

# Baler Belt Skiver Safety and Operating Manual





This manual contains important information about product function and safety. Please read and understand this manual BEFORE operating this tool. Please keep this manual available for other users and owners before they use this tool. This manual should be stored in a safe place.

#### **Table of Contents**

General Safety Rules	2
Main Components	3
Tool Specifications	3
Adjust the Clamping Lid	4
Position Blade Holder, Belt and Hold-Down Shaft	5
Test Skive	6
Skive the Belt	7
Changing the Blade	8
Maintenance	9
Troubleshooting	10
Replacement Parts	11

# **General Safety Rules**

-Save These Instructions-

#### **Signal words:**

"DANGER" indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury. The signal word is limited to the most extreme situations.

"WARNING" indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

"CAUTION" indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.

#### **Safety Symbol**



This international safety symbol is used to identify and call attention to specific safety matters.

#### **Safety Information**

To Avoid Severe Personal Injury or Property Damage, read carefully and understand the following Safety Precautions.

#### 1. WORK AREA

#### **ACAUTION**

Keep your work area clean and well lit. Cluttered benches and dark areas invite accidents.

#### 2. PERSONAL SAFETY

#### **ACAUTION**

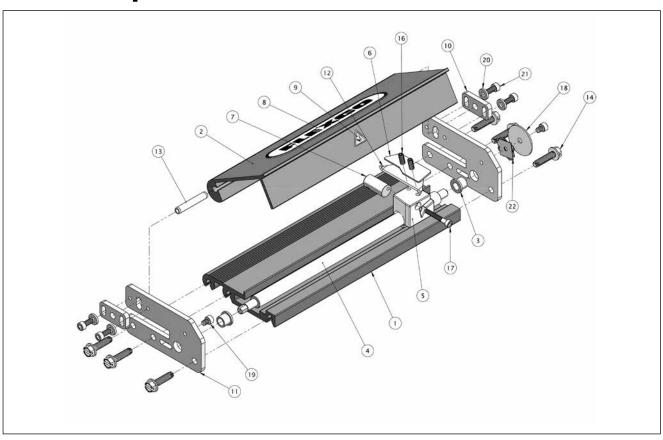
Use safety equipment. Always wear eye protection. Dust mask, non-skid safety shoes, hard hat, or hearing protection must be used for appropriate conditions. Wear cut resistant gloves.

#### **AWARNING**

Keep your hands and fingers away from all moving parts, e.g. the blade, at all times. Do not allow hair or loose clothing near the skiver, particularly rotating components including the user supplied drill motor.

#### www.flexco.com

# **Main Components**



<b>Parts</b>					
ltem	Description	Item	Description	Item	Description
1	Base Plate	8	Flexco Label	15	Position Pins (not pictured) (2)
2	Clamping Lid	9	Cut Hazard Decal	16	Blade Set Screws (2)
3	Spindle Bushings (2)	10	Adjuster Plates (2)	17	Shaft Screw
4	Spindle	11	Side Plates (2)	18	Shim Storage Cover
5	Blade Holder	12	Blade	19	Shim Storage/Stop Screws (2)
6	Blade Backer Plate	13	Lid Hinge Pins (2)	20	Clamp Adjusting Washers (4)
7	Hold-Down Shaft	14	Base Screws (6)	21	Clamp Adjusting Screws (4)
				22	Shims (5)

# **Tool Specifications**

Tool Specifications	
Maximum Belt Width	7.5 inches
Unskived Belt Thickness Range	0.200 to 0.400 inches
Skive Depth (Reach Back)	1.0 inches
Skived Belt Thickness Range	0.190 to 0.240 inches

**Note:** Other skived belt thicknesses may be achieved by providing a shim beneath the belt.

Material	
Side Plates, Blade Holder, Adjuster Plates	Zinc-Plated Steel
Blade Backer Plate	Stainless Steel
Lid and Base	Hard Coat Anodized Aluminum
Spindle, Blades	Steel
Spindle Bushings	Bronze
Shims	Polyester



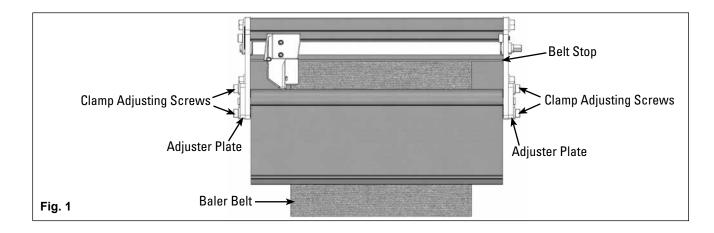
## **Adjust the Clamping Lid**

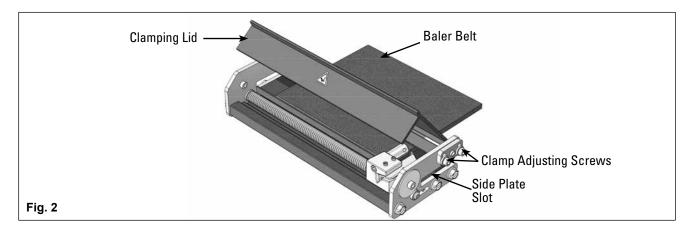
## **A** WARNING

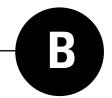
Keep fingers and hands away from blade cutting edge.

For best results: Store skiver in a clean dry area. Do not throw or drop tool.

- 1. Using the 5/32" hex key (included) loosen the four clamp adjusting screws at the adjuster plates (Fig. 1).
- 2. Insert belt to be skived, positioning it flat against the belt stop.
- 3. Hold lid at 45° angle from the belt and apply downward pressure (Fig. 2).
- 4. Tighten four clamp adjusting screws and close lid.
- 5. Clamping pressure is correct when clamped belt cannot easily be pulled from skiver and belt end to be skived does not curl away from base when clamped (check for correct belt position by looking through slot of side plate).
- 6. If tighter clamping force is required, hold lid at between a 45 and 90° angle while applying downward pressure and tighten screws.
- 7. Remove belt from skiver.







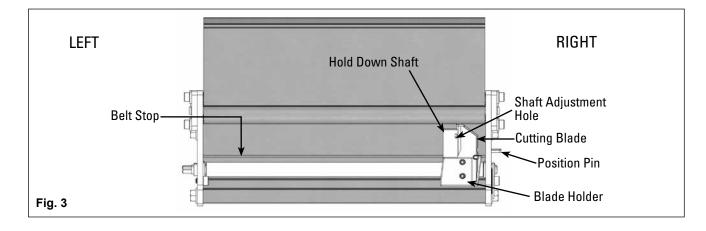
## **Position Blade Holder, Belt and Hold-Down Shaft**

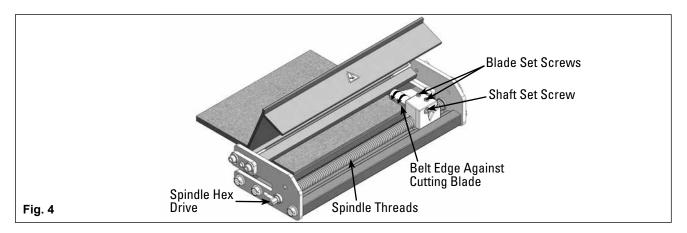
# **A** CAUTION

Avoid contact with blade cutting edge.

Before operation ensure spindle threads are free of dirt/debris to allow proper function of blade holder release system.

- 1. Taking care not to touch the cutting blade, slide the blade holder to the right end of the spindle. (Fig. 3).
- 2. Using the 9/64" hex key (included) loosen the shaft screw and rotate the shaft to its maximum belt clearance position. Temporarily tighten the shaft screw.
- 3. Insert squared belt end into skiver ensuring that it is butted against the belt stop.
- 4. Position the belt so that the edge is against the cutting blade (Fig. 4).
- 5. Loosen the shaft screw, insert suitable tool into shaft adjustment hole (Fig. 3) and rotate shaft to the left (away) from the blade. Hold it against the belt surface with light pressure.
- 6. Tighten the shaft screw.
- 7. Push on the position pin (Fig. 3) to engage blade holder and spindle. The position pin is also an aid in determining the location of the blade holder.
- 8. Close lid.







#### **Test Skive**

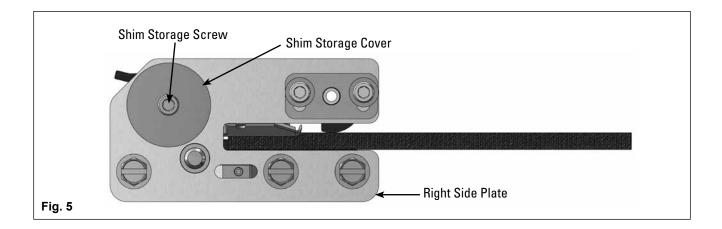
# **A** CAUTION

For multiple skives, use of power drill is recommended to avoid fatigue from use of ratchet. Operate only with clamping lid in place and fully closed.

Use hand drill with a clutch mechanism set to the minimum required to skive the belt. Do not exceed 600 rpm when skiving.

Do not permanently affix a motorized drive device to this equipment.

- 1. Keep hand on closed lid to ensure adequate clamping force and to hold the skiver in place while skiving.
- 2. Use a hand-held power drill with a 1/4" extra deep bit on the spindle hex drive to rotate the spindle and skive the belt (Fig. 4). A ratchet can be used in place of the drill.
- 3. Position the belt so that the edge is against the cutting blade (Fig. 4)
- 4. Measure the skived belt thickness.
- 5. Using the 3/32" hex key loosen blade set screws on top of blade holder.
- 6. Using the 5/32" hex key remove the shim screw and shim storage cover located on the right side plate to access the shims (Fig. 5).
- 7. Insert the required number of shims under the blade to prevent belt carcass damage. Each shim is 0.010" thick, so addition of each shim will result in the skived belt thickness being 0.010" thicker.
- 8. Tighten blade set screws.





## **Skive the Belt**

- 1. Disengage the blade holder from the spindle and slide it to the right end of the spindle. Ensure blade holder moves freely on spindle. Clean spindle if binding or grinding occurs.
- 2. Insert squared belt end into skiver ensuring that it is butted against the belt stop.
- 3. Position the belt so that the edge is against the cutting blade.
- 4. Close lid.
- 5. The clamping action may move the belt away from the belt stop. Verify that belt is against the stop by looking though the slot of the side plate.
- 6. Using the hand drill, skive the belt.
- 7. Lift lid and remove belt.
- 8. Measure the skived height to verify proper belt thickness for your fastener.

**NOTE:** Between skives, keep the interior of the base and the slot that guides the block free from belt material and dirt. Store skiver with hold down shaft in position to aid in guarding blade edge.

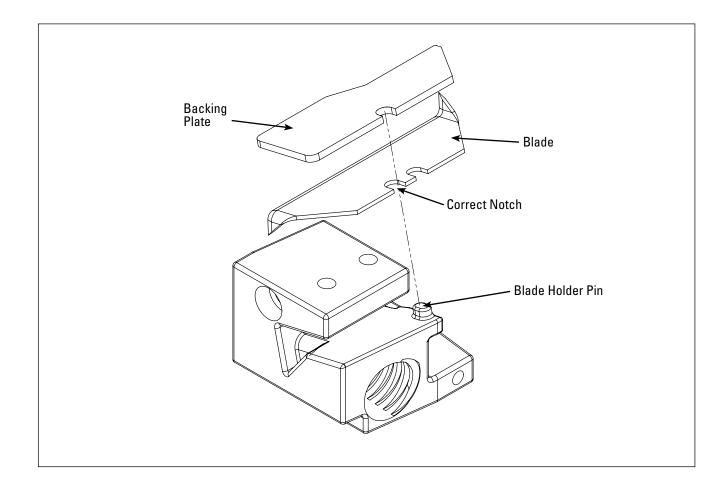


## **Changing the Blade**

## **A** WARNING

Keep fingers and hands away from blade cutting edge.

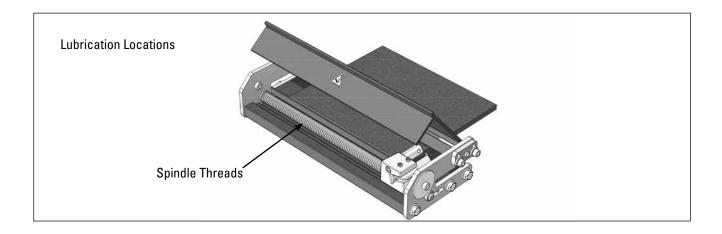
- 1. Loosen the blade set screws.
- 2. Carefully remove the blade and backing plate from the blade holder leaving the shims in place.
- 3. Insert a new blade on top of the previously installed shims. Ensure that the slot in the blade is seated around the pin on the blade holder. When properly installed, the opposite end of the blade farthest from the belt is seated and is completely recessed in the blade holder.
- 4. Replace the backing plate on top of blade ensuring that the slot is seated around the blade holder pin.
- 5. Replace shims under blade.
- 6. Tighten blade set screws.
- 7. Carefully dispose of old blade.

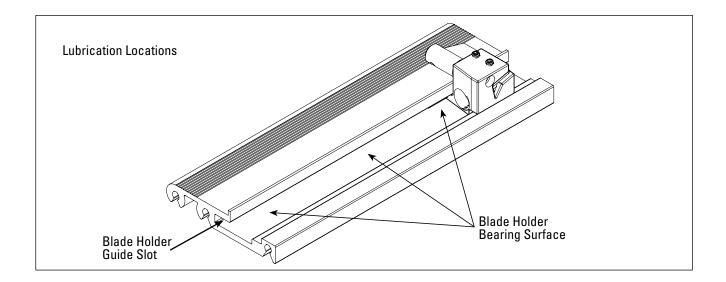




## **Maintenance**

- Store blade adjusting shims behind shim storage plate when not in use.
- Lubricate spindle threads frequently. Spindle threads are initially coated with a semi-dry graphite / molybdenum grease. Application of a high pressure molybdenum grease every 20 skives is recommended. It is also recommended to lubricate the base blade holder surfaces shown (see image). For field applications, use a hard wax or other high pressure dry lubricant on threads and base blade holder surfaces, to avoid entrapment of dirt.
- If the skiver is used outdoors in field applications, remove dirt from belt end and from skiver threads, blade and blade holder rubbing surfaces. Dirt / grit will reduce blade and skiver life.





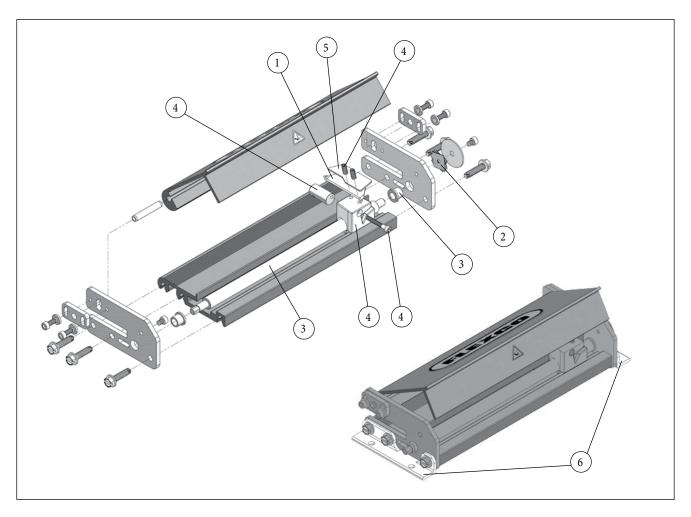


# **Troubleshooting**

Symptom	Possible Cause	Possible Solution
Blade holder does not engage with spindle threads	Belt not positioned against blade and hold down shaft	Reposition belt
with spinale tiffeads	Blade holder beyond spindle threads	Use position pin to aid engagement
Belt moves during skive	Inadequate clamping force	Readjust clamping lid for increased clamp force
	Hold down shaft too tight or too loose	Loosen shaft screw and reposition hold down shaft. Retighten screw
Inconsistent skive thickness	Blade dull	Replace with new blade
	Blade backing plate damaged or missing	Replace blade backing plate
Carcass exposed	Shim selection	Add shim(s) to increase skived belt thickness
·	Blade dull	Replace with new blade
Inadequate skived belt thickness	Shim selection	Add or remove shim(s) to achieve desired thickness
Inadequate skive depth (reach back)	Blade positioned incorrectly	Ensure that blade is properly positioned on the blade holder pin
	Belt moved during skive	Increase clamp force.
Clan not concreted down halt langth	Belt too thick	Remove with utility knife
Flap not separated down belt length	Blade tip damaged	Replace with new blade
Flap not completely removed at skive end	Normal	Remove manually
	Dirt present on spindle threads or blade holder bearing surfaces	Clean dirt from skiver and re-lubricate as necessary
Blade holder binding during skive	Blade dull	Replace with new blade
	Blade positioned incorrectly	Ensure that blade is properly positioned on the blade holder pin
Blade holder does not release at end of	Dirt or debris interfering with movement of blade holder	Clean dirt and debris from skiver
skive	Worn spindle or blade holder threads	Check threads for wear. Replace spindle or blade holder as required.



# **Replacement Parts**



Replacement Parts List			
Item	Description	Ordering Number	Item Code
1	5 replacement blades	BLADE-KIT-5-BALER-SKIVER	04990
2	5 replacement shims	SHIM-KIT-5-BALER-SKIVER	04991
3	Spindle and 2 bushings	SPINDLE-BALER-SKIVER-7IN	04992
4	Blade holder, hold-down shaft & set screws, blade set screws	BLADE-HOLDER-KIT-BALER-SKIVER	04993
5	Blade backer	BLADE-BACKER-SKIVER	04998
6	Bench mounting kit	BENCH-MOUNT-KIT-BALER-SKIVER	04994





