



Bobcat®

V - Blade

60 Inch-14 Pin

60 Inch-7 Pin

72 Inch

84 Inch

96 Inch

108 Inch

Service Manual

(60 In.-14 Pin) S/N 083800101 & Above

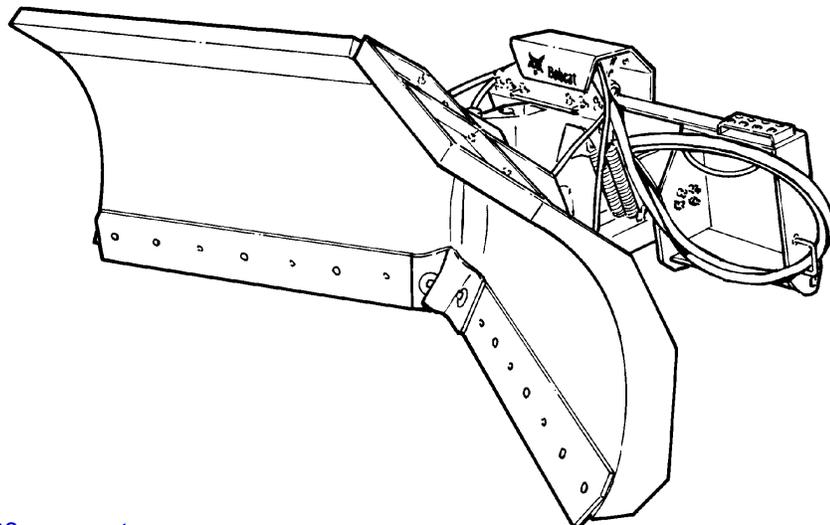
(60 In.-7 Pin) S/N 084300101 & Above

(72 In.) S/N 083900101 & Above

(84 In.) S/N 084000101 & Above

(96 In.) S/N 084100101 & Above

(108 In.) S/N 084200101 & Above



Product: 2006 Bobcat V-Blade 60,V-Blade 72,V-Blade 84,V-Blade 96,V-Blade 108 Service Repair Workshop Manual
Full Download: <https://www.arepairmanual.com/downloads/2006-bobcat-v-blade-60v-blade-72v-blade-84v-blade-96v-blade-108-service-repair-workshop-manual/>

Sample of manual. Download All 98 pages at:

<https://www.arepairmanual.com/downloads/2006-bobcat-v-blade-60v-blade-72v-blade-84v-blade-96v-blade-108-service-repair-workshop-manual/>

MAINTENANCE SAFETY



WARNING

Instructions are necessary before operating or servicing machine. Read and understand the Operation & Maintenance Manual, Operator's Handbook and signs (decals) on machine. Follow warnings and instructions in the manuals when making repairs, adjustments or servicing. Check for correct function after adjustments, repairs or service. Untrained operators and failure to follow instructions can cause injury or death.

W-2003-0903



Safety Alert Symbol: This symbol with a warning statement, means: "Warning, be alert! Your safety is involved!" Carefully read the message that follows.



B-10731a

-  Never service attachments without instructions. See Operation & Maintenance Manual and Attachment Service Manual.
-  Cleaning and maintenance are required daily.
-  Never service or adjust attachment with the engine running unless instructed to do so in manual.
-  Always lower the attachment to the ground before lubricating or servicing.
-  Avoid contact with leaking hydraulic fluid or diesel fuel under pressure. It can penetrate skin or eyes.
-  Stop, cool and clean engine of flammable materials before checking fluids.
-  Keep body, loose objects and clothing away from moving parts, electrical contacts, hot parts and exhaust.
-  Safety glasses are needed for eye protection from electrical arcs, battery acid, compressed springs, fluids under pressure and flying debris or when tools are used. Use eye protection approved for type of welding.



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**SAFETY &
MAINTENANCE**

**HYDRAULIC
SYSTEM**

**MAIN
FRAME**

**SPECIFICATIONS
AND
SCHEMATICS**

**CALIFORNIA
PROPOSITION 65 WARNING**

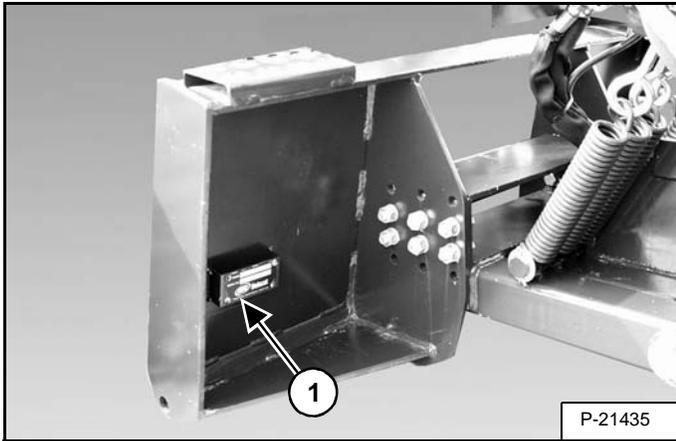
Diesel engine exhaust and some of its constituents are known to the State of California to cause cancer, birth defects and other reproductive harm.



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SERIAL NUMBER LOCATION

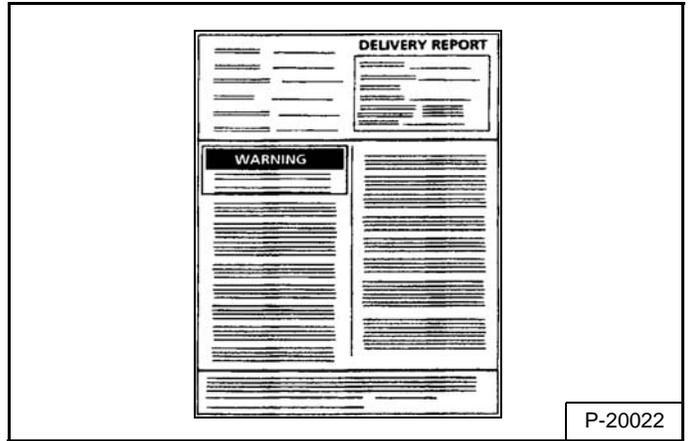
Figure 1



Always use the serial number (Item 1) [Figure 1] of the V-Blade when requesting service information or when ordering parts. Early or later models (identification made by serial number) may use different parts, or it may be necessary to use a different procedure in doing a specific service operation.

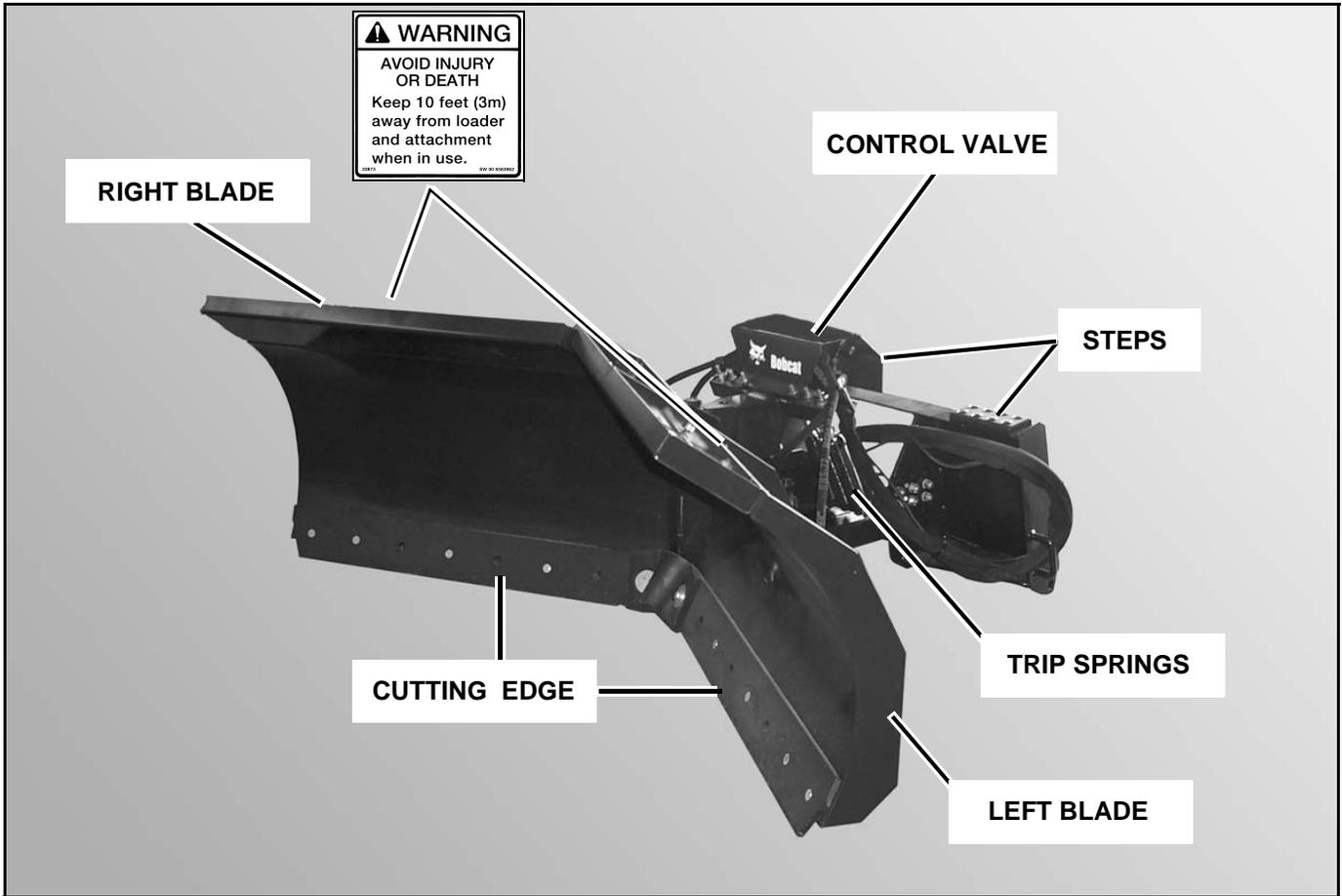
ATTACHMENT DELIVERY REPORT

Figure 2



The Attachment Delivery Report must be filled out by the dealer and signed by the owner or operator when the V-Blade is delivered. An explanation of the form must be given to the owner. Make sure it is filled out completely [Figure 2].

IDENTIFICATION AND MACHINE SIGNS (DECALS)



SAFETY & MAINTENANCE

SAFETY & MAINTENANCE

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TROUBLESHOOTING

PROBLEM	CAUSE	CORRECTION
Blades Will Not Angle	Auxiliary Hydraulics Not Engaged	Engage Auxiliary Hydraulics
	Hydraulic Connections Not Made	Connect Hydraulics
	Electrical Connection Not Made	Connect Electrical
Blade Trips To Easy	Trip Springs Loose	Tighten Trip Springs
Blade Trips Hard	Trip Springs To Tight	Loosen Trip Springs



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INSPECTION

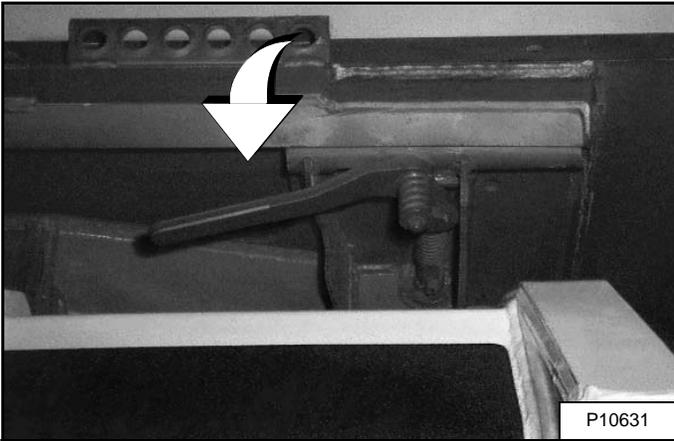
Hand Lever Bob-Tach Inspection

! WARNING

Bob-Tach wedges must extend through the holes in attachment. Lever(s) must be fully down and locked. Failure to secure wedges can allow attachment to come off and cause injury or death.

W-2102-0497

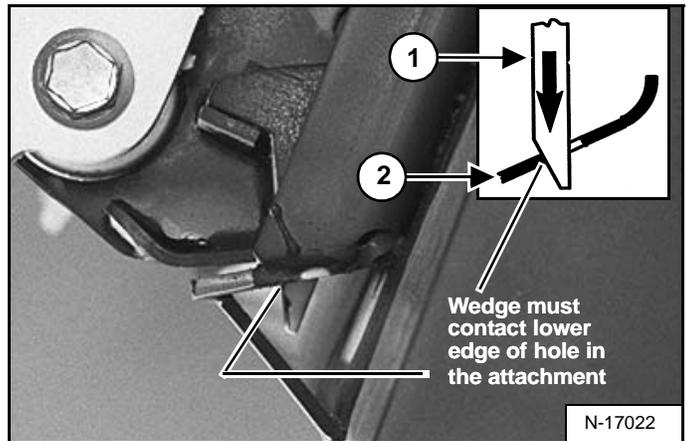
Figure 10-20-1



Move the Bob-Tach levers down to engage the wedges [Figure 10-20-1].

The levers and wedges must move freely.

Figure 10-20-2

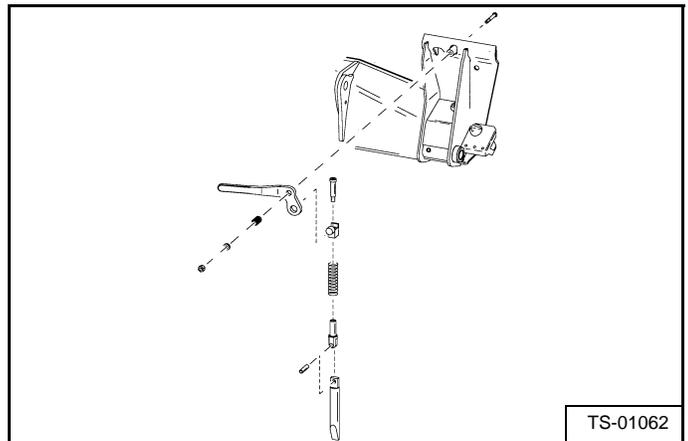


The wedges must extend through the holes in the attachment mounting frame (Item 2) [Figure 10-20-2].

The spring loaded wedge (Item 1) [Figure 10-20-2] must contact the lower edge of the hole in the attachment (Item 2).

If the wedge does not contact the lower edge of the hole the attachment will be loose and can come off the Bob-Tach.

Figure 10-20-3



Inspect the mounting frame on the attachment and the Bob-Tach, linkages and wedges for excessive wear or damage. Replace any parts that are damaged, bent, or missing [Figure 10-20-3]. Keep all fasteners tight.

Look for cracked welds. Contact your Bobcat dealer for repair or replacement parts.

Lubricate the wedges. (See the correct loader Operation & Maintenance Manual for *LUBRICATION OF THE BOBCAT LOADER*.)

INSPECTION (CONT'D)

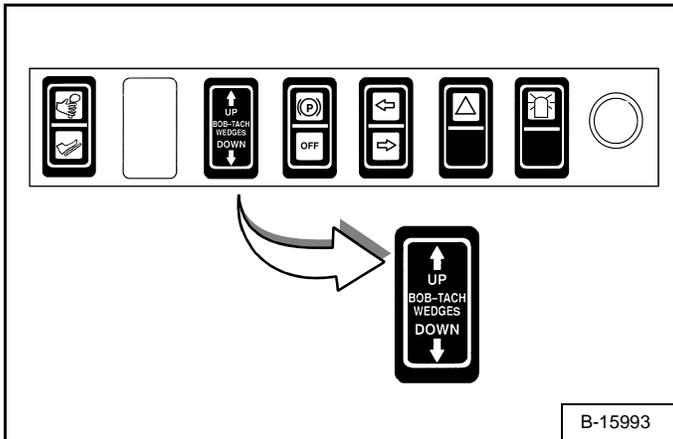
Power Bob-Tach Inspection

! WARNING

Bob-Tach wedges must extend through the holes in attachment. Lever(s) must be fully down and locked. Failure to secure wedges can allow attachment to come off and cause injury or death.

W-2102-0497

Figure 10-20-4

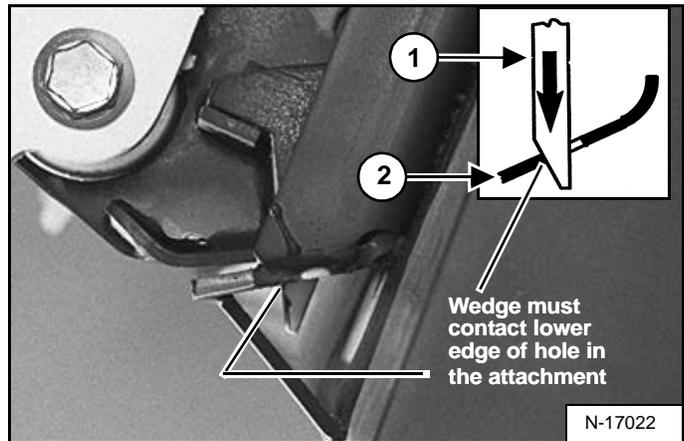


B-15993

Push and hold the BOB-TACH WEDGES UP switch until wedges are fully raised. Push and hold the BOB-TACH WEDGES DOWN switch until [Figure 10-20-4] the wedges are fully down.

The wedges must move freely.

Figure 10-20-5



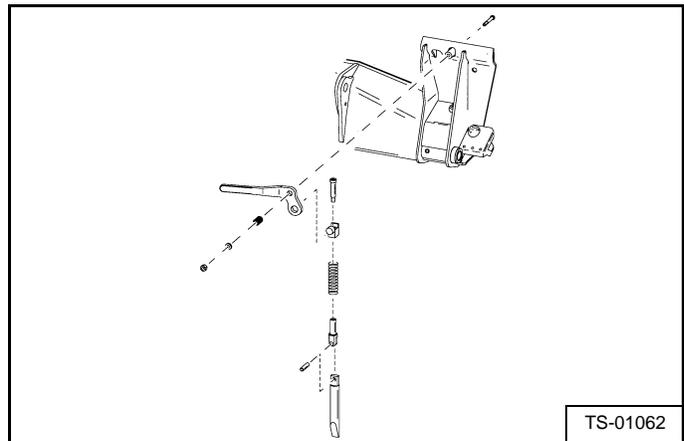
N-17022

The wedges must extend through the holes in the attachment mounting frame (Item 2) [Figure 10-20-5].

The spring loaded wedge (Item 1) must contact the lower edge of the hole in the attachment (Item 2) [Figure 10-20-5].

If the wedge does not contact the lower edge of the hole [Figure 10-20-5] the attachment will be loose and can come off the Bob-Tach.

Figure 10-20-6



TS-01062

Inspect the mounting frame on the attachment and the Bob-Tach, linkages and wedges for excessive wear or damage [Figure 10-20-6]. Replace any parts that are damaged, bent, or missing. Keep all fasteners tight. Inspect the hoses and fittings for leaks.

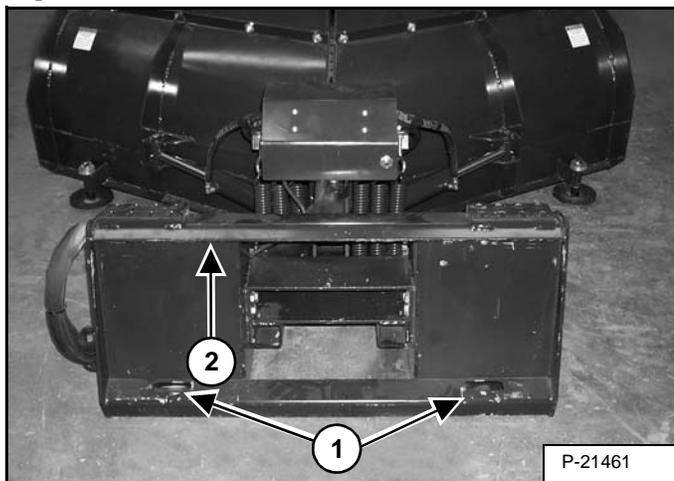
Look for cracked welds. Contact your Bobcat dealer for repair or replacement parts.

Lubricate the wedges. (See the correct loader Operation & Maintenance Manual for *LUBRICATION OF THE BOBCAT LOADER*.)

INSPECTION (CONT'D)

V-Blade Inspection

Figure 10-20-7



Inspect the Bob-Tach wedge mounts (Item 1), mounting flange (Item 2) and all welds on the V-Blade for wear and damage each time the V-Blade is removed from the loader [Figure 10-20-7].



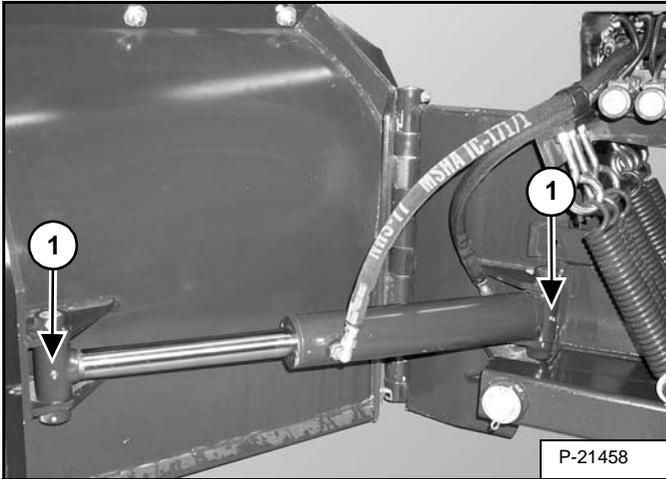
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LUBRICATION

Daily Lubrication

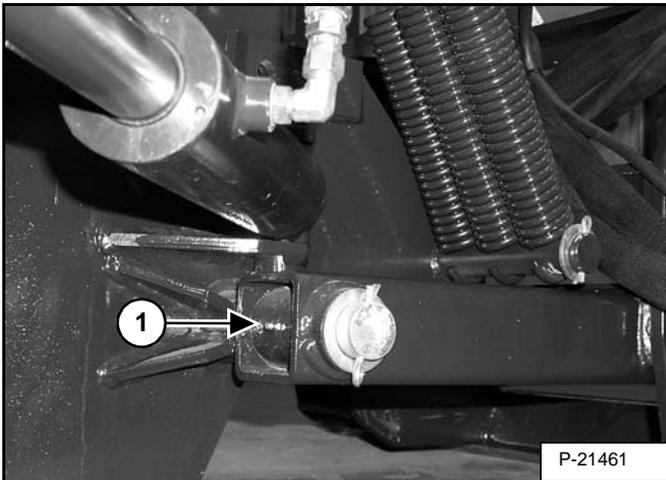
Always use a good quality lithium base grease when lubricating the V-Blade. Apply the lubricant until extra grease shows.

Figure 10-30-1



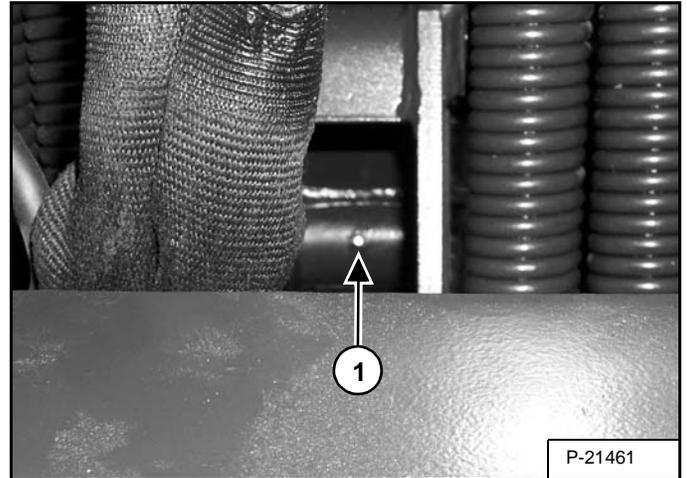
Add grease to the fittings on each end of the cylinder (Item 1) [Figure 10-30-1].

Figure 10-30-2



Add grease to the fitting (Item 1) [Figure 10-30-2] (One fitting on each side).

Figure 10-30-3



Add grease to the fitting (Item 1) [Figure 10-30-3]. Fitting is located in the center of the frame.

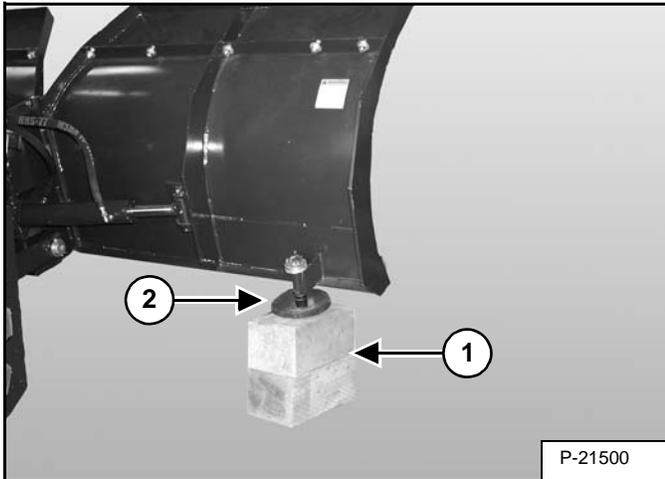


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CUTTING EDGE REPLACEMENT

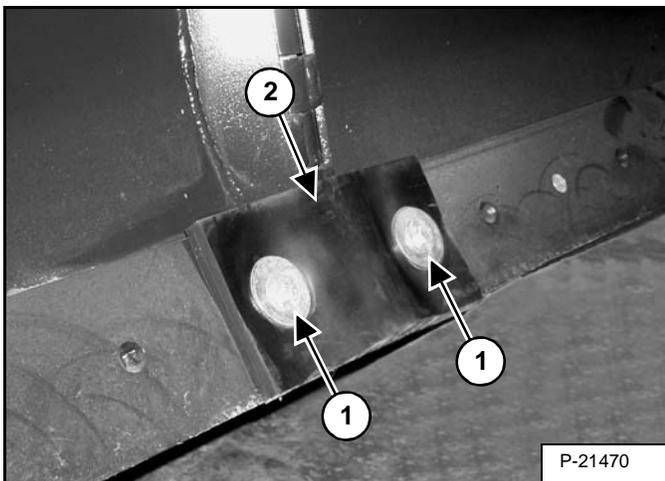
Removal And Installation

Figure 10-40-1



Place blocks (Item 1) under each skid shoe (Item 2) [Figure 10-40-1].

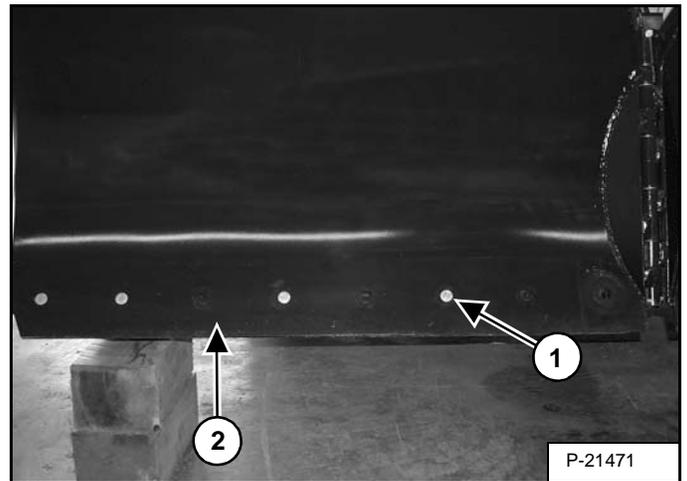
Figure 10-40-2



Remove the bolts and nuts (Item 1), then remove the center rubber cutting edge (Item 2) [Figure 10-40-2].

Installation: Reverse procedure [Figure 10-40-2].

Figure 10-40-3



Remove the bolts and nuts (Item 1) [Figure 10-40-3] in the cutting edge.

Remove and replace cutting edge (Item 2) [Figure 10-40-3] using existing hardware or equal.

Installation: Tighten bolts to 125-140 ft.-lb. (170-190 N•m) torque.

Reversing The Steel Cutting Edge

Remove the steel cutting edge [Figure 10-40-3].

Rotate the steel cutting edge end for end, then rotate the cutting edge top to bottom.

Install the steel cutting edge [Figure 10-40-3].

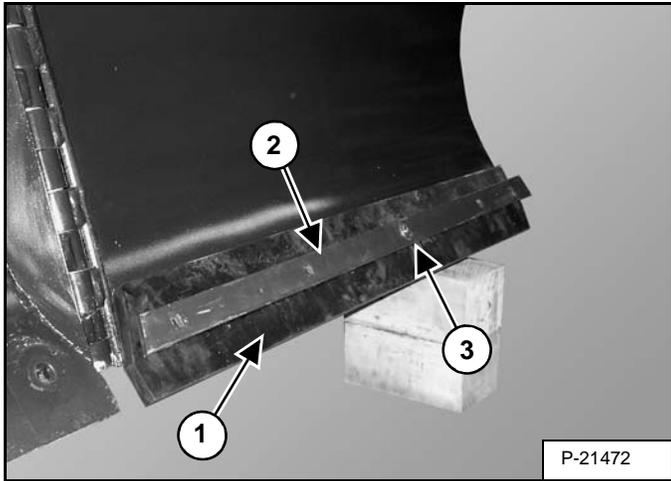
Install center rubber cutting edge [Figure 10-40-2].

CUTTING EDGE REPLACEMENT (CONT'D)

Rubber Cutting Edge Installation and Removal

Remove steel cutting edge. (See Removal And Installation on Page 10-40-1.)

Figure 10-40-4

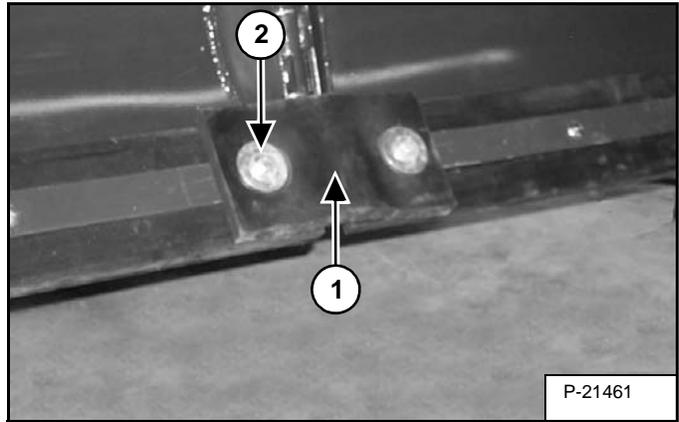


Align holes in rubber cutting edge (Item 1) and flat bar (Item 2) with holes in V- Blade. Install bolt (Item 3) [Figure 10-40-4].

NOTE: Tighten bolt (Item 3) [Figure 10-40-4] enough to hold rubber cutting edge and flat bar in place. This will allow the rubber cutting edge and flat bar to be moved while aligning remaining holes with holes in the V-Blade.

Removal: Reverse procedure [Figure 10-40-4].

Figure 10-40-5



Align holes in center rubber cutting edge (Item 1) [Figure 10-40-5] with holes in the flat bar, rubber cutting edge and V-Blade.

Install bolts (Item 2) [Figure 10-40-5] nuts and washers provided with rubber cutting edge.

Installation: Tighten bolts to 125-140 ft.-lb. (170-190 N•m) torque.

Reversing The Rubber Cutting Edge

Remove the rubber cutting edge [Figure 10-40-4].

Rotate the rubber cutting edge end for end, then rotate the rubber cutting edge top to bottom.

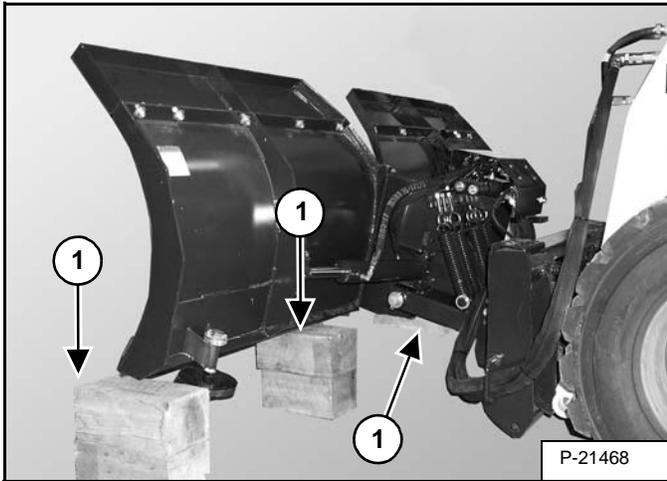
Install the rubber cutting edge [Figure 10-40-4].

Install center rubber cutting edge [Figure 10-40-5].

SKID SHOE REPLACEMENT

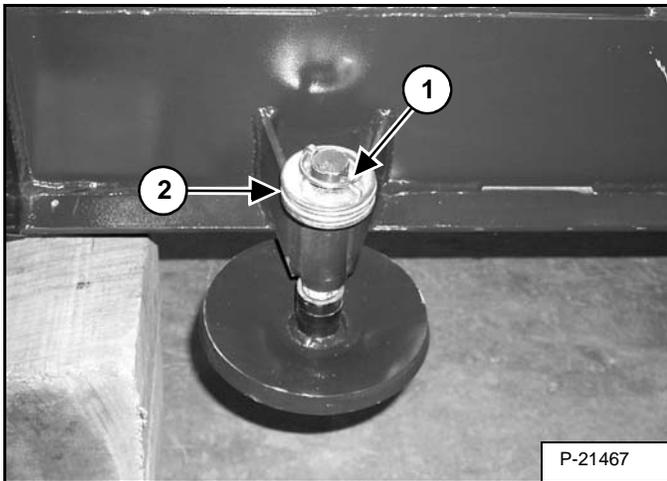
Removal And Installation

Figure 10-50-1



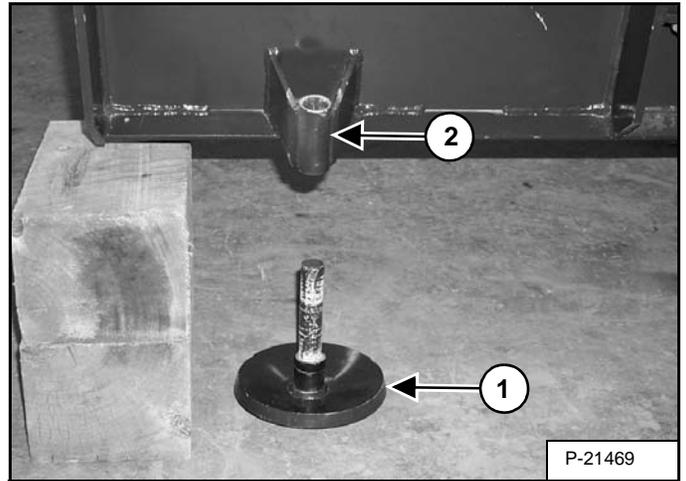
Lift V-Blade up and place blocks (Item 1) [Figure 10-50-1] under cutting edge lower V-Blade to blocks.

Figure 10-50-2



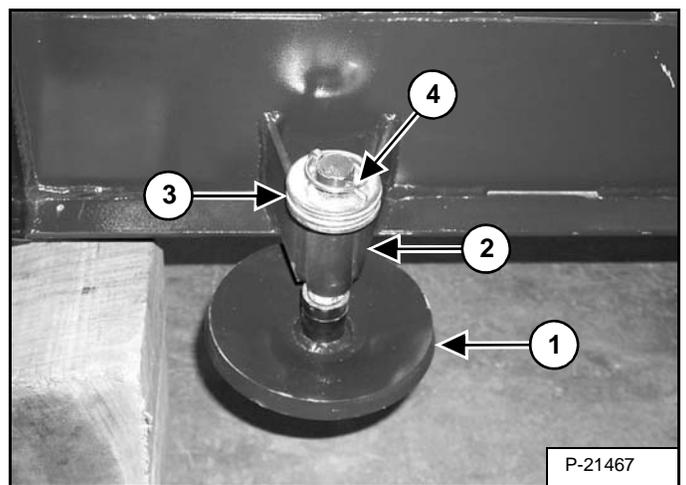
Remove retaining pin (Item 1) and washers (Item 2) [Figure 10-50-2].

Figure 10-50-3



Remove skid shoe (Item 1) from mount (Item 2) and replace [Figure 10-50-3].

Figure 10-50-4



Lift the new skid shoe (Item 1) up and place inside the mount (Item 2) [Figure 10-50-4].

Install washers (Item 3) and retaining ring (Item 4) [Figure 10-50-4].

Adjusting Skid Shoe Height

Raise Skid Shoe

Remove the pin (Item 4) on the skid shoes. Install washers (Item 3) at the top of skid shoe. Reinstall the pin [Figure 10-50-4].

Lower Skid Shoe

Remove the pin (Item 4) on the skid shoes. Remove washers (Item 3) from the top of the skid shoe, then place the desired number of washers onto the shaft of the skid shoe. Install the skid shoe, then install the pin (Item 4) [Figure 10-50-4].

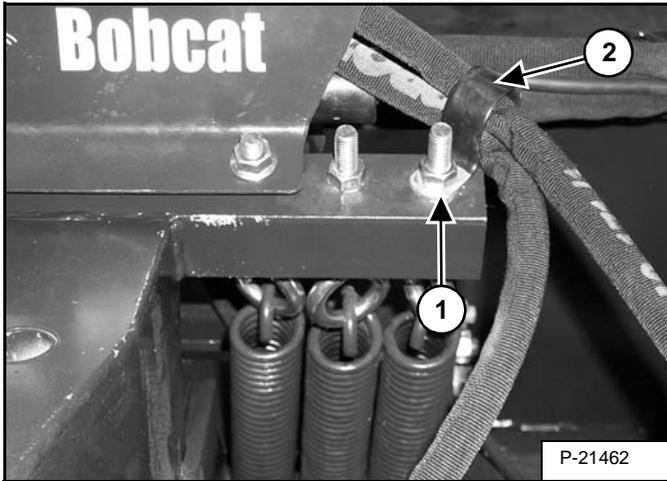


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TRIP SPRINGS

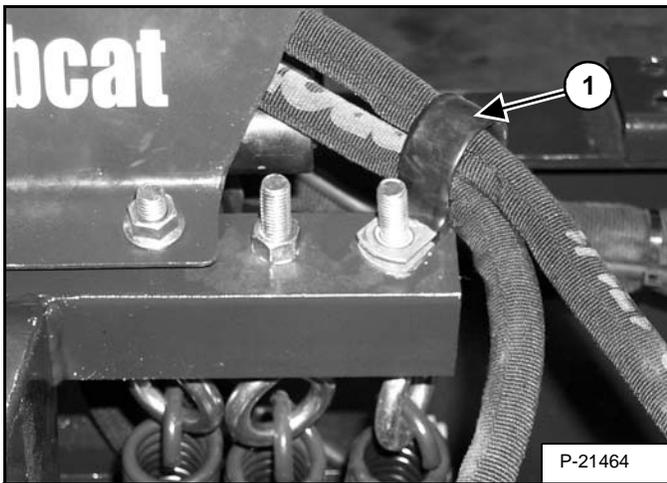
Removal and Installation

Figure 10-60-1



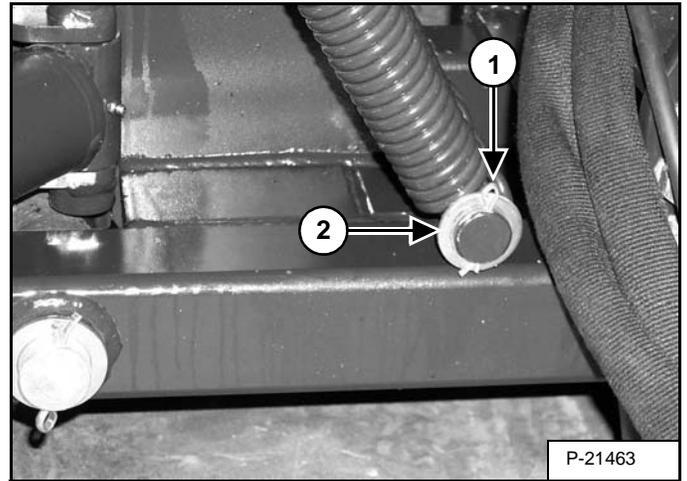
Remove nut (Item 1) [Figure 10-60-1].

Figure 10-60-2



Remove hose clamp (Item 1) [Figure 10-60-2].

Figure 10-60-3

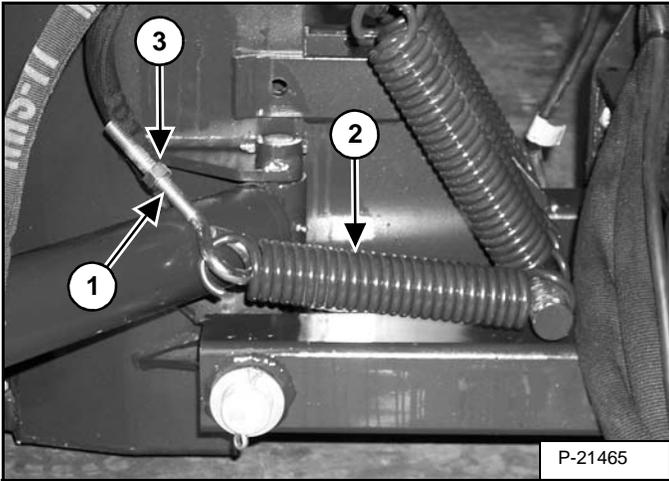


Remove cotter pin (Item 1) and washer (Item 2) [Figure 10-60-3].

TRIP SPRINGS (CONT'D)

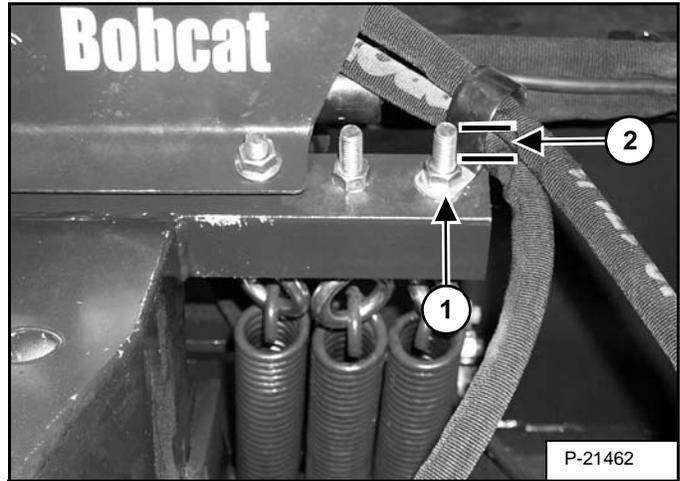
Removal and Installation (Cont'd)

Figure 10-60-4



Remove eyebolt (Item 1) and trip spring (Item 2) [Figure 10-60-4].

Figure 10-60-5



Installation: Reverse procedure.

Installation: Place eyebolt through the mount and hose clamp, then tighten nut (Item 1) until there is approximately 1 in. of threads (Item 2) above the nut. [Figure 10-60-5]

Tighten lower nut (Item 3) [Figure 10-60-4].

Adjusting Trip Springs

If the blade trips too easy, loosen lower nut (Item 3), then tighten top nut (Item 1) to desired tension [Figure 10-60-5].

If the blade trips hard, loosen top nut (Item 1) to desired tension, then tighten lower nut (Item 3) [Figure 10-60-4].

HYDRAULIC SYSTEM

HYDRAULIC SYSTEM

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Bobcat®

HYDRAULIC CONTROL VALVE (S/N 083800101 & ABOVE)

Removal and Installation

IMPORTANT

When repairing hydrostatic and hydraulic systems, clean the work area before disassembly and keep all parts clean. Always use caps and plugs on hoses, tubelines and ports to keep dirt out. Dirt can quickly damage the system.

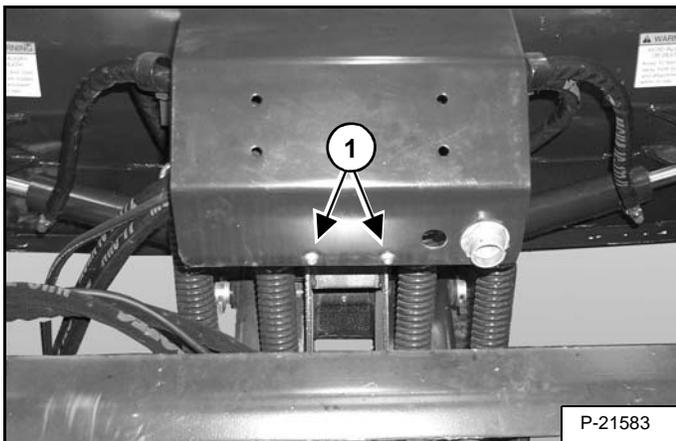
I-2003-0888

IMPORTANT

Contain and dispose of any oil leakage in an environmentally safe manner.

I-2066-0395

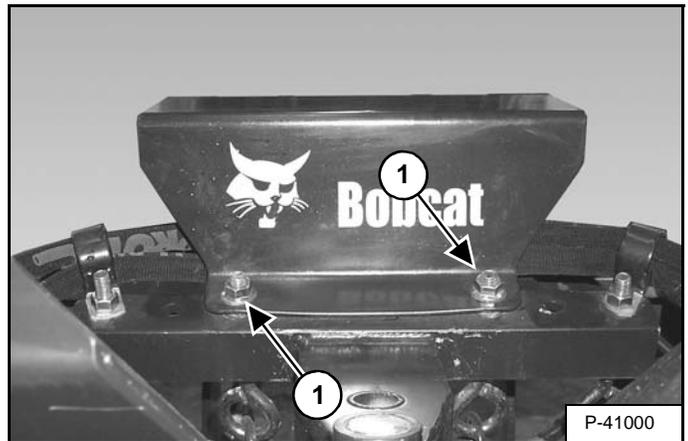
Figure 20-10-1



Remove the bolts (Item 1) [Figure 20-10-1].

Installation: Tighten bolts to 34-38 ft.-lb. (25-28 N•m) torque.

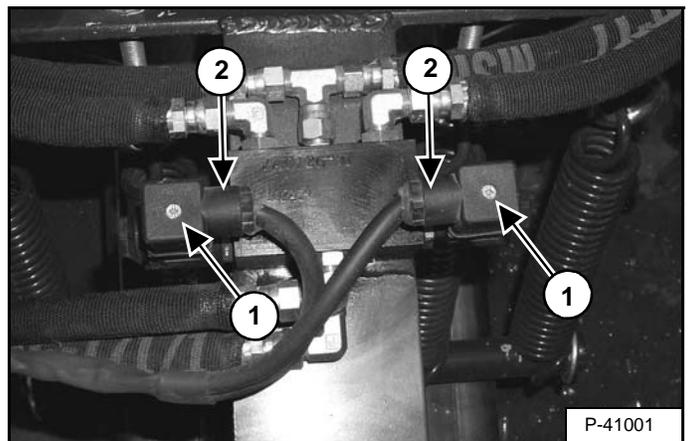
Figure 20-10-2



Remove the nuts (Item 1) [Figure 20-10-2] and bolts.

Installation: Tighten nuts to 65-70 ft.-lb. (88-95 N•m) torque.

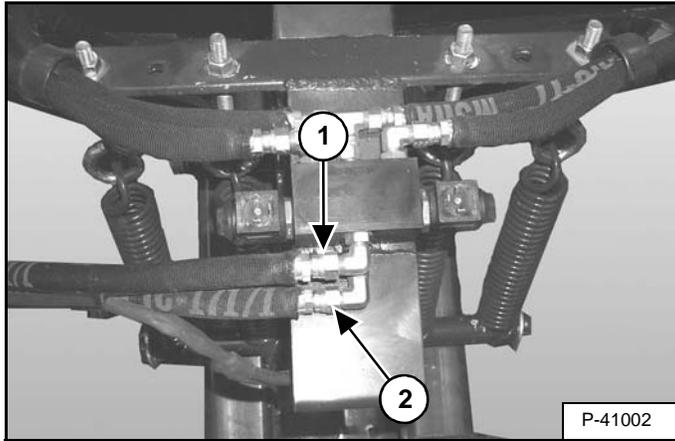
Figure 20-10-3



Remove the screws (Item 1) [Figure 20-10-3].

Remove the auxiliary electrical harness (Item 2) [Figure 20-10-3].

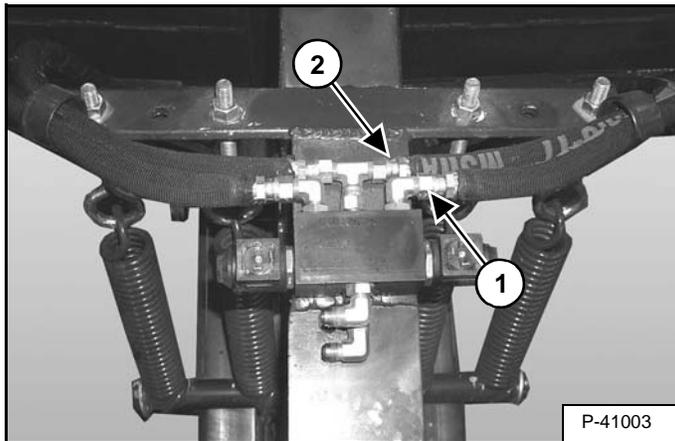
Figure 20-10-4



Remove the male quick coupler hose (Item 1) [Figure 20-10-4].

Remove the female quick coupler hose (Item 2) [Figure 20-10-4].

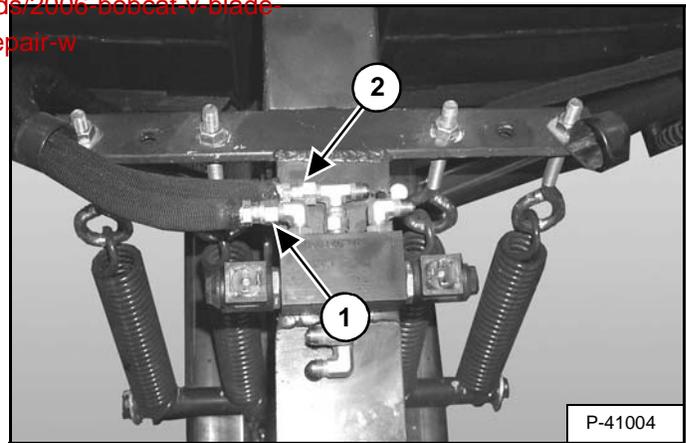
Figure 20-10-5



Remove the rod end hose (Item 1) [Figure 20-10-5] of right blade cylinder.

Remove the base end hose (Item 2) [Figure 20-10-5] of right blade cylinder.

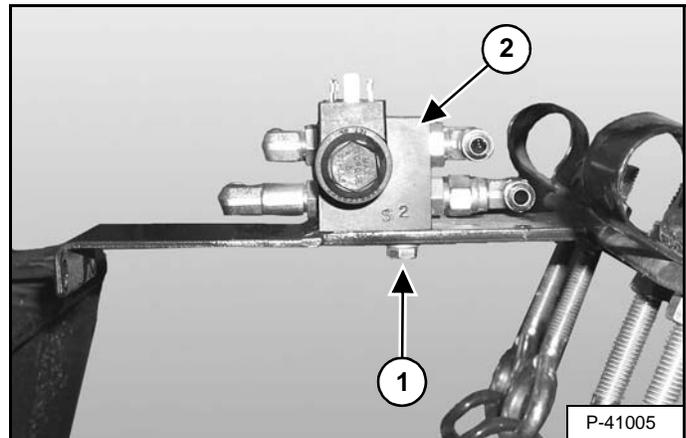
Figure 20-10-6



Remove the rod end hose (Item 1) [Figure 20-10-6] of left blade cylinder.

Remove the base end hose (Item 2) [Figure 20-10-6] of left blade cylinder.

Figure 20-10-7



Remove the bolts (Item 1) [Figure 20-10-7].

Remove the control valve (Item 2) [Figure 20-10-7]