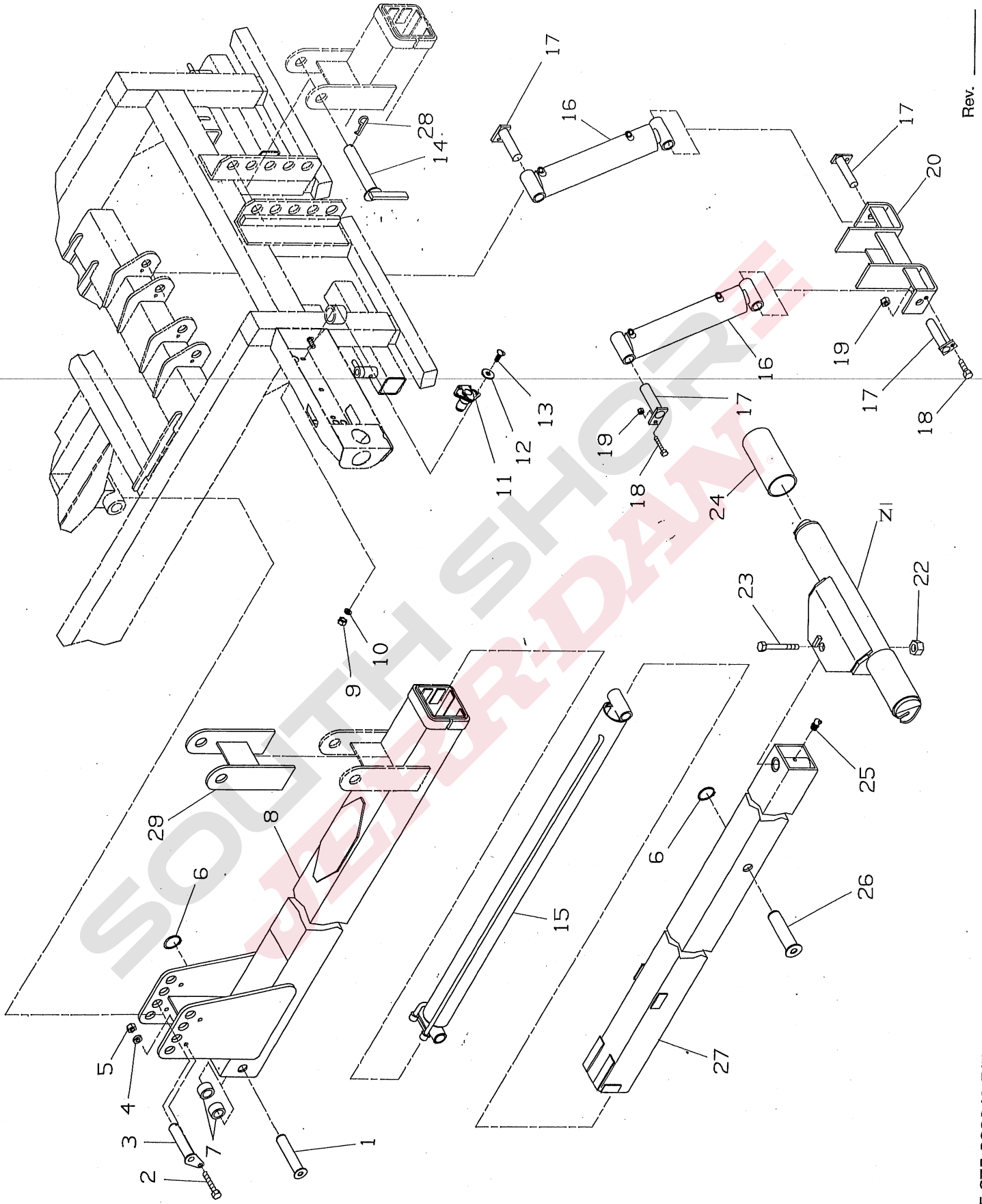
* Not supplied on Transporter Series.

u See body serial number plate or sales order for proper identification.

PARTS LIST - HYDRAULIC TOWBAR WITH AND WITHOUT IRL

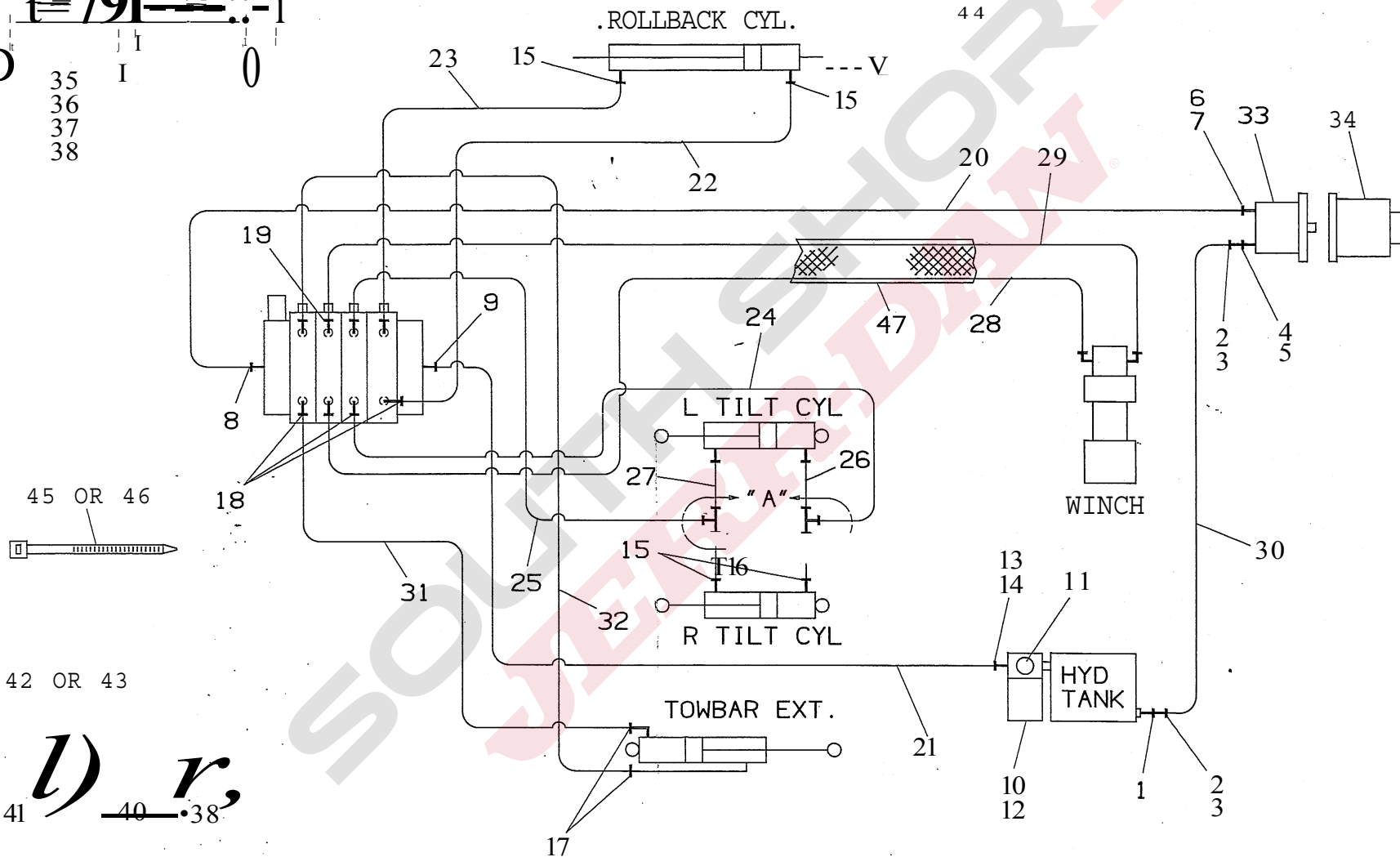
Ref. No.	Part No.	Description	Qty.
1	A3-691-000042	Cylinder Pin	1
2	7-118-151250	Hex Head Cap Screw	1
3	3-691-000074	Tow Bar Attaching Pin	1
4	7-950-150161	Flatwasher	1
5	7-660-152600	Locknut	1
6	A7-754-000006	Retaining Ring	2
7	M-209-000020	Spacer	2
8	03-170-000029	Outer Tube	1
		(Low Profile Chassis)	
9	03-170-000023	Outer Tube	1
10	7-660-140000	Hex Nut	2
11	7-950-140000	Lockwasher	2
12	A7-291-000003	Receptacle	1
13	7-950-140161	Flatwasher	2
14	7-111-140613	Truss Head Screw	2
15	A3-691-000067	Pin	1
16	C3-320-000020	Tow Bar Cylinder	1
	C3-320-000036	Cylinder Assembly	2
		(Low Profile Chassis)	
17	C3-320-000037	Cylinder Assembly	2
18	3-691-000073	Cylinder Pin	4
19	7-115-160850	Hex Head Cap Screw	4
20	7-660-162301	Locknut	4
21	C3-178-000015	Bracket	1
22	C3-556-000015	Tow Hitch	1
23	7-660-261638	Locknut	1
24	A3-691-000016	Hitch Pin	1
25	A7-912-000011	Rubber Tube	2
26	7-440-000000	Grease Fitting	1
27	AS-69-1-000011	Cylinder Cross Pin	1
28	CS-170-000015	Inner Tube	1
29	A7-691-000001	Hair Pin	1
	A3-606-000013	Lug Weldment	1
		(Low Profile Chassis)	
	A3-606-000012	Lug Weldment	1

5-375-000049 TOW BAR WITH AND WITHOUT IRL



HYDRAULIC COMPONENTS

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PARTS LIST - HYDRAULIC COMPONENTS

Ref. No,	Part No,	Description	Qty,
1	7-444-101090	Street Elbow	1
2	A7-443-000013	Nipple	2
3	A7-274-000002	Hose Clamp	2
4	7-444-081040	Reducer	1
5	7-650-080120	Nipple	1
5	7-444-080450	Reducer	1
7	7-445-080829	45° Elbow	1
8	7-445-081243	Str. Adapter	1
9	7-445-121243	Str. Adapter	1
10	A7-430-000003	Filter Assembly	1
11	A7-470-000002	Gauge	1
12	A7-431-000001	Filter Element	1
13	7-445-121220	90° Elbow	1
14	7-444-080654	Reducer	1
15	7-445-060620	90° Elbow	6
16	7-445-060637	Tee	2
17	7-445-060643	Str. Adapter	2
18	7-445-061043	Str. Adapter	6
19	7-445-081043	Str. Adapter	4
20	As Required	Pressure Hose	1
21	4-567-162156	Return Hose	1
22	4-567-122096	Roll-Base Hose	1
23	4-567-123060	Roll-Rod Hose	1
24	4-567-122144	Tilt Supply	1
25	4-567-123144	Tilt Supply	1
26	4-567-120038	Tilt Base	2
27	4-567-120040	Tilt Rod	2
28	As Required	Winch Hose	1
29	As Required	Winch Hose	1
30	A4-570-000014	Suction Hose	1
31	4-567-122054	Tow Bar Base Hose	1
32	4-567-123054	Tow Bar Rod Hose	1
33	A7-724-000002	Hyd. Pump	1
34	As Required	P.T.O.	1
35	B4-274-000001	Hose Clamp	1
36	7-111-161050	Hex Head Bolt	1
37	7-660-160000	Hex Nut	1
38	7-950-160000	Lockwasher	1
39	7-660-140000	Hex Nut	15
40	7-950-140000	Lockwasher	15
41	7-111-140850	Hex Head Bolt	15
42	A7-274-000008	Small Loop Clamp	10
43	A7-274-000003	Large Loop Clamp	5
44	A7-274-000011	Hose Clamp	3
45	A7-894-000003	Long Tie Strap	15
46	A7-894-000004	Short Tie Strap	15
47	A4-570-000022	Fire Hose	1
48	B4-525-000218	Hose Clamp (Not Shown)	5

Rev, __ _

4.8

Date __ _

PARTS LIST - HYDRAULIC COMPONENTS WITH IRL TOW BAR

Ref. No.	Part No.	Description	Qty.
1	M-570-000014	Suction Hose	1
2	As Required	Pressure Hose	1
3	As Required	Winch Hose	1
4	As Required	Winch Hose	1
5	4-567-122144	Tilt Supply Hose	1
6	4-567-123144	Tilt Supply Hose	1
7	4-567-1 20040	Tilt Rod Hose	2
8	4-567-120038	Tilt Base Hose	2
9	4-567-122054	Tow Bar Base Hose	1
10	4-567-123054	Tow Bar Rod Hose	1
11	4-567-122096	Roll Rod Hose	1
12	4-567-162156	Return Hose	1
13	4-567-123060	Roll Base Hose	1
14	4-567-122034	Tow Bar Lift Hose	4
15	4-567-122054	Tow Bar Lift Supply Hose	1
16	4-567-123054	Tow Bar Lift Supply Hose	1
17	7-444-101090	Street Elbow	1
18	A7-274-000002	Hose Clamp	2
19	A7-443-000013	Nipple	2
20	7-444-081 040	Reducer	1
21	7-650-080120	Nipple	1
22	7-444-080450	Reducer	1
23	7-445-080829	45° Elbow	1
24	7-445-081243	Str Adapter	1
25	7-445-121243	Str Adapter	1
26	7-444-080654	Reducer	1
27	7-445-121220	90° Elbow	1
28	A7-430-000003	Filter Assembly	1
29	A7-470-000002	Gauge	1
30	7-445-061 043	Str Adapter	8
31	7-445-081 043	Str Adapter	2
32	7-445-060620	90° Elbow	6
33	7-445-060637	Tee	4
34	7-445-060643	Str Adapter	2
35	7-445-060645	90° Elbow	5
36	7-445-060672	90° Elbow	2
37	A7-274-000003	Hose Loop	7
38	A7-274-000008	Hose Clamp	10
39	7-111-140850	Bolt	15
40	7-660-140000	Nut	15
41	7-950-140000	Lockwasher	15
42	M-570-000022	Fire Hose	1
43	A7-894-000003	Tie Strap	15
44	A7-894-000004	Tie Strap	15
45	B4-525-000218	Hose Clamp (Not Shown)	5
46	7-111-140850	Hex Head Bolt	2
47	7-660-140000	Nut	2
48	7-950-140000	Lockwasher	2
49	7-111-140950	Hex Head Bolt (Not Shown)	2
50	A4-706-000549	Plate (Not Shown)	1
51	A7-274-000011	Hose Clamp	3
52	A7-431-000001	Filter Element	1

Rev. _____

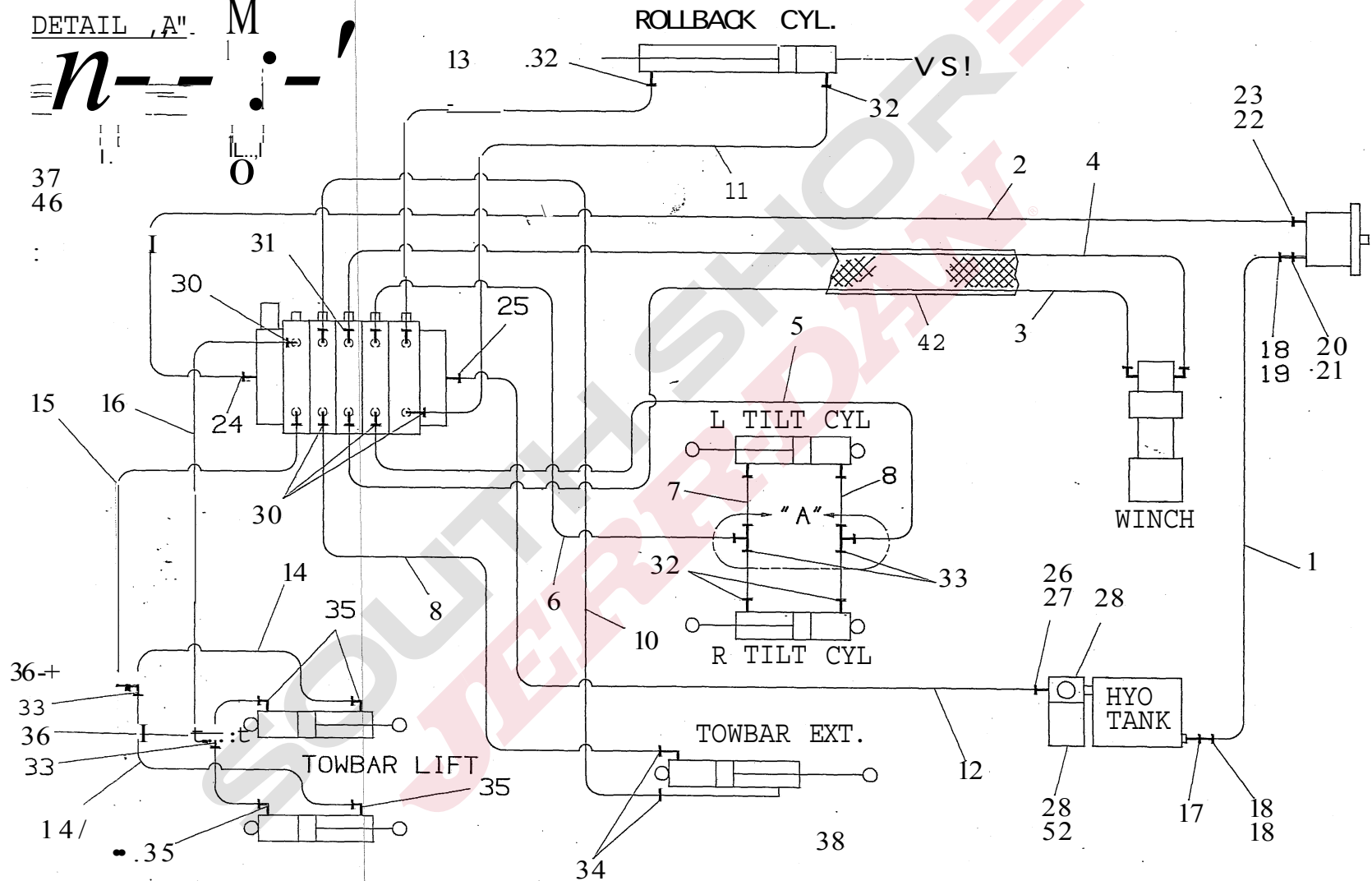
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HYDRAULIC COMPONENTS WITH IRL TOW BAR

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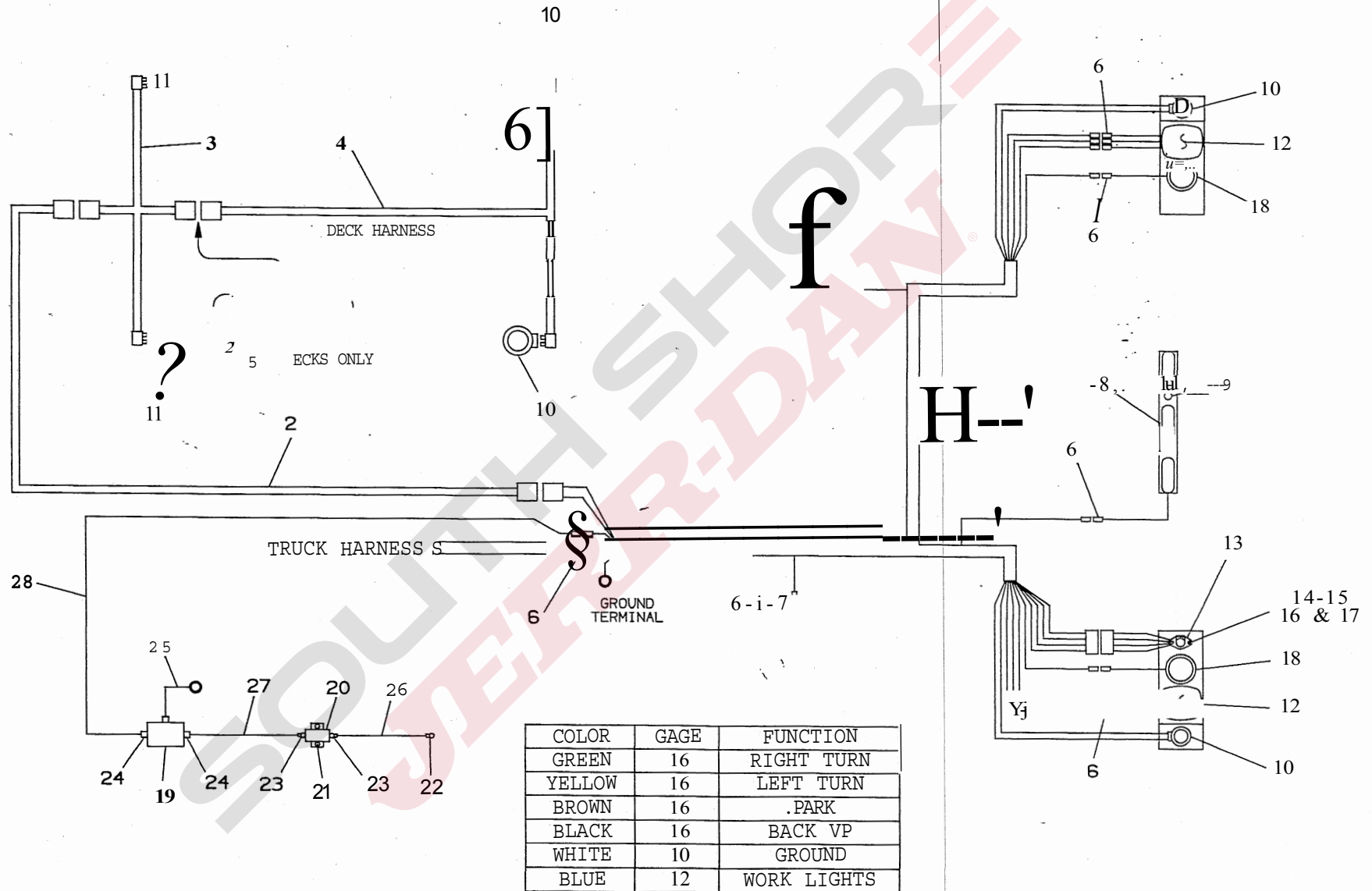
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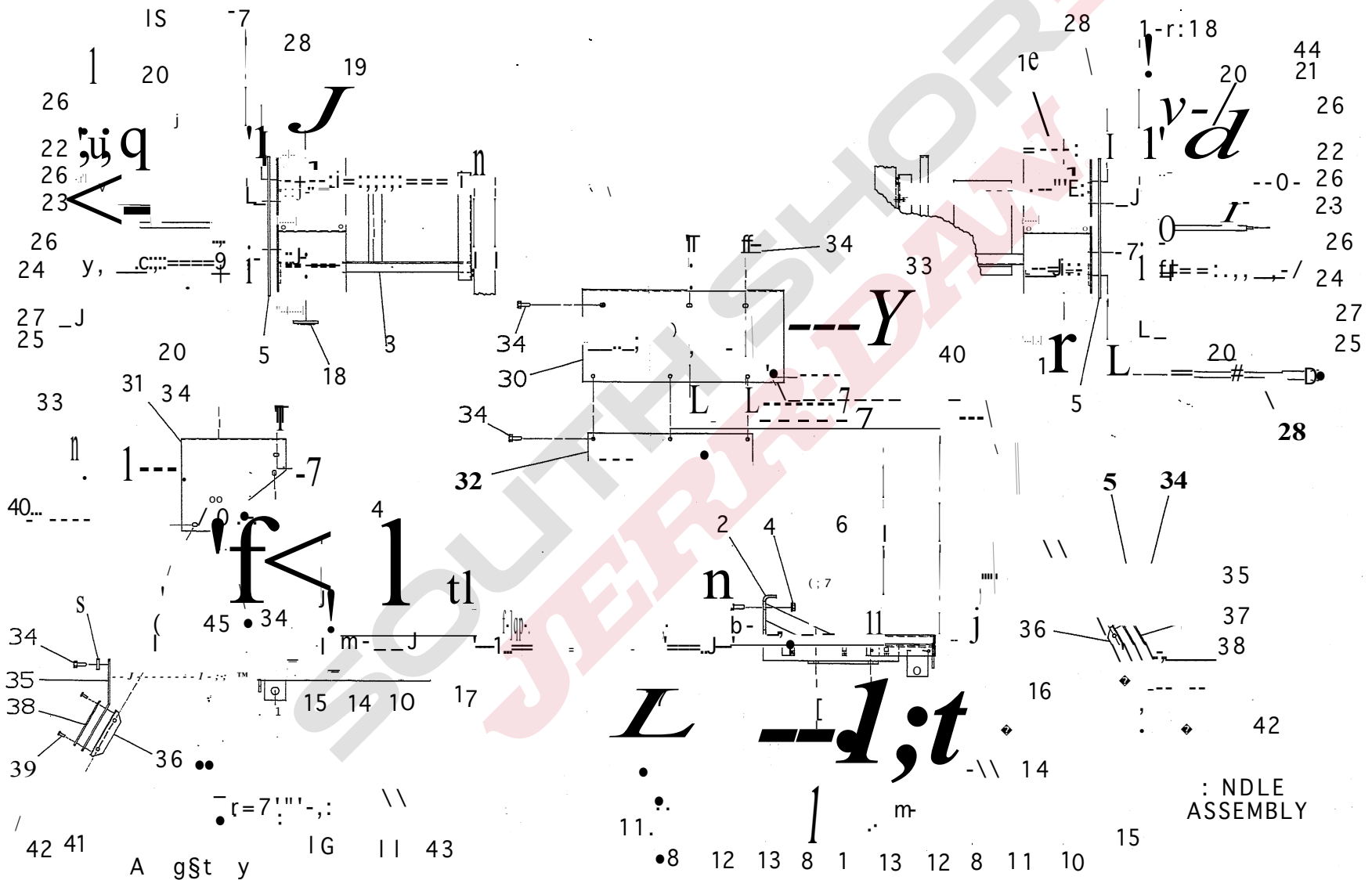
PARTS LIST - LIGHTS AND WIRING

Ref. No.	Part No.	Description	Qty.
1	D7-552-000020	Wiring Harness-Subframe	1
2	87-552-000024	Wiring Harness-Sub to Deck	1
3	87-552-000021	Wiring Harness-Front Deck	1
4	87-552-000022	Wiring Harness-Rear Deck	1
5	87-552-000023	Wiring Harness-Extension (For 22' Decks Only)	1
6.	7-345-001703	Terminal Pin	16
7	A7-590-000012	Light	2
8	A7-590-000007	Bar Lamp	1
9	7-790-141056	Self Tapping Screw	2
10	7-590-000009	Red Light	4
11	7-590-000010	Amber Light	2
12		Stop-Tail-Turn Light	2
13	A7-291-000003	Female Receptacle	1
14	7-111-140613	Truss Head Screw	2
15	7-660-140000	Nut	2
16	7-950-140000	Lockwasher	2
17	7-950-140161	Flatwasher	2
18	A7-590-000011	Work Lights	2
19	A7-870-000003	Auxiliary Switch	1
20	A7-457-000004	Circuit Breaker	1
21	7-790-100856	Screw	2
22	7-345-231901	Terminal	1
23	7-345-211901	Terminal	2
24	7-345-001909	Female Tab	2
25	A3-978-000006	Wire Assembly	1
26.	Length as Req'd.	10 Ga. Wire	1
27	Length as Req'd.	10 Ga. Wire	1
28	Length as Req'd.	10 Ga. Wire	1

LIGHTS AND WIRING



DUAL CONTROLS



PARTS LIST - DUAL CONTROLS (5 BANK VALVE SHOWN)

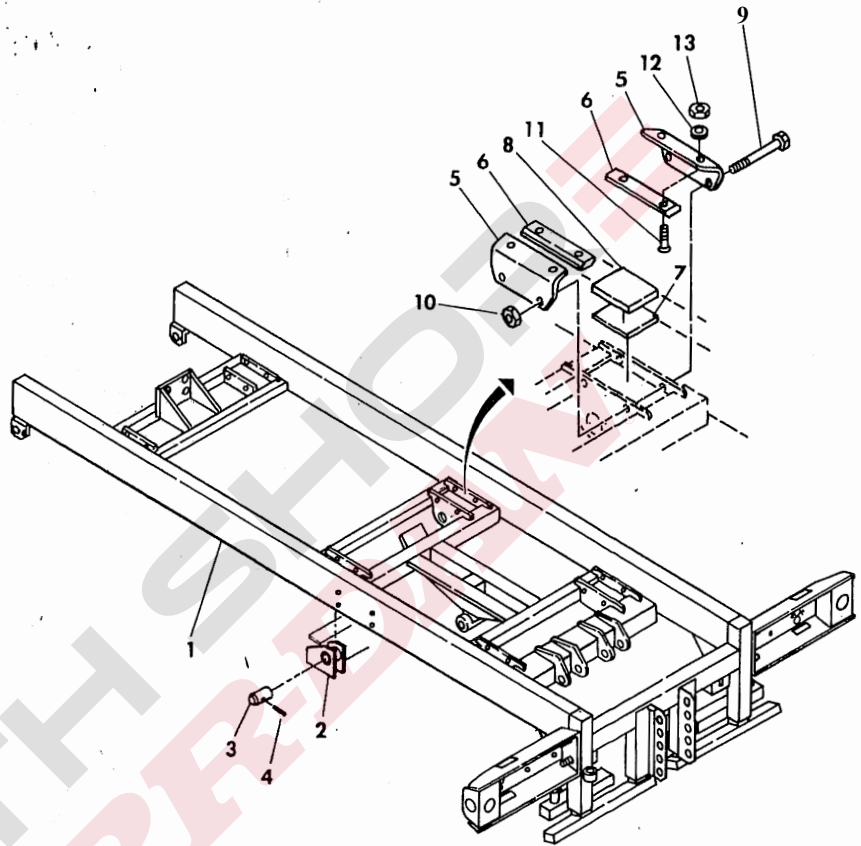
Ref. No.	Part No.	Description	Qty.
1	A4-935-000014	Control Valve	1
2	D3-177-000022	Support Weldment	1
3	D3-177-000021	Support Weldment	1
4	7-660-182301	Hex Nut	4
5	A4-706-000645	Plate	2
6	7-111-162250	Bolt	3
7	7-950-160141	Flatwasher	3
8	7-660-161605	Nylok Nut	3
9	A7-765-000003	Rod End	8, 10
10	A7-277-000001	Clevis	8, 10
11	7-660-150230	Jam Nut	12, 15
12	7-690-141200	Clevis Pin	8, 10
13	7-690-000810	Cotter Pin	8, 10
14	7-690-151600	Clevis Pin	8, 10
15	7-690-051610	Cotter Pin	8, 10
16	7-440-030000	Grease Fitting	8, 10
17	83-763-000048	Control Rod Assembly	4, 5
18	A4-691-000106	Pin	2
1-9	A7-754-000009	Retaining Ring	4
20	7-950-220141	Flatwasher	16
21	C3-551-000013	Handle Weldment	0, 2
22	C3-551-000002	Handle Weldment	2, 2
23	C3-551-000017	Handle Weldment	2, 2
24	C3-551-000001	Handle Weldment	2, 2
25	C3-551-000012	Handle Weldment	2, 2
26	A7-551-000002	Knob (Black)	6, 8
27	A7-551-000003	Knob (Red)	2, 2
28	A7-590-000012	Light	2
29	A7-295-000002	Throttle Cable	1
30	C4-560-000010	Control Panel Hood	1
31	C4-560-000012	Control Panel Hood	1
32	C4-706-000853	Splash Guard	1
33	7-732-044033	Moulding	2
34	7-790-141056	Self Tapping Screw	18
35	C4-314-000018	Cover Plate	2
36	A4-017-000056	Angle	4
37	C7-330-000096	Decal, L.H. (IRL)	1
	C7-330-000115	Decal, L.H. (Rear Stabilizer)	1
38	C7-330-000095	Decal, R.H. (IRL)	1
	C7-330-000114	Decal, R.H. (Rear Stabilizer)	1
39	A7-759-000004	Rivet	8
40	7-111-150813	Truss Head Bolt	18
41	7-950-150000	Lockwasher	18
42	7-660-150000	Nut	18
43	A4-763-000064	Threaded Rod	4, 5
44	A4-209-000021	Spacer Bushing (4 Bank Valve Only)	2, 0
45	C4-706-000779	Splash Guard	1

Rev. _____

4.14

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SUBFRAME



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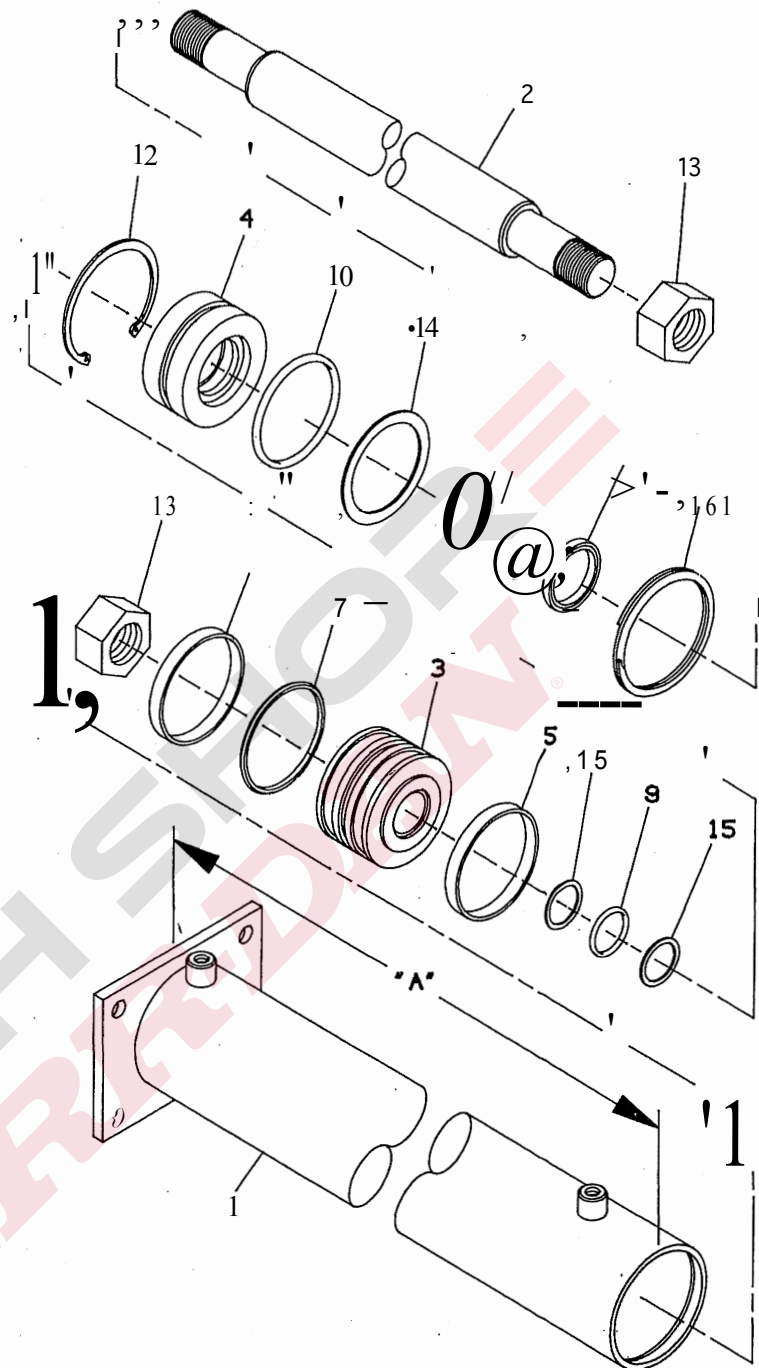
Rev. -- --

Date _____

PARTS LIST- SUBFRAME

Ref. No.	Part No.	Description	Qty.
1	D3-533-700020	Subframe	1
2	03-905-000001	Trunnion	1
3	A4-691-000126	Hinge Pin	2
4	7-690-164040	Roll Pin	2
5	B4-706-000111	Nylatron Holder	12
6	A4-679-00000B	Wear Pad	12
7	A4-534-0-00176	Nylatron Spacer	6
8	M-534-0-00171	Nylatron Pad	6
9	7-115-185250	Hex Head Bolt	12
10	7-660-181600	Hex Lock Nut	12
11	7-111-161207	Flat Head Screw	24
12	7-950-160000	Lockwasher	24
13	7-660-160000	Hex Nut	24

ROLL BACK CYLINDER



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Rev. ___
Date ___

PARTS LIST - ROLL BACK CYLINDER

C3•320•000015

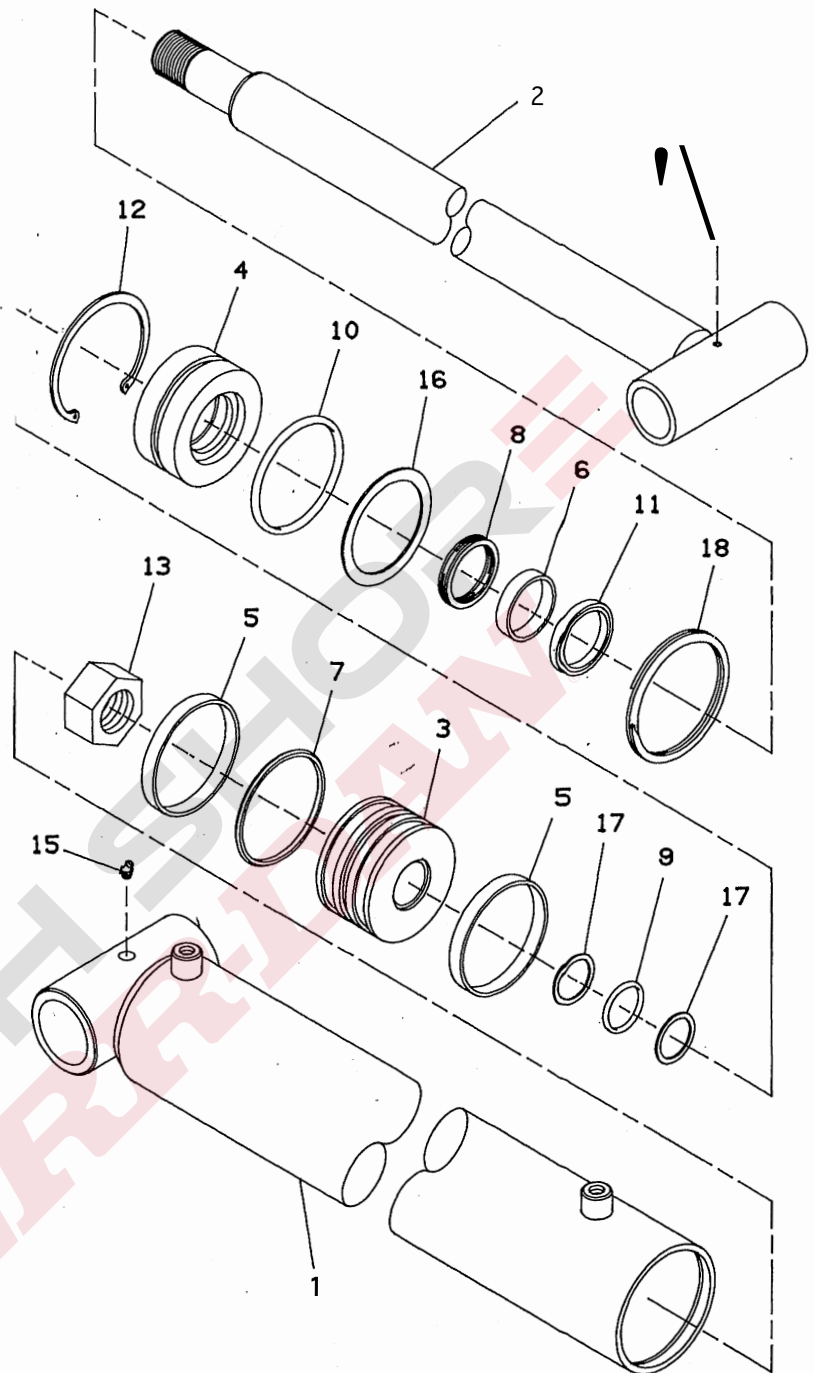
C3•320•000026

C3•320•000035

Ref. No.	Part No.	Description	Qty.
1	C3•071•000015	13arrel ("A"=102.75)	1
	C3•071•000024	Barrel ("A"=114.75)	1
	C3•071•000033	Barrel ("A"=126.75)	1
2	4•763•000090	Rod ("A"=102.75)	1
	4•763•000091	Rod ("A"=114.75)	1
	4•763•000092	Rod ("A"=126.75)	1
3	B4•698•000009	Piston	1
4	84•553•000010	Head	1
5	A7•796•000013*	Ring Wear	2
6	A7•796•000012*	Ring Wear	1
7	A7•796•000014*	Seal Piston	1
8	7•796•000025*	Seal i=lod	1
9	7•755•226000*	"O" Ring	1
10	7•755•338000*	"O" Ring	1
11	A7•796•000011*	Seal Rod Wiper	1
12	A7•754•000016*	Ring, Retaining	1
13	7•660•342031	Locknut	2
14	7•755•338609*	Ring, Backup	1
15	7•755•326609*	Ring, Backup	2
16	7•754•000027*	Ring, Retainer	1

* Available only in service kit #7 577•250025.

TILT CYLINDER



• 5-375-000056-REV-0

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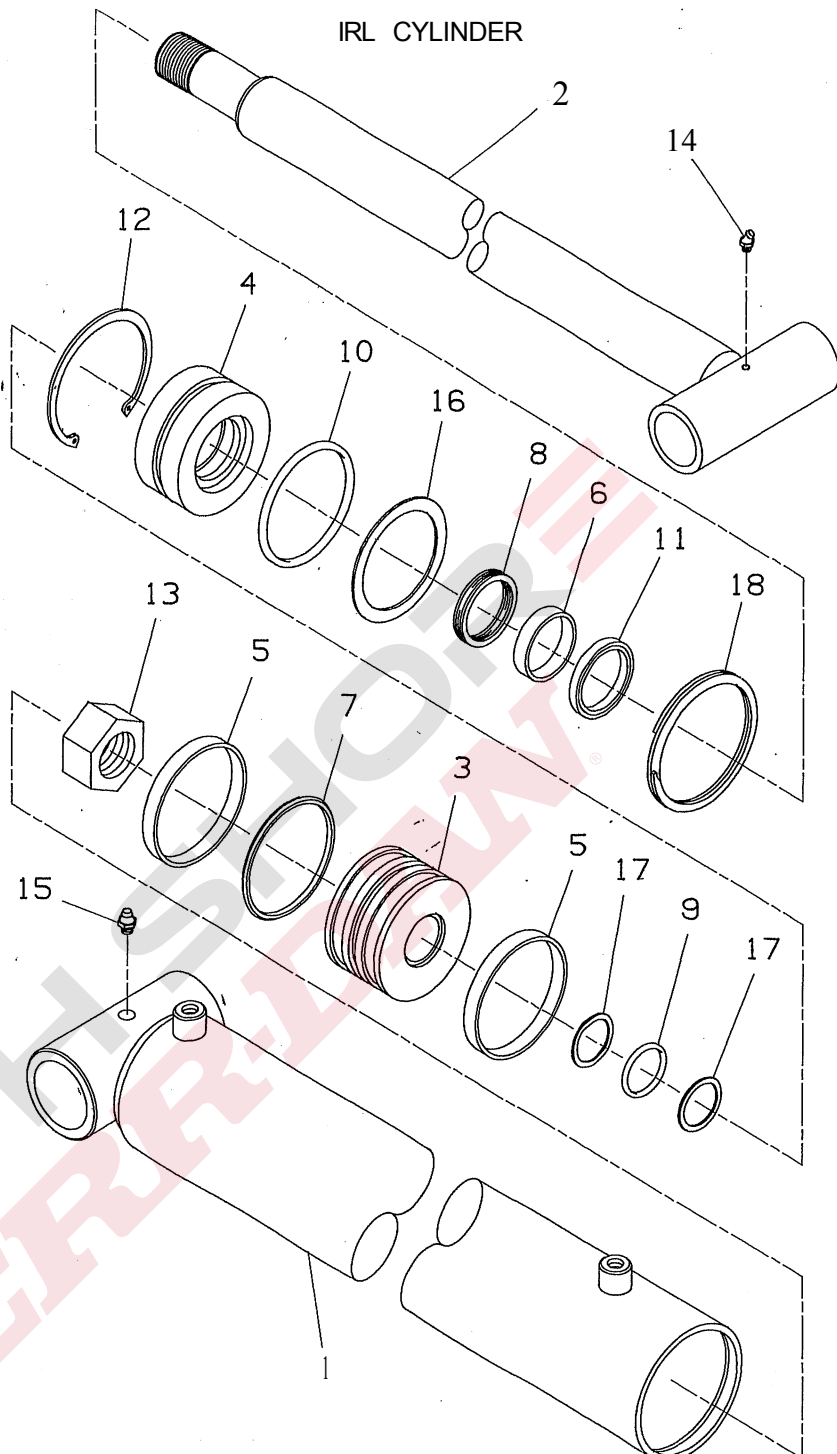
Rev. _____

Date _____

PARTS LIST-TILT CYLINDER
C1 700-1 00024

Ref. No.	Part No.	Description	Qty.
1	C2-700-200033	Barrel	1
2	3-763-000032	Rod	1
3	84-698-000007	Piston	1
4	84-533-000008	Head	1
5	A7-754-000003*	Ring, Wear	2
6,	A7-754-000004*	Ring, Wear	1
7	A7-796-000006*	Seal, Piston 'T'	1
8,	A7-796-000024*	Seal, Rod	1
9	7-755-224000*	"0" Ring	1
10	7-755-334000*	"0" Ring	1
11	A7-796-000008*	Seal, Rod Wiper	1
12	A7-754-000002*	Ring, Retaining	1
13	7-660-262031	Nut, Lock	1
14	7-440-000000	Fitting, Grease	1
15	7-440-000200	Fitting, Grease-45°	1
16	7-755-334609*	Ring, Backup	1
17	7-755-224609*	Ring, Backup	2
18	7-754-000026*	Ring, Retaining	1

*Available only in service kit #7-577-250024,



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4.21

Rev. _____
Date _____

PARTS LIST - IRL CYLINDER

C3•320•000037

Ref. No.	Part No.	Description	Qty.
1	C3-071•000035	Barrel	1
2	3-763-000047	Rod	1
3	B4-698-000007	Piston	1
4	84-533-000008	Head	1
5	A7-754-000003*	Ring, Wear	2
6	A7-754-000004*	Ring, Wear	1
7	A7-796-000006*	Seal, Piston 'T'	1
8	A7-796-000024*	Seal, Rod	1
9	7-755-224000*	"O"Ring	1
10	7-755-334000*	"O"Ring	1
11	A7-796-000008*	Seal, Rod Wiper.	1
12	A7-754-000002*	Ring, Retaining	1
13	7-660-262031	Nut, Lock	1
14	7-440-000000	Fitting, Grease	1
15	7-440-000200	Fitting, Grease-45°	1
16	7-755-224609*	Ring, Backup	1
17	7-755-334609*	Ring, Backup	2
18	7-754-000027*	Ring, Retaining	1

PARTS LIST - IRL CYLINDER

C3•320•000036

Ref. No.	Part No.	Description	Qty.
1	C3-071•000034	Barrel	1
2	3-763-000047	Rod	1
3	B4-698-000007	Piston	1
4	B4-533-000008	Head	1
5	A7-754-000003*	Ring, Wear	2
6	A7-754-000004*	Ring, Wear	1
7	A7-796-000006*	Seal, Piston 'T'	1
8	A7-796-000024*	Seal, Rod	1
9	7-755-224000*	"O"Ring	1
10	7-755-334000*	"O"Ring	1
11	A7-796-000008*	Seal, Rod Wiper	1
12	A7-754-000002*	Ring, Retaining	1
13	7-660-262031	Nut, Lock	1
14	7-440-000000	Fitting, Grease	1
15	7-440-000200	Fitting, Grease-45°	1
16	7-755-224609*	Ring, Backup	1
17	7-755-334609*	Ring, Backup	2
18	7-754-000027*	Ring, Retaining	1

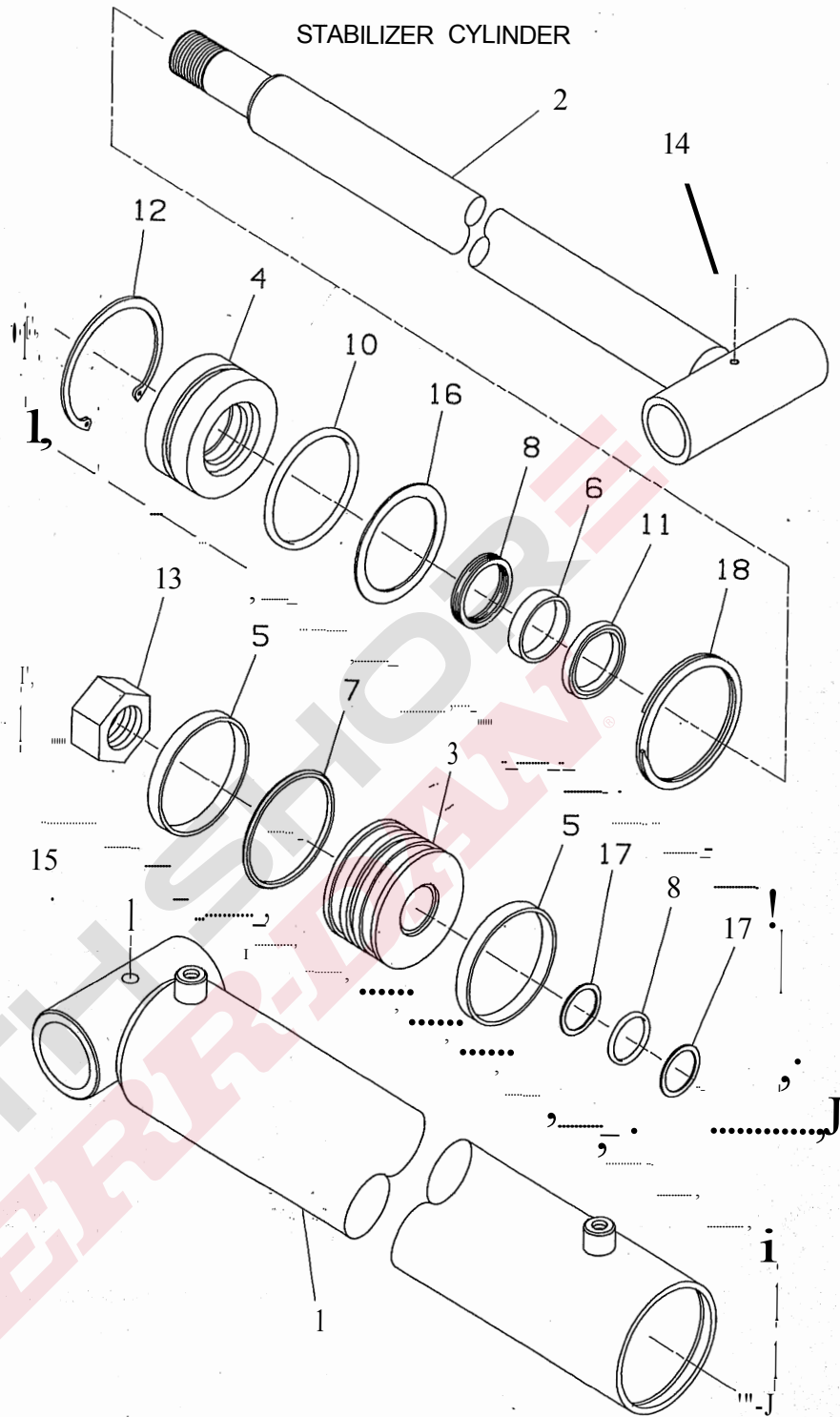
* Available only in service kit #7-577-250024.

Rev. _ _ _

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STABILIZER CYLINDER



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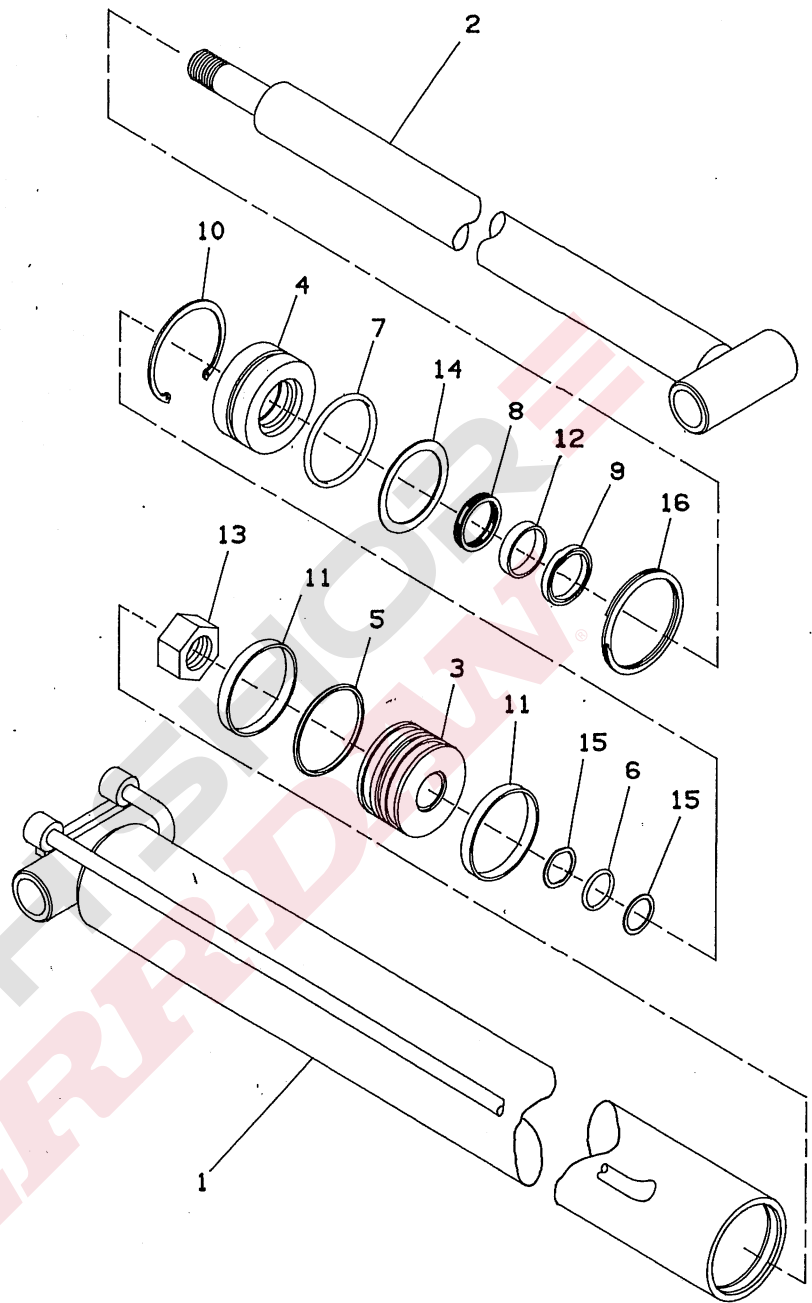
PARTS LIST - STABILIZER CYLINDER

c1-100-1-00019

Ref. No.	Part No.	Description	Qty.
1	C2-700-200021	Barrel	1
2	3-763-000027	Rod	1
3	B4-698-000007	Piston	1
4	B4-533-000008	Head	1
5	A7-754-000003*	Ring, Wear	2
6	A7-754-000004*	Ring, Wear	1
7	A7-796-000006*	Seal, Piston 'T'	1
8	A7-796-000024*	Seal, Rod	1
9	7-755-224000*	"O" Ring	1
10	7-755-334000*	"O" Ring	1
11	A7-796-000008*	Seal, Rod Wiper	1
12	A7-754-000002*	Ring, Retaining	1
13	7-660-262031	Nut, Lock	1
14	7-440-000200	Fitting, Grease-45°	1
15	7-440-000000	Fitting, Grease	1
16	7-755-334609*	Ring, Backup	1
17	7-755-224609*	Ring, Backup	2
18	7-754-000026*	Ring, Retaining	1

* Available only in service kit :/f:7-677-250024.

TOW BAR CYLINDER



5-37 5-000057-REV-0

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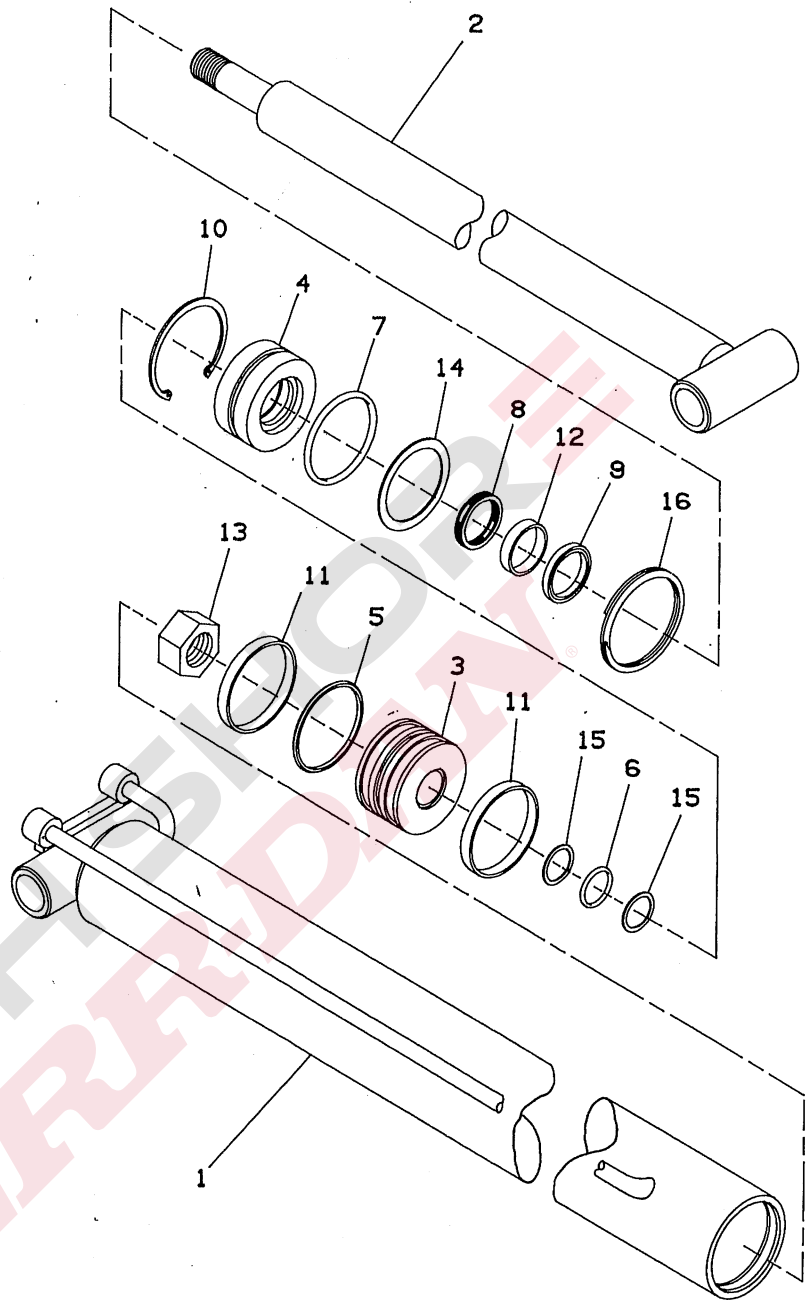
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PARTS LIST - TOWBAR CYLINDER
C3-320-000020

Ref. No.	Part No.	Description	Qty.
1	03-071 -000020	Barrel	1
2	BS-763-000035	Rod	1
3	84-698-000007	Piston	1
4	84-553-000008	Head	1
5	A7-796-000006*	Seal, Piston 'T'	1
6,	7-755-224000*	"O" Ring	1
7	7-755-334000*	"O"Ring	1
B	A7-796-000024*	Seal, Rod	1
9,	A7-796-00000a*	Seal, Rod Wiper	1
10,	A7-754-000002*	Ring, Retaining	1
11	A7-754-000003*	Ring, Wear	1
12	A7-754-000004*	Ring, Wear	1
13	7-660-262031	Nut, Lock	1
14	7-755-334609*	Ring, Backup	1
15	7-755-224609*	Ring, Backup	2
16	7-754-000026*	Ring, Retaining	1

• Available only in service kit #7-577-250024.

WHEEL LIFT TOW BAR CYLINDER



5-375-000057-REV-0

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Rev. _____

Date _____

PARTS LIST- WHEEL LIFT TOWBAR CYLINDER
03-320-000021

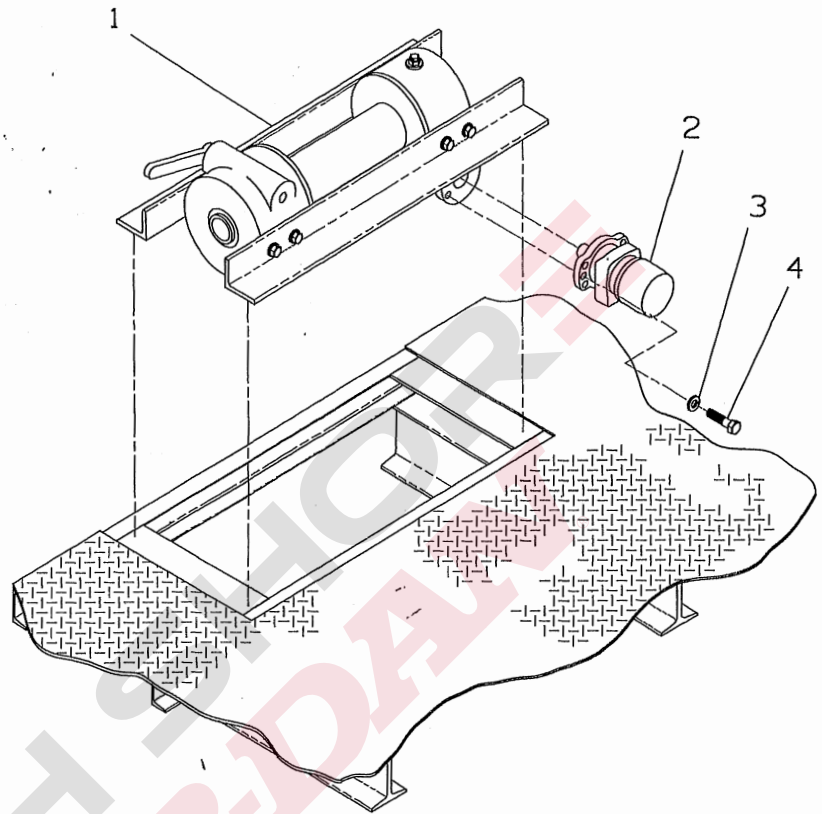
Ref. No.	Part No,	Description	Qty.
1	03-071-000021	Barrel	1
2	B3-763-000036	Rod	1
3	B4-698-000007	Piston	1
4	B4-553-000008	Head	1
5	A7-796-000006*	Seal, Piston 'T'	1
6	7-755-224000*	"O"Ring	1
7	7-755-334000*	"O"Ring	1
8	A7-796-000024*	Seal, Rod	1
9	A7-796-000008*	Seal, Rod Wiper	1
10	A7-754-000002*	Ring, Retaining	1
11	A7-754-000003*	Ring, Wear	1
12	A7-754-000004*	Ring, Wear	1
13	7-660-262031	Nut, Lock	1
14	7-755-334609*	Ring, Backup	1
15	7-755-224609*	Ring, Backup	2
16	7-754-000026*	Ring, Retaining	1

*Available *only* in service kit #7-577-250024.

10,000 LB.

WINCH ASSEMBLY

(8 TON DECK OPTION)



PARTS LIST - 10,000 LB. WINCH ASSEMBLY (8 TON DECK OPTION)

Ref. No.	Part No.	Description	Qty.
1	C7-970-000012	Hydraulic Winch	1
2	87-626-000009	Orbit Motor	1
3	7-950-180000	Lockwasher	2
4	7-115-181250	Hex Head Capscrew	2

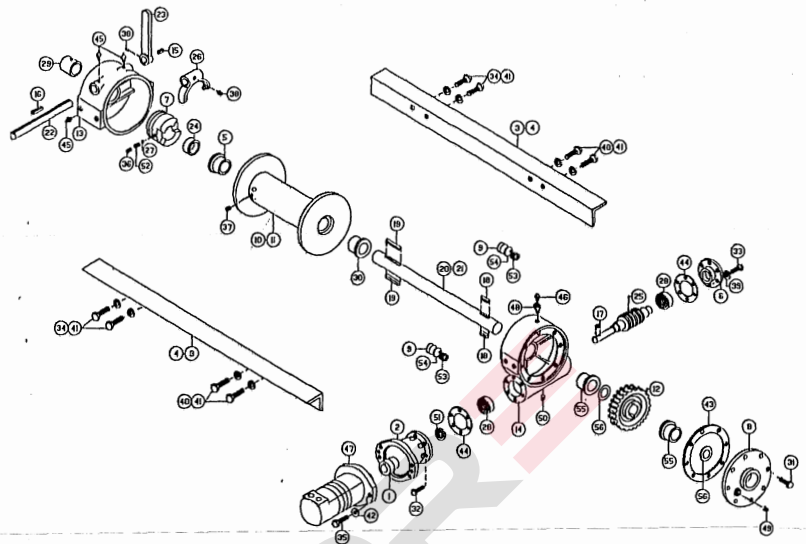
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Rev. _____

Date _ _ _ _

MODEL H-400



PARTS LIST Model H400

Item No.	Qty.	Part No.	Description	Item No.	Qty.	Part No.	Description
1	1	299043	Coupling Ass'y,	31	8	414140	Capscrew 5/16-18NC X 3/4 Ig. Hx. Hd.
2	1	300043	Adapter	32	6	414138	Gr-5 Nylok Hvy. Patch
3	2	302459	Angle-H400	33	6	414139	Capscrew 6/16-18NC x 1-1/4 Ig. Hx. Hd.
4	2	302669	Angle-HY400	34	6	414139	Gr-5 Nylok
5	1	308046	Bushing-Y400	35	4	414457	Capscrew 5/16-18NC x 1-1/4 Ig. Hx. Hd.
6	1	315001	Cap	36	2	04950	Gr-5 W 1/2-3NC x 1-3/4 Ig. Soc. Hd.
7	1	324102	CMch-Jaw	37	1	04971	Screw-Poppet 1/2-20NF H d A"s Pr. Slot
8	1	328010	Cover	38	2	416108	Setscrew 3/8-16NC x 1/2 Ig. fix. Soc. Hd.
9	2	330010	89 Brake	39	6	418163	Lockwasher 6/16 Med. Sect. C.P.
10	1	332004		40	4	414481	Capscrew 7/16-14NC x 1-1/4 Ig. Hx. Hd.
11	1	332074	Drum-Y400	41	8	418198	Gr-5 Nylok Hvy. Patch
12	1	334016	Geor-R.H.	42	2	418218	Lockwasher 7/16 Med. Sect. C.P.
13	1	338009	Housing-Clutch	43	1	441187	Gasket
14	1	338010	Housing-Gear	44	2	442182	Gasket
15	1	342024	Key-Sq. End	45	3	456006	Fitting-Lu.
16	1	342032		46	1	456008	Fitting-Relief
17	1	342051		47	1	458025	Motor-Hyd.
18	2	342120	Key-Rd. End	48	1	460002	Reducer
19	2	342123	Key-Rd. End	49	1	468010	Plug-Pipe
20	1	356702	Shaft-Drum-Y400	50	1	468011	
21	1	356716	Shaft-Drum-Y400	51	1	488057	Spring
22	1	358002	Shaft-Shifter	52	1	494005	Spring
23	1	368001	Shifter-Handle	53	2	494006	Spring
24	1	362007	Spicer-Orill	54	2	530094	Spacer Brake Disc
25	1	368004	Wom-R.H.	55	2	301048	Pushing
26	1	370003	Yoke	56	2	461003	O-Ring
27	1	400003					
28	2	402044					
29	1	020005	Pushing				
30	1	412006	Pushing-Y400 only				

Rev. _____

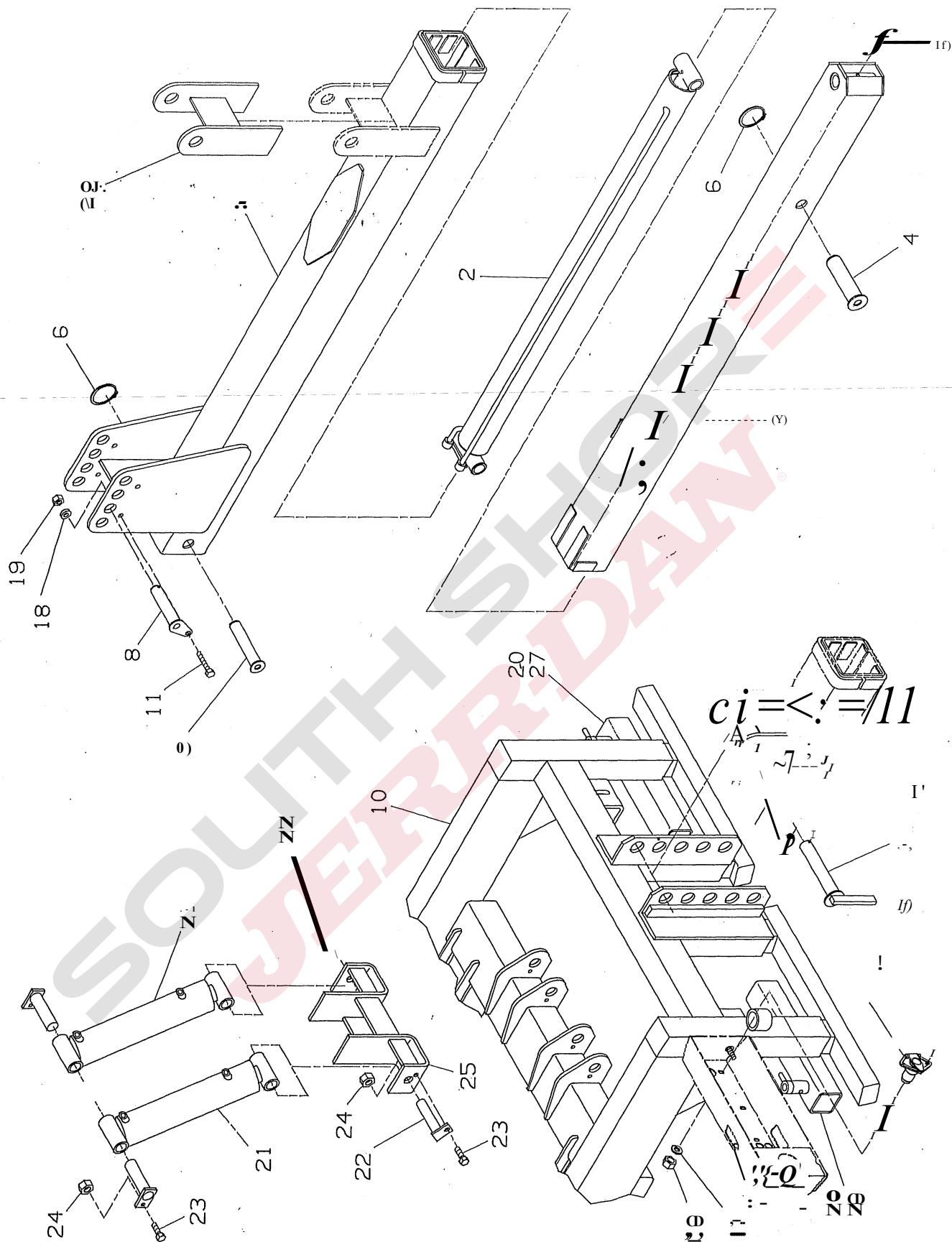
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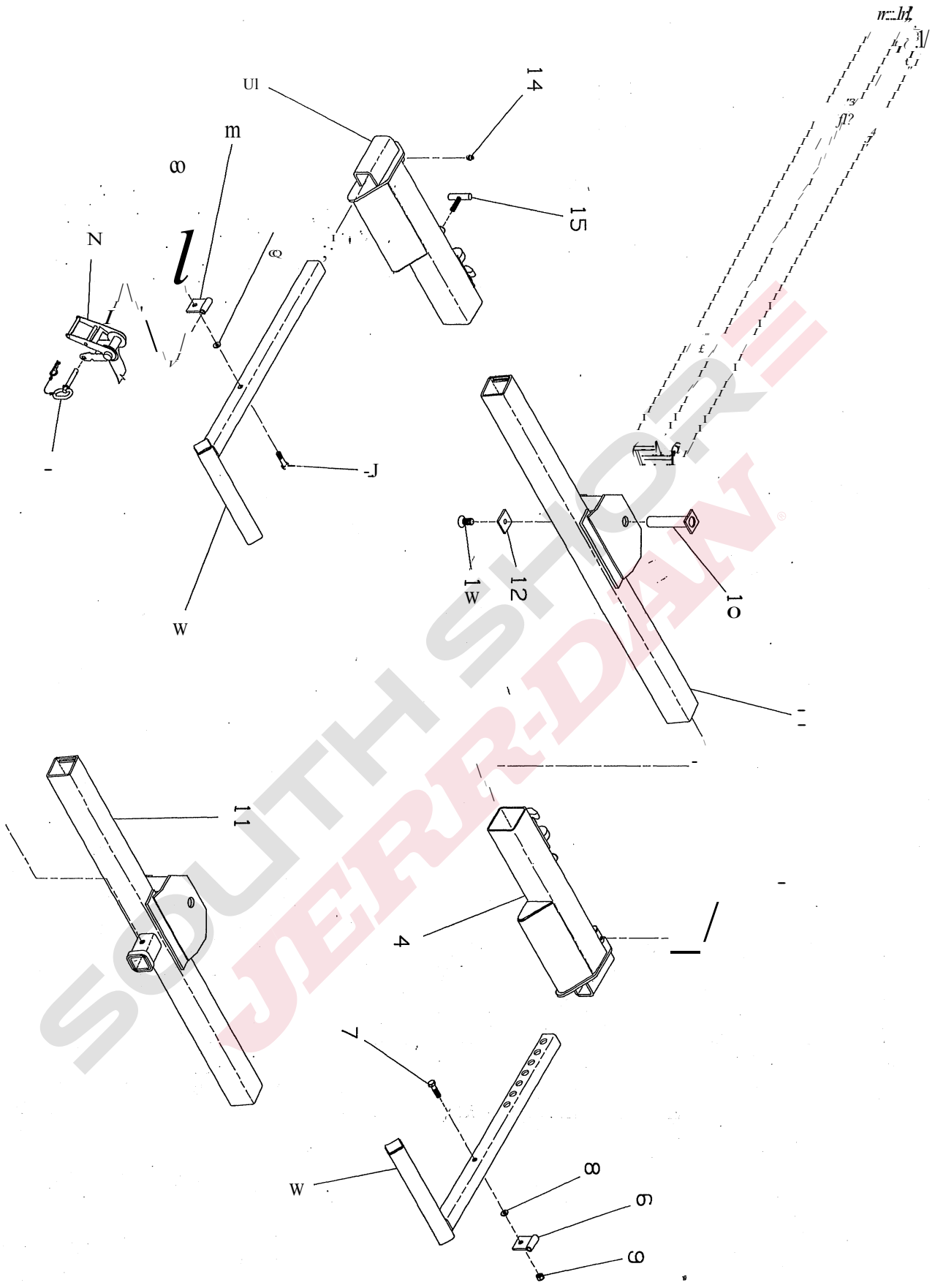
PARTS LIST - HYDRAULIC WHEEL LIFT TOW BAR
INSTALLATION WITH AND WITHOUT IRL

Ref. No.	Part No.	Description	Qty.
1	D3-170-000029	Outer Tube Weldment (Low Profile Chassis)	1
	D3-170-000023	Outer Tube Weldment	1
2	C3-320-000021	Tow Bar Cylinder	1
3	C3-170-000026	Inner Tube Weldment	1
4	A3-691-000011	Cylinder Pin	1
5	7-440-000200	Grease Fitting	1
6	A7-754-000006	Retaining Ring	2
7	A7-691-000001	Hair Pin	1
8	3-691-000074	Pin	1
9	A3-691-000042	Cylinder Pin	1
10	D3-533-700020	Subframe	1
11	7-118-151250	Hex Head Cap Screw	1
12	A3-691-000067	Pin	2
13	A7-291-000003	Female Receptacle	1
14	7-950-1401'61	Flatwasher	2
15	7-111-140613	Truss Head Screw	2
16	7-660-140000	Hex Nut	2
17	7-950-140000	Lockwasher	2
18	7-950-150161	Flatwasher	1
19	7-660-152600	Locknut	1
20	7-660-000011	Flanged Locknut	4
21	C3-320-000036	Cylinder Assembly (Low Profile Chassis)	2
	03-320-000037	Cylinder Ass.embly	2
22	3-691-000073	Cylinder Pin	4
23	7-115-160850	Hex Head Cap Screw	4
24	7-660-162301	Locknut	4
25	C3-178-000115	Bracket	1
26	B3-913-000012	Storage Tube Weldment, L.H.	1
27	B3-913-000024	Storage Tube Weldment, R.H.	1
28	A3-606-000013	Lug Weldment (Low Profile Chassis)	1
	A3-606-000012	Lug Weldment	1

HYDRAULIC WHEEL LIFT TOW BAR INSTALLATION WITH AND WITHOUT IRL



Rev. _____
Date _____



PARTS LIST- HYDRAULIC TOW BAR WHEEL GRID ASSEMBLY

Ref. No.	Part No.	Description	Qty.
1	A7,691,000011	Hitch Pin	2
2	A7•894,000002	Tie Down Strap	2
3	C3,511,880049	L - m	2
4	C3,511,880067	Grid Weldment, R.H.	1
5	C3,511,880068	Grid Weldment, L.H.	1
6,	A3,178,000001	Anchor Bracket	2
7	7,105-182450	Hex Cap Screw	2
8	7,950-180153	Flatwasher	2
9	7•660,181630	Hex Locknut	2
10	B3,691 •000021	p	1
11	C3,500,880043	Pivot Tube	1
	C3,500,880044	Pivot Tube w/Hitch Tube	1
12	A4,949,000010	Plate	1
13	7,118-180820	Flat Head Bolt	1
14	7,440-030000	Grease Fitting	2
15	A3,551 •000026	T,,Handle	2
16	A7,691,000016	Hitch Pin	1

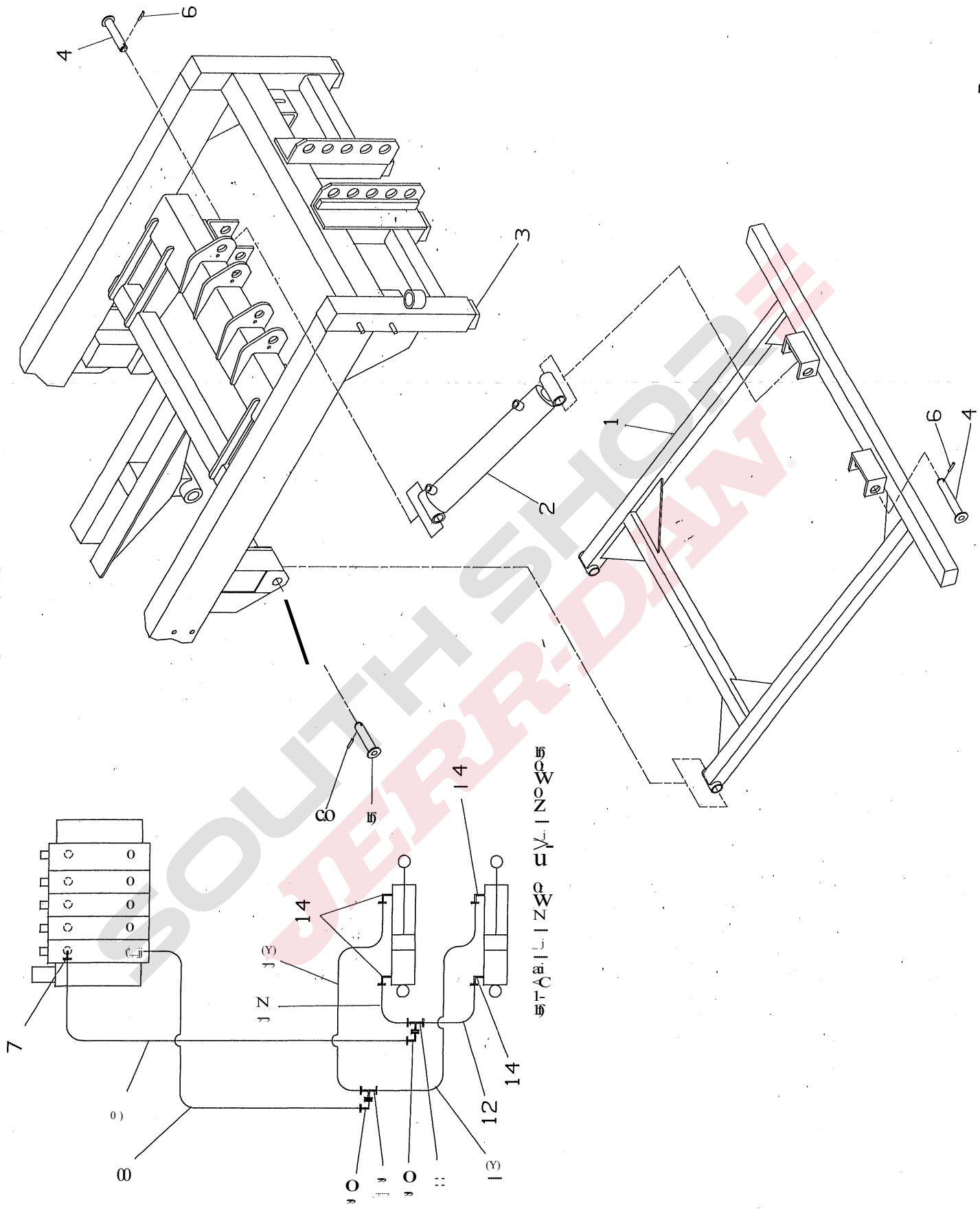
PARTS LIST - REAR DOCK STABILIZER

Ref. No.	Part No.	Description	Qty.
1	D2-530-000087	Lower Arm, 45"	1
2	C1-700-100018	Cylinder Assembly	2
3	A4-913,000113	Tube, Inner Bumper	4
4	A3-6j1,0000	Pin	4
5,	A3,6ft1 -000052	Pin	2
6	7-690-143244	Roll Pin	6
7	7-445-081 043	Str. Adapter	2
8	4-567-130262	Stabilizer Supply Hose	1
9	4-567-130362	Stabilizer Supply Hose	1
1b	7,445-080872	90° Elbow	2
11	7-445-060837	Tee	2
12	4-567-120027	Stabilizer Base Hose	2
13	4,567-120048	Stabilizer Rod Hose	2
14	7-445-060620	90° Elbow	4

4.35

Rev. ---

Date _ _ _



27..-



IPH-8000-1 PARTS UST

ITEM NO.	QTY.	PARTNO.	DESCRIPTION
1	1	228075	COVER ASSEMBLY
2	1	234149	DRUM-CABLE, LONG
3	1	234150	DRUM-CABLE, SHORT
4	1	247010	ASSEMBLY-OUTPUT CARRIER
5	1	247012	ASSEMBLY-INTERMEDIATE CARRIER
6	1	247014	ASSEMBLY-INPUT CARRIER
7	1	276045	HANDLE/SHAFT ASSEMBLY R.H.
8	1	276046	HANDLE/SHAFT ASSEMBLY L.H.
9	1	296290	BRAKE ASSEMBLY "A" ROTATION
10	1	296291	BRAKE ASSEMBLY "B" ROTATION
11	1	299680	CABLE ANCHOR
12	1	324271	COUPLING-CLUTCH
13	1	324323	RING-LOCKING
14	1	334159	GEAR-SUN, OUTPUT
15	1	334160	GEAR-RING
16	1	338264	END BEARING-GEAR HOUSING
17	1	338265	END BEARING-MOTOR
18	1	370053	YOKE
19	1	412073	BUSHING-INPUT SHAFT
20	2	412074	BUSHING-DRUM
21	8	414620	CAPSCREW 1/2-13 NC x 1 LG. HX. HD. GR.5 LOK-WEL
22	6	414848	CAPSCREW 1/4-20 NC x 1 LG. SOC. HD. LOK-WEL
23	8	414669	CAPSCREW 5/16-18 NC x 1 LG. SOC. HD. LOK-WEL
24	1	414871	CAPSCREW 5/16-18 NC x 1 1/4 LG. SOC. HD. LOK-WEL
25	1	414819	CAPSCREW 1/4-20 NC x 1/2 LG. FLAT SOC. HD. LOK-WEL
26	2	414922	CAPSCREW 3/8-16 NC x 1 LG. SOC. HD. NYLOK
27	1	414930	CAPSCREW 3/8-16 NC x 2 1/4 LG. SOC. HD.
28	1	416028	SETSCREW 1/4-20 NC x 1/2 LG. CUP PT. LOK-WEL
29	2	416050	SETSCREW 5/16-24 NF x 1/2 LG. CUP PT.
30	1	418036	NUT 3/8-16 NC JAM
31	2	438014	DISC-DRAW BRAKE
32	1	444062	GEAR-SUN, INTERMEDIATE
33	1	444063	GEAR-SUN, INPUT
34	1	456008	BREATHER
35	1	458065	MOTOR-HYDRAULIC
36	1	462028	O-RING .06 WO. x 3.38 O.D. x 3.25 I.D.
37	1	462030	O-RING .103 SQ. x 5.875 I.D.
38	1	462031	O-RING .09 WD. x 6.940 D. x 6.75 I.D.
39	2	462037	O-RING .06 WO. x .62 O.D. x .50 I.D.
40	1	468002	REDUCER
41	1	468018	PLUG 3/8-18 NPT SOC. HD.
42	2	470068	PIN-CLUTCH SPRING
43	2	472018	PLUG-DRAW BRAKE
44	2	474056	TIE PLATE-LONG DRUM
45	2	474065	TIE PLATE-SHORT DRUM

46	3	477005	RING-THRUST
47	2	486075	LIP SEAL
48	1	489013	SHAFT-INPUT, LONG DRUM
49	1	489014	SHAFT-INPUT, SHORT DRUM
50	2	490001	RING-SNAP, EXTERNAL & I.D.
51	2	494002	SPRING-DRAW BRAKE
52	2	494082	SPRING-CLUTCH
53	2	494086	SPRING-CLUTCH
54	2	518029	WASHER-DRUM
55	2	518031	WASHER-YOKE SPRING
56	2	418181	WASHER-1/2 SAE FLAT
57	1	468030	PLUG 3/8-18 NPT SOC. HD.-MAGNETIC

SUB-ASSEMBLIES IPH-8000-1

ITEM NO.	QTY.	PARTNO.	DESCRIPTION
1	1	202009	END BEARING ASS'Y.-MOTOR
1	1	246036	SEAL KIT (ALL SEALS)
1	1	248049	HOUSING ASS'Y.-CLUTCH
1	1	276043	HANDLE ASS'Y. R.H.
1	1	276044	HANDLE ASS'Y. L.H.
1	1	256044	BRAKE ASSEMBLY KIT- "A" ROTATION
1	1	256045	BRAKE ASSEMBLY KIT- "B" ROTATION
1	1	256046	FRICTION DISC KIT

ITEMS DESIGNATED WITH A TRIANGLE "△" ARE SUB-ASSEMBLIES AND CAN BE PURCHASED BY SUB-ASSEMBLY NUMBER.

Rev. _____

Date _____