



#### **MODEL: 1997 Commercial Snow Thrower**

#### **SUBJECT: Snow Thrower Modification**

To All Husqvarna Servicing Dealers,

The following models are affected ST 723 C, ST 926 EC and ST 1030 EC built in 1996 for 1997. If you should have any of these models in inventory or in the field that need to be modified, please use the following snow thrower modification procedure. It will be handled as warranty. Use the attached form to file your claims. This rework will pay two and one half hours labor. File parts through warranty program. Please return new impeller shafts removed from units that have not been used. All impeller shafts and claims should be sent to:

Husqvarna Forest & Garden Co., 9006 Perimeter Woods Drive, Charlotte, NC, 28216, Attn: Warranty

This modification kit has been provided to ensure optimum reliability and performance of the Husqvarna Snow Throwers. It consists of the necessary parts to:

1) Modify the auger gear box with a hardened impeller shaft

2) Modify the ground speed

3) Improve the stability and control by replacing the skid height adjusters with a new design and adding an extra counter weight.

The following is a listing of the items provided within this modification kit:

2 only	# 531 00 26-90	SHIM.ENG.PULLEY.TRACTION
1 only	# 506 69 95-01	SHAFT.IMPELLER
1 only	# 533 15 55-13	RETAINER.IMPELLER
1 only	# 506 69 37-01	ROLL.PIN.M3x22
1 only	# 503 20 00-37	BOLT.FLANGE.M6x20
1 only	# 531 00 26-91	SKID.HEIGHT.ADJUSTER.LH
1 only	# 531 00 26-92	SKID.HEIGHT.ADJUSTER.RH
1 only	# 533 15 55-34	COUNTER WEIGHT
1 only		INSTRUCTION SHEET

Attached detailed instructions to complete work.

The auger drive worm gear will be added to the above kit for used units already in the field. 1 only # 506 70 15-01 AUGER DRIVE WORM GEAR

NOTE: All references to LH, RH, front or rear of the snow blower are considered from the operator position.

#### Detailed Step by Step procedures for the modification

#### STEP 1: Preparation for splitting the unit

- Drain fuel from the fuel tank (only if unit has been previously serviced)
- Disconnect spark plug lead
- Position engine throttle lever on stop position
- Position gear shift lever into 3rd F gear slot
- Remove belt cover (figure 1A)
- Disconnect the chute deflector cable from the deflector (9 and 10 HP models only) and secure out of the way (figure 1B)
- Disconnect the chute direction control cable and remove (figure 1C)
- Flip unit forward onto front edge of auger housing
- Remove locking pins from axles and remove wheel assemblies
- Remove the bottom panel (secured by 7 fasteners)

#### Figure 1







#### STEP 2: Drive system ground speed modification

- Measure a minimum of 3/16" / 0.1875" to the right (towards the friction wheel) of the existing roll pin in the hex shaft and mark spot for a new hole to be drilled on the center line of the hex flat (figure 2)
- Using a 1/8" / 0.125 drill size, drill new hole at mark as indicated above (catch drill shavings on a cloth for easy removal)
- Insert roll pin provided in kit ensuring that it protrudes evenly on both sides
- Remove the rear right bearing mount bracket bolt and replace with the longer bolt M6x20 provided in the kit (figure 3A)
- Reposition gear shift lever into 1st F gear slot and adjust controls so the drive disc is in the 1st F position in the shifting alignment plate located right above the drive disc inside the traction frame
- Check all of the gears by shifting through all the positions in the following sequence: from 1st F to 2nd R, to 4th F, to 1st R, to 3rd F, to 2nd R, to 2nd F, and finally to neutral. The gear selection at the control panel should coincide with the corresponding position in the alignment plate and the edge of the friction wheel hub should be bottoming out on the newly installed roll pinin 2nd R and the trunnion bearing housing should contact the tip of the newly installed bolt in 4th F.





#### STEP 3: Splitting the unit

- Position the unit (wheels still off) down to its original position resting on wooden blocks
- Remove the top and middle fasteners (figure 4 A, B) and loosen only the bottom fasteners (figure 4 C) that secure the blower assembly to the tractor frame on both sides
- Separate the two assemblies by lowering the tractor gently and lifting the blower assembly out of the two bottom slots of the traction frame (figure 3)





#### STEP 4: Add new shim between the traction engine pulley halves

- While the tractor section is resting against a support remove the engine shaft fasteners securing the engine pulleys (figure 5 A)
- Slide off blower pulley (figure 5 B), key (figure 5 C), spacer washer, (figure 5 Item D to be discarded) and front traction pulley half (figure 5 E)
- Loosen traction idler pulley fastener (figure 4 A)
- Adjust idler pulley position to the end of the slot in the lever towards the direction of the eng. shaft
- While holding the idler pulley in this position, re-tighten fastener
- Install the 2 new shims between the traction pulley halves (figure 4 B)
- Reverse steps to re-assemble the engine pulleys ensuring proper torquing of the fasteners

Figure 4





NOTE: The tractor assembly is ready to be re-attached to the blower later in the procedeure.

#### STEP 5: Impeller shaft replacement

- Block impeller and remove the bolt and washer, pulley, key and spacer
- Remove the 3 impeller bearing bracket mounting fasteners
- Remove the 8 fasteners (4 @ side) that secure the auger and gear box assembly to the side plates
- Remove the entire assembly from the auger housing
- Drain the gear box lubricant into a clean container for re-use by removing drain plug. New units only.
- Remove the shear bolt fastening the RH (cover side of gear box) auger assembly to the shaft and slide auger off
- Remove 4 fasteners from side cover and 3 fasteners from end cover of the gear box assembly and slide covers off
- Remove auger shaft with LH auger still attached
- Hold free end of impeller shaft in a vertical position with gear box at the lower end and with a plastic mallet, gently tap gear box at the end cover area making sure that the tapping is rotated to allow for bearing to slide out evenly
- Once shaft is removed, replace with new replacement shaft and reverse steps for re-assembly of the complete blower unit.

#### STEP 6: Replacement of height adjust skids and addition of extra counter weight

- Remove both existing skid height adjusters from the L & RH side plates and using same fasteners re-install "loosely only" the new skids making sure that they are oriented properly LH is marked L and RH is marked R
- Loosen 2 end and 5 bottom scraper bar fasteners to prepare for proper skid and scraper bar adjustment
- Remove 3 nuts and washers securing the existing counter weights
- With existing weights (x2) in place add the third weight supplied in kit
- Replace fasteners and tighten

#### STEP 7: Re-assemble tractor with blower

#### STEP 8: Adjustment of skids and scraper bar

- With the unit restored to normal position, make sure that both skids are resting entirely flat on the ground (smooth paved surface)
- With the front fasteners on both sides bottoming out in the front slots of the new height adjust brackets, tighten all of the fasteners on both sides while holding the skids in this position
- Use a 3/16" spacer to elevate the scraper bar making sure that it is parallel to the ground
- Tighten the outside end fasteners located at the lower rear corner of both side plates
- Flip unit forward onto the front edge of the auger housing
- Re-tighten 5 fasteners securing bottom of scraper bar
- Re-install bottom over for the traction housing using the 7 fasteners as provided
- Restore unit to normal position

#### STEP 9: Final set-up, adjustment and testing

- Check both belts for proper tension and adjust cables as necessary
- Traction idler pulley may need to be re-aligned by slightly bending arm away from the frame so that it fully engages the belt
- Service the engine
- Test run unit and make necessary final adjustments
- Re-install belt cover



9006 Perimeter Woods Drive, Charlotte, NC 28216 Phone:800-GET SAWS (438-7297) 704-597-5000 Fax:704-599-4304

#### DEALER'S NAME:

ACCT.#:

**CONTACT PERSON:** 

Credit Inv. #

**PH.#**:

MODEL NUMBER	SERIAL NUMBER	CUSTOMER'S NAME	CUSTOMER'S PHONE NUMBER	
Qty. Additional Part #'s Used				
		Par	rts Total	

Offic	Parts Total		
Use	<b>;</b>		
Onl			
	Labor Units	25	
	<sup>]</sup> Total		
DATE	RECEIVED:		
DATE	DATE PROCESSED:		
Tot	al		

# **Husqvarna**

To: CBDM's

From: Technical Services

Date: June 12, 1997

Subject: Snow Thrower (Commercial Units)

The snow rework is now in its final stages. The bulletin that is attached is complete to go to dealer's as soon as inventory of kits have arrived.

Not all the part numbers have been assigned.

Modification kits should be ready for delivery the first / second week in July 1997.

Dealer will submit claims as regular warranty on a special claim that is attached also.

The only time any parts are to be sent back, is if the impeller shaft that has been replaced is not used. We would need these sent back to Charlotte.

Any questions please call your support group team member.

Thanks.

cc: Dave Zerfoss Roger Simons Steve Wood Ben Bonds RM's CBDM's Customer Support Technical Service Team Members Technical Services Department

9006 Perimeter Woods Drive, Charlotte, NC 28216 Phone: 704-597-5000 Fax: 704-599-4304