# **WOODS**

# 111874 LOADER MOUNTING KIT

for LU126, LU132, 1020, 1027 Loaders

on New Holland<sup>®</sup> Tractors TN55, TN60A,TN65 TN70, TN70A, TN75, TN75A

and Case IH<sup>®</sup> Tractors: JX1060C, JX1070C, JX1075C

includes Hose Kits 58025, 46945, 1010460 1023577, 1023583, 1023584

MAN0041





#### TO THE DEALER:

Assembly and proper installation of this product is the responsibility of the Woods® dealer. Read manual instructions and safety rules. Make sure all items on the Dealer's Pre-Delivery and Delivery Check Lists in the Loader Operator's Manual are completed before releasing equipment to the owner.

#### TO THE OWNER:

Read this manual and Loader Operator's Manual before operating your Woods equipment. The information presented will prepare you to do a better and safer job. Keep this manual handy for ready reference. Require all operators to read this manual carefully and become acquainted with all adjustment and operating procedures before attempting to operate. Replacement manuals can be obtained from your dealer. To locate your nearest dealer, check the Dealer Locator at www.WoodsEquipment.com, or in the United States and Canada call 1-800-319-6637.

The equipment you have purchased has been carefully engineered and manufactured to provide dependable and satisfactory use. Like all mechanical products, it will require cleaning and upkeep. Lubricate the unit as specified. Observe all safety information in this manual and safety decals on the equipment.

For service, your authorized Woods dealer has trained mechanics, genuine Woods service parts, and the necessary tools and equipment to handle all your needs.

Use only genuine Woods service parts. Substitute parts will void the warranty and may not meet standards required for safe and satisfactory operation. Record the model number of your equipment in the space provided.

Model:	Date of Purchase:
--------	-------------------

Provide this information to your dealer to obtain correct repair parts.

Throughout this manual, the term **NOTICE** is used to indicate that failure to observe can cause damage to equipment. The terms **CAUTION**, **WARNING**, and **DANGER** are used in conjunction with the Safety-Alert Symbol (a triangle with an exclamation mark) to indicate the degree of hazard for items of personal safety.



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



Indicates a hazardous situation which, if not avoided, will result in death or serious injury.



Indicates a hazardous situation which, if not avoided, could result in death or serious injury.



Indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.

# or **NOTICE**

Is used to address practices not related to personal injury.

NOTE Indicates helpful information.

- **ALITEC**™
  - BML ®
- CENTRAL FABRICATORS®
  - GANNON®
    - GILL®
  - **WAIN-ROY**®
    - **WOODS**®



# **SAFETY RULES** ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED!



## **ILEA EL INSTRUCTIVO!**

Si no lee Ingles, pida ayuda a alguien que si lo lea para que le traduzca las medidas de seguridad.

Safety is a primary concern in the design and manufacture of our products. Unfortunately, our efforts to provide safe equipment can be wiped out by an operator's single careless act.

In addition to the design and configuration of equipment, hazard control and accident prevention are dependent upon the awareness, concern, judgement, and proper training of personnel involved in the operation, transport, maintenance, and storage of equipment.

It has been said, "The best safety device is an informed, careful operator." We ask you to be that kind of operator.

#### **INSTALLATION**

- This Loader Mounting Kit is to be used only for the loaders and tractors specified in this manual. Any other use or modification of this mounting kit may result in serious injury or death.
- Hydraulics must be connected as instructed in this manual. Do not substitute parts, modify, or connect in any other way.
- After connecting hoses, check that all control lever positions function as instructed in the Operator's Manual. Do not put into service until control lever and equipment movements are correct.
- Safety instructions are important! Read all attachment and power unit manuals; follow all safety rules and safety decal information. (Replacement manuals and safety decals are available from your dealer. To locate your nearest dealer, check the Dealer Locator at www.WoodsEquipment.com, or in the United States and Canada call 1-800-319-6637.) Failure to follow instructions or safety rules can result in serious injury or death.
- Keep hands and body away from pressurized lines. Use paper or cardboard, not hands or other body parts to check for leaks. Wear safety goggles. Hydraulic fluid under pressure can easily penetrate skin and will cause serious injury or death.
- Make sure that all operating and service personnel know that if hydraulic fluid penetrates skin, it

must be surgically removed as soon as possible by a doctor familiar with this form of injury or gangrene, serious injury, or death will result. CON-TACT A PHYSICIAN IMMEDIATELY IF FLUID ENTERS SKIN OR EYES. DO NOT DELAY.

- Check that all hardware is properly installed. Always tighten to torque chart specifications unless instructed otherwise in this manual.
- Air in hydraulic systems can cause erratic operation and allows loads or equipment components to drop unexpectedly. When connecting equipment or hoses or performing any hydraulic maintenance, purge any air in hydraulic system by operating all hydraulic functions several times. Do this before putting into service or allowing anyone to approach the equipment.
- Protective hose sleeves must cover all hydraulic hoses within 20 inches of the operator and be secured onto metal hose fittings. Replace hoses or sleeves if damaged or if protective sleeve cannot be properly positioned or secured.
- Make sure all hydraulic hoses, fittings, and valves are in good condition and not leaking before starting power unit or using equipment. Check and route hoses carefully to prevent damage. Hoses must not be twisted, bent sharply, kinked, frayed, pinched, or come into contact with any moving parts. Operate moveable components through full operational range to check clearances. Replace any damaged hoses immediately.
- Always wear relatively tight and belted clothing to avoid getting caught in moving parts. Wear sturdy, rough-soled work shoes and protective equipment for eyes, hair, hands, hearing, and head; and respirator or filter mask where appropriate.
- Do not modify or alter or permit anyone else to modify or alter the equipment or any of its components in any way.
- Do not allow bystanders in the area when operating, attaching, removing, assembling, or servicing equipment.
- Use a suitable lifting device of sufficient capacity. Use adequate personnel to handle heavy components.
- Keep all persons away from operator control area while performing adjustments, service, or maintenance.

Safety 3

# LOADER MOUNT INSTALLATION

# **WARNING**

- Only use 111874 Loader Mounting Kit for mounting Woods LU126, LU132, 1020, 1027 loaders on New Holland<sup>®</sup> TN55, TN60A TN65, TN70, TN70A, TN75, TN75A tractors and Case IH<sup>®</sup> JX1060C, JX1070C, and JX1075C tractors. Any other use or modification of this mounting kit may result in serious injury or death.
- Safety instructions are important! Read all attachment and power unit manuals; follow all safety rules and safety decal information. (Replacement manuals and safety decals are available from your dealer. To locate your nearest dealer, check the Dealer Locator at www.WoodsEquipment.com, or in the United States and Canada call 1-800-319-6637.) Failure to follow instructions or safety rules can result in serious injury or death.
- Do not modify or alter or permit anyone else to modify or alter the equipment or any of its components in any way.

# **A** CAUTION

- Always wear relatively tight and belted clothing to avoid getting caught in moving parts. Wear sturdy, rough-soled work shoes and protective equipment for eyes, hair, hands, hearing, and head; and respirator or filter mask where appropriate.
- If you do not understand any part of this manual and need assistance, see your dealer.

#### **NOTICE**

■ This equipment must be assembled and installed on the customer's tractor by the Woods dealer. Dealer must thoroughly inspect equipment and complete each item on the PRE-DELIVERY CHECK LIST, DELIVERY CHECK LIST, and PROD-UCT REGISTRATION from the loader manual before equipment is released to the customer.

#### **Tractor Preparation**

For installing this mounting kit, references to right, left, forward, and rearward directions are determined from the operator's position in the tractor seat.

- 1. Remove the tractor front weights and front fenders, if equipped.
- **2.** Rotate the exhaust pipe opening to face away from the left side of the tractor.

**NOTE:** On TNA models the tip of the exhaust pipe will have to be removed and a weather cap installed. See page 6 for installation instructions.

Set the tractor wheels to the manufacturer's widest recommended spacing. Refer to the tractor operator's manual.

#### **NOTICE**

■ Clean threaded holes in the tractor chassis thoroughly, using a tap of the proper size. Paint, rust, or debris in the threads may not permit cap screws to be installed and tightened correctly.

As a valued customer, Woods appreciates your comments. Once loader mount and hydraulic hoses have been installed, please take a few minutes to complete the Loader Mount Evaluation sheet that was supplied with this mount. Your comments will help us continue to bring you quality products.

#### **Install Right and Left Rear Mounts**

- 1. Attach right rear mount (1) to tractor.
- 2. Secure using one cap screw (7) and hardened flat washer (9) in the top hole.
- **3.** Secure to bottom holes using two cap screws (8) and hardened flat washers (9).
- **4.** Secure to forward holes using two cap screws (5) and hardened flat washers (9).
- **5.** Repeat steps to install left rear mount (2). See Figure 2.
- **6.** Tighten all hardware to specifications listed on page 6.
  - 1. 1000468 Right rear mount
  - 2. 1000469 Left rear mount
  - 5. 307553 M20 x 2.5P x 50 mm HHCS
  - 7. 1001377 M20 x 2.5P x 40 mm HHCS
  - 8. 21413 M20 x 2.5P x 70 mm HHCS
  - 9. 57798 3/4 Hardened flat washer.

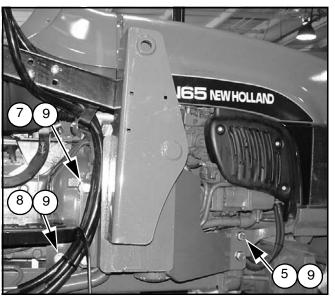


Figure 1. Right Rear Mount Installed

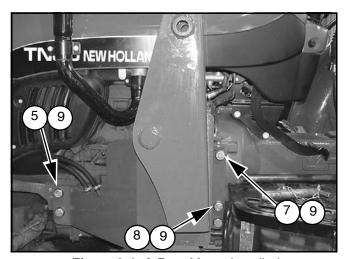


Figure 2. Left Rear Mount Installed

## **Install Grill Guard (Optional)**

- 1. Install grill guard (4) to front of tractor chassis, using four cap screws (5) and lock washers (6) as shown.
- **2.** Torque hardware to specifications given on page 6.
  - 4. 40449 Grill guard
  - 5. 307553 M20 x 2.5P x 50 mm HHCS
  - 21531 M20 Lock washer

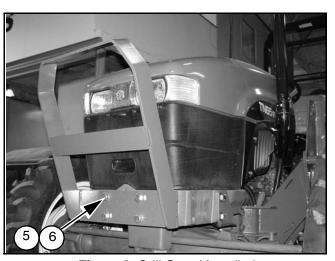


Figure 3. Grill Guard Installed

#### **Torque Hardware**

Torque all hardware to specifications listed below.

#### **NOTICE**

■ Check torque value of mount hardware after 10 hours of operation and again after every 50 hours of operation.

TORQUE SPECIFICATIONS							
Ref.	Cap Screw	Qty	Wrench Size	Required Torque			
7	M20 x 2.5P x 40 mm	2	30 mm	244 lbs-ft. (330 N-m)			
5	M20 x 2.5P x 50 mm	8	30 mm	244 lbs-ft. (330 N-m)			
8	M20 x 2.5P x 70 mm	4	30 mm	244 lbs-ft. (330 N-m)			

#### **Install Weather Cap on Exhaust Pipe**

**NOTE:** After the hydraulics and loader are install on the tractor, check the clearance between the top of the exhaust pipe and the loader boom when the loader is raised. If there is interference, a weather cap will need to be installed.

- **1.** Remove exhaust pipe from the tractor. Save hardware for later use.
- **2.** Remove approximately 6-inches from the top of the exhaust pipe.
- 3. Attach exhaust pipe to the tractor. Make sure that the support flange on the exhaust pipe is between the tractor and the support bracket as shown in page 6. Secure using hardware previously removed.
- 4. Attach weather cap to the top of the exhaust pipe with supplied hardware. Position cap hinge to the rear. See Figure 5. Weather cap is included in the loader mount kit.

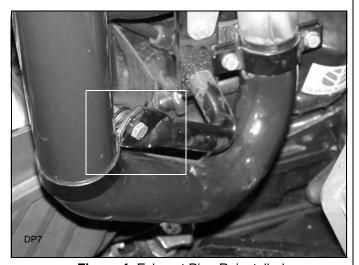


Figure 4. Exhaust Pipe Reinstalled

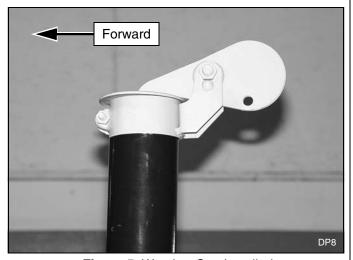


Figure 5. Weather Cap Installed

# HOSE KIT INSTALLATION

# **M** WARNING

- Keep hands and body away from pressurized lines. Use paper or cardboard, not hands or other body parts to check for leaks. Wear safety goggles. Hydraulic fluid under pressure can easily penetrate skin and will cause serious injury or death.
- Make sure that all operating and service personnel know that if hydraulic fluid penetrates skin, it must be surgically removed as soon as possible by a doctor familiar with this form of injury or gangrene, serious injury, or death will result. CONTACT A PHYSICIAN IMMEDIATELY IF FLUID ENTERS SKIN OR EYES. DO NOT DELAY.
- Air in hydraulic systems can cause erratic operation and allows loads or equipment components to drop unexpectedly. When connecting equipment or hoses or performing any hydraulic maintenance, purge any air in hydraulic system by operating all hydraulic functions several times. Do this before putting into service or allowing anyone to approach the equipment.

# **WARNING**

- Protective hose sleeves must cover all hydraulic hoses within 20 inches of the operator and be secured onto metal hose fittings. Replace hoses or sleeves if damaged or if protective sleeve cannot be properly positioned or secured.
- Make sure all hydraulic hoses, fittings, and valves are in good condition and not leaking before starting power unit or using equipment. Check and route hoses carefully to prevent damage. Hoses must not be twisted, bent sharply, kinked, frayed, pinched, or come into contact with any moving parts. Operate moveable components through full operational range to check clearances. Replace any damaged hoses immediately.

58025 Hose Kit InstallationPage 7
46945 Hose Kit Installation Page 1
1010460 Hose Kit Installation Page 16
1023577 Hose Kit Installation Page 19
1023584 Hose Kit InstallationPage 22
1023583 Hose Kit Installation Page 24

# **58025 HOSE KIT**

#### **General Description**

These set up instructions are for operating the 1020, 1027 loader using the tractor hydraulic remote control levers. To use this hydraulic connection the tractor must be equipped with either two hydraulic levers or a joystick control and four tractor hydraulic couplers as shown (Figure 5).

Hydraulic quick couplers for connection to tractor are NOT INCLUDED with hose kits, but are available as service parts.

**NOTE:** After the hydraulics and loader are installed on the tractor, check the clearance between the top of the exhaust pipe and the loader boom when the loader is raised. If there is interference, a weather cap will need to be installed. See Page 6 for installation instructions.

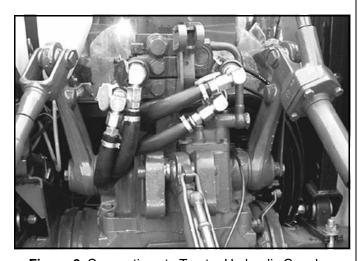


Figure 6. Connections to Tractor Hydraulic Couplers (Typical)

#### **Assemble and Route Hoses**

- 1. Attach a 90-degree elbow (2) and male quick coupler (3) to each loader supply hose (1).
- **2.** Connect loader supply hoses to loader feedlines as shown in Figure 7.
- Route hydraulic hoses along loader mount, under the right side of operator's platform, and over the rear axle. See Figure 8.

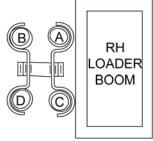
**NOTE:** Hoses must be routed so that they are not pinched, bent sharply, or chafed during operation. Hoses must not interfere with any tractor control operation or contact any moving parts.

- 1. 53670 Hose, 150" x 3/4 JICM x 3/4 JICM
- 2. 313053 Elbow, 3/4 JICF x 1/2 NPTM 90°
- 3. ----- Quick coupler, Male (not supplied)

1020, 1027

A - BUCKET CYL. BASE END (DUMP) - RED

- B BUCKET CYL. ROD END (ROLLBACK) BLUE
- C BOOM CYL. ROD END (DOWN) YELLOW
- D BOOM CYL. BASE END (UP) GREEN



LOADER FEEDLINES

Figure 7. Loader Feedline Connection

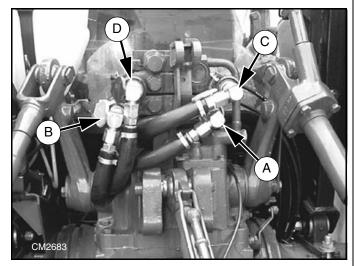


Figure 8. Hose Routing (Typical Installation)

#### 58025 Hose Kit

#### **Connect Hoses to Tractor**

**1.** Connect hoses to the tractor hydraulic couplers as shown in Figure 9.



**Figure 9**. Hose Connection to Tractor Hydraulic Couplers (Typical)

#### **Install Hose Hangers**

1. Install hose hangers beneath the tractor chassis.

**NOTE:** For forward hanger, use hardware provided in kit; for rearward hanger, use tractor hardware.

- **2.** Route hoses through hose hangers as shown and attach lock pins to retain hoses.
- 3. Torque hardware to 15 lbs.-ft.
  - 6. 30577 M8 x 1.25P x 25 mm HHCS
  - 7. 2472 5/16 Lock washer
  - 8. 58033 Hose hanger
  - 9. 58047 1/4 x 2-1/2 Lock pin

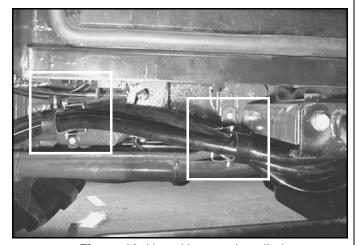


Figure 10. Hose Hangers Installed

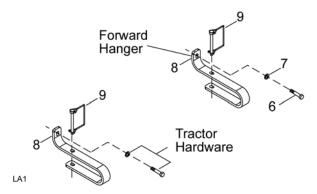
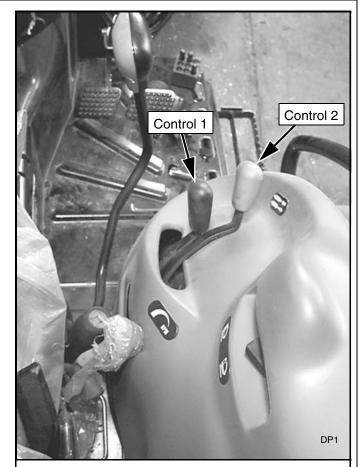


Figure 11. Hose Hanger Installation

#### **Verify Control Movements**

- 1. Mount loader to tractor: Remove mount pins from loader uprights. Align tractor with loader and slowly drive tractor into loader. Shut off tractor.
- **2.** Connect loader feedline hoses to tractor remote control couplers. See Figure 9.
- **3.** Comply with all safety rules and start the tractor.
- 4. Mount loader to tractor by activating bucket cylinders to raise or lower the loader uprights into the loader mounts. Slowly advance tractor forward, activating appropriate cylinders to engage loader completely into mounts. Insert mounting pins to secure loader.
- **5.** Check that all hydraulic control lever positions operate the loader movements correctly as shown in Figure 12.
- 6. If loader movements do not respond correctly, shut off tractor, relieve pressure, and reconnect properly. Loader control movements must be correct before proceeding.
- 7. Once all loader functions are correct, start the tractor and operate the loader to check for leaks. Purge any remaining air from the hydraulic system and check oil level.
- 8. When hose routings and correct loader operations are verified, identify each circuit by placing a matching colored band around the male and female quick couplers. The color-coded bands will make reinstallation easier when the loader is removed from tractor.
- **9.** Be sure that adequate slack is left in the hoses so they can move as the loader moves through its full range of motion.
- 10. Attach the plastic tie straps (included in kit) every 20-inches around the hoses to keep them tightly bundled and away from contact with the ground or other moving parts on the tractor or loader.
- 11. Before operating the loader, make sure that the Pre-Delivery, Delivery, and Pre-Operation Checklists from the Operator section in the Loader Operator's Manual have been completed.



- Control 1, Handle forward Boom down
- Control 1, Handle back Boom up
- Control 2, Handle forward Dump bucket or attachment
- Control 2, Handle back Rollback bucket or attachment

Figure 12. Tractor Hydraulic Control Levers

#### **General Description**

These set up instructions are for operating the 1020, 1027 loader using single lever control valve mounted to the loader rear mount as shown in Figure 13. To use this hydraulic connection the hoses must be connected between the control valve and the tractor hydraulic system located at the rear of the tractor.

**NOTE:** After the hydraulics and loader are install on the tractor, check the clearance between the top of the exhaust pipe and the loader boom when the loader is raised. If there is interference, a weather cap will need to be installed. See Page 6 for installation instructions.

#### **NOTICE**

■ If hydraulic lines are not connected as shown in this manual, the control valve may be damaged. A blocked outlet (RETURN) or improper hose connection will cause pressurized oil to enter the return circuit and damage the valve.

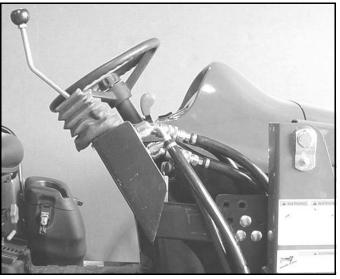


Figure 13. Control Valve Installed

#### **Adjust Control Valve**

The control valve comes standard with two OUT ports. One at the lower left corner and one at the upper right corner. The port at the lower left is shipped with a 3/4 JICM x 7/8 O-ring adapter installed. The port at the upper right is shipped with a 7/8 O-ring plug.

Remove plug installed in the upper right port. Remove adapter from lower left port. Install plug in lower left port and adapter in upper right port. Control valve should have IN, OUT and PBY ports arranged as shown in Figure 14.

Attach control valve and bracket to loader mount before proceeding.

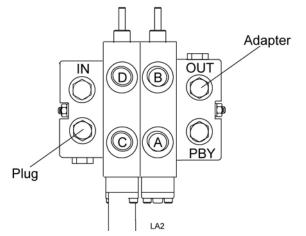


Figure 14. Correct Control Valve Arrangement

#### **Install Hose Guide**

- 1. Attach hose guide (7) to the outer hole on the bracket in front to the brake peddle.
- 2. Secure into place using cap screw (8) as shown in Figure 15. Torque to 30 lbs.-ft. using a 16mm wrench.
  - 7. 54305 Hose guide
  - 8. 307203 M10 x 1.25P x 35 mm HHCS

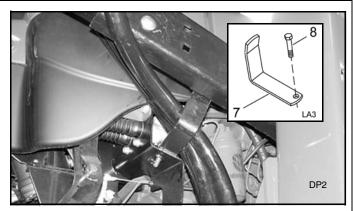


Figure 15. Hose Guide Installed

#### **Attach Hoses to Control Valve**

#### **NOTICE**

- If hydraulic lines are not connected as shown in the mount installation manual or tractor manual, the loader control valve may be damaged. A blocked outlet (RETURN) or improper hose connection will cause pressurized oil to enter the return circuit and damage the valve or the tractor hydraulic system.
- 1. Attach 90° end of hoses (2) to the IN, OUT, and PBY ports on the control valve.
- 2. Route hoses over hose guide (as shown in Figure 15), under right side of platform, and over right rear axle.
  - 2. 46947 Hose, 120" x 3/4 JICF x 7/8 JICF

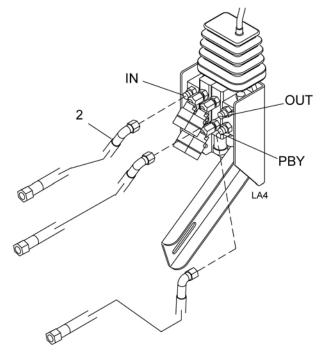


Figure 16. Control Valve Hose Connections

# **Install Hydraulic Fittings and Hoses**

- **1.** Locate the hydraulic ports on the rear of the tractor as shown in Figure 17.
- **2.** Remove tube and fittings from the PBY, PRESSURE, and RETURN ports.

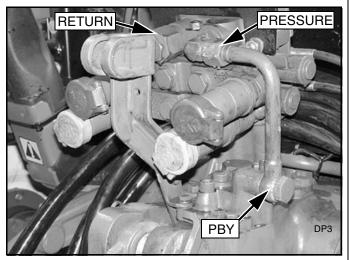


Figure 17. Tractor Hydraulic Connections

# Install Hydraulic Fitting and Hoses (Continued)

- Install adapter (3) and elbow (5) to the RETURN port.
- 4. Install elbow (6) to the PRESSURE port.
- 5. Install adapter (4) and elbow (5) to the PBY port.
- **6.** Attach hose from the IN port on the control valve to elbow (6) in the PRESSURE port on the tractor.
- **7.** Attach hose from the PBY port on the control valve to elbow (5) in the PBY port on the tractor.
- **8.** Attach the hose from the OUT port on the control valve to elbow (5) in the RETURN port on the tractor.
- 9. Position the hoses as shown in Figure 19.
  - 3. 58081 Adapter, M22 x 1.5P x 7/8 JICM
  - 4. 58647 Adapter, M18 x 1.5P x 7/8 JICM
  - 5. 315024 Elbow, 7/8 JICM x 7/8 JICF
  - 6. 46054 Elbow, 7/8 JICF x 7/8 JICF 45°

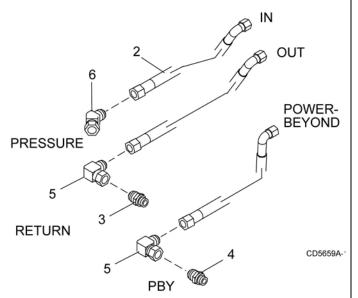


Figure 18. Hydraulic Fitting and Hose Installation

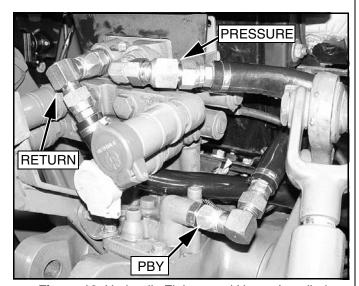


Figure 19. Hydraulic Fittings and Hoses Installed

#### **Install Hose Hanger**

- **1.** Remove lower bolt, washers, and nut that secures right fender to the ROPS.
- **2.** Keep larger washer and discard the remaining hardware.
- 3. Attach hose hanger (9), using spacer (10), cap screw (12), flat washer (from tractor), lock washer (13), and nut (14) as shown in Figure 20 and Figure 21.
- **4.** Route PRESSURE and PBY hoses through hanger as shown in Figure 21.
- **5.** Secure hoses into position using lock pin (11).
- **6.** Route RETURN hose as shown in Figure 19 to avoid upper 3-point arms.
- 7. Tighten all hydraulic fittings securely.
  - 9. 58280 Hose hanger
  - 10. 46948 Spacer
  - 11. 58047 Lock pin
  - 12. 31138 3/8 NC x 3-1/2 HHCS
  - 13. 838 3/8 Lock washer
  - 14. 835 3/8 NC Hex nut

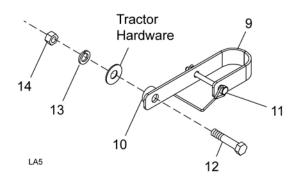


Figure 20. Hose Hanger Installation

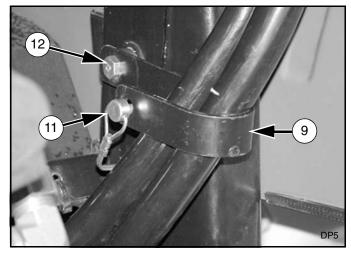
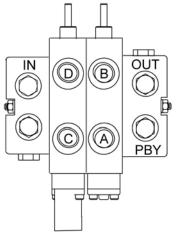


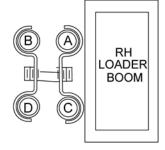
Figure 21. Hose Hanger Installed

#### **Connect Work Port Hoses**

- 1. The control valve kit contains hoses assembled with quick couplers. Attach supply hoses to loader feedlines, following the color scheme shown in Figure 22.
- **2.** Connect loader supply hoses to control valve hydraulic couplers when attaching loader.



A - BUCKET CYL. BASE END (DUMP) - RED B - BUCKET CYL. ROD END (ROLLBACK) - BLUE C - BOOM CYL. ROD END (DOWN) - YELLOW D - BOOM CYL. BASE END (UP) - GREEN



LOADER FEED LINES

2 - Spool Control Valve

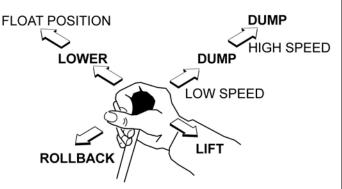
Figure 22. 1020, 1027 Control Valve and Loader Feedline Hose Connections

#### **Verification of Control Movements**

- 1. **Mount loader to tractor:** Remove mount pins from loader uprights. Align tractor with loader and lowly drive tractor into loader. Shut off tractor.
- 2. Connect loader feedline hoses to control valve hydraulic couplers (See Figure 22).

**NOTE:** At least 6" spacing should be maintained between valve, bracket, or hoses and any tractor control (brake pedals, accelerator, hand throttle, or hydraulic levers).

- 3. Comply with all Safety Rules and start the tractor.
- 4. Mount loader to tractor by activating bucket cylinders to raise or lower the loader uprights into the loader mounts. Slowly advance tractor forward, activating appropriate cylinders to engage loader completely into mounts. Insert mounting pins to secure loader.
- Check that all hydraulic control lever positions operate the loader movements correctly as shown in Figure 23.
- 6. If loader movements do not respond correctly, shut off tractor, relieve pressure, and reconnect properly. Loader control movements must be correct before proceeding.
- Once all loader functions are correct, start the tractor and operate the loader to check for leaks. Purge any remaining air from the hydraulic system.
- 8. When hose routings and correct loader operations are verified, identify each circuit by placing a matching colored band around the male and female quick-disconnect coupler set. The colored bands will make re-installation easier when the loader is remove from the tractor.
- 9. Be sure the adequate slack is left in the hoses so they can move as the loader moves through its full range of motion.
- **10.** Attach plastic tie straps every 20" around the hoses to keep them tightly bound and away from contact with the ground or other moving parts on tractor.
- 11. Before operating the loader, make sure that the Pre-Delivery, Delivery, and Pre-Operation Checklists from the Operation section in the Loader Operator's Manual have been completed.



- Handle forward Boom down
- Handle forward to limit Float position
- Handle back Boom up
- Handle right Dump bucket or attachment (slow)
- Handle right to limit Dump bucket or attachment (fast)
- Handle to left Rollback bucket or attachment

Figure 23. Single Lever Control Operation

#### **General Description**

These set-up instructions are for operating the 1020, 1027 loader using the tractor hydraulic remote control lever. To use this hydraulic connection, the tractor must be equipped with a multi-function hydraulic control valve and remote control lever. The control valve is located on the right side of the tractor beneath the operator platform.

**NOTE:** After the hydraulics and loader are installed on the tractor, check the clearance between the top of the exhaust pipe and the loader boom when the loader is raised. If there is interference, a weather cap will need to be installed. See Page 6 for installation instructions.



Figure 24. Tractor Hydraulic Control Lever and Valve

#### **Install Hydraulic Fitting to Tractor Valve**

- **1.** Locate the tractor hydraulic valve under the right side of the tractor platform.
- 2. Install adapters (1), adapter (3), and female half of quick coupler set (5) to each of the tractor valve ports. See Figure 7 and Figure 8.

**NOTE:** Not all parts supplied with this hose kit are used for this application.

Figure 25. Hydraulic Fittings Installed

- 1. 1010920 Adapter, M22 x 1.5 x 3/4 JICM
- 3. 315036 Adapter, 3/8 NPTM x 3/4 JICF
- 5. 316007 Quick coupler set, male & female

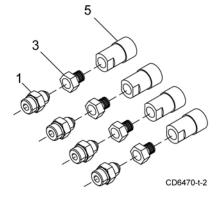


Figure 26. Hydraulic Fitting Installation

#### **Assemble Loader Hoses**

- Attach male half of quick coupler set (5) and elbow (2) to each of the loader feedline hoses (4). See Figure 27.
- 2. Attach loader feedline hoses to the steel feedlines on the loader boom. See Figure 28.
- Route hydraulic hoses along loader mount and under the right side of operator's platform to the tractor valve.

**NOTE:** Be sure to avoid contact with brake pedals and other moveable tractor components. Hoses must be routed so that they are not pinched, bent sharply, or chafed during operation. Hoses must not interfere with any tractor control operation or contact any moving parts.

- 2. 313015 Elbow, 3/8 NPTM x 3/8 NPTF 45°
- 4. 1009513 Hose, 76" x 3/8 NPTM x 3/4 JICM
- 5. 316007 Quick coupler set, male & female

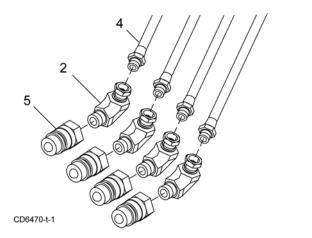


Figure 27. Loader Hose Connection

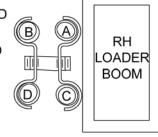
1020, 1027

A - BUCKET CYL. BASE END (DUMP) - RED

B - BUCKET CYL. ROD END (ROLLBACK) - BLUE

C - BOOM CYL. ROD END (DOWN) - YELLOW

D - BOOM CYL. BASE END (UP) - GREEN



LOADER FEEDLINES

Figure 28. Loader Feedline Connection

#### **Connect Hoses to Tractor Valve**

Connect hoses to the hydraulic quick couplers as shown in Figure 29.

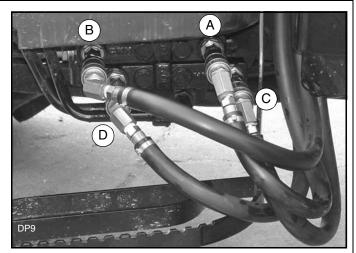


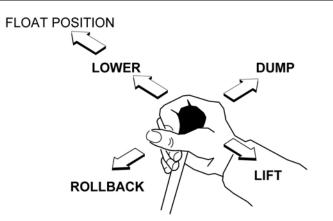
Figure 29. Hydraulic Hose Connection to Tractor Valve

#### **Verification of Control Movements**

- 1. **Mount loader to tractor:** Remove mount pins from loader uprights. Align tractor with loader and lowly drive tractor into loader. Shut off tractor.
- **2.** Connect loader feedline hoses to control valve hydraulic couplers (See Figure 29).

**NOTE:** At least 6" spacing should be maintained between valve, bracket, or hoses and any tractor control (brake pedals, accelerator, hand throttle, or hydraulic levers).

- 3. Comply with all Safety Rules and start the tractor.
- 4. Mount loader to tractor by activating bucket cylinders to raise or lower the loader uprights into the loader mounts. Slowly advance tractor forward, activating appropriate cylinders to engage loader completely into mounts. Insert mounting pins to secure loader.
- **5.** Check that all hydraulic control lever positions operate the loader movements correctly as shown in Figure 30.
- 6. If loader movements do not respond correctly, shut off tractor, relieve pressure, and reconnect properly. Loader control movements must be correct before proceeding.
- 7. Once all loader functions are correct, start the tractor and operate the loader to check for leaks. Purge any remaining air from the hydraulic system.
- **8.** When hose routings and correct loader operations are verified, identify each circuit by placing a matching colored band around the male and female quick-disconnect coupler set. The colored bands will make re-installation easier when the loader is remove from the tractor.
- 9. Be sure the adequate slack is left in the hoses so they can move as the loader moves through its full range of motion.
- **10.** Attach plastic tie straps every 20" around the hoses to keep them tightly bound and away from contact with the ground or other moving parts on tractor.
- 11. Before operating the loader, make sure that the Pre-Delivery, Delivery, and Pre-Operation Checklists from the Operation section in the Loader Operator's Manual have been completed.



- Handle forward Boom down
- Handle forward to limit Float position
- Handle back Boom up
- Handle right Dump bucket or attachment
- Handle to left Rollback bucket or attachment

Figure 30. Single Lever Control Operation

#### **General Description**

These set-up instructions are for operating the LU126 or LU132 loader using the tractor hydraulic remote control lever. To use this hydraulic connection, the tractor must be equipped with a multi-function hydraulic control valve and remote control lever. The control valve is located on the right side of the tractor beneath the operator platform.



Figure 31. Tractor Remote Control Lever

#### **Install Hydraulic Fitting to Tractor Valve**

- **1.** Locate the tractor hydraulic valve under the right side of the tractor platform.
- 2. Install adapters (1), adapter (3), and female half of quick coupler set (5) to each of the tractor valve ports. See Figure 32 and Figure 33.

**NOTE:** Not all parts supplied with this hose kit are used for this application.

Figure 32. Hydraulic Fittings Installed

- 1. 1010920 Adapter, M22 x 1.5 x 3/4 JICM
- 3. 315036 Adapter, 3/8 NPTM x 3/4 JICF
- 5. 316007 Quick coupler set, male & female

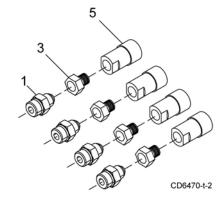


Figure 33. Hydraulic Fitting Installation

#### **Assemble Loader Hoses**

- 1. Attach male half of quick coupler set (5) and elbow (2) to each of the loader feedline hoses (4). See Figure 34
- **2.** Attach loader feedline hoses to the steel feedlines on the loader boom. See Figure 35.
- **3.** Route hydraulic hoses along loader mount and under the right side of operator's platform to the tractor valve.

**NOTE:** Be sure to avoid contact with brake pedals and other moveable tractor components. Hoses must be routed so that they are not pinched, bent sharply, or chafed during operation. Hoses must not interfere with any tractor control operation or contact any moving parts.

- 2. 313015 Elbow, 3/8 NPTM x 3/8 NPTF 45°
- 4. 1022986 Hose, 116" x 3/8 NPTM x 3/4 JICM
- 5. 316007 Quick coupler set, male & female

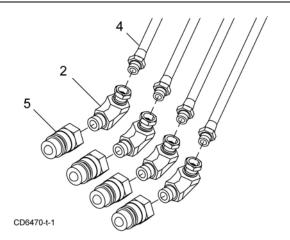


Figure 34. Loader Hose Connection

A - BUCKET CYL. BASE END (DUMP) - RED B - BUCKET CYL. ROD END (ROLLBACK) - BLUE C - BOOM CYL. ROD END (DOWN) - YELLOW D - BOOM CYL. BASE END (UP) - GREEN

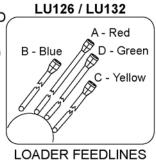


Figure 35. Loader Feedline Connection

#### **Connect Hoses to Tractor Valve**

Connect hoses to the hydraulic quick couplers as shown in Figure 36.

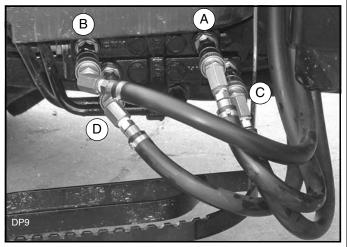


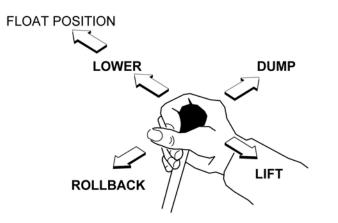
Figure 36. Hydraulic Hose Connection to Tractor Valve

#### Verification of Control Movements

- 1. **Mount loader to tractor:** Remove mount pins from loader uprights. Align tractor with loader and lowly drive tractor into loader. Shut off tractor.
- **2.** Connect loader feedline hoses to control valve hydraulic couplers (See Figure 36).

**NOTE:** At least 6" spacing should be maintained between valve, bracket, or hoses and any tractor control (brake pedals, accelerator, hand throttle, or hydraulic levers).

- 3. Comply with all Safety Rules and start the tractor.
- 4. Mount loader to tractor by activating bucket cylinders to raise or lower the loader uprights into the loader mounts. Slowly advance tractor forward, activating appropriate cylinders to engage loader completely into mounts. Insert mounting pins to secure loader.
- **5.** Check that all hydraulic control lever positions operate the loader movements correctly as shown in Figure 37.
- 6. If loader movements do not respond correctly, shut off tractor, relieve pressure, and reconnect properly. Loader control movements must be correct before proceeding.
- 7. Once all loader functions are correct, start the tractor and operate the loader to check for leaks. Purge any remaining air from the hydraulic system.
- **8.** When hose routings and correct loader operations are verified, identify each circuit by placing a matching colored band around the male and female quick-disconnect coupler set. The colored bands will make re-installation easier when the loader is remove from the tractor.
- **9.** Be sure the adequate slack is left in the hoses so they can move as the loader moves through its full range of motion.
- **10.** Attach plastic tie straps every 20" around the hoses to keep them tightly bound and away from contact with the ground or other moving parts on tractor.
- 11. Before operating the loader, make sure that the Pre-Delivery, Delivery, and Pre-Operation Checklists from the Operation section in the Loader Operator's Manual have been completed.



- Handle forward Boom down
- Handle forward to limit Float position
- Handle back Boom up
- Handle right Dump bucket or attachment
- Handle to left Rollback bucket or attachment

Figure 37. Single Lever Control Operation

#### **General Description**

These set-up instructions are for operating the LU126 or LU132 loader using the tractor hydraulics. To use this connection, the tractor must be equipped with two hydraulic levers and four tractor hydraulic couplers at the rear of the tractor as shown in Figure 38.

**NOTE:** The male hydraulic quick couplers for connection to tractor are NOT INCLUDED with this hose kit but are available as service parts.

**NOTE:** After the hydraulics and loader are installed on the tractor, check the clearance between the top of the exhaust pipe and the loader boom when the loader is raised. If there is interference, a weather cap will need to be installed. See Page 6 for installation instructions.



Figure 38. Tractor Rear Hydraulic Couplers (Typical)

#### **Assemble Hoses**

- Attach a 90-degree elbow (2) and male quick coupler (3) to each loader supply hose (1). See Figure 39.
- **2.** Connect loader supply hoses to loader feedlines as shown in Figure 40.
- 3. Route hoses along right mount, under the cab/operator's platform, and over right rear axle. Be sure to avoid contact with 3-point linkage, brake pedals, and other moveable tractor components. Hoses must be routed so that they are not pinched, bent sharply, or chafed during operation.
  - 1. 1023493 Hose, 200" x 3/4 JICM x 3/4 JICM
  - 2. 313053 Elbow, 3/4 JICF x 1/2 NPTM 90°
  - 3. ----- Quick coupler, male (not included in kit)

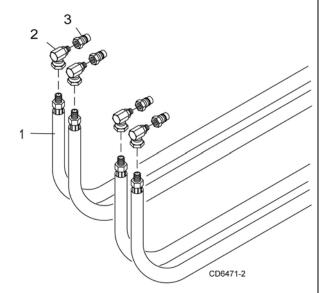


Figure 39. Hose Assembly

A - BUCKET CYL. BASE END (DUMP) - RED B - BUCKET CYL. ROD END (ROLLBACK) - BLUE C - BOOM CYL. ROD END (DOWN) - YELLOW

D - BOOM CYL. BASE END (UP) - GREEN

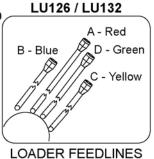


Figure 40. Loader Feedline Connections

#### **Install Hose Hanger**

- **1.** Remove a bolt from the bottom of right cab/operator's platform support.
- **2.** Attach hose hanger (4) and secure with tractor hardware previously removed.
- **3.** Place hoses in hose hanger when routing hydraulic hoses to the tractor hydraulic couplers.
- 4. Secure hoses in position using lock pin (5).
  - 4. 59520 Hose hanger
  - 5. 58047 1/4 x 2-1/2 Lock pin
  - \* Tractor hardware

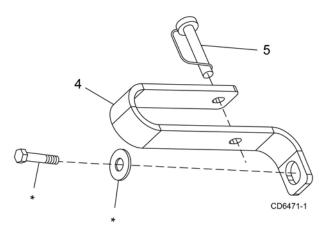
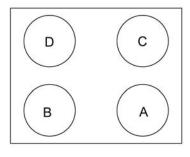


Figure 41. Hose Hanger Installation

#### **Verify Control Movements**

- **1. Mount loader to tractor:** Remove mount pins from loader uprights. Align tractor with loader and slowly drive tractor into loader. Shut off tractor.
- **2.** Connect loader feedline hoses to tractor remote control couplers. See Figure 42.
- 3. Comply with all safety rules and start the tractor.
- 4. Mount loader to tractor by activating bucket cylinders to raise or lower the loader uprights into the loader mounts. Slowly advance tractor forward, activating appropriate cylinders to engage loader completely into mounts. Insert mounting pins to secure loader.
- **5.** Check that all tractor hydraulic control lever positions operate the loader movements correctly.
- 6. If loader movements do not respond correctly, shut off tractor, relieve pressure, and reconnect properly. Loader control movements must be correct before proceeding.

- 7. Once all loader functions are correct, start the tractor and operate the loader to check for leaks. Purge any remaining air from the hydraulic system and check oil level.
- 8. When hose routings and correct loader operations are verified, identify each circuit by placing a matching colored band around the male and female quick-disconnect coupler. The color-coded bands will make reinstallation easier when the loader is removed from the tractor.
- **9.** Be sure that adequate slack is left in the hoses so they can move as the loader moves through its full range of motion.
- 10. Attach the plastic tie straps (included in kit) every 20-inches around the hoses to keep them tightly bundled and away from contact with the ground or other moving parts on the tractor or loader.
- Before operating the loader, make sure that the Pre-Delivery, Delivery, and Pre-Operation Check Lists in the Loader Operator's Manual have been completed.



**Tractor Remote Couplers** 

A - BUCKET CYL. BASE END (DUMP) - RED B - BUCKET CYL. ROD END (ROLLBACK) - BLUE C - BOOM CYL. ROD END (DOWN) - YELLOW D - BOOM CYL. BASE END (UP) - GREEN

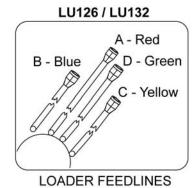


Figure 42. Loader Feedline to Tractor Remote Coupler Connections

LA6

#### **General Description**

These set up instructions are for operating the LU126 or LU132 loader using single lever control valve mounted to the right loader mount as shown in Figure 43. To use this hydraulic connection the hoses must be connected between the control valve and the tractor hydraulic system located at the rear of the tractor.

**NOTE:** After the hydraulics and loader are install on the tractor, check the clearance between the top of the exhaust pipe and the loader boom when the loader is raised. If there is interference, a weather cap will need to be installed. See Page 6 for installation instructions.

#### **NOTICE**

■ If hydraulic lines are not connected as shown in this manual, the control valve may be damaged. A blocked outlet (RETURN) or improper hose connection will cause pressurized oil to enter the return circuit and damage the valve.



Figure 43. Control Valve Installed (Typical)

#### **Install Hydraulic Fittings to Control Valve**

- **1.** Remove open-center plug from the side of the control valve.
- 2. Install PBY conversion plug (18) and elbow (17), supplied with hose kit, into the side of the control valve.
- **3.** Attach elbow (5) to the fitting in the IN port of the control valve.
  - 5. 313032 Elbow, 3/4 JICM x 3/4 JICF 90°
  - 17. 60 Elbow, 3/4 JICM x 7/8 ORBM
  - 18. 346143 Power-Beyond conversion plug

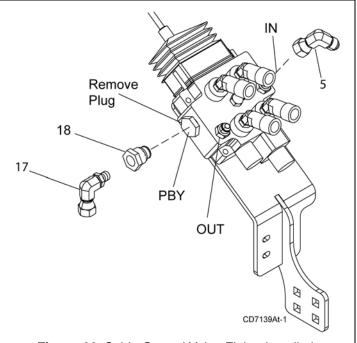


Figure 44. Cable Control Valve Fitting Installation

#### 1023583 Hose Kit

#### **Install Hydraulic Fittings and Hoses**

- Locate the hydraulic ports on the rear of the tractor
- 2. Remove tube and fittings from the PBY, PRESSURE, and RETURN ports shown in Figure 45.
- 3. Install adapter (4) in the PBY port, adapter (3) and elbow (5) in the RETURN port and elbow (6) in the PRESSURE port.
- **4.** Attach straight end of hose (1) to the PBY port on the control valve.
- **5.** Attach 90° end of second hose (1) to the OUT port on the control valve.
- **6.** Attach one end of hose (2) to the IN port on the control valve.
- **7.** Route hoses under right side of platform, over right rear axle and out the back of the tractor.
- **8.** Attach straight end of hose (1) from the OUT port on the control valve to the elbow (5) in the RETURN port on the back of the tractor.
- Attach end of hose (2) from the IN port on the control valve to the PRESSURE port on the back of the tractor.
- **10.** Attach 90° end of hose (1) from the PBY port on the control valve to the PBY port on the back of the tractor.

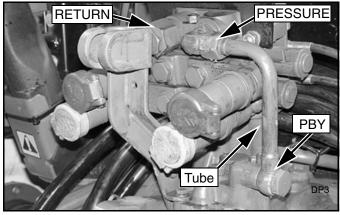


Figure 45. Tractor Hydraulic Connections

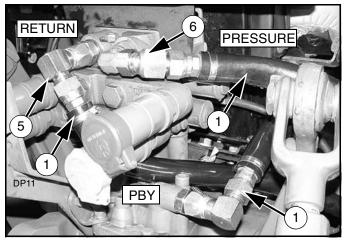
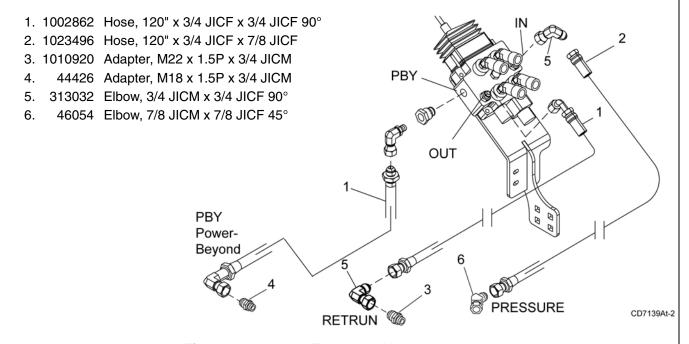


Figure 46. Hydraulic Fittings and Hose Connections



#### **Install Hose Hanger**

- **1.** Remove lower bolt, washers, and nut that secures right fender to the ROPS.
- **2.** Keep larger washer and discard the remaining hardware.
- 3. Attach hose hanger (9), using spacer (10), cap screw (12), flat washer (from tractor), lock washer (13), and nut (14) as shown in Figure 48 and Figure 49.
- **4.** Route PRESSURE and PBY hoses through hanger as shown in Figure 49.
- **5.** Secure hoses into position using lock pin (11).
- 6. Tighten all hydraulic fittings securely.
  - 9. 58280 Hose hanger
  - 10. 46948 Spacer
  - 11. 58047 Lock pin
  - 12. 31138 3/8 NC x 3-1/2 HHCS
  - 13. 838 3/8 Lock washer
  - 14. 835 3/8 NC Hex nut

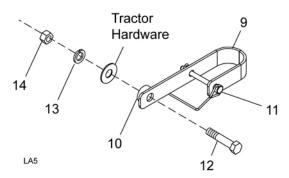


Figure 48. Hose Hanger Installation

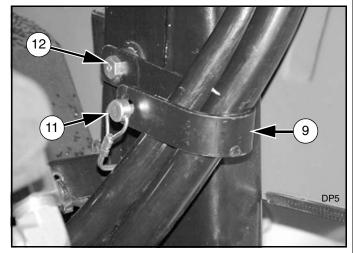
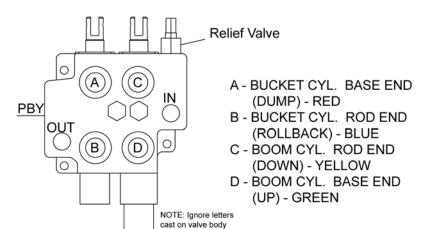


Figure 49. Hose Hanger Installed

#### **Connect Work Port Hoses**

- 1. The control valve kit contains hoses assembled with quick couplers. Attach supply hoses to loader feedlines, following the color scheme shown in Figure 50.
- **2.** Connect loader supply hoses to control valve hydraulic couplers when attaching loader.



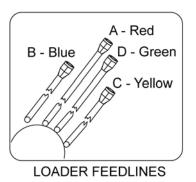
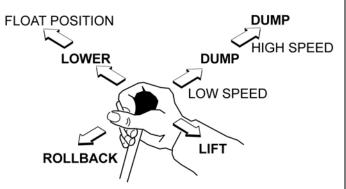


Figure 50. LU126 & LU132 Control Valve and Loader Feedline Hose Connections

#### **Verification of Control Movements**

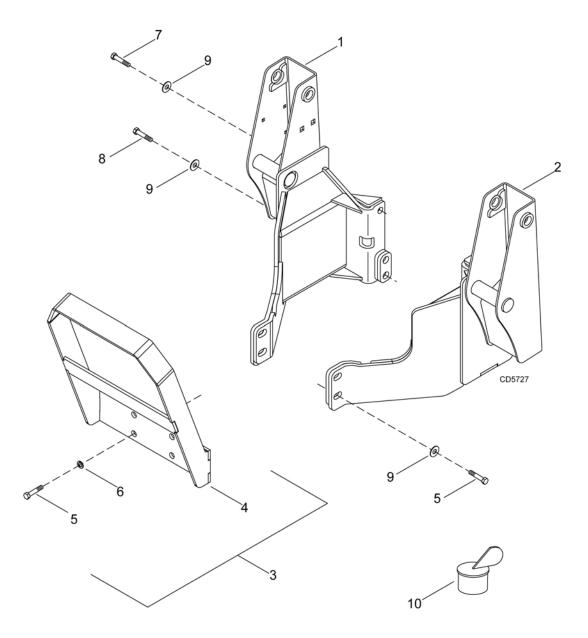
- 1. **Mount loader to tractor:** Remove mount pins from loader uprights. Align tractor with loader and lowly drive tractor into loader. Shut off tractor.
- **2.** Connect loader feedline hoses to control valve hydraulic couplers (See Figure 50).
- 3. Comply with all Safety Rules and start the tractor.
- 4. Mount loader to tractor by activating bucket cylinders to raise or lower the loader uprights into the loader mounts. Slowly advance tractor forward, activating appropriate cylinders to engage loader completely into mounts. Insert mounting pins to secure loader.
- **5.** Check that all hydraulic control lever positions operate the loader movements correctly as shown in Figure 51.
- 6. If loader movements do not respond correctly, shut off tractor, relieve pressure, and reconnect properly. Loader control movements must be correct before proceeding.
- 7. Once all loader functions are correct, start the tractor and operate the loader to check for leaks. Purge any remaining air from the hydraulic system.
- 8. When hose routings and correct loader operations are verified, identify each circuit by placing a matching colored band around the male and female quick-disconnect coupler set. The colored bands will make re-installation easier when the loader is remove from the tractor.
- **9.** Be sure the adequate slack is left in the hoses so they can move as the loader moves through its full range of motion.
- **10.** Attach plastic tie straps every 20" around the hoses to keep them tightly bound and away from contact with the ground or other moving parts on tractor.
- 11. Before operating the loader, make sure that the Pre-Delivery, Delivery, and Pre-Operation Checklists from the Operation section in the Loader Operator's Manual have been completed.



- Handle forward Boom down
- Handle forward to limit Float position
- Handle back Boom up
- Handle right Dump bucket or attachment (slow)
- Handle right to limit Dump bucket or attachment (fast)
- Handle to left Rollback bucket or attachment

Figure 51. Single Lever Control Operation

# 111874 LOADER MOUNTING KIT



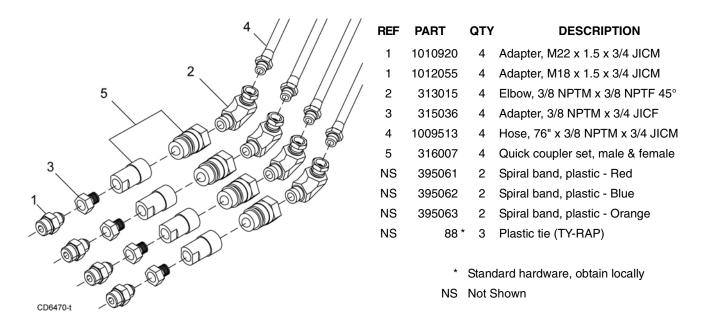
REF	PART	QTY	DESCRIPTION	REF	PART	QTY	DESCRIPTION
1	1000468	1	Right rear mount	6	21531	4	M20 Lock washer
2	1000469	1	Left rear mount	7	1001377	2	M20 x 2.5 x 40 mm HHCS CL10.9
3	40448	1	Grill guard kit	8	21413	4	M20 x 2.5 x 70 mm HHCS CL10.9
			(optional; included items 4-6)	9	57798	10	3/4 Hardened flat washer
4	40449	1	Grill guard	10	1010461	1	Exhaust weather cap 2.25 - 2.43
5	307553	8	M20 x 2.5 x 50 mm HHCS				

HHCS Hex Head Cap Screw

\* Standard hardware, obtain locally

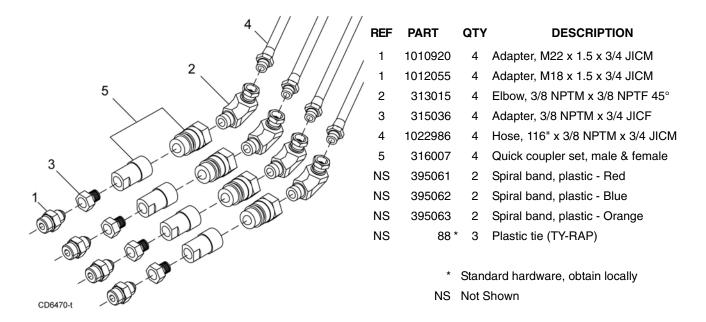
**28** Parts MAN0041 (Rev. 4/4/2008)

1020, 1027 LOADERS



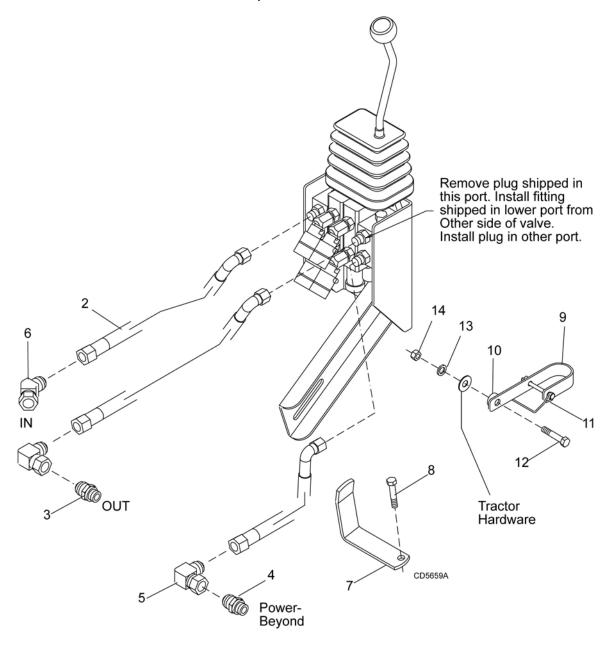
# **1023577 HOSE KIT**

LU126, LU132 LOADERS



MAN0041 (Rev. 4/4/2008) Parts 29

1020, 1027 LOADERS



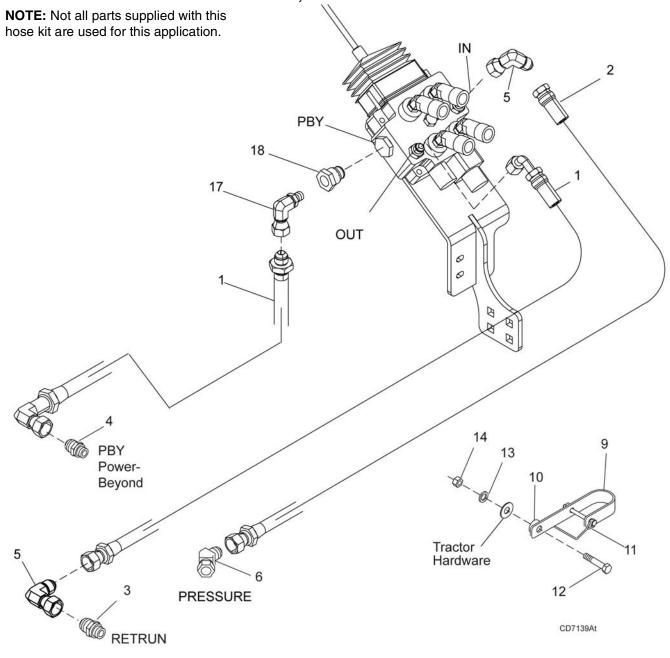
REF	PART	QTY	DESCRIPTION	REF	PART	QTY	DESCRIPTION
2	46947	3	Hose, 120" x 3/4 JICF x 7/8 JICF	9	58280	1	Hose hanger
3	58081	1	Adapter, M22 x 1.5M x 7/8 JICM	10	46948	1	Spacer, .62 x .84 x .38
4	58647	1	Adapter, M18 x 1.5M x 7/8 JICM	11	58047	1	1/4 x 2-1/2 Lock pin
5	315024	2	Elbow, 7/8 JICM x 7/8 JICF	12	31138 *	1	3/8 NC x 3-1/2 HHCS
6	46054	1	Elbow, 7/8 JICM x 7/8 JICF 45°	13	838 *	1	3/8 Lock washer
7	54305	1	Hose guide	14	835 *	1	3/8 NC Hex nut
8	307203	1	M10 x 1.25P x 35 mm HHCS	15	88 *	6	Plastic ties (not shown)

HHCS Hex Head Cap Screw

\* Standard hardware, obtain locally

30 Parts

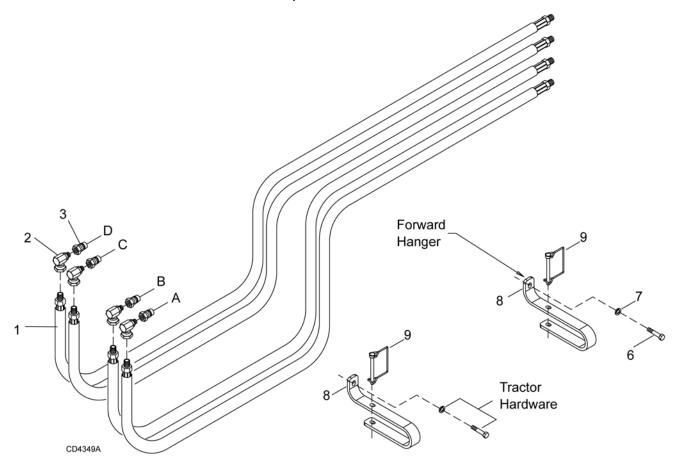
LU126, LU132 LOADERS



REF	PART	QTY	DESCRIPTION	REF	PART	QTY	DESCRIPTION
1	1002862	2	Hose, 120" x 3/4 JICF x 3/4 JICF $90^{\circ}$	12	31138 *	1	3/8 NC x 3-1/2 HHCS
2	1023496	1	Hose, 120" x 3/4 JICF x 7/8 JICF	13	838 *	1	3/8 Lock washer
3	1010920	1	Adapter, M22 x 1.5P x 3/4 JICM	14	835 *	1	3/8 NC Hex nut
4	44426	1	Adapter, M18 x 1.5P x 3/4 JICM	15	88 *	6	Plastic tie (not shown)
5	313032	2	Elbow, 3/4 JICM x 3/4 JICF 90°	17	60	1	Elbow, 3/4 JICM x 7/8 ORBM
6	46054	1	Elbow, 7/8 JICFM x 7/8 JICF 45°	18	346143	1	PBY conversion plug
9	58280	1	Hose Bracket				
10	46948	1	Spacer, .62 x .84 x .38		HHCS	Hex I	Head Cap Screw
11	58047	1	Pin, lock 1/4 x 2-1/4		*	Stand	lard hardware, obtain locally

MAN0041 (Rev. 4/4/2008) Parts **31** 

# 1020, 1027 LOADERS



REF	PART	QTY	DESCRIPTION
1	53670	4	Hose, 150" x 3/4 JICM x 3/4 JICM
2	313053	4	Elbow, 3/4 JICF x 1/2 NPTM 90°
3	66511	4	Quick coupler, Male 1/2" (not included in kit)
6	30577	1	M8 x 1.25P x 25 mm HHCS GR8.8
7	2472 *	1	5/16 Lock washer
8	58033	2	Hose hanger
9	58047	2	1/4 x 2-1/2 Lock pin

REF	PART	QTY	DESCRIPTION
NS	58677	1	Support bracket (not used)
NS	54305	1	Hose guide bracket (not used)
NS	89 *		Nylon cable ties
NS	395061	2	Spiral band, red
NS	395062	2	Spiral band, blue
NS	395063	2	Spiral band, orange
NS	54124	2	Spiral band, white

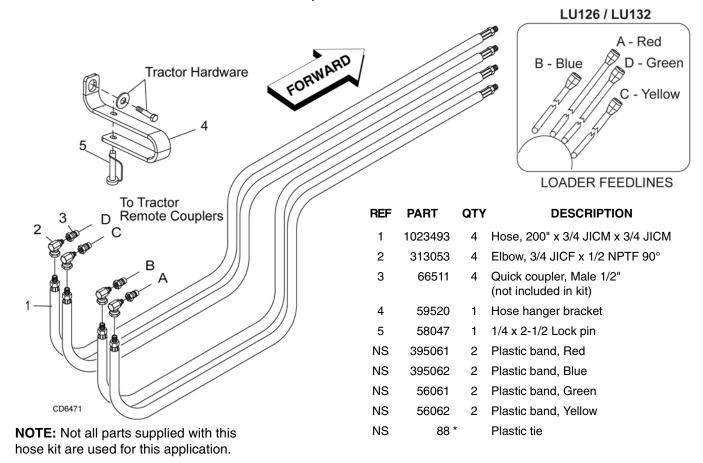
NS Not shown

HHCS Hex Head Cap Screw

\* Standard hardware, obtain locally

**32** Parts MAN0041 (Rev. 4/4/2008)

# LU126, LU132 LOADERS



#### NS Not shown

MAN0041 (Rev. 4/4/2008) Parts **33** 

<sup>\*</sup> Standard hardware, obtain locally

# **BOLT TORQUE CHART**

Always tighten hardware to these values unless a different torque value or tightening procedure is listed for a specific application.

Fasteners must always be replaced with the same grade as specified in the manual parts list.

Always use the proper tool for tightening hardware: SAE for SAE hardware and Metric for metric hardware.

Make sure fastener threads are clean and you start thread engagement properly.

All torque values are given to specifications used on hardware defined by SAE J1701 MAR 99 & J1701M JUL 96.



SAE SERIES TORQUE CHART



(No Dashes)

SAE Bolt Head Identification



SAE Grade 5 (3 Radial Dashes)



SAE Grade 8 (6 Radial Dashes)

$\bigcirc$		MARKING ON HEAD							
(A) Diameter (Inches)	Wrench	SA	E 2	Si	AE 5	SAE 8			
	Size	lbs-ft	N-m	lbs-ft	N-m	lbs-ft	N-m		
1/4"	7/16"	6	8	10	13	14	18		
5/16"	1/2"	12	17	19	26	27	37		
3/8"	9/16"	23	31	35	47	49	67		
7/16"	5/8"	36	48	55	75	78	106		
1/2"	3/4"	55	75	85	115	120	163		
9/16"	13/16"	78	106	121	164	171	232		
5/8"	15/16"	110	149	170	230	240	325		
3/4"	1-1/8"	192	261	297	403	420	569		
7/8"	1-5/16"	306	416	474	642	669	907		
1"	1-1/2"	467	634	722	979	1020	1383		



METRIC SERIES TORQUE CHART



Metric
Grade 8.8

Metric Bolt Head



Metric Grade 10.9

			COARSE	THREAD			FINE T	HREAD		
(A)			MARKING	ON HEAD			MARKING	ON HEAD		(A)
Diameter & Thread Pitch	Wrench	Metr	ic 8.8	Metri	c 10.9	Metri	ic 8.8	Metri	c 10.9	Diameter & Thread Pitch
(Millimeters)	Size	N-m	lbs-ft	N-m	lbs-ft	N-m	lbs-ft	N-m	lbs-ft	(Millimeters)
6 x 1.0	10 mm	8	6	11	8	8	6	11	8	6 x 1.0
8 x 1.25	13 mm	20	15	27	20	21	16	29	22	8 x 1.0
10 x 1.5	16 mm	39	29	54	40	41	30	57	42	10 x 1.25
12 x 1.75	18 mm	68	50	94	70	75	55	103	76	12 x 1.25
14 x 2.0	21 mm	109	80	151	111	118	87	163	120	14 x 1.5
16 x 2.0	24 mm	169	125	234	173	181	133	250	184	16 x 1.5
18 x 2.5	27 mm	234	172	323	239	263	194	363	268	18 x 1.5
20 x 2.5	30 mm	330	244	457	337	367	270	507	374	20 x 1.5
22 x 2.5	34 mm	451	332	623	460	495	365	684	505	22 x 1.5
24 x 3.0	36 mm	571	421	790	583	623	459	861	635	24 x 2.0
30 x 3.0	46 mm	1175	867	1626	1199	1258	928	1740	1283	30 x 2.0

Typical Washer Installations Bolt



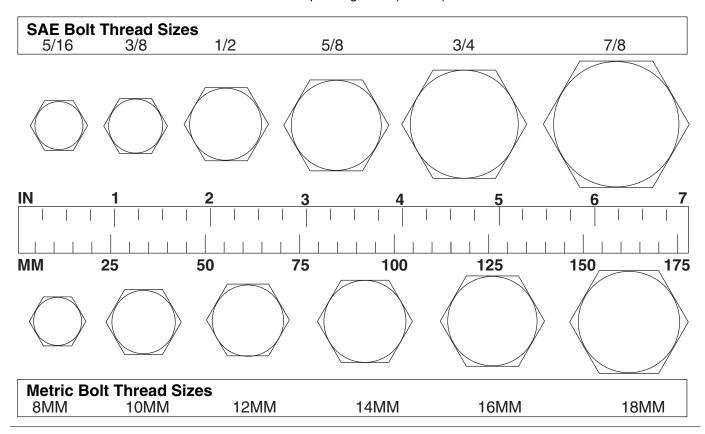




8/9/00

# **BOLT SIZE CHART**

NOTE: Chart shows bolt thread sizes and corresponding head (wrench) sizes for standard SAE and metric bolts.



# **ABBREVIATIONS**

AG	Agriculture
ASABE	American Society of Agricultural &
	Biological Engineers (formerly ASAE)
ASAE	American Society of Agricultural Engineers
ATF	Automatic Transmission Fluid
BSPP	British Standard Pipe Parallel
BSPTM	British Standard Pipe Tapered Male
CV	Constant Velocity
CCW	
CW	Clockwise
F	Female
	Full Thread
GA	Gauge
	c.) Grade (5, etc.)
	Hex Head Cap Screw
	Heat-Treated
	Joint Industry Council 37° Degree Flare
	Left Hand
	Left
	Millimeter
	Male

MPa	Mega Pascal
N	Newton
NC	National Coarse
NF	National Fine
NPSM	National Pipe Straight Mechanical
NPT	National Pipe Tapered
NPT SWFNa	tional Pipe Tapered Swivel Female
ORBM	O-Ring Boss - Male
P	Pitch
PBY	Power-Beyond
psi	Pounds per Square Inch
PTO	Power Take Off
QD	Quick Disconnect
RH	Right Hand
ROPS	Roll-Over Protective Structure
RPM	Revolutions Per Minute
RT	Right
SAE	Society of Automotive Engineers
UNC	Unified Coarse
UNF	Unified Fine
UNS	Unified Special

#### WARRANTY

(Replacement Parts For All Models Except Mow'n Machine™ Zero-Turn Mowers and Woods Boundary™ Utility Vehicles)

Woods Equipment Company ("WOODS") warrants this product to be free from defect in material and workmanship for a period of ninety (90) days from the date of delivery of the product to the original purchaser with the exception of V-belts, which will be free of defect in material and workmanship for a period of 12 months.

Under no circumstances will this Warranty apply in the event that the product, in the good faith opinion of WOODS, has been subjected to improper operation, improper maintenance, misuse, or an accident. This Warranty does not cover normal wear or tear, or normal maintenance items.

This Warranty is extended solely to the original purchaser of the product. Should the original purchaser sell or otherwise transfer this product to a third party, this Warranty does not transfer to the third party purchaser in any way. There are no third party beneficiaries of this Warranty.

WOODS' obligation under this Warranty is limited to, at WOODS' option, the repair or replacement, free of charge, of the product if WOODS, in its sole discretion, deems it to be defective or in noncompliance with this Warranty. The product must be returned to WOODS with proof of purchase within thirty (30) days after such defect or noncompliance is discovered or should have been discovered, routed through the dealer and distributor from whom the purchase was made, transportation charges prepaid. WOODS shall complete such repair or replacement within a reasonable time after WOODS receives the product. THERE ARE NO OTHER REMEDIES UNDER THIS WARRANTY. THE REMEDY OF REPAIR OR REPLACEMENT IS THE SOLE AND EXCLUSIVE REMEDY UNDER THIS WARRANTY.

THERE ARE NO WARRANTIES WHICH EXTEND BEYOND THE DESCRIPTION ON THE FACE OF THIS WARRANTY. WOODS MAKES NO OTHER WARRANTY, EXPRESS OR IMPLIED, AND WOODS SPECIFICALLY DISCLAIMS ANY IMPLIED WARRANTY OF MERCHANTABILITY AND/OR ANY IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE.

WOODS shall not be liable for any incidental or consequential losses, damages or expenses, arising directly or indirectly from the product, whether such claim is based upon breach of contract, breach of warranty, negligence, strict liability in tort or any other legal theory. Without limiting the generality of the foregoing, Woods specifically disclaims any damages relating to (i) lost profits, business, revenues or goodwill; (ii) loss of crops; (iii) loss because of delay in harvesting; (iv) any expense or loss incurred for labor, supplies, substitute machinery or rental; or (v) any other type of damage to property or economic loss.

This Warranty is subject to any existing conditions of supply which may directly affect WOODS' ability to obtain materials or manufacture replacement parts.

No agent, representative, dealer, distributor, service person, salesperson, or employee of any company, including without limitation, WOODS, its authorized dealers, distributors, and service centers, is authorized to alter, modify, or enlarge this Warranty.

Answers to any questions regarding warranty service and locations may be obtained by contacting:

#### Woods Equipment Company

2606 South Illinois Route 2 Post Office Box 1000 Oregon IL 61061

800-319-6637 tel 800-399-6637 fax www.WoodsEquipment.com ALITEC

DN/D

**CENTRAL FABRICATORS®** 

**GANNON**®

GILL®

**WAIN-ROY**®

WOODS®





#### WARRANTY

(All Models Except Mow'n Machine™ Zero-Turn Mowers and Woods Boundary™ Utility Vehicles)

Please Enter Information Below and Save for Future Reference.	
Date Purchased:	From (Dealer):
Model Number:	Serial Number:

Woods Equipment Company ("WOODS") warrants this product to be free from defect in material and workmanship. Except as otherwise set forth below, the duration of this Warranty shall be for TWELVE (12) MONTHS COMMENCING ON THE DATE OF DELIVERY OF THE PRODUCT TO THE ORIGINAL PURCHASER.

Woods backhoe models BH70-X, BH80-X, and BH90-X are warranted for two (2) years from the date of delivery to the original purchaser. The warranty periods for specific parts or conditions are listed below:

Part or Condition Warranted	Model Number	Duration (from date of delivery to the original purchaser)
	BW1260, BW1800	8 years
BB48X, BB60X, BB72X, BB84X, BB600X, BB720X, BB840X, BB6000X, BB7200X, BB8400X, DS1260, DS01260, DS1440, TS1680, BW126-2, BW180-2		6 years
components	PHD25, PHD35, PHD65, PHD95, 2162, 3240, DS96, DS120, RCC42, RM550-2, RM660-2, RM990-3, PRD6000, PRD7200, PRD8400, 7144RD-2, 9180RD-2, 9204RD-2, S15CD, S20CD, S22CD, S25CD, S27CD	5 years
	RDC54, RD60, RD72	3 years (1 year if used in rental or commercial applications)
Blade spindles	RM550-2, RM660-2, RM990-3, PRD6000, PRD7200, PRD8400, 7144RD-2, 9180RD-2, 9204RD-2	3 years
Rust-through	BB600, BB720, BB840, BB6000, BB7200, BB8400, BW126-2, BW180-2, BW1260, BW1800, 2162, 3240, DS1260, DS01260, DS1440, TS1680	10 years

Under no circumstances will this Warranty apply in the event that the product, in the good faith opinion of WOODS, has been subjected to improper operation, improper maintenance, misuse, or an accident. This Warranty does not apply in the event that the product has been materially modified or repaired by someone other than WOODS, a WOODS authorized dealer or distributor, and/or a WOODS authorized service center. This Warranty does not cover normal wear or tear, or normal maintenance items. This Warranty also does not cover repairs made with parts other than those obtainable through WOODS.

This Warranty is extended solely to the original purchaser of the product. Should the original purchaser sell or otherwise transfer this product to a third party, this Warranty does not transfer to the third party purchaser in any way. There are no third party beneficiaries of this Warranty.

WOODS makes no warranty, express or implied, with respect to engines, batteries, tires or other parts or accessories not manufactured by WOODS. Warranties for these items, if any, are provided separately by their respective manufacturers.

WOODS' obligation under this Warranty is limited to, at WOODS' option, the repair or replacement, free of charge, of the product if WOODS, in its sole discretion, deems it to be defective or in noncompliance with this Warranty. The product must be returned to WOODS with proof of purchase within thirty (30) days after such defect or noncompliance is discovered or should have been discovered, routed through the dealer and distributor from whom the purchase was made, transportation charges prepaid. WOODS shall complete such repair or replacement within a reasonable time after WOODS receives the product. THERE ARE NO OTHER REMEDIES UNDER THIS WARRANTY. THE REMEDY OF REPAIR OR REPLACEMENT IS THE SOLE AND EXCLUSIVE REMEDY UNDER THIS WARRANTY.

THERE ARE NO WARRANTIES WHICH EXTEND BEYOND THE DESCRIPTION ON THE FACE OF THIS WARRANTY. WOODS MAKES NO OTHER WARRANTY, EXPRESS OR IMPLIED, AND WOODS SPECIFICALLY DISCLAIMS ANY IMPLIED WARRANTY OF MERCHANTABILITY AND/OR ANY IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE.

WOODS shall not be liable for any incidental or consequential losses, damages or expenses, arising directly or indirectly from the product, whether such claim is based upon breach of contract, breach of warranty, negligence, strict liability in tort or any other legal theory. Without limiting the generality of the foregoing, Woods specifically disclaims any damages relating to (i) lost profits, business, revenues or goodwill; (ii) loss of crops; (iii) loss because of delay in harvesting; (iv) any expense or loss incurred for labor, supplies, substitute machinery or rental; or (v) any other type of damage to property or economic loss.

This Warranty is subject to any existing conditions of supply which may directly affect WOODS' ability to obtain materials or manufacture replacement parts.

No agent, representative, dealer, distributor, serviceperson, salesperson, or employee of any company, including without limitation, WOODS, its authorized dealers, distributors, and service centers, is authorized to alter, modify, or enlarge this Warranty.

Answers to any questions regarding warranty service and locations may be obtained by contacting:

#### **Woods Equipment** Company

2606 South Illinois Route 2 Post Office Box 1000 Oregon IL 61061

800-319-6637 tel 800-399-6637 fax www.WoodsEquipment.com



**ALITEC**™

CENTRAL FABRICATORS®

**GANNON**®

GILL®

**WAIN-ROY**®

**WOODS**®

# PART NO. MAN0041

#### Woods Equipment Company

2606 South Illinois Route 2 Post Office Box 1000 Oregon, Illinois 61061

800-319-6637 tel 800-399-6637 fax www.WoodsEquipment.com



© 2000 Woods Equipment Company. All rights reserved. WOODS, the Woods logo, and "Tested. Proven. Unbeatable." are trademarks of Woods Equipment Company. All other trademarks, trade names, or service marks not owned by Woods Equipment Company that appear in this manual are the property of their respective companies or mark holders. Specifications subject to change without notice.