

Degeleman

"BEST IN THE FIELD - - - WHERE IT COUNTS"

HYDRAULIC MOTOR DRIVE OPTION (for SEMI - HI ROCK PICKERS)

INSTRUCTION and PARTS MANUAL (SUPPLEMENT)

142330

AUG 90

farm implements

INTRODUCTION

Congratulations on the purchase of your new Degelman Product. This machine was carefully designed, professionally engineered, tested and manufactured with quality materials and skilled workmanship. It will reward you with superior results and years of dependable service if proper Maintenance, Care and Adjustments are performed.

NOTE: This Manual is a **Supplement** to the Basic Rockpicker Manual.

Carefully read and understand fully the SAFETY and OPERATOR'S Sections contained in both the Basic Rockpicker Manual and this Supplement Manual before operating machine. Obey all Safety Precautions to promote the safe operation and service of implement.



This Safety Alert Symbol identifies important Safety Messages. When you see this symbol, be alert to the possibility of personal injury and carefully read the message that follows.

"Right Hand" and "Left Hand" sides are determined by facing in the direction of forward travel.

This Manual contains both Imperial Units of measure (inches - in./feet - ft.) and SI Metric Units of measure (millimetres - mm/metres - m).

Record for handy reference the machine Model No., Serial No. and Date of Purchase to assist your Dealer in providing you with prompt and efficient service. For your convenience, a space is provided for recording this information.

Model No. _____

Serial No. _____

Date of Purchase _____

If you should require information not covered in this Manual, consult your local Degelman Dealer. He will be glad to answer any questions that may arise regarding the operations of your machine. Inquiries can also be directed to:

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SAFETY

INTRODUCTION

This Safety Alert Symbol identifies important Safety Messages. When you see this symbol, be alert to the possibility of personal injury and carefully read the message that follows.

The Safety of the Operator was one of the prime considerations in the minds of the engineers and technicians when this product was designed. Simple adjustments and safety features were

built into the machine whenever possible, however, ordinary caution must be exercised when operating this and all machinery.

DO NOT allow anyone to operate this machine who has not been properly trained in its safe operation.

OPERATORS RESPONSIBILITY

It is your responsibility to use this machine in a safe and efficient manner to ensure the personal safety of yourself and others. Be sure to read and understand this manual before attempting any operation. Contact your local Dealer if any questions arise.

INTENDED USE of MACHINE

This Rockpicker has been designed for the removal of windrowed or scattered surface rock and debris. **DO NOT** use this product otherwise, such as attempting to pull out deeply buried materials or forcing the machine to clean out large previous rock piles.

OPERATING SAFETY

Before operating the machine be sure no one is standing near.

DO NOT allow anyone to ride on equipment when it is in motion.

Maintain a Safe operating speed to suit field conditions and contours.

DO NOT operate machine on steep side hills.

Before attempting to remove jammed or lodged materials from Grille or Paddles, be sure to **TURN OFF TRACTOR ENGINE**. Remember that Paddles could be under extreme pressure, therefore, **STAY CLEAR** to prevent severe personal injury should they "kick-back" when freed. Carefully use a long Pry Bar (not hands) to dislodge any material.

SAFETY

MAINTENANCE SAFETY

Lower Rockpicker Grille to ground and Turn Off Tractor Engine before attempting any maintenance work.

Always block up Frame when servicing Tires.

Never allow anyone to work under a raised Grille or Hopper Box.

Frequently check and retighten Bolts to specified Torque Values as shown in Maintenance Section.

DO NOT exceed recommended Tire Pressure. Use care and caution when servicing and inflating Tires to prevent personal injury from blow-out.

Before disconnecting Hydraulic Lines be sure to relieve all pressure to system.

When searching for Hydraulic Leaks use a piece of cardboard. **DO NOT** use your hands. Escaping fluid under pressure can have sufficient force to penetrate the skin which could cause serious infection or reaction. If injured by escaping fluid, seek Medical Attention at Once.

Be sure to securely replace any Shields or Guards which have been removed for maintenance purposes. Replace any damaged or lost Shields and Guards.

Check that Safety Decals are legible and clean. Promptly replace any worn or damaged Decals.

TRANSPORT SAFETY

Before transporting machine on roads or highway, check the following: Tire Pressure, Loose Wheel Bolts, Tire Cuts and Wear.

Be sure to install a safety type Draw Bar Pin.

If machine is being towed by a truck or vehicle other than a farm tractor install Safety Chains in addition to Hitch Pin.

Be sure to engage the Transport Arm into position and swing Hitch Pole fully inward.

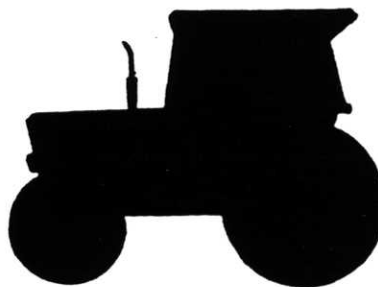
DO NOT exceed Trailing Speed of 32 km/h (20 mph) or less depending on road conditions.

Check local Government Regulations regarding the use of Accessory Lights and Safety Devices to provide adequate warning to operators of other vehicles.

PREPARATION

TRACTOR REQUIREMENTS

To effectively operate the Rockpicker Reel under load utilizing the Hydraulic Motor Kit, the Tractor Hydraulic System must be capable of developing and delivering a flow of hydraulic fluid of at least 10 G.P.M. (U.S.) at a minimum of 1500 PSI pressure.



PREPARING the TRACTOR

If the Tractor Hydraulic System has flow adjusting devices, make sure to set them to maximum operating efficiency. It would be advisable to consult your Tractor's Owner Manual.

Connect the Hydraulic Motor Feeding Hoses to the Tractor Rear Outlets, so that the Tractor Hydraulic Control Lever may be held in a detent position, when the Rockpicker Reel is rotating.

Check the Tractor Hydraulic System fluid level right after the Hydraulic Motor has operated for a few minutes and add fluid if required.

OPERATIONS and ADJUSTMENTS

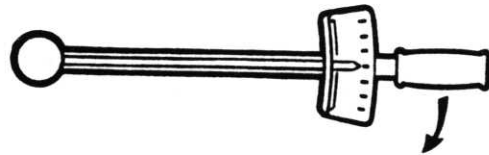
INTRODUCTION

DO NOT allow anyone to operate this machine who has not been properly instructed in its safe operation.



WARNING: DO NOT use Rock-picker for pulling out deeply buried rock or material. Be careful not to overload the Hopper Box when operating on rolling or steep side hills.

NOTE: On new machine, after the first 2-3 hours of operation, check and retorque Bolts to values given in the Maintenance Section.



PRINCIPLE of OPERATION

Hydraulic power is transmitted from Tractor Pump through the Hydraulic Input Hose into an Adjustable Flow Control Valve then into a Safety Cross Over Relief Valve and finally into the Hydraulic Motor which converts hydraulic motion into rotary motion to produce the desired rotation speed of the picker reel.

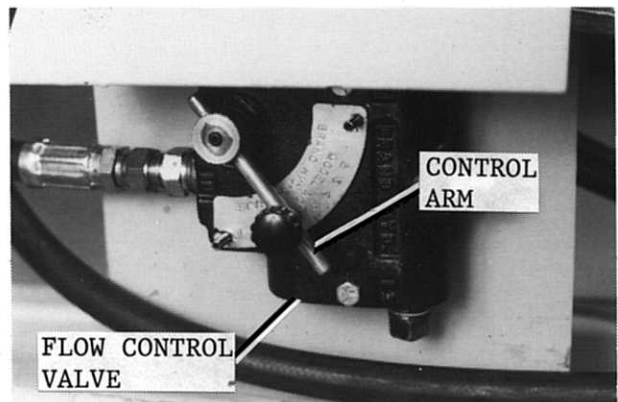
Adjust the speed of the Picker Reel by rotating the Control Arm until the desired Reel speed is achieved.



WARNING: STAY CLEAR of rotating Reel when performing this adjustment.



FLOW CONTROL VALVE

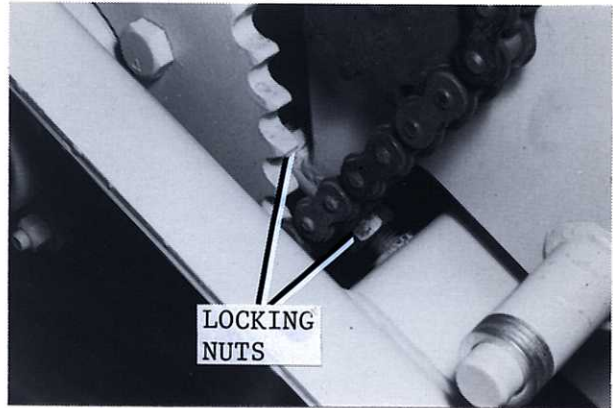


OPERATIONS and ADJUSTMENTS

CHAIN TENSION

Check Chain Tension weekly. There should be approximately 1/2 - 3/4 in. (13 - 19 mm) of slack in the Chain.

To adjust, loosen both Nuts on Threaded Bolt and turn the Bolt until the correct tension is achieved. Secure this setting by retightening the Locking Nuts.



WARNING: Replace Safety Shield. **DO NOT** operate machine without Shield in place.

DISLODGING ROCK or DEBRIS

Dislodged rock or debris trapped in the Grille can usually be removed by bringing the Reel to a full stop and then reversing the direction of rotation.



WARNING: Be sure no one is standing near machine while performing this operation.



WARNING: Before attempting to remove severely jammed or lodged materials from Grille or Paddles, be sure to **Turn Off Tractor Engine**. Remember that Paddles could be under extreme pressure, therefore, **STAY CLEAR** to prevent severe personal injury should they "kick-back" when freed. Carefully use a long Pry Bar (not hands) to dislodge any materials.

ASSEMBLY



INTRODUCTION

Read all ASSEMBLY instructions and carefully observe illustrations.



CAUTION: Use care when handling components to prevent personal injury.

Tighten Bolts to torque values shown at the various steps indicated.

Bolt Dia. (in.)	Bolt Torques (ft. lbs.)			
	Grade 5 		Grade 8 	
	UNC	UNF	UNC	UNF
5/16	13	14	18	20
3/8	23	25	35	38
1/2	55	65	80	90
9/16	80	90	110	130
5/8	110	130	170	180
3/4	200	220	280	320
1	480	530	680	740

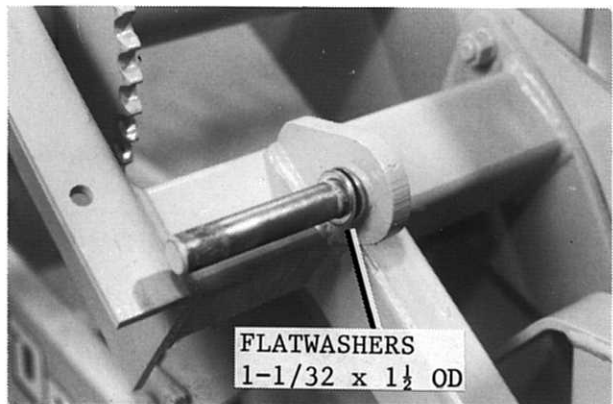
*Torques are for PLATED or LUBRICATED threads.

1. Remove the Chain Tightener Unit if Hydraulic Motor Kit is to be installed on a machine which was previously Ground or PTO driven.



2. Slip three or four of the Flatwashers shown onto the Shaft as shown.

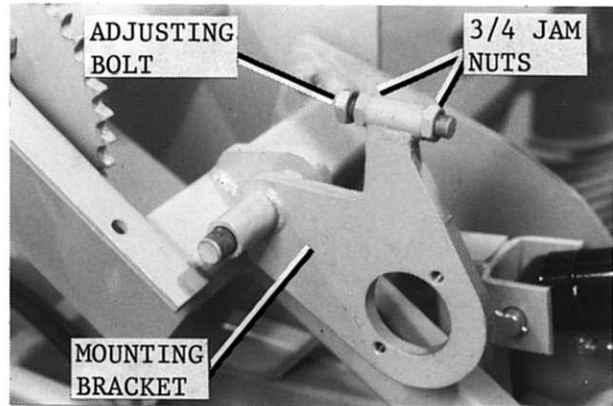
NOTE: At a later step the exact number of Flatwashers will be determined as illustrated.



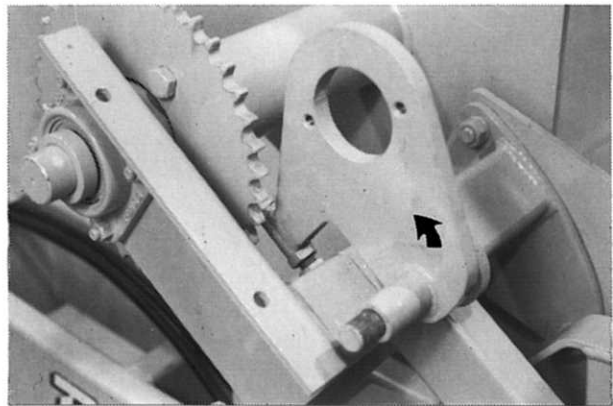
ASSEMBLY

- Slide the Hydraulic Motor Mounting Bracket onto Shaft.

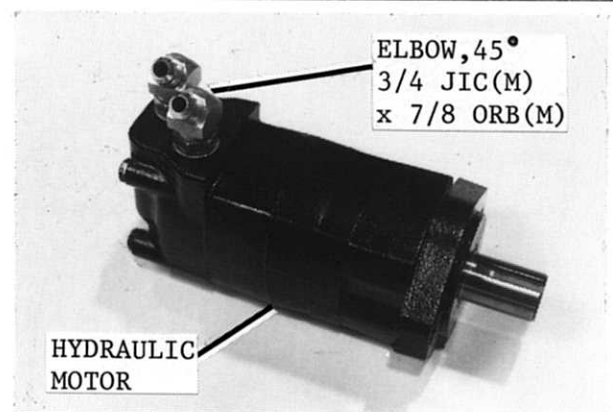
Install the Adjusting Bolt and both Jam Nuts to Mounting Bracket as shown.



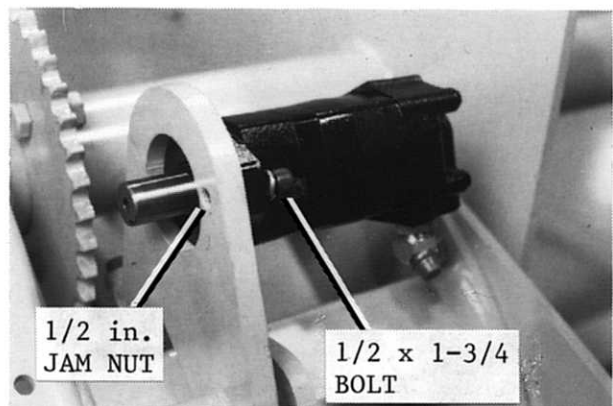
Flip the Mounting Bracket forward.



- Install both of the 45° Elbow Fittings to the Hydraulic Motor.

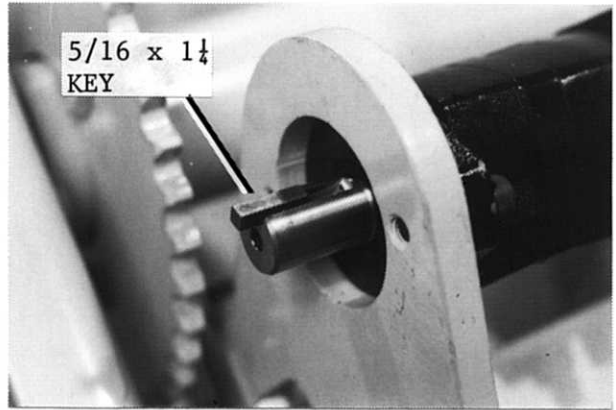


- Mount the Hydraulic Motor to the Mounting Bracket using the hardware shown.

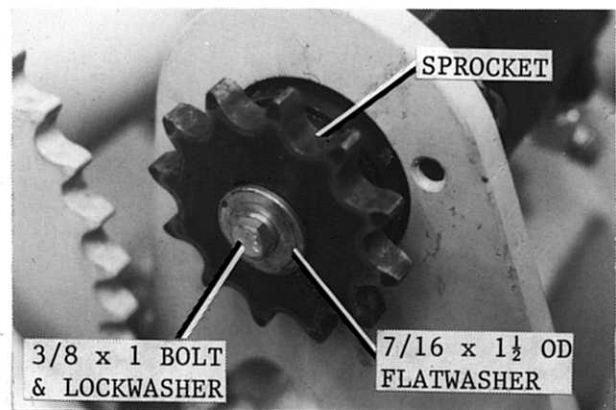


ASSEMBLY

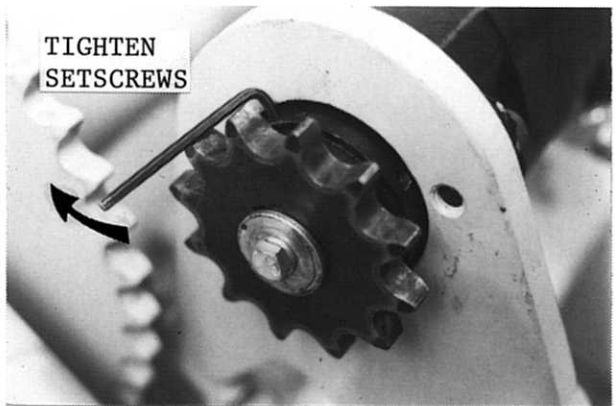
6. Place Key into Shaft Keyway as shown.



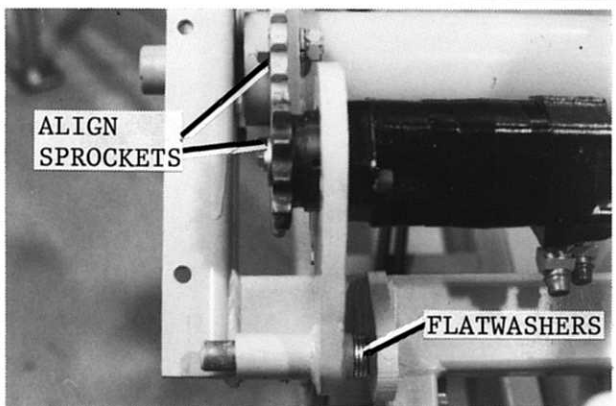
7. Mount the Sprocket to Shaft and secure with the Bolt, Lockwasher and Flatwasher as shown.



Tighten Setscrews with an allen wrench.

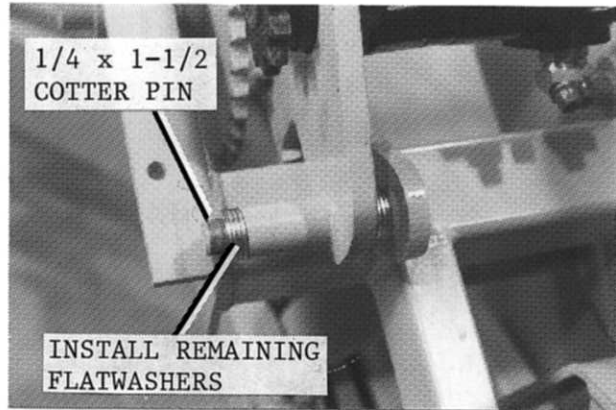


8. Check and ensure the alignment of the Reel and Motor Sprocket by either adding or subtracting the Flatwashers previously installed.

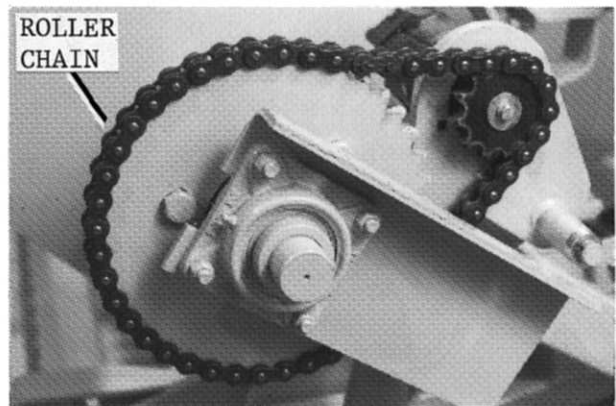


ASSEMBLY

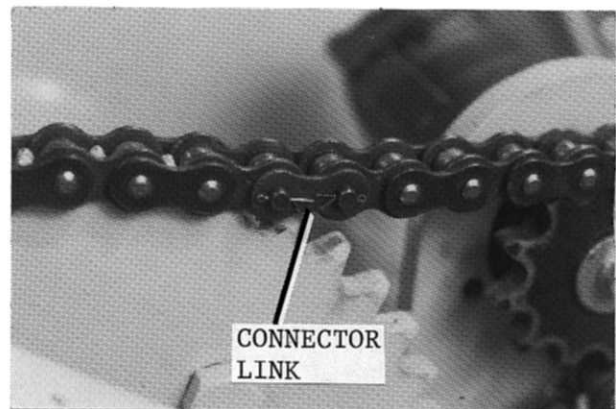
9. Locate the remaining Flatwashers on the opposite side of Shaft.



10. Install the Roller Chain around the Sprockets and join ends with the Connector Link Kit.

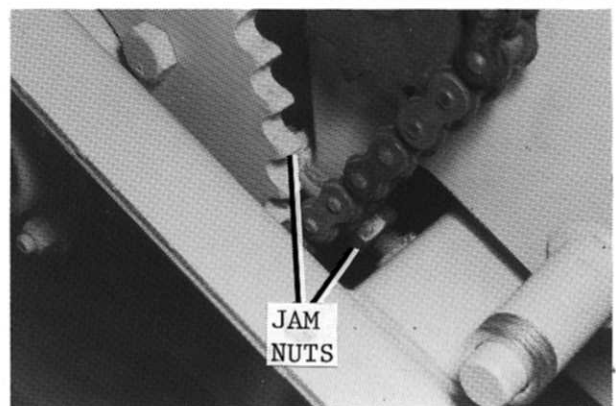


NOTE: The Offset Link (1/2 link)
is included but should
not be required.



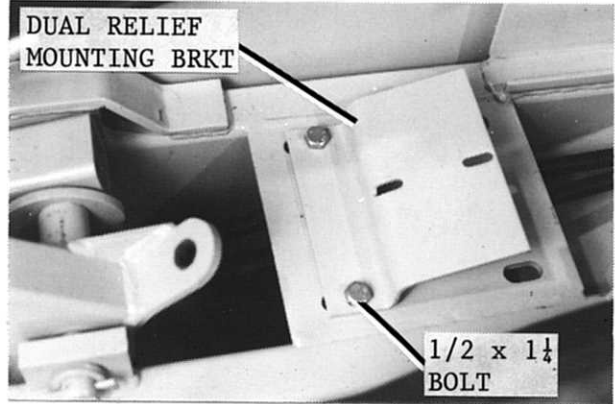
11. Adjust the Chain Tension by loosening the Adjusting Bolt Jam Nuts and turn the Bolt either in or out to allow approximately a 1/2 - 3/4 in. (13 - 19 mm) of chain slack.

Secure this setting by retightening
the Jam Nuts.



ASSEMBLY

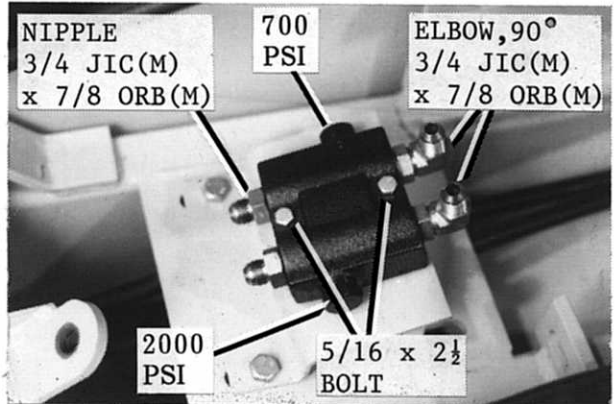
12. Install the Dual Relief Mounting Bracket using the two Bolts, Flatwashers, Lockwashers and Nuts shown.



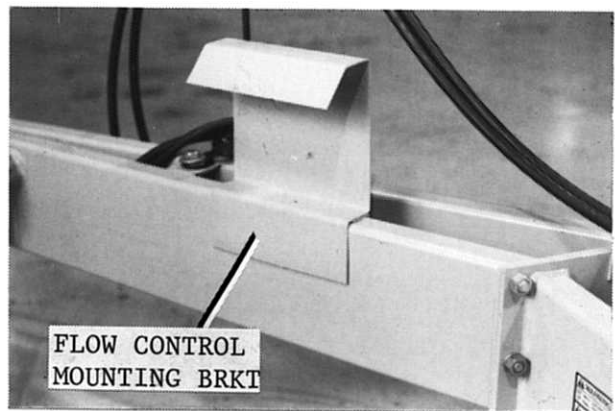
13. Mount the Dual Relief Valve to Mounting Bracket using the two Bolts, Lockwashers and Nuts shown.

Install the Hydraulic Fittings as shown.

NOTE: Be sure to position this unit with the stamped cartridges in the direction indicated.

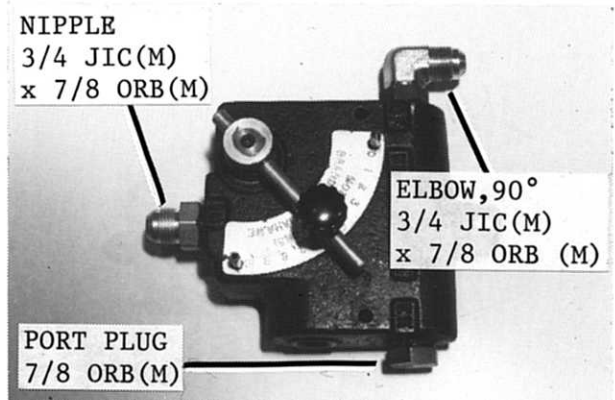


14. Position the Flow Control Mounting Bracket over the Hitch Pole as shown.



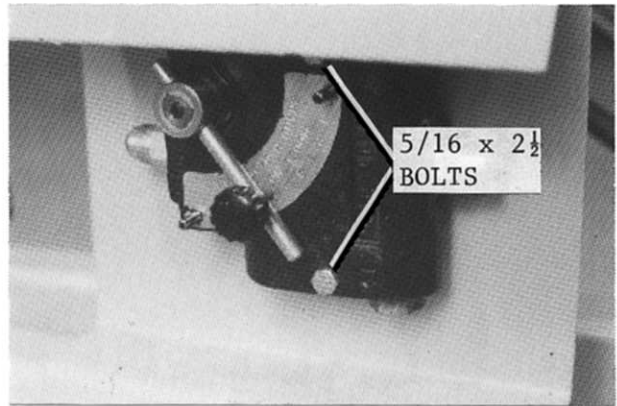
15. Install the Hydraulic Fittings shown, into the Flow Control Valve.

NOTE: If the Tractor to be used has an **Open Centre Hydraulic System** refer to the Optional Kit #226557 for special fittings and instructions.

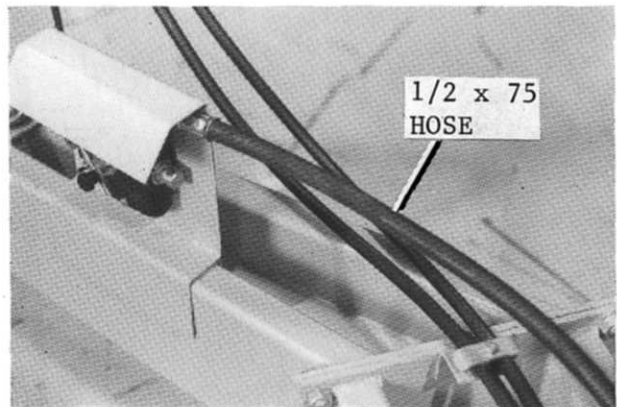


ASSEMBLY

16. Mount the Flow Control Valve to Mounting Bracket using the two Bolts, Lockwashers and Nuts shown.



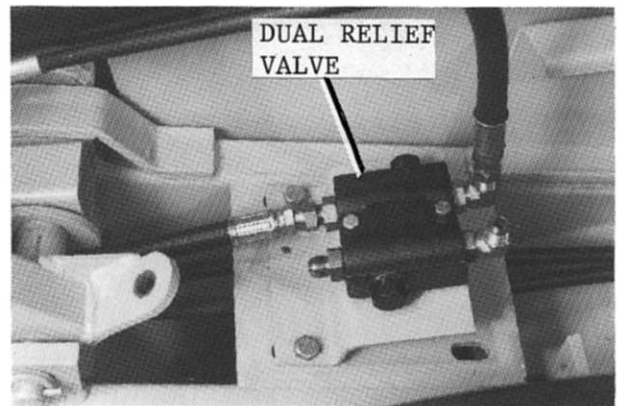
17. Attach the Hose shown to the Elbow Fitting on the Flow Control Valve.



Route the Hose along existing hose path.

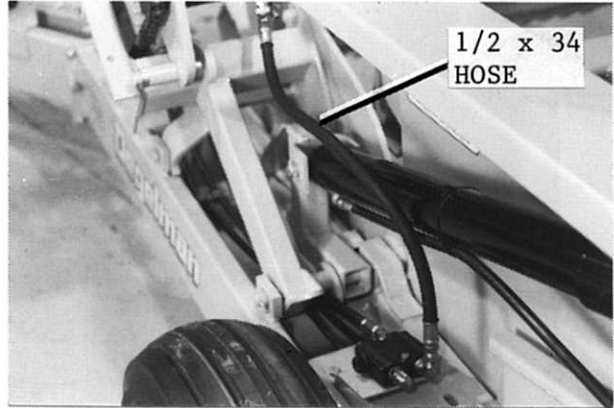


Connect Hose to the **Inner** Fitting of the Dual Relief Valve.

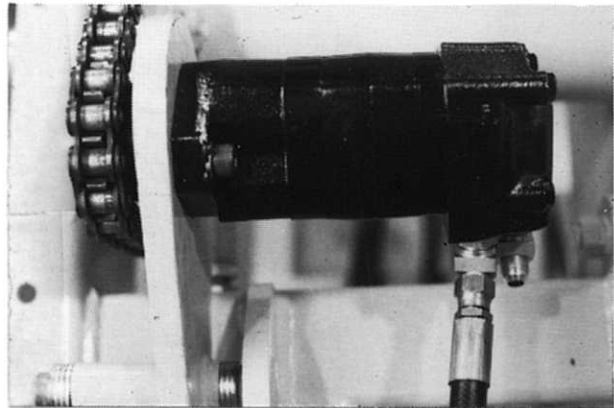


ASSEMBLY

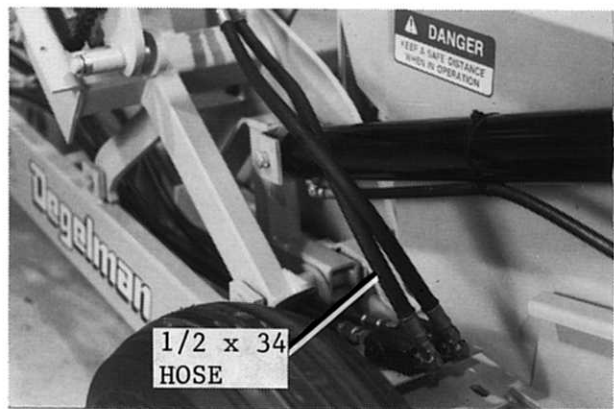
18. Attach the Hose shown to the **Inner** Elbow Fitting on the Dual Relief Valve.



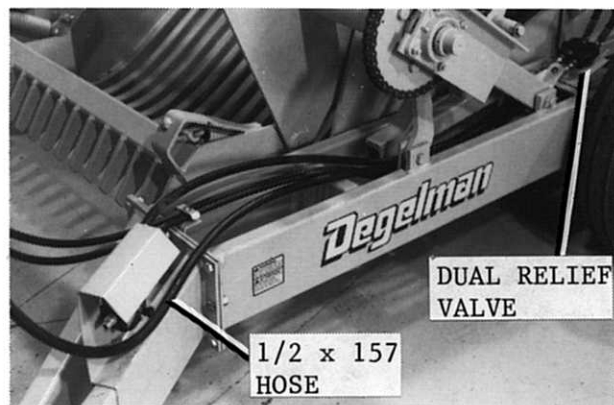
Connect this Hose to the **Inboard** Elbow Fitting on the Hydraulic Motor.



19. Install the Hose shown to the remaining Elbow Fitting and attach the opposite end to the remaining Elbow Fitting on the Hydraulic Motor.

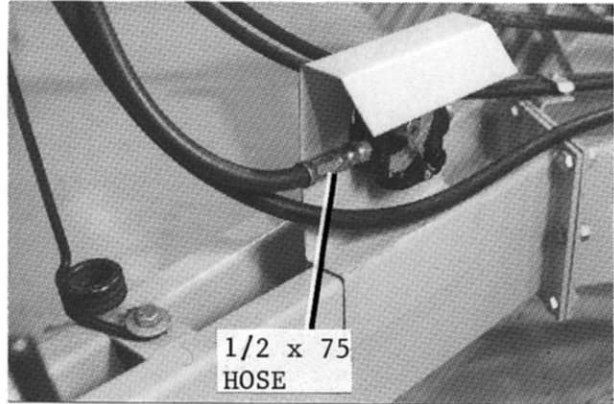


20. Connect the Hose shown to the remaining Fitting on the Dual Relief Valve and route this Hose towards the front of the machine as shown.

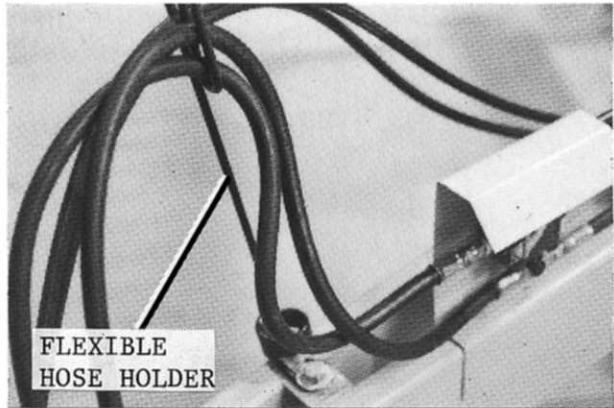


ASSEMBLY

21. Install the Hose shown to the remaining Fitting on the Flow Control Valve.

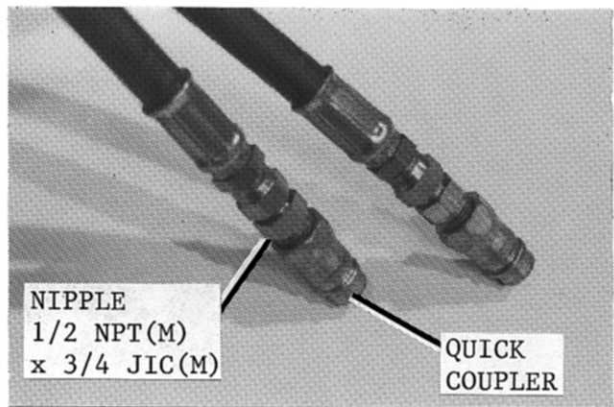


22. Push the Hoses into the Flexible Hose Holder.

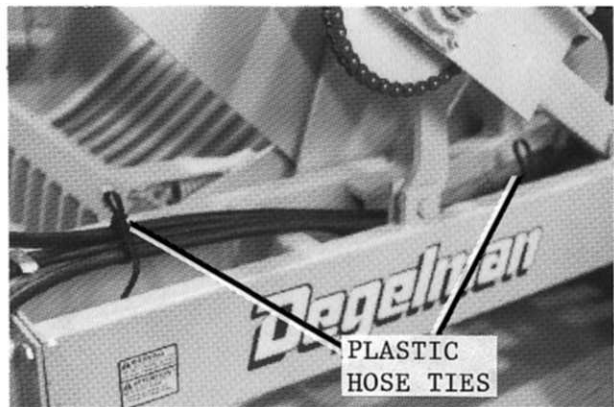


23. Install the Hydraulic Fittings shown to the ends of both Hoses.

NOTE: The Quick Coupler is shown but not supplied by manufacturer.



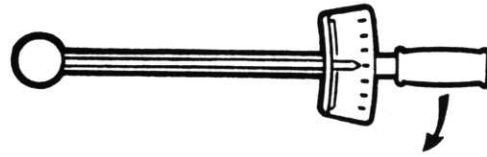
24. Secure the Hoses to existing Hoses as required using the Plastic Hose Ties supplied.



ASSEMBLY

25. Check and tighten all Hydraulic Connections.

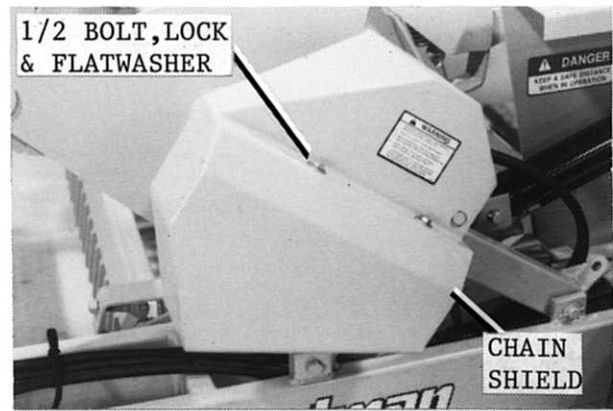
Tighten Bolted Connections to torque values shown on the First Page of the Assembly Section.



26. Mount the Chain Shield to the Rockpicker Yoke using the two Bolts, Lockwashers, Flatwashers and Nuts shown.



WARNING: DO NOT operate this machine without the Shield in place.



27. Read and understand the Safety and Operations Sections of the Basic Rockpicker Manual and this Supplement Manual before operating the machine.



PARTS

When ordering Replacement Parts be sure to include the machine MODEL NUMBER and SERIAL NUMBER along with the PART NUMBER, DESCRIPTION and QUANTITY of components required.

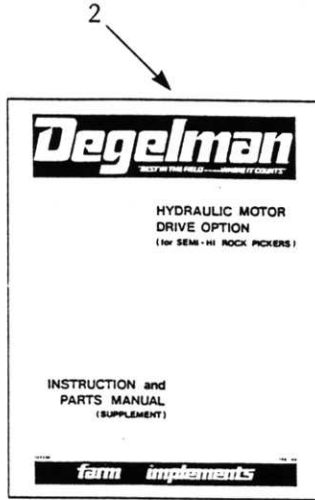
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DECALS and PUBLICATIONS



1



2



3

ITEM	PART No.	DESCRIPTION	QTY.
1	142014	Decal, WARNING - "Read and ..."	1
2	142330	Manual - Hydraulic Motor Drive Option - Semi-Hi	1
3	142021	Manual - Rockpicker - Semi-Hi	1
-	142331	Manual - Instruction Sheet - Open Centre Hydraulics	1