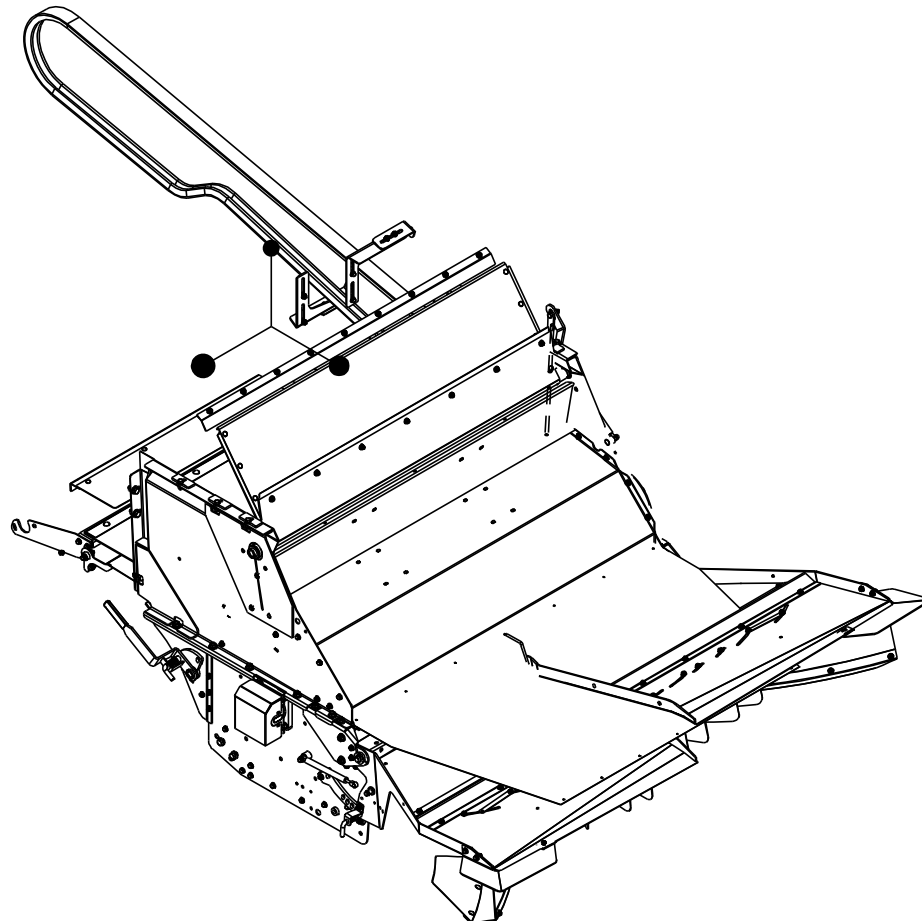




AGCO

Rotary MAV - 500

Complete Chopper Installation Guide



CA001-01_R14
AUG 2016

ROTOR BLADE

IMPORTANT! The paddle blades, located on the balance rings inside the chopper, must be installed in the direction shown (A). The straight edge of the blade cuts the air while the paddle trails behind & pushes the air.

1. The blades for your chopper must be installed as outlined.

Note: If blades are installed other than as directed, damage to the chopper may result or performance may be significantly reduced.

1) Always replace blades two pairs at a time, directly opposite each other through the center of the rotor. This should maintain rotor balance. **Never replace only one blade for wear or breakage.** You do not need to replace the corresponding two pairs on the other end of the rotor.

2) If a blade breaks and the chopper must be operated without a replacement then the damaged blade and the one directly opposite it must both be removed to maintain rotor balance.

3) Use only METRIC class 10.9 bolts (B) and class 10.9 DIN980V steel lock nuts (F) on the chopper rotor.

4) Use a torque wrench to tighten all M12 nuts to the recommended 69 ft-lb.

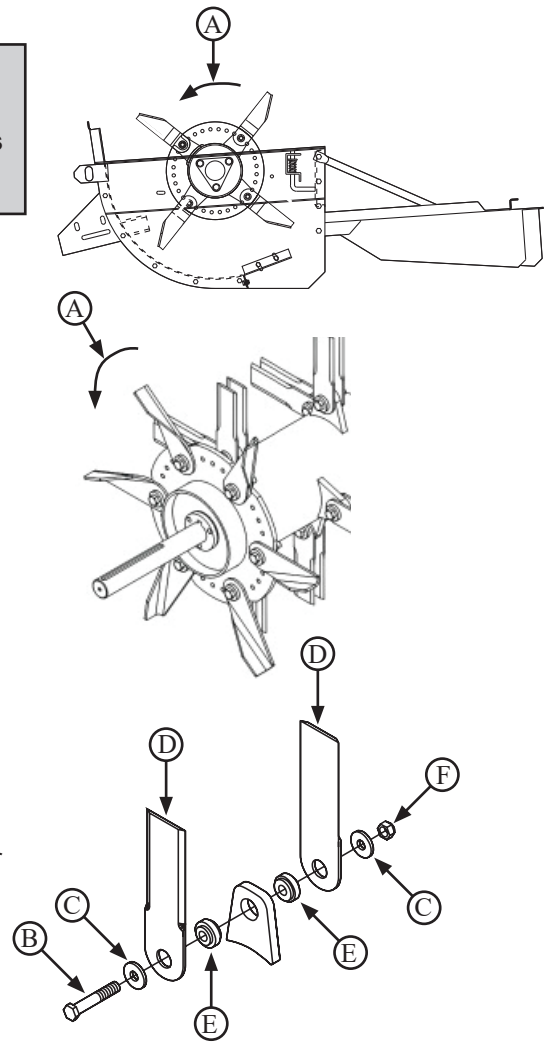
5) Always check for adequate clearance between the installed blades and the stationary knives. A minimum of 1/4" is required. Check clearance of all blades, even those that are not replaced. Do not operate the straw chopper unless this clearance is maintained for all blades.

2. Assembly order for blade pairs (B to F).

Metric Bolt Torque Table

Property Class	8.8	8.8	10.9	10.9
Nominal Size & Thread Pitch	(Nm)	(Ft-Lbs)	(Nm)	(Ft-Lbs)
M6 x 1.00	8	6	11	8
M8 x 1.25	19	14	27	20
M10 x 1.50	38	28	54	40
M12 x 1.75	66	49	94	69
M14 x 2.00	106	78	150	111
M16 x 2.00	164	121	233	172
M18 x 2.50	226	167	323	238
M20 x 2.50	319	235	457	337

All values for dry, yellow zinc plated hardware



- A - Blade rotation direction
- B - M12 x 50 Hex bolt
- C - HA555 Washer
- D - HA650 Blade, straight
- E - HA553 Bushing, straight blade
- F - M12 Lock nut



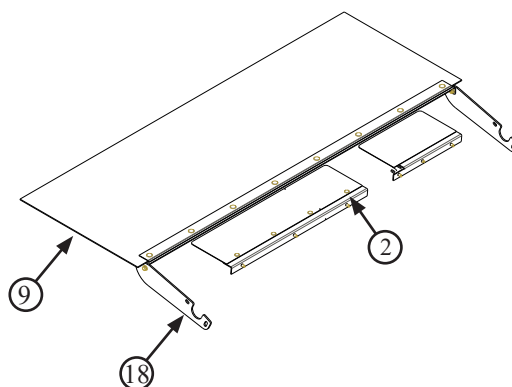
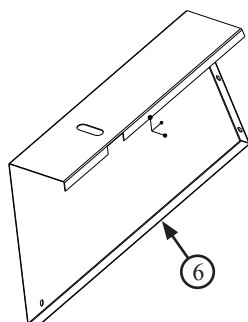
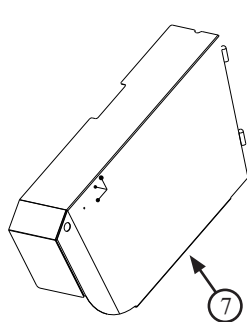
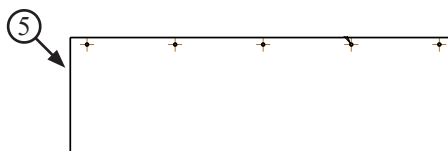
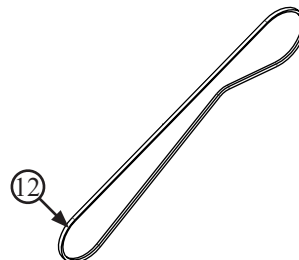
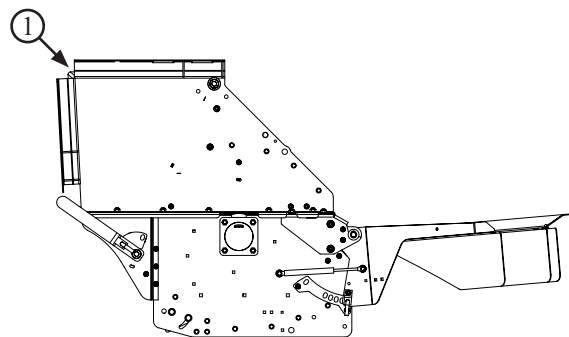
CAUTION: Always use METRIC class 10.9 bolts and class 10.9 DIN980V steel lock nuts when installing blades. Allowable torque range for blade mount nuts is 69 ft-lb.

Torque values listed are for general use only, based on the strength of the bolt. DO NOT use these values if a different torque value or tightening procedure is given for a specific application. For stainless steel fasteners or for nuts on U-bolts, see the tightening instruction for the specific application. Tighten plastic insert or crimped steel type lock nuts by turning the nut to the dry torque shown in the chart, unless different instructions are given for the specific application.

"Dry" means plain or zinc plated without any lubrication.

KIT CONTENTS

REF	ITEM NAME	ITEM DESCRIPTION	QTY
1	AGCO	CHOPPER ASSY	1
2a	PAN	Pan Grain Agco 80s Narrow	1
2b	PAN	Pan Grain Agco 80s Wide	1
3	BAFFLE	BAFFLE DEFLECTOR	1
4	MOUNT	BRACKET BELTING MOUNT	1
5	BELTING	BELTING AGCO HOOD	1
6	SHIELD	DRIVE SHIELD UPPER	1
7	SHIELD	DRIVE SHIELD LOWER	1
8	MOUNT	COLUMN BELT MOUNT	1
9	BELT	BELT AGCO SIEVE EXT	1
10	STRAP	STRAP AGCO SIEVE EXT	1
11	MOUNT	MOUNT BRACKET FOR PAN	1
Box Agco Double/Trippl Drive (2006+)			
12a	SHEAVE	SHEAVE 2B 9.4 PD	1
12b	SHEAVE	SHEAVE 3B 9.4 PD	1
13a	BUSHING	BUSHING SF 1.5 ID	1
13b	BUSHING	BUSHING SK 1.5 ID	1
14a	BELT_2B	BELT 2B 242 - DBL B DRV	1
14b	BELT_3B	BELT 3B 242 - DBL B DRV	1
Completion Box:			
15	BRACKET	Bracket Drv Idler Mnt	1
16	MOUNT	MOUNT SHIELD LT	2
17	BRACKET	BRACKET DRIVE SHIELD	2
18	MOUNT	SIEVE EXT MOUNT LT	2
19	PLATE	PLATE MOUNT WASHER	6
20	LATCH	LOCK TAB CHAFF PAN	2
21	GAS SPRING	Gas Shock 12.5L	2



INSTALLATION

1. Sieve Extension Grain Pan

(Use sieve extension hardware bag)

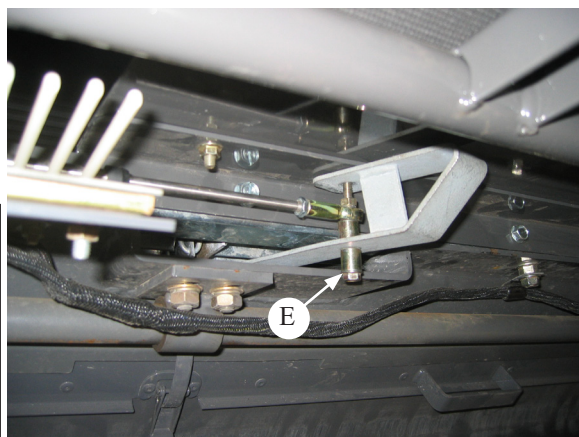
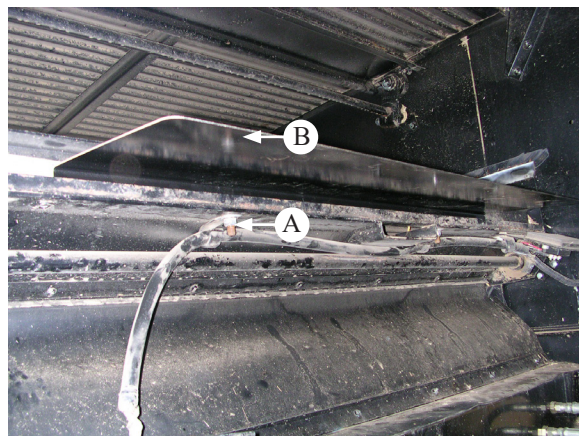
1a. Remove center 2 sieve bolts (A) & install grain pan (B) centered between grain loss sensors at the back of sieve.

1b. Attach grain pan extension angle (F) directly to back of sieve using self-tapping screws. The angle and extension plate(s) come unassembled for ease of installation by using following hardware (See Appendix 2 for definitions):

1 pc. - Channel 33" L (narrow series combines)
44" L (9790 & 9895 combine)

4 pcs. - Bolt, Flg Slf Tap 5/16" x 3/4" - drill #F (.257")
(Narrow series)

5 pcs. - Bolt, Flg Slf Tap 5/16" x 3/4" - drill #F (.257")
(9790 & 9895 series)



Adjustable sieve:

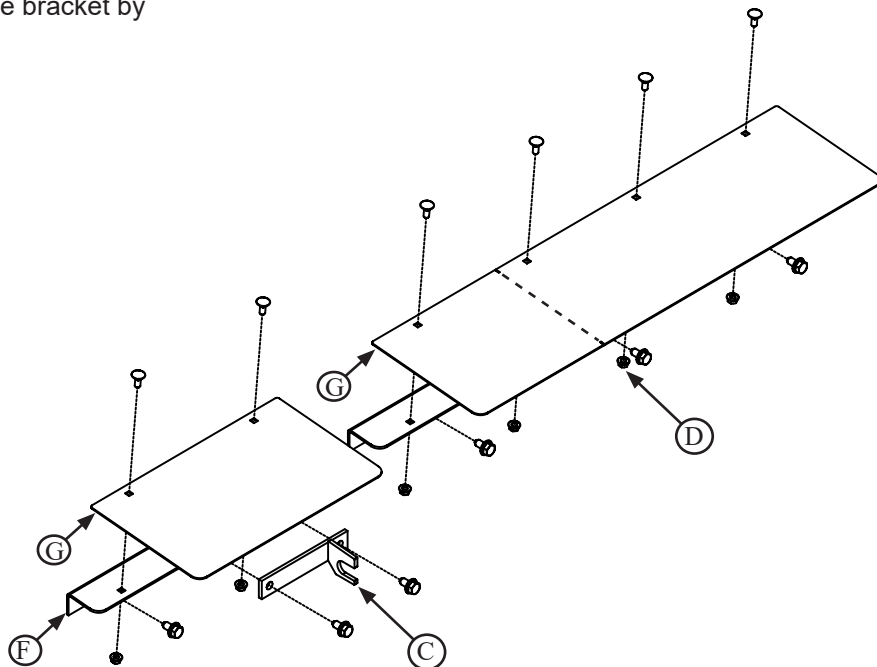
Combines with adjustable sieves will require the grain pan and bracket cut off to clear the sieve adjustment handle. See the locating notches at D for cut location.

Electronically controlled sieve:

Require reorientating the sieve adjustment handle bolt and spacers (E) as shown. The cable lowering bracket (C) shown to the right will also need to be installed. Be sure to cycle sieve by hand to ensure no cable pinch points.

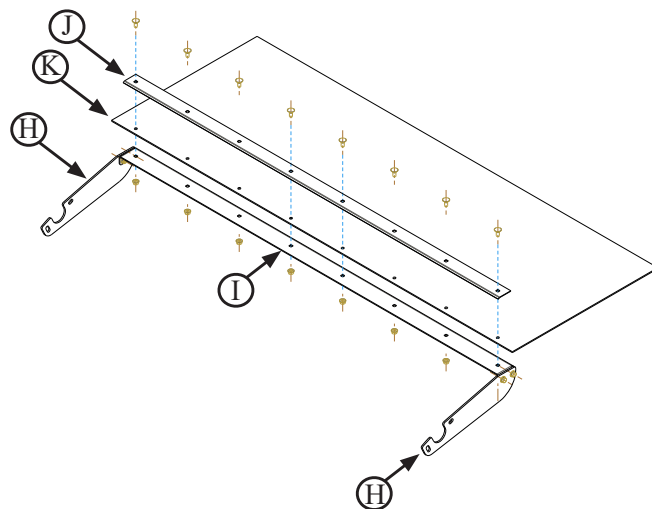
1c. Assemble extension plate(s) (G) to angle bracket by using following hardware:

- 4 pcs. - Bolt, Crg M6 x 16 (narrow series)
- 4 pcs. - Nut, Flg M6
- 6 pcs. - Bolt, Crg M6 x 16 (9790 series)
- 6 pcs. - Nut, Flg M6



1d. Install sieve extension mounts (H). Use existing sieve pan bearing mount hardware.

1e. Proceed to install sieve extension pan channel (I), sieve extension belting (K), and strap (J). Use listed hardware.



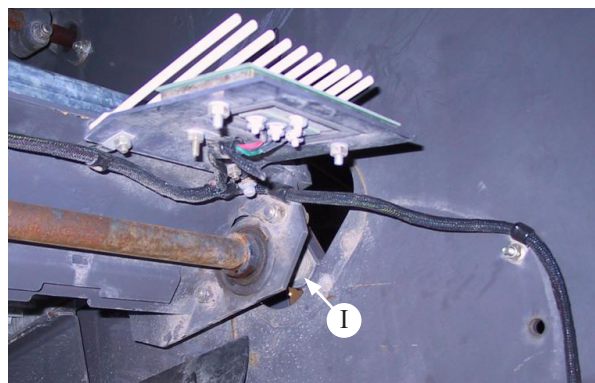
Hardware

- 8 - Bolt, Rd Hd M8 x 20
- 4 - Nut, Flg M8



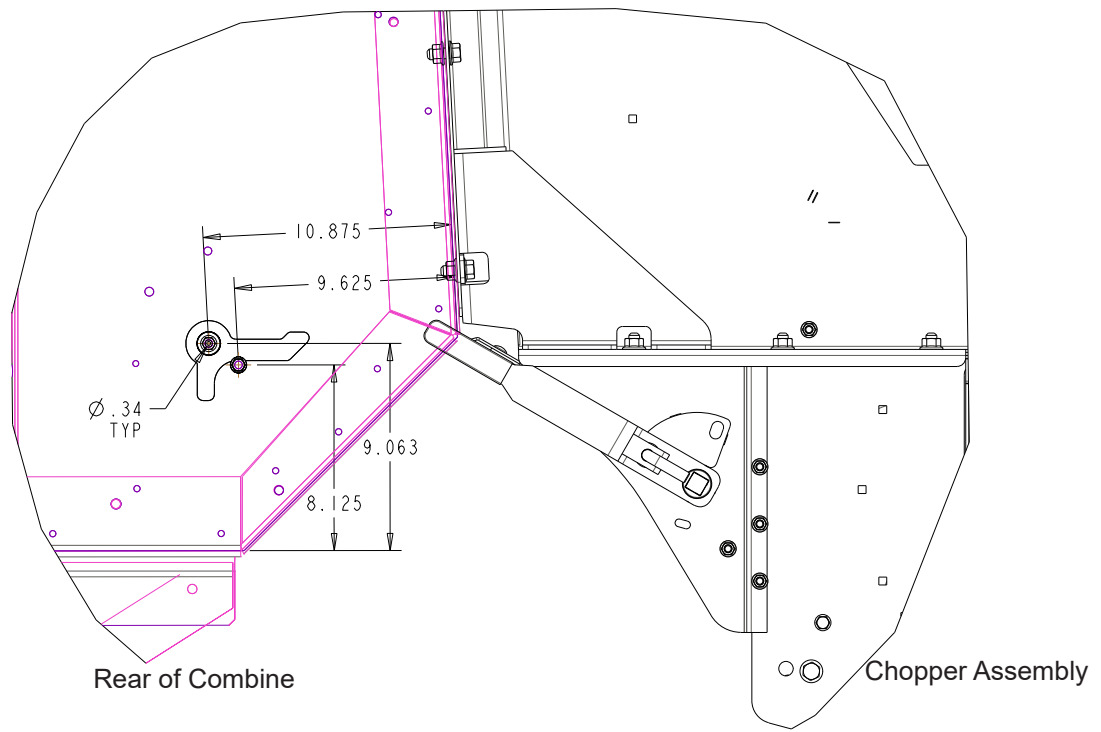
Note:

Some combines come with sieve pan bearings (I) installed on outer side of sieve pan. When installing sieve extension mounts (H) sieve pan bearings must be on inner edge of the sieve pan for a proper fit.



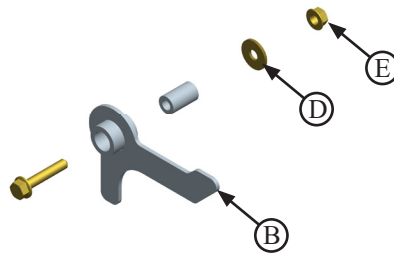
1f. Mount Latches

- Measure for latch and pin holes on outside wall as shown - both sides
- Drill holes 11/32" in diameter at dimensions shown.



1g. Mount Latch Assembly on inside of wall through upper hole

- Install with M8x45 Flange Head Bolt (A), Latch (B), Spacer (C), M8 Flat Washer (D) and M8 Flange Nut (E).



2. Straw Chopper Mount

(Use mounting hardware bag)

2a. Place a second pallet under the MAV bundle and turn 90 degrees (A). Remove tailboard shipping brackets and rest tailboard against the loader to ensure it does not strike the combine during mounting. Raise chopper to the combine using a fork lift or front end loader (B) from the back. Assemble chopper onto combine hood. Place custom washers (C) under upper flange for reinforcement and bolt in place by using hardware:

6 pcs. - Washer, Custom (C) 3" x 1.5" x 0.25" TH

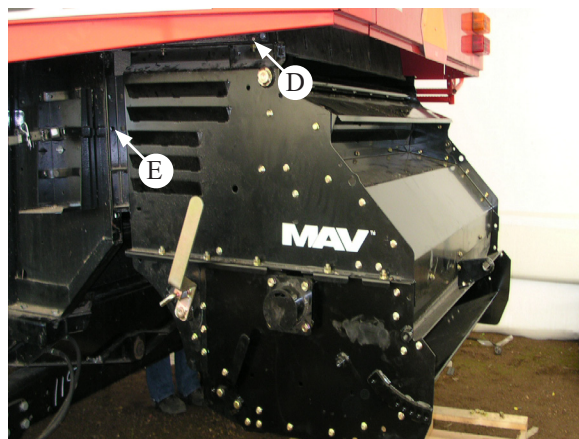
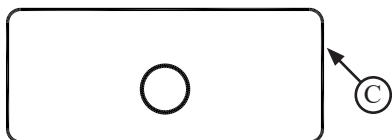
6 pcs. - Bolt, Flg M10 x 25 (D)

6 pcs. - Nut, Flg M10

6 pcs. - Bolt, Flg M12 x 25 (E)

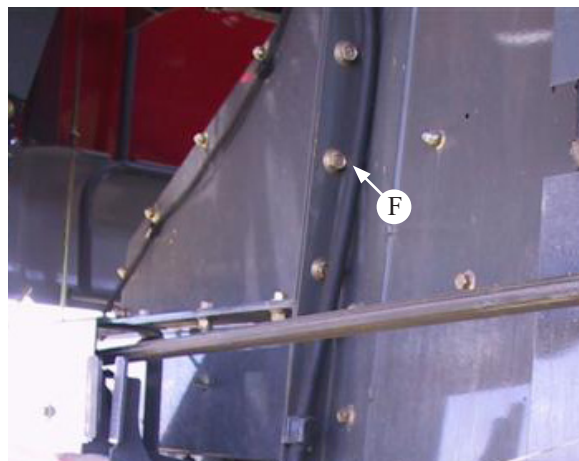
6 pcs. - Nut, Flg M12

6 pcs. - Washer, Flat M12



Note:

If Chopper holes do not line up, loosen upper hood bolts (F) on combine and allow the hood to move while lining up chopper bolts



3. Linkage and Sensor

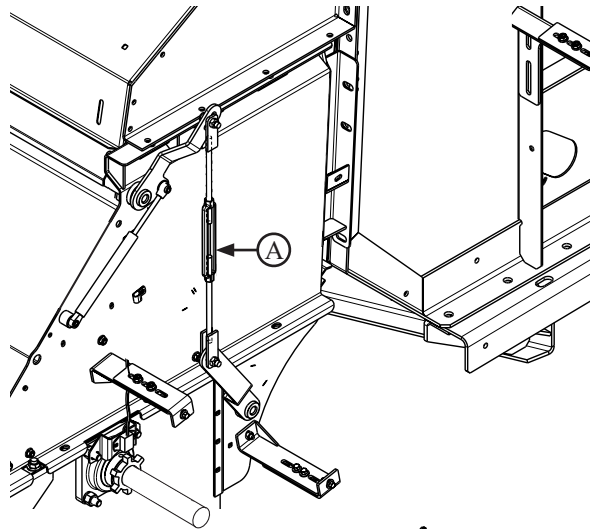
3a. Adjust linkage (A) to position the straw door (B).
Note the angle of the chaff door (C) is aligned with the adjustment handle (D).

For chopping straw:

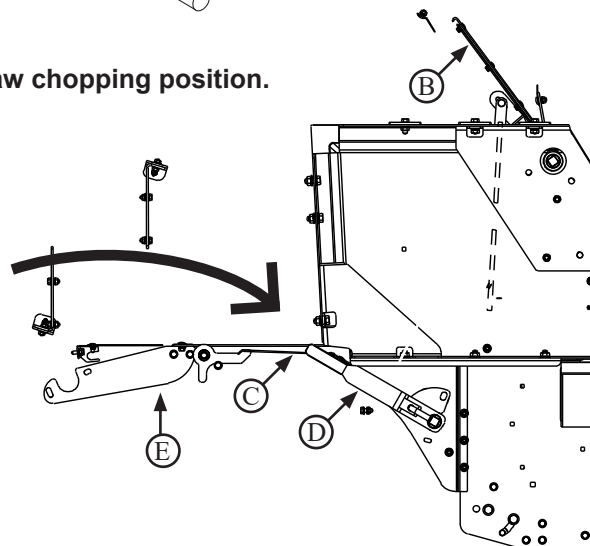
1. Straw door is up against the upper hood of the combine.
2. Chaff door is down and locked.
3. Sieve extension (E) is up. Place overhanging material on top of chaff door.

For windrowing straw:

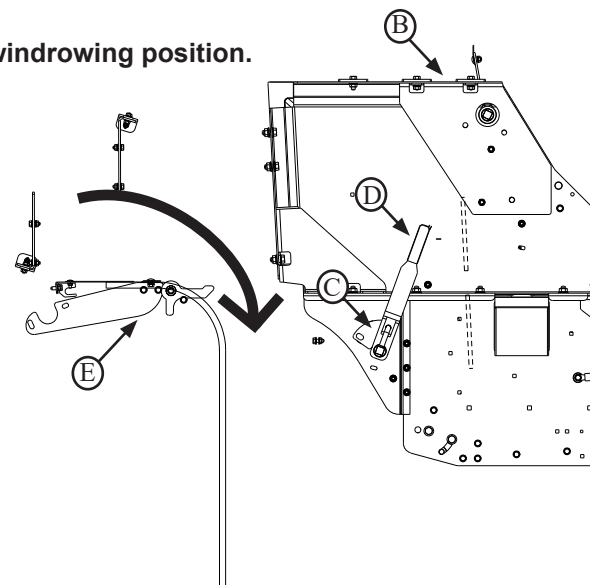
1. Straw door is down overlapping the chaff door.
2. Chaff door is up and locked.
3. Sieve extension is down.



Straw chopping position.



Straw windrowing position.



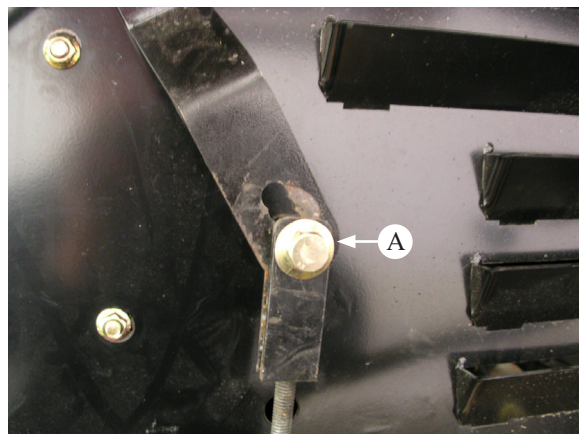
3b. Linkage can be adjusted by either lengthening turnbuckle or by adjusting top flange bolt in slot (A).



Adjust turnbuckle to increase rotation angle of upper door.
Adjust in slot to advance upper door relative to lower door.

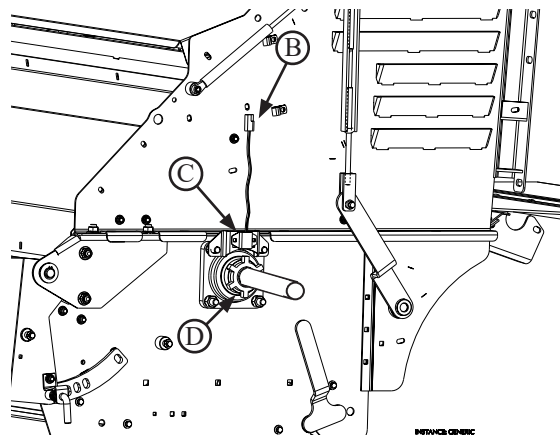
3c. Mount speed sensor (B) on speed sensor bracket (C) on right side of chopper.

Purchase AGCO speed sensor PN 71391021 if required.



Verify that your chopper is equipped with the correct star lug (D) for your combine.

AGCO 9795, 9895 - 6 Lugs
AGCO 9790, 9690 - 6 lugs
AGCO 8000 - 14 lugs



4. Internal Brackets

(Use completion hardware bag)

4a. Fasten straw deflector strap (A). Stand between end of sieve and chopper and hold straw deflector strap in front of straw door (B). Mark & drill holes in combine hood (C) making sure the straw door will clearly pass by the deflector strap. Bolt strap into place. by using hardware:

9 pcs. - Bolt, Flg M8 x 16 (Narrow series combines)

9 pcs. - Nut, Flg M8

11 pcs. - Bolt, Flg M8 x 16 (Wide series combines)

11 pcs. - Nut, Flg M8

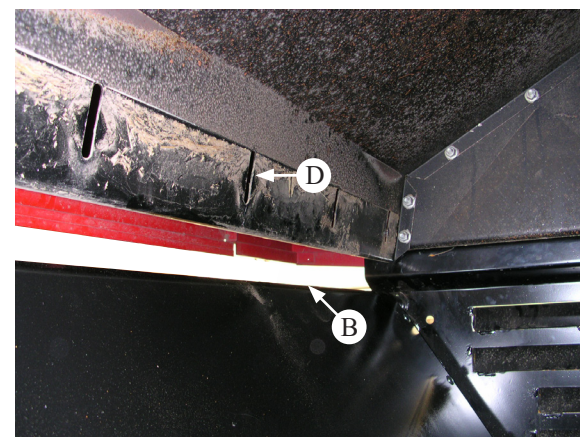
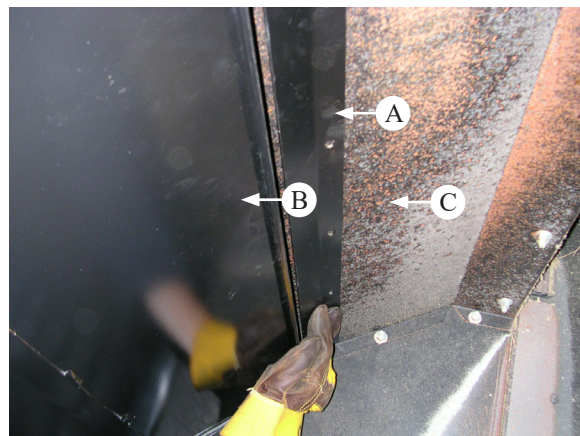
4b. Stand on the inside of the chopper & mount 11" wide belting (F) to rear of combine hood (D). Align holes in belting with slots.

4c. Secure belting with steel fastener strip (E) by using hardware:

7 pcs. - Bolt, Crg M8 x 16

7 pcs. - Nut, Flg M8

4d. Push sieve extension belting through opening into the chopper below the door pivot from outside to seal everything up.



5. Single Belt Drive

(Use drive hardware bag)

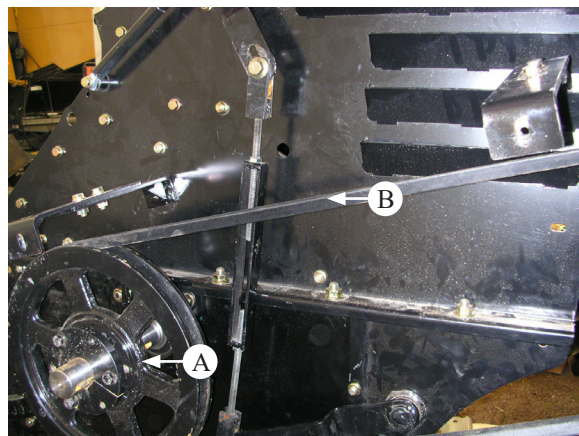
5a. Install 1C11 sheave & SF bushing (A) & belt (B). Ensure sheaves are aligned for smooth belt operation. See Appendix 1 for bushing install instructions.

- 1 - Belt 1C 248
- 1 - Sheave 1C 11 SF
- 1 - Bushing SF 1.5 ID
- 1 - Keystock 0.375 x 2

5b. Adjust factory tensioner assembly (C).



Idlers can be positioned in 2 positions on each arm to take up more or less belt length.



6. Double Belt Drive

(Use drive hardware bag)

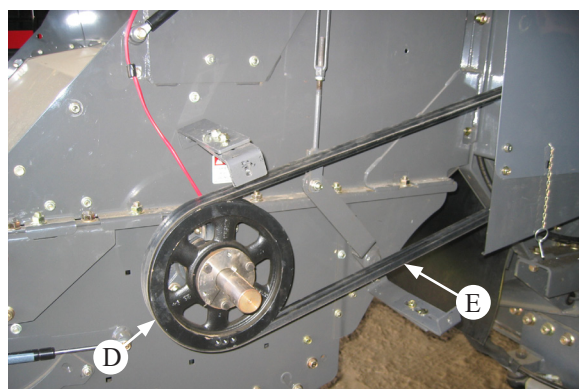
6a. Install 2B9.4 sheave & SK bushing (D) & belt (E). Ensure sheaves are aligned for smooth belt operation. See Appendix 1 for bushing install instructions

- 1 pc. - Belt 2B240
- 1 pc.- Sheave 2B 9.4 PD
- 1 pc. - Bushing SK 1.5 ID
- 1 pc. - Keystock 0.375 x 2

6b. Adjust factory tensioner assembly (C).



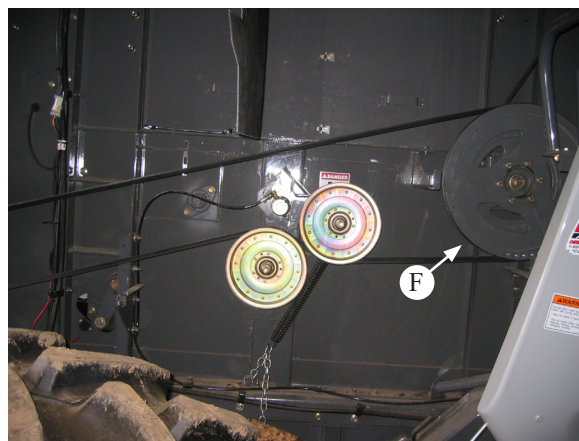
Note:
Idlers can be positioned in 2 positions on each arm to take up more or less belt length.



6c. Ensure jackshaft has 17 inch sheave (F) for chopper drive.



Note:
8 inch sheave is used for low speed.



Note: It is recommended to order and install the AGCO stabilizer kit (#71424705) with the installation of a MAV chopper.

7. Chopper Lower Shield

7a. Install the lower shield brackets (A) and (B) on the drive side of the chopper by using following hardware:

3 pcs.- Bolt, Flg M8 X 25

3 pcs. - Nut, Flg M8

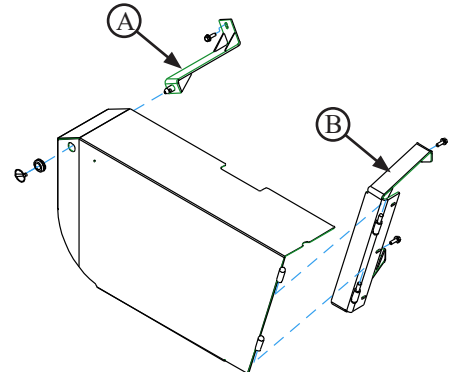
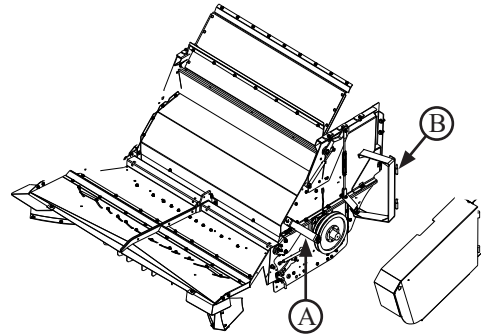
7b. Insert rubber grommet into shield. Then set shield onto the hinges. Check alignment of shield and adjust brackets as necessary. Fit Lynch pin on lower mount bracket pin to hold shield secure by using following hardware:

1 pc. - Rubber Grommet

1 pc. - Lynch Pin



Shield mount bracket (B) must be positioned between drive belts.



8. INSTALLATION OF 8000/9000 SERIES SHIELD

8a. Install Redekop bracket (C) & fasten shield mount bracket (D) on lowest setting (E). Lower shield cup holder bracket (F) to lowest position & place end of bungee in holder by using:

2 pcs. - Bolt, Flg M10 x 25

2 pcs. - Nut, Flg M10

2 pcs. - Washer, Flt M10

2 pcs. - Washer, Lk M10

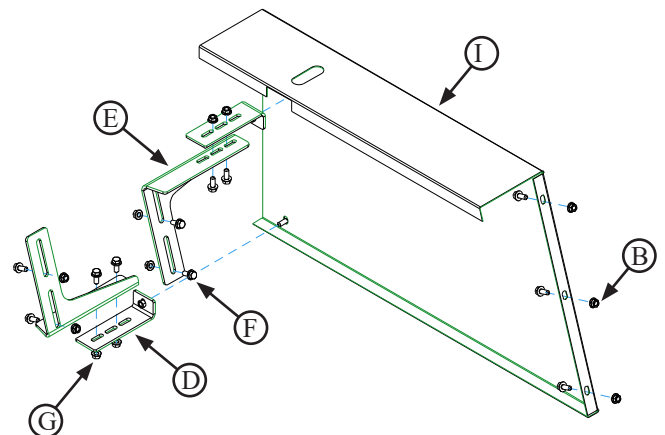
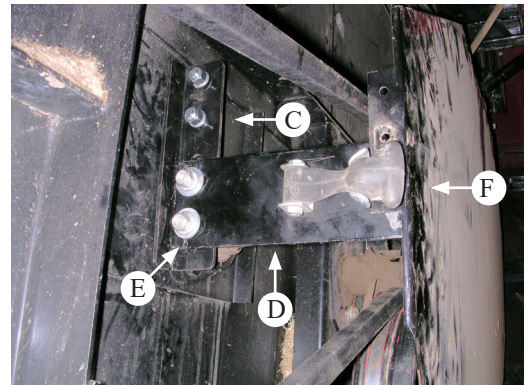
8b. Bolt the lower part of the shield (I) to the lower shield hinge bracket (B) using:

3 pcs. - Flange Bolts M8 x 20

Use L shaped brackets (E) to bolt shield to combine sidewall flanges, using:

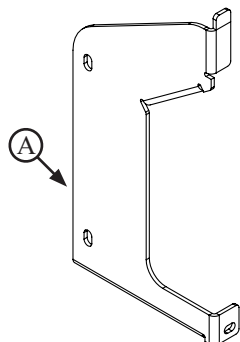
5 pcs. - Bolt, Flg M8 x 25 (F)

1 pc. - Nut, Flg M8 (G)



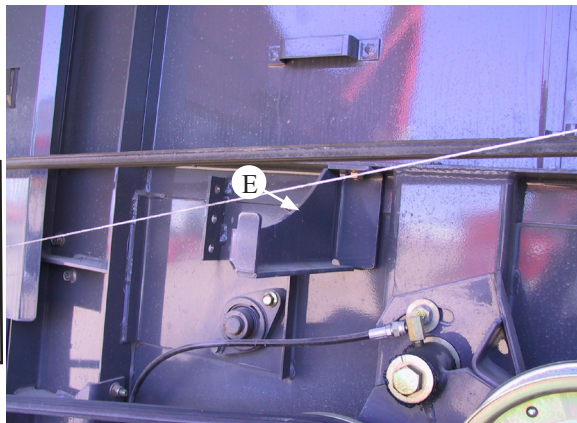
9. 9895 SHIELD EXTENSION

9a. Install Redekop bracket (A), as shown in the photo below using chopper mount bolts. Salvage the OEM shield mount/ locating pin from the old shield mount bracket.



Note: 9895 Drive Sheaves

Ensure jackshaft has the 17 inch sheave (sometimes combines are shipped with choppers set at low speeds for corn, which has the 17 inch sheave on the

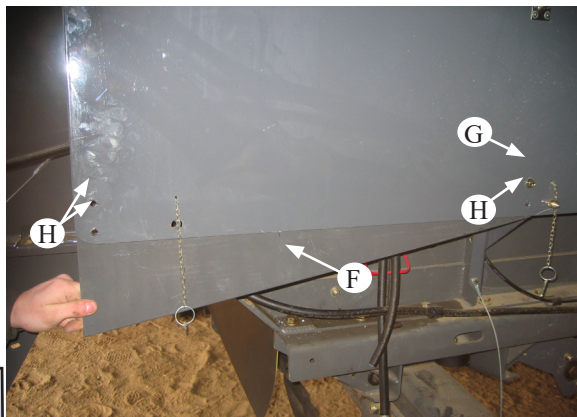


9b. Remove OEM center shield mount bracket (E).

9c. Install Redekop shield extension (F), as shown in the photo below. Use the existing bolt (G) to locate the shield extension. Drill holes (H) using the shield extension as a template. Bolt in place by using:

3 pcs. - Bolt, Flg M8 x 16

3 pcs. - Nut, Flg M8



Check all fasteners to ensure they have been properly tightened. When starting chopper, be sure all people are clear of the rear of the combine.



Start threshing module in low speed & listen for clearance problems. If a knocking noise is heard stop machine immediately! Fix problem and repeat procedure. Progress to full power when every thing is running smoothly at lower speeds.

Appendix 1 : Bushings

IMPORTANT: DO NOT USE LUBRICANTS IN THIS INSTALLATION

To Install Bushing:

1. Remove all paint, oil grease, etc. from tapered surface of bushing and bore of mating part.
2. See **Standard** mounting assembly - Figure 1.

NOTE: If bushing does not slide freely on shaft, wedge a screwdriver blade into the saw cut and the flange OD to open the bore of the bushing. Caution: Excessive wedging will split the bushing.

3. **Standard Mount** – Slide bushing on shaft, flange first. If using the setscrew, snug it against the key. **Excessive Torque will cause mating part to be eccentric.** Position mating part in place on bushing aligning drilled holes in mating part with tapped holes in bushing flange. Using lock washers, install capscrews thru the mating hub and into the bushing flange. (**Note:** S bushings can only be Standard Mounted. Be sure the three tapped holes in the mating hub **do not** align near the bushing saw cut. If they do, rotate the bushing 60 degrees.).

4. **Use A Torque Wrench.** Tighten all capcrews evenly and progressively in rotation to the torque value listed in the table. **Excessive wrench torque, closing the gap between the bushing flange and mating hub, or the use of lubricants will break the mating hub.**

To Remove Bushing:

1. Loosen and remove all capscrews.
2. For **Standard Mount**, thread capscrews into tapped holes in mating part to jack against bushing flange. Tighten bolts evenly and progressively in rotation to separate the two components.
3. Loosen setscrew to slide bushing from shaft.

Standard Mounting

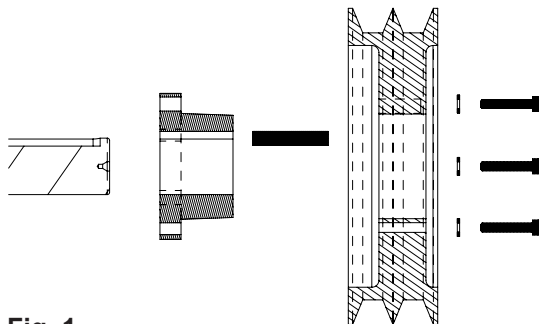


Fig. 1

Screw Tightening Information

Tapered Bushing	Size & Thread of Capscrew	Ft.-Lbs. To Apply With Torque Wrench
SK	5/16 - 18	15
SF	3/8 - 16	30

Appendix: 2 - Hardware Classification

B##	Bolt - Imperial
HEX	Bolt Hex Head
FLG	Bolt Hex Flange Head
RH	Bolt Round Head, Carriage
CS	Bolt Countersunk

N##	Nut - Imperial
JAM	Nut, Jam
LOCK	Nut, Lock

P##	Pin - Imperial
ROLL	Pin, Roll
COT	Pin, Cotter
HITCH	Pin, Hitch Clip
LYNCH	Pin, Lynch
CLEVIS	Pin, Clevis
SPIROL	Pin, Spirol

W##	Washer - Imperial
FLAT	Flat
LOCK	Helical Lock
FEN	Fender Washer

Description: BOLT HEX .5 X 1 GR5 UNC
 Type = Hex ———— ↑ ———— ↑ ———— Imperial Spec = GR5 UNC
 Diameter = 0.5 inch ———— ↑ ———— Length = 1 inch

Hardware Diameter	Wrench Size
1/4in Hardware	7/16in
5/16 Hardware	1/2in
3/8 Hardware	9/16in
1/2 Hardware	3/4in
5/8 Hardware	15/16in

B##M	Bolt - Metric
HEX	Bolt Hex Head
FLG	Bolt Hex Flange Head
RH	Bolt Round Head Carriage
CS	Bolt Countersunk

N##M	Nut - Metric
JAM	Nut, Jam
LOCK	Nut, Lock

P##M	Pin - Metric
ROLL	Pin, Roll
COT	Pin, Cotter
HITCH	Pin, Hitch Clip
LYNCH	Pin, Lynch
CLEVIS	Pin, Clevis
SPIROL	Pin, Spirol

W##M	Washer - Metric
FLAT	Flat
LOCK	Helical Lock
FEN	Fender Washer

Description: BOLT HEX M8 X 40 C8.8
 Type = Hex ———— ↑ ———— ↑ ———— Metric Spec = C8.8
 Diameter = 8mm ———— ↑ ———— Length = 40mm

Hardware Diameter	Wrench Size
M6 Hardware	10mm
M8 Hardware	13mm
M10 Hardware	15mm or 16mm
M12 Hardware	18mm or 19mm
M16 Hardware	24mm

WARRANTY

Redekop Manufacturing Co., hereinafter referred to as "Manufacturer", warrants each new Redekop Upgrade sold by the Manufacturer to be free from defects in material and workmanship, under normal use and service, for a period of one (1) year after the date of delivery to the original retail purchaser. The Manufacturer will, at its option, replace or repair, at the Manufacturer's factory, or at a point designated by the Manufacturer, any part or parts which shall appear to the satisfaction of the Manufacturer upon inspection at such point, to have been defective in material or workmanship. This Warranty does not obligate the Manufacturer to bear any transportation charges in connection with the replacement of defective parts.

This Warranty shall not apply to any rotor which shall have been installed or operated in a manner not recommended by the Manufacturer; nor to any rotor which shall have been repaired, altered, neglected or used in any way which, in the Manufacturer's opinion, adversely affects its performance; nor to any rotor in which parts not manufactured or approved by the Manufacturer have been used; nor to any accessories installed on the rotor where the accessory manufacturer has its warranty; nor to normal maintenance or replacement of normal service items.

Manufacturer reserves the right to modify, alter, and improve any rotor or parts without incurring any obligation to replace any rotor or parts previously sold with such modified, altered or improved rotor or part.

THIS WARRANTY, AND THE MANUFACTURER'S OBLIGATION HEREUNDER, IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED, IMPLIED, OR OF FITNESS FOR A PARTICULAR PURPOSE, and all other obligations or liabilities, including special or consequential damages or contingent liabilities arising out of the failure of any rotor or part to operate properly. No person is authorized to give any other warranty or to assume any additional obligation on the Manufacturer's behalf unless made in writing and signed by an officer of the Manufacturer.

This Warranty is effective only for the original purchaser.

Redekop Manufacturing Co.
Saskatoon, SK Canada