

PREVIEW - YOUFIXTHIS.COM



Air conditioning compressor – removing the shaft seal

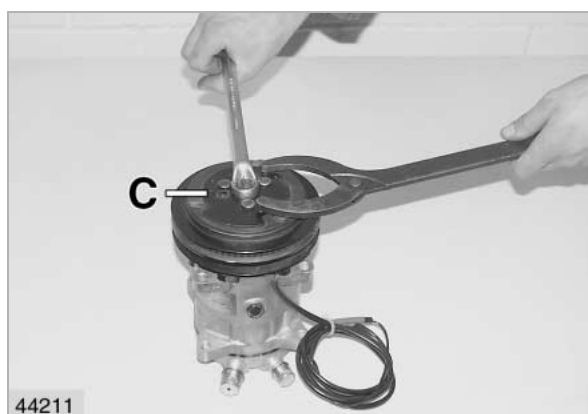
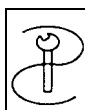
(Air conditioning compressor Sanden Sd 5h 14)

Remove air conditioning compressor.

Unscrew dust cap (2).

(Fig. 30, 42)

42



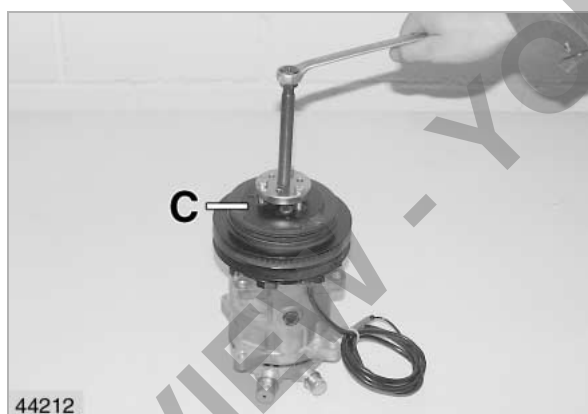
Unscrew thrust plate (C). Use special tool for backing up.

Special tool:

Hole wrench, Part No. 181 624.0

(Fig. 43)

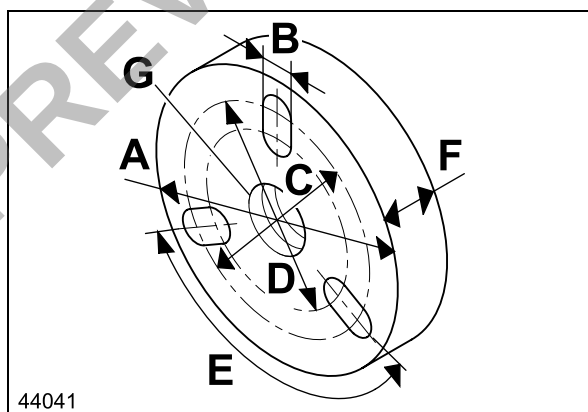
43



Pull off thrust plate (C) using a special tool.

(Fig. 44)

44



45

Special tool (self-manufactured):

A = dia.60 mm

B = 7 mm

C = dia. 35 mm

D = dia. 46 mm

E = 3 x 120°

F = 10 mm

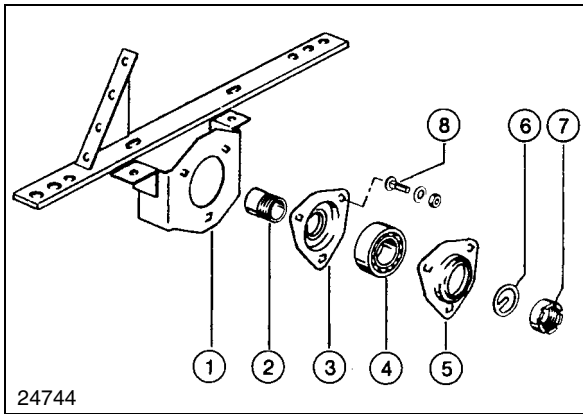
G = M 14 x 1.5

1 Hexagon bolt M 14 x 1.5 x 50 DIN 961-8.8

Part No. 233 634.0

3 Hexagon inch-size bolt, 1/4" - 20 x 1 1/4"

(Fig. 45)

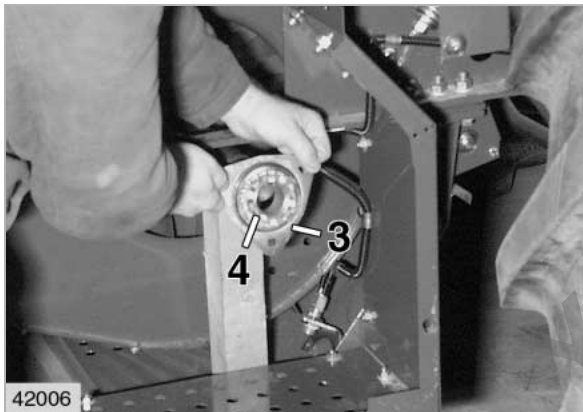


11

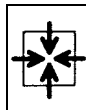
Self-aligning ball bearing, exploded view

- 1 Bearing plate
- 2 Taper lock adapter sleeve
- 3 Bearing shell
- 4 Self-aligning ball bearing 1208 kc/3 DIN 630 (DOMINATOR 108 VX)
- 5 Self-aligning ball bearing 1207 kc/3 DIN 630 (DOMINATOR 98 – 88 VX)
- 6 Bearing shell
- 7 Felt strip
- 8 Circlip
- 9 Face-end slotted nut M 40 x 1.5 (M 35 x 1.5)
- 10 Mushroom head bolt M 8 x 20 DIN 603-8.8
- 11 Mushroom head bolt M 8 x 25 DIN 603-8.8
- 12 Hexagon nut M 8 DIN 934
- 13 Contact washer A 8

(Fig. 11)



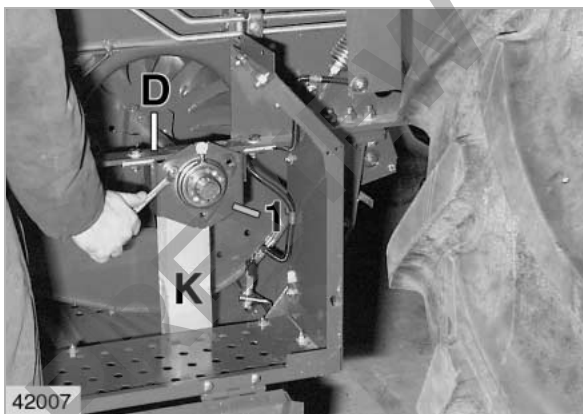
12

**Installing the bearings to the right-hand and left-hand side of cleaning fan**

Push self-aligning ball bearing (4) on the shaft together with bearing shell (3).

Bolt down bearing plate (1) to suspension (D) according to the marking.

(Fig. 11, 12, 13)

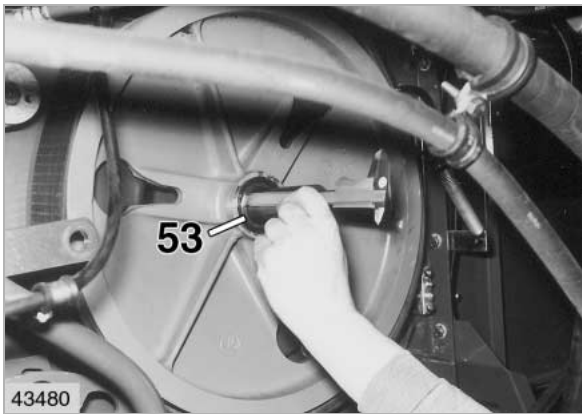


13

Bolt down bearing shell (5) to the bearing plate (1) together with bearing shell (3).

Remove piece of square timber (K).

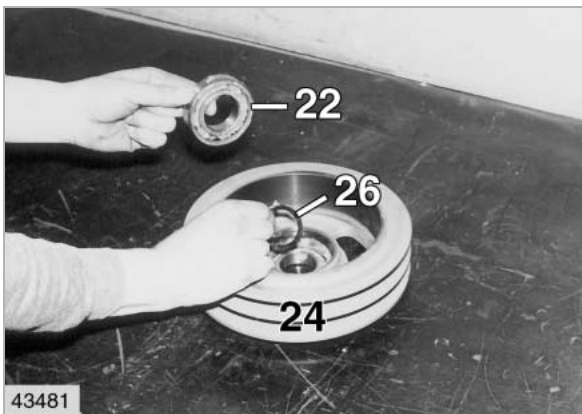
(Fig. 11, 12, 13)



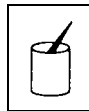
20

4. Remove spacer ring (21).
5. Determine the clearance (X) between the shaft shoulder and the tapered ring (53). This clearance must be at least **0.8 mm**.
6. Push on spacer ring (21).

(Fig. 17, 20)

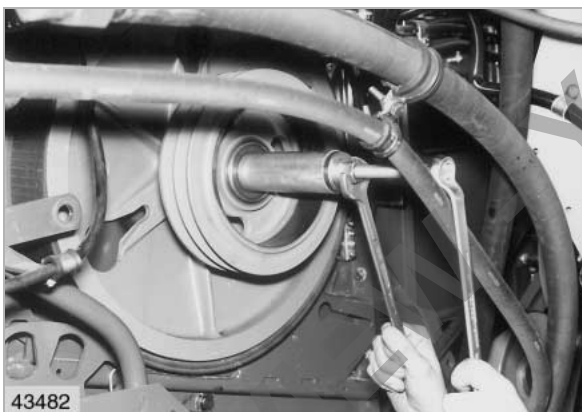


21

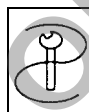


7. Insert two deep groove ball bearings (22) with supporting ring (26) and circlip (23) into the drive pulley (24). Fill the hollow space with multipurpose grease, e.g. CLAAS multipurpose grease EP 2.

(Fig. 17, 21)

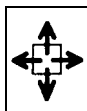


22



8. Install pre-assembled drive pulley (24) using a special tool.

(Fig. 17, 22)



Removing the fan drive belt (8)

Set the fan to the lowest possible r.p.m. while the engine is running.

Swing the grain tank unloading tube halfway out.

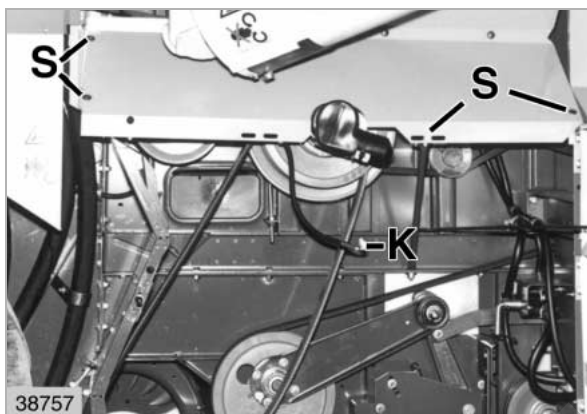
(Fig. 28)



DANGER!

Make adjustments only with the engine stopped and the ignition key removed.

28

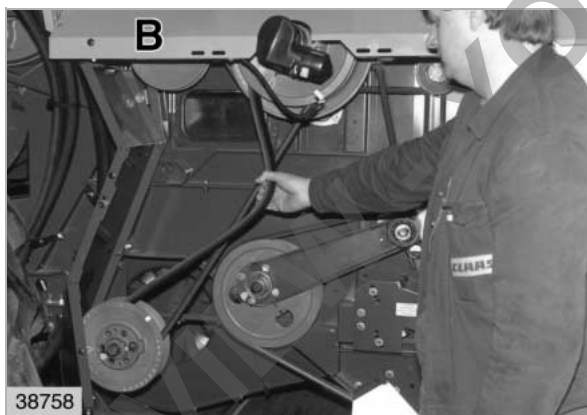


Remove the cable plug (K) from the direct-current (DC) motor.

Remove four bolts at (S).

(Fig. 29)

29



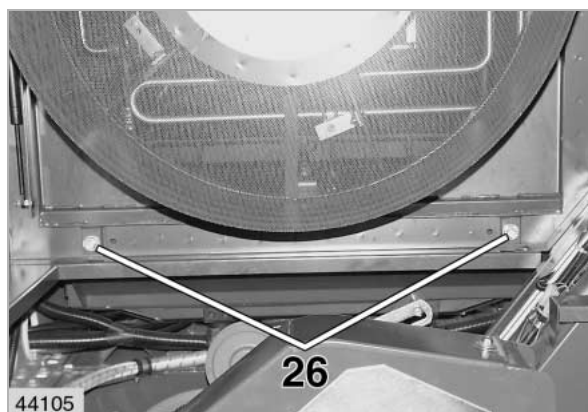
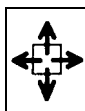
Manually tension belt (8) until the spring-loaded variable-speed pulley is fully spread apart.

Move the guard (B) upwards and remove belt (8).

(Fig. 30)

30

ENGINE ACCESSORIES

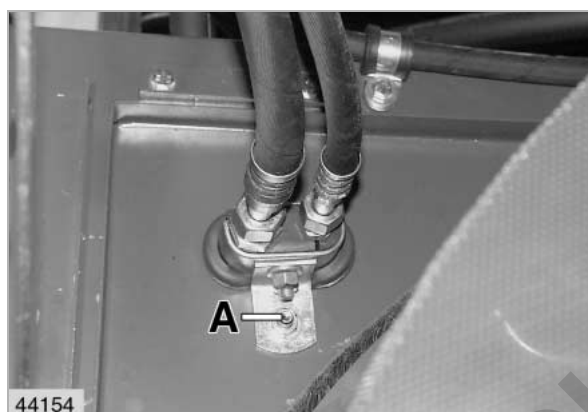
**Removing the rotary screen**

Remove the rotary screen drive belt (26).

Release the quick release bolt (26) and raise the rotary screen.

(Fig. 1, 5)

1



With air conditioning fitted:

Remove the hex. bolt (A).

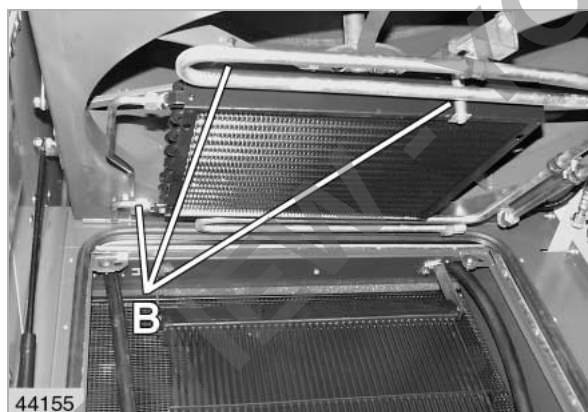
Release the bracket for the air conditioning condenser at (B), and using a piece of string, hang up on the machine.

**ATTENTION!**

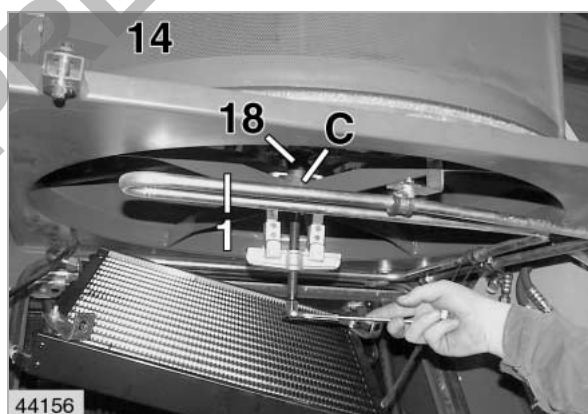
The air condition pipes must not get kinked.

2

(Fig. 2, 3, 4, 5)



3

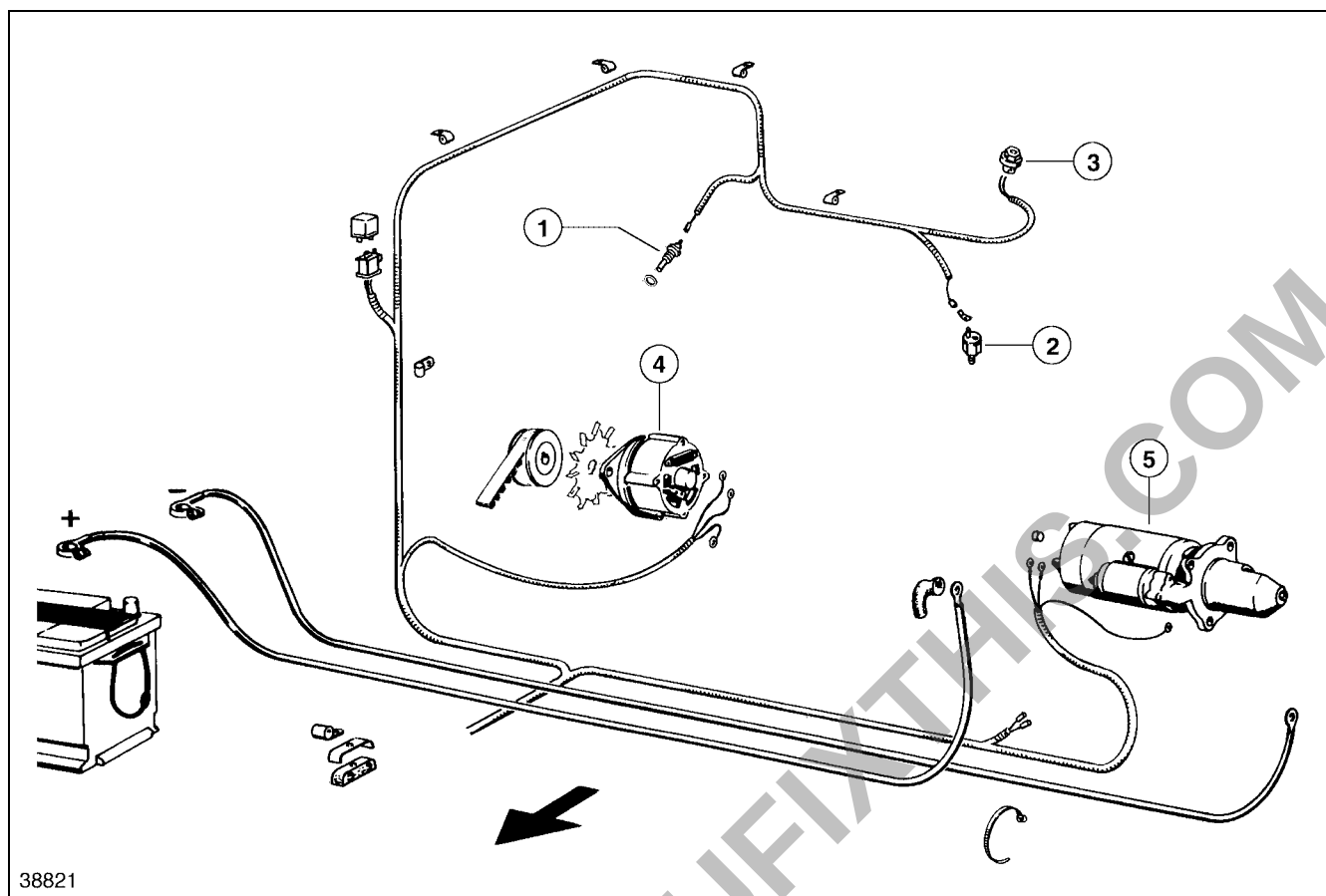


4

Drive out the expansion pin (15) at (C), then remove the rotor (14) complete with the shaft (18) from the rear wall (1) using a suitable puller.

Remove the rotor (14).

(Fig. 4, 5)



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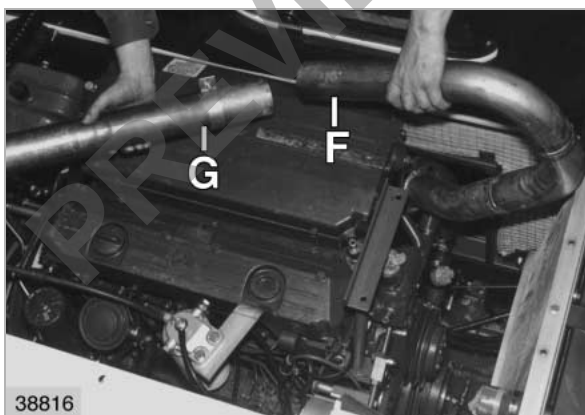
19

Connect the cables to the engine.

- 1 Temperature sensor
- 2 Oil-pressure switch
- 3 Maintenance switch (air intake pipe)
- 4 Alternator
- 5 Starter

(Fig. 19)

Screw on the diesel lines.

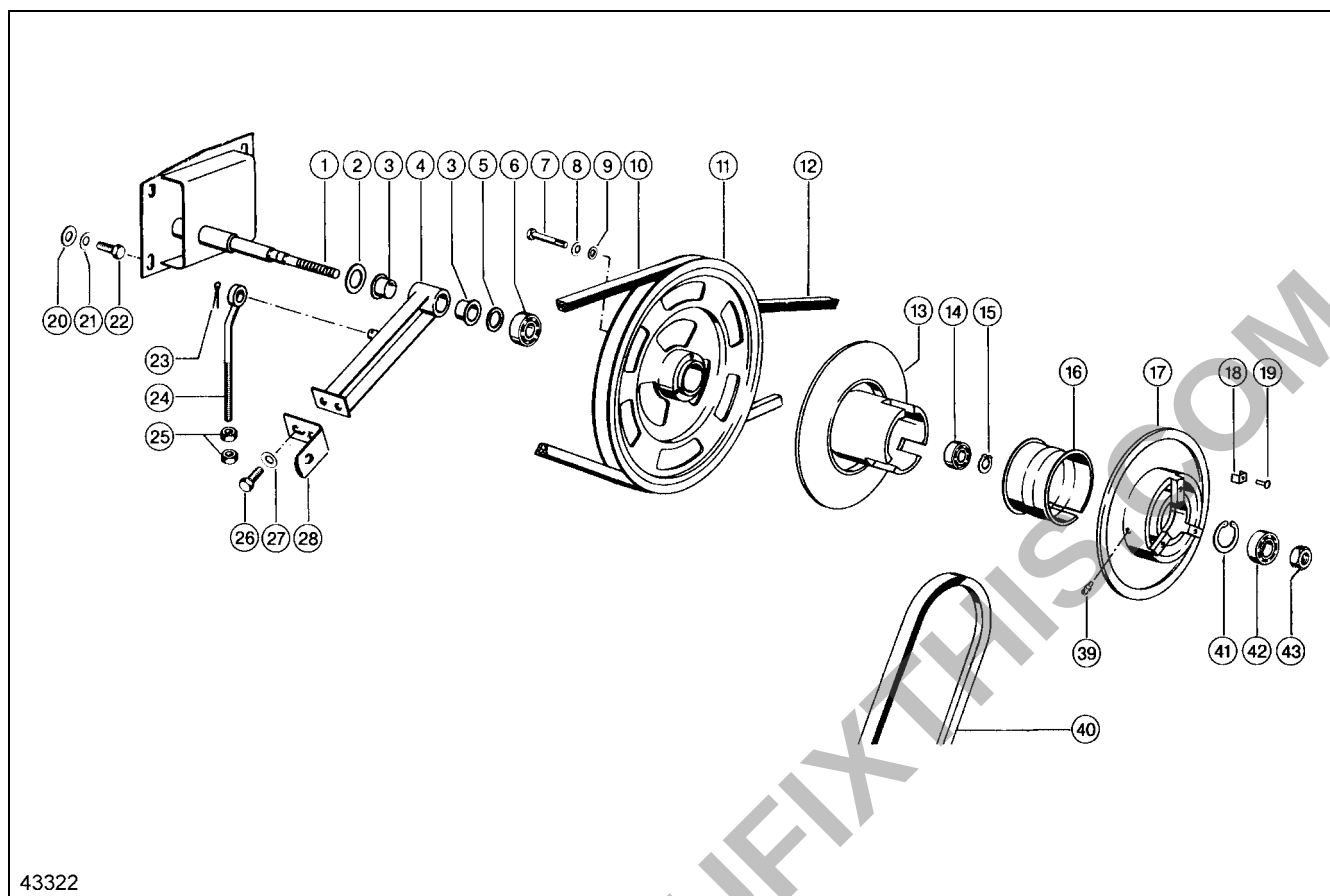


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20

Fit the air intake pipes (G and F) and renew the seals.

(Fig. 20)



43322

49

Variable speed fan drive (electrical), exploded view:

- 1 Bearing
- 2 Tight-fitting washer
- 3 Bushing
- 4 Jockey pulley arm
- 5 Supporting ring S 25 x 35 DIN 988
- 6 Deep groove ball bearing 6205 - 2rs
- 7 Hex. bolt M 8 x 30 DIN 931-8.8
- 8 Contact washer A 8
- 9 Washer 8.4 DIN 125
- 10 V-belt
- 11 V-belt pulley
- 12 V-belt
- 13 Variable speed pulley
- 14 Deep groove ball bearing 6204 - 2rs
- 15 Circlip 20 x 1.2 DIN 471
- 16 Sliding bushing
- 17 Variable speed pulley, pre-assembled
- 18 Guide clamp
- 19 Rivet C 4 x 15 DIN 7338
- 20 Washer 10.5 DIN 9021
- 21 Contact washer A 10
- 22 Hex. bolt M 10 x 25 DIN 933-8.8
- 23 Cotter pin 4 x 22 DIN 1234
- 24 Eyebolt
- 25 Hex. nut M 12 DIN 934
- 26 Hex. bolt M 10 x 20 DIN 933-8.8
- 27 Contact washer A 10
- 28 Angle

39 Grease nipple As 6 x 1 DIN 71412

40 Wide-section V-belt

41 Circlip 52 x 2 DIN 472

42 Deep groove ball bearing 6304 - 2rs

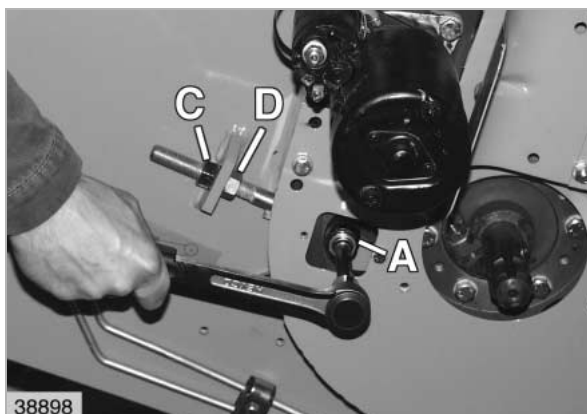
43 Hex. nut M 16 x 1 DIN 934

(up to serial no. ...)

Capstan nut

(from serial no. ...)

(Fig. 49)



84

Insert the chain locks and secure by means of cotter pins.

Tensioning the feeder chains:

Turn the lock nut (C) backwards and tension the feeder chain by means of nut (D). Tension the chains just enough that the feed slats only slightly touch the slide rails on both sides.

Tighten the lock nut (C) and clamping bolt (A). Fit the top to the guard.

(Fig. 84)

Screw on the drum inspection cover (T) and the wear plate (V).

Screw on the control covers (P).

Install the guard (N).

Screw on the dust shield (T) and guide plates (E).

(Fig. 74, 76, 78, 80)



85



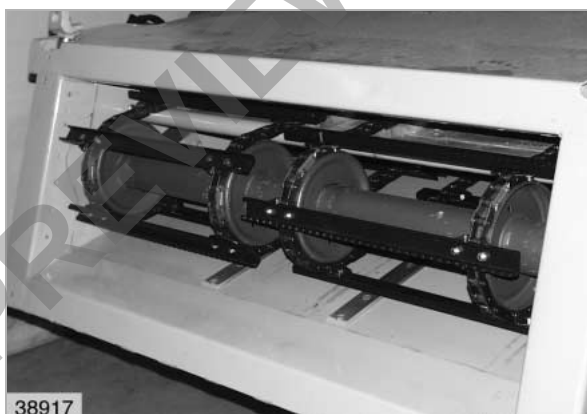
Removing the intermediate floor

Raise the feeder housing and support safely.

Insert the safety supports.

Unscrew the dust shield (T) and guide plates (E).

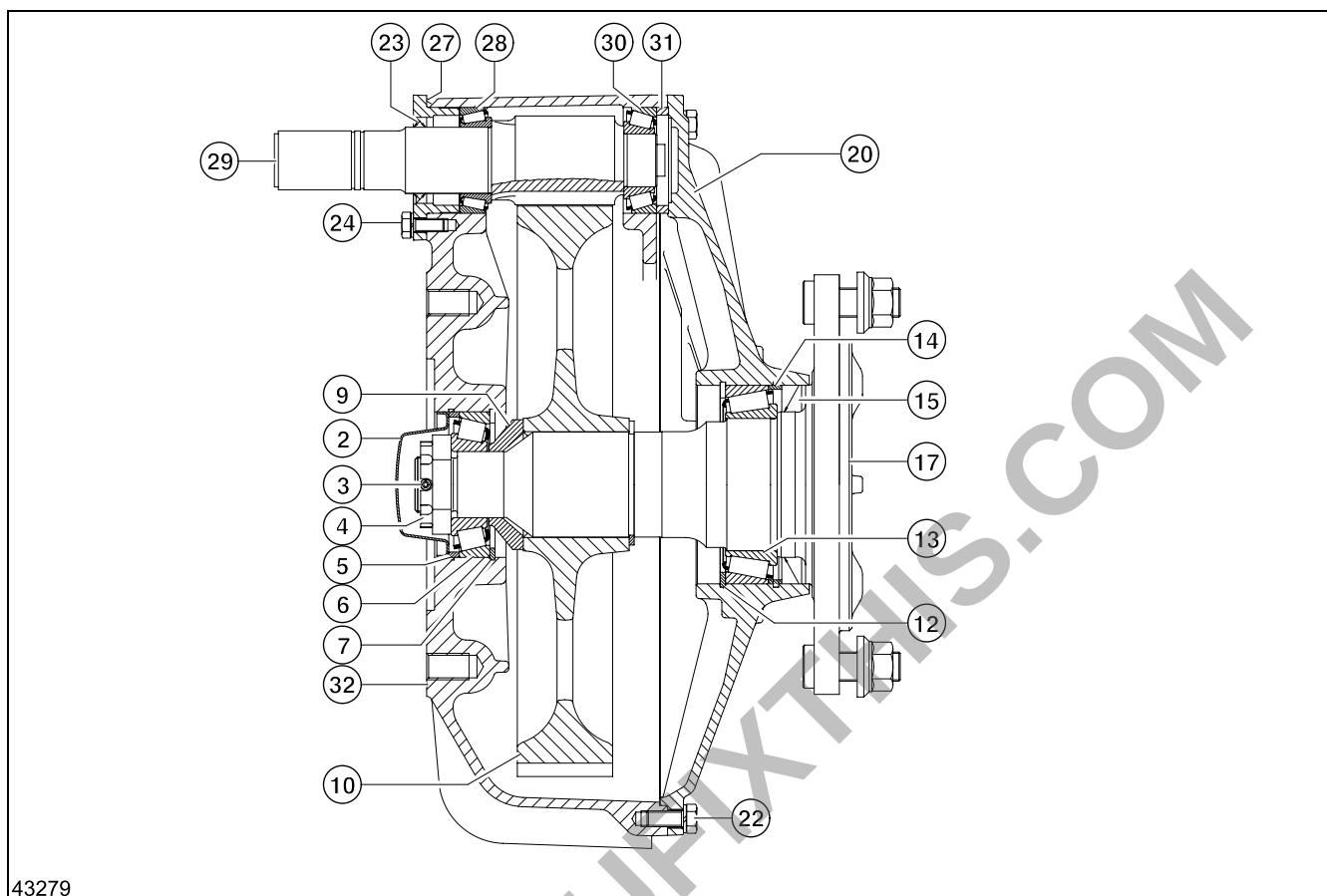
(Fig. 85)



86

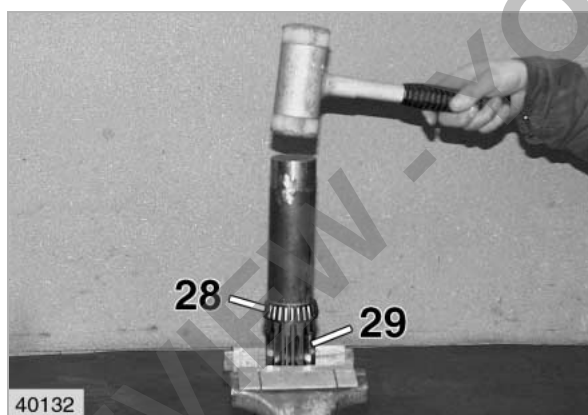
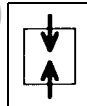
Turn the feeder chains until the chain locks are moved into the bottom position.

(Fig. 86)



43279

84



Assembling the final drives DOMINATOR 98 VX / 88 VX



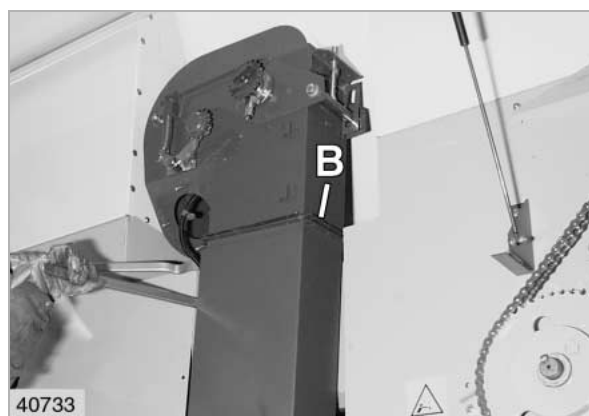
NOTE:

Oil all moving parts, especially the bearings, with multipurpose transmission oil prior to assembly.



1. Heat up inner rings of tapered roller bearings (28 and 30) to approx. 100 °C and install on pinion shaft (29).
2. Check correct seat of bearing by means of a blow.
(Fig. 84, 85)

85



45

Push the grain elevator shaft slightly to the side using a tyre mounting lever so the flange joint (B) can be pushed together.

(Fig. 44, 45)

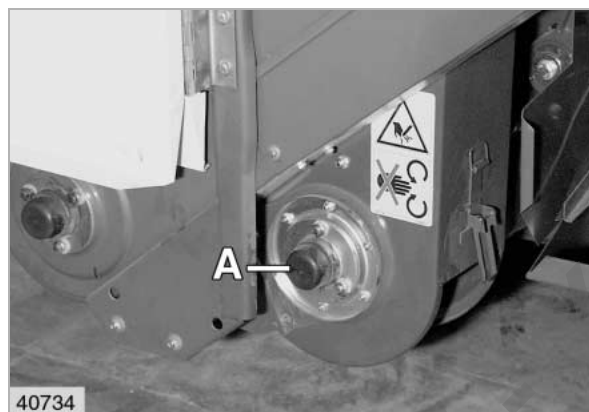
Bolt down the grain elevator top at flange (B).

Connect cable (A) from the magnetic pick-up.

(Fig. 18)

Install grain tank filler auger.

Install grain elevator chain.



46



Removing the grain elevator shaft

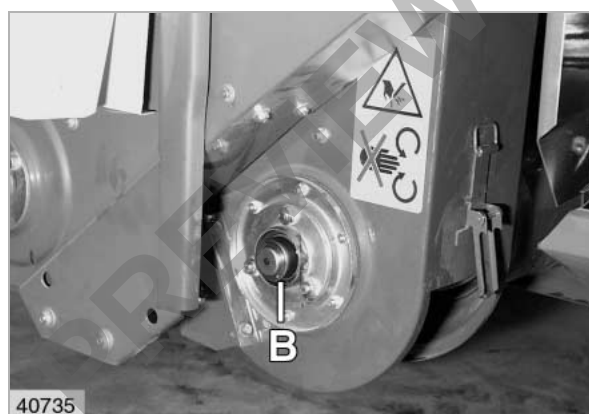
DOMINATOR 108 VX

Remove grain tank filler auger.

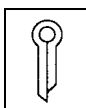
Remove grain elevator chain.

Remove cap (A).

(Fig. 46)

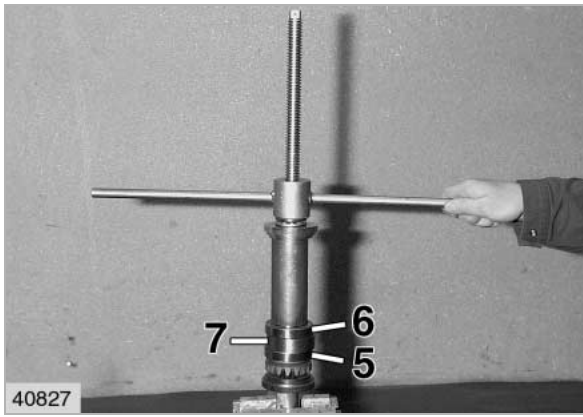
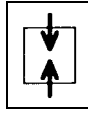
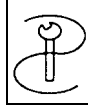


47



Unlock lock collar from lock collar bearing and knock lock collar off.

(Fig. 47)



Assembling the upper angle drive of grain tank unloading

1. Fill spacer bushings (7) with **20 g** of multipurpose grease CLAAS EP2 at point (E) prior to installation.
2. Install taper roller bearings (5), spacer bushings (7) and deep groove ball bearings (6) on the bevel wheels (4) using a special tool.

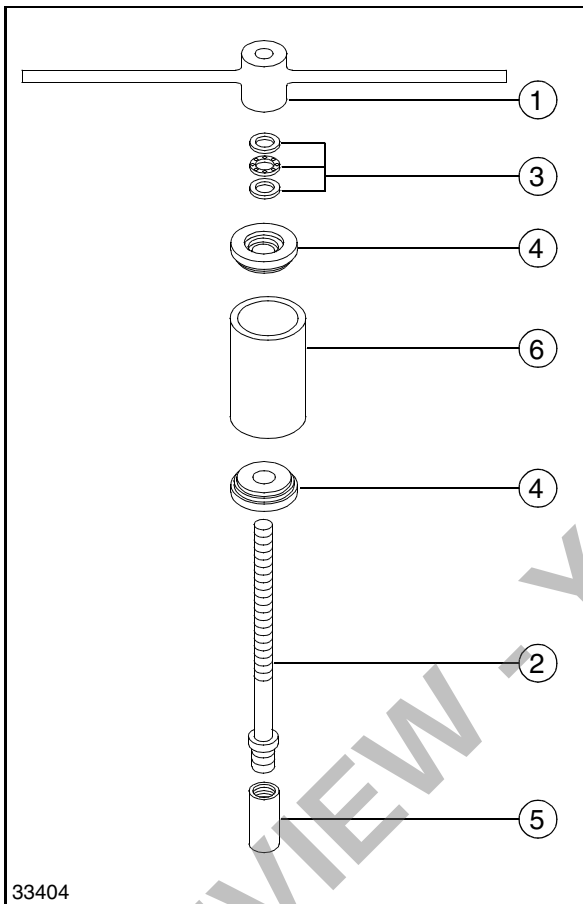
(Fig. 5, 6)

6

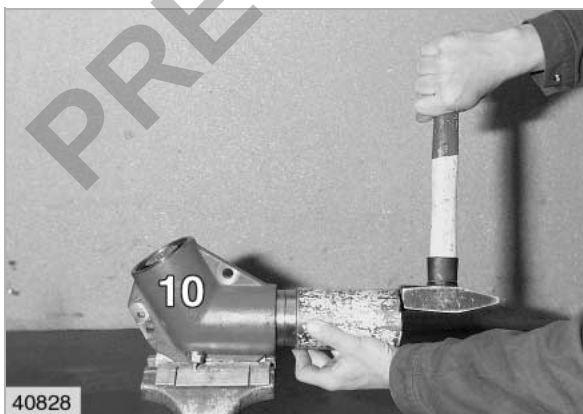
Special tool:

- 1 Lever nut
Part No. 181 880.0
- 2 Spindle
Part No. 181 877.0
- 3 Axial grooved ball bearing
Part No. 235 983.0
- 4 Locating disc
Part No. 181 879.0 – 2 pcs.
- 5 Sleeve
Part No. 181 881.1
- 6 Tube dia. 51 x dia. 60 x 200 long

(Fig. 7)



7

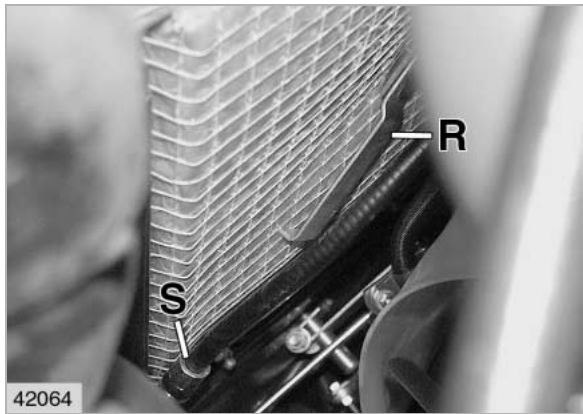


8

3. Cover the tooth profile of a bevel wheel (4) with pattern identification paste.
4. Drive the pre-assembled bevel wheels (4) into the angle drive housing (10) using a block-ended tube.

5. Insert existing washers (3) and the circlips (2).

(Fig. 5, 8)



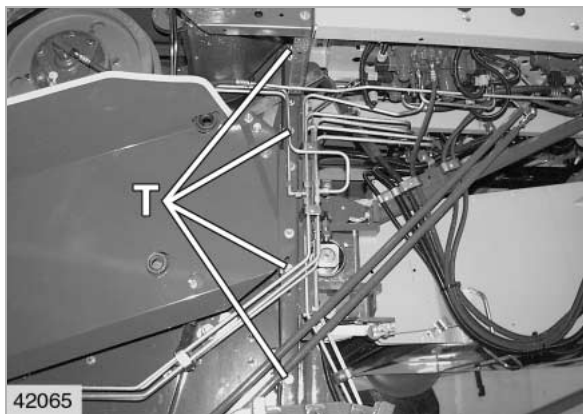
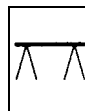
9

Rear side of cab:

Push bracket (R) off of rope.

Pull end of rope (S) out of cab rear wall.

(Fig. 9)



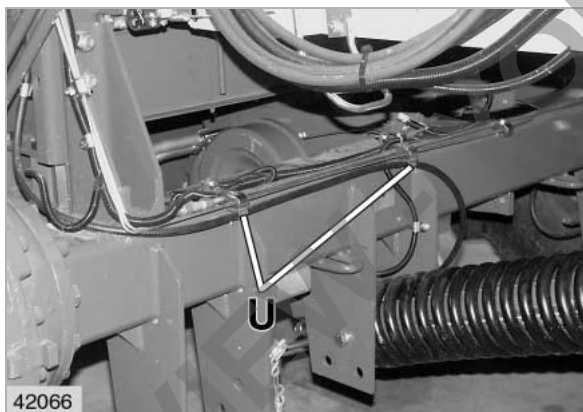
10

Jack up machine at the front right-hand side.

Remove front right-hand drive wheel.

Unscrew clamps (T).

(Fig. 10)

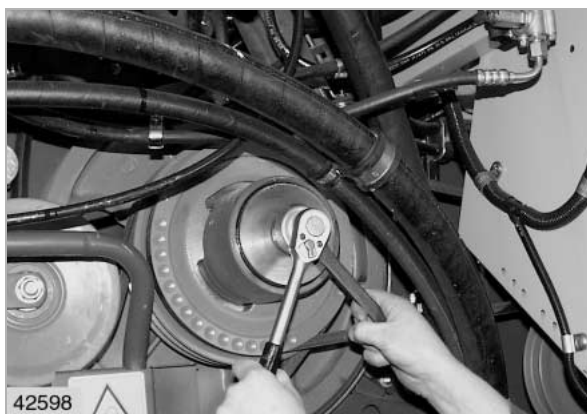


11

Unscrew clamps (U).

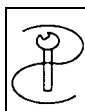
Remove rope.

(Fig. 11)



Removing the cutterbar engagement ram

Remove the rotary coupling from the cutterbar engagement.



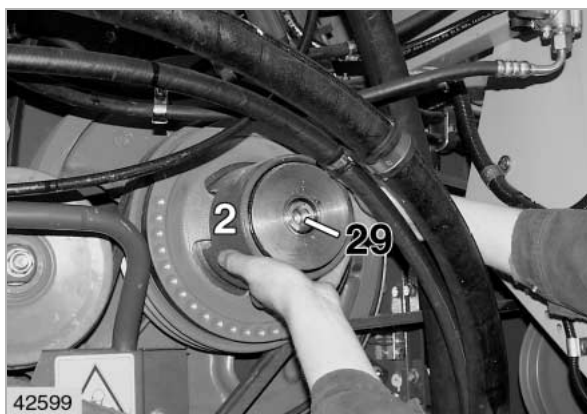
Using the special tool, remove the slotted nuts (9). While slackening the front slotted nut, hold the rear with a C-spanner. Remove the support ring (8) directly behind.

Special tool:

Socket wrench Part No. 181 809.0

(Fig. 48, 53)

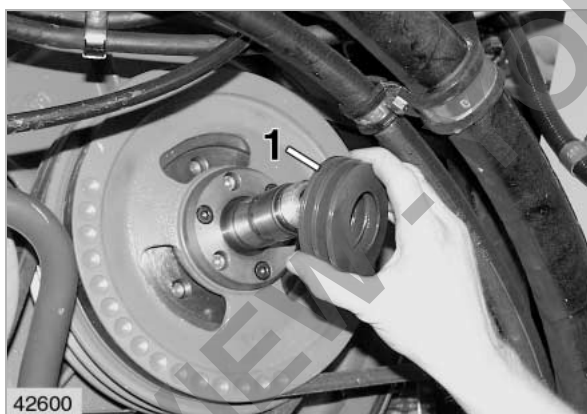
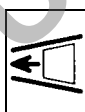
48



Carefully remove the casing (2) from the hydraulic ram (29) and without tilting.

(Fig. 49, 53)

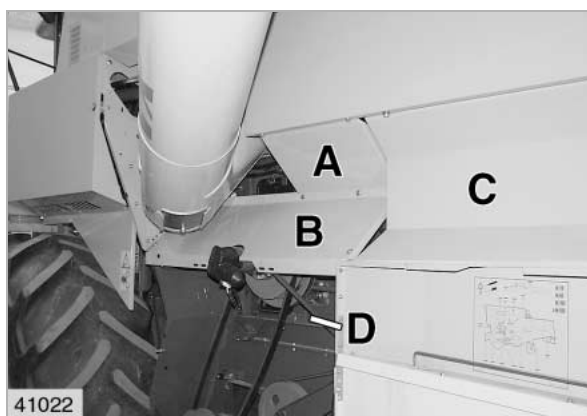
49



Remove the six Belleville springs (1) from the ram (29). Observe the correct fitting position.

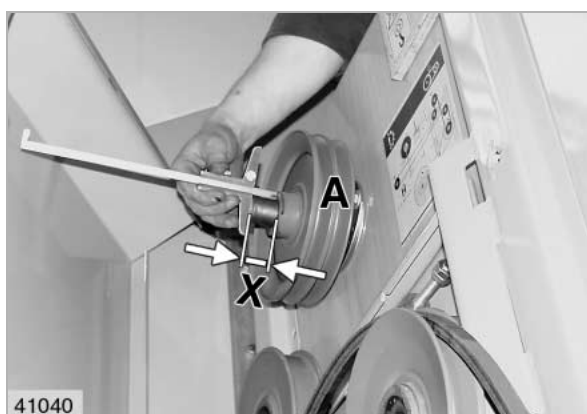
(Fig. 50, 53)

50

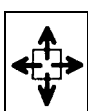


20

Attach the covers (A and B), panel (C) and brace (D).
(Fig. 20)



21

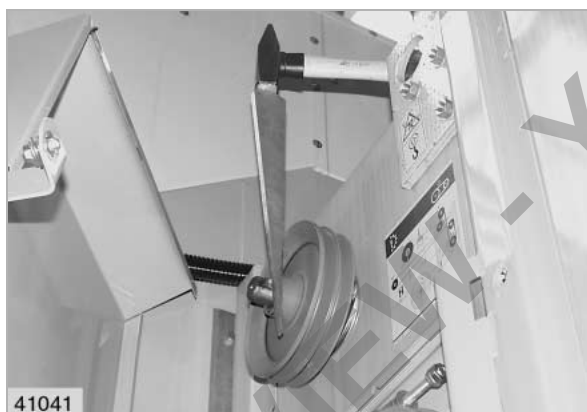


Removing the rear intensive separation system shaft

Remove intensive separation system drive belt (12).

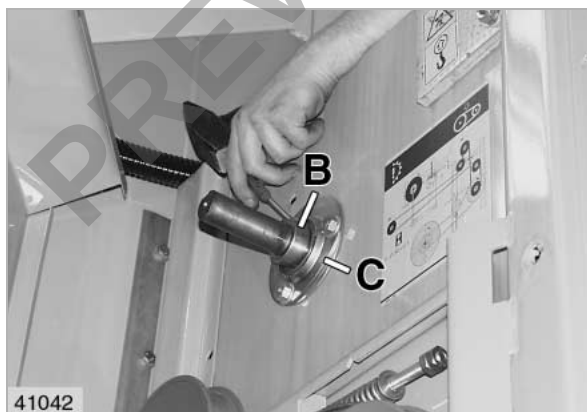
Determine the dimension (X) from the shaft end to the V-belt pulley (A).

(Fig. 21)



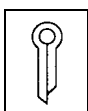
22

Remove the key of V-belt pulley (A) and pull off pulley.
(Fig. 21, 22)



23

Left-hand side of machine:



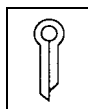
Release the safety of lock collar (B) of the lock collar bearing and knock it off.

Unscrew the sheet metal flange (C) from the machine side wall.

(Fig. 23)

Align the chain wheel to be in the centre of the returns elevator shaft.

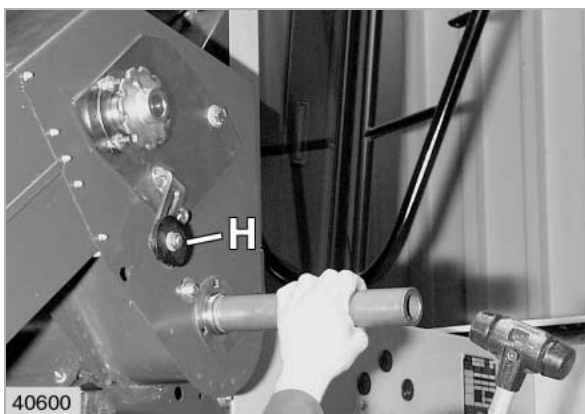
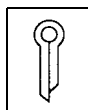
Bolt down the returns elevator boot using bolts (E) and push on the rubber connecting sleeve (G).



Arrest the lock collar bearing by means of the lock collar and secure.

Push on cap (R).

(Fig. 20, 21, 23)



Drive the upper lock collar bearing along with the inner sheet metal flange on the shaft until the bearing is flush with the returns elevator head and bolt down together with the outer sheet metal flange.

Push on chain wheel and secure by means of an expansion pin.

Install drive chain and tension using a block tensioner (H).

(Fig. 24, 25, 43)

43

Install the side door (V) with the brace (Y) and align.

Install the side door (T) with the brace (K) and align.

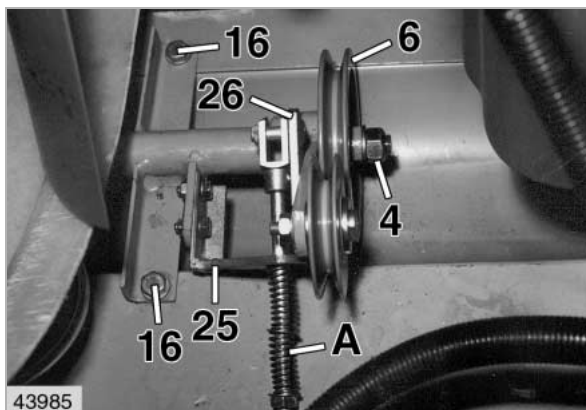
Attach the fuel filter (U) together with the cable clamp to the brace (K).

Bolt down the side door (S) and align.

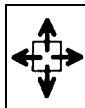
Install returns elevator chain.

(Fig. 17, 18, 19)

ROTARY RADIATOR SCREEN DRIVE



43985

**Removing the rotary radiator screen drive shaft**

Remove rotary radiator screen drive belt (26).

Remove rotary radiator screen intermediate drive belt (27).

Unscrew hexagon nut (4).

Drive V-belt pulley (6) off of the shaft (13).

Unscrew bracket (25).

Unscrew mounting plate (26) and remove spring clamp (A).

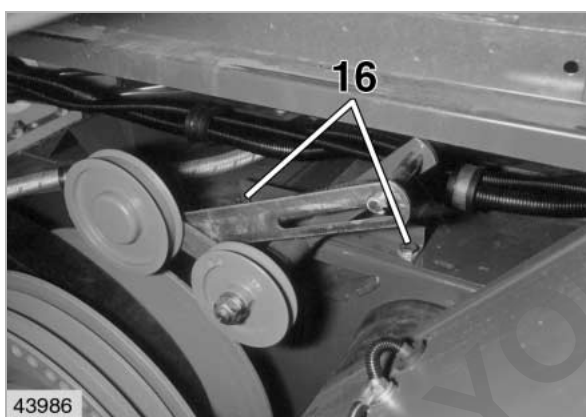
1

Unscrew jockey pulley (21).

(Fig. 1, 16)

Unscrew hexagon bolts (16).

(Fig. 1, 2, 16)

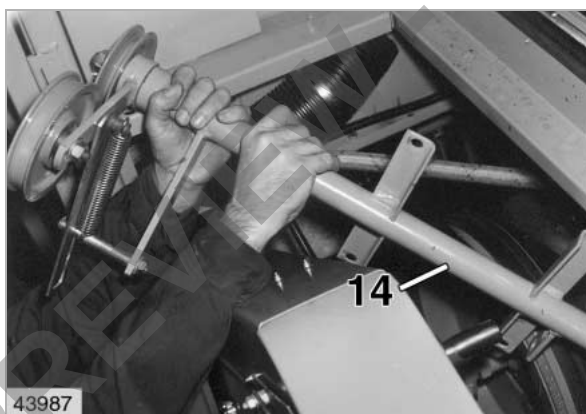


43986

2

Take out bearing tube (14) completely along with the shaft (13) to the right-hand side.

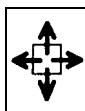
(Fig. 3, 16)



43987

3

SIEVE PAN DRIVE

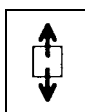
**Removing the straw walker / sieve pan intermediate drive jockey pulley**

Relieve the tension of sieve pan intermediate drive belt (9).

Unscrew complete jockey pulley (23) from the machine side wall.

(Fig. 1, 20)

1

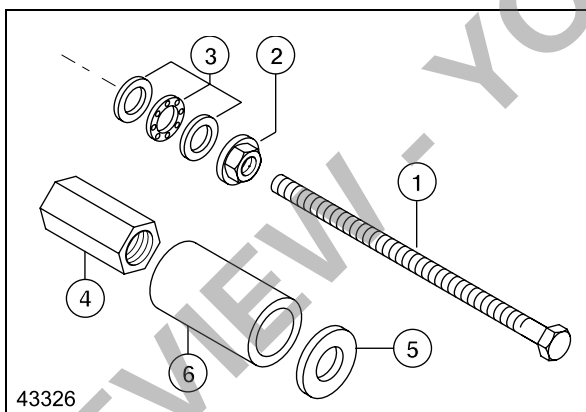
**Dismantling the straw walker / sieve pan intermediate drive jockey pulley**

Pull pin (24) along with deep groove ball bearing (26) out of the jockey pulley (28) using a special tool.

(Fig. 2, 20)



2

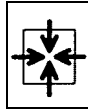


3

Special tool:

- 1 Hex. bolt
M 16 x 300 DIN 933-8.8
Part No. 237 375.1
- 2 Hexagon flange nut M 16
Part No. 244 059.0
- 3 Axial grooved ball bearing
Part No. 177 899.0
- 4 Reducing section
Part No. 181 933.0
- 5 Washer
16.5 mm x 65 mm x 5 mm
- 6 Tube
Inside dia. 50 mm, outside dia. 60 mm,
150 mm long (self-manufactured)

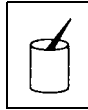
(Fig. 3)

**Installing the stub axle**

(2.05 m steering axle)

**NOTE:**

All moving parts need to have CLAAS multi-purpose grease EP2 applied before assembly.

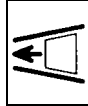


Slide the thrust washers (D) onto the stub axle.

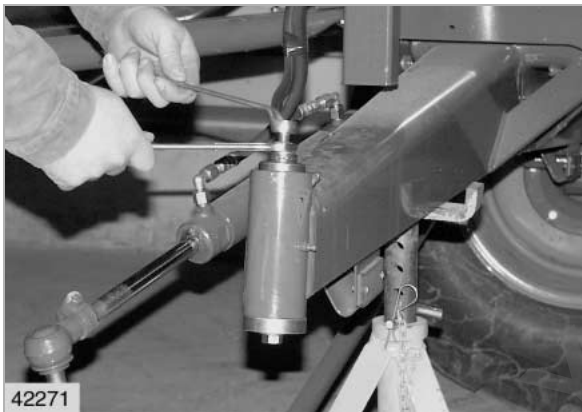
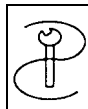
24

**CAUTION!**

The ground sides of the thrust washers must sit together.



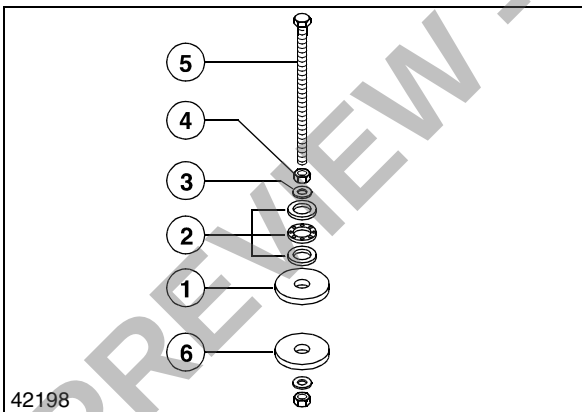
(Fig. 24)



Press the bearing bushes (C) into the steering axle housing using the special tool.

(Fig. 22, 25)

25

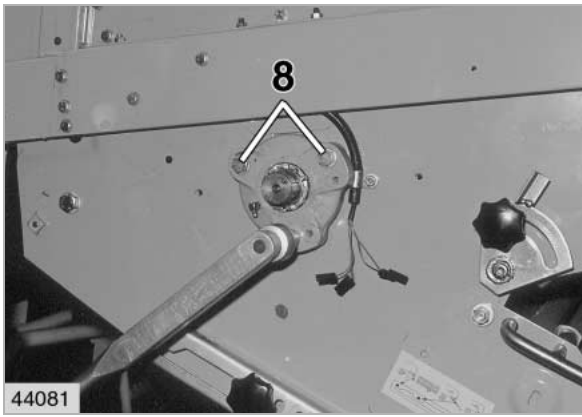
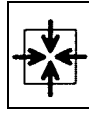


26

Special tool:

- 1 Washer,
outer dia. 50 mm, inner dia. 13 mm, 10 mm thick
- 2 Axial bearing
Part No. 177 899.0
- 3 Washer 13 DIN 125
Part No. 235 124.2
- 4 Hex. nut M 12 DIN 934
Part No. 236 172.0
- 5 Hex. bolt M 12 x 200 DIN 933-8.8
Part No. 244 421.0
- 6 Washer,
outer dia. 65 mm, inner dia. 13 mm, 15 mm thick

(Fig. 26)

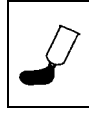


25

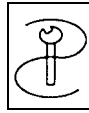
Installing the left-hand straw chopper bearing

1. To make installation easier, screw in three threaded bolts M 12, 100 mm long, into the straw chopper side wall.
2. Place straw chopper bearing (pre-assembled) on the shaft.
3. Bolt down straw chopper bearing to straw chopper side wall with hexagon bolts (8) and contact washers (9).

The hexagon bolts (8) are installed using liquid sealing compound, e.g. DELO-ML-5349.



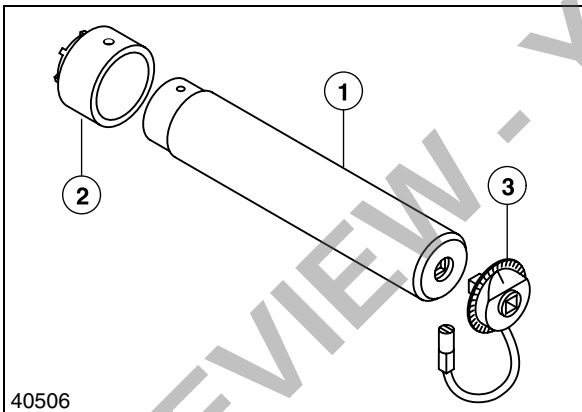
(Fig. 25, 37)



26

4. Arrest the cutting cylinder (17) using a piece of square timber.
5. Pre-tension the face-end slotted nut (11) with a tightening torque of **35 Nm**, using a special tool.
6. Rotate the face-end slotted nut (11) further by **76°**.

(Fig. 26, 37)

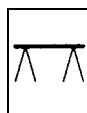


27

Special tool:

- 1 Tube,
Part No. 181 611.0
- 2 Special socket spanner,
Part No. 180 142.0
- 3 Angular-position measuring disc,
Part No. 174 358.0

(Fig. 27)

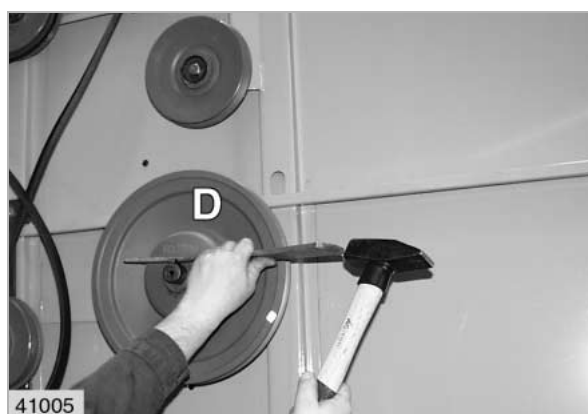


Unlock the rear hood (C) and fold up.

Raise the straw walker racks at the rear using a suitable lifting device.

(Fig. 24)

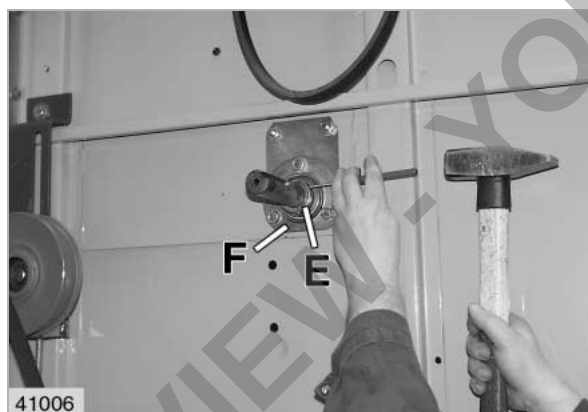
24



Remove key of straw walker drive pulley (D) and remove pulley.

(Fig. 25)

25

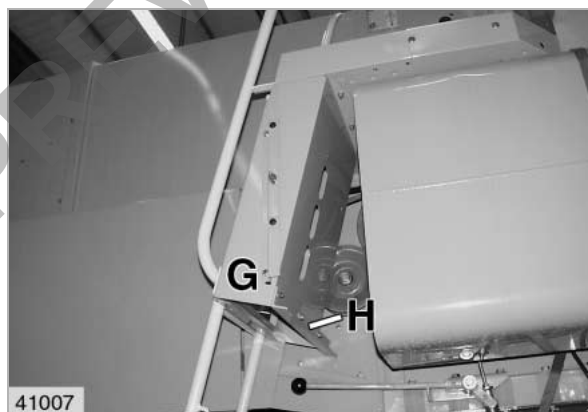


Release the safety of lock collar (E) of the lock collar bearing and knock it off.

Unscrew the sheet metal flange (F) from the machine housing.

(Fig. 26)

26



DOMINATOR 108 VX:

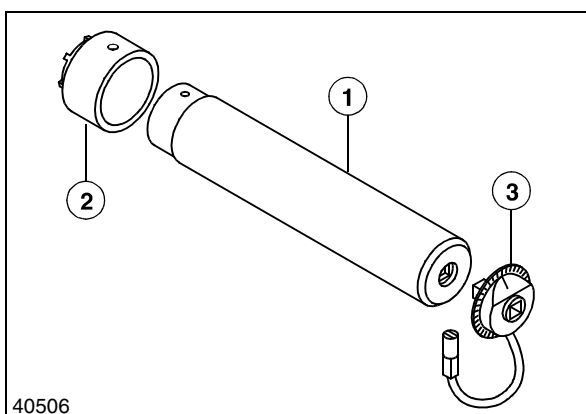
Unscrew jacket sheet (G) and bracket (H).

(Fig. 27)

27



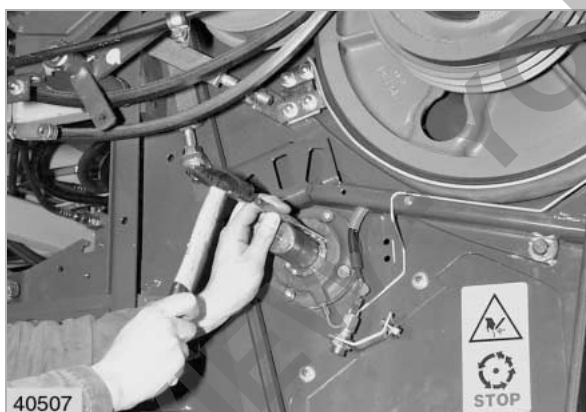
Turn the face-end slotted nut for another 60°.
(Fig. 91)



Special tool:

- 1 Tube
Part No. 181 611.0
- 2 Special socket spanner
Part No. 180 142.0
- 3 Angular-position measuring disc
Part No. 174 358.0

(Fig. 92)

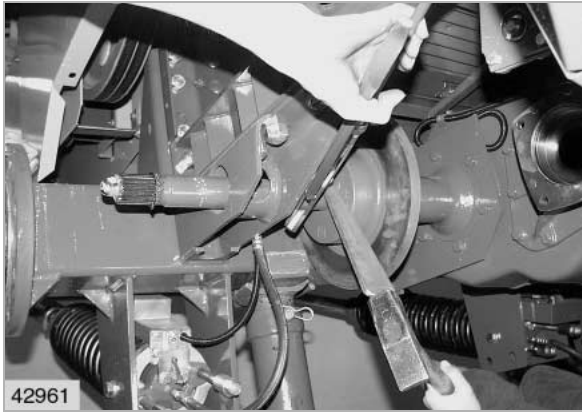


Turn the face-end slotted nut further until the
tab washer corresponds with the groove.
Secure face-end slotted nut.

(Fig. 93)

Bolt down the magnetic pick-up along with the
angle (13).

(Fig. 67)



78

With disc brakes:
(DOMINATOR 98 VX)

Slacken off the brake discs from the intermediate shaft on both the left- and right-hand side.

(Fig. 78)



79

With disc brakes:

Slide the intermediate drive shaft out from the left- and right-hand sides and remove the brake discs by lowering.

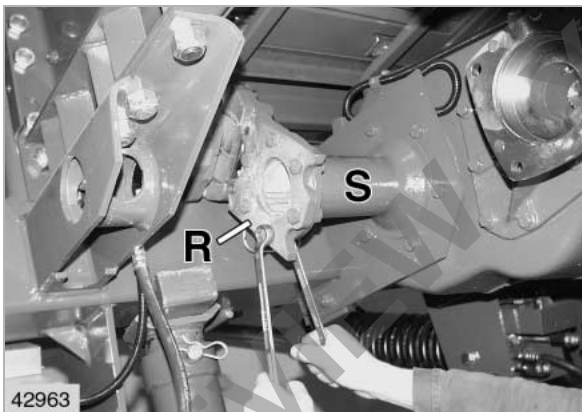


ATTENTION!

Support the centre of the intermediate shaft, so that it does not get damaged on the gearbox on removal.



(Fig. 79)

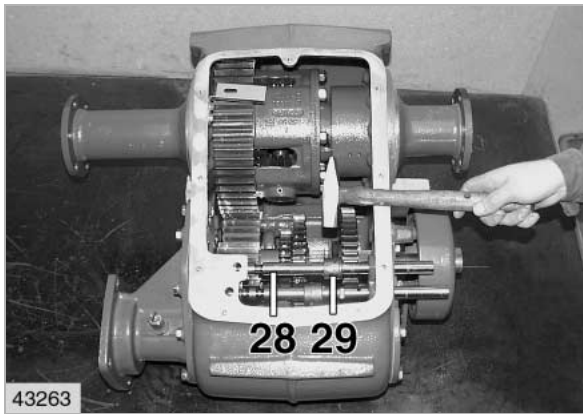
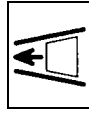


80

With disc brakes:

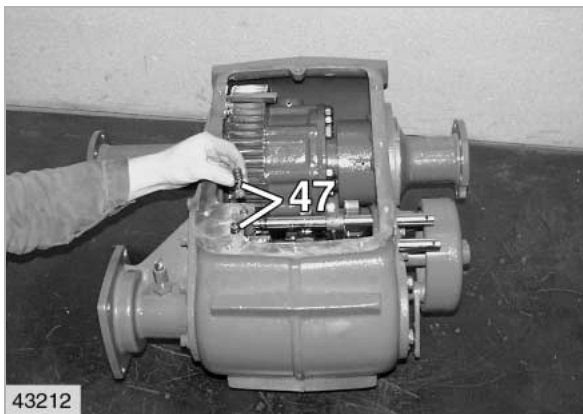
Unbolt the brake shield flanges (S) from the flanges (R) on both the left- and right-hand sides.

(Fig. 80)



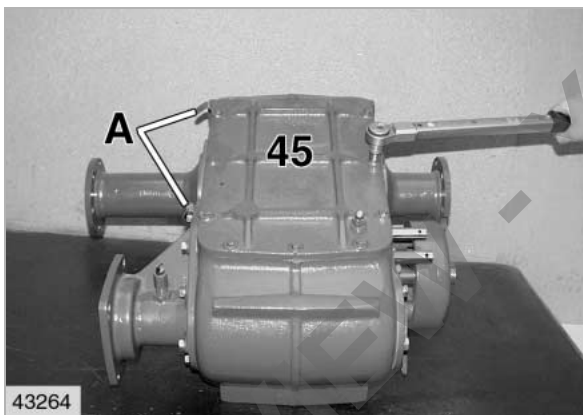
42. Slide in the control rod (28) and fit the selector fork (29). Observe the correct installation (the flat side on the control rod (28) faces the front).
43. Secure the selector fork (29) onto the control rod (28) using the expansion pin (22 and 23).

(Fig. 187, 216)



44. Insert the balls (48) and the springs (47) into the gearbox housing (52).

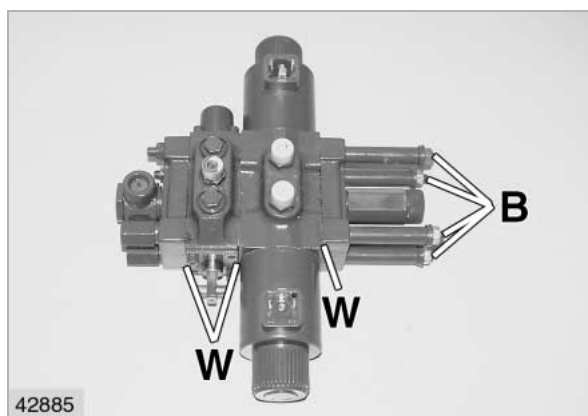
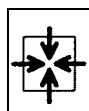
(Fig. 187, 217)



45. Fit the gearbox cover (45) along with new seals (46) back onto the gearbox housing (52). Take note of the position of the straps (A).

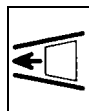
(Fig. 186, 218)

Refit the gearbox.



Installing the 3/3 way control valve for the drum speed adjustment

Bolt the valves back together at (W) using new seals and the studs (B).

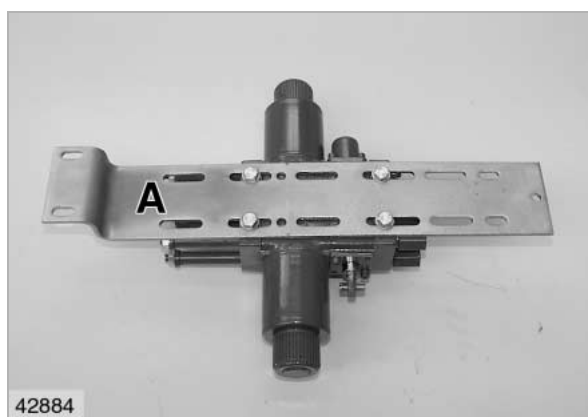


Refit the bracket (A) back according to the marking on the valve block.

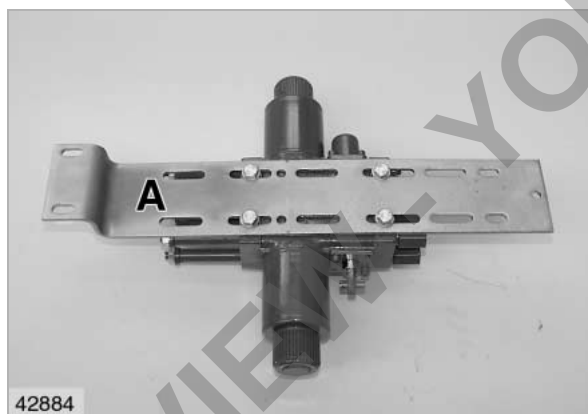
Refit the front working hydraulics valve block.

(Fig. 39, 40)

39

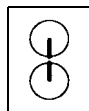


40



Removing the 4/3 way solenoid valve for the reel fore and aft adjustment and the CLAAS Auto-Contour

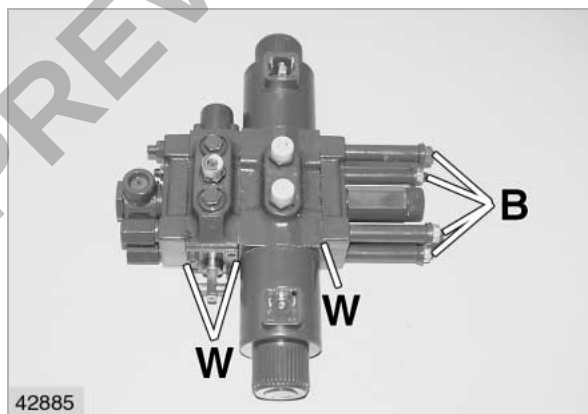
Remove the front working hydraulics valve block.



Mark the bracket (A) to the valve block, then remove the valve block.

(Fig. 41)

41



42

Remove the studs (B) from the valve block and separate the valves at (W).

The individual valve units have O-rings sealing them together.

(Fig. 42)

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