

JERR-DAN®

Operation And Safety Manual

Original Instructions

Keep this manual with machine at all times.

SRS SIDE RECOVERY SYSTEM (WRECKER)

S/N 0230002763 & After

5376000175

August 1, 2018



JERR-DAN®

An Oshkosh Corporation Company



WARNING

Operating, servicing and maintaining this vehicle or equipment can expose you to chemicals including engine exhaust, carbon monoxide, phthalates, and lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. To minimize exposure, avoid breathing exhaust, do not idle the engine except as necessary, service your vehicle or equipment in a well-ventilated area and wear gloves or wash your hands frequently when servicing. For more information go to www.P65Warnings.ca.gov.

REVISION LOG

June 1, 2015 - 0 - Original Issue of Manual.

January 18, 2017 - 1 - Added Reporting Safety Defects

August 1, 2018 - C - Updated cover

Eastern Wrecker Sales Inc

Read This First

This manual is a very important tool! Keep it with the machine at all times.

The purpose of this manual is to provide owners, users, and operators with the precautions and operating procedures essential for the safe and proper machine operation for its intended purpose.

Due to continuous product improvements, Jerr-Dan Corporation reserves the right to make specification changes without prior notification. Contact Jerr-Dan Corporation for updated information.

OPERATOR QUALIFICATIONS

The operator of the machine must not operate the machine until this manual has been read, training is accomplished and operation of the machine has been completed under the supervision of an experienced and qualified operator.

Operators of this equipment must possess a valid, applicable driver's license, be in good physical and mental condition, have normal reflexes and reaction time, good vision and depth perception and normal hearing. Operator must not be using medication which could impair abilities nor be under the influence of alcohol or any other intoxicant during the work shift.

In addition, the operator must read, understand and comply with instructions contained in the following material furnished with the equipment:

- This Operation & Safety Manual
- All instructional decals and plates
- Any optional equipment instructions furnished
- Commercial vehicle's Operation & Maintenance Manuals

The operator must also read, understand and comply with all applicable Employer, Industry and Governmental rules, standards and regulations.

MODIFICATIONS

Any modification to this machine must be approved by Jerr-Dan.

HAZARD CLASSIFICATION SYSTEM

SAFETY ALERT SYSTEM AND SAFETY SIGNAL WORDS



This is the Safety Alert Symbol. It is used to alert you to the potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.



Indicates an imminently hazardous situation. If not avoided, will result in serious injury or death. This decal will have a red background.



Indicates a potentially hazardous situation. If not avoided, could result in serious injury or death. This decal will have an orange background.



Indicates a potentially hazardous situation. If not avoided, may result in minor or moderate injury. It may also alert against unsafe practices. This decal will have a yellow background.



Indicates information or a comply policy that relates directly or indirectly to the safety of the personnel or protection of property.

⚠ WARNING

This product must comply with all safety related bulletins. Contact Jerr-Dan Corporation or the local authorized representative for information regarding safety bulletins which may have been issued for this product.

NOTICE

Jerr-Dan Corporation sends safety related bulletins to the owner of record of this machine. Contact Jerr-Dan Corporation to ensure that the current owner of records are updated and accurate.

NOTICE

Jerr-Dan Corporation must be notified immediately in all instances where Jerr-Dan product have been involved in an accident involving bodily injury or death of personnel or when substantial damage has occurred to personal property on the Jerr-Dan product.

FOR:

- Accident Reporting and Product Safety Publications
- Current Owner Updates
- Questions Regarding Product Applications and Safety
- Standards and Regulations Compliance Information
- Questions Regarding Product Modifications

CONTACT:

Product Safety and Reliability Department
Jerr-Dan Corporation
13224 Fountainhead Plaza
Hagerstown, MD 21742
USA

or Your Local Jerr-Dan Office

In USA

Toll Free: 1-877-554-7233

Outside USA

Phone: 240-420-2661

Fax: 301-745-3713

E-mail

ProductSafety@Jerr-Dan.com

REPORTING SAFETY DEFECTS

If you believe that your vehicle has a defect which could cause a crash or could cause injury or death, you should immediately inform the National Highway Traffic Safety Administration (NHTSA) in addition to notifying Jerr-Dan Corporation.

If NHTSA receives similar complaints, it opens an investigation, and if it finds that a safety defect exists in a group of vehicles, it may order a recall and remedy campaign. However, NHTSA cannot become involved in individual problems between you, your dealer, or Jerr-Dan Corporation.

To contact NHTSA, you may call the Vehicle Safety Hotline toll-free at 1-888-327-4236 (TTY: 1-800-424-9153); go to <http://www.safercar.gov>; or write to:

Administrator
NHTSA
400 Seventh Street S.W.
Washington, DC 20590

You can also obtain other information about motor vehicle safety from <http://www.safercar.gov>.

THIS PAGE IS INTENTIONALLY LEFT BLANK

TABLE OF CONTENTS

Revision Log

Read This First

Operator Qualifications	b
Modifications	b
Hazard Classification System	c
Safety Alert System And Safety Signal Words	c
Reporting Safety Defects.....	e

Table of Contents

Section 1 - General Safety Practices

1.1	General	1-1
1.2	Pre-operation	1-2
	Operator Training And Knowledge	1-2
	Electrical Hazards	1-3
	Crush And Collision Hazards	1-4
	Winch Cable / Falling Load Hazards	1-5
	Tip-over Hazards	1-6
	Fall Hazards	1-7
	Chemical Hazards	1-7
	Battery Hazards	1-8
	Personal Protective Equipment	1-9
	Weather Conditions	1-9
	Vehicle Equipment Damage	1-10

Section 2 - Pre-operation And Inspection

2.1	Pre-operation Check And Inspection	2-1
2.2	Decals	2-2
2.3	Walk-around Inspection	2-4
2.4	Operational Checks	2-6

Section 3 - Controls & Indicators

3.1	General	3-1
3.2	Controls	3-2
	Left Hand - Side Control Station	3-2
	Right Hand - Side Control Station	3-2
3.3	In-Cab Controller	3-4
3.4	8 Function Wireless Hand Controller	3-5
3.5	8 Function Wired Hand Controller	3-6

Section 4 - Operation

4.1	SRS Operation	4-1
4.2	Winch Operation - Air Remote Free-Spool.....	4-9

Table of Contents

Section 5 - Emergency Procedures

5.1 Raising/Retracting of Outrigger/Spades 5-1

Section 6 - Maintenance

Introduction 6-1

6.1 Maintenance And Lubrication 6-2

6.2 Oils And Greases 6-3

6.3 Wire Rope Handling And Inspection 6-5

6.4 Wire Rope Installation 6-7

6.5 SRS Lubrication Points 6-10

6.6 Trouble Shooting 6-13

Hydraulic System 6-13

P.T.O. Functioning Improperly 6-14

Hydraulic Pump 6-14

Winch Functioning Improperly 6-15

Remote Hand Controller 6-16

Section 7 - Specifications

7.1 Product Specifications 7-1

SRS-W25S 7-1

SRS-W35S 7-1

7.2 Capacities 7-2

Transfer of Ownership

SECTION 1 - GENERAL SAFETY PRACTICES

1.1 GENERAL

This section outlines the necessary precautions for proper and safe machine operation and maintenance. For proper machine use, it is mandatory that a daily routine is established based on the content of this manual. A maintenance program, using the information provided in this manual must also be established by a qualified person and followed to ensure the machine is safe to operate.

The owner/user/operator of the machine must not operate the machine until this manual has been read, training is accomplished, and operation of the machine has been completed under the supervision of an experienced and qualified operator.

There may be times your truck may be exposed to direct contact with the public such as parades, charitable fundraisers, etc. Before allowing anyone other than a trained and experienced employee of your company near your truck, you should consult with your company safety officer and plan for safety.

If there are any question with regard to safety, training, inspection, maintenance, application, and operation, please contact Jerr-Dan Corporation.

⚠ WARNING

Failure to comply with the safety precautions listed in this manual could result in machine damage, property damage, personal injury or death.

Section I - General Safety Practices

1.2 PRE-OPERATION

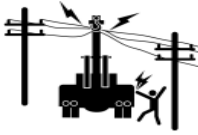
OPERATOR TRAINING AND KNOWLEDGE

- Read and understand this manual before operating the machine.



- Do not operate this machine until complete training is performed by authorized persons.
- Only authorized and qualified personnel can operate the machine.
- Read, understand, and obey all DANGERS, WARNINGS, CAUTIONS, and operating instructions on the machine and in the manual.
- Use the machine in a manner which is within the scope of its intended application set by Jerr-Dan.
- All operating personnel must be familiar with the emergency operation of the machine as specified in this manual.
- Read, understand, and obey all applicable employer, local, and government regulations as the pertain to the operation of the machine.

ELECTRICAL HAZARDS



- This machine is not insulated and does not provide protection from contact or being near electrical current. This includes lightning and lightning strikes.
- NEVER operate the machine in an area where overhead power lines, overhead or underground cables, or other power sources may exist without ensuring the appropriate power utility company de-energizes the lines.
- Always check for power lines before raising the boom.
- Look up and use light to search for power lines in the dark.
- Allow for machine movement and electrical line swaying.
- Do not step off or touch a charged vehicle.
- Maintain a clearance of at least 10 ft. (3m) between any part of the machine from any electrical line or apparatus carrying up to 50,000 volts. Refer to the Minimum Approach Distance (MAD) chart. One foot additional clearance is required for every additional 30,000 volts or less.

Minimum Approach Distance (M.A.D.)

Voltage Range (Phases to Phase)	MINIMUM APPROACH DISTANCE in Feet (Meters)
0 to 50KV	10 (3)
Over 50KV to 200KV	15 (5)
Over 200KV to 350KV	20 (6)
Over 350KV to 500KV	25 (8)
Over 500KV to 750KV	35 (11)
Over 750KV to 1000KV	45 (14)
<i>NOTE: This requirement shall apply except where employer, local or government regulations are more stringent.</i>	

- The minimum approach distance may be reduced if insulating barriers are installed to prevent contact, and the barriers are rated for the voltage of the line being guarded. These barriers shall not be part of (or attached to) the truck. The minimum approach distance shall be reduced to a distance within the designed working dimensions of the insulating barrier. This determination shall be made by a qualified person in accordance with the employer, local, or governmental requirements for work practices near energized equipment.

Section I - General Safety Practices

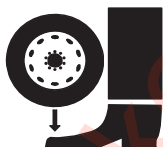
DANGER

DO NOT MANEUVER TRUCK OR PERSONNEL INSIDE PROHIBITED ZONE (MAD). ASSUME ALL ELECTRICAL PARTS AND WIRING ARE ENERGIZED UNLESS KNOWN OTHERWISE.

CRUSH AND COLLISION HAZARDS



- Keep clear of all outriggers.
- Never extend or retract outrigger unless it is in full view.

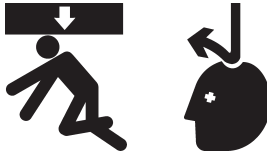


- Check under each wheel of the truck prior to retraction of outriggers to ensure all body parts are clear of wheels.
- Always use jack stands to support the boom and/or underlift before working underneath a lifted load.
- Warn personnel not to work, stand, or walk under a raised boom or underlift. Position barricades if necessary.
- Lower boom to stowed position prior to driving machine.
- Be aware of height clearances when traveling.



- Look out for and avoid other personnel, machinery, vehicles and obstructions in the area when driving the truck. Use a spotter if you DO NOT have a clear view.

Section I - General Safety Practices



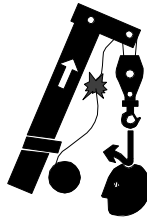
When opening body compartments:

- Loose items may shift during transport, ensure to properly secure items when not in use
- Slide drawer(s) open slowly.
- Ensure all compartment doors are properly closed prior to transport.

WINCH CABLE / FALLING LOAD HAZARDS



- Keep people away during operation.
- Never exceed capacity of rigging or cable.
- Never stand on or straddle cable.
- Always keep a minimum of five (5) wraps of cable on winch drum.
- Keep tension on cable when unwinding.



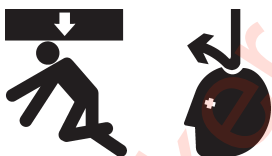
- Always stop operation before block contacts sheave.
- If block contacts sheave, lower load by letting out cable and inspect for damage.
- Keep cables from contacting sharp objects.
- Never wrap cables around objects. Use appropriate chains/straps to wrap around the vehicle to be recovered, and attach the cable hook to the chain/straps.

Section I - General Safety Practices

- Never allow the cable to cross over itself when wrapping on the drum.
- 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.
- Never use damaged cable. Never use cable menders. Replace damaged cable. Use cable and hooks with equal or greater rating.

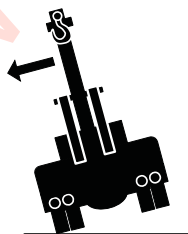


- Keep hands away from cable and drum during operation.



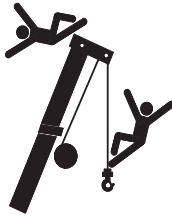
- Never operate recovery equipment with people under load.
- Jog winch clutch before pulling. Keep winch clutch engaged while the cable is loaded.
- Approved head gear must be worn during recovery operations.

TIP-OVER HAZARDS



- Set up on firm surface only.
- Deploy rear outrigger/spades onto proper firm surface.
- Ensure truck is level prior to any boom operations.

FALL HAZARDS



- Never use wrecker boom to hoist personnel.
- Never ride on boom, hook, load or any other device attached to wrecker boom or load line.
- DO NOT carry riders outside the cab. Riders could fall off the machine.
- Do not climb on the truck to access elevated service points. Only use approved ladders or grab handles and steps provided on the rear of the unit when accessing the service points on the top of the truck body in a controlled service environment. Always maintain 3-point contact, using two hands and one foot or two feet and one hand, when mounting or dismounting. These surfaces can become slippery, ensure to keep them and footwear clean and free of debris.

CHEMICAL HAZARDS

Exhaust Fumes

- DO NOT operate machine in an enclosed area without proper ventilation.
- DO NOT operate the machine in hazardous environments unless approved for that purpose by Jerr-Dan and site owner. Sparks from the electrical system and the engine exhaust can cause an explosion.

Flammable Fuel



- DO NOT fill the fuel tank or service the fuel system near an open flame, sparks or smoking materials. Engine fuel is flammable and can cause a fire and/or explosion.

Section I - General Safety Practices

Hydraulic Fluid



- DO NOT attempt to repair or tighten any hydraulic hoses or fittings while the engine is running or when the hydraulic system is under pressure.
- Stop engine and relieve trapped pressure. Fluid in the hydraulic system is under pressure and can penetrate the skin.
- DO NOT use your hand to check for leaks. Use a piece of cardboard or paper to search for leaks. Wear gloves to protect hands from spraying fluid.

BATTERY HAZARDS



- Battery fluid is highly corrosive. Avoid contact with skin and clothing at all times.
- Keep sparks, flames, and lighted materials away from batteries.
- Charge batteries only in a well ventilated area.
- Wear proper eye protection when servicing battery.

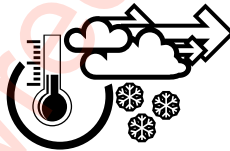
Section I - General Safety Practices

PERSONAL PROTECTIVE EQUIPMENT



- Use personal protective equipment when working on or around this vehicle.
- Remove rings, watches, jewellery, neckwear or other items that can catch in equipment.
- Wear :
 - o Snug fitting and sturdy long-sleeve shirt and long pants. Avoid loose fitting clothes.
 - o Sturdy gloves.
 - o Approved eye protection.
 - o Steel toed boots.
 - o Approved head gear.
 - o Approved hearing protection.

WEATHER CONDITIONS



- Be aware of the wind conditions. Wind may cause load to swing or shifting of load.
- If using in freezing conditions, you must be alert to possibility of ice forming on the device. Use Caution when extending and retracting winch cables, boom, and underlift. In addition use caution when opening/closing body panels
- Hydraulic cylinders are subject to thermal expansion and contraction. This may result in changes to the boom and/or attachment position while the machine is stationary. Factors affecting thermal movement can include the length of time the machine is stationary, hydraulic oil temperature, ambient air temperature and boom and/or attachment.

Section I - General Safety Practices

VEHICLE EQUIPMENT DAMAGE

The act of lifting and towing casualty vehicles that have often been involved in a crash offers many opportunities to inflict worse damage on the towed vehicle, or even damage to the recovery vehicle. Recovery operators should take great care to avoid this damage. Follow these guidelines to reduce the potential for equipment damage.

- Ensure vehicle is positioned in an area free from overhead obstructions. Keep a safe working distance from overhead power lines, bridges, road signs and other objects.
- Avoid retracting or extending the wrecker boom while under load.
- Do not 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 or use a towing dolly.
- Never attach the chain hooks in such a way as to damage brake lines or other functional parts.
- Ensure proper ground clearance of the underlift boom when traveling. Keep the underlift boom raised high enough off the ground when roading to avoid dragging it over road surfaces.
- Do not move the recovery vehicle while rear hydraulic stabilizers are extended.
- Outrigger spades may damage paved surfaces.
- **Do not use machine as a ground when performing any welding operations.**
- Never tie down the front of the recovery vehicle. This procedure may place excessive load on the chassis frame or other structural components leading to damage and costly repairs.
- Don't travel with the PTO engaged. Damage to the recovery vehicles transmission and hydraulic components will occur. Engage the PTO only when operating the hydraulic controls.
- When using stabilizer pads on pavement or concrete, it is suggested that you use larger rubber or wood pads under the stabilizer pads to help distribute the heavy loads. Damage to the pavement or concrete may result.
- The tire lift and grid tubes must be in their outermost positions for storage on the under lift when folded up in the travel position to avoid damage to the body.

SECTION 2 - PRE OPERATION AND INSPECTION

2.1 PRE-OPERATION CHECK AND INSPECTION

Note: Complete all required maintenance before operating unit.

⚠ WARNING

FALL HAZARD. Use extreme caution when checking items beyond your normal reach. Use an approved ladder.

The pre-operation check and inspection, performed at beginning of each work shift or at each change of operator, should include the following:

1. **Cleanliness** - Check all surfaces for leakage (oil, fuel or battery fluid) or foreign objects. Report any leakage to the proper maintenance personnel.
2. **Structure** - Inspect the machine structure for dents, damage, weld or parent metal cracks or other discrepancies.
3. **Safety Decals Placards** - Ensure all safety decals are legible and in place. Clean or replace as required. See page 2-2 for details.
4. **Operation and Safety Manual(s)** - Operation & Safety Manual(s) are in cab.
5. **Walk-Around Inspection** - See page 2-4 for details.
6. **Attachments/Accessories** - Inspect all attachments for dents, damage, weld or parent metal cracks or other discrepancies. Inspect tie-down straps for cuts, frays or tears. Inspect chains for weld or parent metal cracks or other discrepancies.
7. **Operational Check** - Once the walk-around inspection is complete, perform a warm-up and operational check (see page 2-6) of all systems in an area free of overhead and ground level obstructions. See Section 3 - Controls and Indicators for more specific operating instructions.

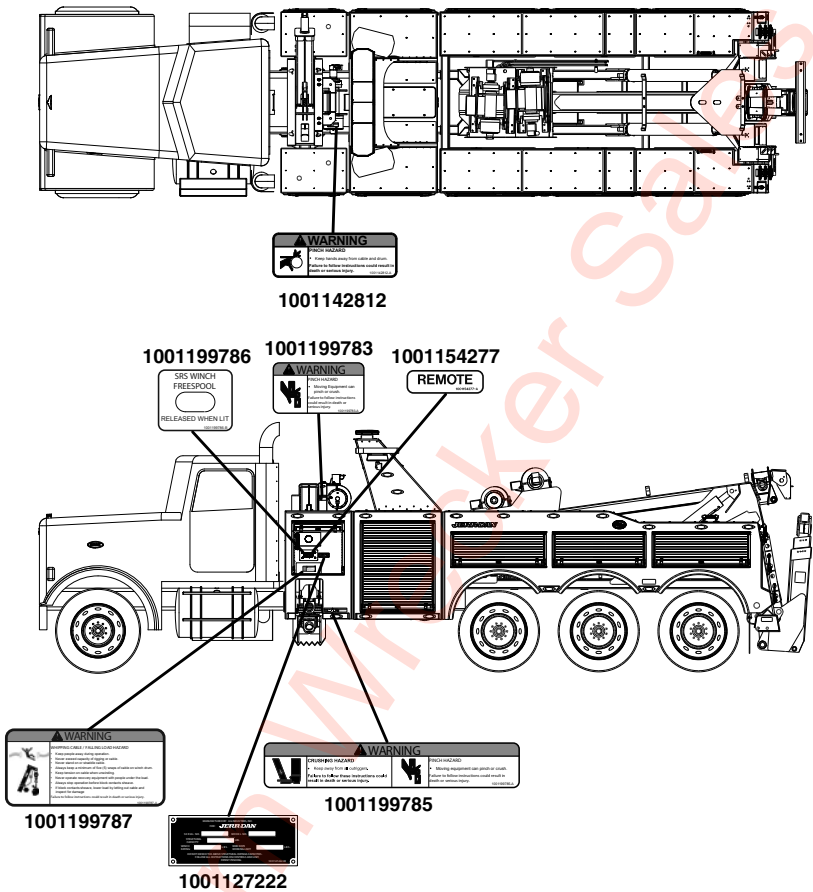
⚠ WARNING

If your SRS does not operate properly, immediately bring machine to a stop, lower boom to stowed position and stop the engine. Determine cause and correct before continued use.

Section II : Pre-operation and Inspection

2.2 DECALS

Ensure all **DANGER**, **WARNING**, **CAUTION** and instructional decals and proper capacity charts are legible and in place. Clean and replace as required.



1001199786

SRS WINCH
FREESPOOL
RELEASED WHEN LIT

1001199783

WARNING
WINCH ENGAGED
DO NOT ATTEMPT TO
OPERATE THE WINCH
UNTIL THE LIGHT IS
EXTINGUISHED

1001154277

REMOTE

1001134433

AIR TENSIONER
PULL PINS
TO UNLOCK
RELEASED
PRESSURE
WARNING

1001199780

LUBRICATION CHART
SRS-W355

1001199785

WARNING
WINCH ENGAGED
DO NOT ATTEMPT TO
OPERATE THE WINCH
UNTIL THE LIGHT IS
EXTINGUISHED

10011997870

WARNING
WINCH ENGAGED
DO NOT ATTEMPT TO
OPERATE THE WINCH
UNTIL THE LIGHT IS
EXTINGUISHED

1001199789

MANUAL OVERRIDE
FIRST - DEPRESS AND HOLD SELECTOR VALVE BUTTON
SECOND - DEPRESS AND HOLD FUNCTION BUTTON FOR SELECTED FUNCTION

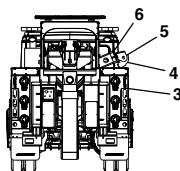
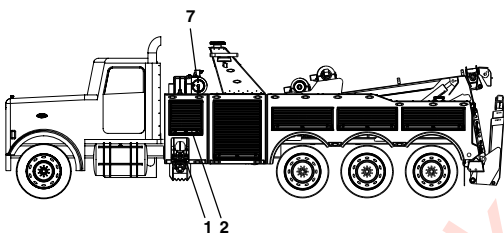
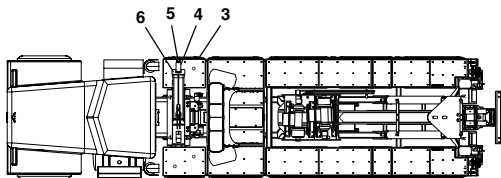
SELECTOR VALVE

1001199789
ON BACKSIDE
OF PLATE

Section II : Pre-operation and Inspection

2.3 WALK-AROUND INSPECTION

NOTE: Complete all required maintenance before operating the unit.



Begin your walk-around inspection at item 1, as noted below checking each item in sequence.

INSPECTION NOTE: On all components, make sure there are no loose or missing parts, that they are securely fastened and no visible leaks or excessive wear exists in addition to any other criteria mentioned. Inspect all structural members including attachment for cracks, excessive corrosion and other damage.

WARNING

FALL HAZARD. Use extreme caution when checking items beyond your normal reach. Use an approved ladder.

CAUTION

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

Section II : Pre-operation and Inspection

1. Outrigger/Spades – Left Hand and Right Hand
 - a. Check for presence of grease
 - b. Cylinder pivot pins, secure
 - c. Hydraulic hoses undamaged, not leaking
 - d. Spade Claw pivot pin, secure
2. Wire Rope Hook and Shackle
 - a. Wire Rope, Undamaged
 - b. Wire Rope, presence of grease
 - c. Wire Rope Hooks, Undamaged
 - d. Shackle, Undamaged and functional
 - e. Shackle Pin, Undamaged and functional
3. Hydraulic Controls
 - a. Hydraulic hoses undamaged, not leaking
 - b. Valve, not leaking
4. Wire Rope
 - a. Wire Rope, Undamaged
 - b. Wire Rope, presence of grease
5. Winch Sheave(s)
 - a. Check for presence of grease
 - b. Pivot pin secure
6. Boom
 - a. Pivot pin secure
 - b. Pivot Cylinder Pivot pins secure; hydraulic hoses undamaged, not leaking
7. Winch(s)
 - a. Hydraulic hoses undamaged, not leaking
 - b. Gear oil level full

2.4 OPERATIONAL CHECKS

OPERATIONAL CHECK

When engine warms, perform an operational check:

1. Service brake and parking brake operation.
2. Horn and back-up alarm. Must be audible from inside operators cab with engine running.
3. Manually controlled hydraulic functions - all functions operate smoothly and the controls return to the "Neutral Off" position.
4. Hydraulic filter condition indicator.
5. Power-Take-Off operation.
6. Electric over hydraulic controlled functions - all functions operate smoothly and the controls return to the "Neutral Off" position.
7. Body lighting operation.
8. Emergency lighting operation.

SECTION 3 - CONTROLS & INDICATORS

3.1 GENERAL

This section provides the necessary information needed to understand control functions.

The controls inside the cab control the body compartment lights, emergency lights, auxiliary lights and the Power Take Off. The Power Take Off provides a transfer of power from the transmission to a hydraulic pump to provide hydraulic power to the SRS.

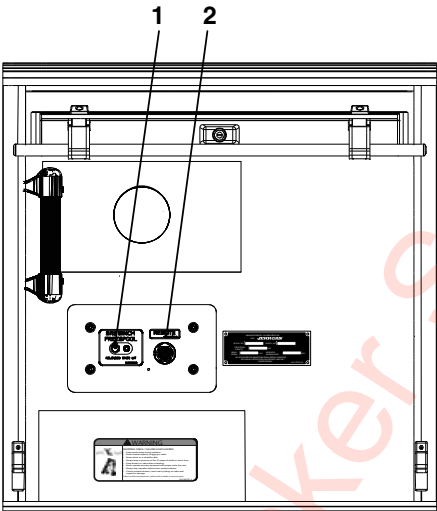
The controls in the body compartment of the SRS control the winch free-spool functions.

The SRS is supplied with various remote controllers. The remote controllers operate the boom functions, winch functions and the SRS stabilizer functions.

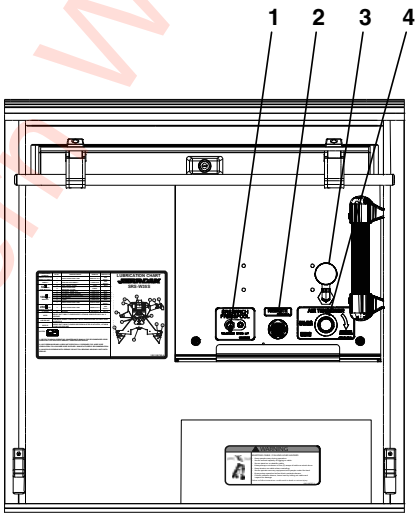
Note: The manufacturer has no direct control over machine application and operation. The user and operator are responsible for conforming with good safety practices.

3.2 CONTROLS

LEFT HAND - SIDE CONTROL STATION



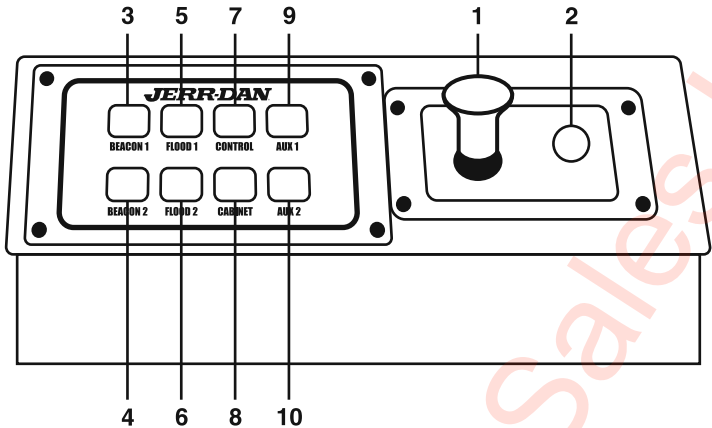
RIGHT HAND - SIDE CONTROL STATION



Section III - Controls & Indicators

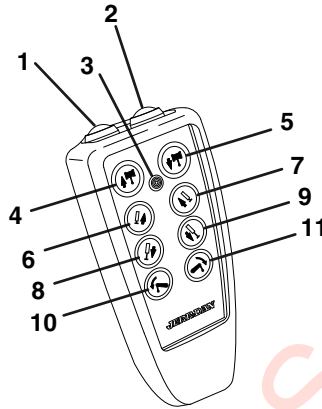
1. Winch Air Controls Button Switches : Engages/disengages the winch into free-spool.
2. Wired Remote Control Connector : Connection for the wired Remote Controller.
3. Pressure Gauge : Indicates system hydraulic pressure at valve..
4. Winch Air Tension Regulator : Adjusts the air pressure at the winch wire rope tensioners.

3.3 IN-CAB CONTROLLER



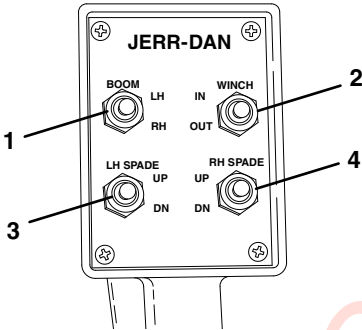
- | | |
|-----------------------------------|--|
| 1. Power Take Off Switch | : Engages and disengages the Power Take Off. |
| 2. Power Take Off Indicator Light | : Indicates that the Power Take Off is "Engaged" when illuminated. |
| 3. Beacon 1 Button Switch | : Controls Emergency Lighting. |
| 4. Beacon 2 Button Switch | : Controls Emergency Lighting. |
| 5. Flood 1 Button Switch | : Controls Upper Work Lights. |
| 6. Flood 2 Button Switch | : Controls Lower Work Lights. |
| 7. Controls Button Switch | : Controls power to the wireless hand controllers and the outrigger electric/hydraulic controls. |
| 8. Cabinet Button Switch | : Powers Body Compartment Lights. |
| 9. Aux 1 Button Switch | : Powers Auxiliary Lighting. |
| 10. Aux 2 Button Switch | : Powers Auxiliary Lighting. |

3.4 8 FUNCTION WIRELESS HAND CONTROLLER



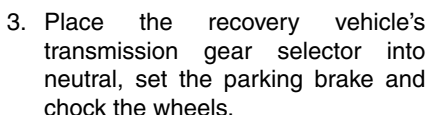
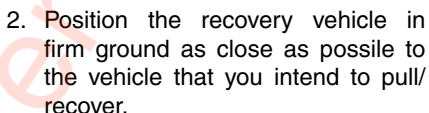
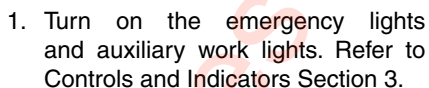
- | | |
|------------------------------------|--|
| 1. Power "OFF" Button | : Turns "OFF" the Hand Controller Power. |
| 2. Power "ON" Button | : Turns "ON" the Hand Controller Power. |
| 3. Power Indicator Light | : Indicates that the Hand Controller is powered "ON" when Illuminated. |
| 4. Winch – In | : Controls the wire rope winding function of the winch. |
| 5. Winch – Out | : Controls the wire rope unwinding function of the winch. |
| 6. Left Outrigger/Spade – Retract | : Controls the retract function of the Left Outrigger/Spade. |
| 7. Left Outrigger/Spade – Extend | : Controls the extend function of the Left Outrigger/Spade. |
| 8. Right Outrigger/Spade – Retract | : Controls the retract function of the Right Outrigger/Spade. |
| 9. Right Outrigger/Spade – Extend | : Controls the extend function of the Right Outrigger/Spade. |
| 10. Boom Flip – Left | : Controls the flip "left" function of the boom. |
| 11. Boom Flip – Right | : Controls the flip "right" function of the boom. |

3.5 8 FUNCTION WIRED HAND CONTROLLER

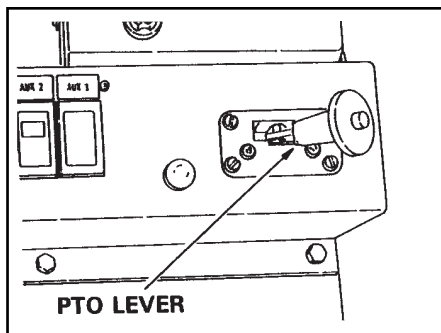


- | | |
|--------------------|--|
| 1. Boom Flip | : Controls the flip “left/right” function of the boom.. |
| 2. Winch | : Controls the wire rope winding/ unwinding functions of the winch. |
| 3. Outrigger/Spade | : Controls the extend/retract function of the Left Outrigger/Spade. |
| 4. Outrigger/Spade | : Controls the extend/retract function of the Right Outrigger/Spade. |

4.1 UNDERLIFT OPERATION



Section IV : Operation



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

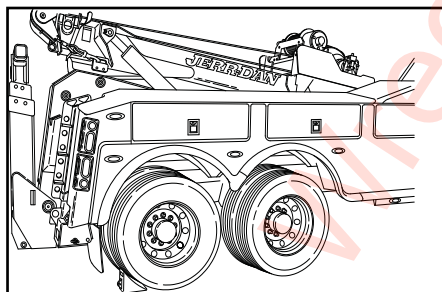
NOTICE

NEVER TRAVEL WITH THE POWER TAKE OFF CONTROL ENGAGED. This could result in damage to the PTO unit and the recovery vehicle's transmission.

- Adjust the electronic or manual throttle control to elevate the engine speed to approximately 1000-1200 R.P.M. of P.T.O. output shaft speed for optimum performance. Refer to the cab chassis manufacturer's manual for throttle control operation.

CAUTION

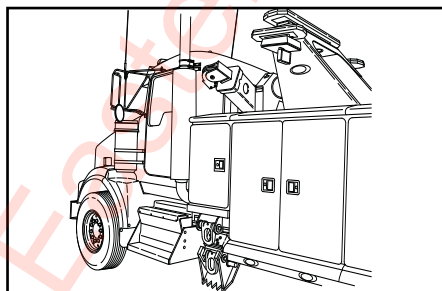
Never exceed 1200 R.P.M. When your hook up is complete, reset the engine idle to normal.



- Block the recovery vehicle's rear tires with wheel chocks to prevent accidental carrier movement. Check the area around the recovery vehicle and the vehicle to be pulled/recovered for obstructions or hazards.

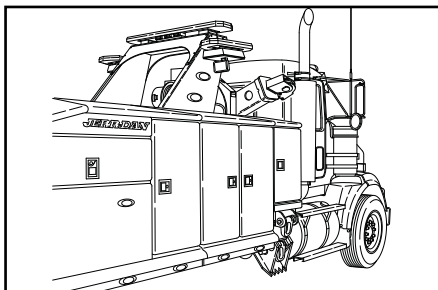
NOTICE

Be sure the casualty vehicle is not in gear or park. Keep the casualty vehicle parking brake set.

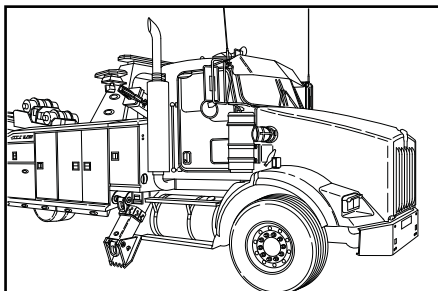


- The recovery boom can hydraulically flip from the left side to the right side or right side to the left side of the vehicle.

Section IV : Operation



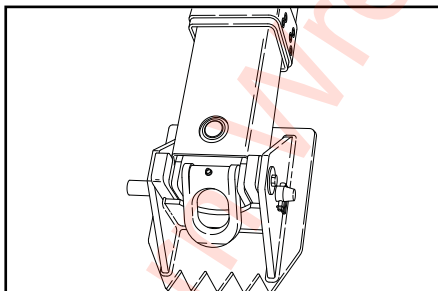
8. Lower the underlift boom to about one (1) in. from the ground.



9. Next, lower the SRS stabilizers to the ground.
10. The left and right stabilizers operate independently of each other. The stabilizers only need to touch the ground to support the load. **Do not attempt to use the stabilizers to level or raise the truck.**

⚠ CAUTION

Stand clear of the outrigger/stabilizers to avoid crushing injury. Area should be clear of feet when lowering the stabilizers. Also, never move the recovery vehicle with the stabilizers on the ground or damage to the stabilizers can occur.



11. If you are on gravel or a soft surface the integral spades can give you more gripping power.

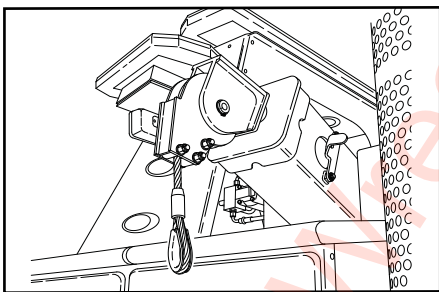
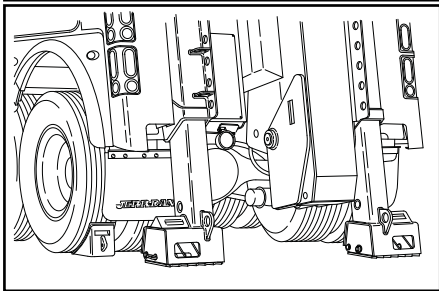
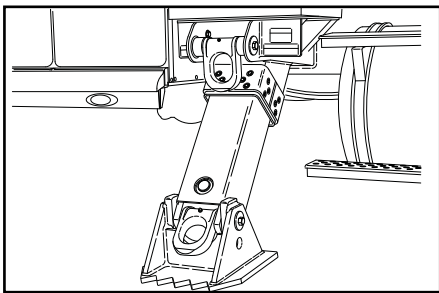
⚠ WARNING

Area must be clear of feet when lowering the stabilizers.

⚠ CAUTION

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

Section IV : Operation



12. If you are on concrete or pavement and can't use the integral spades, pull the spade retaining pin allowing the stabilizer pad to level out flat before completely lowering the stabilizers.

NOTICE

Jerr-Dan also recommends that the rear stabilizers be lowered to help stabilize the recovery vehicle. (See Heavy Duty Wrecker Operation Manual)

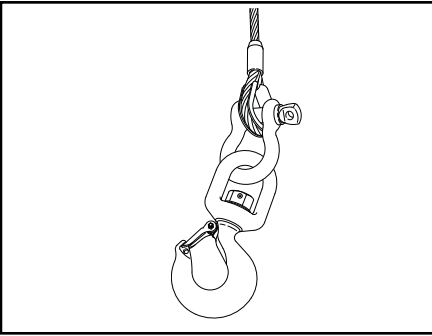
13. Next, remove the wire rope/cable from the tie back and unreel enough of the wire rope/cable from the winch to make your hookup. This can be done using the winch control on the hand controller and unreeling the wire rope/cable from the winch while keeping the wire rope/cable taut. You can also use the remote winch free spool device. This allows for rapid unspooling of the wire rope/cable from the winch. (See winch operation).

⚠ WARNING

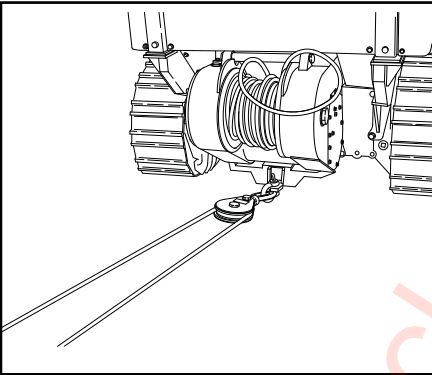
Maintain a minimum of five (5) wraps of wire/rope cable on the winch drum at all times. Also maintain a uniform wrap of wire/rope cable on the drum.

⚠ CAUTION

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



14. Attach the hook to the cable and secure with the screw pin and shackle.



15. Attach the wire rope/cable to the vehicle to be pulled/recovered. Always use V-straps or hook-up chains to attach the wire rope/cable to the vehicle. **Refer to the AAA or vehicle manufacturer's towing manual for correct attachment points.** A snatch block may be used if required to pull from a lower angle.

⚠ CAUTION

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

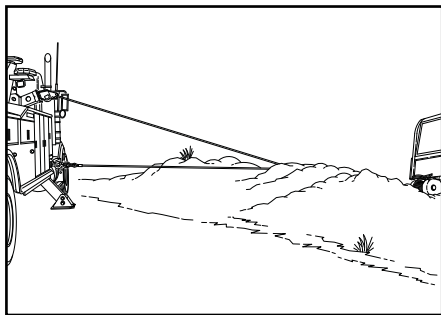
⚠ CAUTION

Always use V-straps or hook-up chains. Never connect the wire rope/cable hook directly to vehicle. Never hook the wire rope/cable back onto itself because damage to the wire rope/cable will occur..

⚠ CAUTION

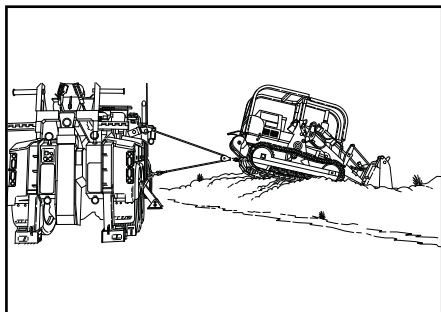
Always attach the wire rope/cable with the hook pointing up.

Section IV : Operation

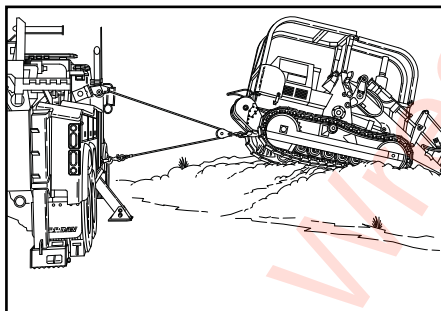


⚠ CAUTION

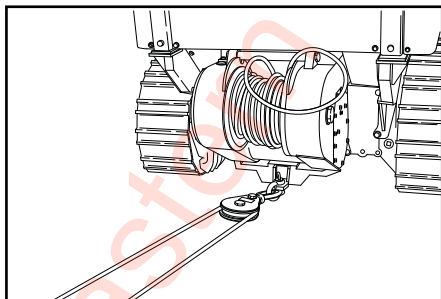
If the vehicle is parked on an incline, leave the parking brake partially engaged to prevent it from rolling forward on its own.



16. Using the winch control on the hand controller, begin winching the load.
17. Continue winching until the load is recovered and in a position where it can be disconnected from the winch wire rope/cable.

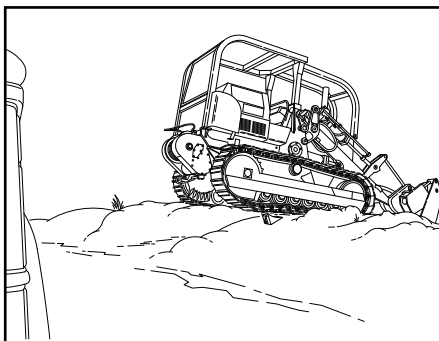


18. Secure the recovered vehicle to prevent it from rolling. If the vehicle has wheels, place wheel chocks against the tires.

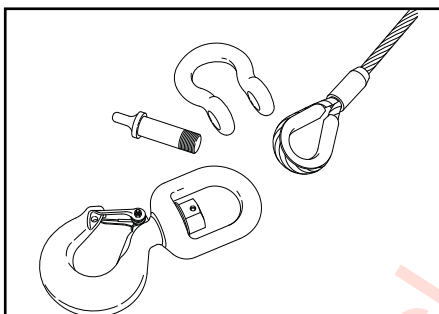


19. Using the remote controller unwind some of the wire rope/cable to relieve the tension on the wire rope.

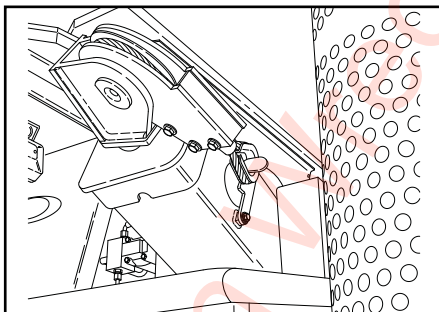
Section IV : Operation



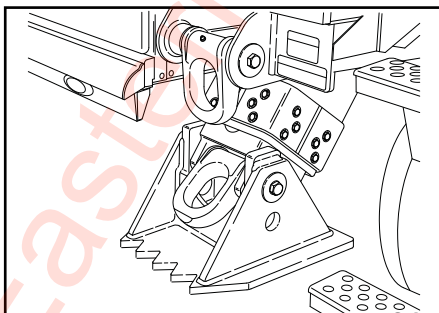
20. Unhook the wire rope/cable from the recovered vehicle.



21. Remove the hook from the wire rope/cable and store in the tool compartment.



22. Reel in any extra wire rope/cable and secure end of wire rope/cable to tie back.

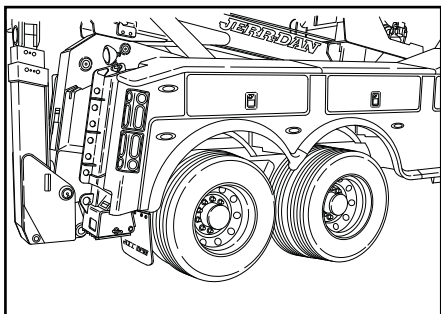


23. Retract the stabilizers.

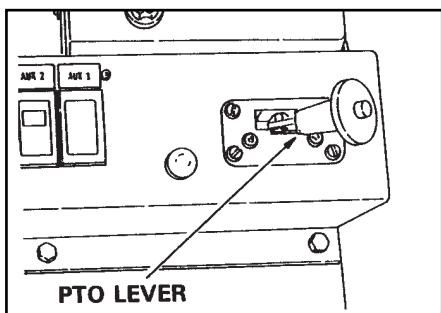
⚠ CAUTION

If you removed the stabilizer foot pin earlier to use the stabilizer foot flat, the stabilizer foot will self stow it's self when the stabilizers are retracted.

Section IV : Operation



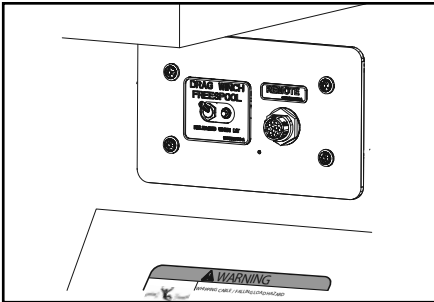
24. Remove the wheel chocks for the recovery vehicle's rear tires.



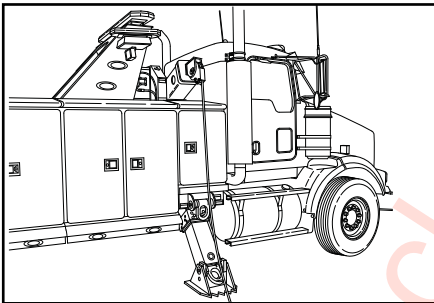
25. Disconnect the power take-off (PTO). Refer to PTO operator's manual. **NEVER TRAVEL WITH THE POWER TAKE-OFF CONTROL ENGAGED.** This could result in damage to the PTO unit and the recovery vehicle's transmission.

4.2 WINCH OPERATION - AIR REMOTE FREE-SPOOL

Follow these simple steps to disengage the winch:



1. To disengage the winch "free-spool", toggle the Free Spool switch to the "free-spool" position. The red light will illuminate. **Never pull the free spool knob while the wire rope/cable is under load.**



2. The winch clutch is now released and the wire rope/cable may be pulled off by hand.

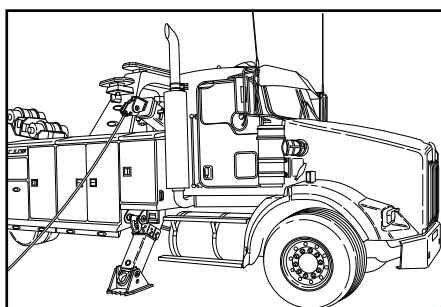
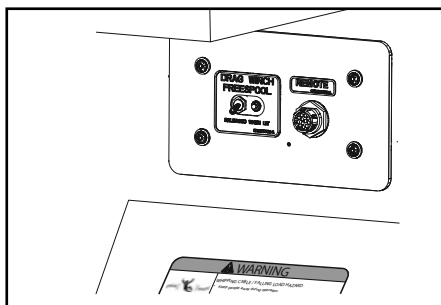
! WARNING

Maintain a minimum of five (5) wraps of wire rope/cable on the winch drum at all times. Also maintain a uniform wrap of wire rope/cable on the drum..

Section IV : Operation

Follow these simple steps to re-engage the winch:

1. To re-engage the winch clutch, toggle the Free Spool switch to the engaged position. The red light will stop illuminating. Run the winch in reverse until the winch drum starts turning.
2. After the winch clutch is fully engaged, the winch is ready for winching.



! CAUTION

Do not attempt to pull a load unless the winch free spool is completely engaged.

! CAUTION

Jerr-Dan does not recommend that the winch air tensioner pressure be adjusted. If you do adjust the air tensioner pressure to assist in "free-spooling" the wire rope/cable from the winch drum, make sure to adjust the pressure back to the factory setting of 40-50 PSI after "free-spooling". Birdnesting of the wire rope/cable may occur and cause damage to the wire rope/cable and or the winch.

SECTION 5 - EMERGENCY PROCEDURES

5.1 RAISING/RETRACTING OF THE OUTRIGGER/SPADES

In the event of total loss of engine power or hydraulic pump failure with Outrigger(s) and/or Spades extended, the situation must be properly evaluated and dealt with on an individual basis. **Contact a local Authorized Distributor for specific instructions.**

Secure the unit using the following procedures:

⚠ WARNING

Do not retract outrigger/spades(s) with boom elevated and/or extended.

1. Clear the area around the unit of all personnel.
2. Engage the parking brake. Place the transmission control lever in "PARK".
3. Chock front and rear wheels.
4. Section off the area with string or tape to restrict any personnel from entering the area.

THIS PAGE IS INTENTIONALLY LEFT BLANK

SECTION 6 - MAINTENANCE

INTRODUCTION

Service the product in accordance with the maintenance schedule on the following pages.

Wear all the protective clothing and personal safety devices issued to you or called for by job conditions.

DO NOT wear loose clothing or jewelry that can get caught on controls or moving parts.

Clean lubrication fittings before lubricating.

Intervals shown are for normal usage and conditions. Adjust intervals for abnormal usage and conditions.

Check all lubricant levels when lubricant is cool. For ease of filling hydraulic reservoir, use a funnel with a hose or flexible tube for best results.

When performing maintenance that requires accessing the top of the truck, use only an approved ladder.



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

Place Do Not Operate Tags on the ignition switch and the steering wheel before attempting to perform any service or maintenance. Remove the key and disconnect battery leads.

WARNING

CUT/CRUSH/BURN HAZARD. Do not perform service or maintenance on the machine with the engine running, with the exception of the hydraulic return filter indicator checks.

WARNING

The SRS hydraulic systems operate at extremely high and potentially dangerous pressures. The operator must relieve any system pressure before disconnecting or removing any portion of the system.

Section VI - Maintenance

6.1 MAINTENANCE AND LUBRICATION

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 SRS. The following Lubricant Chart shows the proper lubricant and the most common brands and specification which meet the requirements. Refer to Section 6.5.

The hydraulic filters located on the return side of the hydraulic tank come equipped with restriction indicator gauges. The gauge shows 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 filter element will result in premature wear and/or failure of any or all of the hydraulic components. **Only check gauge when hydraulic fluid is at operating temperature. Cold oil is more dense and will give a false indicator gauge reading.** Refer to Section 6.5.

The body of your Jerr-Dan has been built from a polypropylene material which has been carefully assembled in our factory.

To keep your polypropylene body clean and free of dirt use any non-abrasive soap or detergent that is safe to the touch. Use a soft cloth or sponge and finish with a thorough rinsing. Drying with a soft cloth or chamois will prevent spotting or streaking. To clean tough stains from the white polypropylene surfaces, a clear pipe cleaner suitable for ABS, CPVC, or PVC can be used. There are rubber plugs in the bottom of the vertical tool compartments of the body to provide water drainage when cleaning out the compartments. The roll-up doors in your body require very little maintenance, and are simple to clean. Any door with a painted surface should not be cleaned aggressively cleaned for 30 days from time of shipment. When cleaning anodized doors, use only a mild non-abrasive soap and water. The side channels should be inspected and cleaned periodically to remove the dirt and grime from inside the channels. A dry silicone spray can be applied to ensure smooth operation. **DO NOT** use lithium or grease to lubricate the track, these lubricants only attract dirt. The slide out chain board tracks and the pull-out/tilt down drawer tracks should be cleaned periodically and free of debris.

For all sling, strap, chain and lifting components refer to the manufacturer inspection and maintenance schedules.

6.2 OILS AND GREASES

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

Company	Product
HYDRAULIC OILS	
1. Chevron	Clarity AW 46
2. Exxon	Univis N46
3. Mobil	Mobilfluid 424
4. Texaco	Rando HD 46
5. Kendall	AW 46
6. Citgo	Mystik AW 46
7. Amoco	AW 46
8. Conoco	Super
9. Mobil	DTE10 Excel 32 (for cold weather use)
10. Conoco	AW Hydraulic Fluid MV 32 (for cold weather use)
GREASES	
1. Drydene	HD Lithium EP2
2. Gulf	Crown EP2
3. Amoco	Amolith EP2
4. Shell	Alvania EP2
5. Texaco	Marfax EP2
6. Mobil	Mobilux EP2
7. Sunoco	Prestige EP2
WINCH	
Mobil	SAE 75W-90 Synthetic Gear Lube (or approved equivalent)

Section VI - Maintenance

Company	Product
Mobile	WIRE ROPE Motor Oil (or other approved deep penetrating equivalent)

6.3 WIRE ROPE HANDLING AND INSPECTION

⚠ WARNING

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

Wire rope failure may cause serious injury or death!

Protect yourself and others:

- **NEVER USE** wire rope that is **WORN-OUT, DAMAGED** or **ABUSED**.
- **NEVER OVERLOAD** a wire rope.
- **REFER TO APPLICABLE CODES, STANDARDS and REGULATIONS** for **INSPECTION REQUIREMENTS** and **REMOVAL CRITERIA**.

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

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

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

Any deterioration, resulting in a suspected loss of original rope strength, the wire rope should be replaced.

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

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

Section VI - Maintenance

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

Replace any wire ropes that have been abraded, crushed, kinked or twisted.

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

Refer to the placard on your unit or consult the manufacturer or your local distributor for the proper replacement wire rope.

6.4 WIRE ROPE INSTALLATION

Proper Unreeling Procedures

Wire rope can be permanently damaged by improper unreeling or uncoiling practices. The majority of wire rope performance problems start here. Improper unreeling practices lead to premature rope replacement, hoisting problems and rope failure.

Place the payout reel as far away from the boom tip as is practical, moving away from the chassis. Never place the payout reel closer to the chassis than the boom point sheave. Doing so may introduce a reverse bend into the rope and cause spooling problems. Take care to determine whether the wire rope will wind over or under the drum before proceeding.

Unreeling & Uncoiling and Kinks

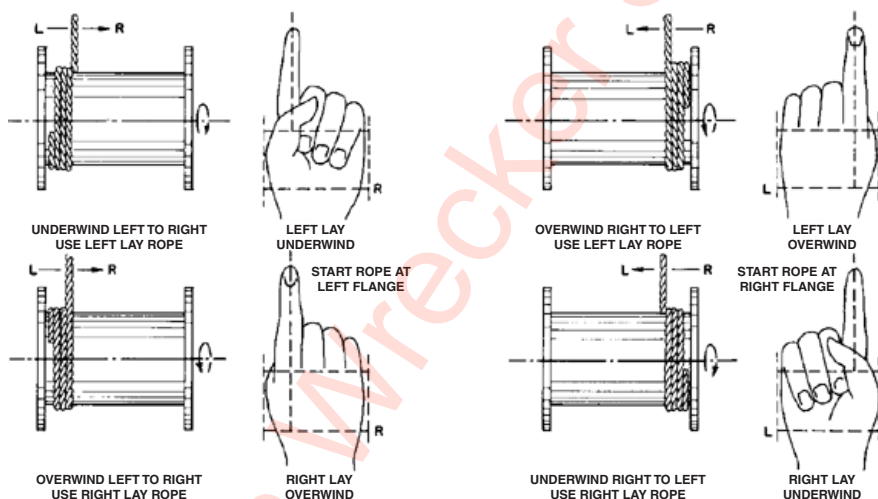
- **The Right Way To Unreel.** To unreel wire rope from a heavy reel, place a shaft through the center and jack up the reel far enough to clear the floor and revolve easily. One person holds the end of the rope and walks a straight line away from the reel, taking the wire rope off the top of the reel. A second person regulates the speed of the turning reel by holding a wood block against the flange as a brake, taking care to keep slack from developing on the reel, as this can easily cause a kink in the rope. Lightweight reels can be properly unreeled using a vertical shaft; the same care should be taken to keep the rope taut.
- **The Wrong Way To Unreel.** If a reel of wire rope is laid on its flange with its axis vertical to the floor and the rope unreeled by throwing off the turns, spirals will occur and kinks are likely to form in the rope. Wire rope always should be handled in a way that neither twists nor unlays it. If handled in a careless manner, reverse bends and kinks can easily occur.
- **The Right Way To Uncoil.** There is only one correct way to uncoil wire rope. One person must hold the end of the rope while a second person rolls the coil along the floor, backing away. The rope is allowed to uncoil naturally with the lay, without spiraling or twisting. Always uncoil wire rope as shown.
- **The Wrong Way To Uncoil.** If a coil of wire rope is laid flat on the floor and uncoiled by pulling it straight off, spirals will occur and kinking is likely. Torsions are put into the rope by every loop that is pulled off, and the rope becomes twisted and unmanageable. Also, wire rope cannot be uncoiled like hemp rope. Pulling one end through the middle of the coil will only result in kinking.
- **Kinks.** Great stress has been placed on the care that should be taken to avoid kinks in wire rope. Kinks are places where the rope has been unintentionally bent to a permanent set. This happens where loops are pulled through by tension on the rope until the diameter of the loop is only a few inches. They are also caused by bending a rope around a sheave having too severe a radius. Wires in the strands at the kink are permanently damaged and will not give normal service, even after apparent "restraightening."

Section VI - Maintenance

Drum Winding

When wire rope is wound onto a sheave or drum, it should bend in the manner in which it was originally wound. This will avoid causing a reverse bend in the rope. Always wind wire rope from the top of the one reel onto the top of the other. Also acceptable, but less so, is re-reeling from the bottom of one reel to the bottom of another. Re-reeling may also be done with reels having their shafts vertical, but extreme care must be taken to ensure that the rope always remains taut. It should never be allowed to drop below the lower flange of the reel. A reel resting on the floor with its axis horizontal may also be rolled along the floor to unreel the rope.

Wire rope should be attached at the correct location on a flat or smooth-faced drum, so that the rope will spool evenly, with the turns lying snugly against each other in even layers. If wire rope is wound on a smooth-face drum in the wrong direction, the turns in the first layer of rope will tend to spread apart on the drum. This results in the second layer of rope wedging between the open coils, crushing and flattening the rope as successive layers are spooled.



A simple method of determining how a wire rope should be started on a drum is shown above. The observer stands behind the drum, with the rope coming towards him. Using the right hand for right-lay wire rope, and the left hand for left lay wire rope, the clenched fist denotes the drum, the extended index finger the oncoming rope.

Keep Wraps Tight

The end of the rope must be securely and evenly attached to the drum anchorage point by the method recommended by the equipment manufacturer. At least five wraps of wire rope must remain on the drum as dead wraps when the rope is unwound during normal operations. Locate the dead end rope anchorage point on the drum in relation to the direction of the lay of the rope. Do not use an anchorage point that does not correspond with the rope lay. Mismatching rope lay and anchorage point will cause the wraps to spread apart from each other and allow the rope to cross over on the drum. Very gappy winding will occur resulting in crushing damage in multilayer applications.

Back tension must be continually applied to the payout reel and the crewman installing the rope must proceed at a slow and steady pace whether the drum is smooth or grooved. Regardless of the benefits of a grooved drum, tension must be applied to ensure proper spooling. An improperly installed rope on a grooved drum will wear just as quickly as an improperly installed rope on a smooth drum. If a wire rope is poorly wound and as a result jumps the grooves, it will be crushed and cut under operating load conditions where it crosses the grooves.





Every wrap on the first or foundation layer must be installed very tightly and be without gaps. Careless winding results in poor spooling and will eventually lead to short service life. The following layers of rope must lay in the grooves formed between adjacent turns of the preceding layer of rope. If any type of overwind or crosswinding occurs at this stage of installation and is not corrected immediately, poor spooling and crushing damage will occur.

On a multilayer spooling drum be sure that the last layer remains at least two rope diameters below the drum flange top. Do not use a longer length than is required because the excess wire rope will cause unnecessary crushing and may jump the flange. Loose wraps that occur at any time must be corrected immediately to prevent catastrophic rope failure.

The use of a mallet is acceptable to ensure tight wraps, however a steel-faced mallet should be covered with plastic or rubber to prevent damage to the rope wires and strands.

6.5 SRS LUBRICATION POINTS

The following lubrication charts are located inside the tool box door on the passenger side of the SRS body.

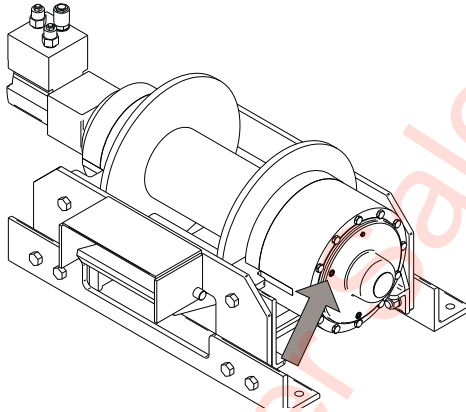
LUBRICATION INTERVAL	ID No.	IDENTIFICATION	SERVICE	LUBRICATION
VENDOR SPECIFIED BREAK-IN PERIOD	1	WINCH GEAR CASE LUBE	DRAIN & FILL	SEE NOTE 1
WEEKLY	2	WIRE ROPE ASSEMBLY	LUBRICATE	SEE NOTE 2
50  OR SEMI-MONTHLY	3	PAIDS, WEAR / STEEL	COAT	MPG
	4	WINCH GEAR CASE BREATHER / PLUGS	CHECK	-
100  OR MONTHLY	5	CYLINDER, BOOM FLIP	LUBRICATE	MPG
	6	CYLINDER, SPADE EXTEND	LUBRICATE	MPG
	7	SWIVEL, BOOM SHEAVE HEAD	LUBRICATE	MPG
	8	PIN, SHEAVE	LUBRICATE	MPG
	9	D-RING	LUBRICATE	MPG
	1	WINCH GEAR CASE LUBE	CHECK LEVEL	SEE NOTE 1
250  OR VENDOR SPECIFIED 10 YEARS	1	WINCH GEAR CASE LUBE	DRAIN & FILL	SEE NOTE 1
	10	BEARING	SEE NOTE 3	MPG-S
MPG	HEAVY DUTY MULTI-PURPOSE EP LITHIUM COMPLEX NLGI No. 2 GREASE.			
LUBRICANT	PREMIUM BRAND LUBRICANT WITH PENETRATING OIL AND RUST INHIBITOR.			
MPG-S	HEAVY DUTY M ULTI-PURPOSE FORMULATED SYNTHETIC, LITHIUM COMPLEX GREASE.			
NOTES	 <ol style="list-style-type: none"> 1.) REFER TO WINCH OPERATING / MAINTENANCE MANUAL FOR RECOMMENDED GEAR LUBRICANT FOR SPECIFIED AMBIENT TEMPERATURE RANGE. 2.) USE PREMIUM BRAND LUBRICANT SPECIFICALLY DESIGNED FOR WIRE ROPE LUBRICATION. FOLLOW WIRE ROPE SUPPLIER / MANUFACTURERS' RECOMMENDATION. 3.) HAND PACK BEARING WITH GREASE. DO NOT FILL BEARING HOUSING CAVITY WITH GREASE. 			

1001199790-A

SRS LUBRICATION POINTS

Note: The following numbers correspond to those shown on the lubrication chart on Page 6-10.

1. Winch Gear Case



- | | |
|---------------|--|
| Lube Point(s) | – Fill Plug |
| Lube | – Reference winch manufacturers manual. |
| Interval | – Check level every 100 hours or monthly
Change every 250 hours |

THIS PAGE IS INTENTIONALLY LEFT BLANK

6.6 TROUBLE SHOOTING

You probably won't require anything but preventive maintenance to keep your HDL700 running, however, the following chart should help you isolate and correct minor problems if they occur with use. Any service work on the hydraulic system should be performed by qualified mechanics.

HYDRAULIC SYSTEM

Problem	Cause	Solution
Slow operation	a. Low engine RPM b. Low oil level c. Blocked or restricted hose d. Dirty hydraulic oil e. Hydraulic pump worn f. Frozen hydraulic lines	a. Speed up engine b. Check level and fill with the specified oil c. Inspect: remove blockage d. Drain, flush and refill with clean oil, replace filter e. Rebuild or replace f. Thaw and remove water
Valve handle sticks tight or frozen	a. Insufficient lubrication b. Broken centering spring or clogged with foreign material	a. Lubricate per lube chart b. Inspect, clean or replace
Valve leaks	a. Defective seals	a. Inspect and replace
Cylinder leaks	a. Defective seals or rods	a. Inspect and replace
Erratic cylinder function	a. Air in the system b. Defective pump (pulsating)	a. Cycle hydraulic system 10 to 15 times to remove air b. Replace if necessary
Remote hand controller fails to respond	a. Electric power turned off	a. Turn on CONTROL power switch in cab
Oil heating up	a. Oil Cooler not working	a. Repair or replace

TROUBLESHOOTING

P.T.O. FUNCTIONING IMPROPERLY

Problem	Cause	Solution
Intermittent operation	a. Poor Electrical connection	a. Check electrical connections
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. Electrical circuit wiring	a. Check/repair electrical wiring problem circuit.
	b. Solenoid Valve malfunctioning	b. Repair or replace
	c. Blown fuse	c. Replace fuse

HYDRAULIC PUMP

Problem	Cause	Solution
Pump noisy (Cavitation)	a. Low oil supply	a. Fill to proper level
	b. Heavy oil	b. Fill with proper oil (See chart)
	c. Dirty oil filter	c. Replace filter
	d. Restriction in suction line	d. Clean out and remove
	e. Pump worn	e. Repair or replace
Pump slow or fails to respond	a. Low oil supply	a. Fill to proper level
	b. Cold Thick Oil	b. Drain and refill with a low temperature oil
Oil heating up	a. Foreign material lodged in relief valve filter	a. Inspect and remove/replace
	b. Using too light oil	b. Drain and refill with clean oil
	c. Dirty oil	c. Drain, flush and refill with clean oil/replace filter
	d. Oil level too low	d. Fill to proper level
	e. Pump worn (slippage)	e. Repair or replace

TROUBLESHOOTING

HYDRAULIC PUMP

Problem	Cause	Solution
Oil foaming	a. Air leaking into suction line	a. Tighten all connections
	b. Wrong kind of oil	b. Drain and refill with non-foaming type of hydraulic oil (See lube chart) Replace filter
	c. Oil level too low	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 wire rope	a. Free-spooling device not engaged	a. Engage
	b. Sheared keys or broken coupling	b. Inspect or replace
	c. Hydraulic pump worn	c. Inspect and replace
Free-spool device	a. No air pressure	a. Turn truck on
	b. Insufficient air pressure	b. Allow truck to run
	c. Defective pressure switch	c. Inspect and replace
	d. Leaking air line	d. Inspect and replace
Cable tensioner device non-functional	a. No air pressure	a. Turn truck on
	b. Insufficient air pressure	b. Allow truck to run
	c. Defective pressure switch	c. Inspect and replace
	d. Leaking air line	d. Inspect and replace
Cable speed shift non-functional	a. No air pressure	a. Turn truck on
	b. Insufficient air pressure	b. Allow truck to run
	c. Defective pressure switch	c. Inspect and replace
	d. Leaking air line	d. Inspect and replace

TROUBLESHOOTING

REMOTE HAND CONTROLLER

Problem	Cause	Solution
Transmitter not working. LED not on or blinking.	a. Electric power turned off b. Discharged Battery	a. Turn on CONTROL power switch in cab or control station b. Replace Battery
Transmitter not working. LED not on or blinking	a. Discharged Battery b. Receiver power turned off c. Out of range d. Communication error	a. Replace Battery b. Check receiver power input c. Make sure transmitter is in range of receiver d. Make sure transmitter and receiver are matched.
Poor Range	a. Discharged Battery b. Communication error c. Communication error	a. Replace Battery b. Obstructions, interference, and adverse weather can affect range c. Check receiver antenna and cable connections
Does not operate correctly	a. Communication error	a. Check/ Verify antenna Wiring

SECTION 7 - SPECIFICATIONS

7.1 PRODUCT SPECIFICATIONS

SRS-W25S

OPERATING SPECIFICATIONS AND PERFORMANCE DATA

DO NOT EXCEED THE FOLLOWING RATINGS:

MAXIMUM STRUCTURAL RATING: 35,000 lbs.

WINCH RATING: (Standard Planetary Gear)
Each Drum (Single Speed, Variable Control) 25,000 lbs.¹

WIRE ROPE:

Working Limit Each Line 11,700 lbs.
Nominal Breaking Strength..... 41,200 lbs
Construction 6 x 37 EIPS RRL IWRC
Diameter 5/8 inch
Standard Length 250 Feet

SRS-W35S

OPERATING SPECIFICATIONS AND PERFORMANCE DATA

DO NOT EXCEED THE FOLLOWING RATINGS:

MAXIMUM STRUCTURAL RATING: 35,000 lbs.

WINCH RATING: (Standard Planetary Gear)
Each Drum (Single Speed, Variable Control) 35,000 lbs.¹

WIRE ROPE: (Standard)

Working Limit Each Line 11,700 lbs.
Nominal Breaking Strength..... 41,200 lbs
Construction 6 x 37 EIPS RRL IWRC
Diameter 5/8 inch
Standard Length 250 Feet

WIRE ROPE: (Optional)

Working Limit Each Line 16,800 lbs.
Nominal Breaking Strength..... 48,800 lbs
Construction 6 x 37 EIPS RRL IWRC
Diameter 3/4 inch
Standard Length 200 Feet

¹ SAE J706: Surface Vehicle Recommended Practices - Rating of Winches

Section VII : Specifications

7.2 CAPACITIES

Hydraulic System

Operating Pressure 3500 psi max.

System Flow 34 gpm

Type of Oil

0° to 104° F Mobilfluid® 424

-40° to 0° F Mobile DTE 10 Excel 32M

IM Body

Walking Surface 400 lbs.

Grab Handles 250 lbs.

Steps 500 lbs.

Inspection, Maintenance and Repair Log

Serial Number _____

[illegible]

Inspection, Maintenance and Repair Log

[illegible]



An Oshkosh Corporation Company

TRANSFER OF OWNERSHIP

To Product Owner:

If you now own but ARE NOT the original purchaser of the product covered by this manual, we would like to know who you are. For the purpose of receiving safety-related bulletins, it is very important to keep Jerr-Dan Corporation updated with the current ownership of all Jerr-Dan products. Jerr-Dan maintains owner information for each Jerr-Dan product and uses this information in cases where owner notification is necessary.

Please use this form to provide Jerr-Dan with updated information with regard to the current ownership of Jerr-Dan products. Please return completed form to the Jerr-Dan Product Safety & Reliability Department via facsimile or mail to address as specified below.

Thank You,
Product Safety & Reliability Department
Jerr-Dan Corporation
13224 Fountainhead Plaza
Hagerstown, MD 21742
USA
Telephone: +1-717-485-6591
Fax: +1-301-745-3713

NOTE: Leased or rented units should not be included on this form.

Mfg. Model : _____

Serial Number : _____

Previous Owner : _____

Address : _____

Country : _____ Telephone : (_____) _____

Date of Transfer : _____

Current Owner : _____

Address : _____

Country : _____ Telephone : (_____) _____

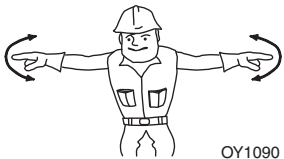
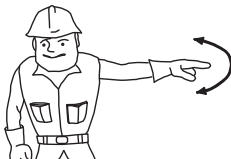

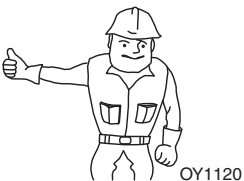
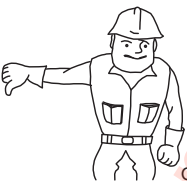

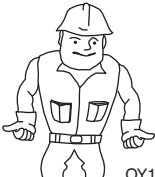



Who in your organization should we notify?

Name : _____

Title : _____

THIS PAGE IS INTENTIONALLY LEFT BLANK

Hand Signals

 <p>OY1090</p> <p>EMERGENCY STOP - With both arms extended laterally, hands open downward, move arms back and forth.</p>	 <p>OY1100</p> <p>STOP - With either arm extended laterally, hand open downward, move arm back and forth.</p>	 <p>OY1110</p> <p>STOP ENGINE - Draw thumb or forefinger across throat.</p>
 <p>OY1120</p> <p>RAISE BOOM - With either arm extended horizontally, fingers closed, point thumb upward.</p>	 <p>OY1130</p> <p>LOWER BOOM - With either arm extended horizontally, fingers closed, point thumb downward.</p>	 <p>OY1140</p> <p>MOVE SLOWLY - Place one hand motionless in front of hand giving motion signal. (Raise load slowly shown)</p>
 <p>OY1150</p> <p>EXTEND BOOM - With both hands clenched, point thumbs outward.</p>	 <p>OY1160</p> <p>RETRACT BOOM - With both hands clenched, point thumbs inward.</p>	 <p>OY1170</p> <p>THIS FAR TO GO - With hands raised and open inward, move hands laterally, indicating distance to go.</p>
 <p>OY1180</p> <p>SWING BOOM - Arm extended, point with finger in direction of swing of boom.</p>	<p>Special Signals - When signals for auxiliary equipment functions or conditions not covered are required, they shall be agreed upon in advance by the operator and signalman.</p>	



5376000175- C

JERR-DAN

An Oshkosh Corporation Company

*13224 Fountainhead Plaza
Hagerstown, MD 21742
Phone (717) 597-7111*

TOW 
SUPPORT
by **JERR-DAN**

Phone (800) 926-9666