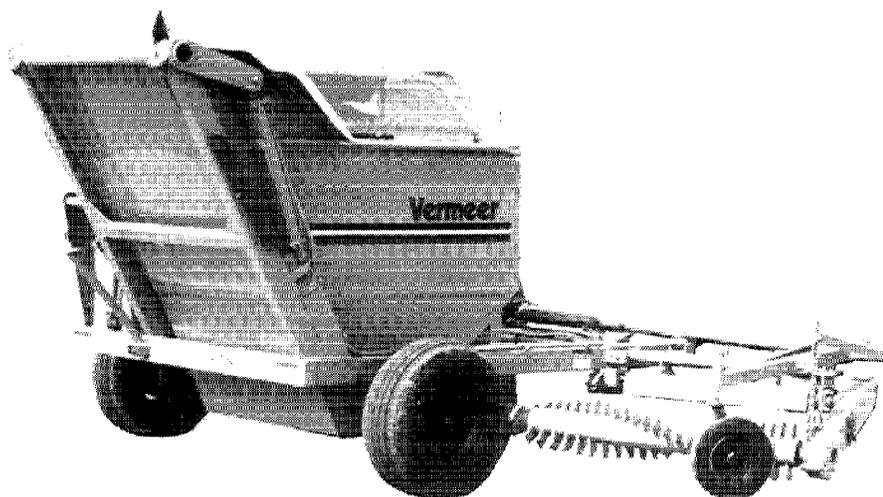




Operator's Manual



106 Rock Picker

Vermeer

Manufacturing Company

Pella, Iowa 50219

105400-B01

**TO THE PURCHASER
OF A 106 ROCK PICKER**

The purpose of this manual is to acquaint you with your new Rock Picker. This manual will explain the proper operation and maintenance of this unit. It is very important that you know the serial number of your Rock Picker. REMEMBER, whenever you order parts for your Rock Picker, specify the model number and serial number of your unit. So that you will always have this information at hand when you need parts, we suggest that you fill in the following information for your ready reference.

Rock Picker Model _____ Rock Picker Serial No. _____

PRICES SUBJECT TO CHANGE WITHOUT NOTICE.

PRINTING DATE: First Edition, May 1985

Serial No. 82826 to _____

585APM2

Revised April 1991 due to
elimination of Power Pack.

TABLE OF CONTENTS

Safety Instructions	Pages 2 - 3
Decal Assembly	Page 4
Introduction	Pages 5 - 6
Assembly Instructions	Pages 6 - 12
Controls Orientation	Page 13
Normal Shutdown Procedure	Page 13
Prestarting Inspection Instructions	Pages 13 - 14
Operating Instructions	Pages 14 - 16
Attaching the Rock Picker to the Tractor	Page 14
Mounting Instructions	Page 14
Transporting the Rock Picker	Page 15
Field Preparation	Page 15
Picking Rocks with the Rock Picker	Page 15
Dumping the Rock Bucket	Page 15 - 16
Detaching the Rock Picker from the Tractor	Page 16
Adjustments	Pages 16 - 21
Rock Wheel Adjustment	Page 17
Adjustment of Rock Plates	Pages 18 - 19
Windrower Depth Adjustment	Pages 19 - 20
Windrower Height Adjustment	Page 20
Caster Wheel Adjustment	Page 21
Storage Instructions	Page 21
Lubrication Instructions	Pages 22 - 25
Service & Maintenance Instructions	Pages 25 - 33
Service and Maintenance Precautions	Pages 25 - 26
Drain Holes	Page 26
Kicker Rotor and Rubber Strips	Page 27
Wheel Bearings	Page 28
Chain Case	Page 29
Rock Paddle	Page 30
Hydraulic System	Page 31
Trouble Shooting Guide	Pages 32 - 33
Optional Equipment	Pages 34 - 39
Safety Chain	Page 34
Single Hydraulic Hookup	Pages 34 - 36
Drag Plate	Page 39

SAFETY INSTRUCTIONS



This symbol is used throughout this manual to call attention to the safety instructions. These instructions are of great importance and must be read carefully and obeyed.

The safety of the operator is of great importance to Vermeer Manufacturing Company. We have provided decals, shields and other safety features for your protection. In addition, we ask you to be a careful operator who will properly use and service your Vermeer equipment.



WARNING: BEFORE ATTEMPTING TO OPERATE YOUR TRACTOR WITH THE 106 ROCK PICKER, CAREFULLY READ AND FOLLOW INSTRUCTIONS GIVEN BELOW AND CONTAINED ELSEWHERE IN THIS MANUAL.

1. Read and follow all instructions contained in:
 - a. this 106 Rock Picker Operator's Manual
 - b. tractor operator's manual
 - c. decals placed on the Rock Picker and Tractor.
 2. Be sure all safety shields and covers are securely in place when machine is running.
 3. Allow only responsible, properly instructed individuals to operate machine. Carefully supervise inexperienced operators.
 4. Make no modifications to this equipment unless specifically requested or recommended by Vermeer Manufacturing Company.
 5. Tighten or replace any loose or cracked bolts, chains, hoses or connections.
 6. Check overhead for electrical power lines or other obstructions and be certain there is adequate clearance before raising hopper.
 7. Never leave the tractor controls unattended while the Rock Picker is operating.
 8. Always make sure the area behind the Rock Picker is clear before raising or lowering the bucket.
 9. Exercise extreme caution when operating the Rock Picker on steep slopes or grades.
 10. Be sure all spectators are clear of the area where Rock Picker is in operation.
 11. Be sure that the tractor operator is the only person riding the tractor. Allow no one to ride the Rock Picker at any time.
 12. **Remember**, loose clothing, necklaces and similar items are more easily caught in moving parts. Avoid the use of these items if possible and keep long hair confined.
 13. Never work around or under the hopper when the hopper is lifted unless the safety stops are installed on both lift cylinders.
 14. Watch out for and avoid any object that might interfere with the proper operation on the machine.
 15. Keep hands, feet and clothing away from power driven parts.
 16. The towing vehicle must be of equal or greater weight than the Rock Picker and any load in hopper to assure adequate braking and steering control.
- ### DURING SERVICE AND MAINTENANCE
1. Before working on or near Rock Picker for any reason, including servicing, inspecting or unclogging machine:
 - a. Disengage power to Rock Picker
 - b. Lower machine to ground level or lock in raised position
 - c. Place transmission in park or set park brake
 - d. Shut off engine and remove key
 - e. Wait for all movement to stop.
 2. When replacing any part on your Rock Picker, be sure to use only Vermeer authorized parts.

SAFETY INSTRUCTIONS

DURING SERVICE AND MAINTENANCE

3. Relieve all pressure in the hydraulic system before disconnecting the lines or performing other work on the system (bucket must be down). Make sure all connections are tight and the hoses and lines are in good condition before applying pressure to the system.
4. Hydraulic fluid escaping under pressure can be invisible and have enough force to penetrate the skin. When searching for a suspected leak, use a piece of wood or cardboard rather than your hands. If injured, seek medical attention immediately to prevent serious infection or reaction.



WARNING: FAILURE TO COMPLY WITH ANY OF THE ABOVE SAFETY INSTRUCTIONS OR THOSE THAT FOLLOW WITHIN THIS MANUAL MAY RESULT IN SEVERE INJURY OR DEATH.

THIS ROCK PICKER IS NOT TO BE USED FOR ANY PURPOSE OTHER THAN THAT FOR WHICH IT IS INTENDED AS EXPLAINED IN THE OPERATOR'S MANUAL, ADVERTISING MATERIALS AND OTHER PERTINENT WRITTEN MATERIAL PREPARED BY VERMEER MANUFACTURING COMPANY.

SAFETY DECALS

Safety decals located on your machine contain important and useful information that will help you operate your equipment safely. Each of these safety decals and all other decals are shown below.

To assure that all decals remain in place and remain in good condition, follow the instructions given below:

1. Keep decals clean. Use soap and water - not mineral spirits, adhesive cleaners, and other similar cleaners that will damage the decal.

WHEN TRANSPORTING ON PUBLIC ROADS

1. Use good judgement and drive carefully, especially over rough and uneven roads.
2. Be sure tractor brakes are properly adjusted and foot pedals locked together.
3. Check your state laws regarding the use of lights, slow moving vehicle sign, safety chain and other possible requirements.
4. Be aware of machine width at all times, do not exceed 20 mph.

2. Replace any damaged or missing decals. When attaching decals, surface temperature of the metal must be at least 40 degrees Fahrenheit. The metal must also be clean and dry.
3. When replacing a machine component to which a decal is attached, be sure to also replace the decal.
4. Replacement decals can be purchased from your Vermeer dealer.

DECAL ASSEMBLY

DANGER

THIS MACHINE WILL CONDUCT ELECTRICITY

MAINTAIN ENOUGH CLEARANCE FROM ELECTRICAL POWER SOURCES TO AVOID ACCIDENTAL CONTACT.

DEATH OR SERIOUS INJURY WILL PROBABLY RESULT IF SUCH CONTACT IS MADE.

D-492

WARNING FOR YOUR PROTECTION AND PROTECTION OF OTHERS, PRACTICE THE FOLLOWING SAFETY RULES

- BEFORE OPERATING THIS MACHINE, READ THE OPERATOR'S MANUALS SUPPLIED WITH THIS MACHINE AND YOUR TRACTOR.
- READ ALL SAFETY DECALS PLACED ON MACHINE FOR YOUR SAFETY AND CONVENIENCE.
- NEVER CARRY RIDERS.
- KEEP ALL SPECTATORS AND OTHER WORKERS AWAY FROM THE MACHINE WHILE IN OPERATION.
- KEEP HANDS AND FEET AWAY FROM POWER DRIVEN PARTS.
- KEEP ALL SHIELDS IN PLACE WHILE MACHINE IS OPERATING.
- BEFORE WORKING ON OR REAR MACHINE FOR ANY REASON, INCLUDING MAINTENANCE, INSPECT, REWIND OR UNLOADING MACHINE.
 - DISengage POWER TO REAR ATTACHMENT.
 - LOWER MACHINE TO GROUND LEVEL OR LOCK IN TRANSPORT POSITION.
 - PLACE TRANSMISSION IN PARK OR SET PARK BRAKE.
 - SHUT OFF ENGINE AND REMOVE KEY.
 - WAIT FOR ALL MOVEMENT TO STOP.

D-638

WARNING

ROTATING DRIVE LINE. KEEP AWAY

SAFETY FEET MUST BE LOCKED IN PLACE

ADJUST TRACTOR BRAKES AND IMPLEMENTS
FOR PROPER DISCHARGING.

KEEP TRACTOR WHEELS STRAIGHT FOR CORRECT
AND SUFFICIENT CLEARANCE IN PLACE.

FREQUENCY OF LUBRICATION

D-644

WARNING

INSTALL SAFETY STOP ON BOTH HOPPER LIFT CYLINDERS BEFORE GOING UNDER RAISED HOPPER FOR ANY REASON INCLUDING SERVICING, LUBRICATING, ADJUSTING, OR UNPLUGGING.

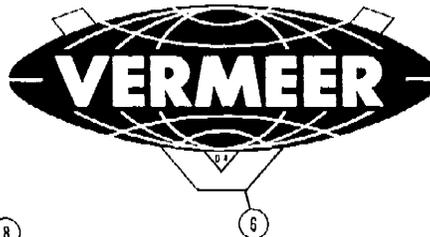
FAILURE TO FOLLOW THESE INSTRUCTIONS MAY RESULT IN SEVERE PERSONAL INJURY OR DEATH.

D-645

CAUTION

INSERT TRANSPORT LOCKS BEFORE MOVING ON ROADS.

D-646



Vermeer

REF. NO.	CUSTOMER ORDER NO.	QTY.
1	2326-814	1
2	2326-816	1
3	2326-813	2
4	2326-822	1
5	2326-818	1
6	2326-004	1
7	2326-595	1
	2326-620	53.5"

INTRODUCTION

Every effort has been made to ensure that the information contained in this manual is correct at the date of publication; but, due to continuous improvements, Vermeer Manufacturing Company reserves the right to make changes in the contents without notice or obligation.

This manual is shipped with each machine to familiarize the operator with the proper operating, maintenance and lubrication instructions to insure the best possible performance and service from the machine. Study and understand these instructions thoroughly before operating the machine. We recommend that this manual be readily available for reference at all times. Consult your Vermeer dealer if any items in this manual are not understood.

IMPORTANT: WHEN REPLACEMENT PARTS ARE NEEDED, USE THE LISTED PARTS NUMBERS AND DESCRIPTIONS TO INSURE FAST AND ACCURATE SHIPMENT OF YOUR ORDER. WHEN ORDERING PARTS ALWAYS SPECIFY UNIT SERIAL NUMBER.

ONLY AUTHORIZED PARTS SHOULD BE USED FOR REPAIR AND/OR REPLACEMENT.

IDENTIFICATION PLATE

The serial number is stamped on an identification plate #1, Figure A, with the machine model number. The model number and serial number are important when service and/or parts are required.

Vermeer Manufacturing Company reserves the right to make changes in engineering, design and specifications, add improvements, or discontinue manufacture at any time without notice or obligation.

ORDERING PARTS

When ordering parts always specify your model number, serial number, and the number of the parts you wish to order.

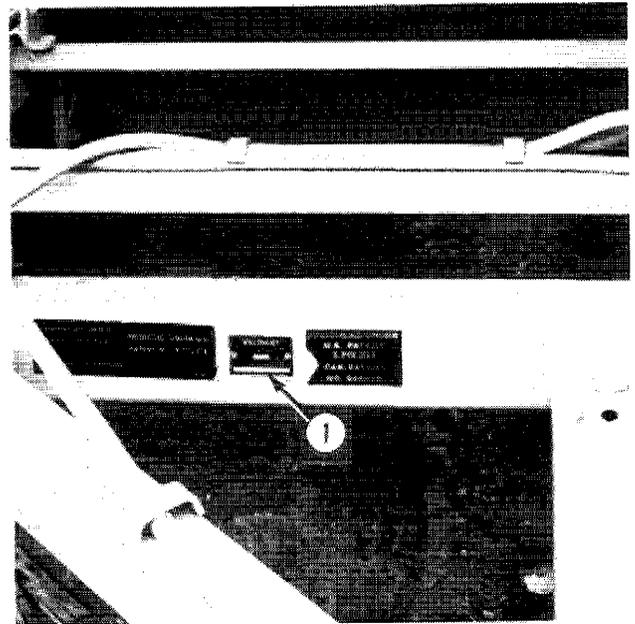


Figure A - Model & Serial Number Plate

INTRODUCTION

ABOUT YOUR 106 ROCK PICKER

The 106 Rock Picker is designed to clean 2 - 15" rocks and other bulky debris. The ten foot windrower "sweeps" rocks and other debris into the ground driven rock wheel. The ribbed rock wheel leaves the soil on the ground; the rocks and other debris are carried up by the rock wheel and loaded into the rock bucket.

ROCK PICKER SPECIFICATIONS

Transport Width: 12' 8"
Transport Length: 12' 6"
Windrower Working Width: 10'
Weight: 3900 lbs.
Bucket Capacity: 1 cubic yd. (approx.
3000 lbs.)

Tire Size - Main: 11L x 16
Caster Wheel: 4.00 x 8
Tire Pressure - Main: 32 PSI
Caster Wheel: 10 PSI
Height: 91" to 176"
Dumping Height: 83"
Rock Wheel Diameter: 6'
Rod Spacing: 1 7/8"
Power (Hydraulic): 2 Hydraulic Motors
Rock Size Capability: 2" - 14"

OPTIONAL EQUIPMENT:

PTO Power Pack - PTO speed 540 or 1000 rpm
Drag Plate
Single Hydraulic Hook-up
Safety Chain

ASSEMBLY INSTRUCTIONS

IMPORTANT: The rock picker was shipped with the rear jackstand lowered. This jackstand must be locked in the lowered position while assembling the rock picker. Refer also to page 26.

1. Attach the rock picker to the tractor drawbar. The tractor must comply with requirements on page 14.

! WARNING: Before attempting to assemble 106 Rock Picker, take the following precautions:

- A. Set park brake
 - B. Shut off tractor
 - C. Remove key.
2. Using a hoist, remove any large, heavy parts from the rock bucket.
 3. Remove all remaining parts from the rock bucket.
 4. Remove the wheel from the hub assembly. The wheel and hub assembly were shipped loose in the rock bucket.

5. Using a hoist or floor jack, raise the left rear corner of the rock picker approximately four inches as shown in Figure B.

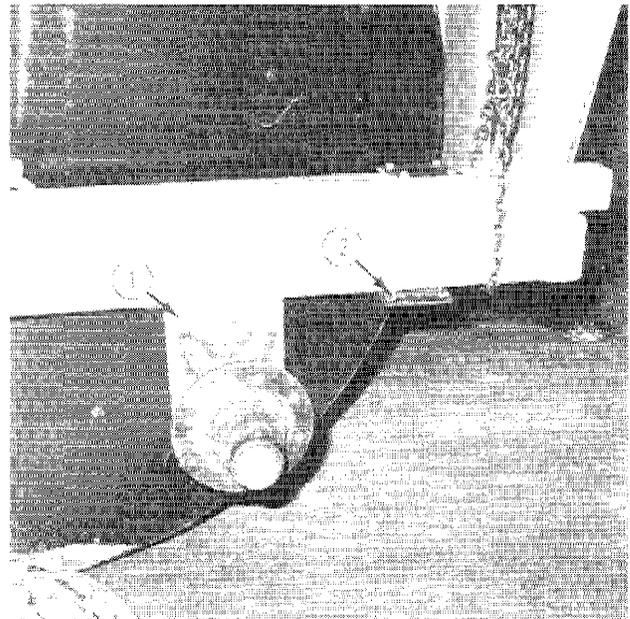


Figure B

ASSEMBLY INSTRUCTIONS

6. Using a 15/16" wrench and socket, mount the hub assembly #1, Figure B, with four 5/8" x 2" bolts. Tighten the bolts securely.
7. Using a 7/8" socket, install the left rear wheel.
8. Using a 9/16" wrench, remove the clamp #2.
9. Remove the hoist or floor jack.
10. Connect the hydraulic hoses from the rock picker to the tractor. Refer also to Figure WW. Connect the 1/4" rope to the tractor.
11. Start the tractor. Pull and hold the rope. Using the appropriate hydraulic control lever, raise the rock bucket completely. Follow normal shut-down procedure (page 13) except do not lower the rock bucket.
12. Install safety stops on both lift cylinders. Refer also to Figure O.
13. Slide the windrower into position under the machine. The end with the bearing installed is oriented toward the rock wheel.
14. Disconnect hose "A", Figure C, at grease zerk. Install elbow "B" into bearing with elbow pointing upward. Slip bearing cap "C" over bearing. Slip elbow nut and compression sleeve on nylon hose as shown.
15. Connect hose to elbow "B". Slide rotor and bearing assembly into carrier bracket "D" and secure with two 1/2" x 2" bolts and lock nuts. Reconnect hose "A" to grease zerk. Install bearing shield "E" using two 3/8" x 1" bolts, four flat washers and two lock nuts.

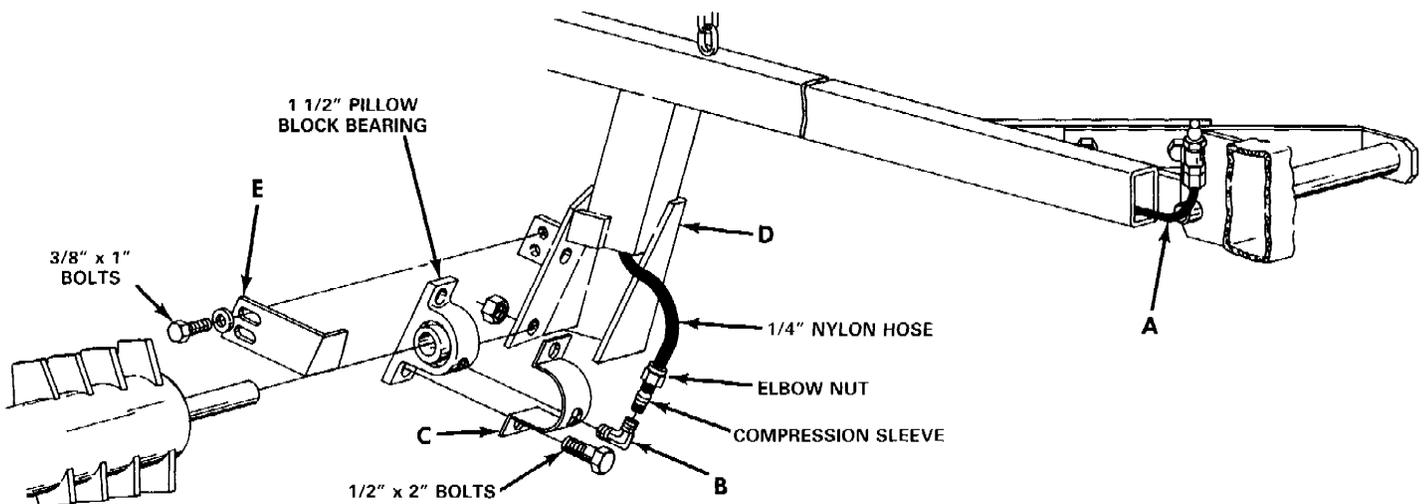


Figure C - Windrower Rotor Inner Bearing Assembly

ASSEMBLY INSTRUCTIONS

16. Install windrower hanger tube "P", Fig. D, on main frame mounts using eight 1/2" x 1 1/2" bolts and lock nuts.
17. Remove cotter pin and 3/4" pin from linkage straps "L". Connect straps to hangar tube using center hole of straps. Note location of flat washers.
18. Install hangar brace tube "I" and shield "J" on windrower hangar "R" using two 1/2" x 1 1/2" bolts, four flat washers and two lock nuts. Do not tighten yet.
19. Install opposite end of hangar brace tube "I" on main frame bracket using three 1/2" x 1 1/2" bolts, lock nuts and one flat washer as shown. Tighten securely.

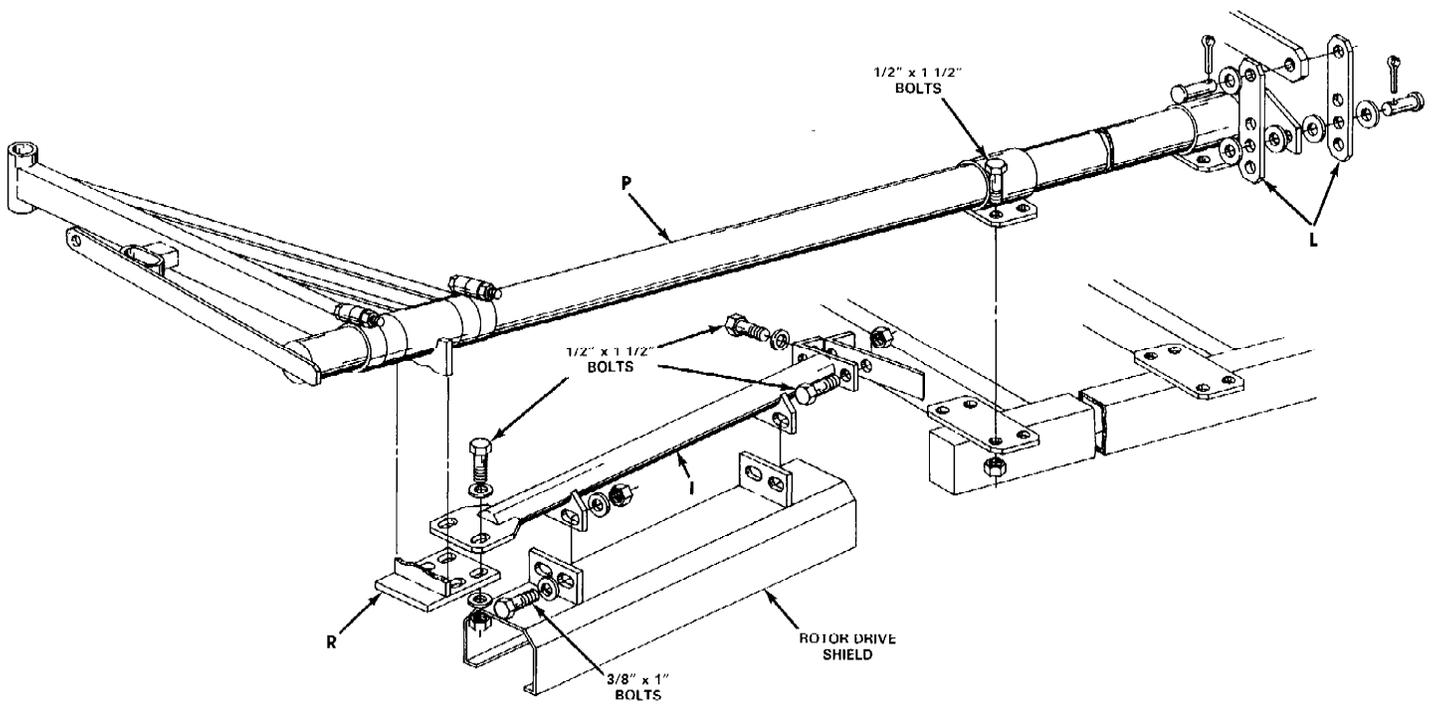


Figure D - Windrower Hanger Tube Assembly

ASSEMBLY INSTRUCTIONS

20. Install caster wheel with 1 1/4" machine washers as shown in Figure E. Secure with several 1 1/4" machine washers and 1/4" x 2" cotter pin. Bend over both halves of cotter pin.

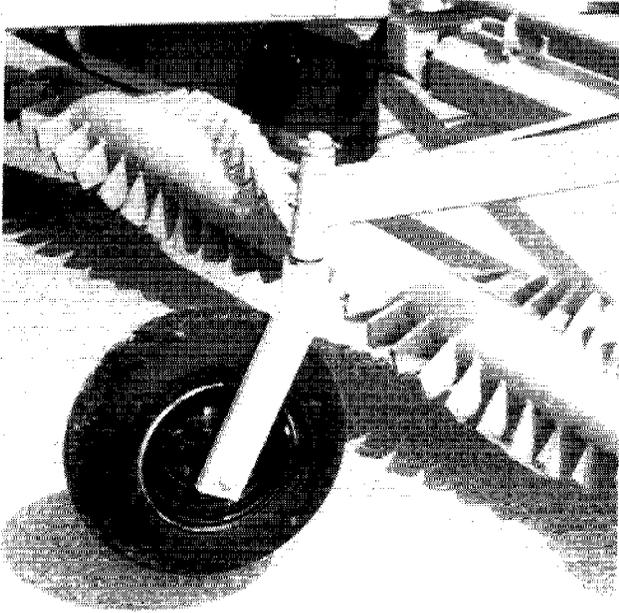


Figure E - Caster Wheel

21. Clean any paint, foreign material and burrs from windrower shaft. Remove chain case cover. Slide 1 1/2" lock collar "M", Figure G, over windrower shaft "N". Slide 1 1/2" bearing (pre-assembled on case) over shaft "N" leaving 3" of shaft extending through case as shown in Fig. G. Secure bearing to shaft with lock collar. Tighten allen screw in lock collar.
22. Install bearing bracket "K", Figure F, on hangar support "R" using four 1/2" x 1 1/2" bolts. Do not tighten yet.
23. For proper sprocket alignment, windrower rotor must be 90° to drive case. Using a square, slide the hangar support "R" in or out on hangar tube "P" until the chain case is properly positioned. Refer also to Figure G. To secure the hangar support in position, slide the two pipe clamps "V" against the caster wheel hanger support. Install two 1/2" x 3" bolts and lock nuts and tighten securely.

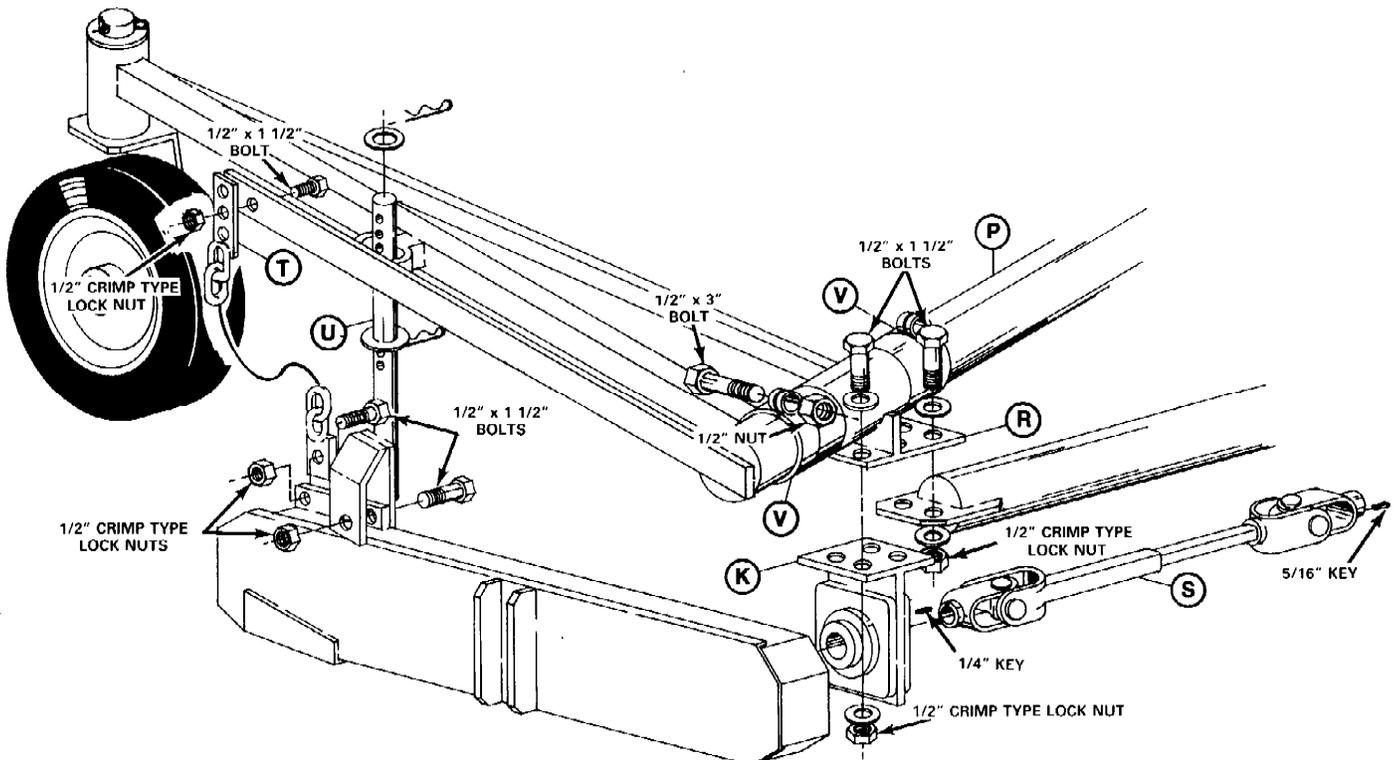


Figure F - Windrower Rotor Drive Assembly

ASSEMBLY INSTRUCTIONS

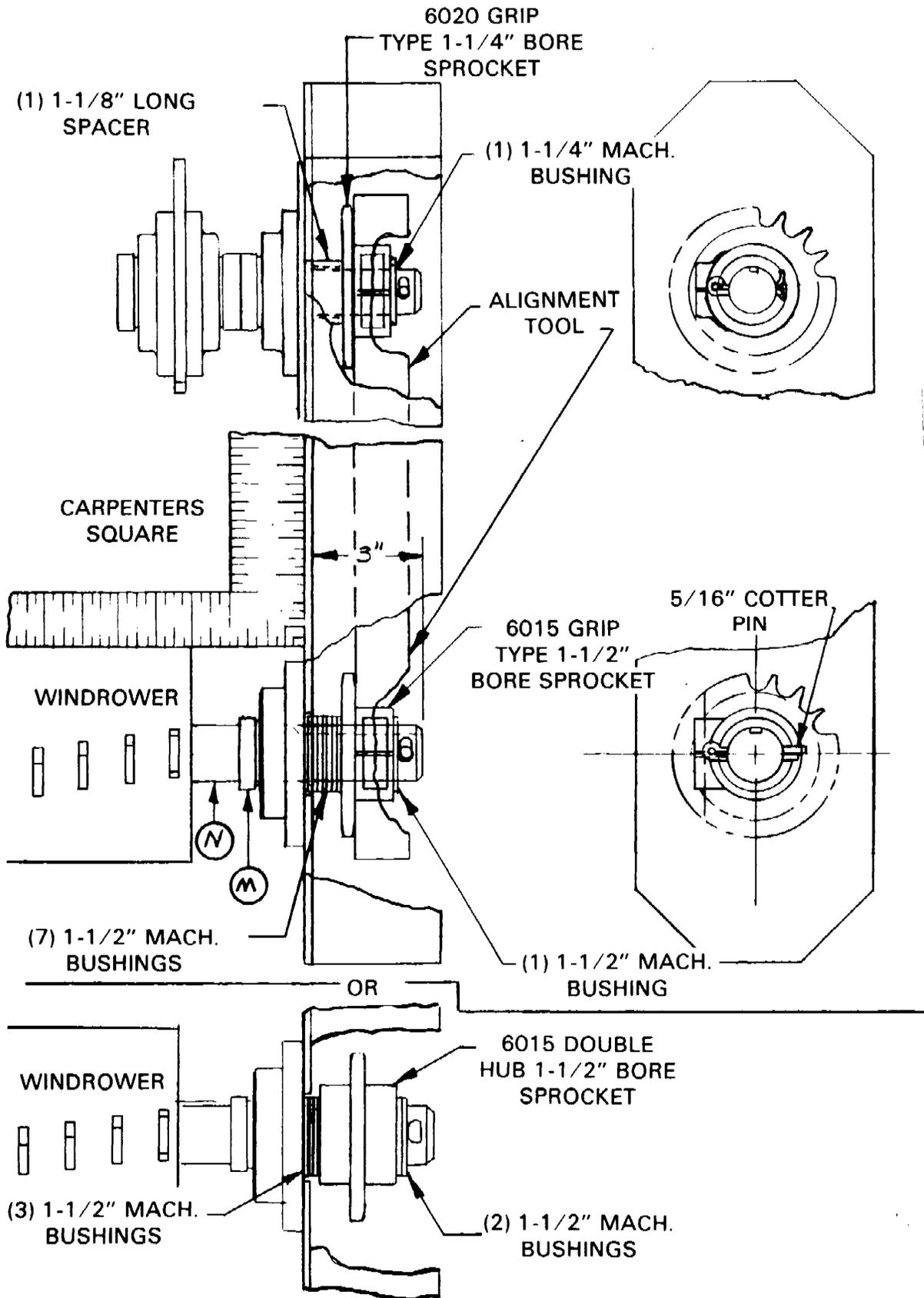


Figure G - Chain Case Assembly

ASSEMBLY INSTRUCTIONS

24. Install 15 tooth sprocket, 3/8" square key, seven 1 1/2" I.D. machine washers and 5/16" cotter pin on windrower shaft "N", Figure G as shown. Tighten the two allen screws in the sprocket hub.
25. Check sprocket alignment by placing aligning tool (found in chain case) along one edge of each sprocket as shown in Figure G. Due to oversize holes in hanger support "R", Figure F and bearing bracket "K", alignment of 20 tooth sprocket can be adjusted by rotating these brackets slightly. Tighten all bolts in hanger and support brackets. Recheck sprocket alignment.
26. Loosen the four nuts #1, Figure H, holding the flange bearing and adjustment plate to chain case. Install the chain. Adjust the chain tension until there is no sag between the sprockets. Tighten bearing and adjustment plate nuts #1.
27. Install the cover on the chain case. Do not overtighten the center bolts because this may bend the cover.
28. Remove the plastic plug in the chain case. Fill the chain case with 90 weight oil until the oil level is approximately 1" below the bottom of the plug hole. Reinstall the plug.
29. Install power shaft "S", Figure F, onto the hydraulic motor using a 5/16" key. Tighten the allen screws securely.
30. Check that the timing of the power shaft #1, Figure I, is correct as shown in Figure I. Install end of power shaft onto gearbox shaft using 1/4" key. Tighten allen screws securely.

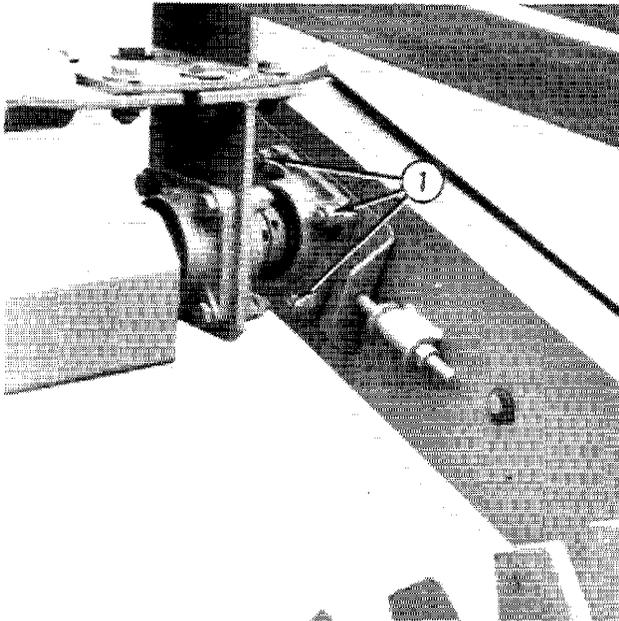


Figure H - Chain Adjustment

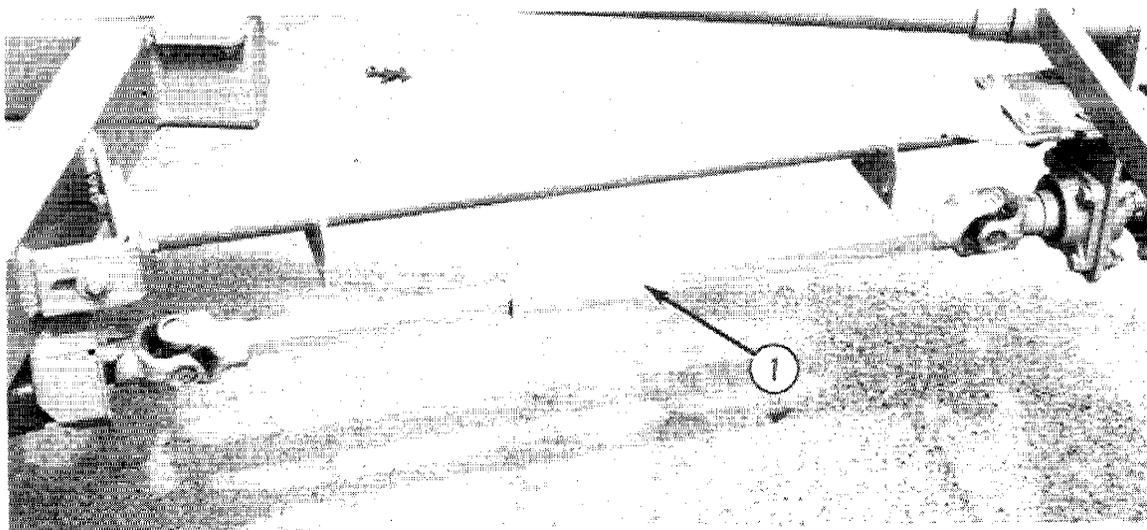


Figure I - U-Joint Timing

ASSEMBLY INSTRUCTIONS

31. Attach chain linkage "T", Figure F, using two 1/2" x 1 1/2" bolts and lock nuts. Leave enough play in bolts so that the bars can still swing freely.
32. Slip a 1" flat washer on adjustment rod "U", Figure F and install in caster wheel frame. Mount adjustment rod on chain case using a 1 1/2" bolt and lock nut as shown in Figure J. Leave enough play so that adjustment rod can rotate freely. Slip a second 1" flat washer onto the adjustment rod. Install two 1/4" hair pins in the holes on the adjustment rod. Correct placement of these hair pins for your conditions is covered in the "Adjustment" section of this manual.
33. Check that all decals are in good condition. Replace any damaged decals.
34. Grease all pivot points until grease emerges from pivot. Grease left bearing on windrower with several shots of grease to fill remote grease line. Grease all remaining bearings with one shot of grease.
35. Remove the safety stops from the rock bucket lift cylinders. Lower the rock bucket.
36. Remove hair pin from rear jackstand. Remount jackstand so that it faces up. Install hair pin. Refer also to Figure LL.

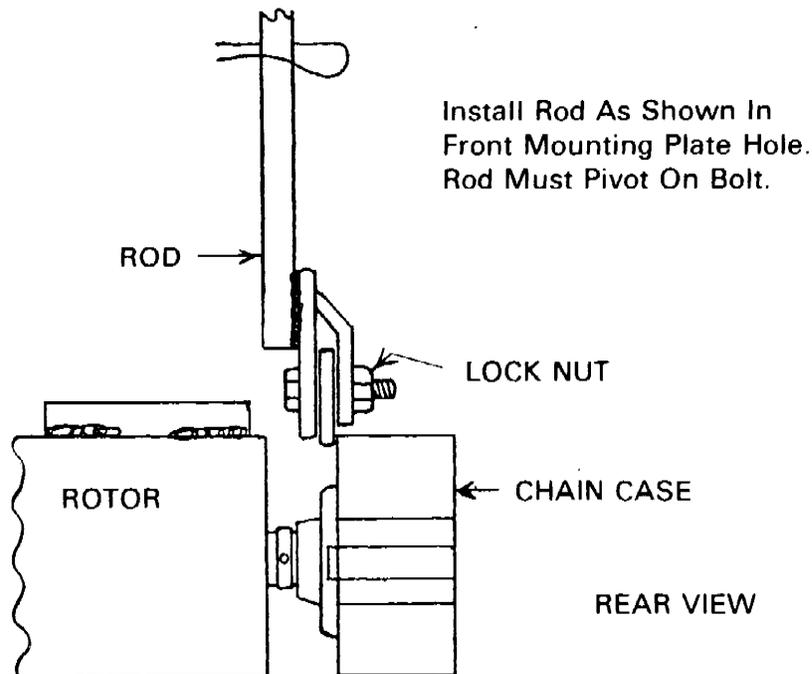


Figure J - Adjustment Rod Installation

CONTROLS ORIENTATION

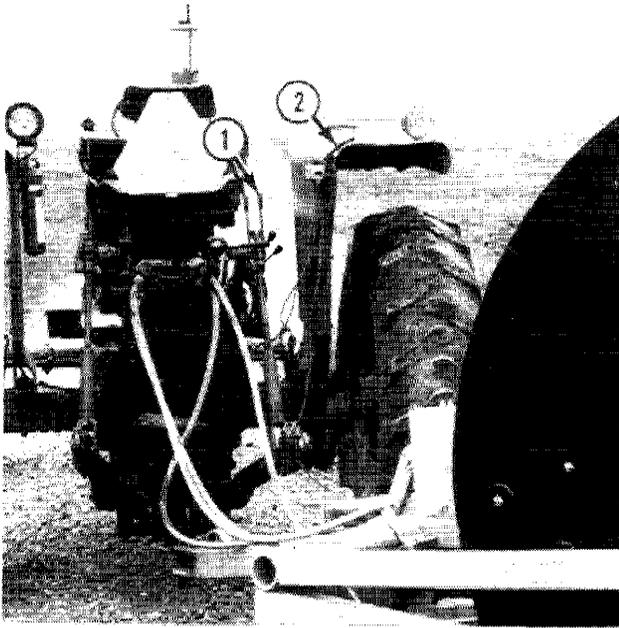


Figure K - Typical Rock Picker Controls

The tractor auxiliary hydraulic control levers #1, Figure K, control all of the cylinders and motors on the rock picker. One control lever controls the rotation of the windrower rotor and kicker rotor. The other lever controls either the rock wheel and windrower lift cylinder or the rock bucket lift cylinders. When the 1/4" rope #2 is pulled and held, the appropriate control lever #1 will raise or lower the rock bucket. When the rope is released, the control lever will raise or lower the rock wheel and windrower.

Refer to the "Options" section for the operation of the rock picker with the single hydraulic hook-up on PTO driven hydraulic power pack.

NORMAL SHUTDOWN PROCEDURE

For your safety and the safety of others, you must use the following normal shutdown procedure before leaving the tractor controls unattended for any reason, including servicing, cleaning, or inspecting the Rock Picker. A variation of the following procedure may be used if so instructed within this manual or your tractor manual or if an extreme emergency requires it.

- a. Disengage power to rock picker
- b. Lower rock bucket completely or lock in raised position
- c. Lower windrower attachment to ground or lock in transport position.
- d. Set park brake or place transmission in park.
- e. Shut off engine and remove key.

PRESTARTING INSPECTION INSTRUCTIONS

To insure long life and economical operation, we highly recommend the operator of the Rock Picker be thoroughly instructed in the maintenance and operation of the machine. There is no substitute for a sound preventative maintenance program and a well trained operator. Prior to starting the engine of the tractor, we recommend the operator make a visual inspection of the unit. This can be done as the lubrication is being carried out. Any items that are worn, broken, missing or needing adjustment must be serviced accordingly before operating the rock picker.

WARNING: Before inspecting the machine, use the normal shutdown procedure on this page.

Check the following:

1. Hydraulic components for leaks or damage.



WARNING: Hydraulic fluid escaping under pressure can be almost invisible and can have sufficient force to penetrate the skin. When searching for suspected leaks, use a piece of wood or cardboard rather than your hands. If injured, seek medical attention immediately to prevent serious infection or reaction.

2. Lug nuts for tightness.

PRE-STARTING INSPECTION INSTRUCTIONS

3. Condition of tire rims.
4. Tires for proper air pressure.
5. Chain case for leaks.
6. Condition of windrower and kicker rotors.
7. Condition and clearance of rock plates.
8. Condition of rock paddles and springs.
9. Installation and condition of shields.
10. Installation of slow moving vehicle (SMV) sign if required.
11. Condition of decals.
12. Condition and installation of lift cylinder safety stops.

OPERATING INSTRUCTIONS

ATTACHING THE ROCK PICKER TO THE TRACTOR

Tractor Specifications

WARNING: Do not operate the rock picker unless the tractor complies with the following requirements:

1. Horsepower - 40 h.p. minimum
2. Rollover protective structure and seat belts.
3. Hydraulic system - 12 gallons per minute minimum, 1500 psi minimum, two-way valves.
4. Drawbar Height - 15" - 17" from the top of the drawbar to the ground.
5. The tractor must be of equal or greater weight than the Rock Picker and any load in the hopper to assure adequate braking and steering control.

MOUNTING INSTRUCTIONS

1. Install the correct couplers on the hydraulic hoses. Attach the hydraulic hoses to the tractor. Be sure the hoses are paired correctly.
2. Attach the rope to the tractor. Provide sufficient slack to allow turns to be made.
3. When hitching the Rock Picker to the tractor, always use the bolt with nut and hairpin cotter which is included with the machine. Always install bolt with nut and hairpin cotter on the bottom as shown in Figure L.

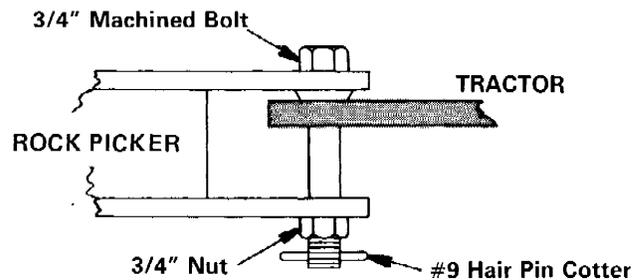


Figure L - Hitch Pin

4. Retract the jack #1, Figure M. Remove the attachment pin #2. Install the jack in the storage position as shown and install the attachment pin.

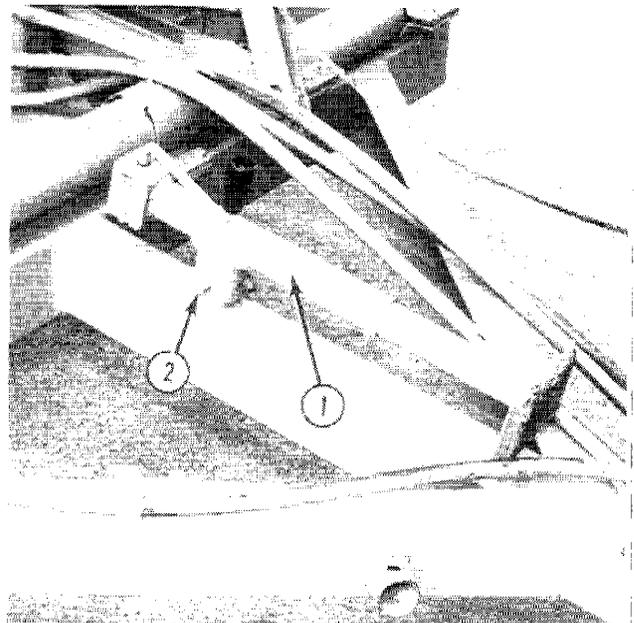


Figure M - Jack

OPERATING INSTRUCTIONS

TRANSPORTING THE ROCK PICKER

Raise the rock wheel and windrower using the appropriate tractor auxiliary hydraulic control lever. Secure the rock wheel and windrower in transport position by installing the transport pins #1, Figure N.

The height of the windrower and caster wheel are adjustable. Refer to the "Adjustments" section.

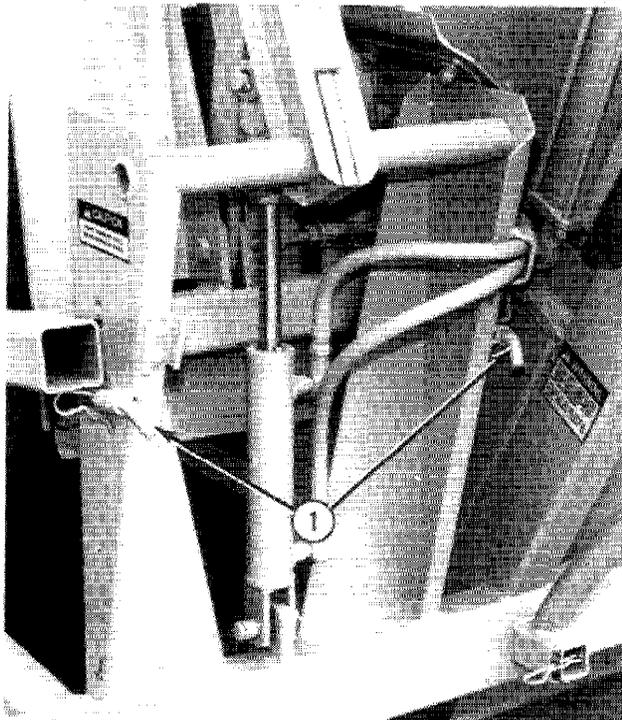


Figure N - Transport Pins

FIELD PREPARATION

The soil should be dry, loose and free of trash. This machine was not designed to dig rocks; therefore, the terrain should be as level as possible. Terrain with ridges does not allow the windrower to gather small stones.

PICKING ROCKS WITH THE ROCK PICKER

To place the Rock Picker in operating position, first remove the transport pins #1, Figure N. Lower the windrower and rock wheel into operating position. Retract the windrower and rock wheel cylinder completely to allow the rock wheel to float over the terrain.

The depth of the windrower is adjustable. Refer to the "Adjustments" section.

Activate windrower and kicker rotors. The rotors are rotating in the correct direction when the windrower rotor rotates clockwise when viewed from the rock wheel end.

Maximum ground speed varies with the soil type and rock density. Excessive ground speed can also cause rock bucket to fill toward front. An inexperienced operator should use slower speeds until developing a feel for the capability of the machine.

After you have picked rocks for approximately 30 minutes, or gathered rocks off three acres, stop and inspect the following points:

! WARNING: Use normal shutdown procedure on Page 13 before inspecting the machine.

1. Check for any oil leaks.
2. Check windrower and kicker rotors for uneven wear.
3. Check that all bolts and screws are tight.
4. Check windrower for being level and for the proper depth.
5. Check all shields and guards for unusual wear.

If a rock lodges between the rock wheel and the rock plate, put the tractor in reverse and back the machine up a few feet. This should dislodge the rock.

Rock plate clearance is adjustable. Refer to the "Adjustments" section.

Transport the rock picker to the rock pile when the rock bucket is full. Overfilling the rock bucket can cause rocks to lodge in the kicker rotor. To reduce wear, shut off the windrower and kicker rotors when transporting.

DUMPING THE ROCK BUCKET

Be sure any spectators are clear of the area before raising rock bucket. Check for overhead obstructions such as tree limbs or overhead wires.

OPERATING INSTRUCTIONS

DUMPING THE ROCK BUCKET (CONT.)

⚠ DANGER: Machine will conduct electricity if contact is made with wires.

Pull and hold the 1/4" rope, using the appropriate control lever, raise the rock bucket. After the bucket is empty, lower the rock bucket, release the 1/4" rope.

DETACHING THE ROCK PICKER FROM THE TRACTOR

Pull and hold the 1/4" rope. Using the appropriate control lever, lower the rock bucket fully. Release the rope. Using the same control lever, raise the windrower and rock wheel. Shut off the tractor and set the park brake or place the transmission in park. Install the transport pins #1, Figure N. Relieve all hydraulic pressure by cycling the hydraulic controls. Detach the hydraulic hoses and 1/4" rope from the tractor. Install the jack. Remove the hitch pin.

ADJUSTMENTS

There are several adjustments on the Rock Picker. The rock wheel and rock plate adjustments should not normally need to be reset once they are properly set; they are independent of field conditions. The caster wheel and two windrower adjustments may change depending on field conditions.

If, for any reason during the adjustment or operation of the Rock Picker, you need to work around the Rock Picker with the rock bucket raised, lock the rock bucket by installing the bucket hold-up safety clamps #1, Figure O on each cylinder. These bucket hold-up safety clamps block each cylinder. Therefore, they prevent the rock bucket from dropping unexpectedly.

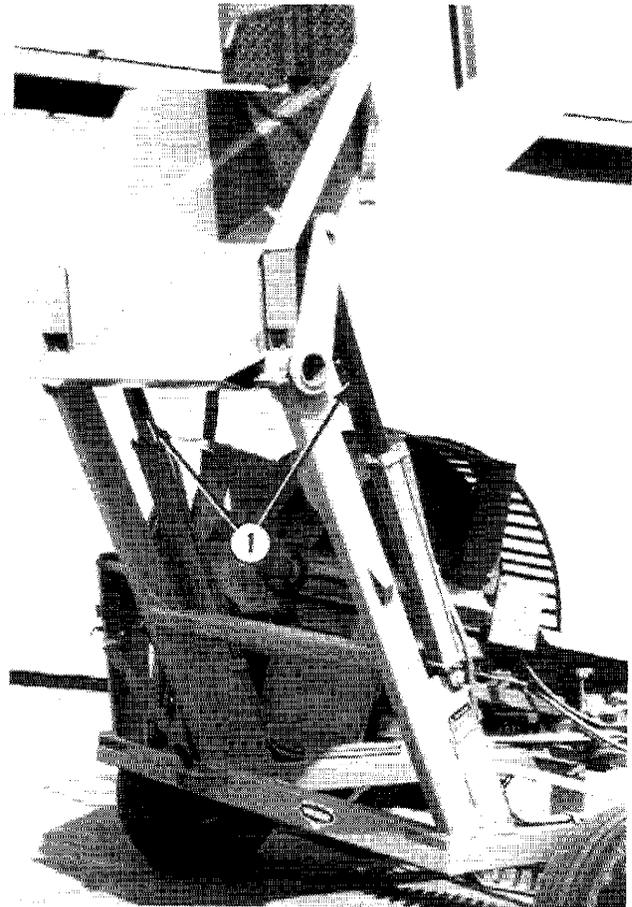


Figure O - Bucket Hold-up Safety Clamps

Before lowering the rock bucket, clear the area around the Rock Picker and remove the bucket hold-up safety clamps.

ADJUSTMENTS

ROCK WHEEL ADJUSTMENT

This adjustment is performed to position the rock wheel parallel to the main frame.

To adjust the rock wheel:

1. Raise the rock bucket and install the bucket hold-up safety clamps # 1, Figure O.
2. Follow normal shut-down procedure except do not lower the rock bucket.
3. Remove rubber strip and plate # 1, Figure P.
4. Loosen bearing mounting bolts # 1, Figure Q on each side of rock wheel.
5. Use adjustment bolts # 2 to adjust position of rock wheel until it is parallel with the frame.
6. Tighten bearing mounting bolts.
7. Install rubber strip and plate.

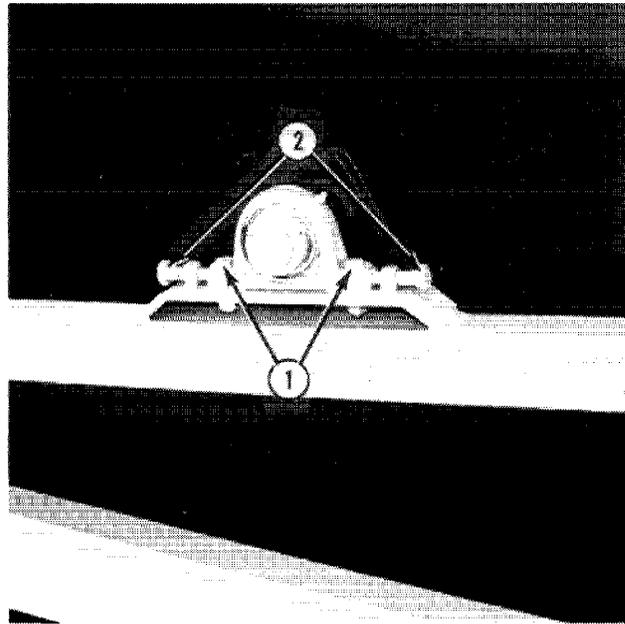


Figure Q - Rock Wheel Adjustment

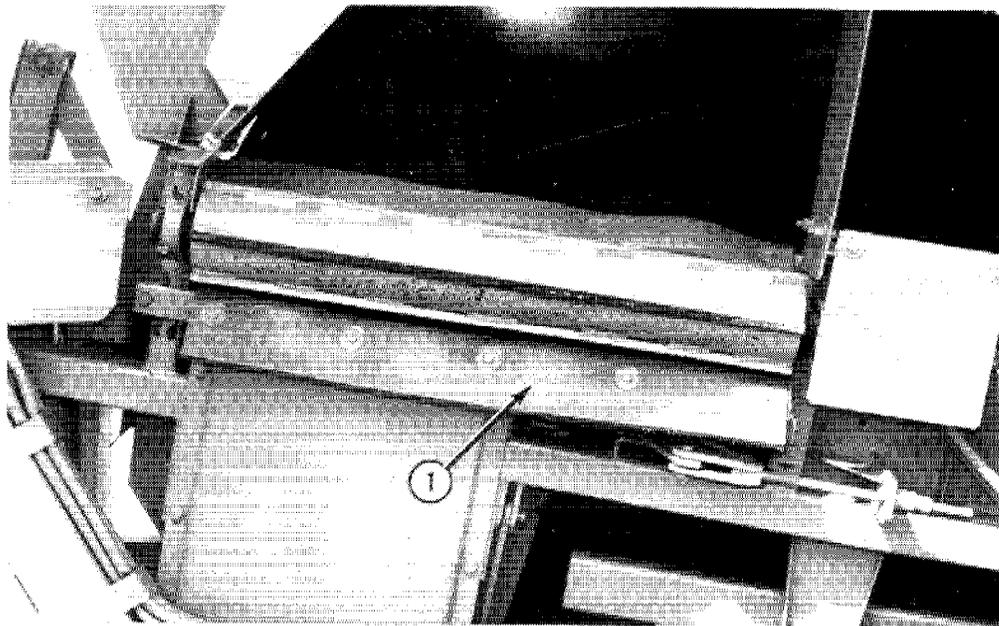


Figure P - Rock Wheel Bearing Access

ADJUSTMENTS

ADJUSTMENT OF ROCK PLATES

The rock plates #1 and #2, Figure R are adjusted to provide a minimum gap of 1/4" between the rock wheel and rock plates.

To set the adjustment of the rock plates:

1. Rock plate #1, Figure R, should be adjusted first. Using the adjusting bolt #1, Figure S, adjust the rock plate so that there is a 1/4" gap at the closest point between the rock plate and rock wheel. Rotate the wheel at least once to check this.

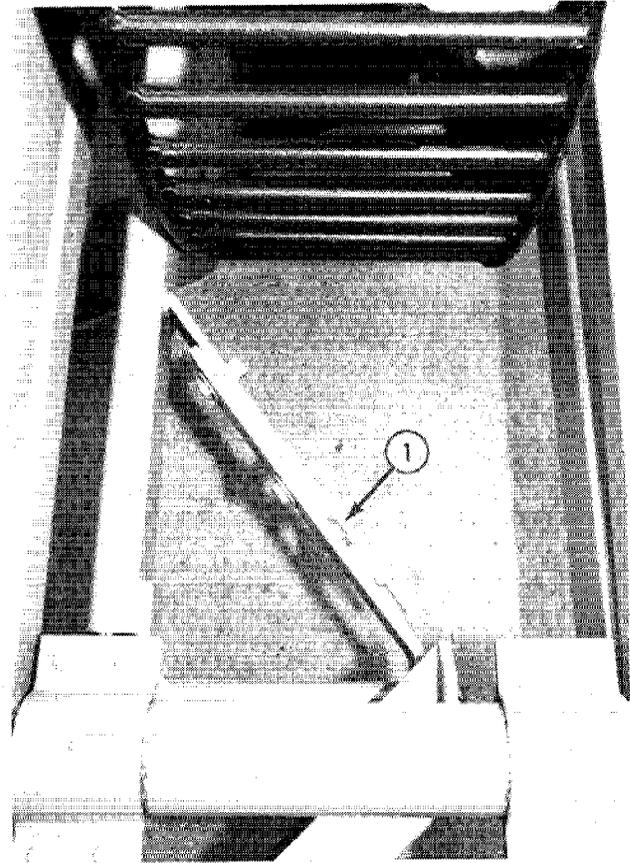


Figure S - Adjustment Bolt

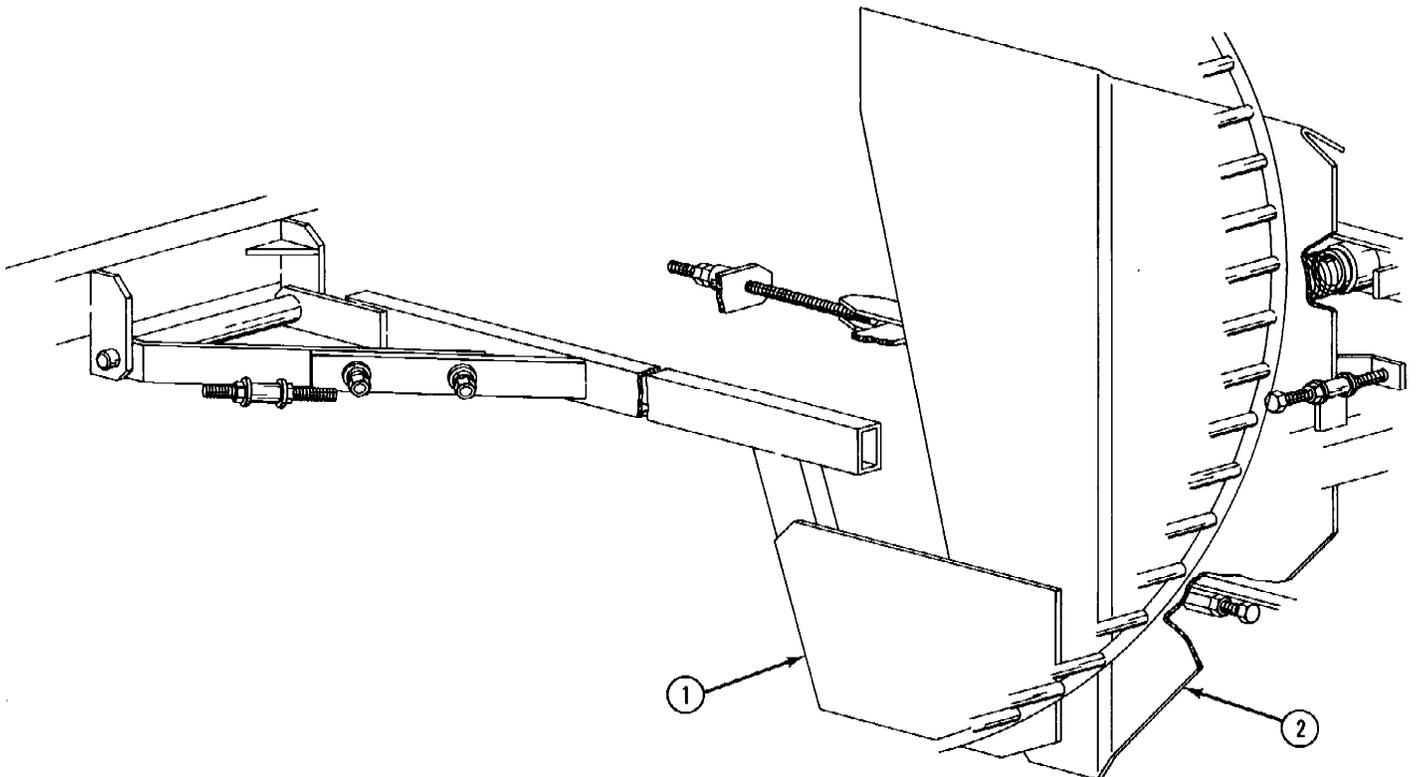


Figure R - Rock Plates

ADJUSTMENTS

ADJUSTMENT OF ROCK PLATES (CONT.)

To set the adjustment of the rock plates:

- Using the adjusting bolt #1, Figure T, adjust the rock plate #2, Figure R, so that there is a 1/4" gap at the closest point between the rear of the rock plate and rock wheel. Rotate the wheel at least once to check this adjustment.

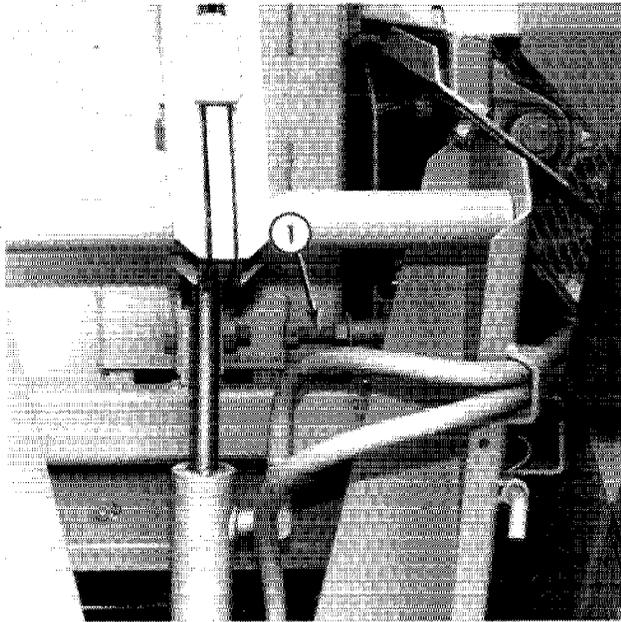


Figure T - Adjusting Bolt



Figure U - Adjusting Bolt

- Using the adjusting bolt #1, Figure U, adjust the rock plate #2, Figure R, so that there is a 1/4" gap at the closest point between the octagon hub and rock wheel. Rotate the wheel at least once to check this adjustment.
- Using the adjusting bolt #1, Figure V, adjust the lower portion of the rock plate #2, Figure R, to remove the pressure against rock plate #1, Figure R.

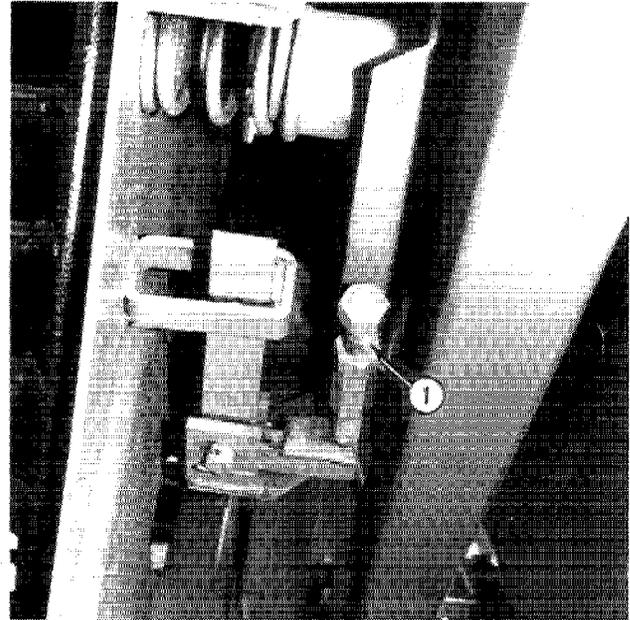


Figure V - Adjusting Bolt

WINDROWER DEPTH ADJUSTMENT

The windrower rotor must run level at all times. In most cases, the windrower rotor should be allowed to skim approximately two inches of loose top soil. If there is hard packed soil, this distance should be decreased.

To adjust the windrower depth:

- The inner end of the windrower (nearest the rock wheel) is adjusted in 1" increments using the lift chain #1, Figure W. Using a higher hole in the mounting strap will lower the windrower; using a lower hole will raise the windrower.

ADJUSTMENTS

WINDROWER DEPTH ADJUSTMENT (CONT.)

To adjust the windrower depth (Cont.)

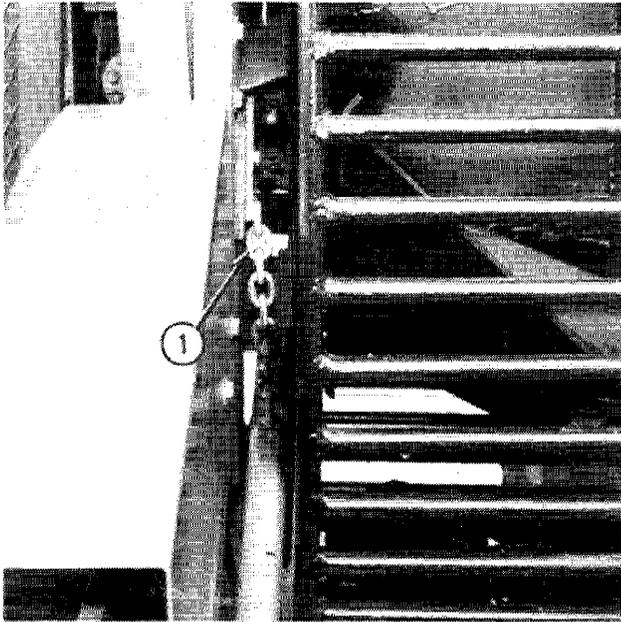


Figure W - Windrower Depth Adjustment

2. After the inner end of the windrower is adjusted, the outer end must be adjusted to level the windrower. Moving the hairpin #1, Figure X, to a higher hole will lower the windrower. Moving the hairpin to a lower hole will raise the windrower.

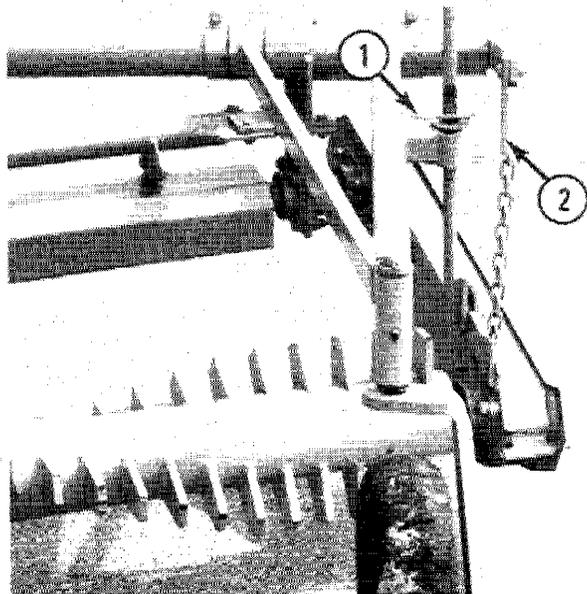


Figure X - Windrower Adjustment

WINDROWER HEIGHT ADJUSTMENT

This adjustment sets the height of the windrower when it is raised for transporting.

To adjust the windrower height:

1. Be sure that windrower is lowered to the ground.
2. Detach pin #1, Figure Y.
3. Install pin #1 in upper hole to decrease windrower height. Install pin in lower hole to increase windrower height.

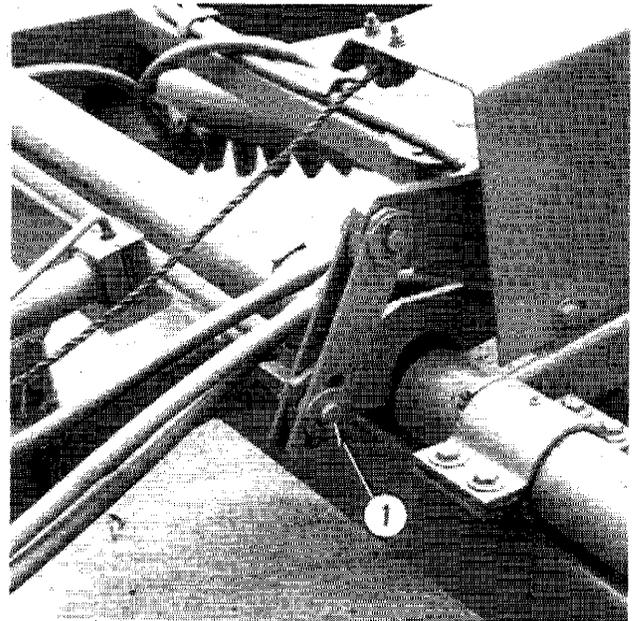


Figure Y - Windrower Height Adjustment

4. Raise the windrower. Follow normal shut-down procedure except do not lower the windrower.
5. Check that the windrower is level. If not, follow Step 7.
6. Lower the windrower to the ground.
7. A chain adjustment is provided on the outer end of the windrower to level the windrower. Moving bracket #2, Figure X, up will raise the windrower. Moving the bracket down will lower the windrower.

ADJUSTMENT

CASTER WHEEL ADJUSTMENT

The caster wheel is raised and lowered along with the windrower. The height of the caster wheel when the windrower is raised is adjusted by hairpin #1, Figure Z. Moving the hairpin to a higher hole raises the transport height of the caster wheel. Moving the hairpin to a lower hole lowers the transport height of the caster wheel.

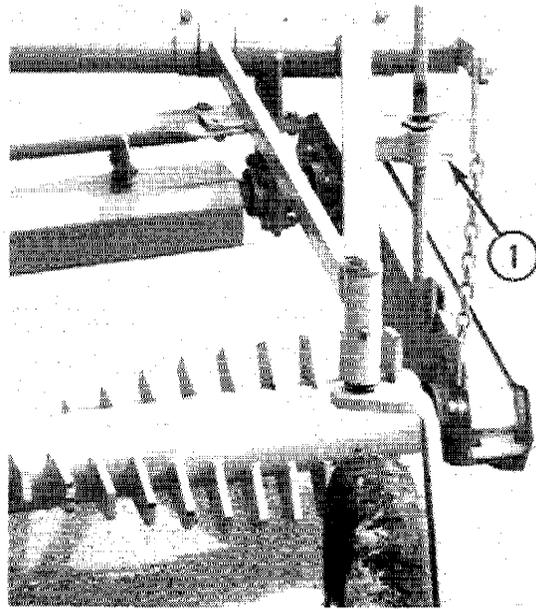


Figure Z - Caster Wheel Adjustment

STORAGE INSTRUCTIONS

PREPARING FOR STORAGE



WARNING: When preparing machine for storage, use normal shut-down procedure (page 13).

Clean all mud, dirt, grease and other foreign material from the exterior of the machine. Wash the complete machine. Repair places where bare metal is exposed - this will inhibit rusting.

Coat all chains and exposed hydraulic cylinder rods with a Valvoline Tectyl 506 oil or equivalent. Lubricate machine thoroughly according to the lubrication instructions.

If possible, store the machine in a dry, protected place. If it is necessary to store the machine outside, cover it with plastic, waterproof canvas, or other suitable protective material.

Check the machine for any worn or broken parts. By ordering parts now, you will avoid delays when it is time to remove the machine from storage. When ordering parts always specify machine serial number and the part number of the replacement part. Part numbers can be found in the Parts List Manual.

REMOVING FROM STORAGE

Remove all protective coverings.

Remove all excess oil from chains and cylinder rods. Lubricate machine in accordance with lubrication instructions found in this manual.

Check all hydraulic hoses for deterioration and, if necessary, replace. Tighten any loose bolts, nuts and hydraulic fittings.

Follow pre-starting inspection.

LUBRICATION INSTRUCTIONS

All 106 Rock Pickers are completely serviced at the factory before shipping. However, the operator should make a check of all grease fittings on the unit before beginning to operate it so as to become familiar with their location and the correct service schedule.

! WARNING: Use normal shut-down procedure (page 13) before lubricating machine.

Use only a high quality, multi-purpose grease when lubricating the unit. Make sure all fittings and the nozzle of the grease applicator are clean before applying the grease. If any grease fittings are missing, replace them immediately.

Lubricating of all pillow block and flange-type self-aligning ball or roller bearings should be done slowly to help prevent bearing seal damage. Use caution when using a high pressure, high volume gun.

SYMBOLS

 Lubricate with a SAE multi-purpose type grease at the hourly interval indicated by the bottom number. The top number indicates the number of shots of grease per greasing interval.

 Oil with a SAE 30 Engine Oil at the hourly rate indicated on the symbol.

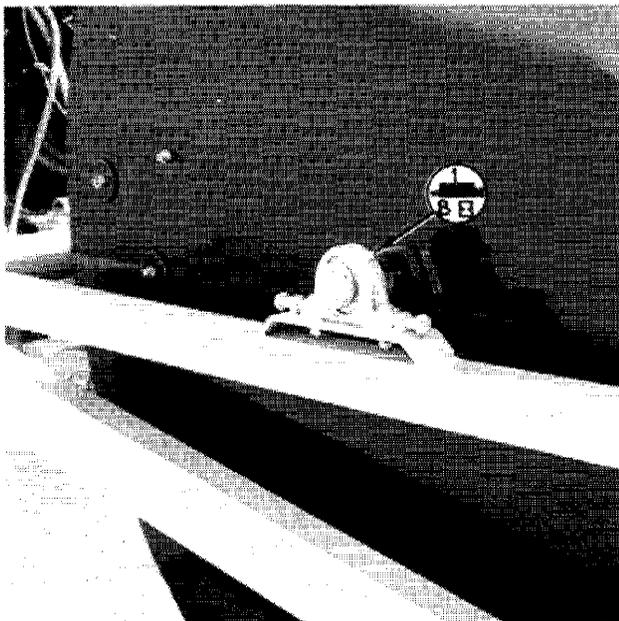


Figure AA - Outer Rock Wheel Bearing

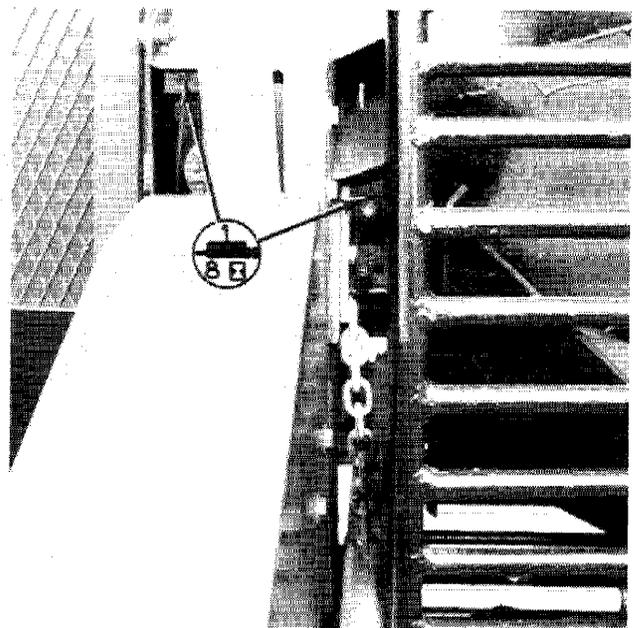


Figure BB - Inner Rock Wheel Bearing and Front Kicker Rotor Bearing

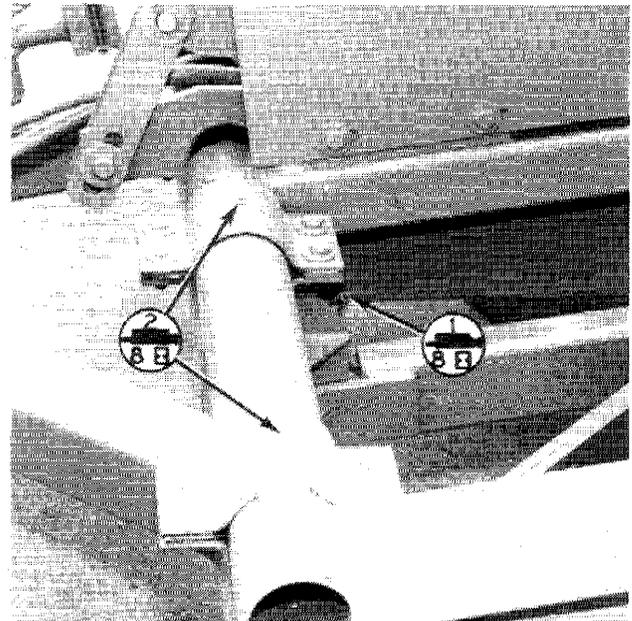


Figure CC - Inner Windrower Bearing and Rock Wheel Pivot

LUBRICATION INSTRUCTIONS

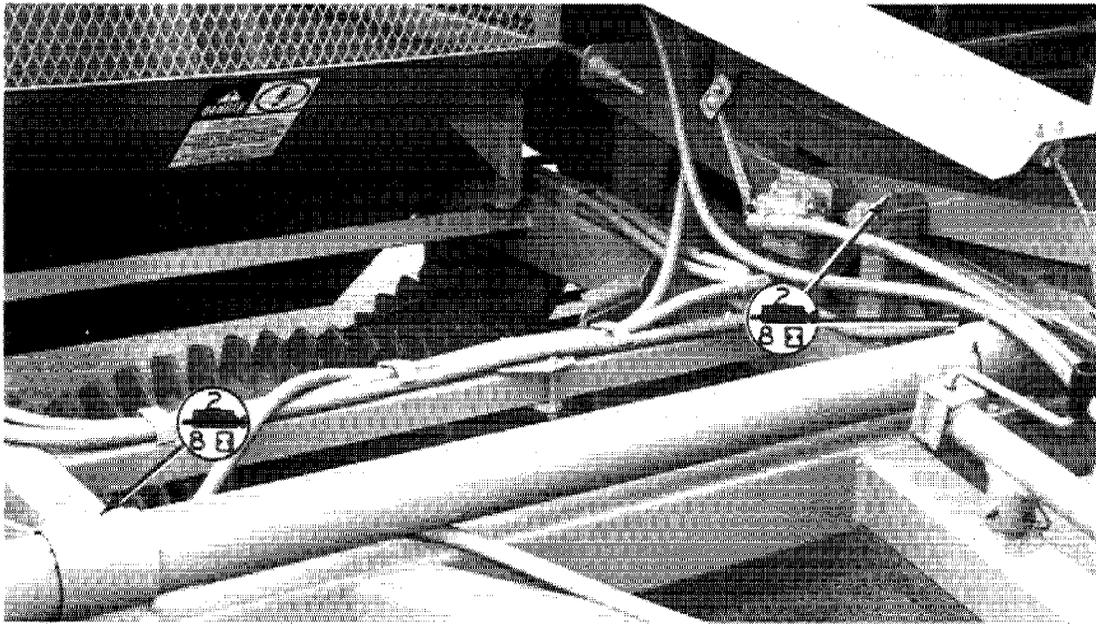


Figure DD - Windrower Lift Pivot

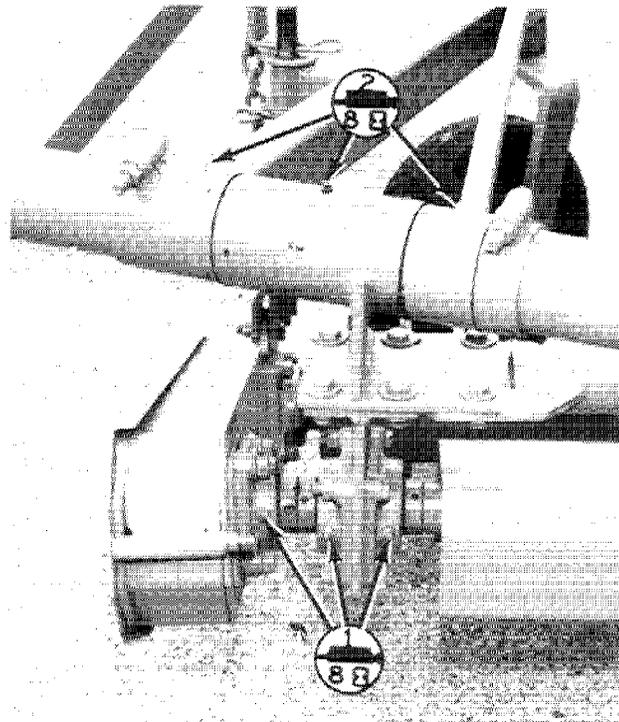


Figure EE - Windrower Lift Pivot
and Chain Case Drive Bearings

LUBRICATION INSTRUCTIONS

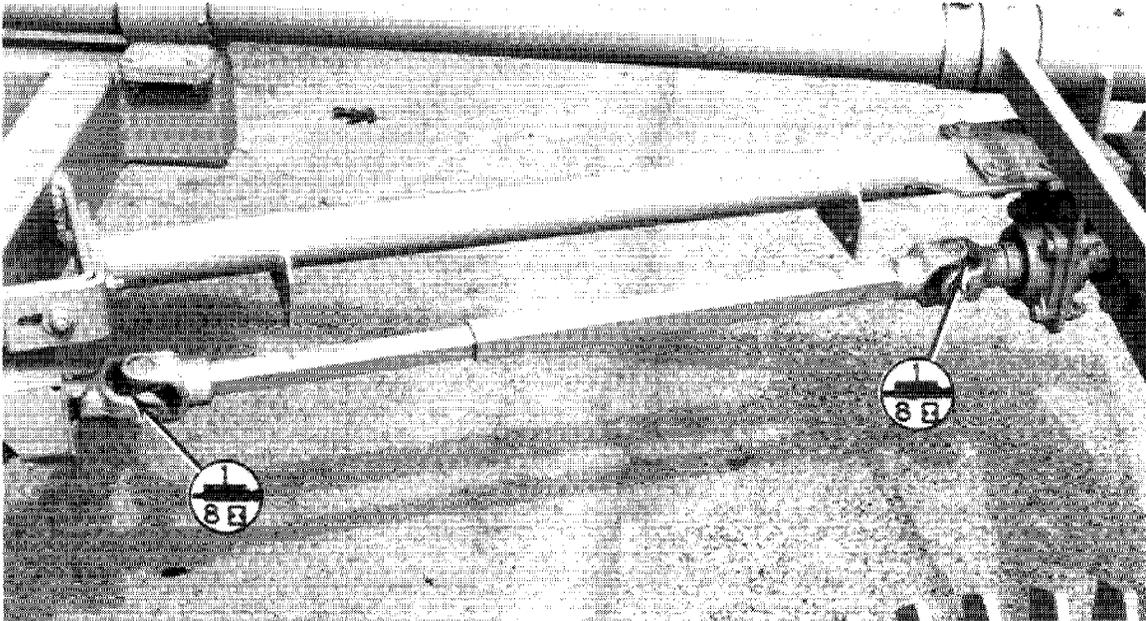


Figure FF - Drive Shaft
Protective shield removed for clarity.

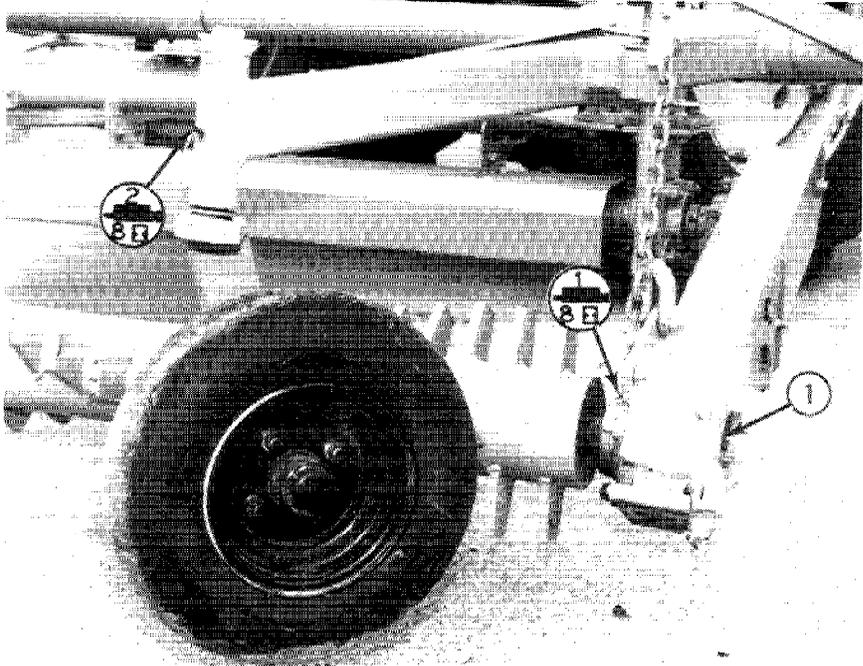


Figure GG - Windrower Drive Bearing,
Caster Wheel and Chain Case

- 1. Check and fill plug. Keep chain case filled approximately 1" below the bottom of the plug hole. Use 90 weight oil.

LUBRICATION INSTRUCTIONS

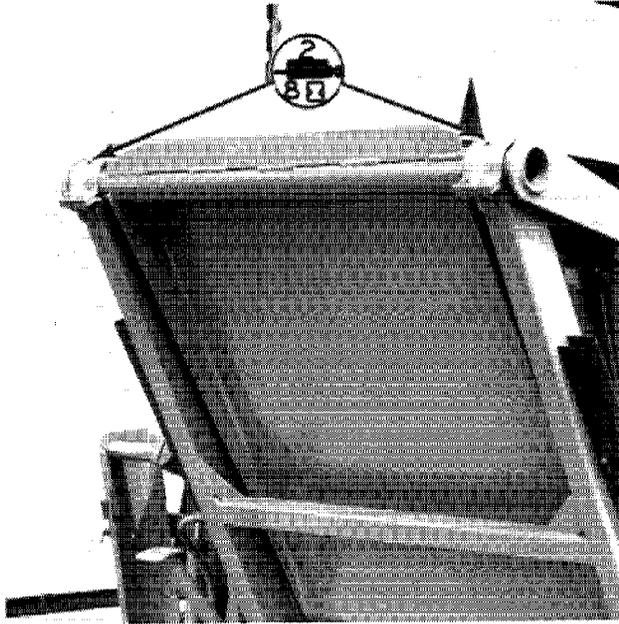


Figure HH - Rock Bucket Pivots



Figure II - Rear Kicker Rotor Bearing

SERVICE & MAINTENANCE INSTRUCTIONS



WARNING: Before servicing machine, use normal shut-down procedure (page 13) unless instructed differently in this section and as noted in "Service and Maintenance Precautions".

The purpose of these instructions is to acquaint the operator, service personnel, etc. with the necessary requirements for the proper service and maintenance of this unit.

Daily preventative maintenance is very important for this type of equipment in order to obtain the best performance with the least amount of downtime as well as for longer machine life.

A thorough working knowledge of the machine is the first requirement toward a good maintenance and service program.

SERVICE AND MAINTENANCE
PRECAUTIONS

If, for any reason during the service and maintenance of the Rock Picker, you need to work around the Rock Picker with the rock bucket raised, lock the rock bucket by installing the bucket hold-up safety clamps #1, Figure JJ, on each cylinder. These bucket hold-up safety clamps block each cylinder. Therefore, they prevent the rock bucket from dropping unexpectedly.

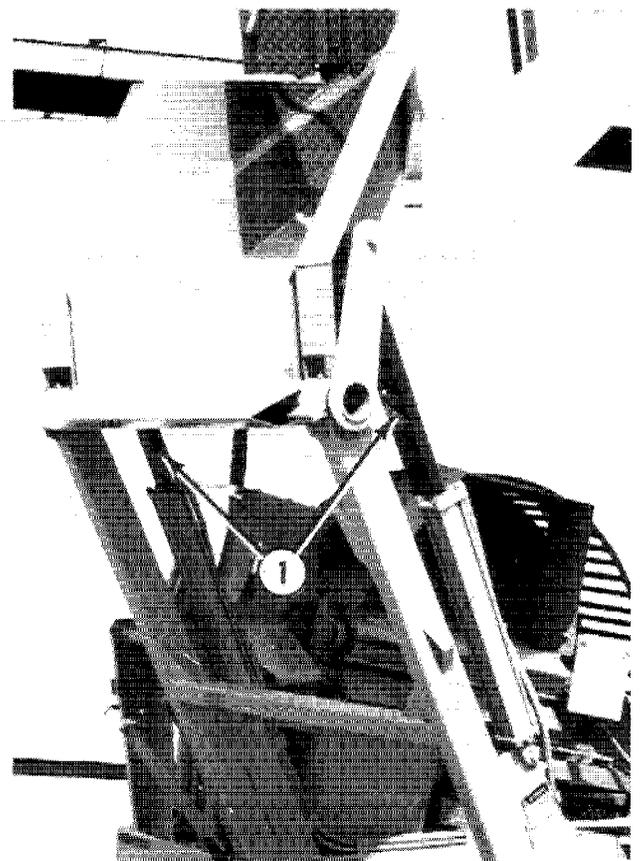


Figure JJ

SERVICE & MAINTENANCE INSTRUCTIONS

**SERVICE AND MAINTENANCE
PRECAUTIONS**

A rear jackstand is provided on the rock picker. This jackstand should be used if the windrower is ever detached. Lower the jackstand as shown in Figure KK before detaching the windrower. We recommend storing the jackshaft on the rock picker as shown in Figure LL.

DRAIN HOLES

Your Vermeer Rock Picker has two drain holes in the rock bucket, as shown in Figure MM. The drain holes must be kept open to prevent any water buildup. Failure to keep the drain holes open will result in a damaged bucket.

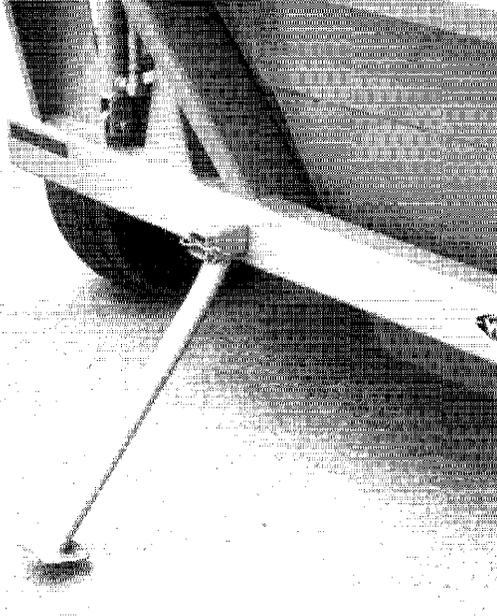


Figure KK - Rear Jackstand

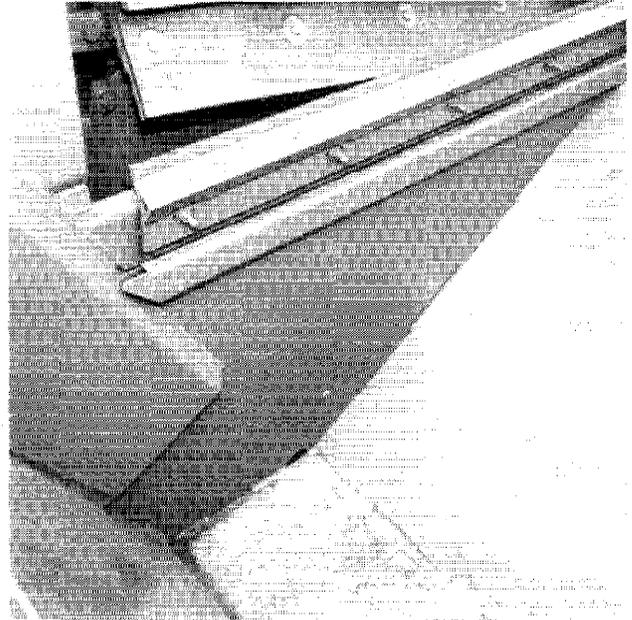


Figure MM - Rock Bucket Drain Holes

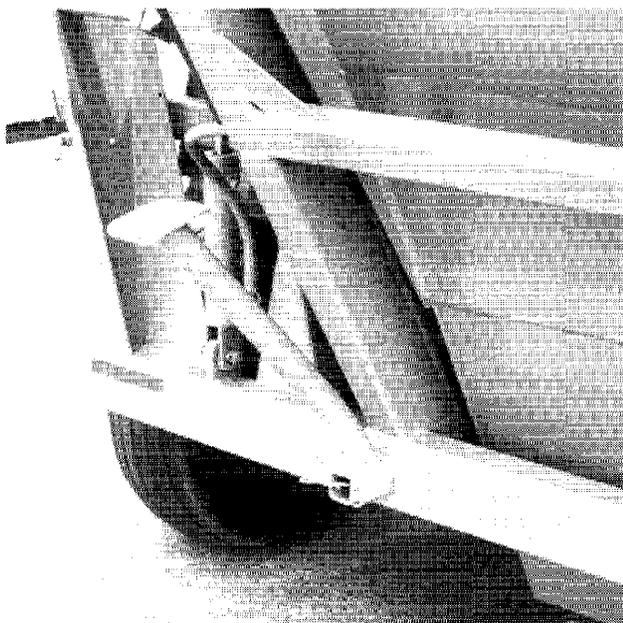


Figure LL - Rear Jackstand Stored

SERVICE & MAINTENANCE INSTRUCTIONS

KICKER ROTOR AND RUBBER STRIPS

When rotors operate properly, the rock box will fill nearly level from side to side. If the box fills only on one side nearest the kicker rotor, the rotor speed may be too low. Check the rotor rpm with a tachometer at the rear of the kicker rotor, #1, Figure NN. Rotor should turn a minimum of 500 rpm. Any slower will allow rocks to wedge in the kicker rotor.

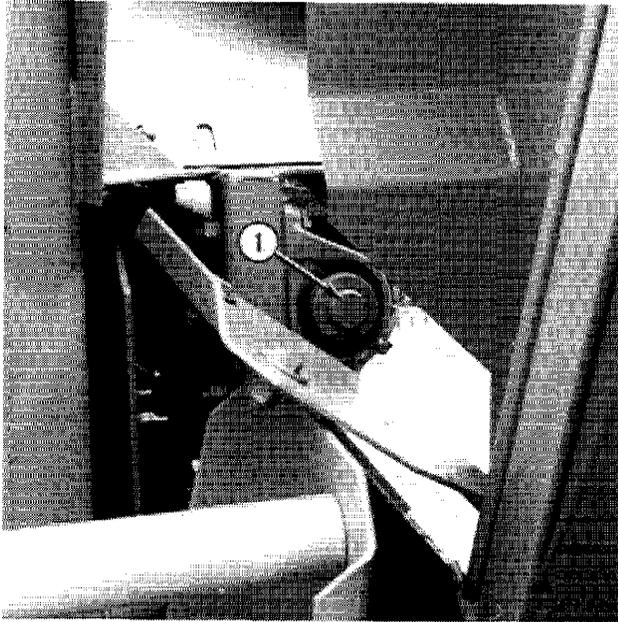


Figure NN - Kicker Rotor

The clearance of the kicker rotor rubber strip #1, Figure OO is important. The bolt holes in the rubber are slotted so it can be adjusted up or down where it bolts to the rock box. The rubber strip should clear the square bars on the rotor. Since this rubber strip is a high wear item, the rubber strip may be turned top side down when a new edge is required.

The lower rubber strip #2, holds the rocks toward the rock bucket and keeps the rocks from wedging between the kicker roller, rock plate and frame. To adjust the lower rubber strip:

1. Adjust the bracket #3 on the rear of the rubber strip to 3 1/2" from the edge of the rock bucket.
2. Adjust the bracket #4 on the front of the rubber strip to 1 1/8" from the edge of the rock bucket.

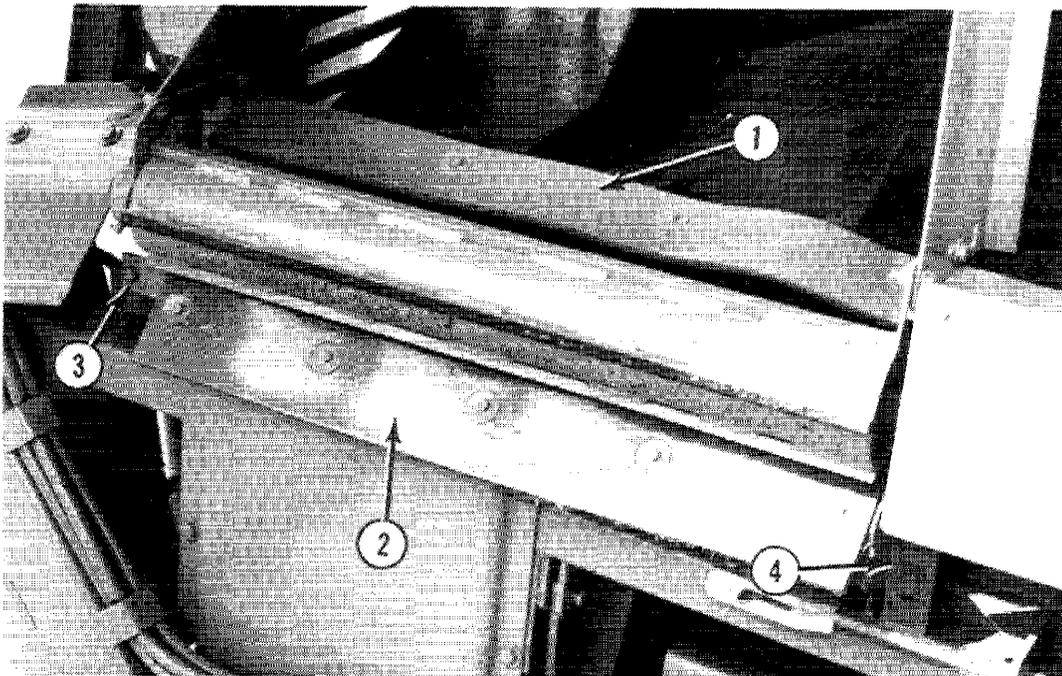


Figure OO - Rubber Strip Adjustments

SERVICE & MAINTENANCE INSTRUCTIONS

WHEEL BEARINGS

At the end of each rock picking season, the wheel bearings on the Rock Picker, #1 and #2, Figure PP should be checked for lubrication and/or adjustment.

Use the following procedure for checking wheel bearings:

1. Jack up the Rock Picker until wheel is off the ground.
2. Remove dust cap.
3. Remove cotter key, castellated nut and washer.
4. Remove outer bearing and inspect lubricant.

If a generous amount of grease is on the bearing and in the housing, and if the grease is soft, the

grease will not need changing.

If the lubricant is caked and the bearings seem dry, the bearings should be washed to remove old grease.

To repack the bearings, the wheel must be pulled and the inner bearing and seal must be removed. If the seal is damaged, it must be replaced.

The cone bearings and the housing should be washed with a solvent and wiped clean. When repacking the bearings, be sure the grease is worked into the roller retainers to allow the entire bearing to be filled with grease.

When adjusting the wheel bearings, tighten the castellated nut until a drag is felt when turning the wheel. Loosen the nut until the wheel spins freely. A very slight amount of side play is advisable to allow for heat expansion.

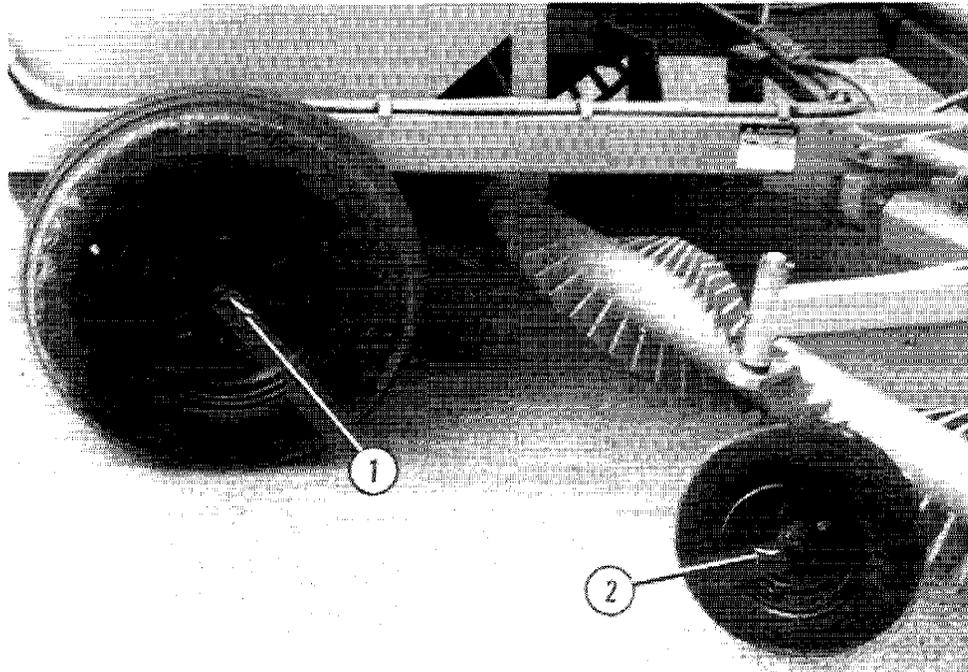


Figure PP - Wheel Bearings

SERVICE & MAINTENANCE INSTRUCTIONS

CHAIN CASE

The chain case #1, Figure QQ, enclose a 60 pitch drive chain. The chain case is filled with approximately 2 quarts of oil.

To adjust the chain:

1. Loosen four bolts around bearing #1, Figure RR.
2. Adjust adjustment bolt #2, Figure RR until all slack is removed from chain. Drive chain tension can be checked through plug hole #2, Figure QQ.

After a period of time, the drive chain may wear. If this wear becomes excessive, the chain may break or even wear the sprockets completely. If this happens, dismantle the gearbox cover. The rubber joint glued to the inside of the lid should be replaced carefully so that the cover seals all around the gearbox. A new rubber joint should be used whenever the gearbox is disassembled. When installing the gearbox cover, do not tighten the center bolt excessively causing the cover to bend.

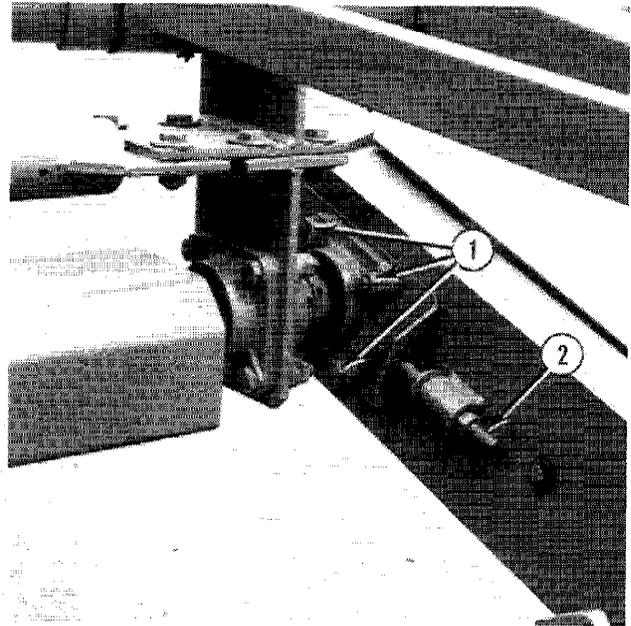


Figure RR - Chain Adjustment

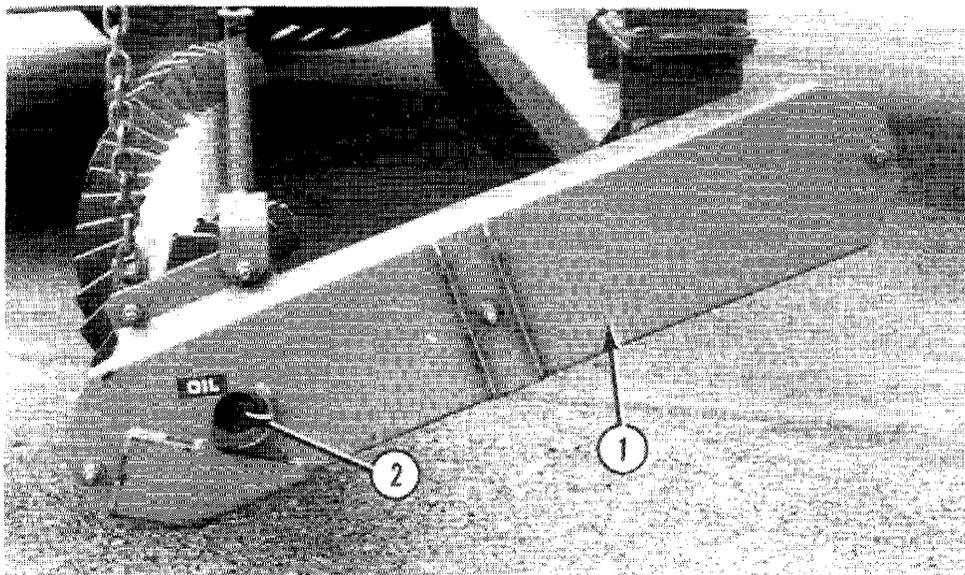


Figure QQ - Chain Case

SERVICE & MAINTENANCE INSTRUCTIONS

ROCK PADDLE

To remove the rock paddle:

⚠ WARNING: Since the rock paddle is spring loaded, special care must be used to remove the paddle chain from the rock wheel. It will spring downward.

1. Insert the pry bar as shown in Figure SS.

2. Using the pry bar to release the tension from the chain, detach the chain by removing nut #1.

3. Release the tension on the pry bar slowly until all of the tension is released.

4. Remove the paddle assembly by removing the two nuts #2.

5. Reverse the above procedure to install the paddle.

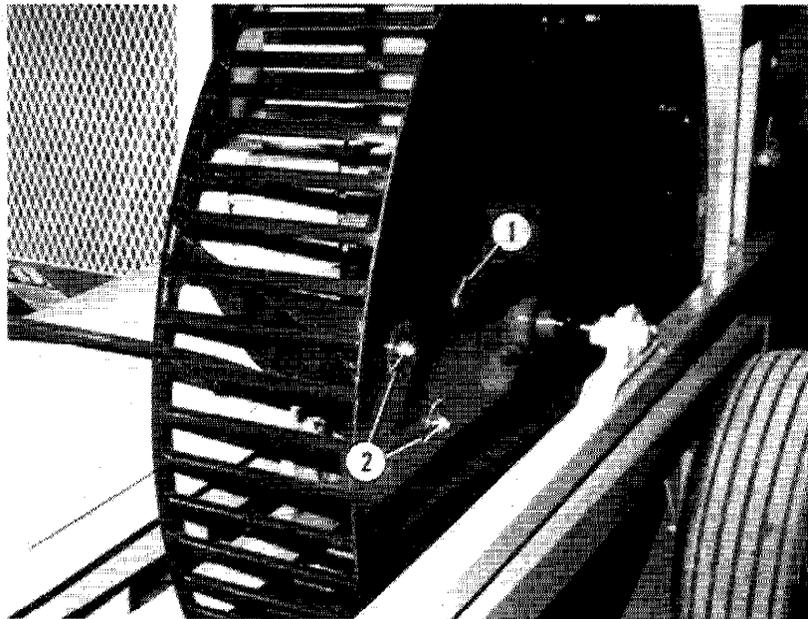


Figure SS - Rock Paddle Removal

SERVICE & MAINTENANCE INSTRUCTIONS

HYDRAULIC SYSTEM

The hydraulic system shown in Figure TT is for the standard dual circuit Rock Picker. If your Rock Picker has the optional single hydraulic hookup; refer to pages 34 - 36 in the "Optional" section.

The cylinder circuit controls the operation of the rock wheel and rock bucket cylinders. The diverter valve is used to shift the oil flow between the cylinders.

The motor circuit controls the operation of the windrower and kicker rotors.



WARNING: Hydraulic fluid escaping under pressure can be invisible and can have sufficient force to penetrate the skin. When searching for suspected leaks, use a piece of wood or cardboard rather than your hands. If injured, seek medical attention immediately to prevent serious infection or reaction.



WARNING: Relieve all pressure in the hydraulic system before disconnecting the lines or performing other work on the system. Make sure all connections are tight and lines are in good condition before applying pressure to the system.

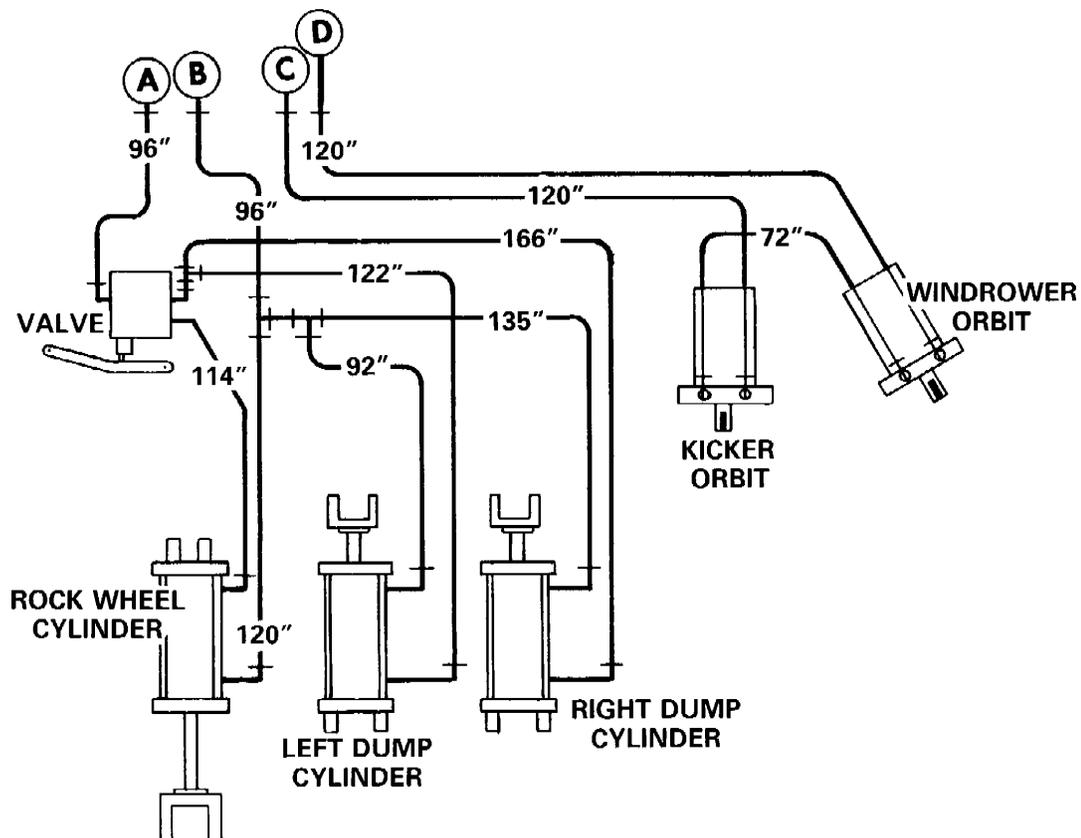


Figure TT - High Lift Hydraulic System

SERVICE & MAINTENANCE INSTRUCTIONS

TROUBLE SHOOTING GUIDE

PROBLEM	SOLUTION
Windrower and kicker rotors are not turning	Hydraulic controls are not engaged Mismatched hydraulic couplers Windrower depth set too deep - readjust Windrower is not level - adjust Hydraulic coupler ruined - replace Broken hose - replace Broken chain - replace Hydraulic motor leaking internally - replace Tractor hydraulics are not up to specifications Rock or foreign material may be wedged between the roller and frame Trash and mud wrapping and balling up rotors - wait until conditions are drier Bearing ruined - replace Hydraulic fittings leaking Rock box too full - empty Rocks wedged in kicker rotors
Rock bucket will not dump	Cylinder is leaking internally - repair Hydraulic couplers mismatched - correct Hydraulic hose broken - replace Tractor hydraulics are not up to specifications Hydraulic fittings are leaking Valve not shifted to bucket cylinders
Windrow and rock wheel do not raise or lower	Transport pins are in the wrong position Hydraulic couplers are mismatched - correct Hydraulic hose broken - replace Hydraulic fittings leaking

SERVICE & MAINTENANCE INSTRUCTIONS

TROUBLE SHOOTING GUIDE (CONT.)

TROUBLE	SOLUTION
Oil is overheating	Hydraulic system is not adequate Oil cooler is plugged
Dirt does not fall through the bars on the rock wheel	Too much trash in the rock wheel Dirt is too wet - wait until it dries
Rocks wedge between the rock plate and the rock wheel	Gap between the rock plate and rock wheel is too large - readjust
Windrower does not gather rocks	Excessive ground speed - use a lower gear Soil is not loose and dry
Rocks wedge in kicker rotor	RPM of kicker rotor too slow

OPTIONAL EQUIPMENT

SAFETY CHAIN

A safety chain may be required. Check local regulations. Install the safety chain as shown in Figure UU.

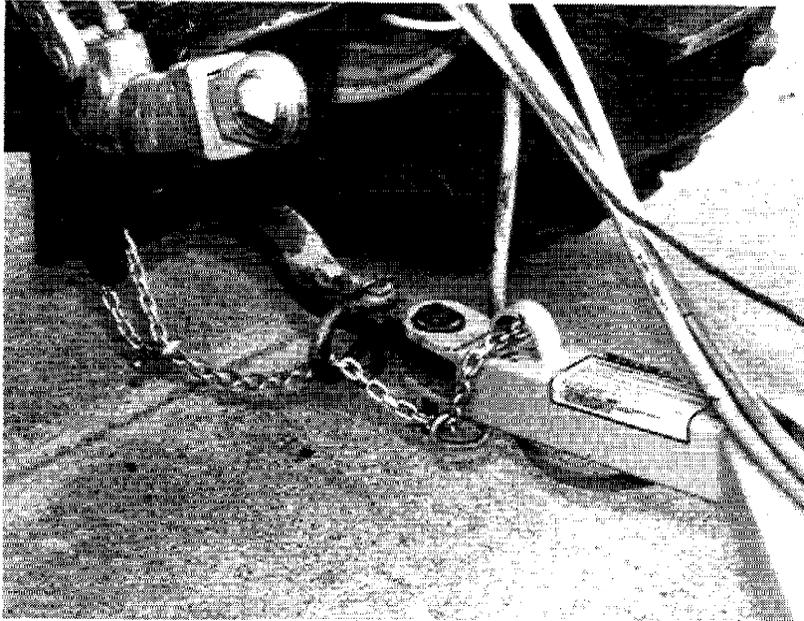


Figure UU - Safety Chain Installation

SINGLE HYDRAULIC HOOK UP

The Rock Picker comes standard with hoses to accommodate dual outlets from the tractor. If your tractor does not have dual outlets, a single hydraulic hookup is available and can be mounted on your tractor.

Before mounting the single hydraulic hook-up option, determine if your tractor has an open or closed center hydraulic system. If unsure, contact your tractor dealer. The control valve used with single hydraulic hook-up option must have the correct plugs installed to match the tractor hydraulic system. Refer to Figure VV.

OPTIONAL EQUIPMENT (CONT.)

SINGLE HYDRAULIC HOOKUP (CONT.)

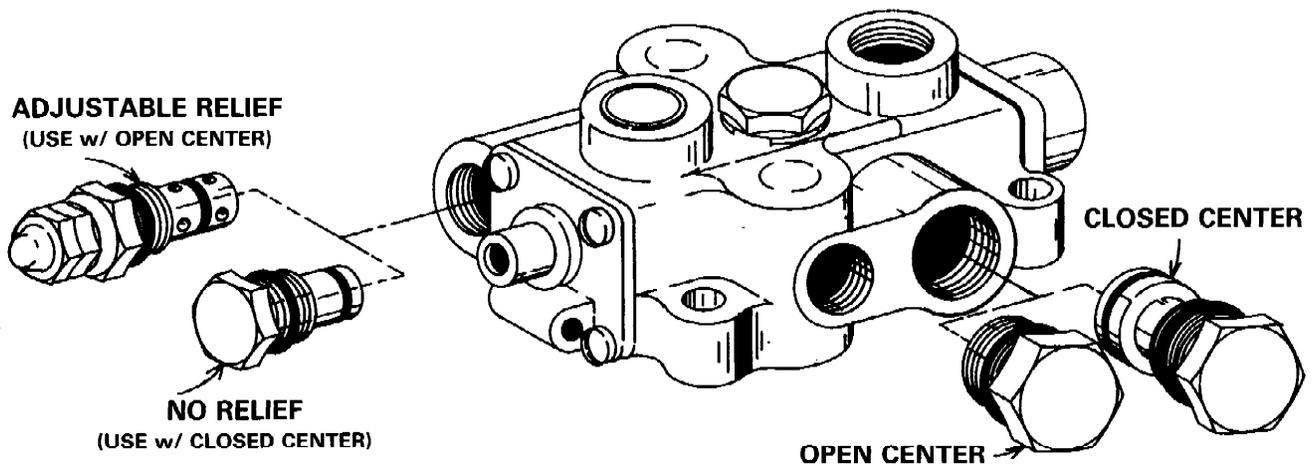


Figure VV - Open and Closed Center Conversion Plugs

To install the single hydraulic hookup option:

1. Mount the hydraulic control valve in a suitable position on the tractor.
2. Install two 3/4" bushings and four 1/2" elbows in the valve.
3. Connect hose #1, Figure WW, to the tractor.
4. Remove the quick couplers from the three remaining hoses.
5. Connect the five foot hose #2 to the
6. outlet port of the control valve. Install a quick coupler on the hose.
6. Using a 1/2" coupler, connect a four foot hose from the in port of the control valve to hose #3.
7. Using a 1/2" coupler, connect a four foot hose from a pressure port on the control valve to hose #4.
8. Using a 1/2" coupler, connect a four foot hose from a pressure port on the control valve to hose #5.

OPTIONAL EQUIPMENT (CONT.)

SINGLE HYDRAULIC HOOKUP (CONT.)

Operation of the Rock Picker with the single hydraulic hookup is as follows. The tractor auxilliary hydraulic control lever controls the windrower and kicker rotors. The rotors must

be actuated to raise or lower the rock wheel or rock bucket. Use the control valve to raise or lower the rock wheel. Use the control valve and pull and hold the 1/4" rope to raise or lower the rock bucket.

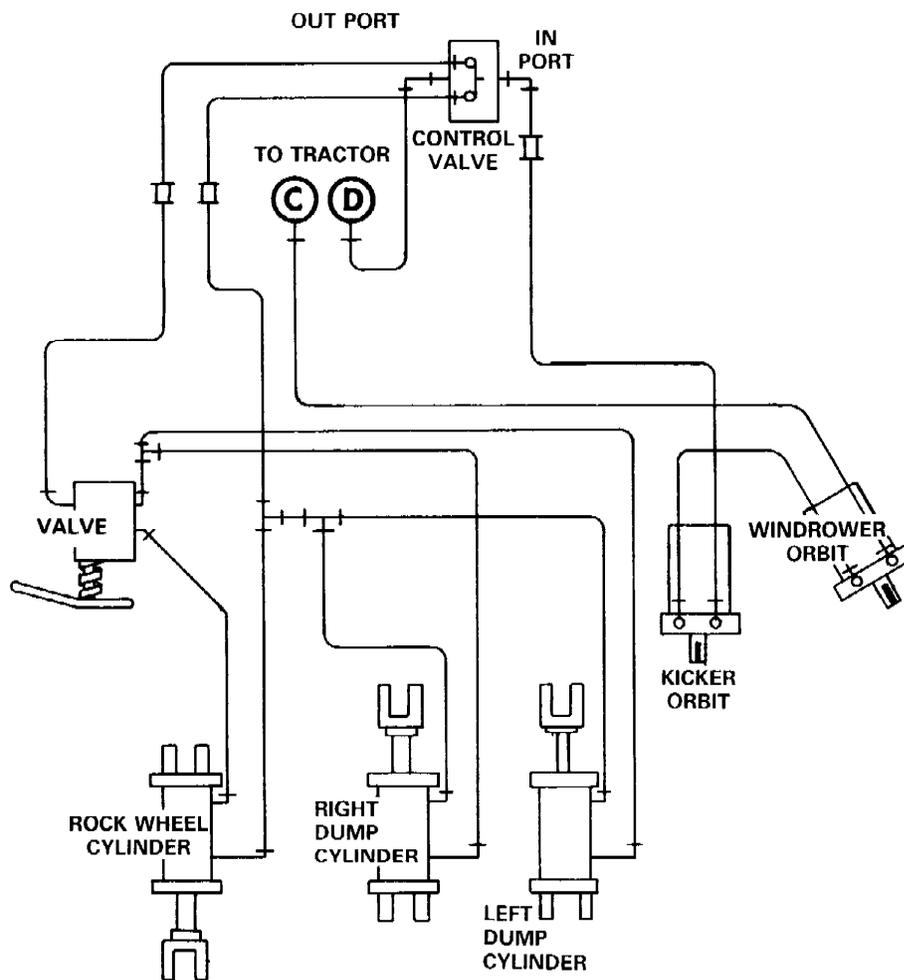


Figure WW - Single Hookup Hydraulic System

OPTIONAL EQUIPMENT (CONT.)

Revised April 1991 due to
elimination of power pack.

(PAGE 38) 106 ROCK PICKER

OPTIONAL EQUIPMENT (CONT.)

Revised April 1991 due to
elimination of power pack.

OPTIONAL EQUIPMENT (CONT.)

DRAG PLATE

Some rocks will roll out in front of the rock wheel. An optional drag plate is available to stop those rocks and direct them into the rock wheel. To mount the drag plate:

1. Install the inner bracket #1, Figure AAA, to the main frame using two 3/8" x 4 1/2" bolts, lock washers and nuts. Center the inner bracket between the angle and hose channel and tighten securely.
2. Install the outer bracket #2 as shown using two 3/8" x 3 1/2" bolts, lock washers and nuts. Do not tighten yet.
3. Install rubber flaps #3 to the inner and outer brackets using four 3/8" x 1 1/2" bolts, lock washers and nuts.
4. Install drag plate #4 on rubber flaps using four 3/8" x 1 1/2" bolts, lock washers and nuts. The height of the drag plate should be adjusted according to your field conditions.
5. Tighten all bolts securely.

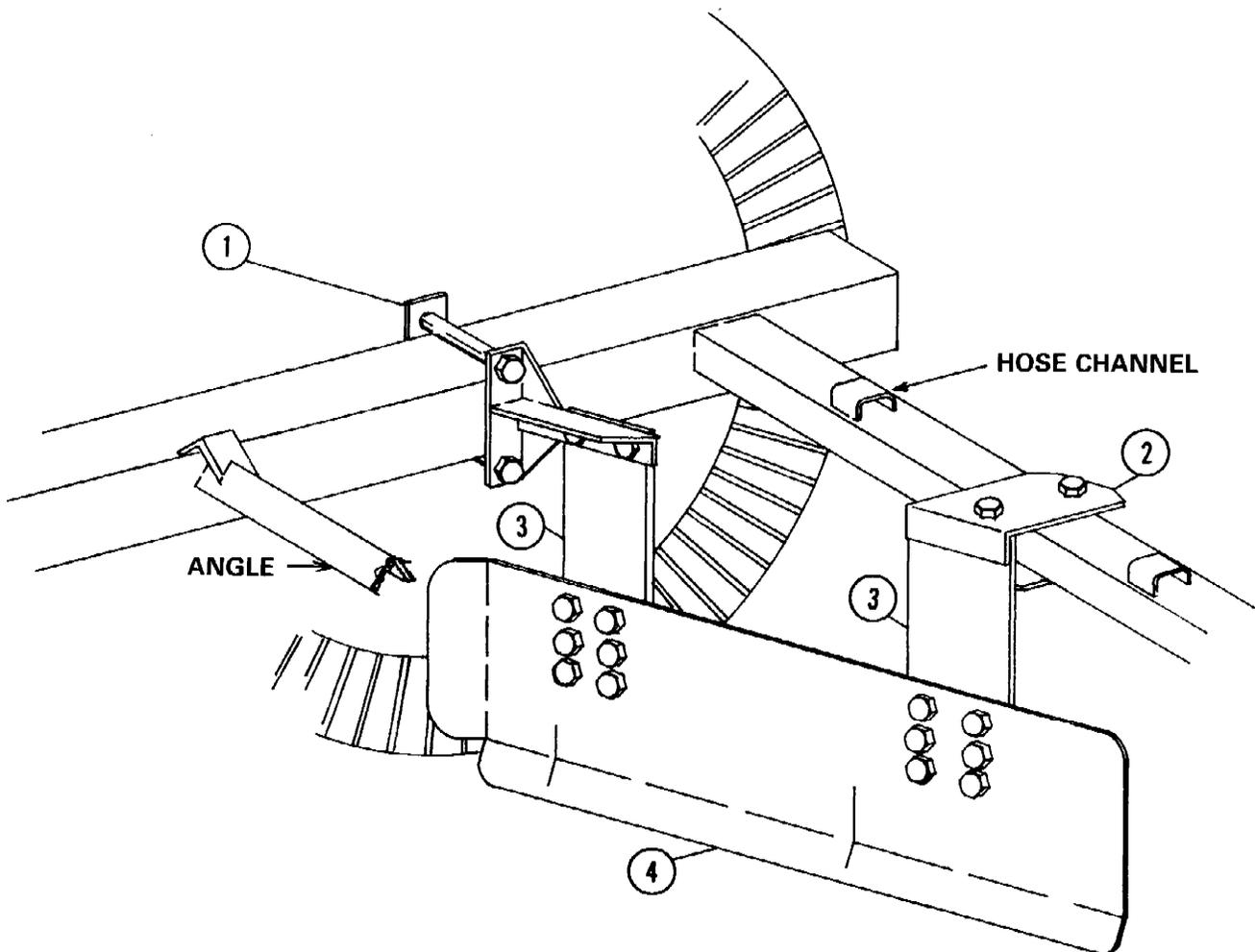


Figure AAA - Drag Plate

PARTS LIST TABLE OF CONTENTS

FRAME ASSEMBLIES - SECTION 1

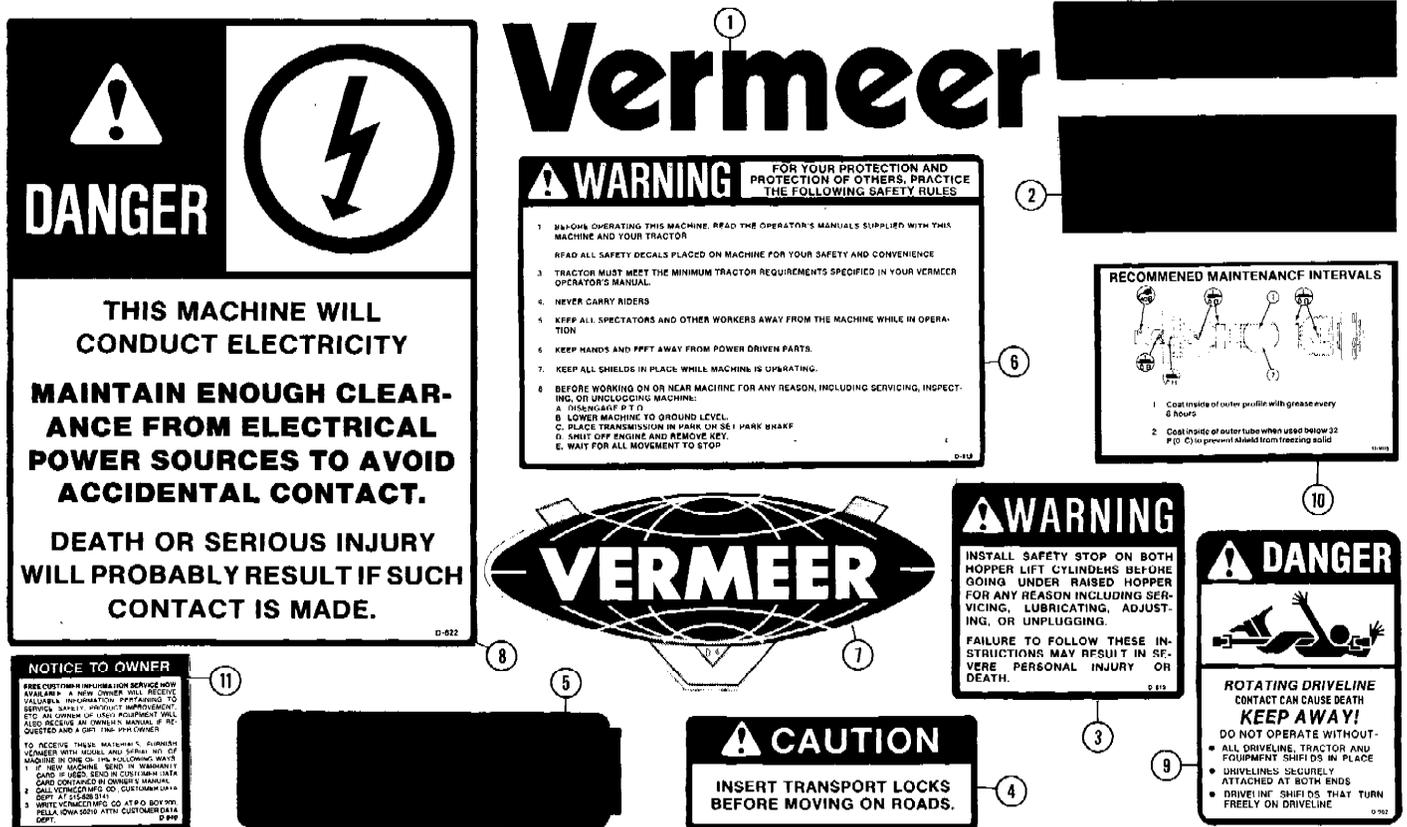
Decal Assembly (Fig. "1-1")	Page 1-1
Drag Plate Assembly - Optional (Fig. "1-7")	Page 1-9
Main Frame Assembly (Fig. "1-2")	Pages 1-2 & 1-3
Rock Box Assembly (Fig. "1-3")	Page 1-4
Rock Wheel Assembly (Fig. "1-4")	Pages 1-5 & 1-6
Transport/Caster Tire & Wheel Assembly (Fig. "1-6")	Page 1-8
Windrower Hanger Assembly (Fig. "1-5")	Page 1-7

HYDRAULIC ASSEMBLIES - SECTION 2

Hydraulic Cylinder Components - Rock Kicker - 2" x 8" (Fig. "2-4")	Page 2-4
Hydraulic Cylinder Components - Windrower - 3" x 24" (Fig. "2-5")	Page 2-4
Hydraulic Motor Components - Rock Kicker (Fig. "2-3")	Page 2-3
Hydraulic Motor Components - Windrower (Fig. "2-2")	Page 2-2
Hydraulics Assembly (Fig. "2-1")	Page 2-1
Selector Valve Assembly (Fig. "2-6")	Page 2-5

DECAL ASSEMBLY

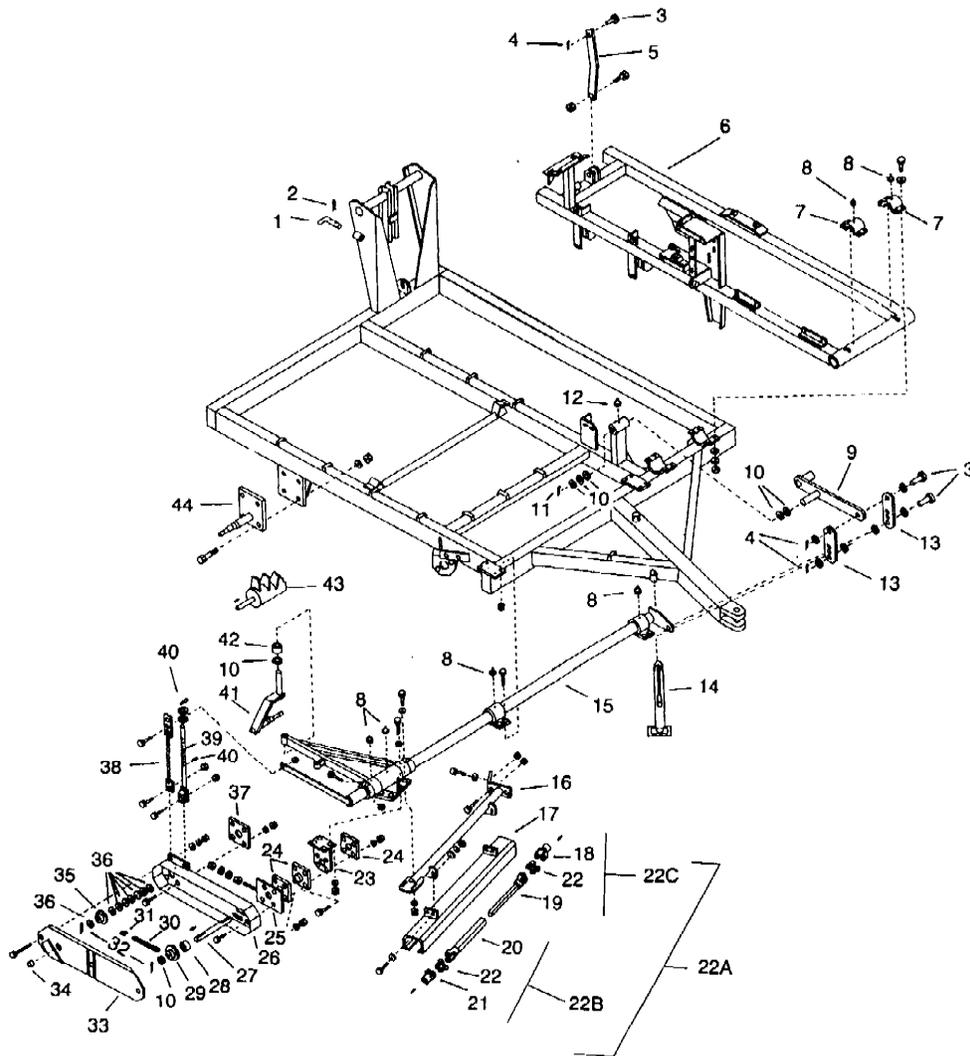
Figure 1-1



REF. NO.	PART NO.	DESCRIPTION	QTY.	
1-1	1	2326-595	DECAL-VERMEER 4 1/2" X 24	1
1-1	2	+	DECAL-STRIPE 4" X 4.46'	1
1-1	3	2326-813	DECAL-WARNING	2
1-1	4	2326-814	DECAL-CAUTION TRANSPORT LOCKS	1
1-1	5	70000-170	DECAL-RED REFLECTIVE	2
1-1	6	2326-819	DECAL-WARNING	1
1-1	7	2326-004	DECAL-VERMEER WORLD 7.75"	1
1-1	8	2326-822	DECAL-DANGER	1
1-1	9	2326-902	DECAL-DANGER	1
1-1	10	2326-906	DECAL-MAINTENANCE INTERVALS	1
1-1	11	2326-940	DECAL-NOTICE TO OWNER	1
	+2326-626	DECAL-STRIPE 4" (SPECIFY LENGTH)		
	84530-133	DECAL ASSEMBLY-106 ROCK PICKER (INCLUDES REF. 1 - 11)		

MAIN FRAME ASSEMBLY

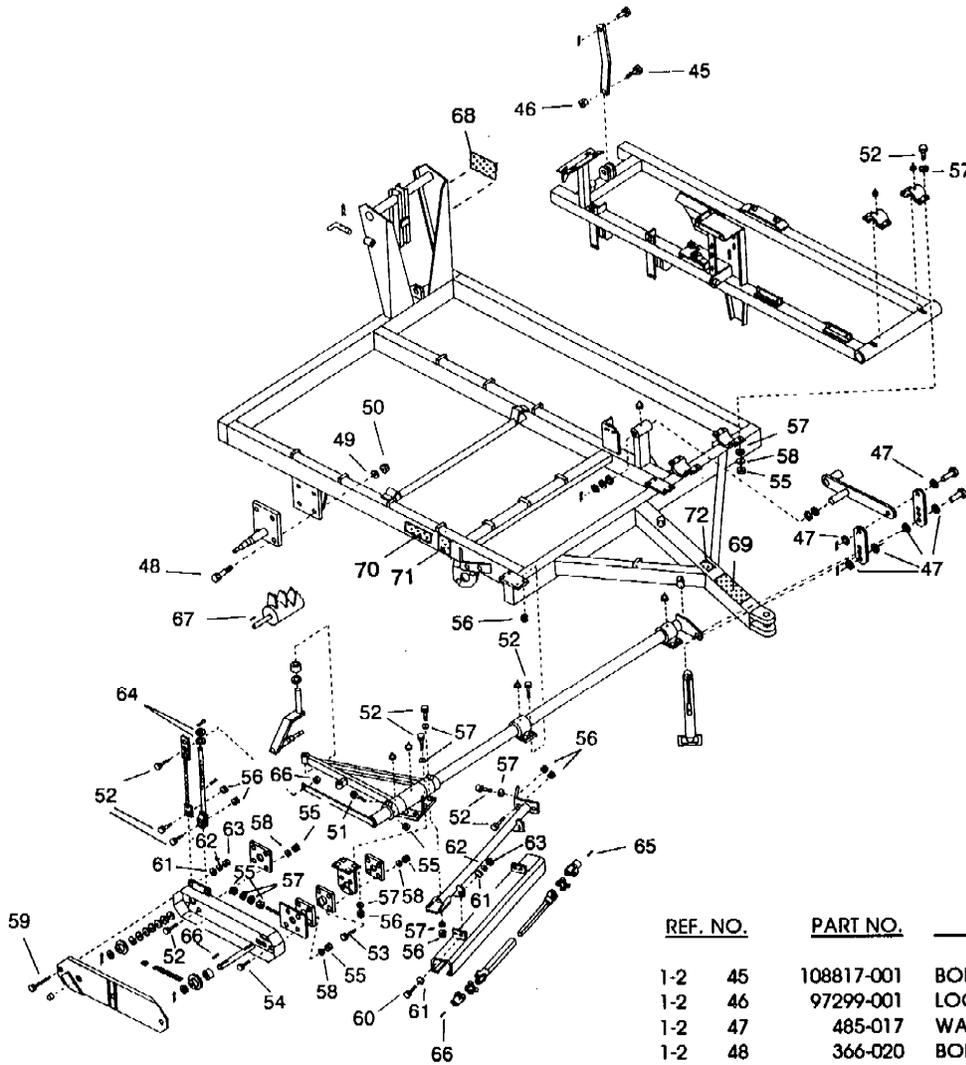
Figure 1-2



REF. NO.	PART NO.	DESCRIPTION	QTY.	REF. NO.	PART NO.	DESCRIPTION	QTY.
1-2	1	108503-001	2	1-2	22C	108813-001	1
1-2	2	75153-001	2	1-2	23	75232-001	1
1-2	3	75144-001	3	1-2	24	75056-001	3
1-2	4	510-011	3	1-2	25	75234-001	1
1-2	5	75205-001	1	1-2	26	75233-001	1
1-2	6	108804-001	1	1-2	27	75240-001	1
1-2	7	108805-001	2	1-2	28	75057-001	1
1-2	8	108806-001	7	1-2	29	64950-001	1
1-2	9	108807-001	1	1-2	30	108814-001	1
1-2	10	75168-001	7	1-2	31	108815-001	2
1-2	11	510-025	1	1-2	32	75151-001	2
1-2	12	75121-001	1	1-2	33	75235-001	1
1-2	13	75204-001	2	1-2	33	65044-001	1
1-2	14	75190-001	1	1-2	34	65042-001	1
1-2	15	75229-001	1	1-2	35	83650-001	1
1-2	16	108808-001	1	1-2	36	75169-001	1
1-2	17	108809-001	1	1-2	37	75055-001	1
1-2	18	65015-001	1	1-2	38	75199-001	1
1-2	19	108810-001	2	1-2	39	75200-001	1
1-2	20	108811-001	1	1-2	40	75148-001	2
1-2	21	65015-001	1	1-2	41	75201-001	1
1-2	22	65020-001	2	1-2	42	70615-001	1
1-2	22A	78401-001	1	1-2	43	108816-001	1
1-2	22B	108812-001	1	1-2	44	75096-001	2

MAIN FRAME ASSEMBLY (CONT.)

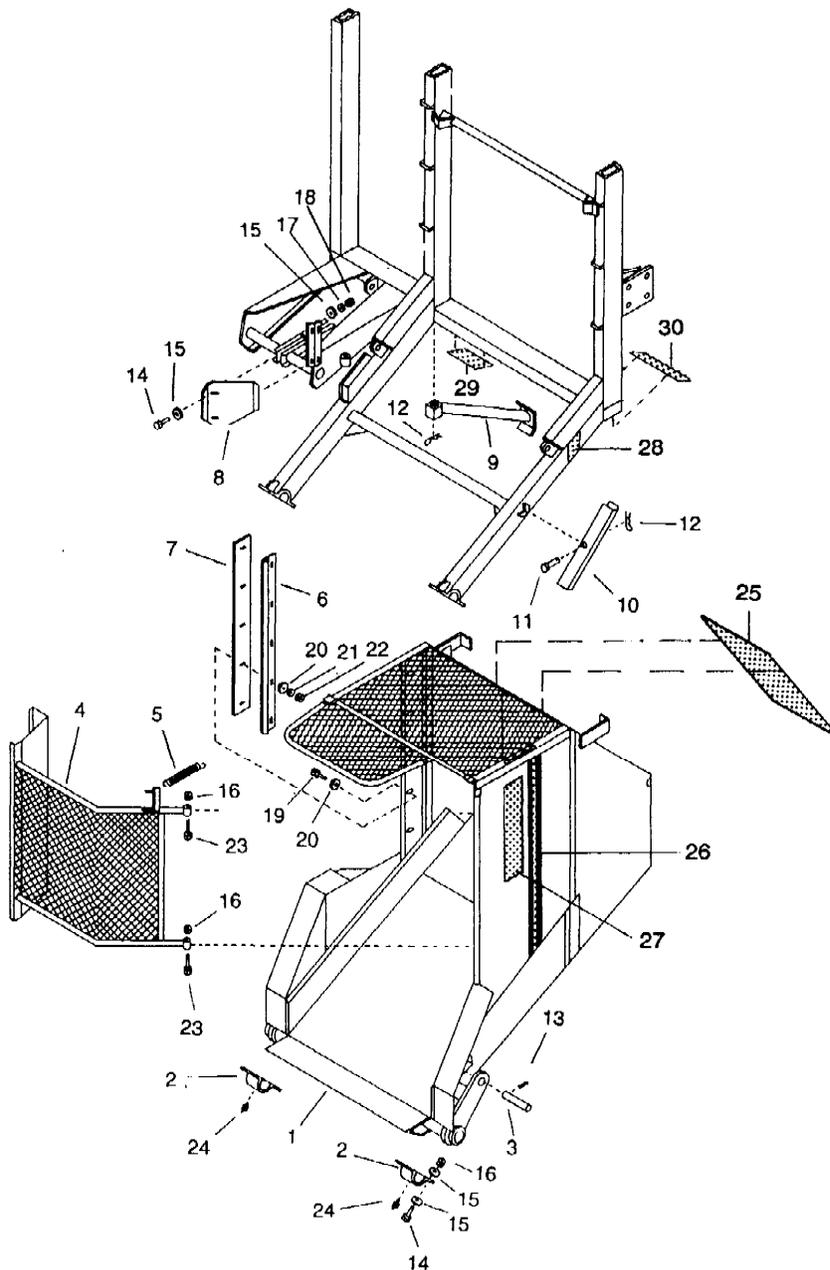
Figure 1-2



REF. NO.	PART NO.	DESCRIPTION	QTY.
1-2	45	108817-001 BOLT 3/4" X 3"	1
1-2	46	97299-001 LOCK NUT-3/4"	1
1-2	47	485-017 WASHER-3/4" FLAT	6
1-2	48	366-020 BOLT-5/8"-11 X 2" GR 5 HEX	8
1-2	49	485-015 WASHER-5/8" FLAT	8
1-2	50	428-001 NUT-5/8" NC HEX	8
1-2	51	358-030 BOLT-1/2"-13 X 3" GR 5 HEX	2
1-2	52	358-014 BOLT-1/2"-13 X 1 1/2" GR 5 HEX	32
1-2	53	358-024 BOLT-1/2"-13 X 2 1/2" GR 5 HEX	4
1-2	54	108818-001 CARR BOLT 1/2" X 1 3/4"	4
1-2	55	421-001 NUT-1/2" NC HEX	24
1-2	56	66944-001 LOCKNUT	20
1-2	57	485-011 WASHER-1/2"	
1-2	58	480-011 WASHER-1/2" S/T LOCK	20
1-2	59	108819-001 BOLT-3/8" X 5"	3
1-2	60	354-010 BOLT-3/8"-16 X 1" GR 5 HEX	4
1-2	61	485-007 WASHER-3/8"	14
1-2	62	480-007 WASHER-3/8" S/T LOCK	7
1-2	63	412-001 NUT-3/8" NC HEX	7
1-2	64	75173-001 WASHER-1"	2
1-2	65	75187-001 KEY-5/16" X 1 1/2"	1
1-2	66	75188-001 KEY-1/4" X 1 1/2"	2
1-2	67	108820-001 KEY-3/8" X 1 1/2"	1
1-2	68	2326-814 DECAL-CAUTION TRANSPORT LOCKS	1
1-2	69	2326-819 DECAL-WARNING	1
1-2	70	2326-906 DECAL-MAINTENANCE INTERVALS	1
1-2	71	2326-902 DECAL-DANGER	1
1-2	72	2326-940 DECAL-NOTICE TO OWNERS	1

ROCK BOX ASSEMBLY

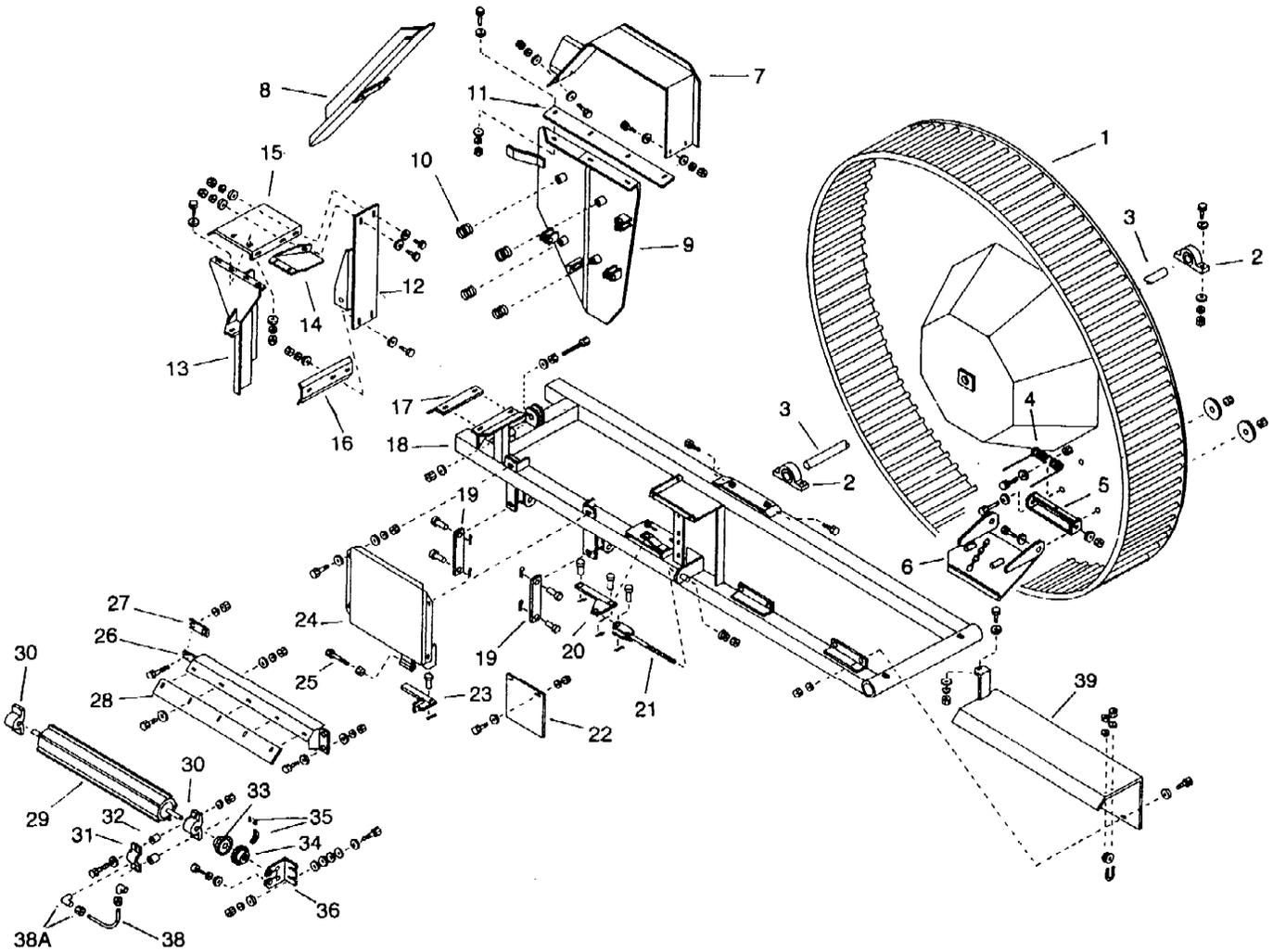
Figure 1-3



REF. NO.	PART NO.	DESCRIPTION	QTY.	REF. NO.	PART NO.	DESCRIPTION	QTY.		
1-3	1	108821-001	BUCKET (HIGH LIFT)	1	1-3	18	421-001	NUT-1/2" NC HEX	10
1-3	2	75231-001	BUCKET HINGE CLAMPS	2	1-3	19	354-034	BOLT-3/8"-16 X 3 1/2" GR 5 HEX	5
1-3	3	108822-001	CYLINDER PIN 1" X 6 1/2"	2	1-3	20	485-007	WASHER-3/8" FLAT	10
1-3	4	108823-001	FALL-OUT SHIELD	1	1-3	21	480-007	WASHER-3/8" S/T LOCK	5
1-3	5	75179-001	PULL SPRING	1	1-3	22	412-001	NUT-3/8" NC HEX	5
1-3	6	75209-001	PLATE-W/ANGLE	1	1-3	23	108827-001	BOLT 1/2" X 4"	2
1-3	7	108824-001	BELTING 5" X 44 1/2"	1	1-3	24	75121-001	STRAIGHT ZERK	2
1-3	8	108825-001	ROCK SHIELD	1	1-3	25	2326-822	DECAL-DANGER	1
1-3	9	108826-001	STAND	1	1-3	26	+	DECAL-STRIPE 4" X 4.46'	1
1-3	10	75237-001	SAFETY CLAMP	2	1-3	27	2326-595	DECAL-VERMEER 4 1/2" X 24	1
1-3	11	103903-001	PIN-3/4" X 3"	2	1-3	28	2326-813	DECAL-WARNING	2
1-3	12	75153-001	HAIR PIN-1/8"	3	1-3	29	2326-004	DECAL-VERMEER WORLD 7.75"	1
1-3	13	510-031	COTTER PIN-1/4" X 2"	2	1-3	30	70000-170	DECAL-RED REFLECTIVE	2
1-3	14	358-014	BOLT-1/2"-13 X 1 1/2" GR 5 HEX	10					
1-3	15	485-011	WASHER-1/2" FLAT	20			+2326-626	DECAL-STRIPE 4"	
1-3	17	480-011	WASHER-1/2" S/T LOCK	10				(SPECIFY LENGTH)	

ROCK WHEEL ASSEMBLY

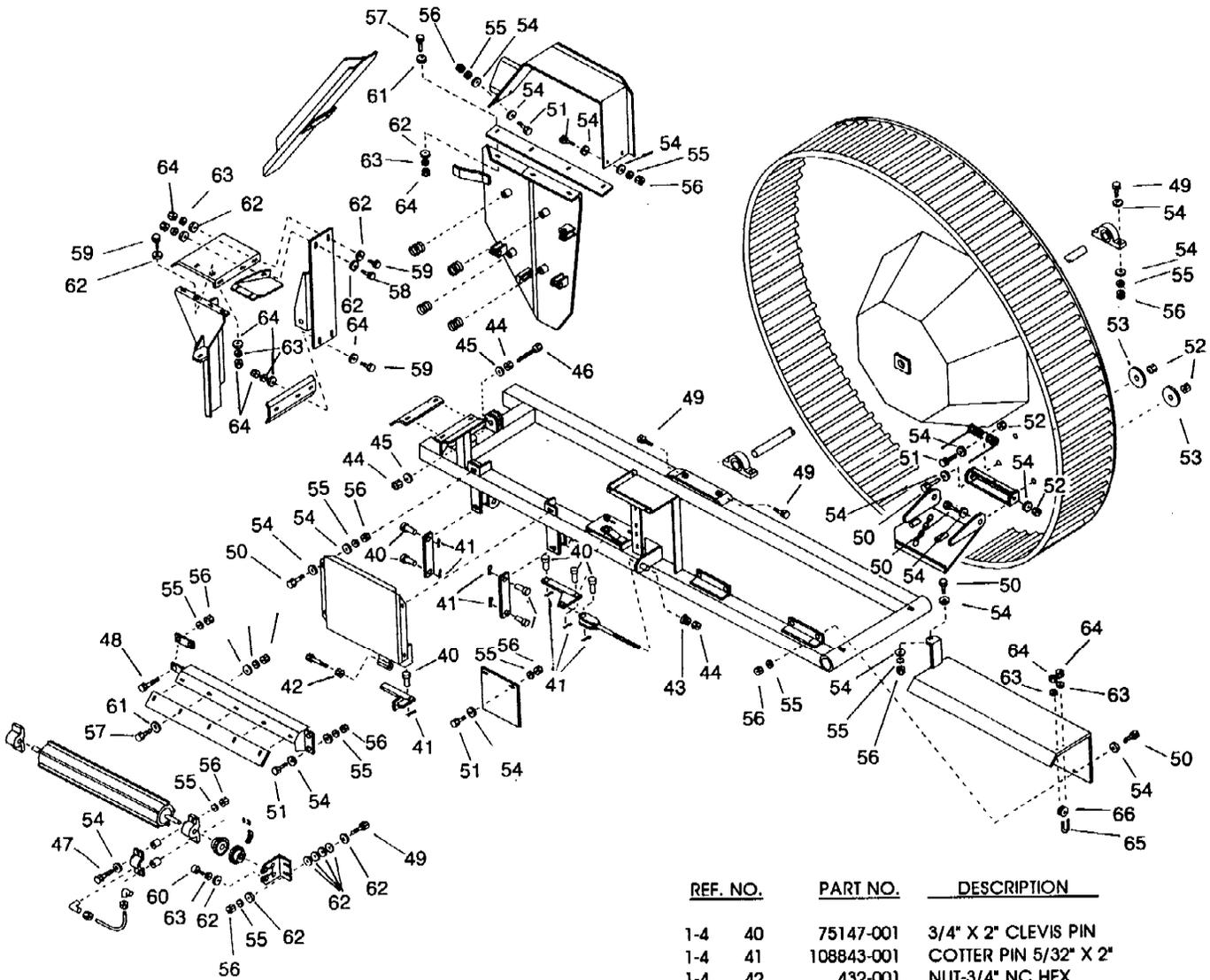
Figure 1-4



REF. NO.	PART NO.	DESCRIPTION	QTY.	REF. NO.	PART NO.	DESCRIPTION	QTY.
1-4	1	75211-001	1	1-4	21	75218-001	ADJUSTMENT BOLT
1-4	2	75054-001	2	1-4	22	75217-001	SHIELD
1-4	3	75239-001	1	1-4	23	75219-001	BOTTOM LINK PLATE
1-4	4	70793-001	5	1-4	24	75220-001	SPRING BRACKET
1-4	5	75212-001	5	1-4	25	75221-001	ADJUSTMENT BOLT
1-4	6	75213-001	5	1-4	26	108836-001	HOSE PROTECTOR
1-4	7	108829-001	1	1-4	27	108837-001	HOSE PROTECTOR MOUNTING STRAP
		75214-001	1	1-4	28	108838-001	HOSE PROTECTOR BELTING 5" X 39"
1-4	8	75227-001	1	1-4	29	75196-001	KICKER ROLLER
1-4	9	75226-001	1	1-4	30	108839-001	BEARING 1 1/4" MALLABLE
1-4	10	108830-001	4	1-4	31	108840-001	BEARING STRAP
1-4	11	65041-001	1	1-4	32	108841-001	BEARING STRAP SPACER
1-4	12	108831-001	1	1-4	33	64954-001	SPROCKET-5014 1 1/4" BORE
1-4	13	108832-001	1	1-4	34	64951-001	SPROCKET-5014 1" BORE
1-4	14	108833-001	1	1-4	35	64957-001	50 PITCH CHAIN 13 LINKS & CONNECTOR LINK
1-4	15	108834-001	1	1-4	36	75197-001	BRACKET
1-4	16	108835-001	1	1-4	37	108842-001	1/4" HOSE 14 1/2"
1-4	17	75215-001	1	1-4	38	75124-001	1/8" P.T. TO 1/4" TUBE 90 DEG EL
1-4	18	108804-001	1	1-4	39	75222-001	SHIELD
1-4	19	75198-001	2				
1-4	20	75216-001	1				

ROCK WHEEL ASSEMBLY (CONT.)

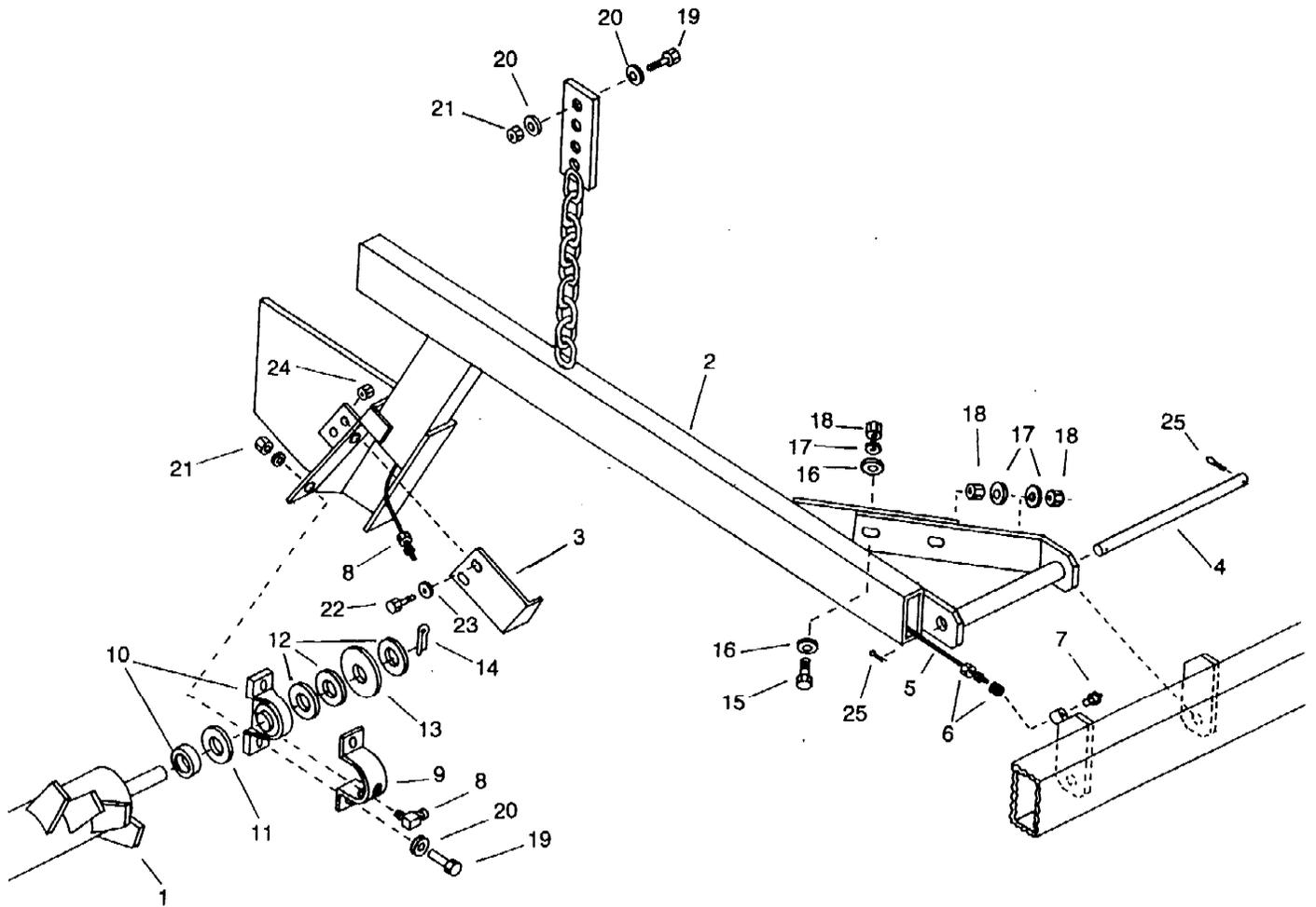
Figure 1-4



REF. NO.	PART NO.	DESCRIPTION	QTY.
1-4	40	75147-001 3/4" X 2" CLEVIS PIN	8
1-4	41	108843-001 COTTER PIN 5/32" X 2"	8
1-4	42	432-001 NUT-3/4" NC HEX	1
1-4	43	65034-001 NUT-5/8" LOCK	1
1-4	44	428-001 NUT-5/8" NC HEX	3
1-4	45	485-015 WASHER-5/8" FLAT	2
1-4	46	108844-001 ADJUSTING BOLT 5/8" X 5 1/2"	1
1-4	47	103904-001 1/2" X 5" BOLT	4
1-4	48	108845-001 BOLT 1/2" X 3 1/2"	2
1-4	49	358-020 BOLT-1/2"-13 X 2" GR 5 HEX	10
1-4	50	358-014 BOLT-1/2"-13 X 1 1/2" GR 5 HEX	29
1-4	51	358-012 BOLT-1/2"-13 X 1 1/4" GR 5 HEX	16
1-4	52	66944-001 LOCKNUT	30
1-4	53	108846-001 WASHER 1/2"ID X 3"OD	10
1-4	54	485-011 WASHER-1/2" FLAT	40
1-4	55	480-011 WASHER-1/2" S/T LOCK	27
1-4	56	421-001 NUT-1/2" NC HEX	27
1-4	57	354-014 BOLT-3/8"-16 X 1 1/2" GR 5 HEX	9
1-4	58	354-012 BOLT-3/8"-16 X 1 1/4" GR 5 HEX	1
1-4	59	354-010 BOLT-3/8"-16 X 1" GR 5 HEX	7
1-4	60	354-006 BOLT-3/8"-16 X 3/4" GR 5 HEX	4
1-4	61	108847-001 FENDER WASHER 3/8"	9
1-4	62	485-007 WASHER-3/8" FLAT	59
1-4	63	480-007 WASHER-3/8" S/T LOCK	32
1-4	64	412-001 NUT-3/8" NC HEX	32
1-4	65	75152-001 U-BOLT	1
1-4	66	75223-001 ROPE GUIDE	1

WINDROWER HANGER ASSEMBLY

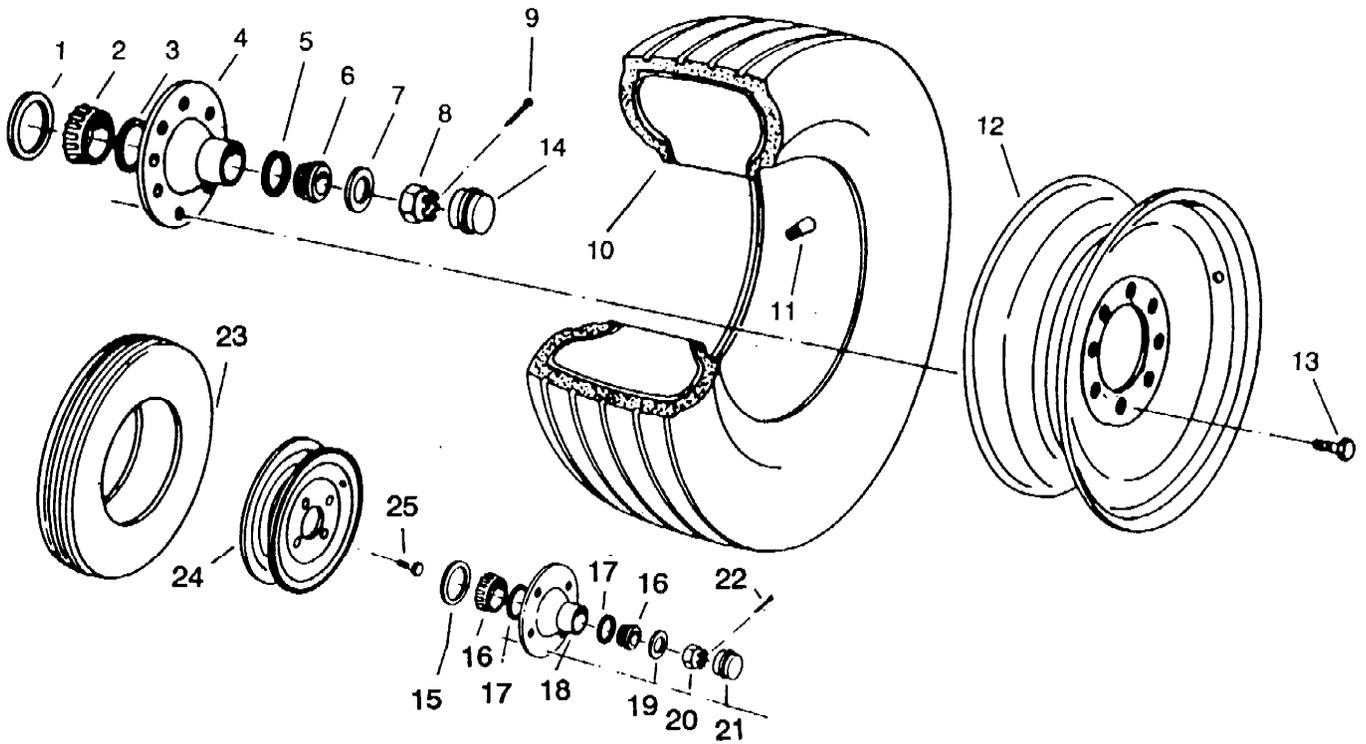
Figure 1-5



REF. NO.	PART NO.	DESCRIPTION	QTY.
1-5	1	108816-001 WINDROWER (TOOTH TYPE)	1
1-5	2	75224-001 ADJUSTMENT BRACKET	1
1-5	3	75203-001 BRG. SHIELD	1
1-5	4	75146-001 HINGE PIN	1
1-5	5	108848-001 1/4" HOSE 72"	1
1-5	6	108849-001 1/8" NIPPLE AND COUPLING	1
1-5	7	75121-001 STRAIGHT ZERK	1
1-5	8	75124-001 1/8" P.T. TO 1/4" TUBE 90 DEG EL	1
1-5	9	65039-001 BEARING STRAP	1
1-5	10	86213-001 2 BOLT FLG BRG W/COLLAR	1
1-5	11	65040-001 RUBBER SHIELD	1
1-5	12	75169-001 SHIMS	3
1-5	13	92088-001 WASHER-7 GA.	1
1-5	14	75151-001 5/16" X 2" COTTER PIN	1
1-5	15	366-020 BOLT-5/8"-11 X 2"GR 5 HEX	2
1-5	16	485-015 WASHER-5/8" FLAT	4
1-5	17	480-015 WASHER-5/8" S/T LOCK	2
1-5	18	428-001 NUT-5/8" NC HEX	4
1-5	19	358-020 BOLT-1/2"-13 X 2" GR 5 HEX	3
1-5	20	485-011 WASHER-1/2" FLAT	4
1-5	21	66944-001 LOCKNUT	3
1-5	22	354-010 BOLT-3/8"-16 X 1" GR 5 HEX	2
1-5	23	485-007 WASHER-3/8" FLAT	2
1-5	24	1809-003 NUT-3/8" SM FLGE T.L.	2
1-5	25	108843-001 COTTER PIN 5/32" X 2"	2

TRANSPORT/CASTER TIRE AND WHEEL ASSEMBLY

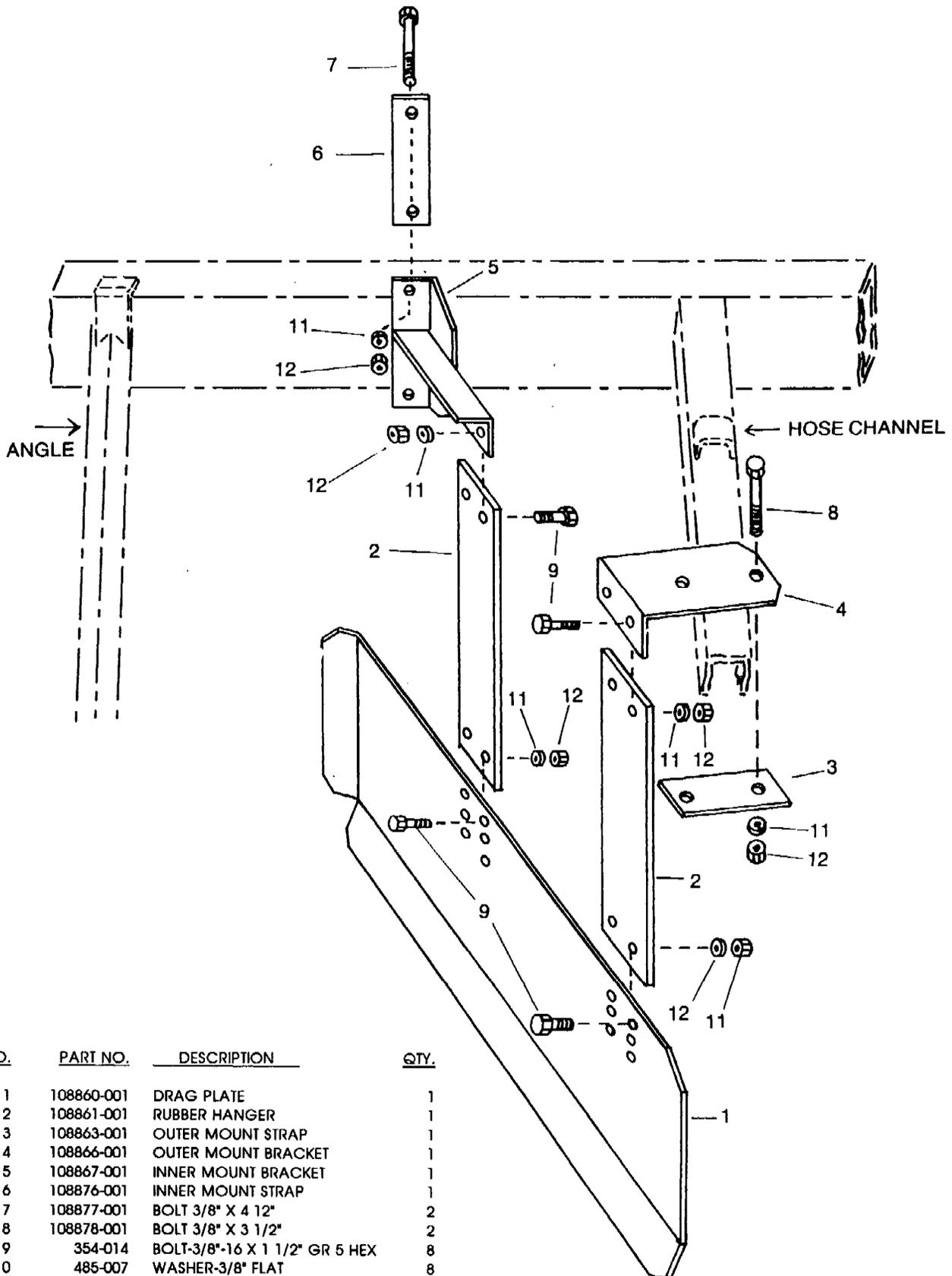
Figure 1-6



<u>REF. NO.</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>	<u>QTY.</u>
1-6	1	75084-001 WHEEL SEAL	2
1-6	3	75082-001 INNER CUP	2
1-6	4	75081-001 HUB COMPLETE	2
1-6	5	75080-001 OUTER CONE	2
1-6	6	75079-001 OUTER CUP	2
1-6	7	75078-001 WASHER	2
1-6	8	75077-001 NUT	2
1-6	9	75076-001 COTTER PIN	2
1-6	10	75060-001 11 L 16 TIRE	2
1-6	11	75065-001 11 L 16 TUBE	2
1-6	12	75068-001 16" WHEEL	2
1-6	13	75069-001 WHEEL BOLT	16
1-6	14	75075-001 HUB CAP	2
1-6	15	75085-001 SEAL	1
1-6	16	75086-001 CONE	2
1-6	17	75087-001 CUP	2
1-6	18	75088-001 HUB	1
1-6	19	75089-001 WASHER	1
1-6	20	75090-001 NUT	1
1-6	21	65010-001 CAP	1
1-6	22	75091-001 COTTER KEY	1
1-6	23	75061-001 4-80 X 8 TUBELESS TIRE	1
1-6	24	75070-001 WHEEL	1
1-6	25	75071-001 WHEEL BOLT	4

DRAG PLATE ASSEMBLY - OPTIONAL

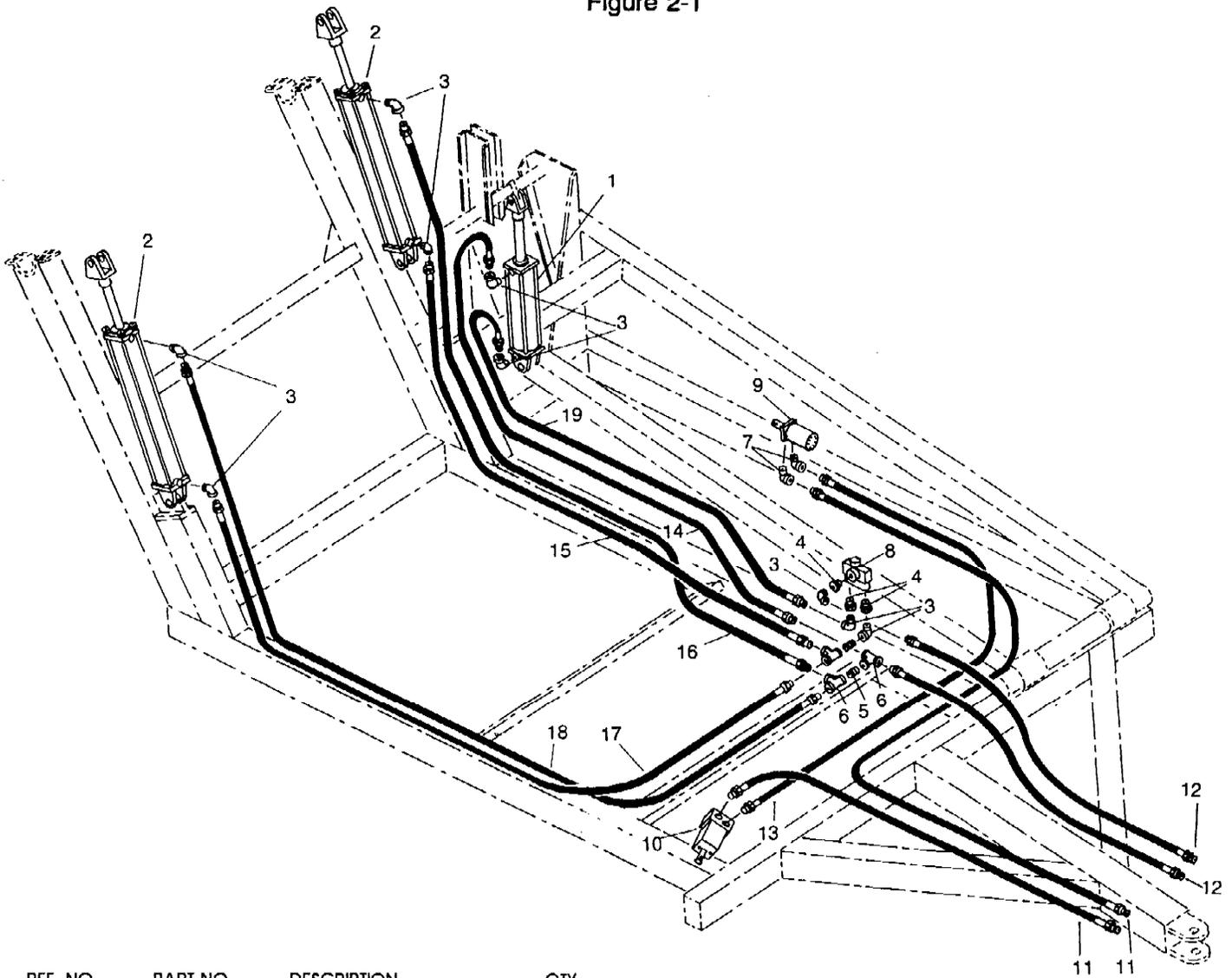
Figure 1-7



REF. NO.	PART NO.	DESCRIPTION	QTY.
1-7	1	108860-001 DRAG PLATE	1
1-7	2	108861-001 RUBBER HANGER	1
1-7	3	108863-001 OUTER MOUNT STRAP	1
1-7	4	108866-001 OUTER MOUNT BRACKET	1
1-7	5	108867-001 INNER MOUNT BRACKET	1
1-7	6	108876-001 INNER MOUNT STRAP	1
1-7	7	108877-001 BOLT 3/8" X 4 12"	2
1-7	8	108878-001 BOLT 3/8" X 3 1/2"	2
1-7	9	354-014 BOLT-3/8"-16 X 1 1/2" GR 5 HEX	8
1-7	10	485-007 WASHER-3/8" FLAT	8
1-7	11	480-007 WASHER-3/8" S/T LOCK	12
1-7	12	412-001 NUT-3/8" NC HEX	12

HYDRAULICS ASSEMBLY

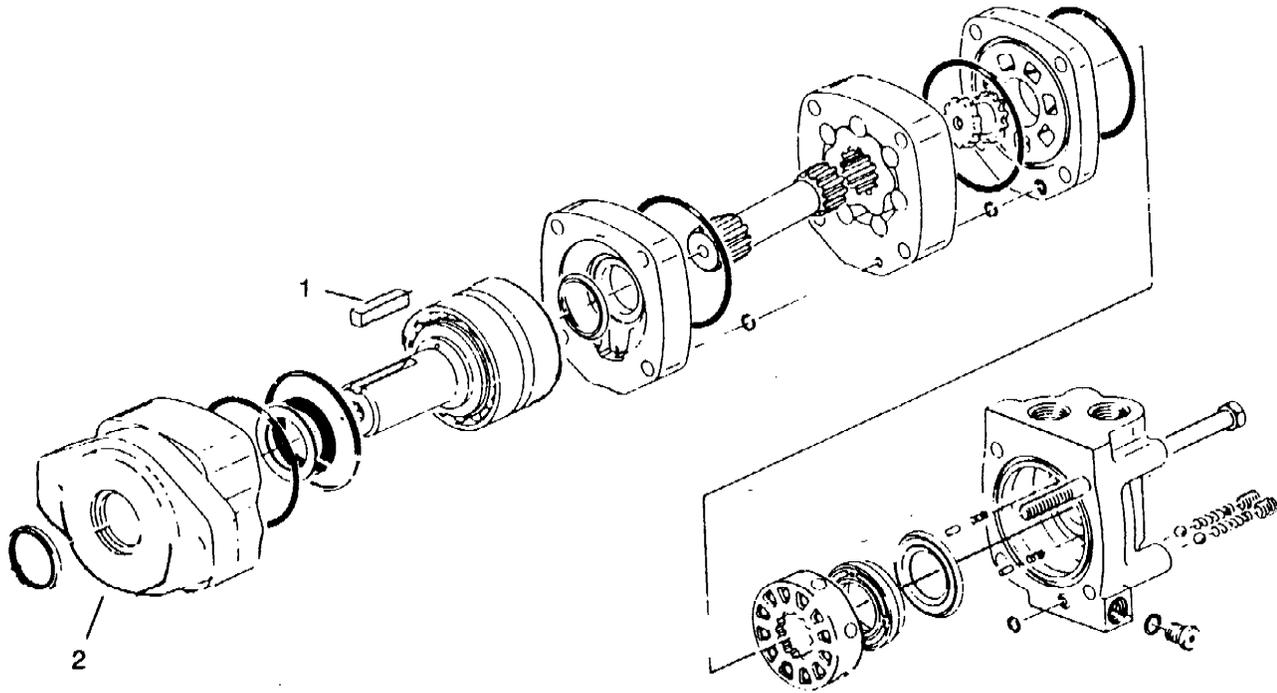
Figure 2-1



REF. NO.	PART NO.	DESCRIPTION	QTY.
2-1	1	65028-001 CYLINDER-HYDRAULIC 2" X 8" (BREAKDOWN FIG. 2-4)	1
2-1	2	75142-001 CYLINDER-HYDRAULIC 3" X 24" (BREAKDOWN FIG. 2-5)	2
2-1	3	75118-001 90 DEG. 1/2" ST ELBOW	9
2-1	4	108850-001 BUSHING 3/4" X 1/2"	3
2-1	5	69220-001 FITTING-NIPPLE	2
2-1	6	69219-001 FITTING-TEE	2
2-1	7	75125-001 45 DEG. 1/2" ST. ELBOW	2
2-1	8	70631-001 HYDRAULIC CONTROL VALVE (BREAKDOWN FIG. 2-6)	1
2-1	9	75130-001 203 ORBIT MOTOR (BREAKDOWN FIG. 2-3)	1
2-1	10	75131-001 2000 ORBIT MOTOR (BREAKDOWN FIG. 2-2)	1
2-1	11	108851-001 HOSE 120" BOTH ENDS SOLID	2
2-1	12	108852-001 HOSE 96" BOTH ENDS SOLID	2
2-1	13	108853-001 HOSE 72" BOTH ENDS SWIVEL	1
2-1	14	108854-001 HOSE 114" BOTH ENDS SWIVEL	1
2-1	15	108855-001 HOSE 92" BOTH ENDS SWIVEL	1
2-1	16	108856-001 HOSE 122" BOTH ENDS SWIVEL	1
2-1	17	108857-001 HOSE 135" BOTH ENDS SWIVEL	1
2-1	18	108858-001 HOSE 166" BOTH ENDS SWIVEL	1
2-1	19	108859-001 HOSE 120" BOTH ENDS SWIVEL	1

HYDRAULIC MOTOR COMPONENTS - WINDROWER

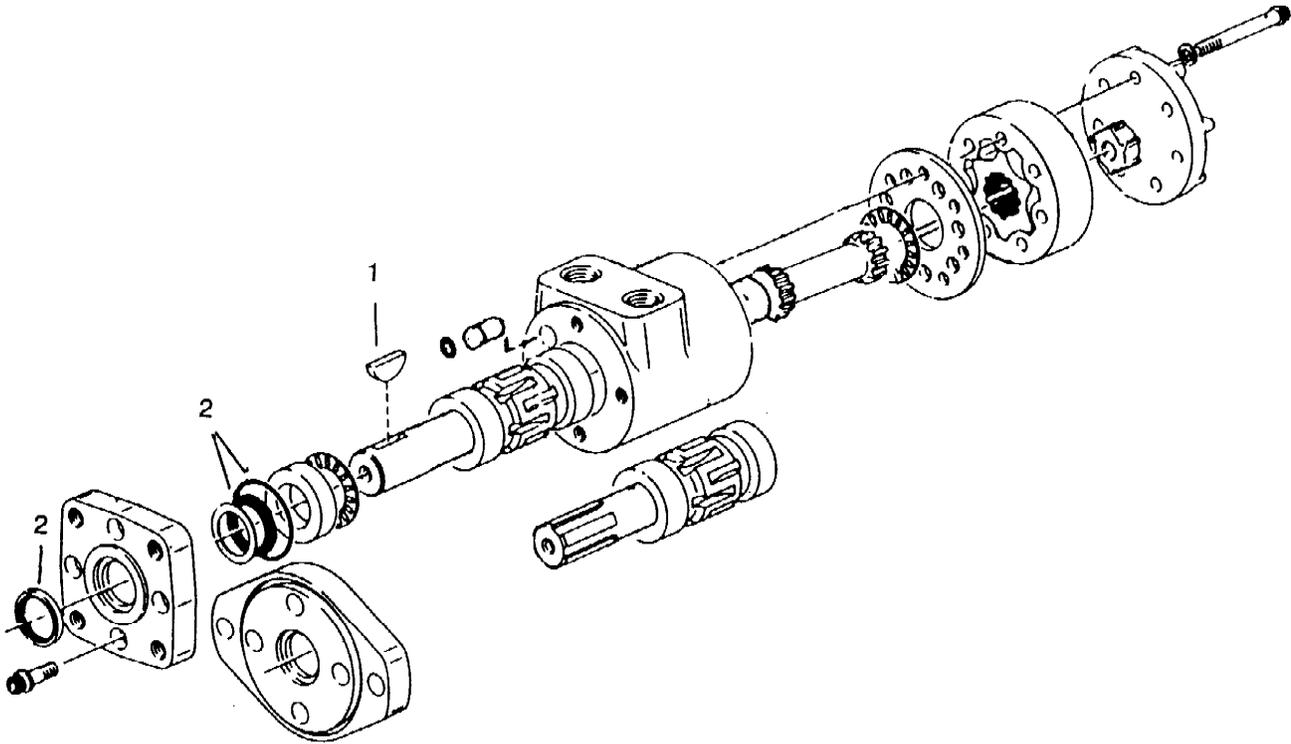
Figure 2-2



<u>REF. NO.</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>	<u>QTY.</u>
2-2 1	75186-001	WOODRUFF KEY	1
2-2 2	65013-001	SEAL KIT	1
	75131-001	2000 ORBIT MOTOR (COMPLETE)	

HYDRAULIC MOTOR COMPONENTS - ROCK KICKER

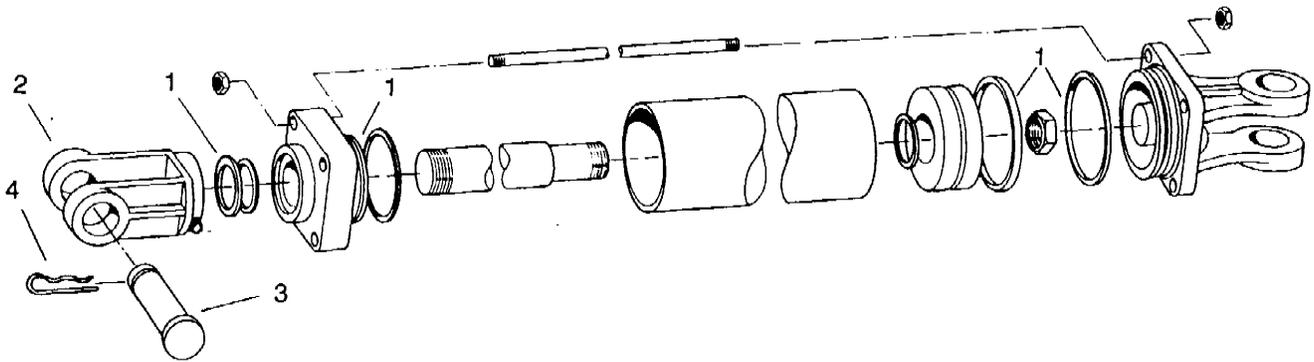
Figure 2-3



<u>REF. NO.</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>	<u>QTY.</u>
2-3 1	75186-001	WOODRUFF KEY	1
2-3 2	65013-001	SEAL KIT	1
	75130-001	203 ORBIT MOTOR (COMPLETE)	

HYDRAULIC CYLINDER COMPONENTS - ROCK WHEEL - 2" X 8"

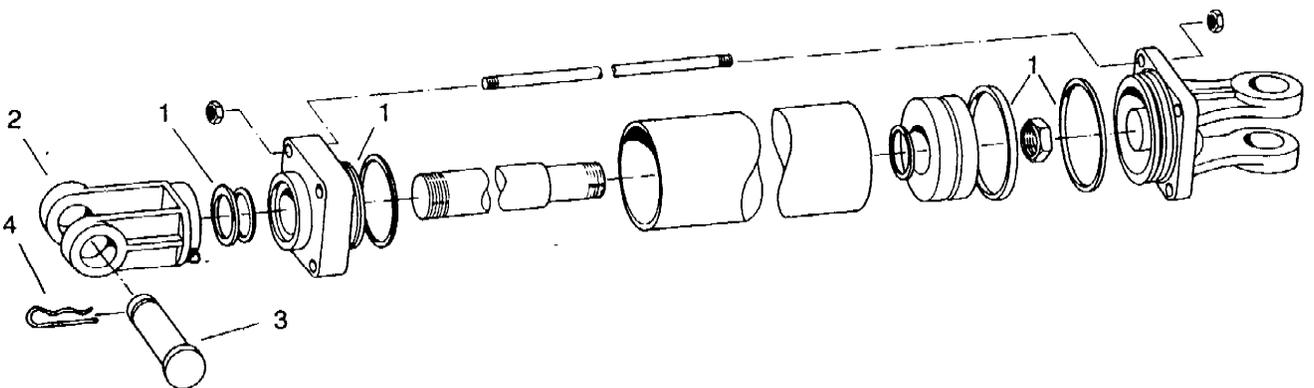
Figure 2-4



<u>REF. NO.</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>	<u>QTY.</u>
2-4	1	75138-001 SEAL KIT	1
2-4	2	75139-001 YOKE	1
2-4	3	69230-001 PIN-CYLINDER	2
2-4	4	75141-001 HAIR PIN	2
	65028-001	CYLINDER-HYDRAULIC 2" X 8" (COMPLETE)	

HYDRAULIC CYLINDER COMPONENTS - BUCKET DUMP - 3" X 24"

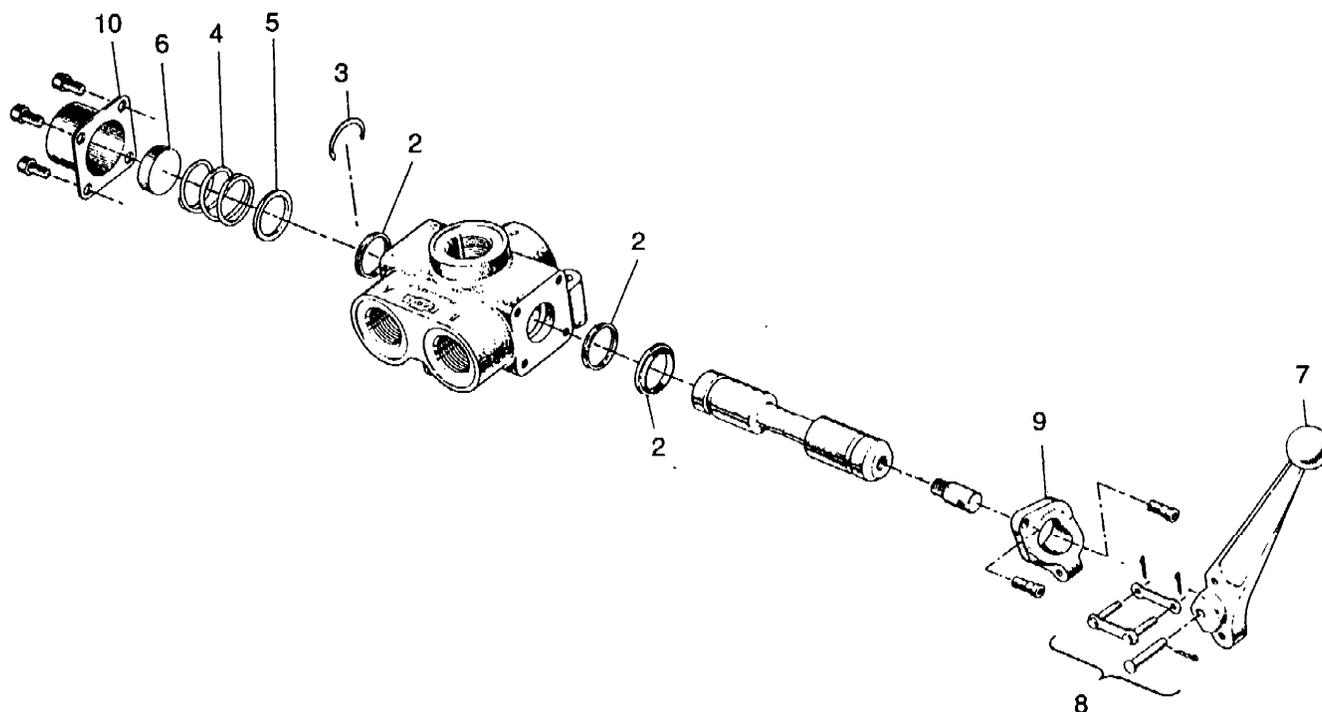
Figure 2-5



<u>REF. NO.</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>	<u>QTY.</u>
2-5	1	65030-001 SEAL	1
2-5	2	75143-001 CYLINDER YOKE	1
2-5	3	69230-001 PIN-CYLINDER	2
2-5	4	75141-001 HAIR PIN	2
	75142-001	CYLINDER-HYDRAULIC 3" X 24" (COMPLETE)	

SELECTOR VALVE ASSEMBLY

Figure 2-6



<u>REF. NO.</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>	<u>QTY.</u>
2-6	1	108880-001 SEAL KIT	1
2-6	2	108881-001 SNAP RING	1
2-6	3	108882-001 SPRING	1
2-6	4	108883-001 WASHER	1
2-6	5	108884-001 FORWARD STOP	1
2-6	6	108885-001 HANDLE	1
2-6	7	108886-001 HANDLE LINK KIT	1
2-6	8	86211-001 BRACKET	1
2-6	9	108887-001 END CAP	1
	70631-001	HYDRAULIC CONTROL VALVE (COMPLETE)	

FIG. NO.	PART NO.	FIG. NO.	PART NO.	FIG. NO.	PART NO.	FIG. NO.	PART NO.				
1-4	60	354-006	1-2	72	2326-940	2-4	1	75138-001	1-2	7	108805-001
1-2	60	354-010	1-2	29	64950-001	2-4	2	75139-001	1-2	8	108806-001
1-4	59	354-010	1-4	34	64951-001	2-4	4	75141-001	1-2	9	108807-001
1-5	22	354-010	1-4	33	64954-001	2-5	4	75141-001	1-2	16	108808-001
1-4	58	354-012	1-4	35	64957-001	2-1	2	75142-001	1-2	17	108809-001
1-4	57	354-014	1-6	21	65010-001	2-5	2	75142-001	1-2	19	108810-001
1-7	9	354-014	2-2	2	65013-001	2-5	2	75143-001	1-2	20	108811-001
1-3	19	354-034	2-3	2	65013-001	1-2	3	75144-001	1-2	22	108812-001
1-4	51	358-012	1-2	18	65015-001	1-5	4	75146-001	1-2	22	108813-001
1-2	52	358-014	1-2	21	65015-001	1-4	40	75147-001	1-2	30	108814-001
1-3	14	358-014	1-2	22	65020-001	1-2	40	75148-001	1-2	31	108815-001
1-4	50	358-014	2-1	1	65028-001	1-2	32	75151-001	1-2	43	108816-001
1-4	49	358-020	2-4	1	65028-001	1-5	14	75151-001	1-5	1	108816-001
1-5	19	358-020	2-5	1	65030-001	1-4	65	75152-001	1-2	45	108817-001
1-2	53	358-024	1-4	43	65034-001	1-2	2	75153-001	1-2	54	108818-001
1-2	51	358-030	1-5	9	65039-001	1-3	12	75153-001	1-2	59	108819-001
1-2	48	366-020	1-5	11	65040-001	1-2	10	75168-001	1-2	67	108820-001
1-5	15	366-020	1-4	11	65041-001	1-2	36	75169-001	1-3	1	108821-001
1-2	63	412-001	1-2	34	65042-001	1-5	12	75169-001	1-3	3	108822-001
1-3	22	412-001	1-2	33	65044-001	1-2	64	75173-001	1-3	4	108823-001
1-4	64	412-001	1-2	56	66944-001	1-3	5	75179-001	1-3	7	108824-001
1-7	12	412-001	1-4	52	66944-001	2-2	1	75186-001	1-3	8	108825-001
1-2	55	421-001	1-5	21	66944-001	2-3	1	75186-001	1-3	9	108826-001
1-3	18	421-001	2-1	6	69219-001	1-2	65	75187-001	1-3	23	108827-001
1-4	56	421-001	2-1	5	69220-001	1-2	66	75188-001	1-4	7	108829-001
1-2	50	428-001	2-4	3	69230-001	1-2	14	75190-001	1-4	10	108830-001
1-4	44	428-001	2-5	3	69230-001	1-4	29	75196-001	1-4	12	108831-001
1-5	18	428-001	1-1	5	70000-170	1-4	36	75197-001	1-4	13	108832-001
1-4	42	432-001	1-3	30	70000-170	1-4	19	75198-001	1-4	14	108833-001
1-2	62	480-007	1-2	42	70615-001	1-2	38	75199-001	1-4	15	108834-001
1-3	21	480-007	2-1	8	70631-001	1-2	39	75200-001	1-4	16	108835-001
1-4	63	480-007	2-6	1	70631-001	1-2	41	75201-001	1-4	26	108836-001
1-7	11	480-007	1-4	4	70793-001	1-5	3	75203-001	1-4	27	108837-001
1-2	58	480-011	1-4	2	75054-001	1-2	13	75204-001	1-4	28	108838-001
1-3	17	480-011	1-2	37	75055-001	1-2	5	75205-001	1-4	30	108839-001
1-4	55	480-011	1-2	24	75056-001	1-3	6	75209-001	1-4	31	108840-001
1-5	17	480-015	1-2	28	75057-001	1-4	1	75211-001	1-4	32	108841-001
1-2	61	485-007	1-6	10	75060-001	1-4	5	75212-001	1-4	37	108842-001
1-3	20	485-007	1-6	23	75061-001	1-4	6	75213-001	1-4	41	108843-001
1-4	62	485-007	1-6	11	75065-001	1-4	7	75214-001	1-5	25	108843-001
1-5	23	485-007	1-6	12	75068-001	1-4	17	75215-001	1-4	46	108844-001
1-7	10	485-007	1-6	13	75069-001	1-4	20	75216-001	1-4	48	108845-001
1-2	57	485-011	1-6	24	75070-001	1-4	22	75217-001	1-4	53	108846-001
1-3	15	485-011	1-6	25	75071-001	1-4	21	75218-001	1-4	61	108847-001
1-4	54	485-011	1-6	14	75075-001	1-4	23	75219-001	1-5	5	108848-001
1-5	20	485-011	1-6	9	75076-001	1-4	24	75220-001	1-5	6	108849-001
1-2	49	485-015	1-6	8	75077-001	1-4	25	75221-001	2-1	4	108850-001
1-4	45	485-015	1-6	7	75078-001	1-4	39	75222-001	2-1	11	108851-001
1-5	16	485-015	1-6	6	75079-001	1-4	66	75223-001	2-1	12	108852-001
1-2	47	485-017	1-6	5	75080-001	1-5	2	75224-001	2-1	13	108853-001
1-2	4	510-011	1-6	4	75081-001	1-4	9	75226-001	2-1	14	108854-001
1-2	11	510-025	1-6	3	75082-001	1-4	8	75227-001	2-1	15	108855-001
1-3	13	510-031	1-6	2	75083-001	1-2	15	75229-001	2-1	16	108856-001
1-5	24	1809-003	1-6	1	75084-001	1-3	2	75231-001	2-1	17	108857-001
1-1	7	2326-004	1-6	15	75085-001	1-2	23	75232-001	2-1	18	108858-001
1-3	29	2326-004	1-6	16	75086-001	1-2	26	75233-001	2-1	19	108859-001
1-1	1	2326-595	1-6	17	75087-001	1-2	25	75234-001	1-7	1	108860-001
1-3	27	2326-595	1-6	18	75088-001	1-2	33	75235-001	1-7	2	108861-001
1-1	2326-626	2326-626	1-6	19	75089-001	1-3	10	75237-001	1-7	3	108863-001
1-3	2326-626	2326-626	1-6	20	75090-001	1-4	3	75239-001	1-7	4	108866-001
1-1	3	2326-813	1-6	22	75091-001	1-2	27	75240-001	1-7	5	108867-001
1-3	28	2326-813	1-2	44	75096-001	1-2	22	78401-001	1-7	6	108876-001
1-1	4	2326-814	2-1	3	75118-001	1-2	35	83650-001	1-7	7	108877-001
1-2	68	2326-814	1-2	12	75121-001	1-1	84530-133	1-7	8	108878-001	
1-1	6	2326-818	1-3	24	75121-001	2-6	8	86211-001	2-6	1	108880-001
1-2	69	2326-818	1-5	7	75121-001	1-5	10	86213-001	2-6	2	108881-001
1-1	8	2326-822	1-4	38	75124-001	1-5	13	92088-001	2-6	3	108882-001
1-3	25	2326-822	1-5	8	75124-001	1-2	46	97299-001	2-6	4	108883-001
1-1	9	2326-902	2-1	7	75125-001	1-3	11	103903-001	2-6	5	108884-001
1-2	71	2326-902	2-1	9	75130-001	1-4	47	103904-001	2-6	6	108885-001
1-1	10	2326-906	2-3	75130-001	1-2	1	108503-001	2-6	7	108886-001	
1-2	70	2326-906	2-1	10	75131-001	1-2	6	108804-001	2-6	9	108887-001
1-1	11	2326-940	2-2	75131-001	1-4	18	108804-001				

