SUPER SERIES

OPERATIONS AND MAINTENANCE MANUAL



An Oshkosh Corporation Company

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FOREWORD

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

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

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

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NOTICE

MANUFACTURED BY:	mo	vr
INCOMPLETE VEHICLE MANU BY:	JFACT	URED
DATE INC. VEH. MFD.	_mo	yr
GVWR		
GAWR FRONT		with tires
rims, @ psi cold		
GAWR INTERMEDIATE (1)		with _tires
rims, @ psi cold		
GAWR INTERMEDIATE (2)		with tires
rims, @ psi cold		
GAWR REAR		with tires
rims, @ psi cold		
Vehicle Safety Standards, which previously fully certified by the vehicle manufacturer or interme manufacture, has not been affe stage manufacture. The vehic completed in accordance wi manufacturer's instructions, whe This vehicle conforms to all oth Federal Motor Vehicle Safety se effect in:	h have e incor ediate v cted by le has th the re appl er app Standa	vehicle vehicle vehicle final beer prio icable licable rds in
	_mo	yr
	/BFR:	
VEHICLE IDENTIFICATION NON		

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

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



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SAFETY

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

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

- 1. Read operating and loading instructions thoroughly.
- Become familiar with the loads that your unit can safely transport without exceeding the structural capacity of the Jerr-Dan equipment or the gross axle weight ratings, gross vehicle weight rating, and gross combined vehicle weight rating of your chassis.
- 3. Observe all warning decals.
- 4. Make sure you are clear of oncoming traffic. Dual controls (driver's side and passenger's side) are standard on your Jerr-Dan roll back.
- 5. Always put bumper on the ground to support the body and truck frame.



6. Never exceed the rated capacity of the body or truck chassis and it's components or use a tow option without a vehicle on the deck.



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7. Never winch from the side of the bed. Winch only from the rear with load in line with the winch. Failure to do so can result in winch or wire rope damage. JERR-DAN DOES NOT RECOMMEND THE USE OF SIDE PULLING DEVICES.



- 8. Always try to winch from the center of the load.
- 9. Maintain winch cable in good condition. Replace when worn, kinked or frayed. Do not use cable clamps.



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10. When loading or unloading the deck and operating the winch, make certain the area behind the load is clear of personnel and obstacles.



11. Distribute load evenly on the deck. Do not concentrate the load on one section of the deck, to the rear of the truck axles, or use a tow option without a load on the deck.



12. Secure cargo to the deck at both the front and rear before the truck is driven. Do not rely on the winch as the only means of holding the load.





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- 13. Keep alert. Do not be distracted during any operating sequences.
- 14. Do not work behind truck with vehicle on deck unless vehicle is secured at front of deck. (Do not rely on winch.)
- 15. Keep alert to the location of the C.G. of the load. Tili when C.G. is at the control station.



- 16. Insure deck is in the locked position before traveling.
- 17. Review operator's pre-transport checklist located on the headboard of the deck each time you move a vehicle.
- 18. Block up deck before performing any service or maintenance work under deck.





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DECAL GROUP



(STANDARD DECAL, RIGHT SIDE)

LUBRICATION CHART	INTERVAL (HOURS)	REF NO.	IDENTIFICATION	SERVICE	LUBRICANT	NO. OF
JERRADANI BIC SUPER SERIES CARRIERS	50 OR MONTHLY	2	CABLE	OIL	ENGINE OIL	1
	100 OR BI- MONTHLY	2 5 4	WINCH FS CLEVIS (IF APPLICABLE) HYD RESERVOIR SUBFRAME PIVOT	LUBE CHECK LUBE	MPG * MPG	1 1 2
CHART COVERS ONLY <i>过夏冠冠边组</i> 级 BODY COMPONENTS * INDICATES DUAL RANGE HYD. FLUID 5 W 20	250 OR SEMI- ANNUALLY	1 3 6	HOLD DOWN GUIDE WINCH GEAR BOX HYD FILTER	OIL CHECK CHANGE	HYD FLUID **	2 1 1
AUTO TRANS FLUID MAY BE SUBSTITUTED IF NECESSARY ** CONSULT WINCH MANUAL FOR PROPER GRADE AND TYPE DO NOT GREASE SLIDE PADS 1001127494 REV-00	1000 OPERATING HOURS	3 5	WINCH GEAR BOX HYD RESERVOIR	DRAIN/FILL DRAIN/FILL	**	1 1

(LUBRICATION CHART)



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WINCH CABLE FAILURE MAY CAUSE INJURY OR DEATH. STAY CLEAR OF CABLE AND LOAD WHEN OPERATING.

BOTH FRONT AND REAR TIE DOWNS MUST BE USED TO SECURE VEHICLE / LOAD TO DECK. DO NOT RELY ON THE WINCH AS THE ONLY MEANS OF HOLDING THE LOAD.

CLUTCH MUST BE TOTALLY ENGAGED BEFORE STARTING THE WINCHING OPERATION.

DO NOT DISENGAGE CLUTCH UNDER LOAD.

DO NOT USE WINCH TO LIFT, SUPPORT OR OTHERWISE TRANSPORT PEOPLE.

A MINIMUM OF 5 WRAPS OF CABLE AROUND THE WINCH DRUM IS NECESSARY TO HOLD THE LOAD. CABLE SETSCREW IS NOT DESIGNED TO HOLD LOAD.

DO NOT EXCEED MAXIMUM LINE PULL RATINGS PUBLISHED IN EQUIPMENT OPERATOR'S MANUAL AND / OR WINCH OPERATING MANUAL.

(WINCH)



MAINTAIN OIL LEVEL WITHIN 1/2" OF TOP OF SIGHT GAUGE WITH ALL CYLINDERS FULLY RETRACTED. TORQUE SIGHT GAUGE BOLTS: 8 FT-LBS MAX. 272-02

(HYDRAULIC OIL LEVEL)





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(DECK ALIGNMENT)



(TOW OPTION WARNING)



(WHEEL LIFT WARNING)



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DO NOT EXCEED TOW OPTION CAPACITIES. OVERLOADING MAY RESULT IN UNSAFE STEERING AND/OR BRAKING CONDITIONS.

PINCH HAZARDS AND MOVING PARTS KEEP CLEAR OF THIS AREA

TOWED VEHICLE MUST BE CONNECTED TO BODY SUBFRAME WITH SAFETY CHAINS



FULLY RETRACT TOW OPTION BOOM TO AVOID DAMAGE DURING OPERATION OF OTHER CARRIER FUNCTIONS

(TOW OPTION WARNING)



(CHECKLIST REMINDER)



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OPERATOR'S
REVIEW THIS CHECKLIST BEFORE EACH TOW, FAILURE TO FOLLOW CHECKLIST COULD CREATE A DANGEROUS CONDITION FOR YOU, OTHER MOTORISTS AND PEDESTRIANS, AND MIGHT RESULT IN SERIOUS INJURY OR DEATH,
VEHICLE ON DECK - CHECKLIST:
 HEED ALL WARNINGS ON EQUIPMENT AND CONTROLS. DO NOT HOOK CABLE HOOK DIRECTLY TO VEHICLE. USE A HOOK-UP CHAIN, V-STRAP/V-CHAIN ASSEMBLY. IS VEHICLE ON DECK ENGINE FORWARD TO AVOID UNLOADING FRONT AXLE OF CHASSIS? ARE TWO (2) REAR TIE-DOWN J-HOOKS OR CHAINS SECURELY ATTACHED TO VEHICLE AND DECK? IS TOWED VEHICLE IN PARK OR IN GEAR WITH EMERGENCY BRAKE APPLIED? DID YOU ATTACH FRONT SAFETY CHAIN/STRAPS TO VEHICLE? DO NOT OVERLOAD! SEE LOAD RATING PLACARD ON UNIT. STOP VEHICLE AT ONCE AND REARANGE LOAD IF YOU NOTICE FRONT END OF TRUCK FEELS LIGHT OR BOUNCES EXCESSIVELY D RIFT.
LOSS OF VEHICLE CONTROL CAN RESULT FROM AN OVERLOAD AND CAN CAUSE A SERIOUS ACCIDENT.
VEHICLE ON TOW BAR - CHECKLIST:
DO NOT LIFT OR TOW A VEHICLE USING THE WHEELIFT SYSTEM UNLESS THERE IS A VEHICLE ON THE DECK. DO YOU HAVE TURNING CLEARANCE ON TOWED VEHICLE? IS GROUND CLEARANCE SET FOR PROPER TOWING OF SECOND VEHICLE? ARE T-HANDLES TICHTENED SO THAT GRIDS DO NOT MOVE DURING TRANSPORT? DOFUMINE OF SECOND VEHICLE?
ARE BUTH WHEEL STRAPS ON TOWED VEHICLE AND TIGHTENED DOWN?
 ARE BOTH SAFETY CHAINS ATTACHED FROM TOWING TRUCK TO TOWED VEHICLE?
 ARE AUXILIARY TOWING LIGHTS ATTACHED TO TOWED VEHICLE?
DO NOT OVERLOAD YOUR VEHICLE!
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(CHECKLIST)



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AIR SUSPENSION MUST BE FULLY DEFLATED BEFORE TILTING DECK TO LOAD OR UNLOAD

(SUSPENSION WARNING)



GREASELESS PIVOT JOINTS. NO LUBRICATION IS REQUIRED.

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(SLIDE PAD LUBRICATION)



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O MANUFACTURED BY: JLG INDUSTRIES, INC.	0
FOR: JERRIDAN	
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www.jen-dan.com	
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STRUCTURAL CAPACITIES*	
MAIN DECK CAPACITY: LBS.*	
UPPER DECK CAPACITY: LBS.*	
WHEELLIFT/TOWBAR LIFT CAPACITY:	
(FULL EXTENSION)	
LBS.*	
WHEELLIFT/TOWBAR TOW CAPACITY:	
L LBS.*	
HITCH OPTION TONGUE CAPACITY: (FULL RETRACTION)	
LBS.*	
HITCH OPTION TONGUE CAPACITY:	
LBS.*	
*PLEASE READ THE FOLLOWING IN	
ORDER TO ENSURE SAFE AND	
CORRECT USE OF THE EQUIPMENT.	
DO NOT EXCEED THE ABOVE STRUCTURAL RATINGS.	
THE MAXIMUM EFFECTIVE TRANSPORT LOAD	
OF THE TRUCK CHASSIS.	
THE MAXIMUM EFFECTIVE TRANSPORT LOAD MAY BE LIMITED BY THE RATINGS OF ANY TOW IMPLEMENTS, ATTACHMENTS, OR ACCESSIONES BEING LISED	
WHEN SUPPLIED. THE SAFETY LOCKING PIN	
MUST BE IN PLACE DURING TRANSPORT TO ACHIEVE THE RATINGS LISTED ABOVE.	
SAFETY IS NO ACCIDENT. REVIEW OPERATOR'S PRE-TRANSPORT CHECKLIST ON VEHICLE AND IN THE OWNERS MANUAL EACH TIME YOU MOVE A VEHICLE. FOLLOW ALL INSTRUCTIONS ON CONTROLS AND UNIT.	
O 1001132765-A	\circ

(STRUCTURAL RATING PLACARD)



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(WINCH REMOTE AIR FREE-SPOOOL)



(PINCH HAZARD)



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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.



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OPERATION

Super Series Carriers operate on the simple concept of a see-saw or teeter-totter. As weight moves from one side of the pivot to the other, gravity wants to make the deck tilt to the side that the weight is on (the pivot point of the deck is just forward of the control station).



LOAD TO RIGHT OF PIVOT (AS DECK SLIDES FURTHER FORWARD)

A. Controls

The operating controls for the Jerr-Dan equipment are conveniently located on both the driver's and passenger's side.

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

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

The following controls are provided:

- 1. Power-take-off (in truck cab)
- 2. Auxiliary engine throttle control
- 3. Rollback control (1st handle
- 4. Stabilizer control (2nd handle)
- 5. Winch control (3rd handle)
- 6. Tow Option Extend/Retract (4th handle)







B. Loading the Deck

1. Position

Park the truck in-line with and approximately 13 feet of the equipment to be loaded.

A CAUTION: The unit should always be loaded and unloaded on level and stable ground.

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



2. Stabilize

Lower the Tilt/Stabilizer control handle to lower the stabilizer until it is approximately 1 inch off the ground. If the stabilizer should come down in a depression and cannot be extended to within 1 inch of the ground, the vehicle should be moved to a better location or adequate blocking provided to assure support.



3. Roll

Raise the Roll control handle and the deck will slide back. Continue this operation until the deck begins to tilt and the stabilizer rests firmly on the ground. NEVER ROLL THE DECK BACK UNLESS THE STABILIZER IS DOWN.





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4. Tilt

Raise the Tilt/Stabilizer control handle to retract the stabilizer cylinders allowing the back of the deck to lower to the ground. Use both the Tilt/ Stabilizer control handle and the Roll control handle to roll the deck fully rearward while keeping the tip of the deck in light contact with the ground. Make sure the tip of the deck and stabilizer are both resting firmly on the ground before loading.



5. Winch

Winch the load onto the deck. Refer to the Winch Operation Manual for specific winch operation procedures.

5a. Raise the Winch control handle to power unreel the winch cable while a second person keeps the cable taut or disengages the winch clutch and free spool the cable. (See the Winch Operation Manual for proper clutch disengagement procedures)

A CAUTION: Never disengage the winch clutch when the winch is under load.

Always maintain a minimum of 5 wraps of cable on the winch drum.

- 5b. Engage the winch clutch if the winch cable was free spooled. Raise the winch handle (unreel the cable) until the winch clutch fully engages. Ensure that the winch clutch is fully engaged be fore putting a load on the winch.
- 5c. Attach the winch cable to the load. The winch cable should be at tached as close to the center of the load as possible. It may be necessary to use a "V" chain or other implement to attach the winch cable to the load.
- 5d. Lower the Winch control handle to wind the cable onto the winch drum and pull the load onto the deck.





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CAUTION:	Always winch load onto deck, NEVER drive equipment onto the tilted deck.
A CAUTION:	Always maintain a uniform wrap of cable on the drum. "Nesting" of the winch cable may cause damage or pre- mature wear of the winch cable.
A CAUTION:	Remember that cables break, winches fail, and hooks be- come disengaged. DO NOT WORK BELOW THE LOAD!
A CAUTION:	Replace worn or damaged cables. Always wear gloves when handling cable. DO NOT USE CABLE CLAMPS.

A CAUTION: The winch cable should remain attached to the load and taut.

6. Secure Load

Once the load is positioned on the deck secure it from movement in all directions. Set the parking brake or use wheel chocks if applicable.

7. Roll

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Lower the Roll control handle to roll the deck forward. Use the Tilt/Stabilizer control handle to keep the tip of the deck in light contact with the ground while rolling the deck forward. Continue this operation only until the balance point of the deck and load nears the control station.

A CAUTION: Rolling the deck too far forward will cause the deck to level (tilt) uncontrolled and may cause damage to the Jerr-Dan equipment, load, or truck chassis, and my cause personal injury.



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8. Lower (Tilt)

Lower the Tilt/Stabilizer control handle to extend the stabilizer cylinders. This will level (tilt) the deck. Continue this operation until the deck lays flat on the slide pads on the chassis frame, Do not force the front of the deck against the slide pads.



9. Roll

Lower the Roll control handle to roll the deck forward until it is in the full forward position and under the hold downs.



10. Raise Stabilizer

Raise the Tilt/Stabilizer control handle to fully raise the stabilizer into the transport position.



11. Secure Load

Fully secure the load against movement in all directions. Keyslots are provided at the front and rear of the deck for securing the load. Set brakes (if applicable) and use wheel blocks and tie-downs for safe transport.



A CAUTION: Use safety tie-downs to secure the load against rearward motion. Leave the winch cable attached to the load and taut, but do not rely on the winch cable to secure the load.



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12. Disconnect PTO

Return the engine to normal idle speed and disengage the PTO before engaging the transmission. Driving the truck with the PTO engaged will cause overspeeding. Overspeeding of the PTO and/or pump will greatly shorten their life and can cause damage to the PTO, pump, and transmission.

C. Unloading the Deck

1. Position

Park the truck with ample clearance to the back of the deck, approximately 13 feet plus the length of the equipment to be unloaded.

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



2. Stabilize

Lower the Tilt/Stabilizer control handle to lower the stabilizer until it is approximately 1 inch off the ground. If the stabilizer should come down in a depression and cannot be extended to within 1 inch of the ground, the vehicle should be moved to a better location or adequate blocking provided to assure support.





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3. Roll

Raise the Roll handle to roll the deck rearward. Continue this operation until the deck begins to tilt and the stabilizer rests firmly on the ground. NEVER ROLL THE DECK BACK UNLESS THE STABILIZER IS DOWN.



4. Tilt

Raise the Tilt/Stabilizer control handle to retract the stabilizer cylinders allowing the back of the deck to lower to the ground. Use both the Tilt/ Stabilizer control handle and the Roll control handle to roll the deck fully rearward while keeping the tip of the deck in light contact with the ground. Make sure the tip of the deck and stabilizer are both resting firmly on the ground before loading.



5. Winch

Winch the load off of the deck. Refer to the Winch Operation Manual for specific winch operation procedures.



- 5a. Ensure that the winch cable is securely attached to the load and is taut. Ensure that the winch clutch is fully engaged (the winch is NOT in free spool mode.)
- 5b. Remove all equipment used to secure the load to the deck (excluding the winch cable). Release brakes of the load (if applicable).
- 5c. Raise the winch control to power unreel the cable from the drum, lowering the load from the deck.



Rev. _____ Date _____ 5d. Secure the load on the ground Remove the winch cable from the load and store the cable.

CAUTION:	Never disengage the winch clutch when the winch is under load.
A CAUTION:	Always maintain a minimum of 5 wraps of cable on the winch drum.
CAUTION:	Always winch load off of the deck, NEVER drive equipment on the tilted deck.
A CAUTION:	Always maintain a uniform wrap of cable on the drum. "Nesting" of the winch cable may cause damage or pre- mature wear of the winch cable.
	Remember that cables break, winches fail, and hooks become disengaged. DON'T WORK BELOW THE LOAD!
A CAUTION:	Replace worn or damaged cables. Always wear gloves when handling cable. DO NOT USE CABLE CLAMPS!

6. Roll

Lower the Roll control handle to roll the deck forward. Use the Tilt/Stabilizer control handle to keep the tip of the deck light contact with the ground while rolling the deck forward. Continue this operation only until the balance point of the deck nears the control station.

• CAUTION: Rolling the deck too far forward will cause the deck to level (tilt) uncontrolled and may cause damage to the Jerr-Dan equipment, load, or truck chassis, and my cause personal injury.





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7. Level (Tilt)

Lower the Tilt/Stabilizer control handle to extend the stabilizer cylinders. This will level (tilt) the deck. Continue this operation until the deck lays flat on the slide pads on the chassis. Do not force the front of the deck against the slide pads.



8. Roll

Lower the Roll control lever to roll the deck until it is in the full forward position and under the hold downs.



9. Raise Stabilizer

Raise the Tilt/Stabilizer control handle to fully raise the stabilizer into the transport position.



10. Disconnect PTO

Return the engine to normal idle speed and disengage the PTO before engaging the transmission. Driving the truck with the PTO engaged will cause overspeeding. Overspeeding of the PTO and/or pump will greatly shorten their life and can cause damage to the PTO, pump, and transmission.



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D. DOCK LOADING

- 1. Position the truck within 2-3 feet of the dock.
- 2. Lower the Tilt/Stabilizer control handle to lower the stabilizer until it rests firmly on the ground.
- 3. Raise the Roll control handle to roll the deck rearward to the dock. The deck should not be extended more than 4 feet from its transport position during loading.
- 4. Lower the Tilt/Stabilizer control handle to raise the rear of the deck to the height required for loading.
- NOTE: Be careful when positioning the rear of the deck over the dock as the deck may settle when loaded and jam against the dock.

A CAUTION: Always center the load (side to side) on the deck.



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MAINTENANCE AND LUBRICATION

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

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

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

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

Sliding surfaces of deck beams are to be cleaned and coated with engine oil periodically. Cleaning every six (6) months is recommended for normal highway operations, but this frequency will vary appreciably with the type of service. Sliding on dirty wear surfaces will cause rapid wear. Fittings on linkage pivots should be greased every two (2) months, again depending upon usage. See Lube Chart.

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

The proper oil level is best checked by rolling the deck back enough to gain access to the fill plug (unless the chassis configuration caused the oil tank to be mounted abnormally far to the rear). The oil tank should be about 2/3 full with the deck so positioned (shut off the engine after moving the deck). This will result in a 3/4 full tank with the cylinders fully retracted (deck fully forward). (Proper oil level is achieved when the hydraulic oil is within 1/2 inch of top of sight tube.)



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

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



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NO. OF POINTS	1	7 1 7	2 1 1	
LUBRICANT	ENGINE OIL	9dw	HYD FLUID ** 	* *
SERVICE	OIL	LUBE CHECK LUBE	OIL CHECK CHANGE	DRAIN/FILL DRAIN/FILL
IDENTIFICATION	CABLE	WINCH FS CLEVIS (IF APPLICABLE) HYD RESERVOIR SUBFRAME PIVOT	HOLD DOWN GUIDE WINCH GEAR BOX HYD FILTER	WINCH GEAR BOX HYD RESERVOIR
REF NO.	2	2 2 4	1 3 6	5 3
INTERVAL (HOURS)	50 OR MONTHLY	100 ОК ВІ- МОИТНLY	250 OR SEMI- ANNUALLY	1000 OPERATING HOURS
LUBRICATION CHART	3IC SUPER SERIES CARRIERS		CHART COVERS ONLY <u>JJ或RJR私</u> DALNY BODY COMPONENTS * INDICATES DUAL RANGE HYD. FLUID 5 W 20	AUTO TRANS FLUID MAY BE SUBSTITUTED IF NECESSARY ** CONSULT WINCH MANUAL FOR PROPER GRADE AND TYPE [DO NOT GREASE SLIDE PADS] 1001127494 REV-00



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TROUBLESHOOTING

PROBLEMS ENCOUNTERED WHILE UNIT IS IN TRANSIT

of deck

Looseness and rattling a. Loose Hold Down Blocks

WINCH FUNCTIONING IMPROPERLY

Winch screeches during a. Insufficient lubrication operation

Winch will not pull load on deck

- a. Free spooling device disengaged b. Insufficient Relief Valve
- pressure
- c. Sheared keys or broken chain at coupling d. Hydraulic pump worn
- a. Off centered load Cable build-up on one

- a. Lubricate per lube chart
- a. Engage

required.

- b. Reset to correct setting using gauge
- c. Inspect and replace
- d. Inspect and replace
- a. Recenter load if possible

VALVE BANK FUNCTIONING IMPROPERLY

- a. Reset to correct setting using aauae
- b. Inspect and replace

a. Replace

b. Inspect, clean or replace

a. Cvcle hvdraulic svstem

b. Replace if necessary

10-15 times to remove air

- CYLINDERS FUNCTIONING IMPROPERLY a. Inspect and replace

Cylinders leak oil Erratic operation of

Valve leaks at top or

bottom of spools

- a. Defective seals or rod
 - a. Air in hvdraulic system
 - b. Defective pump (Pulsating)
- HYDRAULIC SYSTEM FUNCTIONING IMPROPERLY

Slow Operation

cylinders

tight or frozen

- a. Low engine RPM
- b. Low oil level
- c. Blocked, restricted or collapsed hoses
- d. Dirty hydraulic oil
- e. Hydraulic pump worn
- f. Relief valve in valve bank bypassing

3.4

- a. Speed up engine
- b. Reservoir should be 3/4 full with cylinders retracted
- c. Inspect, remove blockage or reposition hoses affected
- d. Drain, flush and refill with clean oil
- e. Rebuild or replace
- f. 1) Reset to correct pressure using gauge
 - 2) Check if relief spring is broken. Replace if necessary





a. Shim Hold Down Blocks as

SOLUTION

- side of spool or other Valve bypasses oil or squeals during all operations
 - a. Insufficient relief valve settina b. Broken relief spring
 - b. Broken centering spring or clogged with dirt at bottom of spool
- Valve handles stick,

 - a. Defective seals

PROBLEM

CAUSE

TROUBLESHOUTING				
PROBLEM	CAUSE	SOLUTION		
P	T.O. FUNCTIONING IMP	ROPERLY		
Cable tight or frozen	a. Cable kinked or bent b. Cable and P.T.O. connec- tion not adjusted property	a. Straighten or replace b. Inspect and adjust		
	c. Mounting bracket nuts are over tightened at P.T.O. knob	c. Loosen if necessary		
Rattling noise in P.T.O.	a. P.T.O. backlash too loose	a. Shims must be removed (Consult P.T.O. manual)		
Howling noise in P.T.O.	a. P.T.O. backlash too tight	a. Shims must be added (Consult P.T.O. manual)		
Gear oil leak between P.T.O. and pump	a. Defective shaft seal	a. Remove and replace		
P.T.O. will not engage or disengage	a. Cable and P.T.O. connec- tion not adjusted properly	a. Inspect and adjust		
	 b. Defective shifter cover plate 	b. Inspect and replace		
HYDRAL	JLIC PUMP FUNCTIONIN	NG IMPROPERLY		
Cavitation: pump	a. Low oil supply	a. Fill to proper level		
unusually noisy	b. Heavy oil	b. Fill with proper oil		
	d. Restriction in suction line	d. Remove		
Pump takes too long	a. Low oil supply	a. Fill to proper level		
to respond or fails to	b. Insufficient relief valve	b. Reset to correct setting		
respond	c. Pump worn or damaged	c. Repair or replace		
Oil Heating up	a. Foreign material lodged in	a. Inspect and remove		
0 1	relief valve			
	b. Using too light oil c. Dirty oil	 b. Drain and refill with clean oil c. Drain, flush, and refill with clean oil 		
	d. Oil level too low	d. Fill to proper level		
	e. Insufficient relief valve	e. Set to correct setting using		
	f. Relief valve pressure too high	f. Same as "e"		
	g. Pump worn (slippage)	g. Repair or replace		
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 hydraulic oil 		
	c. Oil level too low	c. Fill to proper level		
Hydraulic oil leak be- tween 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		



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