$35.00

HIP40

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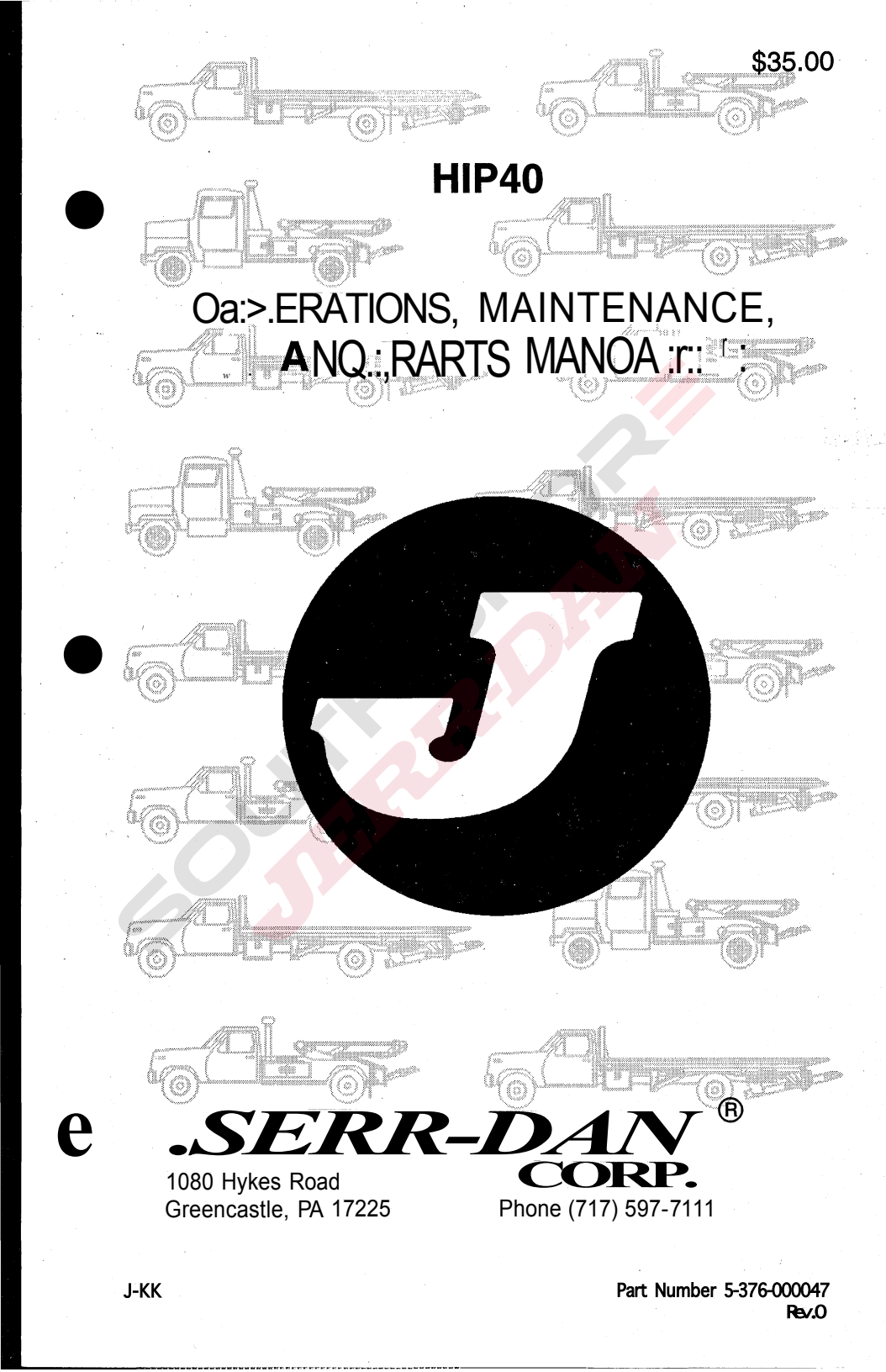

e .SERR-DAN® CORP.

1080 Hykes Road
Greencastle, PA 17225

Phone (717) 597-7111

J-KK

Part Number 5-376-000047
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.

Rev: _ _ _

Date _ _ _

JBEL.El.-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 Manufactuer 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, l.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 Manufactuerer'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 Llablllty. 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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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 ii, 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 hous 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. Fllng of Warranty Clalm. Upon notifying the Manufacturer of a failure, the Manufacturer or Its representative will verbally authorize and comfirm 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 (ii deemed necessary) to assure return of defective parts for manufacturer's evaluation.

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 shippping 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 pe‡ aining 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.

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

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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
111. 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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Date _ _ _

HIP40 SAFETY (GENERAL)

The safe operation of your HIP40 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 recommend that you receive specialized and advanced training from a professional Towing and Recovery instructor before operating any recovery equipment and that the American Automobile Association (AAA) Towing Manuals be used as a reference for operating safety methods.

AAA address and phone number:

THE AMERICAN AUTOMOBILE ASSOCIATION
8111 GATEHOUSE RD
FALLS CHURCH, VA 22047
(703) 222-6000

DO NOT EXCEED THE FOLLOWING RATINGS:

HIP Underlift Rating ..... 4,000 lbs "L" Arm

Tow Rating ..... 7,000 lbs.

Boom Rating ..... 8,000 lbs.

Winch Rating ..... 8,000 lbs.

Wire Rope:

- Working Limit ..... 3,385 lbs.
- Construction ..... 6 x 37 EIP Fibercore
- Diameter ..... 3/8 inch
- Standard Length ..... 80 Feet

NOTE:

These ratings apply to the structural design of the HIP40 only and may be limited by the axle rating and gross vehicle weight rating of the truck chassis. CHECKTRUCK MANUAL FOR SPECIFIC GVW & AXLE RATINGS. ALSO REFERENCE THE CERTIFICATION DECAL AFFIXED TO DRIVER'S SIDE DOOR JAMB AND THE S.T.A.R. PLACARD ON THE LOWER BOOM MECHANISM.

MANUFAC TURE D BY:

DATE OF MANUFAC TURE __ mo. __ sr.

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DATE INC. VEH. MFD __ mo. __ sr.

GVWR _____ _

GAWR FRONT _____ with
-------'---------t,ires,
___ rims,@ _____psi cold ___ _

GAWR INTE RME DIATE (1) _____ with
_____ tires,
___ rims, @ __ __,psi cold ___ _

GAWR INTE RME DIATE (2) _____ with
_____ t.ires,
___ rims, @ __ __,psi cold ___ _

GAWR RE AR _____ with
_____ t,ires,
___ 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 vechicle Safety Standards in effect in:

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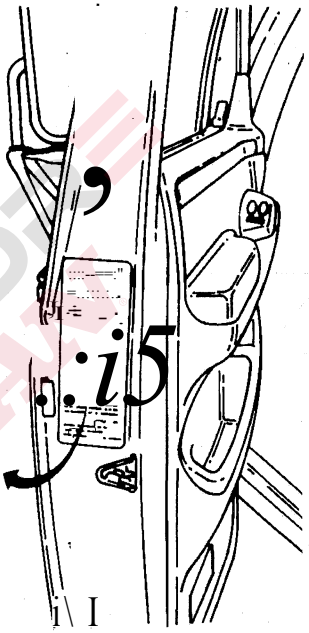
r __ mo. __ yr.

VEHICLE IDENTIFICATION NUMBER:

e

L.VEHICLE TYPE: _____ J



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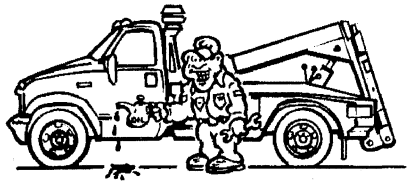
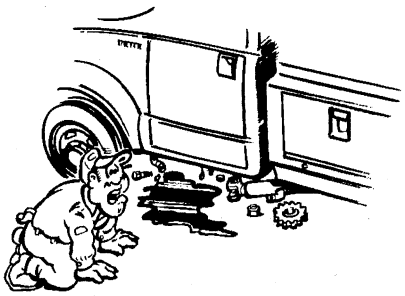
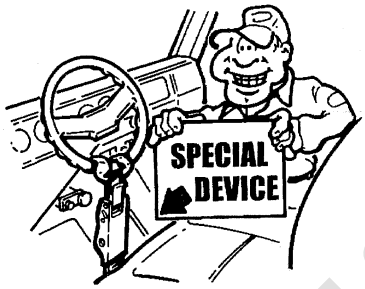


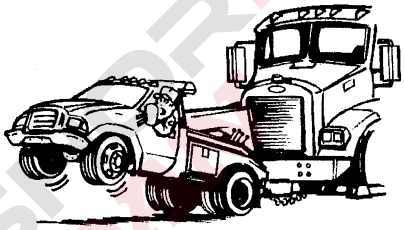
- Don't use a recovery vehicle that has not been properly maintained. Pay special attention to the mounting bolts, and lubrication of moving parts.



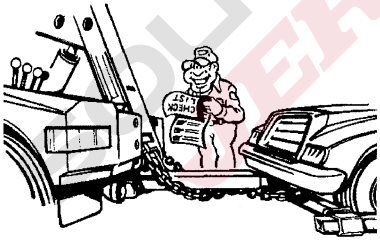
- Don't operate the wrecker's engine faster than recommended. Excessive speeds can damage PTO, hydraulic pumps, and winches .



- Don't rely on anti-theft steering locks to secure the steering wheel. Use a special steering wheel clamping device designed for this purpose.

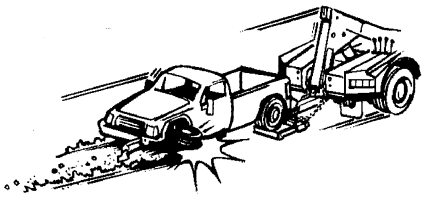


- Don't tow a vehicle that reduces the weight on the front wheels of the wrecker more than 50percent.

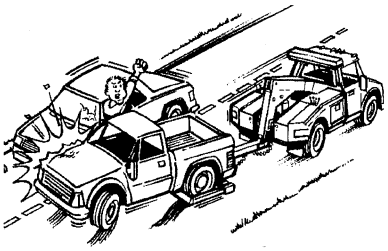


- After you have hooked up a vehicle for towing, don't start the tow until you have double checked the hook-up, installed safety chains, and released the parking brakes of the towed vehicle.

- 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.

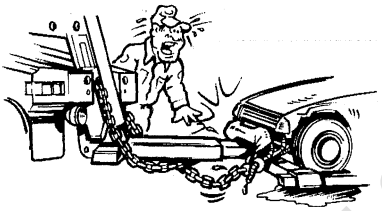


- Don't tow a vehicle on Its front wheels unless the steering wheel is secured with the front wheels straight ahead.

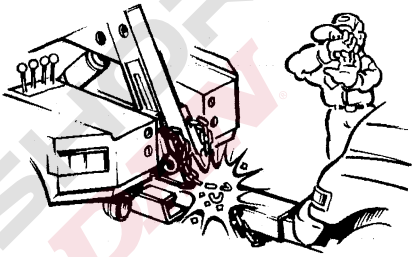
SAFETY CHAINS MUST BE USED WHEN TOWING AND TRANSPORTING

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.

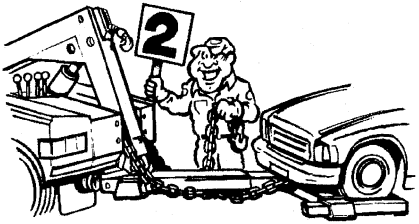


- Never attach the chain hooks in such a way as to damage brake lines or other functional parts.



- 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.

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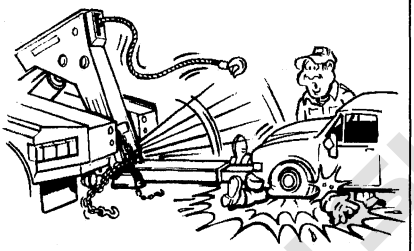
Date __ _

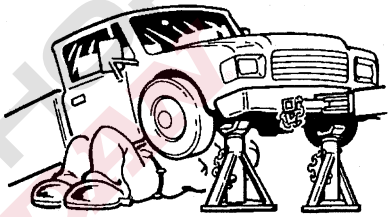
LIFT SAFETY

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. In addition, the intent of the design of this unit should be taken before the undertaking of its use.

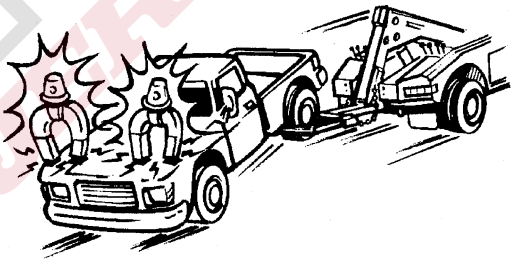
Your HIP40 is unique. It not only can make lifts from level surfaces, our boom tilt feature allows pickup of vehicles that are parked on both inclines and declines.



- You should never make a lift or movement while close to or under the vehicle being lifted!



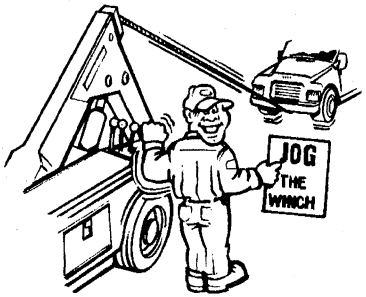
- Always use jack stands to support the vehicle if it is necessary to work under it.



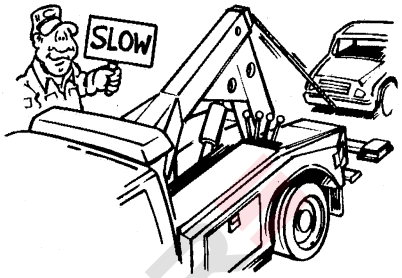
- Magnetic towing lights are required in many areas and are always recommended for safe tows .

BOOM SAFETY

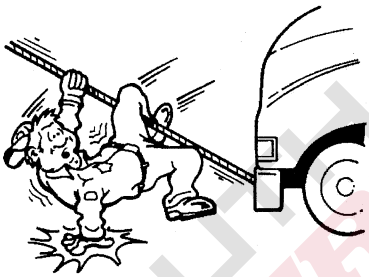
If your HIP40 is equipped with an optional recovery winch the following safety procedures must be observed:



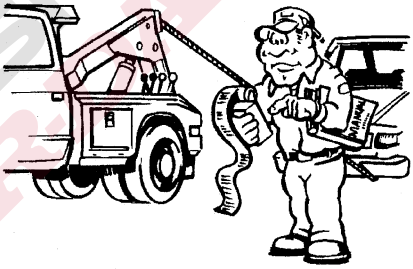
- Jog the winch control lever to be sure of complete engagement of the clutch gears before making a lift or pull.



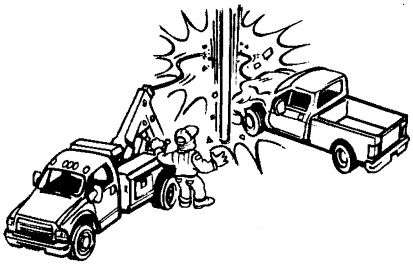
- Take up the wire rope slowly and be sure the hook is securely set.



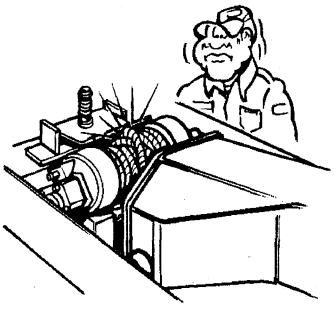
- Never stand on or straddle a working wire rope.



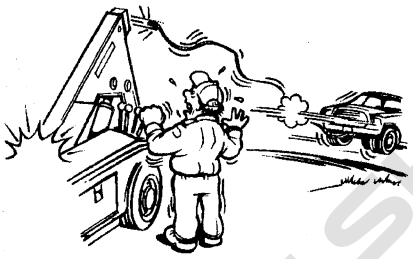
- Be sure of your lift or pull and do not exceed the working strength of the wire rope or hook. Rig to keep the estimated amount of pull well within equipment ratings. Use wire rope breaking strength ratings only for selecting replacement wire rope.



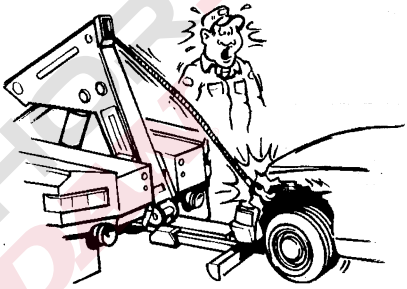
- Never lift or pull over or around a sharp obstacle.



- Never allow the wire rope to cross wrap (criss-cross) on the winch drum. Crushing of the wire rope can cause wire rope failure .

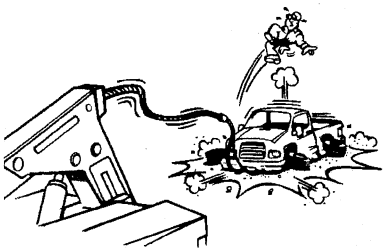


- Never completely unwind wire rope from a winch while loaded. Always be sure that a minimum of five (5) wraps of wire rope are on the drum at all times.

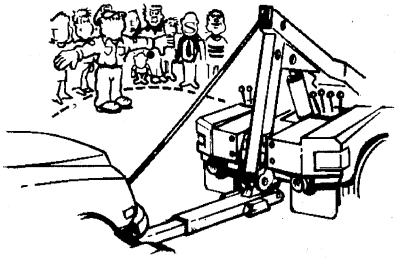


- Never make a lift or pull with the wire rope attached to light gauge or sheet metal parts; use the frame or major structural members.

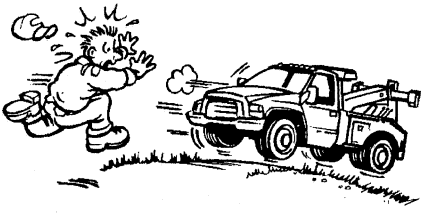
- Never tie down the front end of your wrecker for recovery work of heavy lifts. You will likely damage the truck frame if you do.



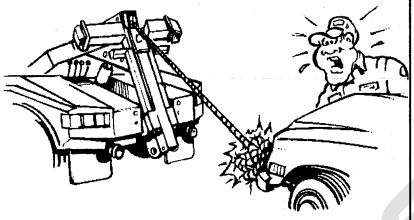
- Don't disengage the winch drum clutch while the wire rope is loaded.



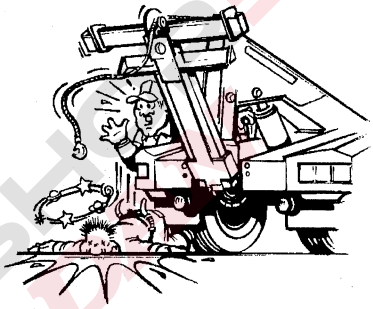
- Don't permit bystanders in the area while performing recovery work.



- Be sure all brakes and locks are properly set on the recovery vehicle.

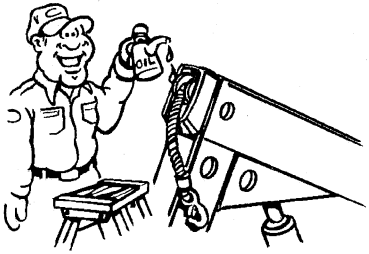


- Never wrap the wire rope around frames or cross members. Use chains and hook the wire rope to the chains.

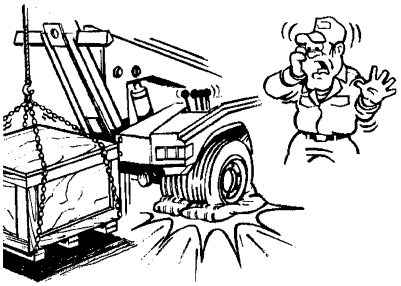


- Never under any circumstances use the winch or boom to lift people!

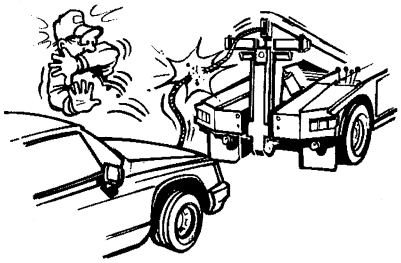
- Don't use damaged wire ropes on your wrecker. Become familiar with the various types of wire rope damage and periodically Inspect the entire wire rope for wear and corrosion. Never use wire rope menders. Replace with similar rated wire rope and hooks.



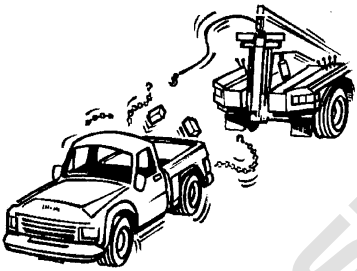
- Lubricate and maintain both the wire rope and winch on regular intervals. (See maintenance charts.)



- 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.

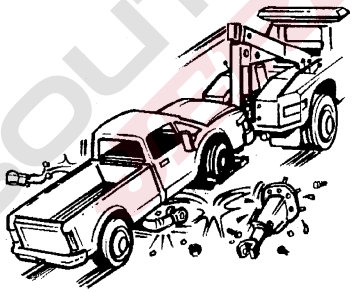


- All boom placement functions should be made with the winch wire ropes set in "free spool" to avoid over tensioning or breaking the winch wire ropes.

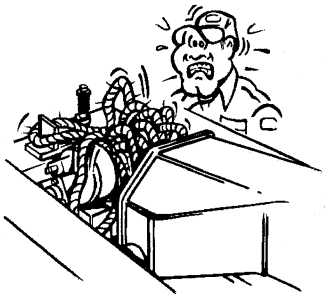


- After rigging wire ropes, don't begin pulling without rechecking connections. Make sure that all wire ropes and snatch blocks are securely attached and cannot accidently pull loose.

- 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.



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

SAFETY WARNING DECALS

As an extra safety precaution, your HIP40 has 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 RATINGS (MAXIMUM)
EXTENDED c::===] LBS. RETRACTED c::===] LBS.
WINCH RATING: EACH DRUM c::===] LBS.
WIRE ROPE: WORKING LIMIT c::===] LBS.
TYPE [ ] SIZE [ ] FT.

A WARNING A
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.

A WARNING A
ALL RATINGS ARE BASED ON THE STRUCTURAL CAPACITY OF ABOVE MODEL. ACTUAL TOWING AND RECOVERY CAPACITY MAY BE LIMITED BY THE CAPACITY OF THE CHASSIS AND EQUIPMENT SELECTED.

MANUFACTURED BY:
JERR-DAN CORPORATION
1080 HYKES ROAD
GREENCASTLE, PA 17225
1-800-926-9666
287 0

& WARNING &
MOVING PARTS
KEEP HANDS AND FEET CLEAR OF THIS AREA
037

/b, WARNING /b,
FULLY RETRACT BOOM AGAINST STOP FOR TOWING WITH A TRAILER BALL.
EXTEND BOOM A MIN. OF 4' FOR TOWING WITH THE WHEEL GRID.
060

III WARNING III
TOWED VEHICLE MUST BE CONNECTED TO TOW TRUCK BODY WITH SAFETY CHAINS
122

& CAUTION &
CHECK HYDRAULIC FLUID LEVEL
FILL ONLY WITH APPROVED FLUID
(SEE OPERATOR'S MANUAL)
084

/b, WARNING /b,
VEHICLE MUST BE SECURED
TO WHEEL GRID USING BOTH TIE DOWN
STRAPS PRIOR TO LEAVING LOADING SITE.
036

& 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.
262

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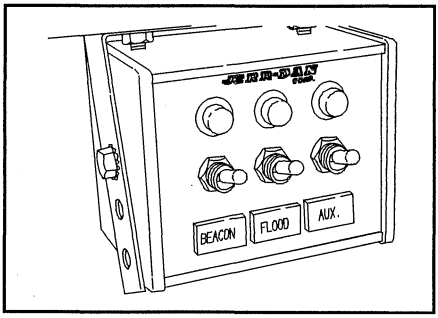
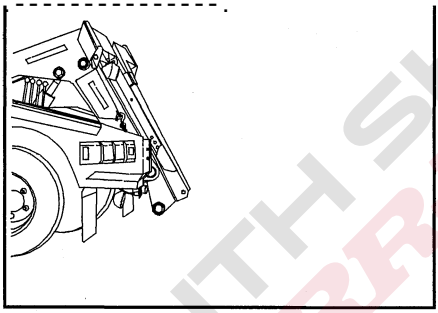
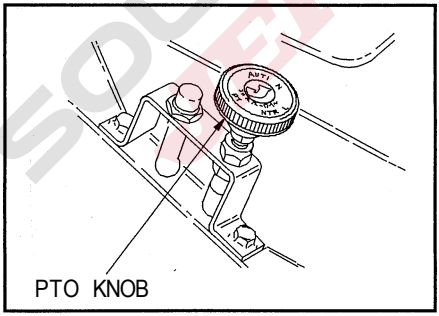
WHEEL-LIFT OPERATION

Your HIP40 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 under the dash).
2. Position the truck within 3 to 4 ft. of the subject vehicle and as close to the direction of the pull as possible.
3. Set the truck's parking brakes.
4. Engage the power take-off (PTO) by pulling on 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 truck transmission.
5. Adjust the electronic or manual throttle control to elevate the engine speed to approximately 1200-1400 R.P.M. for optimum performance.

A CAUTION:
Never exceed 1,500 R.P.M. When your hook up is complete, reset the engine idle to normal.

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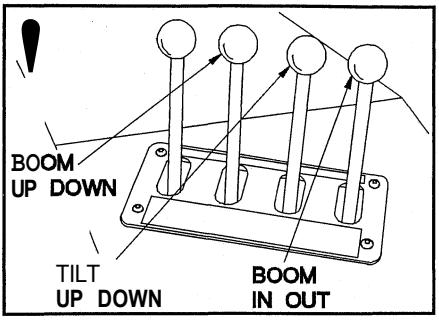
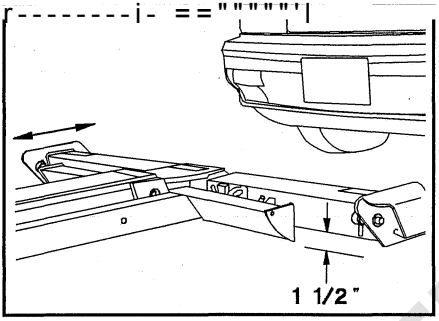
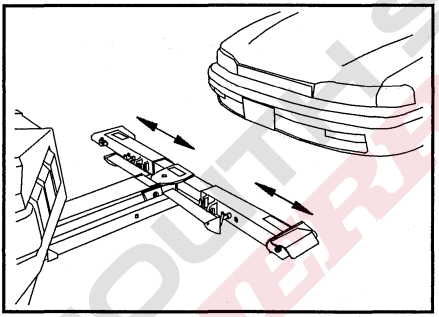


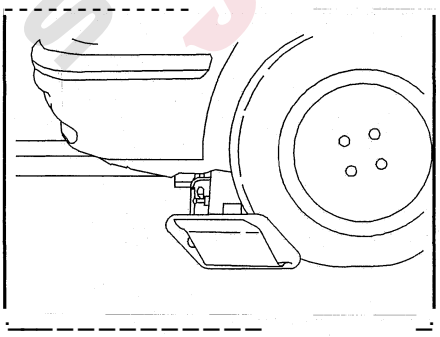
6. Confirm the truck's position in relation to the vehicle to be towed. Three (3) to four (4) feet is recommended. Re-position the HIP40 if necessary. Be sure the towed vehicle is not in gear or park. Keep the brake set.



7. Unfold and lower the lift arm to about 1-1/2" from the ground and swing the cross bar parallel to the tires.



8. Set the grid width as required for the vehicle to be towed. Be sure both grids are as close to the center of the boom as possible. (See your particular grid option instructions).



9. Extend the lift arm under the vehicle being sure that all under carriage 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 .

10. Visually inspect the tire to grid contact before proceeding.

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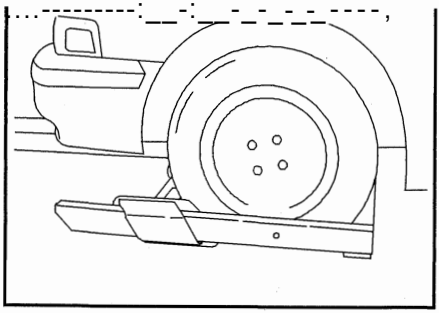
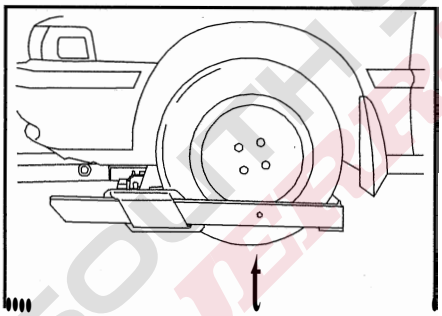


11. Secure the grid arm around the towed vehicle's tires following the instructions given for your particular grid option.
12. After securing the grid arms around the towed vehicles tires and before making the actual lift, check to be sure the towed vehicle's parking brake is released, the transmission is in neutral, and the wheels are straight.

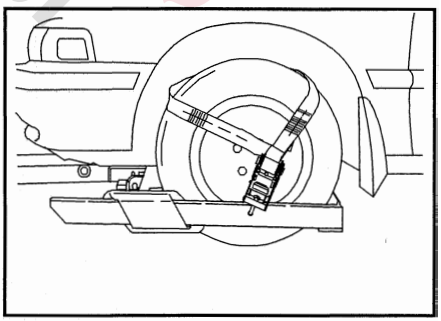
MZIE;_

If vehicle to be towed is on a slope, do not release the brake until the tie-down 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 any tow.



14. Lift the vehicle high enough to allow tires to clear ground. Make sure that the grid is not in contact with any engine or body components.
15. Remove the tie down straps from tool boxes and attach the tie down straps. (See your particular grid option instructions).



16. With the straps in place, 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.

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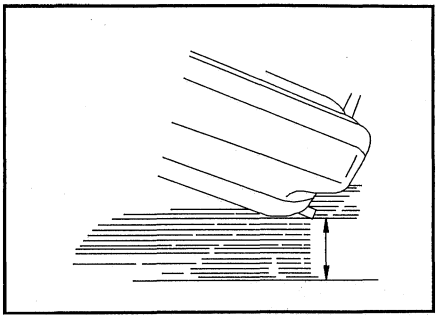
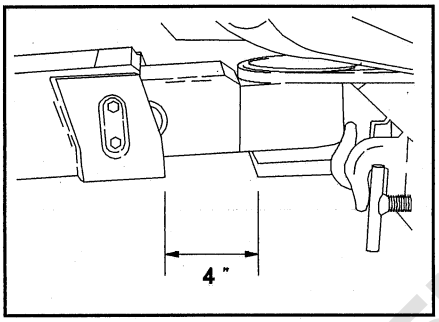
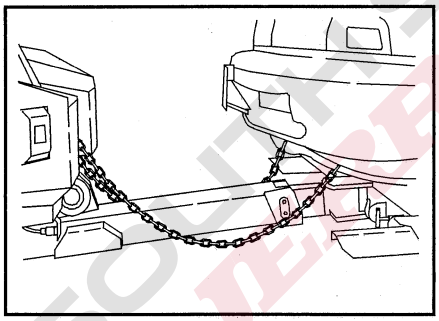






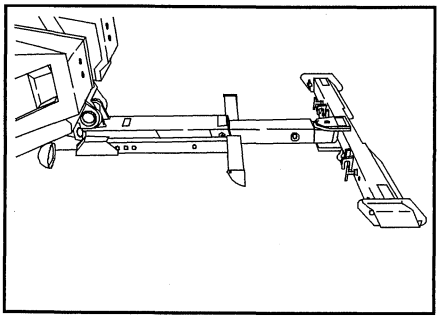
17. Raise the vehicle into the final towing position observing the far end for sufficient ground clearance. It is possible to set the rear of a front lifted vehicle completely onto the ground, causing damage. Take irregular roadsurfaces into consideration. Observe the lift function from the side and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

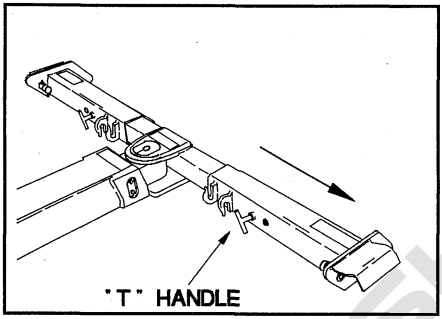
18. Power retract the grid boom until the towed vehicle is about 3 to 4 feet from the back of the truck. Leave enough room to maneuver around corners without corner binding or causing contact between the two (2) vehicles. **Be sure that the boom is extended at least 4" to ensure unobstructed cross-bar pivoting.**

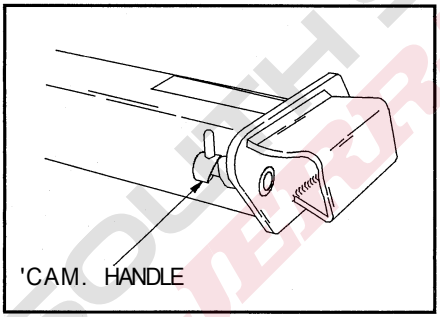
19. Be sure to maintain sufficient clearances with the bottom of the towed vehicle.

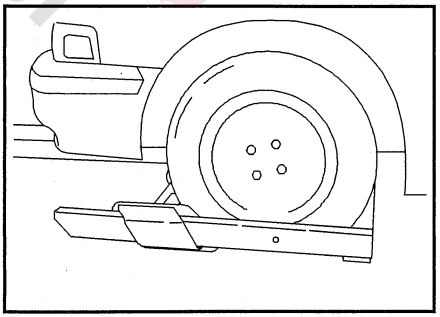
20. Attach the safety chains and magnetic towing lights.

"L"-ARM GRID OPERATION









1. Remove the "L" arms by extending the underlift and removing them from their holders.
2. Set the grid width as required for the vehicle to be towed.
3. To set the grid width, loosen the "T" handles on the front of the grid arms and pull the grids out. Be sure both grids are as close to the center of the boom as possible, and wide enough to allow the "L" arms to slide into their channels. Tighten the "T" handles to secure the grids.
4. Retract the "Cam" handle locking pin on the grid by turning it a half turn. It should remain in the open position.
5. Lower the lift arm to the ground and extend under the vehicle to be towed as described in the Wheel Lift Operation section.
6. Take the "L" arms and slide them into the channels on the side of the grid. Insure that they are resting snugly against the tires. With the "L" arms in close contact with the tires, reset the locking 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.
7. Remove the tie down straps from toolboxes and attach the tie down straps.

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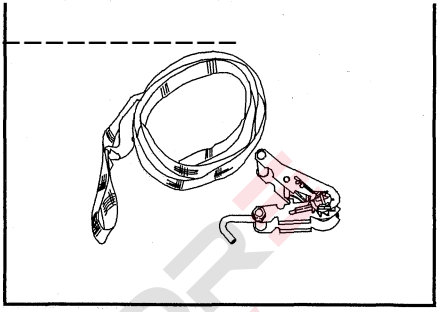
TIE DOWN STRAPS

The HI P40 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 STRAPSINSTALLED.

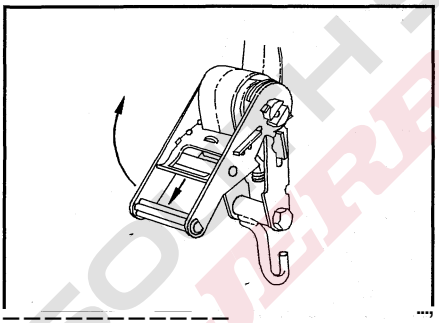
The tie down strap assembly is comprised of 2 basic components:

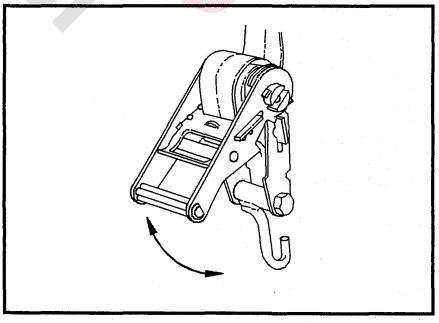
1. The Strap
2. The Ratchet Spool Mechanism



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

USING THE RATCHET SPOOL MECHANISM





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.
2. Now pull on the lock bar and move it downward until it engages the ratchet teeth on the take up spool. By pushing and pulling the handle up and down, the strap will be wound onto the spool.
3. To release the ratchet, simply pull on the locking bar, disengaging the teeth and raise the handle to the "free spool" position.

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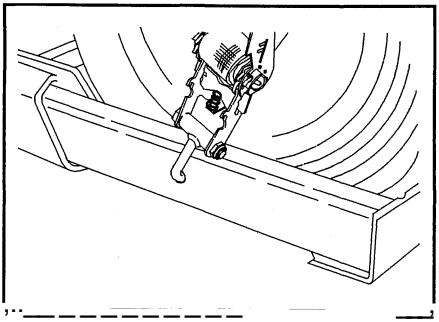
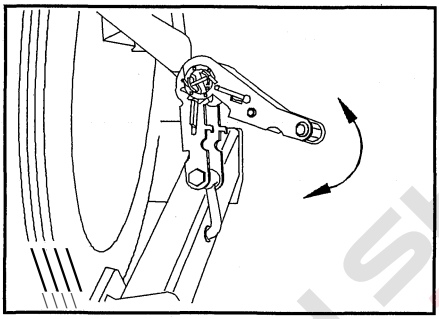
INSTALLING THE TIE DOWN STRAP

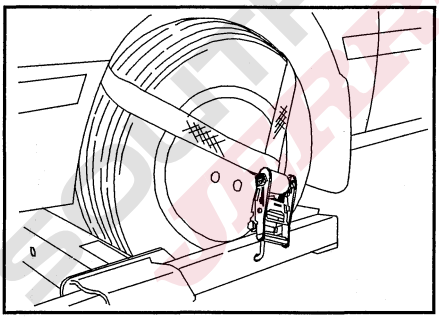


1. With the vehicle lifted just barely off the ground, attach the strap to the wheel grid.



2. Set the ratchet spool in "free spool" position and pull the webbed strap out and form a loop which will wrap around the tire. Be sure the loop is over approximately 1/3 of the tire.

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



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

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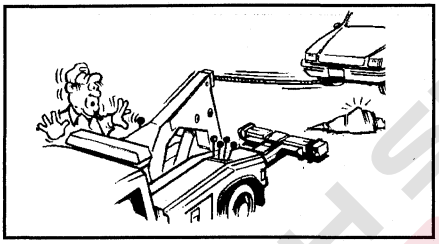
RECOVERY WINCH OPERATION (OPTIONAL)

The HIP40 recovery winch is an extremely effective tool in recovery or retrieval prior to lifting and towing. To operate the winch effectively, care and thought must be given.

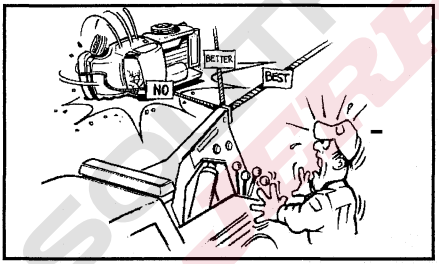
Winch Rating:	8,000 lbs.
Wire Rope Specifications:	.375 x 80 ft.; 6x37 IPS fiber core
Working Limit (wire rope):	3385 lbs.

A 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.

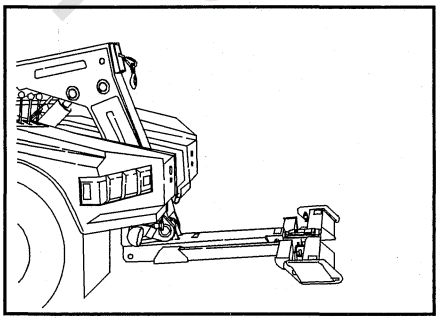


1. Check the direction you wish the work to travel, being sure there are no major obstacles in the way.



2. Position and align the truck to obtain as direct a pull as possible. Straight line pulls are the best and most efficient.

3. Set the brakes on your Jerr-Dan unit.



4. Unfold the under lift boom to gain access to the winch wire rope.

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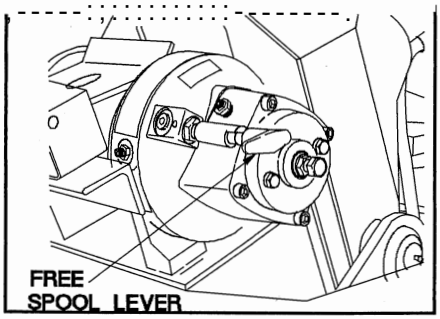
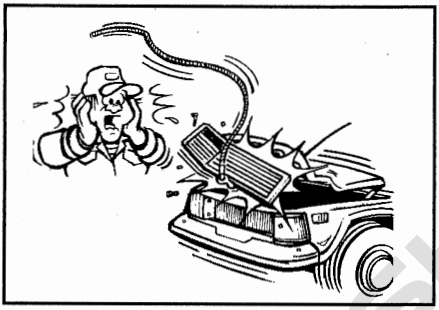
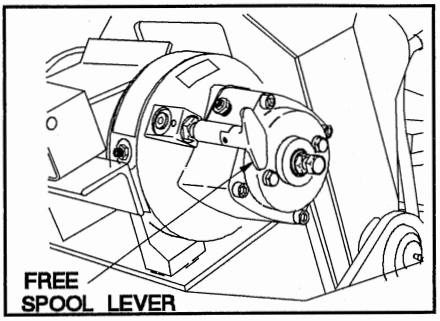


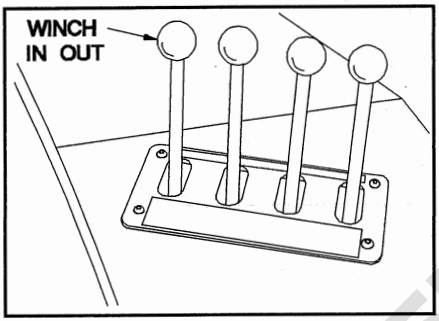
5. Release the free spooling lever on the winch by pulling and turning the handle 90°. Never pull this handle whlle the wire rope ls under loadl This allows the wire rope to be pulled directly off the drum to the work. Return to the wire rope drum and be sure that at least five (5) wraps of Wire rope remain on the drum.

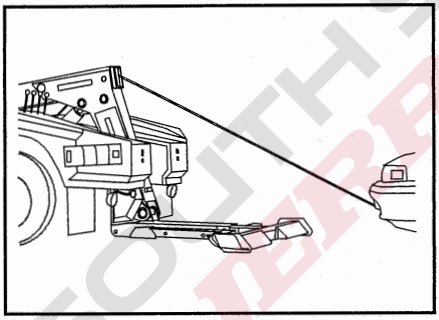


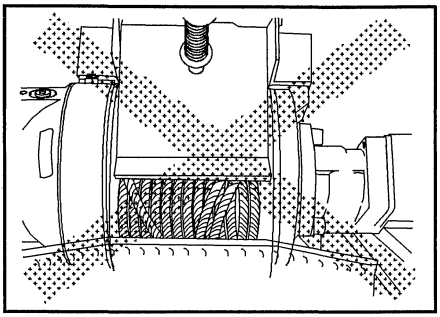
6. Attach the chain sling, hook or cable and hook securely to the work. Be sure of this hook up; you don't want it breaking loose during the pull. (See the safety sections earlier in this manual).



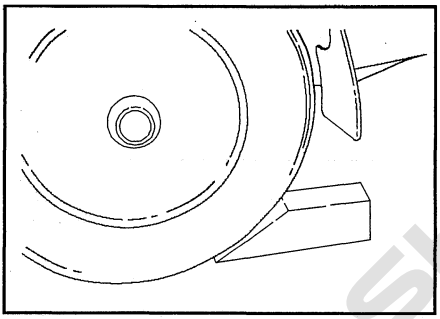
7. Re-engage the winch drive by turning the handle back 90°. It should retract cleanly. Confirm winch engagement by visually verifying that the handle has fully retracted, and by jogging the winch control lever. Now slowly take up the slack in the wire rope.



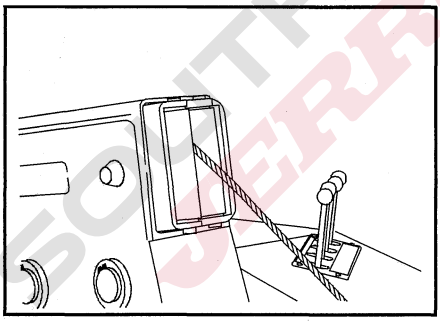




8. With the wire rope tight, slowly wind it in, observing both the work and the drum. Be sure the wire rope strands do not cross wrap or criss-cross on the drum. Observe the path the work must travel for snags or obstructions which could stall the work movement and overload the wire rope.



9. Once the work is in the de-sired position, use blocks or tie the work down if there is any question about stability. Slowly reduce the wire rope tension. After enough wire rope has been unwound, you may remove the hookup.



10. Now slowly retrieve the wire rope, carefully winding the wire rope onto the drum. Many operators take this opportunity to do a visual inspection. When you've finished rewinding the wire rope, be sure you don't over-wind it. Always wear safety glasses and gloves when doing recovery work or handling the wire rope.

Remember, most wire rope fallures are caused by the operator underestimating the pull or over estimating the wire rope strength.

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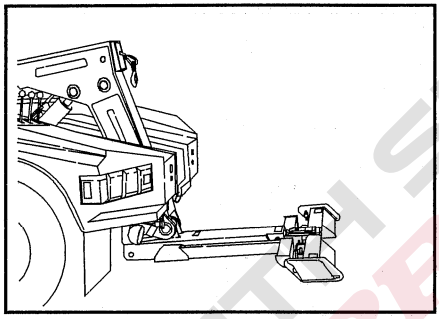
BOOM WINCH OPERATION (OPTIONAL)

The HIP40 boom winch is an extremely effective tool for lifting and loading. To operate the boom winch effectively, care and thought must be given.

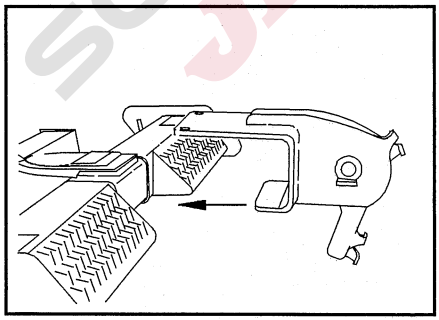
Boom Rating:	8,000 lbs.
Winch Rating:	8,000 lbs.
Wire Rope Specifications:	.375 x 80 ft.; 6x37 IPS fiber core
Working Limit (Wire Rope):	3385 lbs.

A WARNING:

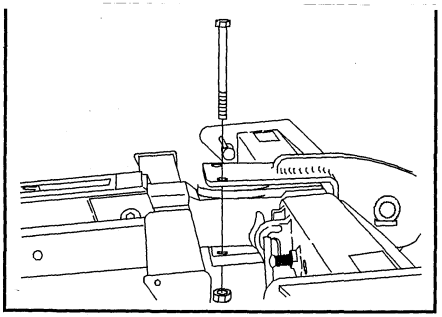
Do not exceed the working limit of the wire rope. Use snatch blocks and multiple lines to reduce the load on the wire rope.



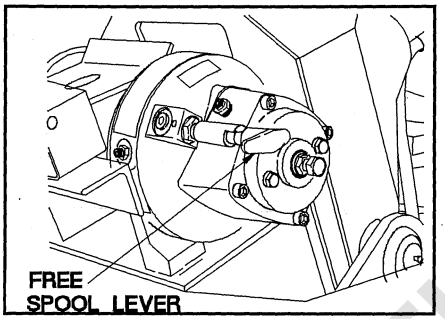
1. Position and align the truck to obtain a straight and direct pull.
2. Set the brake on your Jerr-Dan unit.
3. Unfold the under lift boom to gain access to the winch wire rope and to allow installation of the wire rope sheave attachment.



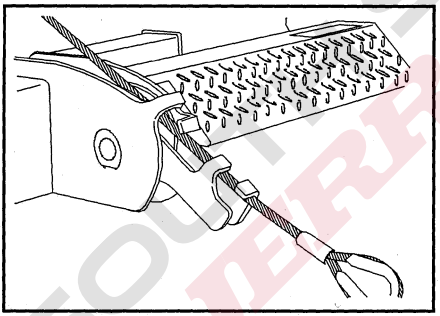
4. Position and slide the sheave attachment onto the crossbar pivot.



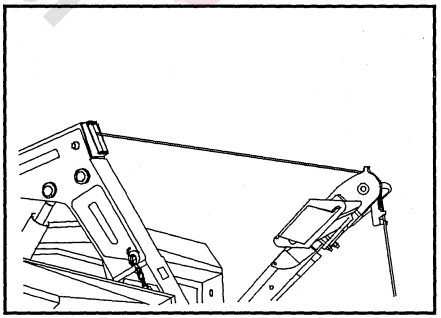
5. Install the retaining bolts thru the sheave attachment and secure with nuts on the under side of the crossbar.



6. Release the free spooling lever on the winch by. pulling and turning the handle 90°. Never pull the handle while the wire rope is under load! This allows the wire rope to be pulled directly off the drum to the work. Make sure at least 5 wraps of wire rope remain on the drum.



7. Install the wire rope into the sheave attachment.



8. Raise and position the boom and sheave attachment for the lift or pull.

9. Make your hookup to the load to be lifted or pulled.

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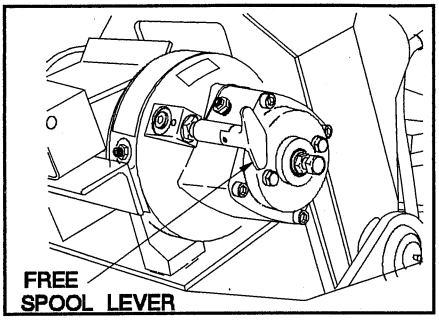

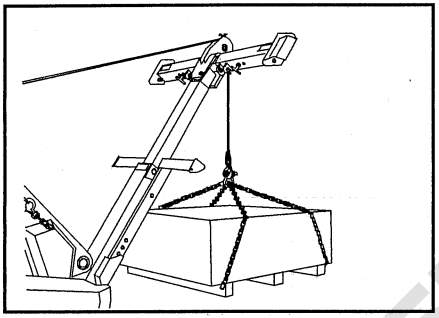

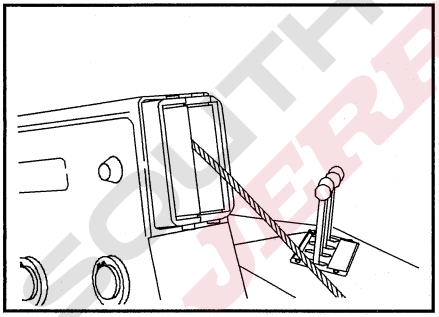

10. Re-engage the winch drive by turning the handle back 90°. It should retract cleanly. Confirm winch engagement by visually verifying that the handle has fully retracted and by jogging the winch control lever. Now slowly take up the slack in the wire rope.

11. With the wire rope tight, slowly wind it in, observing both the work and the drum. Be sure the wire rope strands do not criss-cross on the drum. Observe the path the work must travel for snags or obstructions which could stall the work movement and overload the wire rope.

12. Once the work is in the de-sired position, set the load down or stabilize the load. Slowly reduce the wire rope tension. Remove your hookup and the wire rope sheave.

13. Now slowly retrieve the wire rope, carefully winding the wire rope onto the drum. Many operators take this opportunity to do a visual inspection. When you've finished rewinding the wire rope, be sure you don't over-wind it.

Remember, most wire rope failures are caused by the operator underestimating the pull or over estimating the wire rope strength.

MAINTENANCE AND LUBRICATION

Your HIP40 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 HIP40 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 underlift 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 HIP40 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 dipstick has been provided under the filler cap of 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 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 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 composite materials. 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 HIP40 is mounted to the truck chassis by bolts. These bolts are torqued at the factory to 90 ft. lbs. We recommend periodic inspection and retorquing of these bolts. If your truck is equipped with the optional recovery winch, the winch mounting bolts should be regularly inspected and tightened if necessary. Replace any broken or damaged bolts immediately.

OILS AND GREASES

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

Company	Product
HYDRAULIC OILS	
1. Drydene Dual Range	Hydraullc Fluid 5w20
2. Sun Refining & Marketing	2105 Hydraullc
3. D.A. Lubricants	5w20 HlVI
4.Texaco	Rando HDAZ
5. Mobll OU Corp.	DTE 15
6. Amoco 011 Co.	Rykon MV
7. Citgo	AW All Temp
GREASES	
1. Drydene	HD Lithium EP2
2.Gulf	Crown EP2
3.Amoco	Amollth EP2
4. Shell	Alvanla EP2
5.Texaco	MarfaxEP2
6. Mobll	Mobilux EP2
7.Sunoco	Prestige EP2
WINCH AND GEAR LUBE	
1. Phllllps	140 wt. EP Gear Lube 93301 (or approved equlvalent)

LUBRICATION POINTS

The following lubrication chart is located inside the tool box lid on the driver's side of the HIP40 body.

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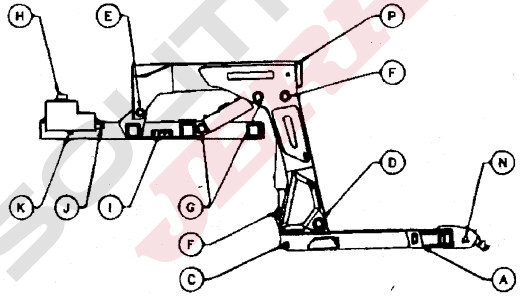
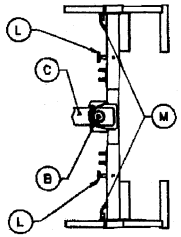
INTERVAL (HOURS)	REF NO	IDENTIFICATION	SERVICE	LUBRICANT	NO. OF POINTS
50 OR MONTHLY	A	BOOM (FLY)	COAT	MPG	1
	L	ADJUSTMENT KNOB	OIL	ENGINE OIL	2
100 OR BH,ONTHLY	B	GRID PIVOT	LUBE	I.PG	1
	C	EXTEND CYLINDER	LUBE	MPG	2
	D	Uft)ERL IFT PIVOT	LUBE	loPG	2
	E	BOOM PIVOT	LUBE	MPG	2
	F	TILT CYLINDER	LUBE	MPG	2
	G	LI FT CYL INDER	LUBE	MPG	2
	H	HYDRAULIC RESERVOIR	CHECK	•	1
	I	VALVE SPOOL	CLEAN & OIL	ENGINE OIL	8
	M	PLUNGER	LUBE	MPG	2
	N	CROSSBAR SHEAVE PIN	LUBE	t.fG	1
	P	CABLE ROLLER PINS	OIL	ENGINE OIL	2
250 OR SEMI-ANNUALLY	J	HYDRAULIC FILTER	CHANGE	———	1
1000 OR YEARLY	H	HYDRAULIC RESERVOIR	DRAIN-FILL	•	1
	K	MAGNETIC PLUG	CLEAN	———	1





L-ARM GRID

• INDICATES DUAL HYDRAULIC FLUID 5 W 20 AUTO TRANS FLUID MAY BE SUBSTITUTED IF NECESSARY

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TROUBLE SHOOTING

You probably won't require anything but preventive maintenance to keep your HI P40 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 hoses d. Dirty hydraulic oil e. Hydraulic pump worn	a. Speed up engine b. Check dipstick and fill with the specified oil c. Inspect: remove blockage d. Drain, flush and refill with clean oil, replace filter e. Rebuild or replace
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. 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

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.	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
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 P.T.O. connection not adjusted properly b. Defective shifter cover plate	a. Inspect and adjust b. Inspect and replace

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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

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 cable	a. Free spooling device not engaged b. Sheared keys or broken coupling c. Hydraulic pump worn	a.Engage b. Inspect or replace c. 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.

SUBFRAME INSTALLATION

Ref No.	Part No.	Description	Qty.
1	3470000001	Breather Cap	1
2	7115161250	Capscrew	4
3	7950160000	Lockwasher	4
4	7950160151	Flat Washer	4
5	4831000075	Spacer	4
6	4706002324	Plate	2
7	7118181216	Capscrew	16
8	4706002509	Plate	2
9	3868000171	Subframe Assembly	1
10	4706002317	Plate	2
11	7660182301	Locknut	16
12	7701000026	Plu	1
13	3750000025	Hy raulic Tank	1

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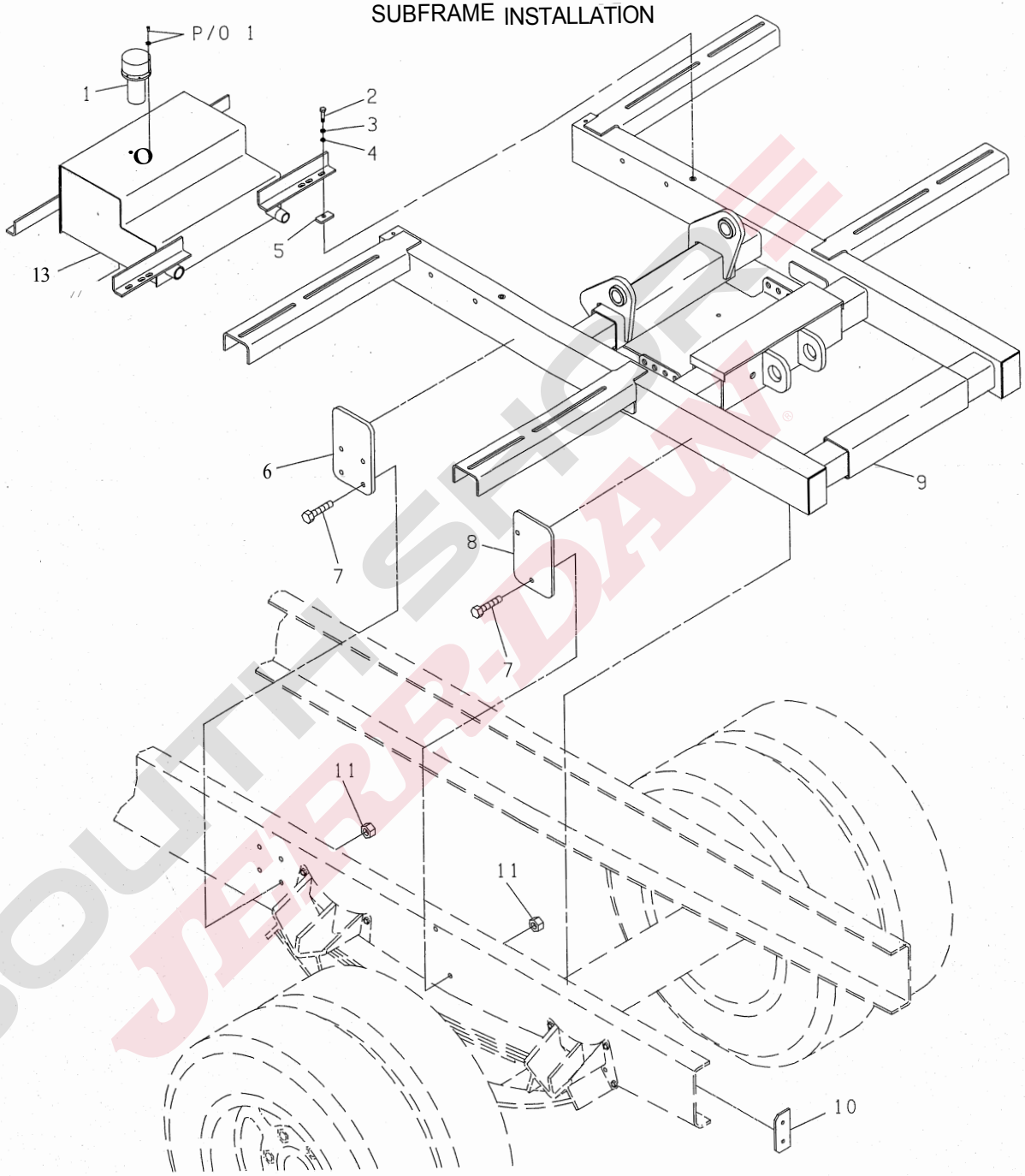
SUBFRAME INSTALLATION



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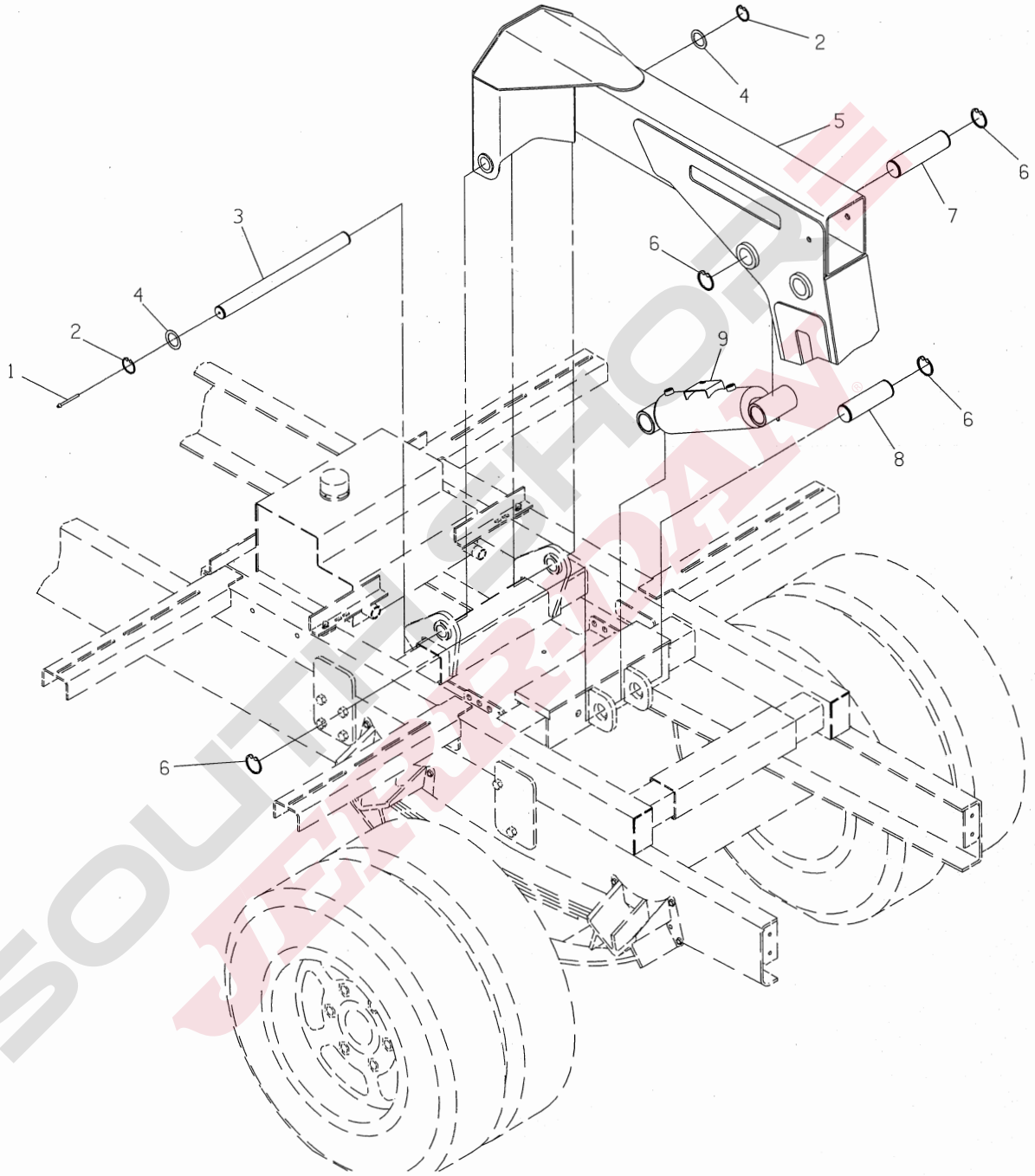
UNDER LIFT BOOM INSTALLATION



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UNDER LIFT BOOM INSTALLATION

Ref No.	Part No.	Description	Qty.
1	7440030000	Grease Fitting	2
2	7754000033	Retaining Ring	2
3	4691000300	Pin	1
4	4949000051	Washer	2
5	3170000147	Europac Boom Assembly	1
6	7754000048	Retaining Ring	4
7	4691000303	Pin	1
8	4691000309	Pin	1
9	3320000065	Lift Cylinder Assembly	1

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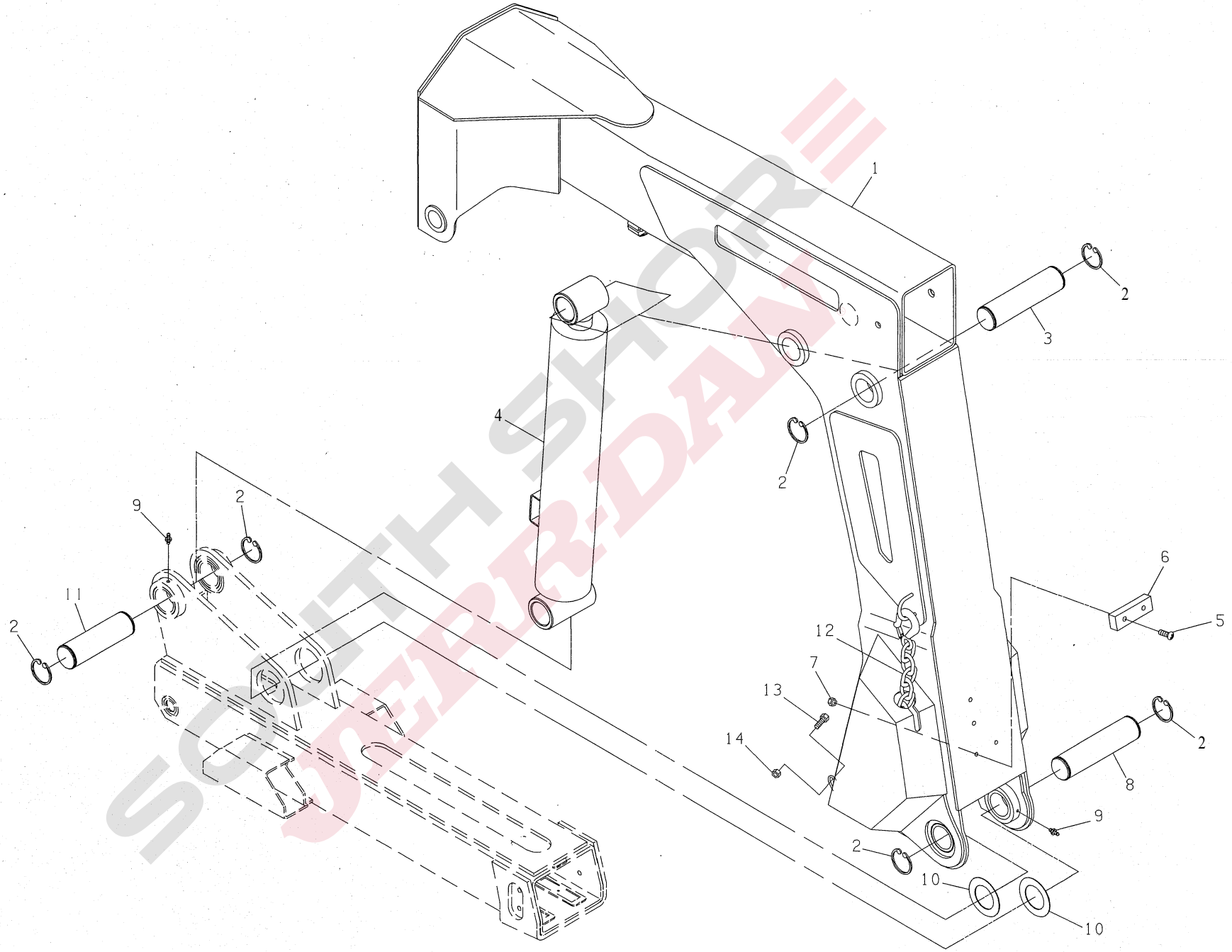
UNDER LIFT BOOM ASSEMBLY



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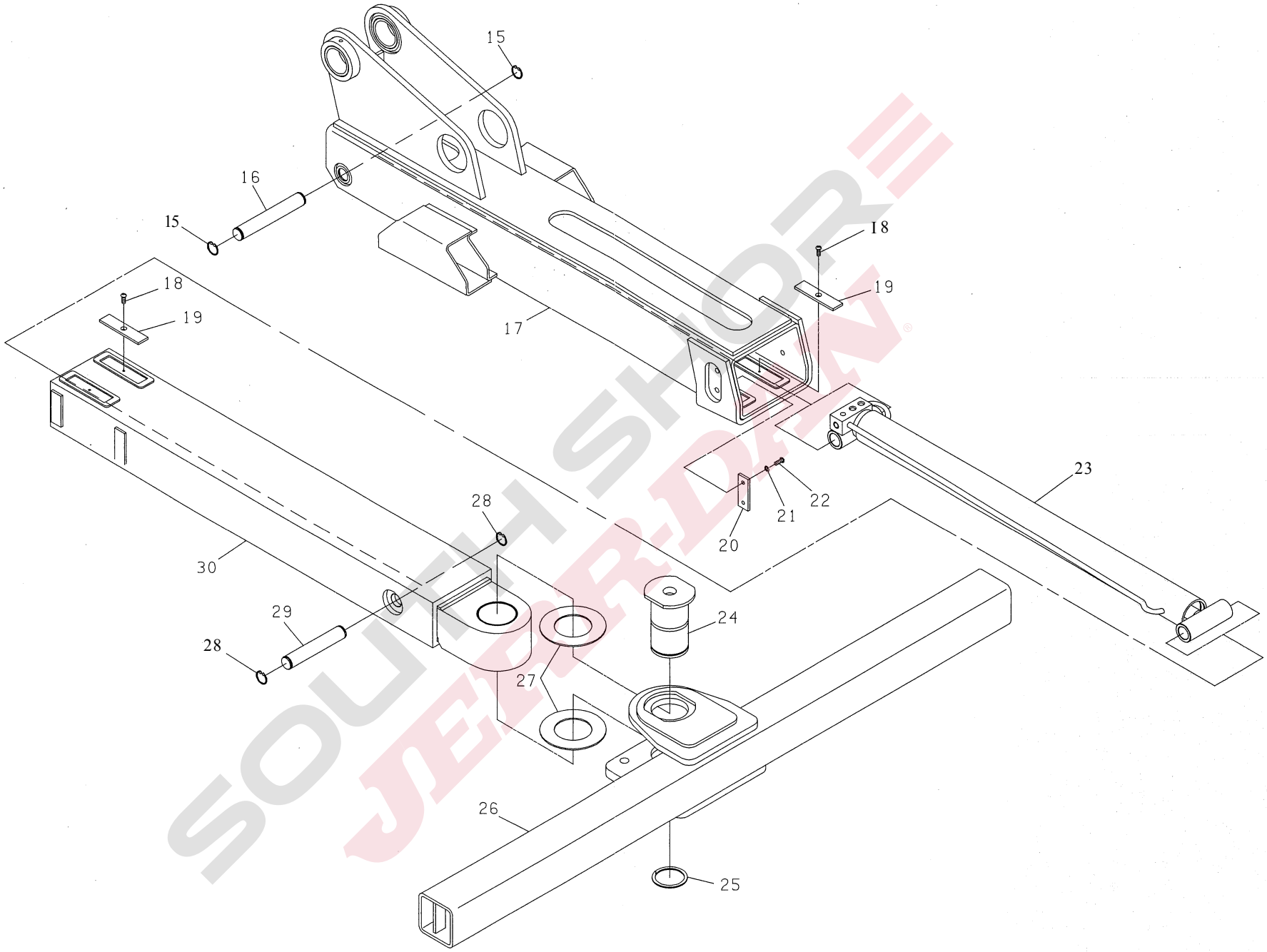

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UNDER LIFT BOOM ASSEMBLY

Ref. No.	Part No.	Description	Qty.
1	3170000142	Boom Tower Weldment	1
2	7754000048	Retaining Ring	6
3	4691000303	Pin	1
	3320000066	Tilt Cylinder Assembly	1
	7114141018	Capscrew	2
	7679000010	Pad	1
7	7660142600	Locknut	2
8	4691000310	Pin	1
9	7440030000	Grease Fitting	4
10	4949000050	Washer	2
11	4691000309	Pin	1
12	7262000020	Chain With Latch Hook Assembly	2
13	7115161050	Capscrew	2
14	7660162601	Locknut	2
15	7754000056	Snap Ring	2
16	4691000308	Pin	1
17	3170000145	Underlift Outer Tube Weldment	1
18	7115100323	Capscrew	5
19	4679000156	Pad	5
20	4831000071	Spacer	2
21	7950150000	Washer	4
22	7105150450	Capscrew	4
23	3320000067	Underlift Ext/Ret Cylinder Assembly	1
24	4691000103	Pin	1
	7754000024	Retaining Ring	1
•25 26	3913000058	Pivot Tube Weldment	1
27	4949000047	Washer	2
28	7754000019	Retaining Ring	2
29	4691000307	Pin	1
30	3170000143	Underlift Inner Tube Weldment	1

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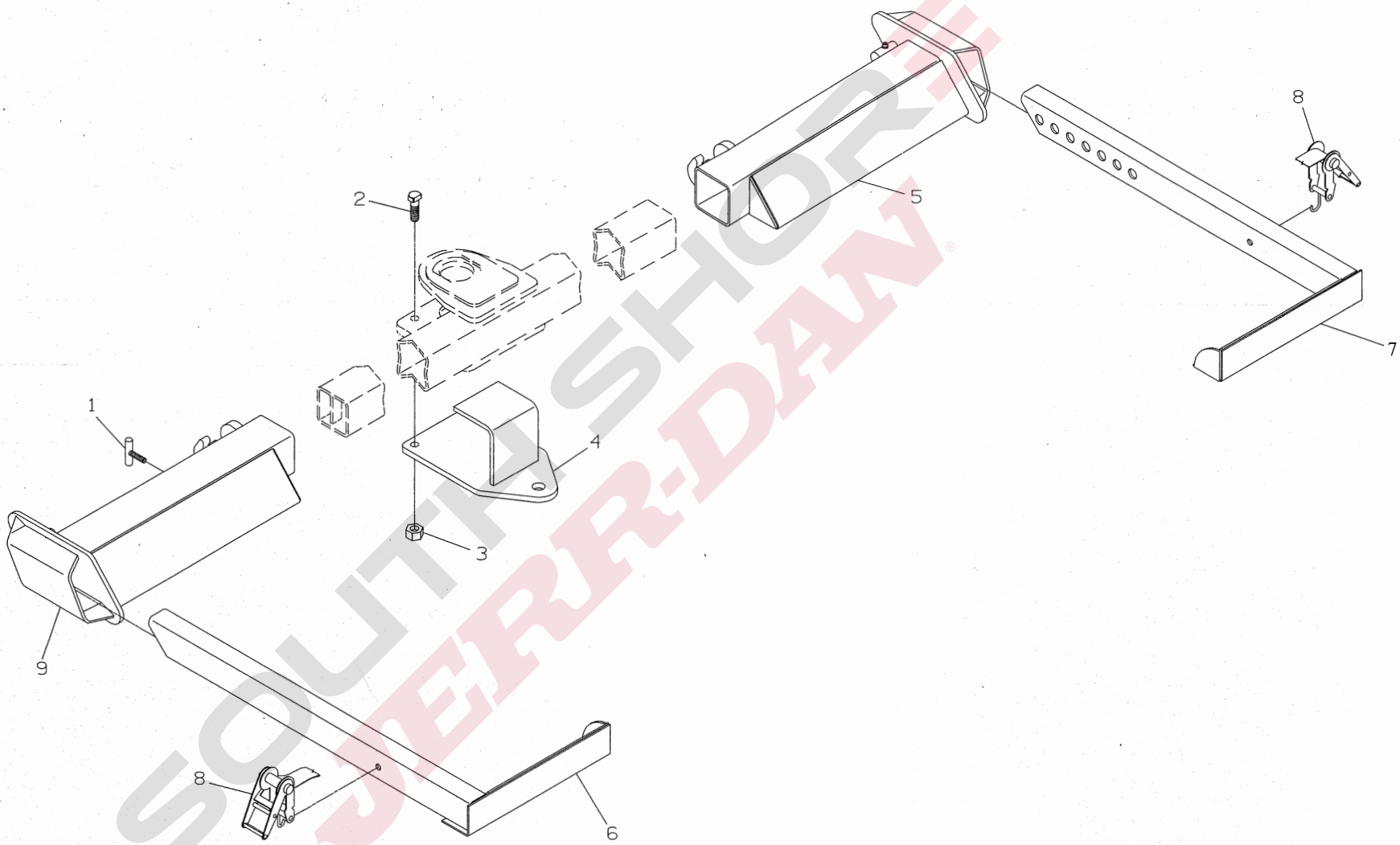
WHEEL GRID INSTALLATION

Ref No.	Part No.	Description	Qty.
1	3551000036	T-Handle Weldment	2
2	4120000013	Bolt	2
3	7660200008	Nut	2
4	3706000130	Ball Hitch Plate	1
5	3484000030	Grid Weldment, RH	1
6	3020000038	L-Arm Weldment, RH	1
7	3020000037	Arm Weldment, LH	1
8	7894000034	Light Tie Strap L-Arm	2
9	3484000031	Grid Weldment, LH	1

WHEEL GRID INSTALLATION



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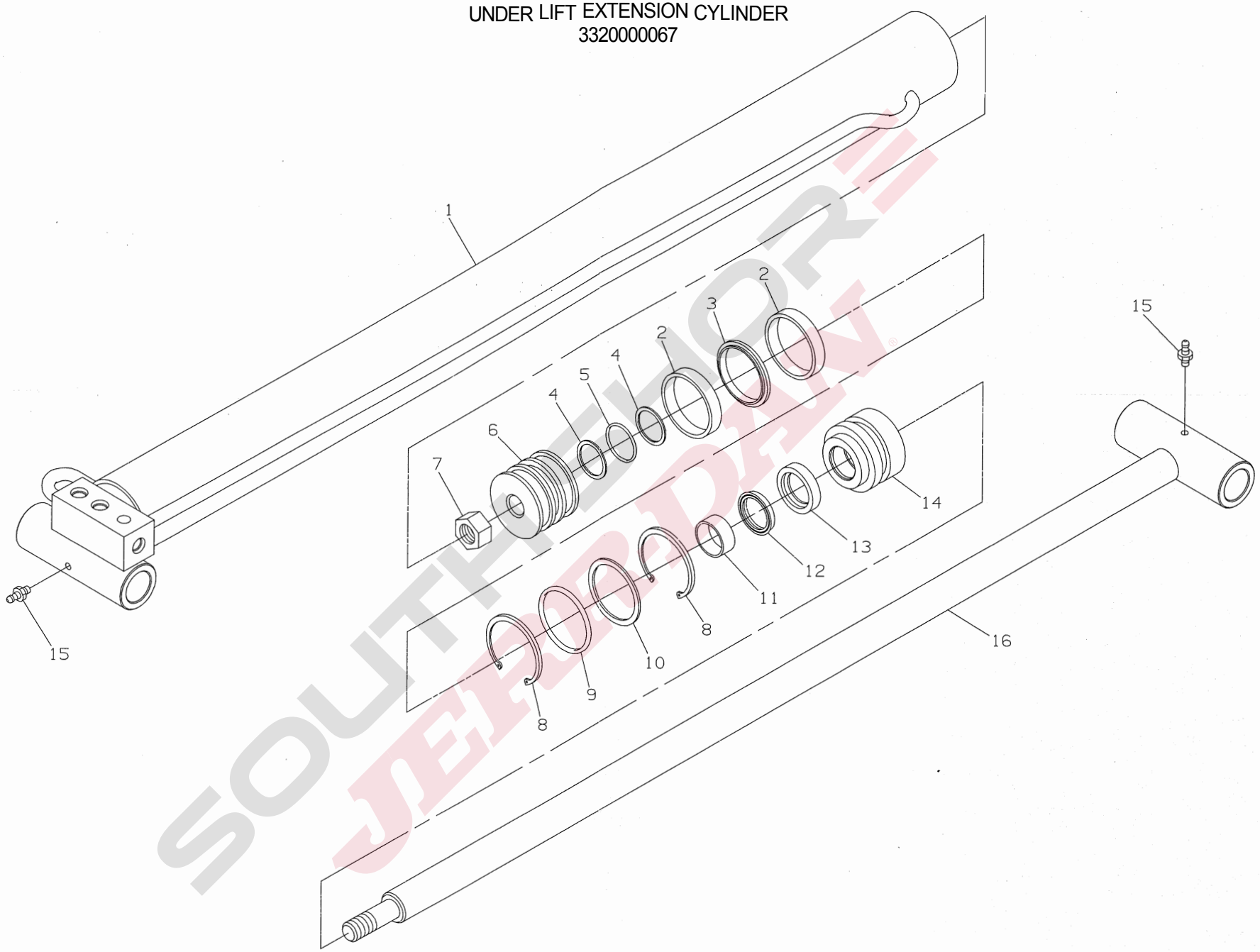
UNDER LIFT EXTENSION CYLINDER
3320000067



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UNDER LIFT EXTENSION CYLINDER
3320000067

Ref. No.	Part No.	Description	Qty.
1	3071000063	Underlift Cylinder Barrel	1
2	7796000030*	Wear Ring	2
	7796000026*	Piston Seal	1
	7755214609*	Backup Ring	2
5	7755214000*	O-Ring	1
6	4698000011	Piston	1
7	7660201631	Locknut	1
8	7754000001	Retaining Ring	2
9	7755327000*	O-Ring	1
10	7755327609*	Backup Ring	1
11	7754000036*	Wear Ring	1
12	7796000023*	Rod Seal	1
13	7796000005*	Rod Wiper Seal	1
14	4553000015	Head	1
15	7440030000	Grease Fitting	2
16	3763000084	Underlift Cylinder Hod	1

* Available only in Service Kit 7577250041

TILT CYLINDER
3320000066

Ref. No.	Part No.	Description	Qty.
1	7440030000	Grease Fitting	2
2	3071000062	Tilt Cylinder Barrel	1
3	7660341631	Nut	1
4	4698000008	Piston	1
5	7755226609*	Backup Ring	2
6	7755226000*	O-Ring	1
7	7754000011*	Piston Wear Ring	2
8	7796000009*	Piston Seal	1
9	3763000083	Tilt Cylinder Rod	1
10	4553000009	Head	1
11	7754000013	Retaining Ring	1
12	7796000011*	Rod Wiper Seal	1
13	7755342609*	Backup Ring	1
14	7755342000*	O-Ring	1
15	7796000025*	Rod Seal	1
16	7754000012*	Piston Rin	1
17	7754000028	Retaining ing	1

* Available only in Service Kit 7577250026

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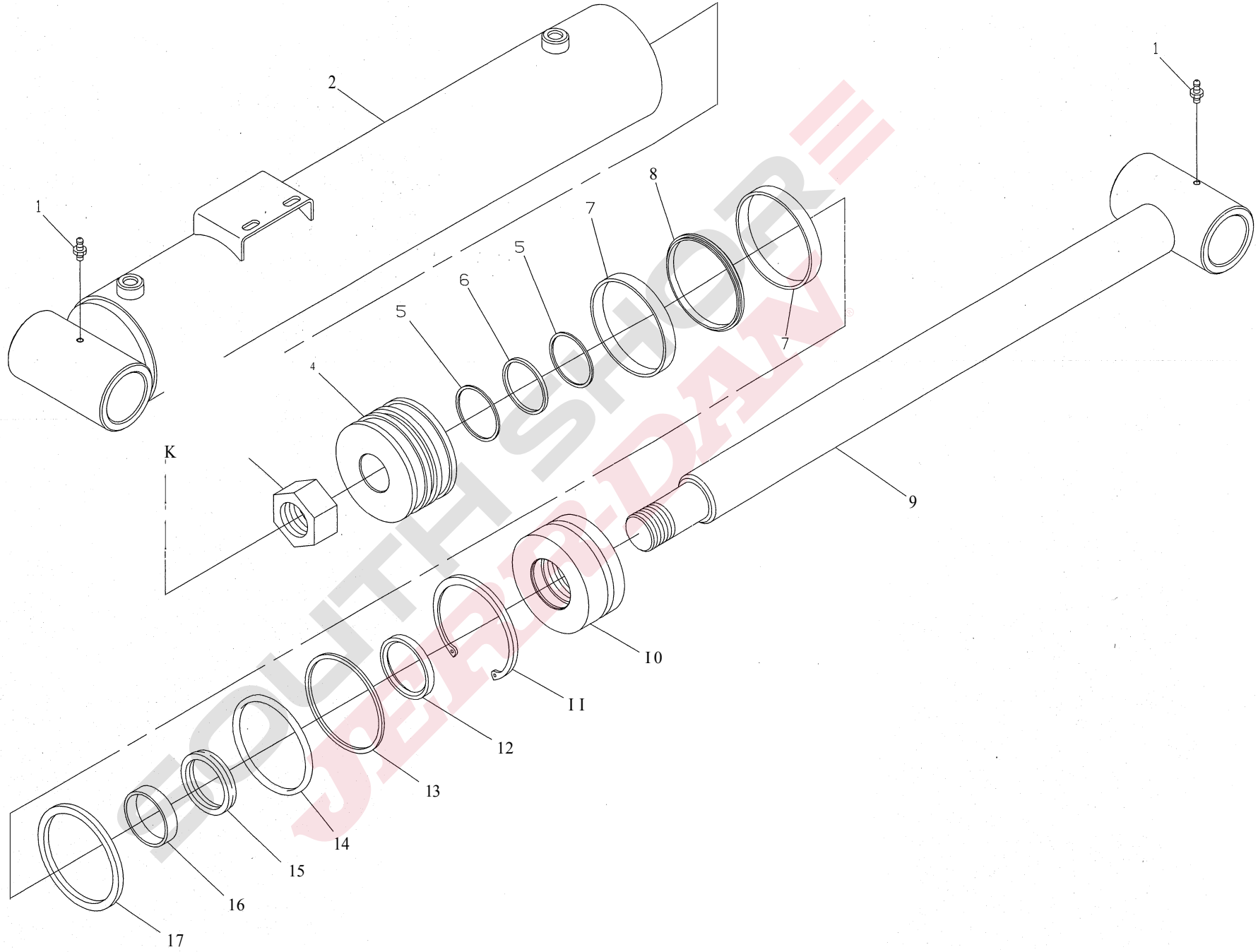
TILT CYLINDER 3320000066



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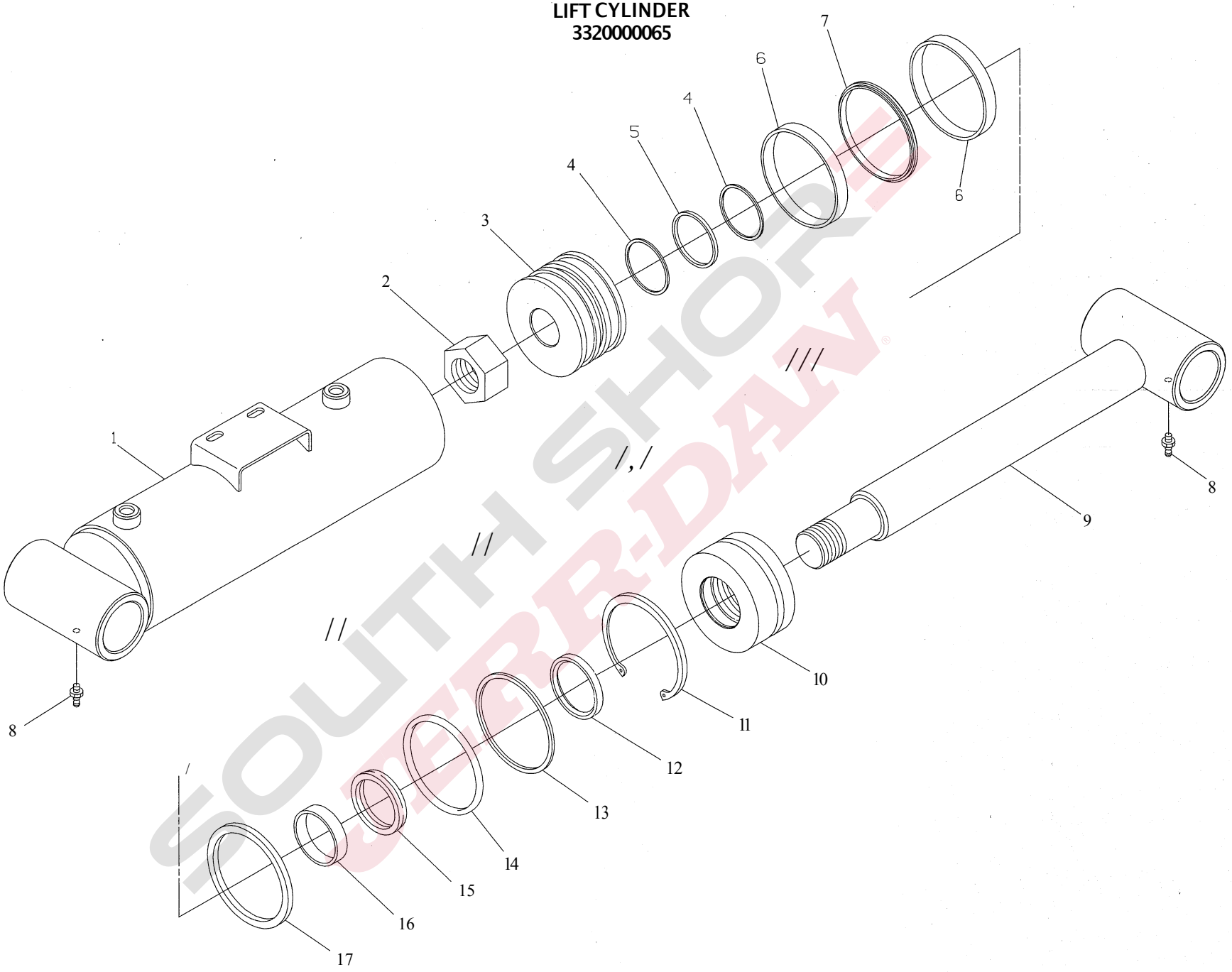

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LIFT CYLINDER
3320000065

Ref. No.	Part No.	Description	Qty.
1	3071000061	Lift Cylinder Barrel	1
2	7660341631	Nut	1
	4698000008	Piston	1
	7755226609*	Backup Ring	2
	7755226000*	O-Ring	1
6	7754000011*	Wear Ring	2
7	7796000009*	Piston Seal	1
8	7440030000	Grease Fittin	2
9	3763000082	Lift Cylinder od	1
10	4553000009	Head	1
11	7754000013	Retaining Ring	1
12	7796000011*	Rod Wiper Seal	1
13	7755342609*	Backup Ring	1
14	7755342000*	O-Ring	1
15	7796000025*	Rod Seal	1
16	7754000012*	Wear Ring	1
17	7754000028	Retaining Ring	1

* Available only in Service Kit 7577250026

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WINCH INSTALLATION (OPTION)

Ref No.	Part No.	Description	Qty.
1	7115181016	Capscrew	6
2	7660182600[1]	Locknut	1
3	7950180161[1]	Flat Washer	2
4	7843000004[1]	ring	1
5	7970000063	inch	1
6	3017000042	Angle	1
7	7115205250	Capscrew	2
8	3706000129[2]	Sheave Support	1
9	7754000008[2]	Retaining Ring	1
10	7809000001[2]	Wire Rope Sheave	1
11	3706000128[2]	Cable Guide	1
12	3691000168[2]	Sheave Pin Crossbar	1
13	7660200008	Nut	2
14	7754000022	Retaining Ring	4
15	4691000304	Pin	2
16	3706000109	Nose Boom	1
17	4691000305	Pin	1
18	7209000011	Bushing	6
19	4912000247	Tube	2
20	4912000246	Tube	1
21	7115181450	Capscrew	2
22	7660182601	Locknut	2
23	7118180650	Capscrew	4
24	7660182301	Locknut	6
25	4017000855	Angle	1
26	3500900010[1]	Cable Tensioner	1
27	3533000027	Cable	1

[1] Available as Assembly 3500900011
[2] Available as Assembly 3809000002

WINCHI
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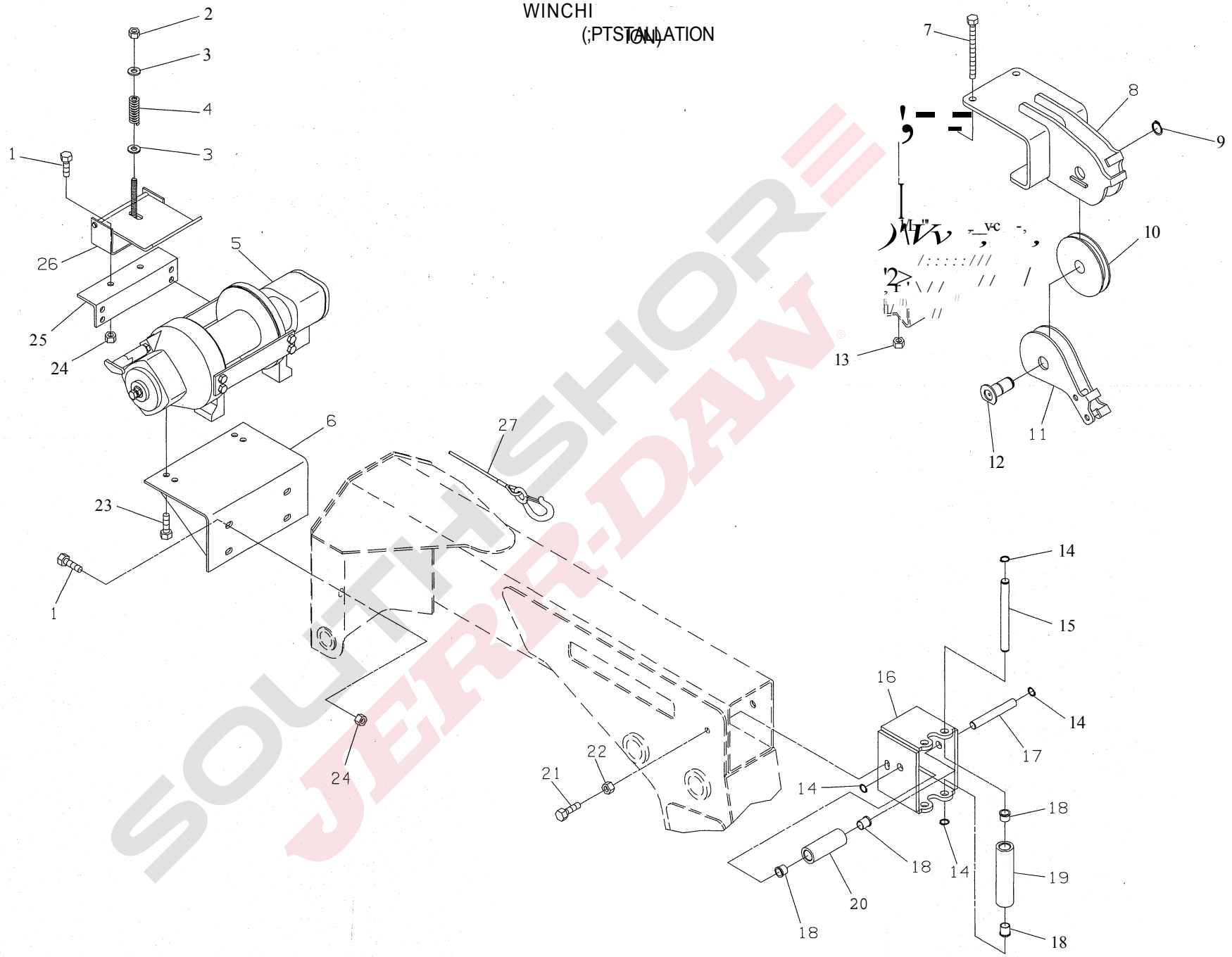

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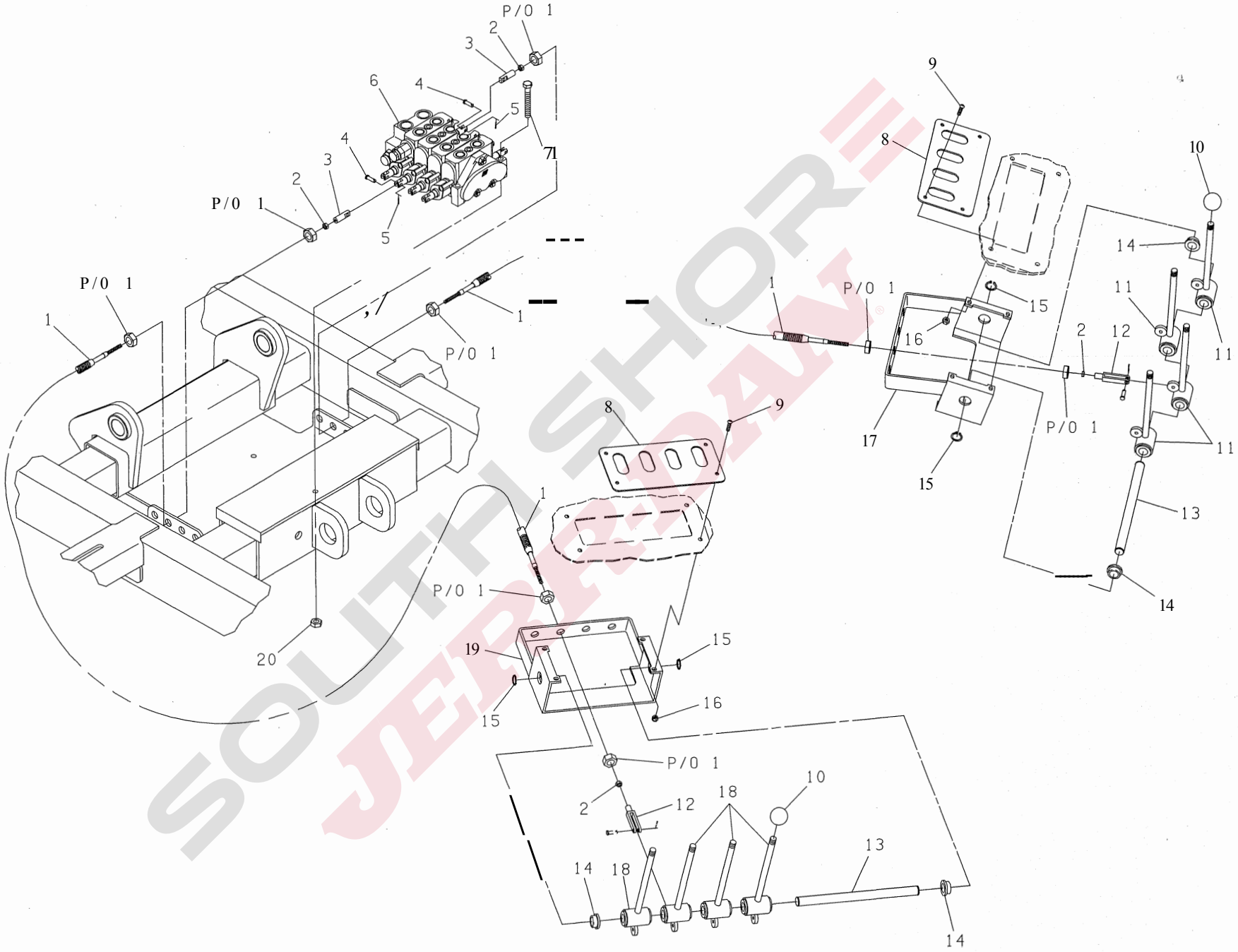
CONTROLS INSTALLATION



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Date __ ____

CONTROLS INSTALLATION

Ref No.	Part No.	Description	Qty.
1	7248000049	Push-Pull Cable	8
2	7660140230	Nut	16
3	4309000001	Coupling	8
4	7690141200	Clevis Pin	8
5	7690000810	Cotter Pin	8
6	3935000081	Valve Assembly	1
7	7115162250	Capscrew	3
8	4314000048	Coverplate	2
9	7114140818	Capscrew	8
10	7551000002	Knob	8
11	3551000038	Handle	4
12	7990000003	End Yoke	8
13	4691000301	Pin	2
14	7082000005	Bearing	4
15	7754000022	Retaining Ring	4
16	7660142600	Locknut	8
17	3178000257	Controls Bracket, RH	1
18	3551000048	Handle	4
19	3178000256	Controls Bracket, LH	1
20	7660162601	Locknut	3

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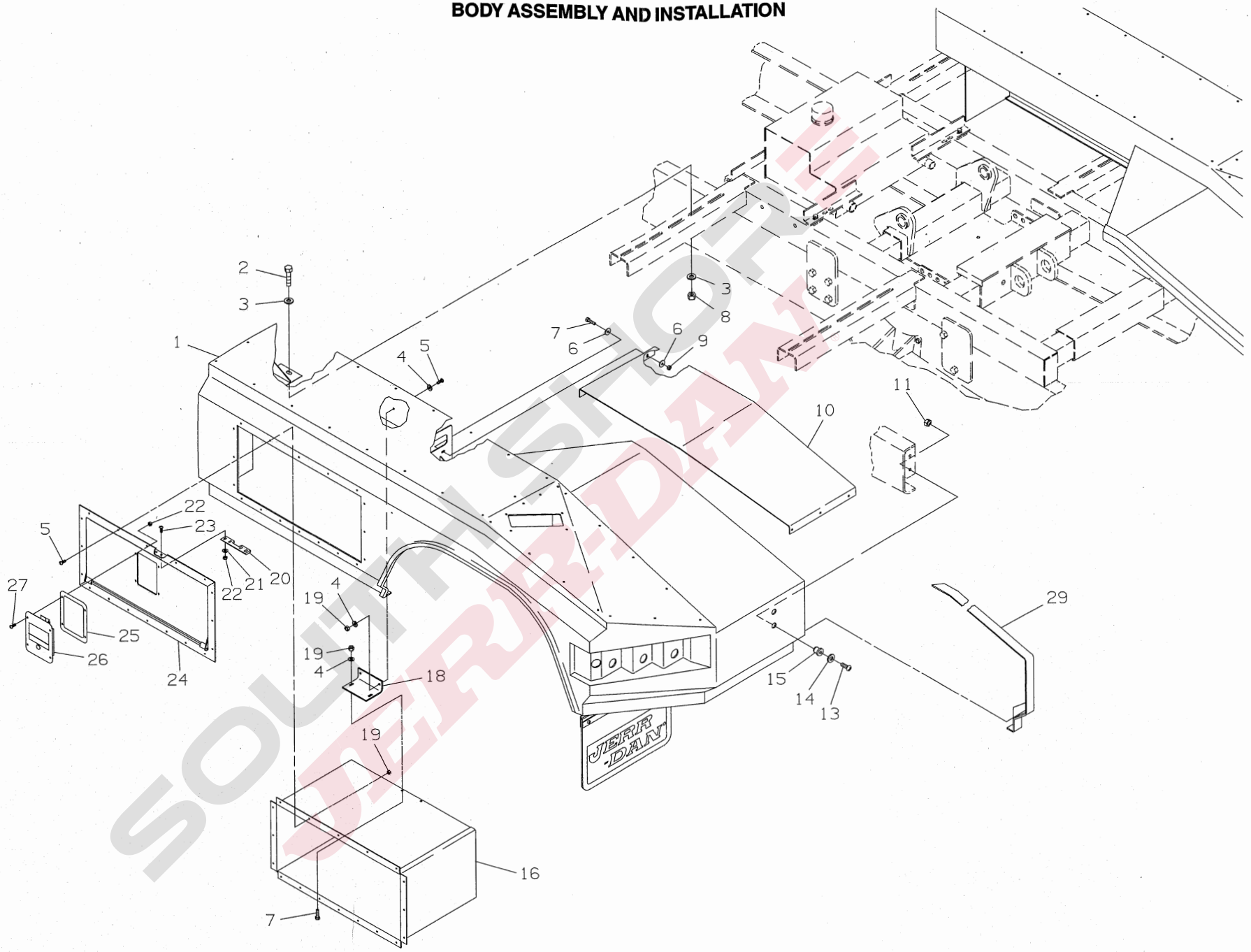
BODY AbSt:MBLY AND INSTALLATION

Ref No.	Part No.	Description	Qty.
1	7097000001	Body, LH	1
2	7115181250	Capscrew	8
3	7950180161	Flat Washer	16
4	7950140153	Flat Washer	6
5	7114140818	Capscrew	20
6	7949000022	Washer	26
7	7115140850	Capscrew	22
8	7660182601	Locknut	8
9	7660140001	Nut	20
10	4686000119	Panel, LH	1
11	7660162601	Locknut	4
12	7686000040	Body Trim Angle Panel, RH	1
13	7114161618	Capscrew	4
14	7950160153	Washer	4
15	7636000014	Rubber Mount	4
16	3899000059	Toolbox	1
17	4178000301	Bracket	2
18	4017000948	Angle	1
19	7660142601	Locknut	22
20	4706002551*	Plate	1
21	7950100151*	Flat Washer	4
22	7660102601*	Nut	8
23	7114100618*	Capscrew	4
24	3899000057	Toolbox Door and Frame Assembly	1
25	7796000031*	Gasket	1
26	7595000002*	Paddle Handle Lock	1
27	7114100418*	Capscrew	4
28	7097000002	Body, RH	1
29	7686000039	Body Trim Angle Panel, LH	1
30	4686000120	Panel, RH	1
31	7660152601	Locknut	12
32	7950150161	Flat Washer	16
33	7115150850	Capscrew	4
34	7590000089	Work Lamp with Connectors	2
35	4178000207	Mounting Bracket	2
36	7950160161	Flat Washer	2
37	7111151010	Screw	8
38	4706001124	Backup Plate	2
39	7638000003	Mud Flap	2

* Part of Door and Frame Assembly 3899000057

BODY ASSEMBLY AND INSTALLATION



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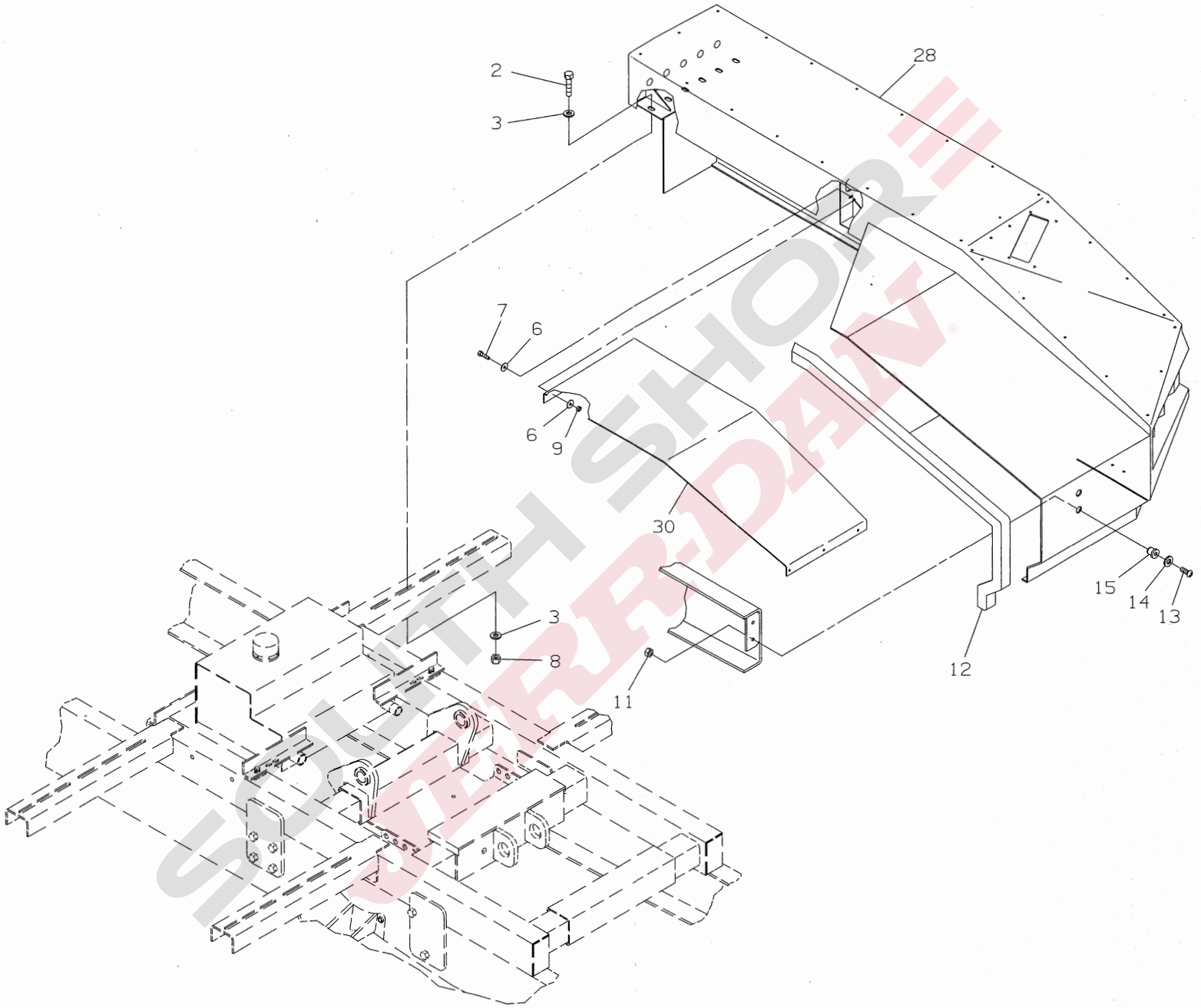
BODY ASSEMBLY AND INSTALLATION



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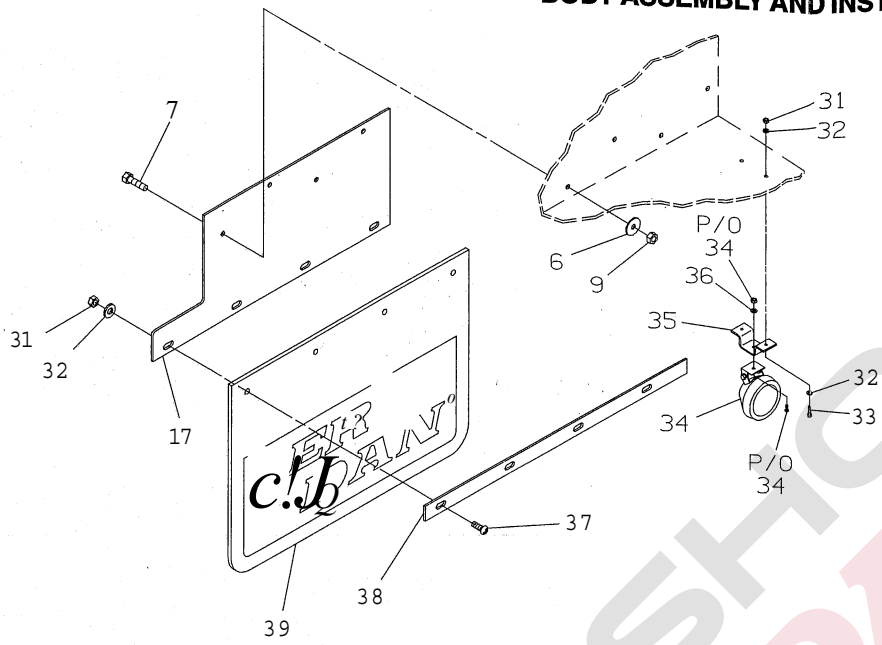
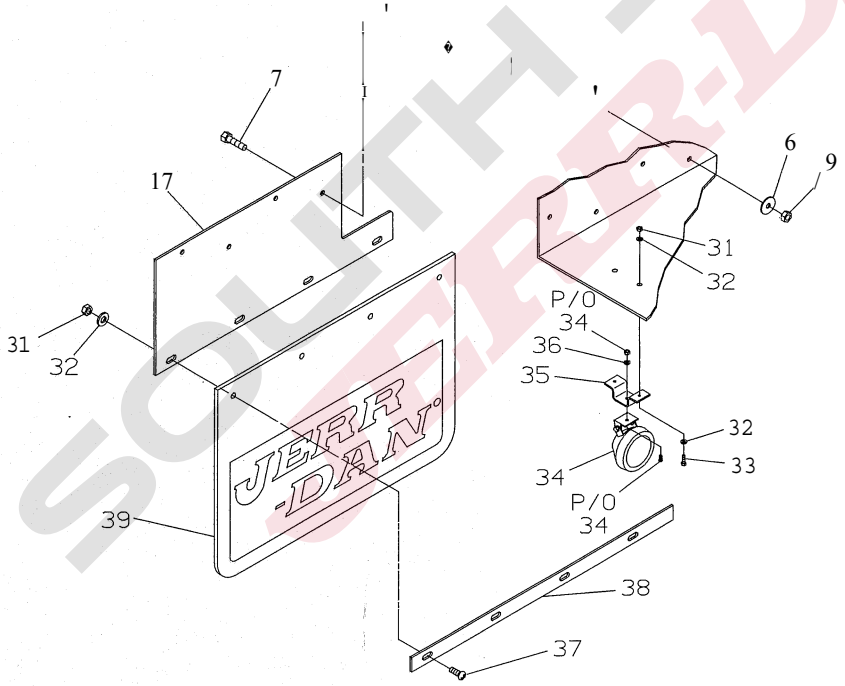
BODY ASSEMBLY AND INSTALLATION





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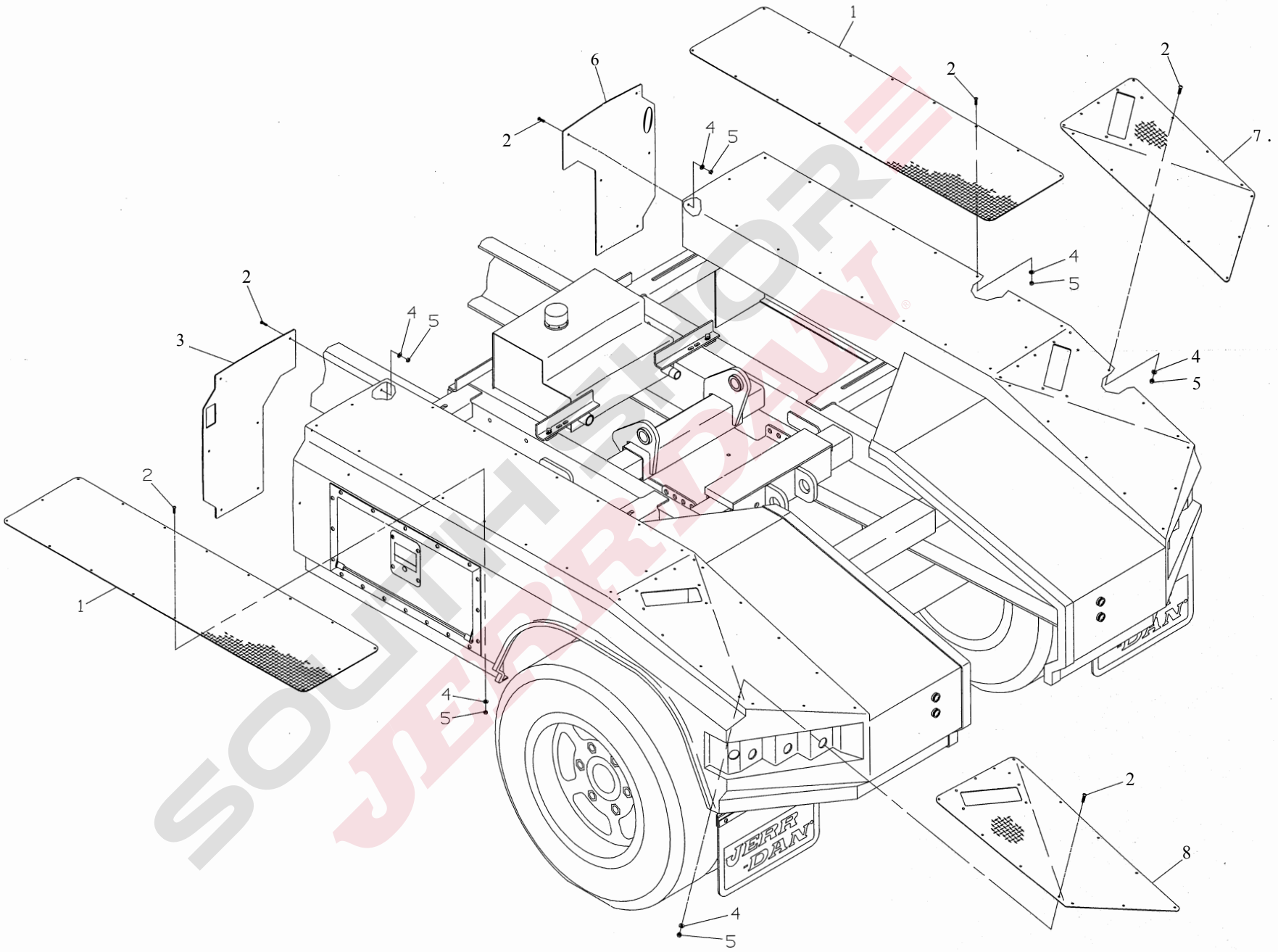
ALU MINUM DRESS-UP KIT
(OPTION)



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ALUMINUM DRESS-UP KIT (OPTION)

Ref No.	Part No.	Description	Qty.
1	4707000114	Plate	2
2	7114140818	Capscrew	76
3	4707000123	Plate	1
4	7950140141	Flat Washer	76
5	7660142600	Locknut	76
6	4707000122	Plate	1
7	4707000116	Plate	1
8	4707000117	Plate	1

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TUNNEL TOOLBOX INSTALLATION

Ref No.	Part No.	Description	Qty.
1	7115150850	Capscrew	8
2	7950150161	Flat Washer	16
3	7950160161	Flat Washer	24
4	7115161650	Capscrew	4
5	4177000042	Brace	2
6	7660152601	Locknut	8
7	7115181450	Capscrew	4
8	3274000007	Clamp Weldment	4
9	7660182301	Locknut	4
10	7115161450	Capscrew	8
11	3455000025	Tunnel Frame	1
12	4831000072	Body Spacer	4
13	7632046054	Moulding	2
14	7660162601	Locknut	12
15	3899000062	Toolbox Assembly (Ford)	1
	3899000063	Toolbox Assembly (Chevy HD3500)	1

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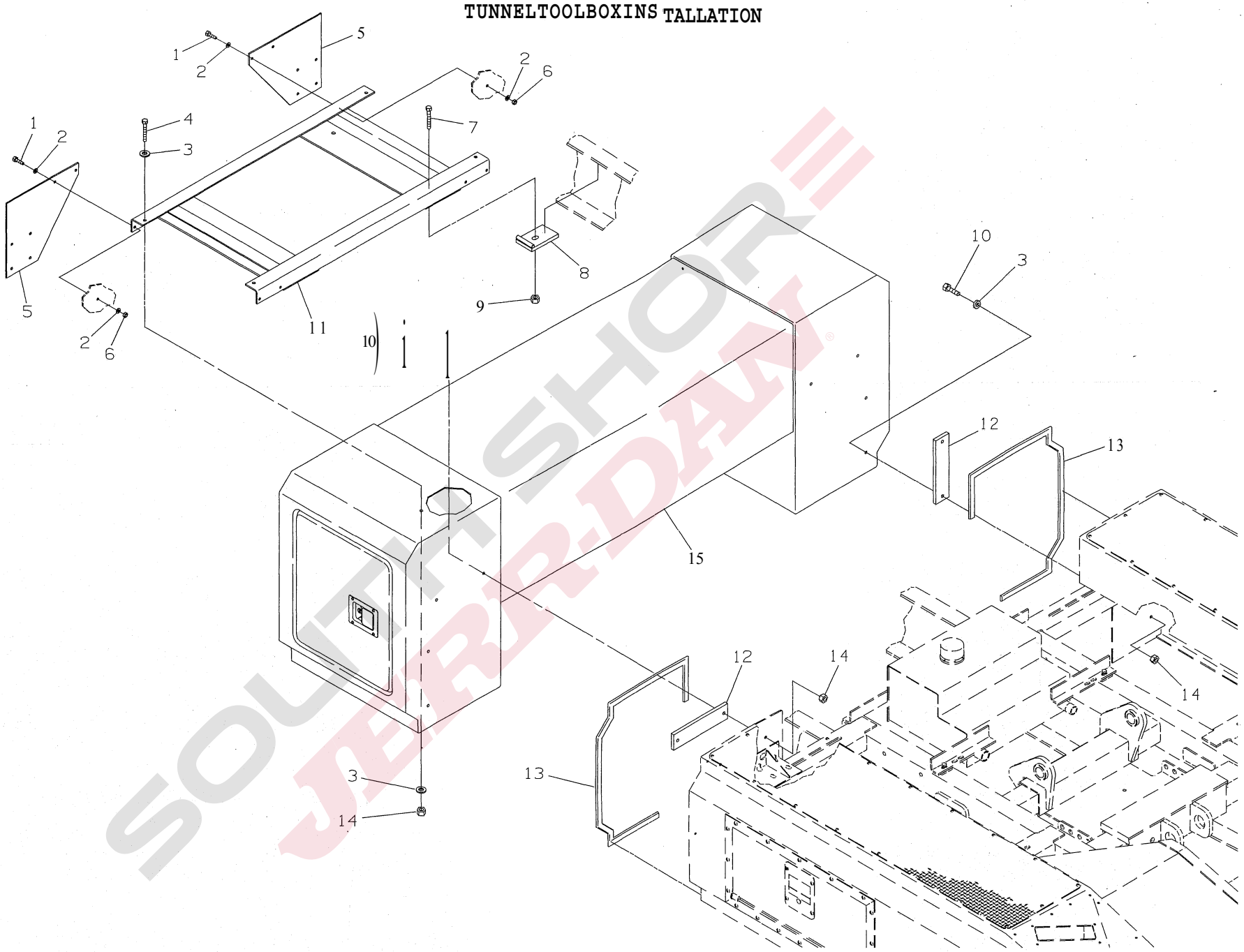
TUNNELTOOLBOXINS TALLATION



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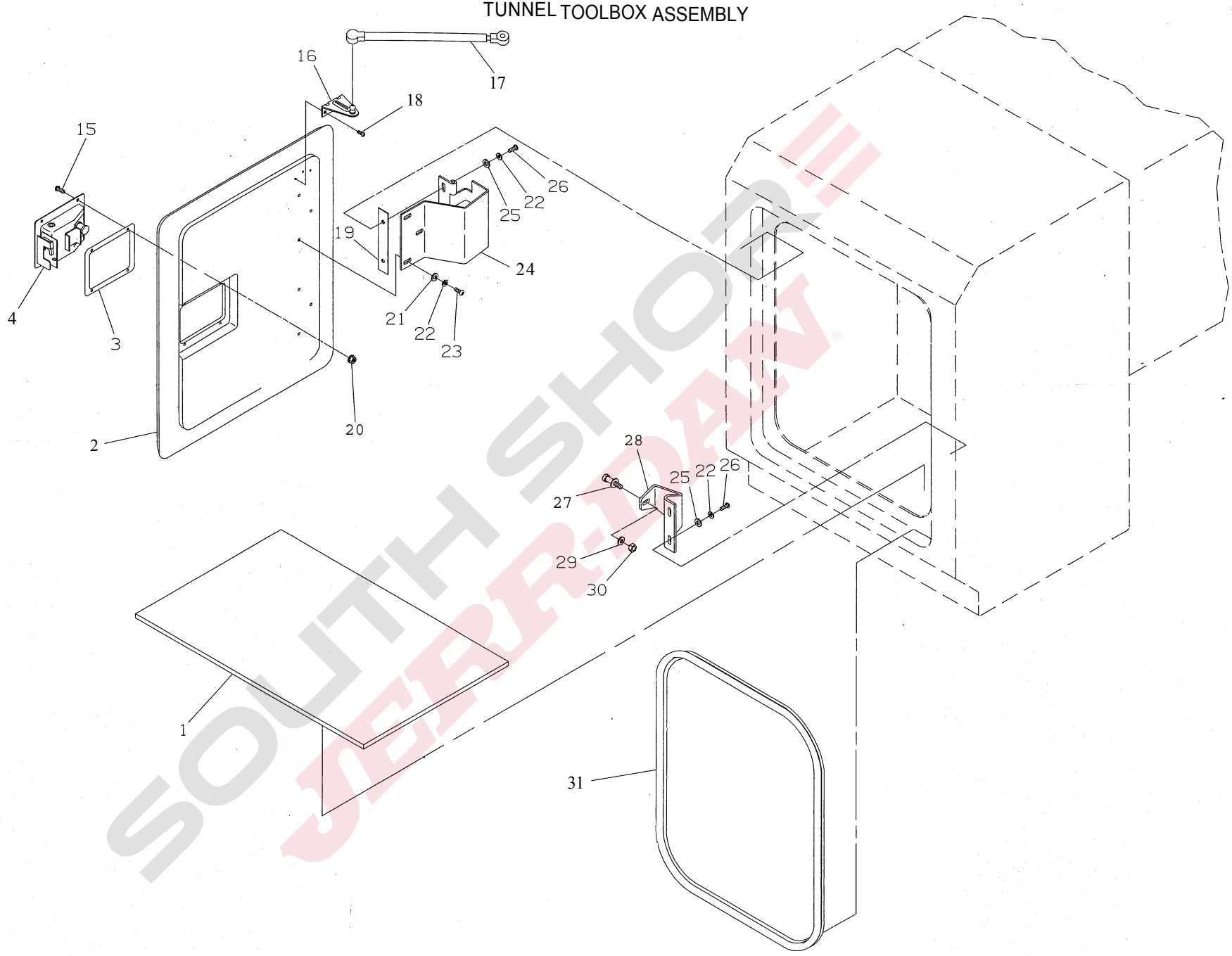
TUNNEL TOOLBOX ASSEMBLY



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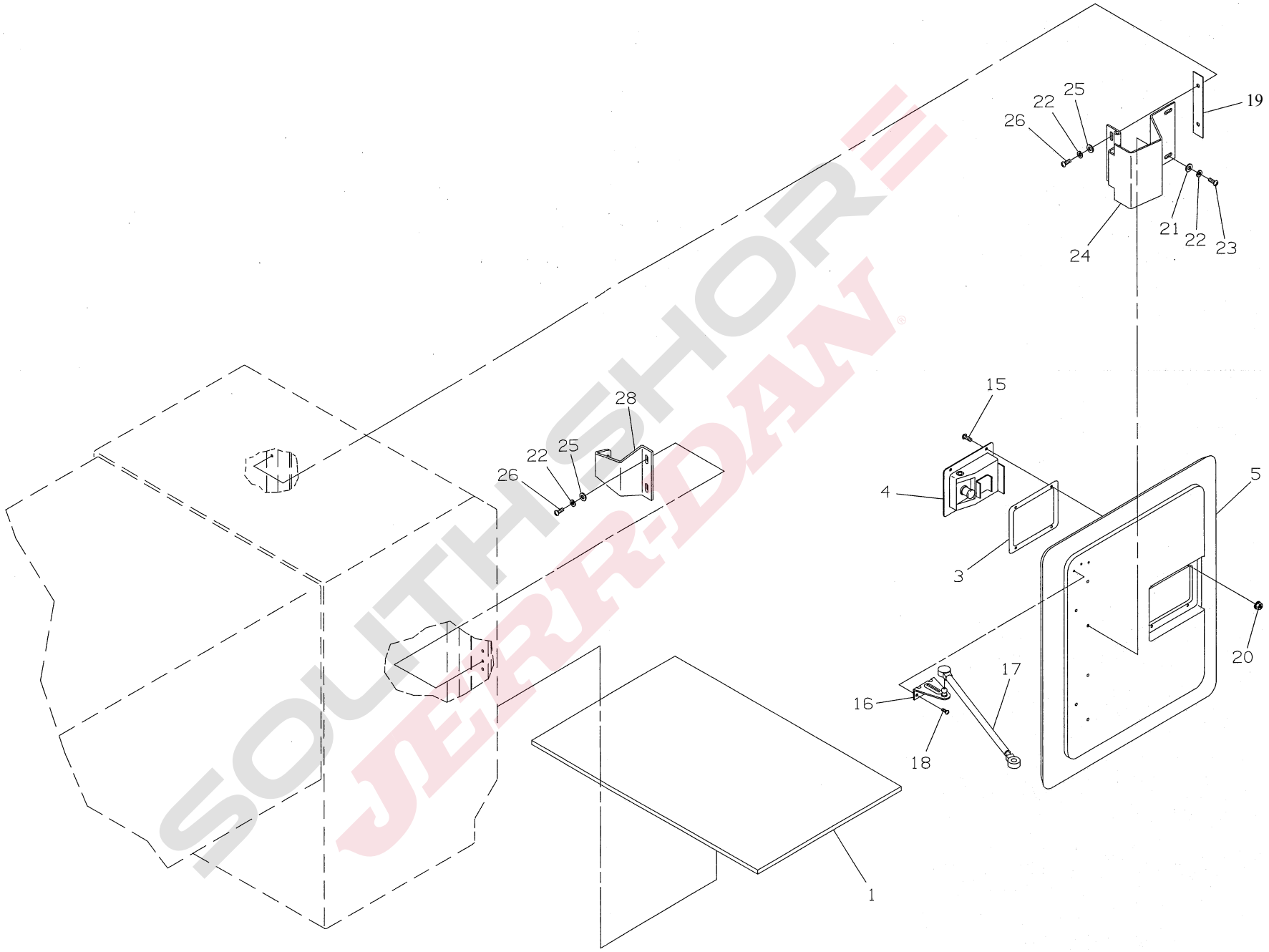
TUNNELTOOLBOXASSEMBLY



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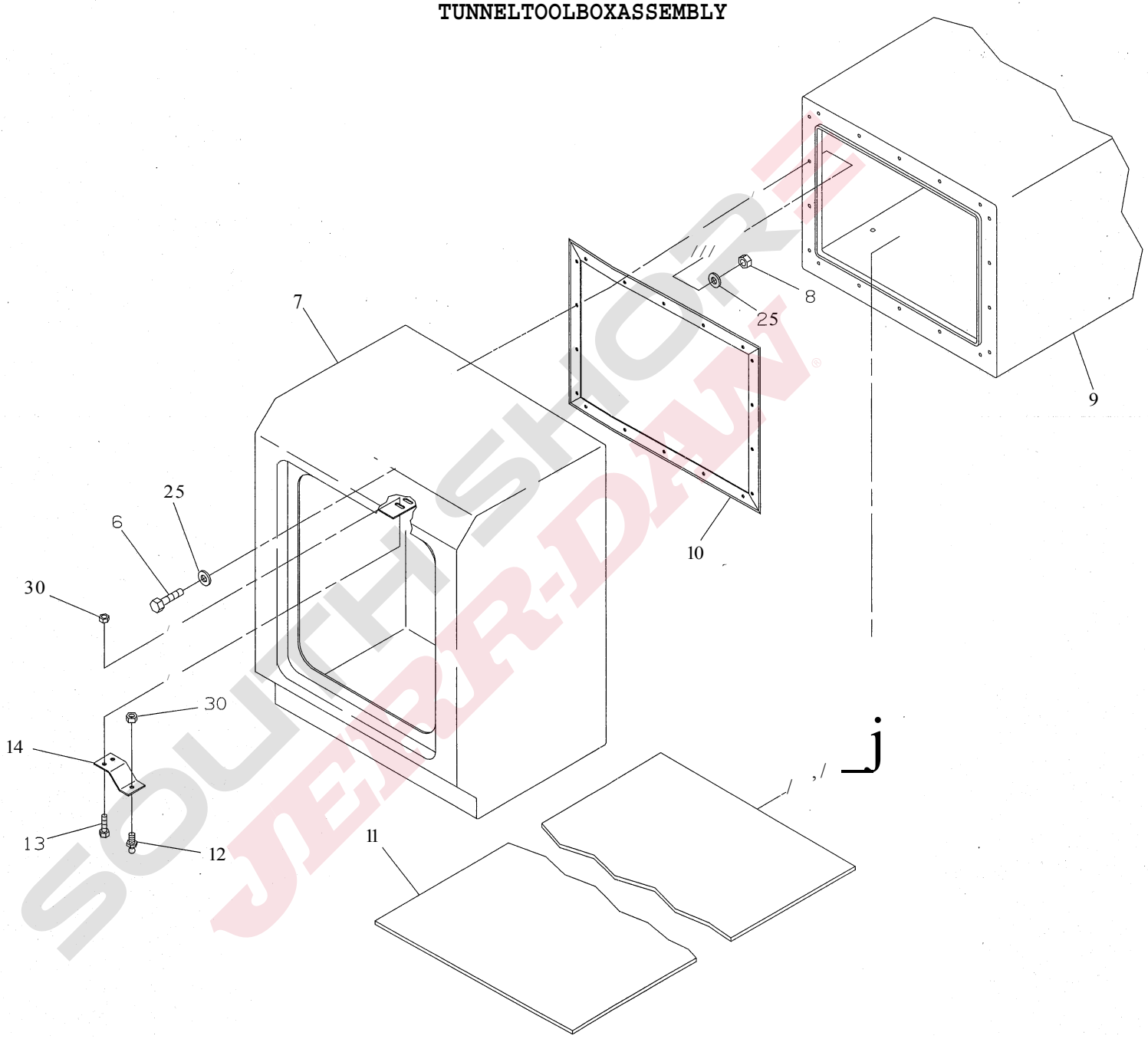
TUNNELTOOLBOXASSEMBLY



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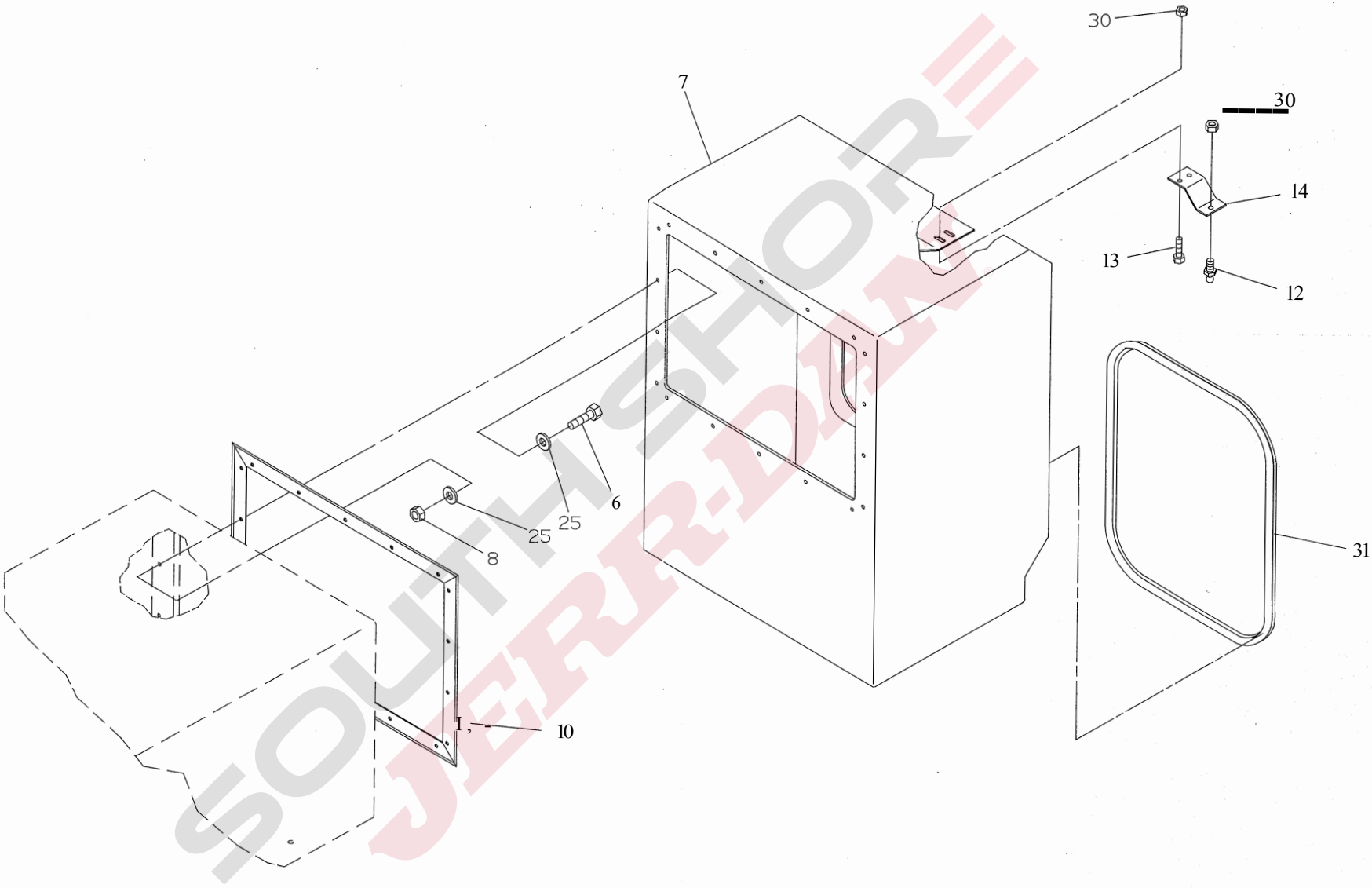
TUNNEL TOOLBOX ASSEMBLY



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TUNNEL TOOLBOX ASSEMBLY

Ref No.	Part No.	Description	Qty.
1	4679000157	Rubber Pad	2
2	4686000123	Door Panel, LH	1
3	7796000031	Gasket	2
4	7595000009	Latch	2
	4686000122	Door Panel, RH	1
	7115141050	Capscrew	36
7	7899000002	Tunnel Front Toolbox	2
8	7660142601	Locknut	36
9	7899000005	Tunnel Toolbox, Ford	1
	7899000006	Tunnel Toolbox, Chevy HD3500	1
10	4632000017	Toolbox Seal	2
11	4679000160	Rubber Pad	1
12	7865000001	Thread Ball Stud	2
13	7115150650	Capscrew	4
14	4178000322	Bracket	2
15	7114080618	Screw	8
16	7178000023	Ball Stud Bracket	2
17	7843000020	Gas Spring	2
18	7114100418	Capscrew	6
19	4812000060	Shim	4
20	7660082500	Locknut	8
21	7950100151	Flat Washer	12
22	7949000025	Lockwasher	16
23	7114140518	Capscrew	12
24	7555000005	Hinge	4
	7950140161	Flat Washer	76
26	7114140418	CaP.screw	4
27	7585000008	Striker Latch	2
28	4178000320	Bracket	2
29	7950150161	Flat Washer	2
30	7660152601	Locknut	8
31	4632000018	Door Seal	2

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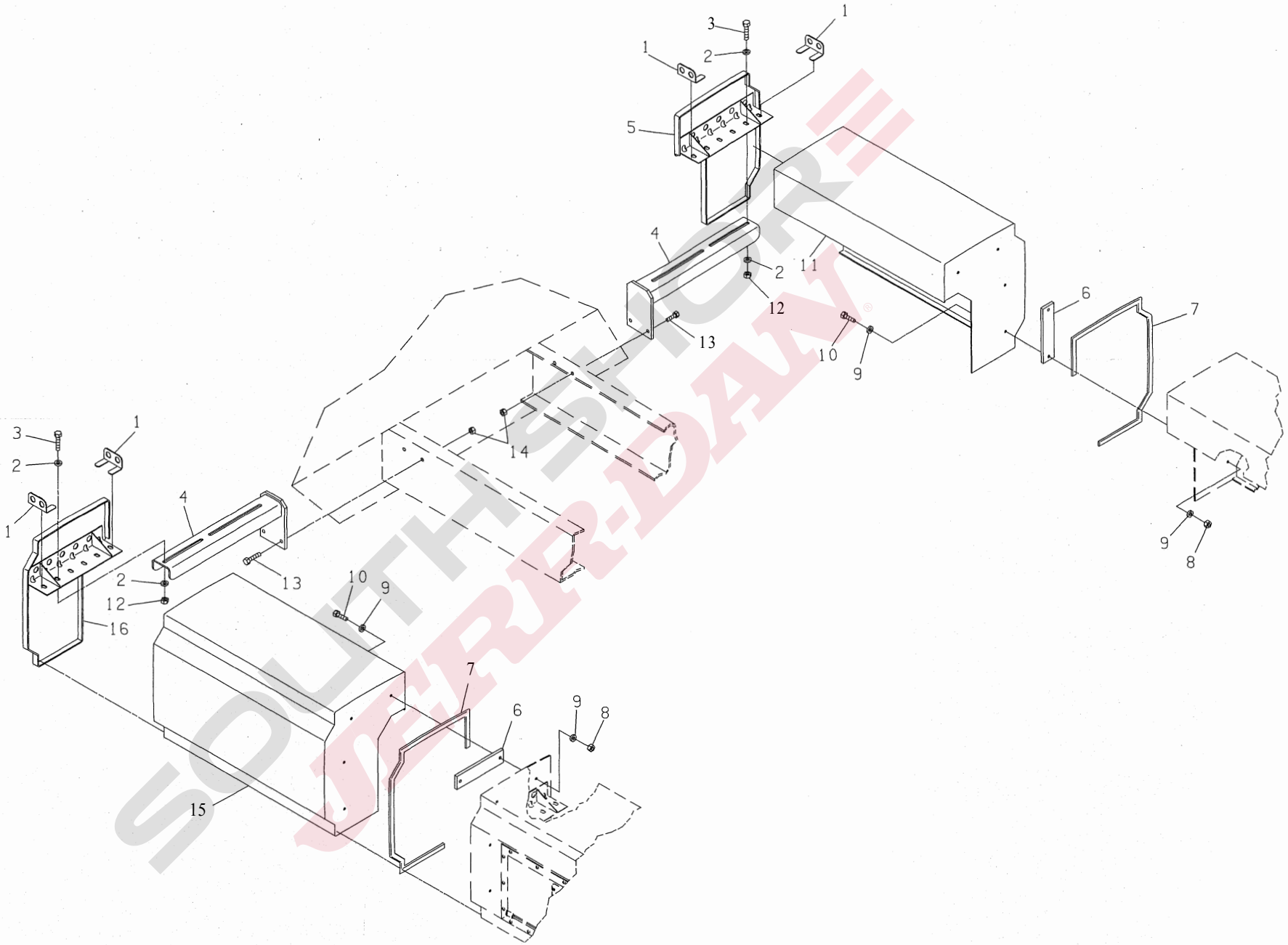
BODY EXTENSION PANEL INSTALLATION

Ref No.	Part No.	Description	Qty.
1	4017000956	Angle	4
2	7950180161	Flat Washer	8
3	7115181250	Capscrew	4
4	3178000255	Front Section Mount Body	2
5	7686000033	End Cap Panel, RH	1
6	4831000072	Spacer	4
7	7632046054	Moulding	2
8	7660162601	Locknut	8
9	7950160161	Flat Washer	16
10	7115161450	Capscrew	8
11	7686000035	Body Front Section Panel, RH	1
12	7660182601	Locknut	4
13	7118181216	Capscrew	4
14	7660182301	Locknut	4
15	7686000034	Body Front Section Panel, LH	1
16	7686000032	End Cap Panel, LH	1

BODY EXTENSION PANEL INSTALLATION



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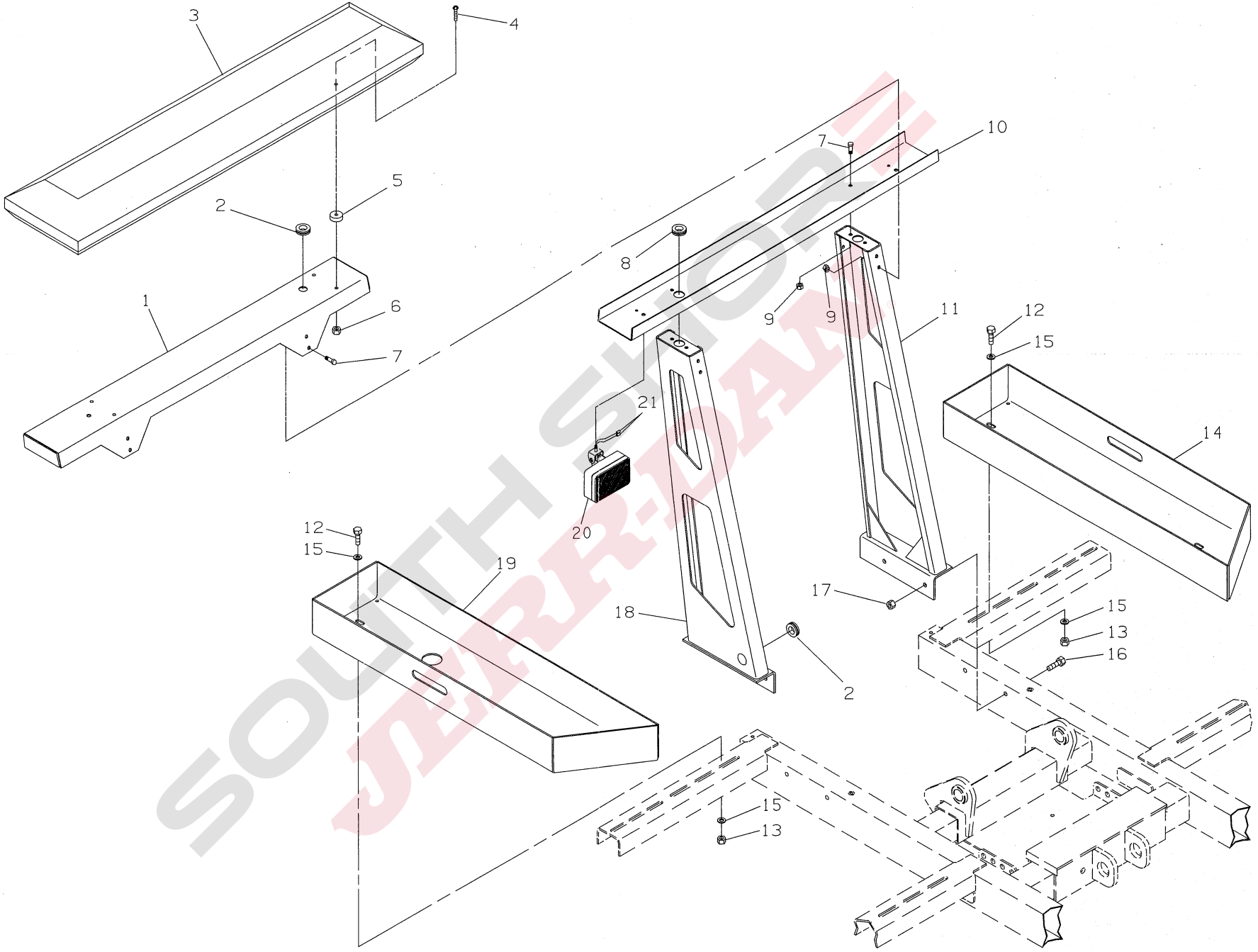
EMERGENCY LIGHT PYLON AND STORAGE TRAY INSTALLATION



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EMERGENCY LIGHT PYLON AND STORAGE TRAY INSTALLATION

Ref No.	Part No.	Description	Qty.
1	3263000071	Upper Channel	1
2	7493000011	Grommet	2
3	7590000073	Emergency Lightbar	1
	7115151264	Carriage Bolt	4
	4831000074	Spacer	4
	7660152601	Locknut	4
7	7114160818	Capscrew	12
8	7493000003	Grommet	1
9	7660162601	Locknut	12
10	4263000393	Channel	1
11	3263000073	Channel, RH	1
12	7115181250	Capscrew	4
13	7660182601	Locknut	4
14	3263000070	Channel, RH Ford)	1
	3263000084	Channel, RH Chevy HD3500)	1
15	7950180161	Flat Washer	8
16	7115183250	Capscrew	4
17	7660181250	Locknut	4
18	3263000072	Channel, LH	1
19	3263000069	Channel, LH Ford)	1
	3263000083	Channel, LH Chevy HD3500)	1
20	7590000144	Work Light	2
21	7345001713	Butt Connector	4

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HYDRAULIC SCHEMATIC

Ref No.	Part No.	Description	Qty.
1	7445081043	Adapter	2
2	7443000023	Elbow	2
3	4567132027	Hose Assembly	1
4	7445080843	Adapter	2
5	4567120026	Hose Assembly	1
6	7445060643	Straight Adapter	2
7	7445060645	Elbow	7
8	7912000078	Tube Assembly	2
9	7950150161	Flat Washer	6
10	7660152601	Locknut	6
11	7115151650	Capscrew	4
12	4567120024	Hose Assembly	1
13	7935000148	Valve	3
14	7445060647	Branch	3
15	7912000077	Tube Assembly	2
16	7912000081.	Tube Assembly	1
17	4569120014	Hose Assembly	1
18	7912000079	Tube Assembly	1
19	4569120015	Hose Assembly	1
20	7443000105	Reducer	1
21	7443000106	Nut Reducer	1
22	4567110025	Hose Assembly	1
23	7443000114	Plug	1
24	7445040443	Straight Adapter	2
25	4567110024	Hose Assembly	1
26	7445040643	Straight Adapter	1
27	7114151618	Capscrew	2
28	7912000082	Tube Assembly	1
29	4569122020	Hose Assembly	2
30	4569122021	Hose Assembly	2
31	7445060843	Straight Adapter	6
32	7443000128	Adapter	1
33	4567162036	Hose Assembly	1
34	7445121619	Strai9.ht Adapter	1
35	7470000002	Oil Filter Gauge	1
36	7443000158	Elbow	1
37	7430000003	Oil Filter Assembly	1
38	7650080125	Pi e Nipple	1
39	7444080860	El ow	1
40	7445161619	Straight Adapter Pipe	1
41	7445121243	Straight Adapter	1
42	7445081243	Straight Adapter	1
43	4567782096	Hose Assembly	1
44	4567632103	Hose Assembly	1
45	4567133029	Hose Assembly	1
46	7912000080	Tube Assembly	1

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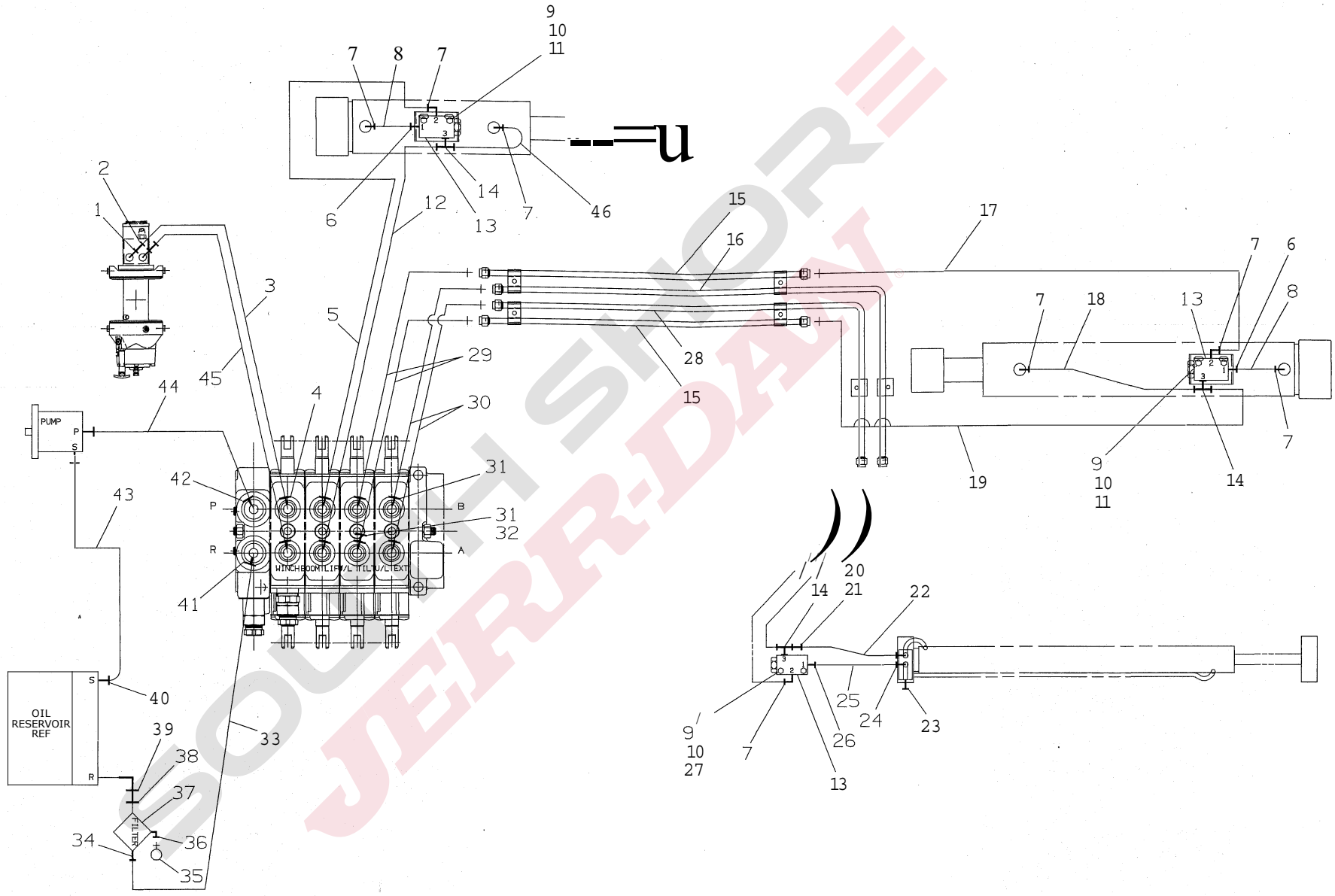
HYDRAULIC SCHEMATIC



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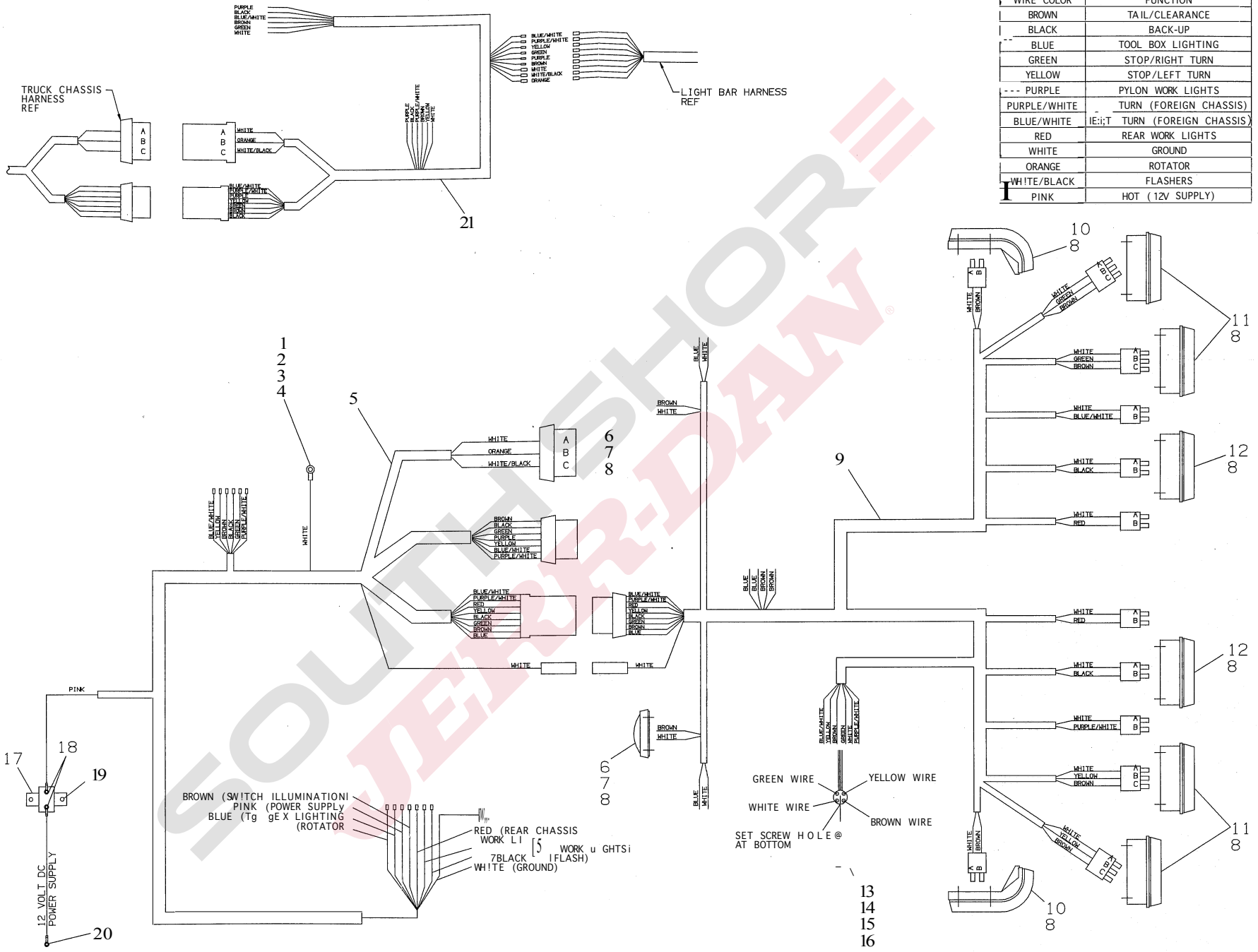
WIRE COLOR	FUNCTION
BROWN	TAIL/CLEARANCE
BLACK	BACK-UP
BLUE	TOOL BOX LIGHTING
GREEN	STOP/RIGHT TURN
YELLOW	STOP/LEFT TURN
PURPLE	PYLON WORK LIGHTS
PURPLE/WHITE	TURN (FOREIGN CHASSIS)
BLUE/WHITE	TURN (FOREIGN CHASSIS)
RED	REAR WORK LIGHTS
WHITE	GROUND
ORANGE	ROTATOR
WHITE/BLACK	FLASHERS
PINK	HOT (12V SUPPLY)



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LIGHTS AND WIRING INSTALLATION

Ref. No.	Part No.	Description	Qty.
1	7345221902	O-Ring Terminal	1
2	7950140500	Lockwasher	1
3	7660142601	Locknut	7
	7115140850	Capscrew	7
	7552000157	Truck Chassis Harness	1
	7577000202	Lifeht Mount Adapter Kit	2
7	7590000090	C earance Marker Light	2
8	7790101271	Screw	36
9	7552000156	Main Harness	1
10	7590000131	Wrap Around Marker Light	2
11	7590000128	Stop-Tail-Turn Light	4
12	7590000130	Backup Light	2
13	7291000003	Female Receptacle	1
14	7114140818	Capscrew	2
15	7950140141	Flat Washer	2
16	7660142601	Locknut	2
17	7457000004	Circuit Breaker	1
18	7345211901	Stud Terminal Ring	2
19	7790100856	Screw	2
20	7345231901	Stud Terminal Ring	1
21	7552000158	Headboard Harness	1

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DECAL INSTALLATION

Ref No.	Part No.	Description	Qty.
1	7330000279	Toll Controls Decal	2
2	7330000034	W L Caution Nameplate	1
3	7330000122	W/L Warning Nameplate	1
4	7330000287	Serial/Model/Rating Decal	1
5	7759000004	Rivet	4
6	7330000037	Moving Parts Nameplate	1
7	7330000060	Warnin Decal	1
8	7330000036	Secure ehicle Nameplate	2
9	7330000286	Jerr-Dan Logo Decal	2
10	7330000285	Circle "J" Decal	2
11	7330000143	"Proudly Made in the USA" Decal	1
12	7330000315	Lubrication Chart Decal	1
13	7330000262	Winch Warnin Decal	2
14	7330000280	Bottom Contro s Decal	2

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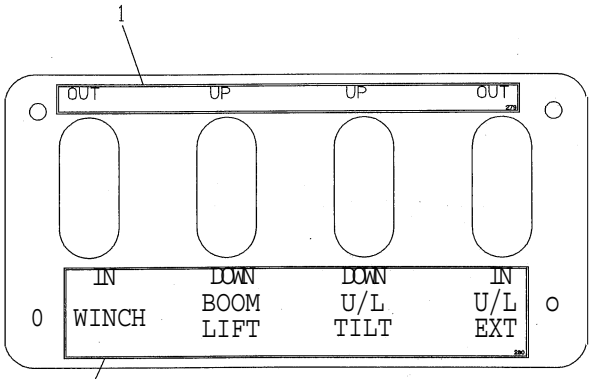
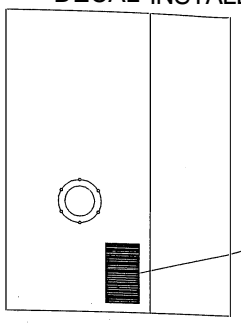
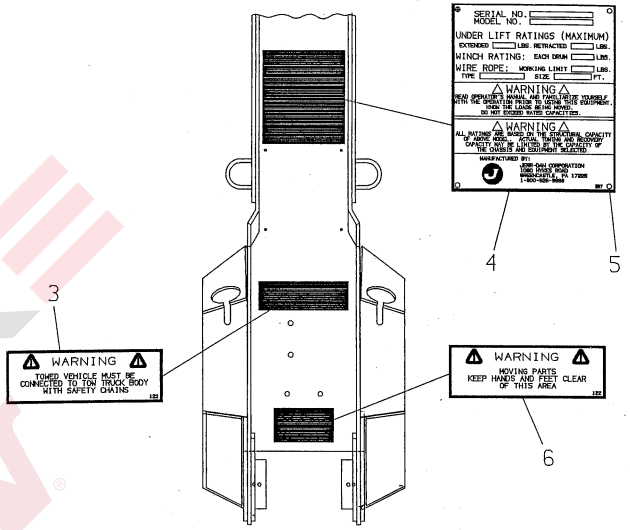
DECAL INSTALLATION



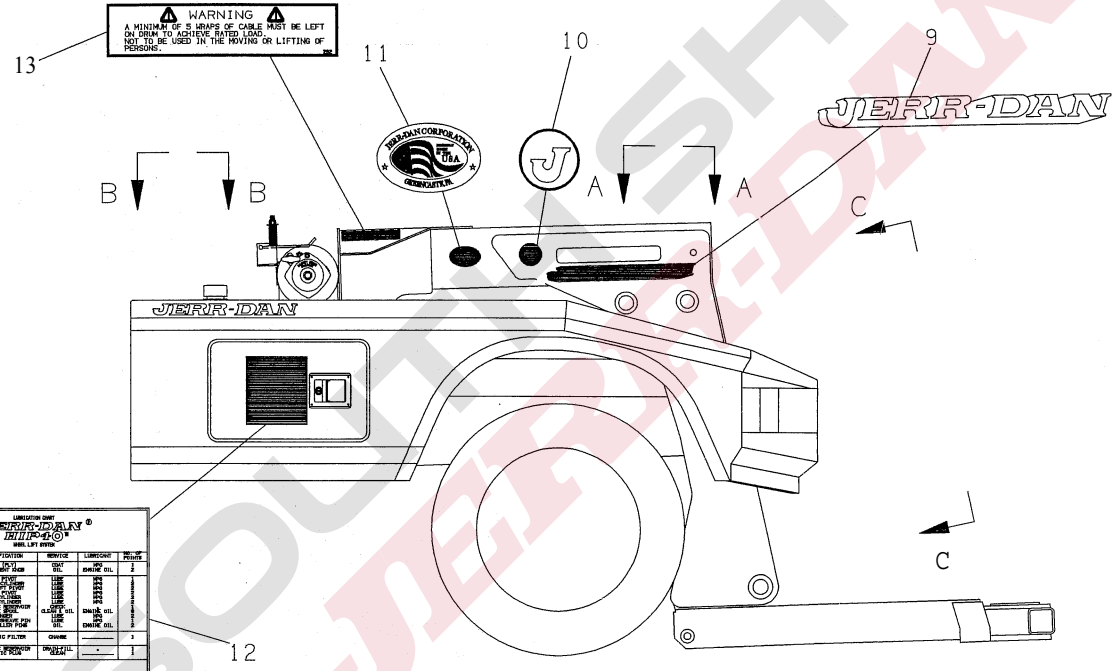
VIEW A-A
CONTROL HANDLES DECAL

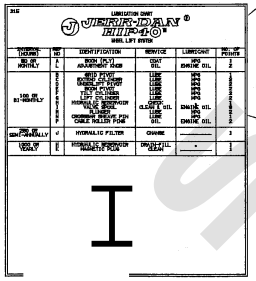


VIEW 8-B

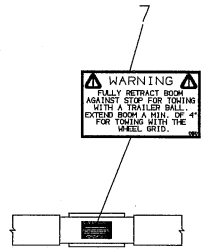


VIEW C-C

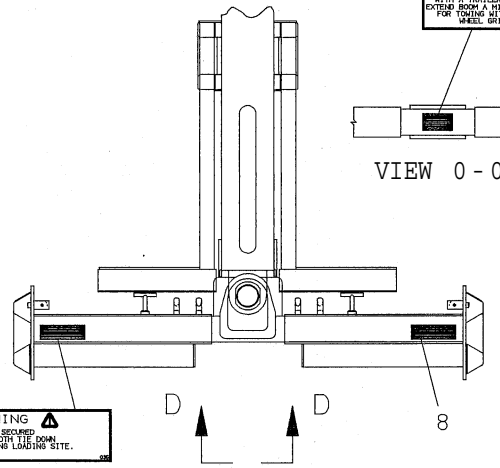




O E PANEL
OF TOOLBOX DOOR



VIEW 0-0



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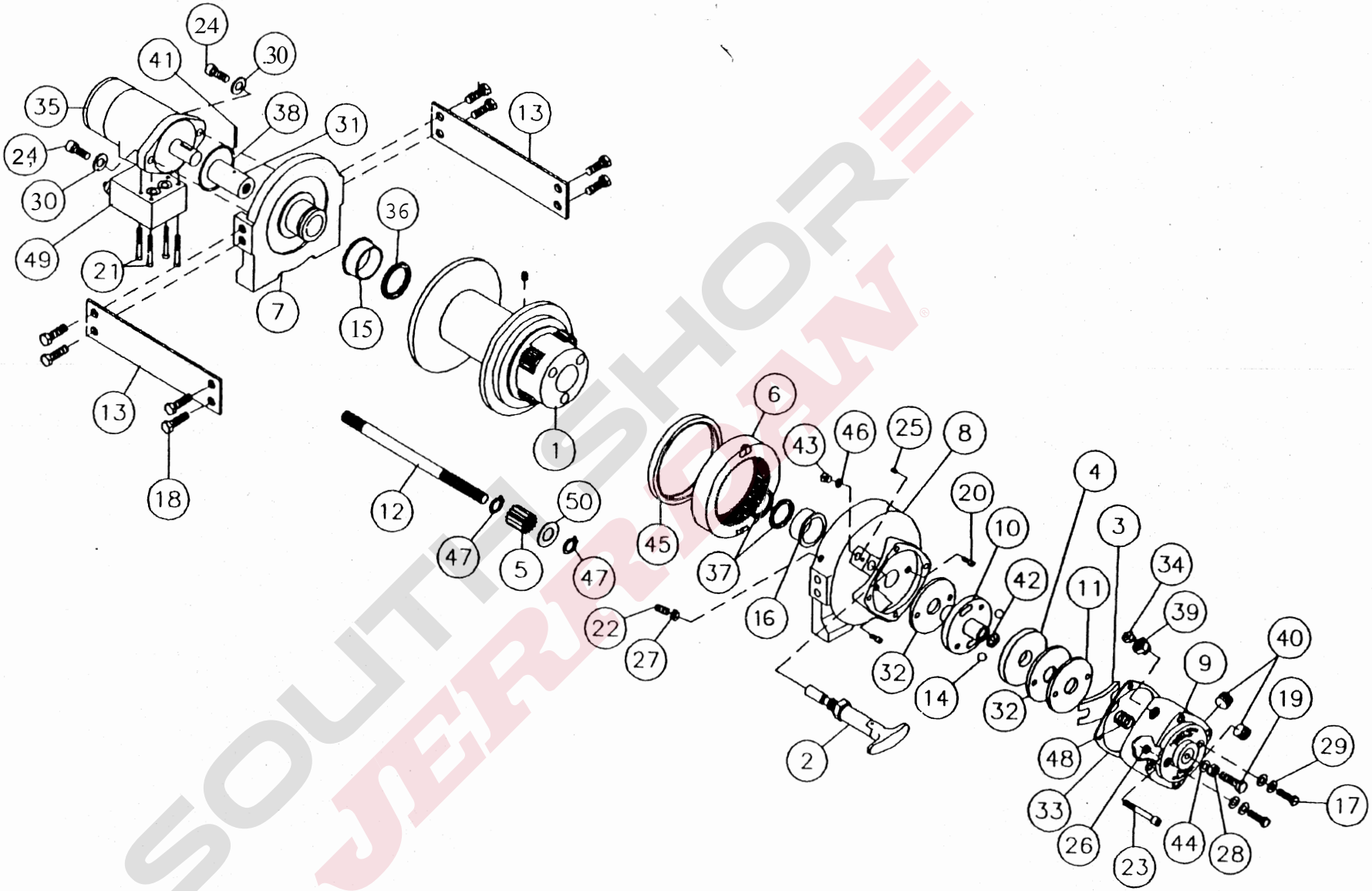
RPHSOOO 8000 LB WINCH

Ref.No.	Part No.	Description	Qty.
1	9970280019	"Y" Drum Assembly	1
	9970280018	"STD" Drum Assembly	1
2	9551960018	Shifter Assembly	1
3	9843960027	Brake Flat S ring	1
4	9250960002	Cam Brake late	1
5	9472960042	Sun Output Gear	1
6	9472960043	Rin Gear	1
7	9082960016	En Motor Bearing	1
8	9560960013	End Bearing Gear Housing	1
9	9560960012	Brake Housing	1
10	9180960009	Brake Hub	1
11	9706960028	Retainer Plate	1
12	9806960017	"Y" Input Shaft	1
	9806960016	"STD Input Shaft	1
13	9706960031	"Y" Tie Plate	2
	9706960030	"STD" Tie Plate	2
14	9970400007	Ball	2
15	9209960022	Motor End Drum Bushing	1
16	9209960023	Gear Drum Bushing	1
17	9120960021	Bolt	2
18	9120960025	Caftscrew	8
19	9120960023	Bot	1
20	9120960022	Capscrew	2
21	9120960018	Screw	4
22	9786960006	Setscrew	1
23	9120960026	Capscrew	4
24	9120960024	Capscrew	2
25	7785140404	Setscrew	1
26	7660160001	Nut	2
27	7660160201	Nut	1
28	7660180201	Nut	1
29	9970418184	Washer	4
30	9949960016	Lockwasher	2
31	9309960009	Hydraulic Motor Coupling	1
32	9706960029	Brake Plate	2
33	9796960047	Brake Housing Gasket	1
34	9970456008	Relief Fitti	1
35	9626960012	Hydraulic otor (model with counterbalance valve)	1
36	9796960050	0-Rin	1
37	9796960048	Ring uad	2
38	9796960051	0-Ring	1
39	9970468002	Reducer	1
40	9701960015	Pipe Plug	2
41	9691960001	Spirol Pin	1
42	9701960014	Plug	1
43	9701960016	Plu	1
44	9796960097	Sea	1
45	9796960049	Gear Housing Seal	1
46	9812960005	Shim	1
47	9754960039	Snap Ring	2
48	9970494010	Spring	1
49	9935960023	Counterbalance Valve ("P[t] Rotation)	1
50	9949960017	Thrust Washer	1

Rev. ___ _

Date __ _



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