



# INSTRUCTION BULLETIN

No. 340511  
Machine: ATLV 4300  
Published: 8-02  
Rev. 01

**NOTE: DO NOT DISCARD the Parts List from the Instruction Bulletin. Place the Parts List in the appropriate place in your machine manual for future reference. Retaining the Parts List will make it easier to reorder individual parts and will save you the cost of ordering an entire kit.**

*NOTE: Numbers in parenthesis ( ) are reference numbers for parts listed in Bill of Materials.*

Installation instructions for **kit number 373433**

## DESCRIPTION:

This kit contains the parts needed to replace the hydraulic pump on the model ATLV 4300 litter vacuum.

Please follow step-by-step instructions.

## SPECIAL TOOLS / CONSIDERATIONS: NONE

(Estimated time to complete: 6 hours)

## PREPARATION:

**FOR SAFETY: Before leaving or servicing machine, stop on level surface and set parking brake. Then turn off machine and remove key.**

1. Disconnect battery cables from machine.



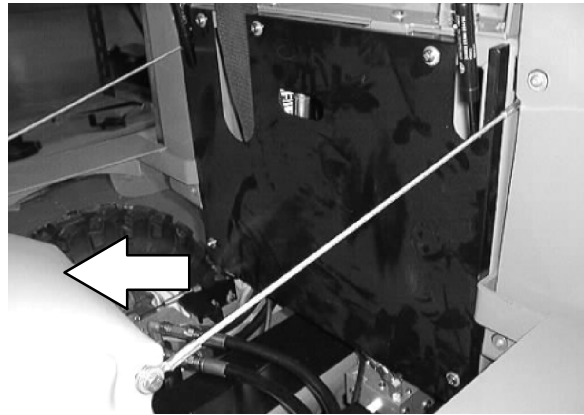
**WARNING: Always disconnect battery cables from machine before working on electrical components.**

## HYDRAULIC PRINCIPLES:

1. Cleanliness is extremely important when working with hydraulic components. Work in a clean, dust-free area. Dirt or foreign material in hydraulic systems can impair operation and damage equipment.
2. Before disconnecting hydraulic hoses or fittings, thoroughly clean outside of hydraulic component to prevent dirt from entering system.
3. Mark hydraulic hoses and record locations for proper installation.
4. Cap disconnected hoses or open ports to keep dirt out of system.
5. Discard any hydraulic fluid drained from the system. Use only new, approved hydraulic fluid to replenish hydraulic reservoir.
6. Flush hose and fittings at pressure port of hydraulic component with air, solvent or hydraulic fluid to help avoid contamination.

## PUMP REMOVAL:

1. Open the hopper cover and tilt the hopper back.
2. Open the top engine cover.
3. Remove the five pan screws holding the rear engine cover to the machine. Remove the cover.

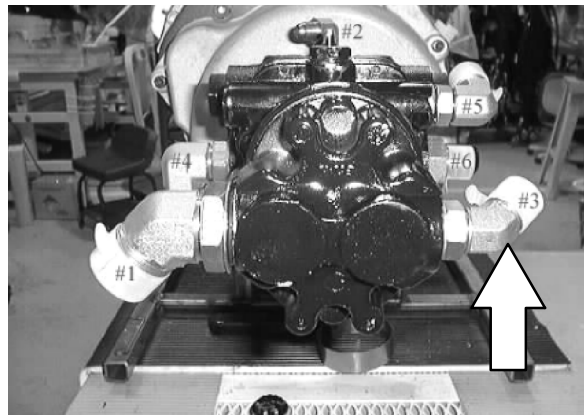


4. Remove the grill from the left side fender panel.
5. Disconnect the air intake tube from the collar on the left side machine fender.
6. Remove the seven pan screws holding the left fender to the machine. Pull the fender out slightly and disconnect the turn signal. Remove the fender from the machine.

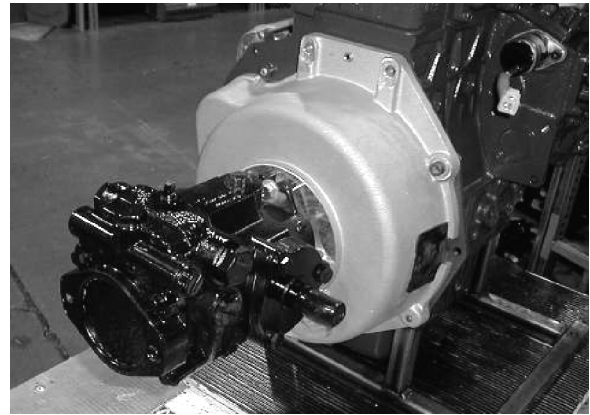
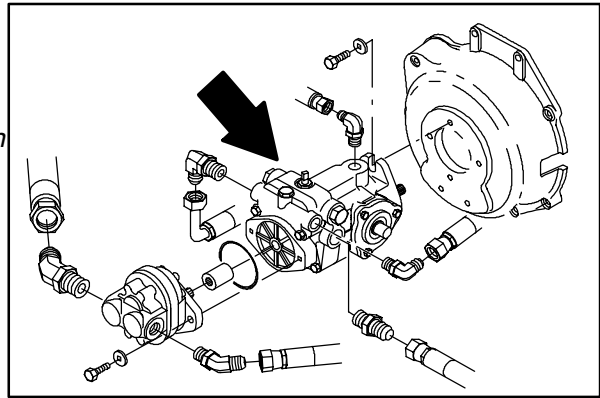


*NOTE: Observe hydraulic cleanliness requirements when opening hydraulic lines.*

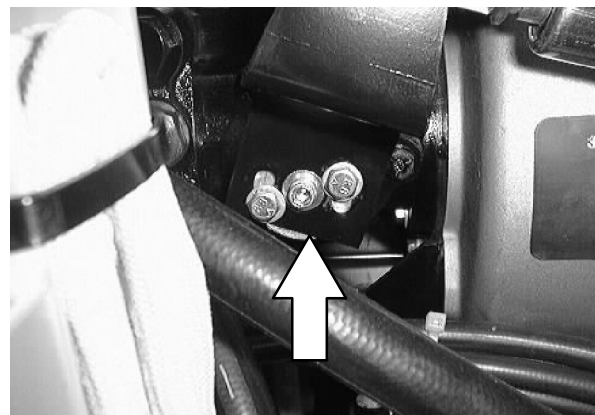
7. Disconnect and plug the small hydraulic hose leading to the back side of the accessory pump. Leave the larger suction line connected.
8. Remove the two cap screws holding the accessory pump to the propel pump. Pull the accessory pump straight back out of the propel pump. Let the accessory pump drop down out of the way for access to the propel pump. *Make sure to retain the O-ring.*
9. Locate the propel pump directional arm on the back side of the propel pump. Remove the two hex screws holding the pump arm to the pump hub.



10. Mark, disconnect, and plug the four hydraulic hoses leading to the propel pump.
11. Remove the two hex screws holding the propel pump to the bellhousing. *The bottom hex screw can be accessed easier with the motor mount removed.*
12. Pull the propel pump out of the bellhousing and remove it from the machine.
13. Remove the directional hub from the side of the propel pump and install on the new pump in the same orientation. Use blue loctite (242) on the threads of the cap screw. Tighten to 18 - 24 Nm (15 - 20 ft. lb).
14. Remove the hydraulic fittings from the old propel pump and install into the new pump in the same orientation.
15. Position the new pump assembly into the engine bellhousing. Line up splines on the pump input shaft with the teeth in the flywheel coupling. Push the pump in until it is against the bellhousing plate.



16. Reinstall the two hex screws into the pump mount holes. *The pump directional hub faces the rear of the machine.* Tighten to 31 - 40 Nm (27 - 35 ft. lb).
17. Reconnect the four hydraulic hoses to the propel pump. See hose diagram in the *STANDARD PARTS* section of the *PARTS MANUAL*.

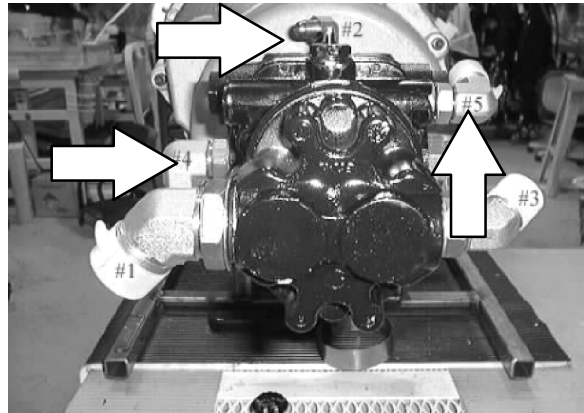


**NOTE:** Observe hydraulic cleanliness requirements when opening hydraulic lines.

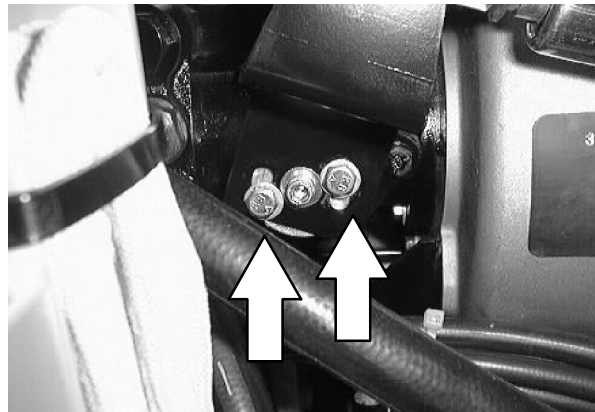
18. Reinstall the accessory pump into the propel pump. Make sure the O-ring is installed on the face of the pump. Reinstall the hardware and tighten to 31 - 40 Nm (27 - 35 ft. lb).

19. Reconnect the one small hydraulic hose to the accessory pump.

*NOTE: Observe hydraulic cleanliness requirements when opening hydraulic lines.*



20. Reinstall the directional pump arm onto the pump hub. Reinstall the two hex screws. Leave the screws loose for now.
21. The neutral centering will have to be set at this point. See TO ADJUST PROPEL NEUTRAL instructions.
22. Reinstall the left hand side panel and left hand grill.
23. Reinstall the rear engine cover.



24. Tilt the hopper forward, close the hopper cover, and close the top engine cover.
25. Start the machine and operate the propel circuit. Check for proper operation.



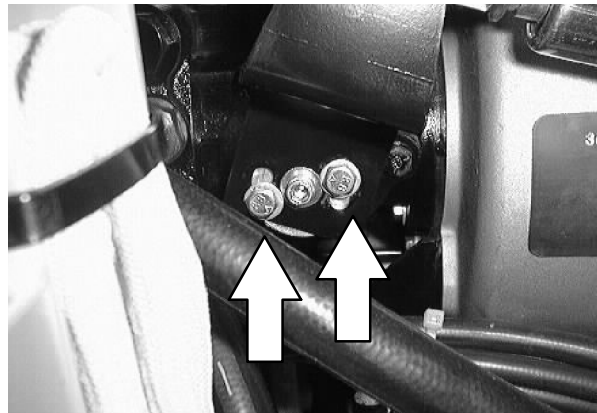
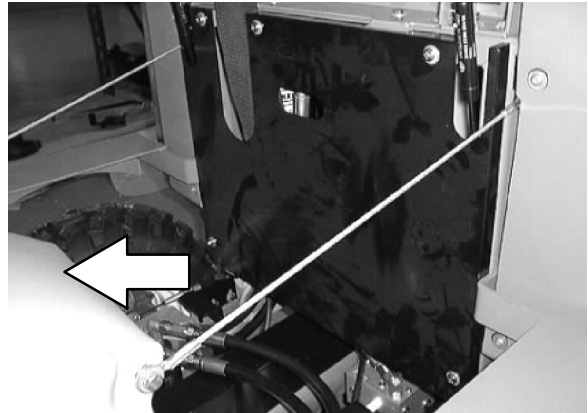
## TO ADJUST PROPEL NEUTRAL:

**FOR SAFETY: Before Leaving Or Servicing Machine; Stop On Level Surface, Set Parking Brake, turn off machine, and remove key.**

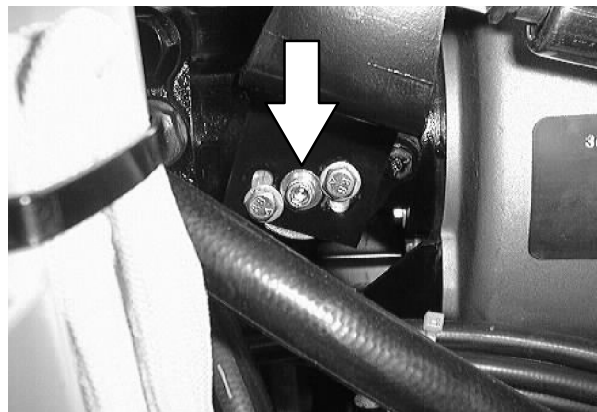
1. Open the hopper cover and tilt the hopper back.
2. Open the top engine cover.
3. Remove the five pan screws holding the rear engine cover to the machine. Remove the cover.

*NOTE: The rear wheels must be off the ground when adjusting the neutral centering.*

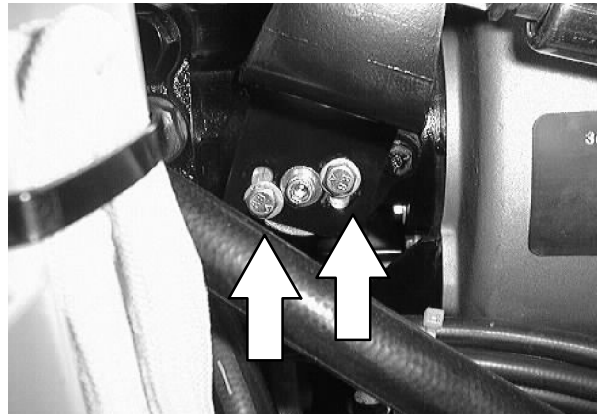
4. Place blocks in front and back of the front tires.
5. Jack up the rear of the machine at the indicated jack points. Install jack stands under the machine frame.
6. Locate the propel pump directional arm hub on the back side of the pump.
7. Loosen the two outside hex screws on the hub. DO NOT loosen the cap screw in the center of the hub.



8. Place an allen wrench in the cap screw (this will be used to rotate the hub). Start the machine and observe the rear tires. If they are not turning--no adjustment is needed and the hardware can be tightened. If the tires are rotating--an adjustment is needed. Go to the next step.
9. Rotate the allen wrench until the tires are stationary. Hold the allen wrench so the hub does not move.



10. Tighten the two outside hex screws. Re-observe the rear tires for rotation. Repeat step if necessary. Lower the machine and reinstall the rear engine cover.
11. Operate the machine and check the propel for proper operation.



#### **BILL OF MATERIALS FOR HYDRAULIC PUMP REPLACEMENT KIT 373433**

<b>Ref.</b>	<b>TENNANT Part No.</b>	<b>Description</b>	<b>Qty.</b>
1	373425	Pump, hyd, piston	1
2	373429	Instr, repair, pump	1

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