Operator's Manual

Combine

CEREA 7274

CEREA 7278

+ Auto Level

+ Rotary Separator

Operator's Manual

Published October 2007
by AGCO A/S,
Dronningborg Allé 2, DK-8900 Randers
Publication No. EN D3110100M10
Edition 1

This Operator's Manual applies from
combine serial number: 62018
and
cutting table serial number: 943265

Contents

Contents

Contents

Contents

Contents

1. General Information

Contents

1. General Information

1.1 Appropriate Use

Appropriate use:

This self-propelled combine harvester is manufactured exclusively for usual agricultural purposes (appropriate use).

Any other use is considered as being contrary to the appropriate use. AGCO declines all liability in cases of physical damage or injuries resulting from non-appropriate use. The risk lies exclusively with the user.

The conformity and strict adherence to the operating, maintenance and repair requirements specified by AGCO are also essential factors for appropriate use.

This self-propelled combine harvester may be used, serviced and repaired only by personnel having full knowledge of its specific features and who are aware of the danger involved and the applicable safety rules (prevention of accidents).

It is the responsibility of the owner/user to ensure that prescribed safety precautions and other general technical, health and safety and road-safety rules are observed.

AGCO disclaims all liability to any claim resulting from the fitting of non-approved parts or accessories or unauthorised modification or alteration.

Customers are strongly recommended to contact an AGCO dealer in the event of after-sale problems and for any adjustments that may be necessary.

In accordance with the Company's policy of continuous improvements to its products, alterations in the specifications may be made at any time without notice.

The Company accepts no responsibility for any discrepancies which may occur between the specifications of its machines and the descriptions thereof contained in its publications.

This machine has been designed and produced in conformity with the machine directive 98/37/EF. An EU declaration of conformity is supplied with the machine.

This machine has been tested according to the **EEC directive 77/311/EEC and ISO 5131-1982**
Noise level: MF 7274 RS = 78 dB (A) Noise level: MF 7278 RS = 78 dB (A)

1. General Information

1.2 Preface

This Manual

The purpose of this manual is to enable the owner/operator to handle and maintain the combine efficiently. Time spent in becoming familiar with the Operator's Manual now will save time in the field.

Wide variations in operation conditions make it impossible for the Company to make comprehensive or definite statements in its publications concerning performance and the use of its machines, or to accept liability for any damage which may result from errors or omissions.

The specifications and illustrations contained in this manual pertain to combines manufactured for specific countries. Due to differing laws and requirements in various countries, some apparent discrepancies may result between any particular combine and those depicted in this manual. Some accessories and optional equipment appearing in this manual are not necessarily available in all territories.

AGCO service

During the warranty period, all maintenance and repair work must be carried out by the AGCO dealer who will carefully carry out detailed checks of the progress and performance of the new combine.

To obtain best results from an AGCO combine, it is important to continue regular servicing and periodical inspection after the warranty has expired. All major overhaul work on the combine must be carried out by a local AGCO dealer; an experienced technician will detect any problems which may arise between two overhauls.

Mechanical staff regularly follow training courses to update their knowledge of the product, maintenance and repair techniques and the use of special modern tools and equipment for troubleshooting. They receive regular Service Bulletins and have access to all the workshop manuals and technical publications required to carry out repairs or maintenance meeting the quality standards required by AGCO.

Warning concerning spare parts

Parts other than original AGCO parts are likely to be of lower quality. AGCO disclaims all liability in the event of loss or damage arising as a result of such parts being fitted. The manufacturer's warranty may also become void, if such parts are fitted during the normal warranty period.

Warranty, pre-delivery check and installation

The Company, when selling new goods to its Distributors, gives a warranty which, subject to certain conditions, guarantees that the goods are free from defects in material and workmanship. The Company's Distributors and Dealers are required to give the benefit of a similar warranty to the first retail purchaser of all new goods supplied by the Company, and users should inquire of the Distributor or Dealer from whom they purchase as to the terms of the warranty made available to them.

Before delivering a new combine to the Customer's premises, it is the responsibility of the Distributor to conduct a pre-delivery check of the machine. This consists of a series of detailed inspections, adjustments and functional checks, which should ensure that when received by the Customer the combine is ready to start work immediately.

Upon delivery the Distributor is required to instruct the Customer in the basic principles and operating procedures of the combine. This is termed Combine Installation, which should include instruction on controls and instruments, field settings, maintenance requirements, safety precautions and winter storage, and should preferably be undertaken in the presence of all who will be concerned with the operation and maintenance of the machine.

This manual is published for World wide distribution, and the availability of equipment shown either as basic or accessory varies according to the territory in which the combine is to be used. Details of equipment available in your area can be obtained from your AGCO Distributor/Dealer.

1.3 Product Identification

Always quote combine model and serial number in any communication to your Distributor/Dealer.

Keep this manual safely for convenient reference.

Combine model: MF _____

Serial number: _____

Fig. 1

Table serial number: _____

Fig. 2

Engine type: _____

Serial number: _____

Owner's name: _____

Address: _____

_____

Installation date:_____

Dealer's name:_____

Address: _____

_____

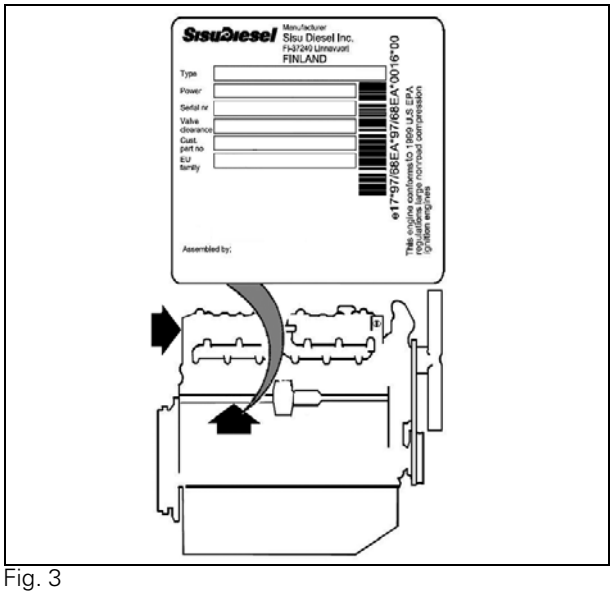

Fig. 3

1. General Information

1.4 Sectional Drawing and Parts Identification

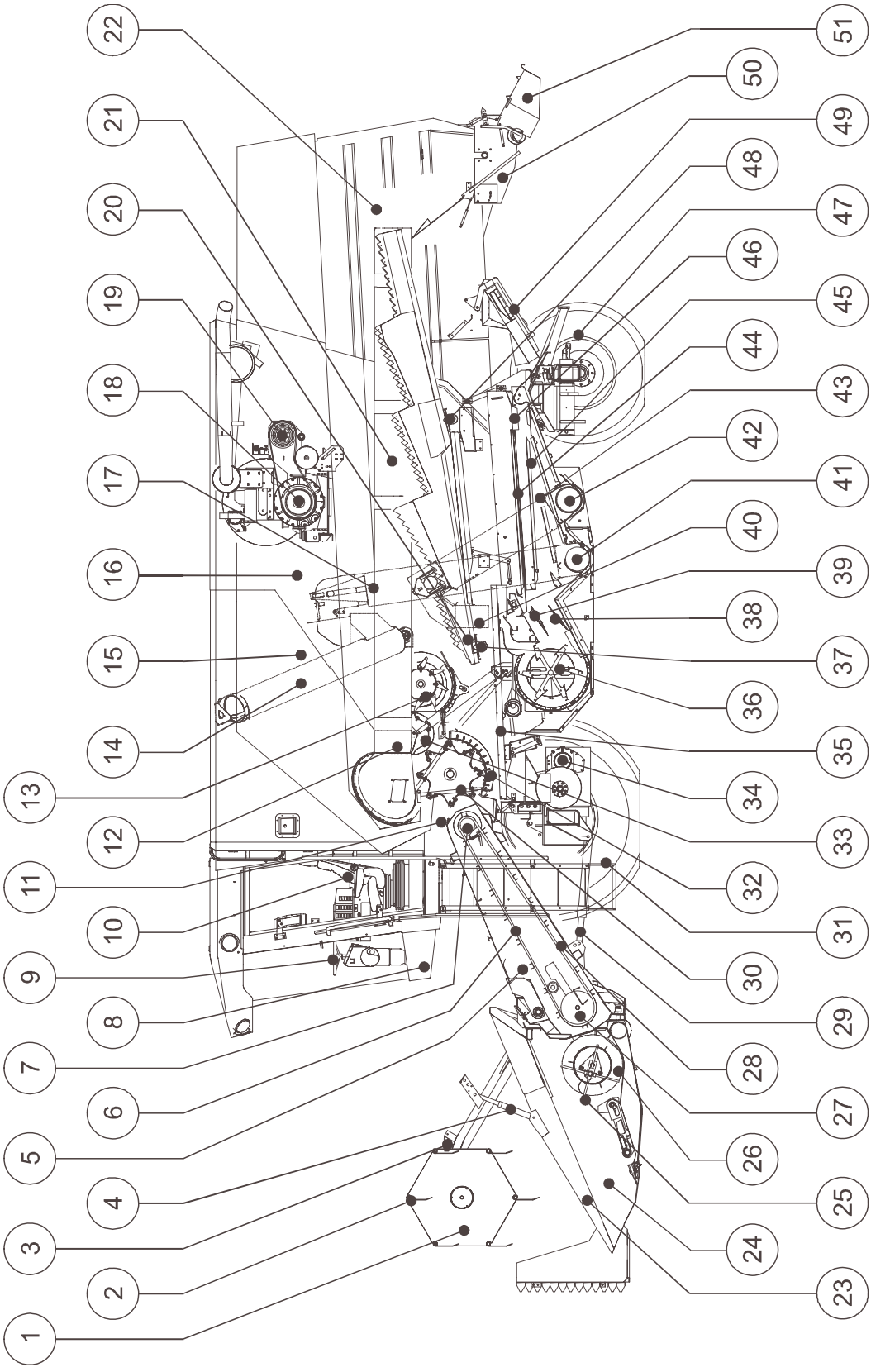

Fig. 4

Combine parts		
1. Reel	18. Engine	35. Main grain pan
2. Reel tine bars	19. Hydrostatic pump (transmission)	36. Fanning mill
3. Hydraulic ram for reel fore/aft	20. Straw walkers	37. Straw walker front crank
4. Hydraulic ram for reel up/down	21. Unloading tube	38. Bottom fan deflector
5. Main crop elevator	22. Straw hood	39. Top fan deflector
6. Crop elevator chain	23. Straw divider	40. Returns thresher
7. Elevator chain top shaft	24. Table	41. Good grain auger
8. Operator cab	25. Feathering fingers	42. Returns auger
9. Steering wheel	26. Table auger	43. Shaker shoe
10. Operator seat	27. Elevator chain front shaft	44. Top sieve
11. Cylinder access door	28. Elevator chain slats	45. Bottom sieve
12. Unloading auger/tube	29. Hydraulic table lift ram	46. Sieve extension
13. Rotary separator	30. Threshing cylinder	47. Rear wheels
14. Tank filling auger	31. Traction wheels	48. Straw walker rear crank
15. Grain tank	32. Concave	49. Chaff spreader
16. Rear beater curtain	33. Rear beater	50. Straw chopper
17. Tank filling elevator	34. Hydrostatic motor (transmission)	51. Spreader hood

Fig. 5

1. General Information

2. Safety

Contents

2. Safety

2.1 General Safety Precautions

Every effort has been made to ensure that Massey Ferguson combines provide maximum protection against personal injury through accidents. The effectiveness of guards and other safety devices is only as comprehensive as the operator allows in practising caution whenever the machine is running. Reading the simple rules below is only part of your responsibility. Memorise them and practise them until you are continually safety conscious. In order to provide a better view, certain photographs or illustrations in this manual may show an assembly with the safety shield removed. However, a machine should never be operated in this condition. Keep all shields in place. If a shield removal becomes necessary for repairs, replace the shield prior to machine operation.

Operators should familiarise themselves with the provisions of the Road Traffic Acts and of the regulations made thereunder in order to ensure that, when taking the combine and the attachments upon the road, they comply with the relevant statutory requirements. Always remember to observe the restrictions on the use of vehicles carrying projection loads or appliances.

The machine is delivered from the factory with guards and safety equipment as required by the authorities.

2.2 Attention - Warning Symbols

Read Operator's Manual and safety precautions thoroughly before starting! (Note decals on the machine!)

All persons using or involved with service or maintenance of this table should familiarise themselves with the safety precautions!

Provisions Concerning Safety and Prevention of Accidents

Before starting check the combine with a view to road safety and reliability.

Note this symbol in this operator's manual, it's for your own safety:

2. Safety

2.3 Safety Precautions

Attention! Become alert! Your safety is involved

Safety precautions are for your safety

1. In addition to the instructions stated in this operator's manual it is the responsibility of the user to observe general safety provisions and regulations for the prevention of accidents.
2. Warnings and instructions on the machine give important information as to safe use. They are for your own safety and must be closely observed.
3. In road transport it is the responsibility of the user to observe the current provisions concerning forward speed, total weight, axle load, transport dimensions, safety equipment, safety guards, warnings and lights.
4. Before starting the operator should familiarise himself thoroughly with the machine functions and their operation, not least for his own safety. It may be too late once the machine is at work!
5. Keep a safe distance from rotating parts. Never wear loose clothes when combining.
6. Keep the machine clean to avoid fire hazard.
7. Check the immediate surroundings before starting (children!). Be sure to have a clear view. Never start the machine until persons near the machine are aware of your intentions to start.
8. Never allow any passengers on the machine when driving.
9. Before starting the engine make sure the machine is in neutral and that all safety guards are fitted and secured.
10. Start the engine only from the operator seat. Never start by short-circuiting the electronic connections at the starter, as the machine may then start moving instantly.
11. Never let the engine run in a closed room.
12. Handle fuel with caution. Fire hazard. Smoking and open fire should be avoided when refuelling.
13. Always stop the engine and remove the ignition key before refuelling. Never refuel in a closed building. Remove spilled fuel immediately.
14. Handle brake fluid and battery acid with caution (noxious and caustic).
15. Never leave the operator platform on the move.
16. The forward speed must always be adapted to ground conditions. Avoid abrupt turns when driving up- or down-hill or across steep slopes.
17. The combine may be transported on roads only with an empty, closed grain tank.
18. Never leave the combine without securing it against rolling (hand brake/sprags under the wheels). Stop the engine, remove ignition key and main switch handle and lock the cab.
19. Never leave the combine unattended when the engine is running.
20. Before leaving the combine lower the table completely.
21. Never work on or under the table in raised position without securing it with all safety stops.
22. Be particularly cautious when mounting/dismounting the table and when attaching the table trailer.
23. As the function of table, maize header, table auger, elevator chain, knives, reel, etc. does not permit complete shielding, be sure to keep safe distance from these parts during test and work.
24. Make sure that the P.T.O. shaft is always properly fitted when the table is attached.
25. The straw chopper rotor will keep moving for some time after the chopper has been disengaged. Therefore keep safe distance until the chopper has stopped completely.
26. As the function of the grain tank augers does not permit complete shielding, always use suitable tools (rod or the like) to remove accumulated material in the grain tank.
27. Never enter the grain tank without stopping the engine and removing the ignition key from the switch, to prevent that the machine is started unintentionally.
28. Before any repair, maintenance, cleaning or correction of functional faults is carried out, stop the engine and disengage the threshing unit. **Remove the ignition key from the switch**.
29. Fluid under high pressure (fuel, hydraulic oil, etc.) spraying out may penetrate your skin and cause severe injury. In that case, see a doctor immediately. Risk of infection!
30. Before carrying out any service or repair on the hydraulic system, make sure the particular function is lowered/relieved (without pressure).
31. Repair of the hydraulic system to be carried out only by a specialist workshop.
32. Before carrying out any work on the electrical system, remove ignition key and main switch handle.
33. Before carrying out any electric welding on machine or table, dismount the alternator cables and remove the main switch handle.
34. Always remove the radiator cap with greatest caution when the engine is warm. The radiator is under pressure and scalding hot water may splash out.
35. Dispose of oil, fuel and filters in a safe way.
36. Check braking before each start.
37. Check the brake system regularly and thoroughly.
38. Adjustment and repair of the brake system to be carried out only by specialist workshops or authorised brake specialists.
39. Fitting of tyres may be carried out only by specialists with special tools and sufficient knowledge of tyre fitting.

40. When working on tyres and wheels make sure that the machine stands firmly on the ground and is secured against rolling (sprags under the wheels).
41. Repair of tyres and wheels to be carried out only by specialists.
42. Check tyre pressure regularly. Observe prescribed tyre pressure.
43. Check bolts and nuts regularly and retighten if required.
44. Keep safe distance from low-hanging mains (be aware of the aerial, if any).
45. Repair and maintenance of the air-conditioning system to be carried out only by specialist workshops. Avoid smoking during repair and maintenance.
46. To avoid health/respiratory hazard to the operator it is recommended that accumulated debris is removed by vacuuming and supplemented use of effective respiratory protective equipment (UK: EN149:FFP2S or better).
47. In situations where cleaning by use of vacuuming is impossible and pressurised air or water is used alternatively, the operator should protect himself by using effective respiratory protective equipment in accordance with national regulations (UK: COSHH 1994).
48. Dismounted, defective combine parts, used oil and other fluids must be disposed of in accordance with current environmental regulations. When replacing machine components during the warranty period, observe the Massey Ferguson Warranty conditions.

2.4 Road Transport

It is the responsibility of the owner/user that cutting table and machine are fitted with the equipment required in the country and driven according to the regulations in force for road transport.

1. Safety guards, traffic lights, rotating beacon, reflectors, warning triangle must be fitted and in transport position.
2. Brake, steering gear, and other safety equipment must comply with the relevant statutory requirements.
3. Rules governing maximum width, length, height and total weight must be observed.
4. Rules governing driver's licence and insurance must be observed.
5. Table and table trailer must be attached and secured according to regulations.
6. In transport the forward speed of the machine must not exceed the speed limit prescribed by law, irrespective of the conditions.

Note: *To avoid accidents, all persons engaged in operation, maintenance, repair and testing of this machine should familiarise themselves with the recommendations and warnings in this operator's manual. The sections,* ***Safety Precautions*** *and* ***Before Start****, are particularly important.*

Please also note:

If the combine is equipped with maize header or other special header, the rules in force on the use and transport of such headers must be observed.

The use of spare parts, accessories and additional implements which are not genuine and not tested and approved by the manufacturer may cause changes in machine function and thus affect work and road safety (safety guards).

The manufacturer accepts no liability for any loss or damage which may result from the use of non-original parts, accessories or implements.

Technical specifications, dimensions and weights are without any obligation.

Right to change technical specifications and equipment reserved.

Front, rear, RH and LH are always seen in the travelling direction.

2.5 CE Marking and Type Plate on the Combine

See drawings at the end of this chapter.

IMPORTANT: *Renew decals that have been damaged, lost, painted out or otherwise have become illegible. If components that originally held decals, are replaced make sure that new decals are mounted on the new components.*

Note: *New decals can be ordered from your dealer.*

Type Plate 1, (Fig. 1)
Frame No./CE Marking

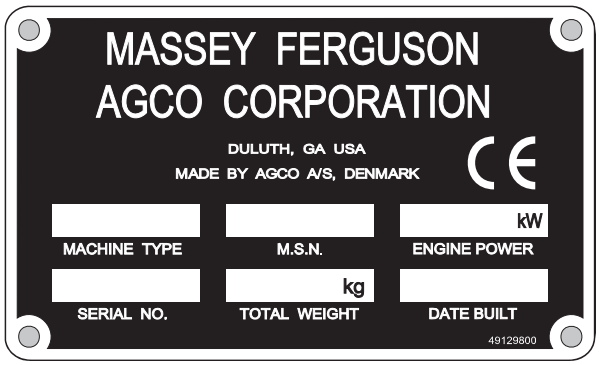

Fig. 1

Decal 2, (Fig. 2)
Carefully read the operator's manual before putting the combine into use. Observe instructions and safety precautions during work.

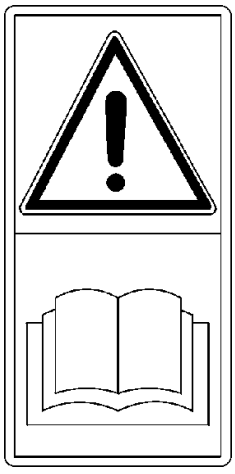

Fig. 2

Decal 3, (Fig. 3)
Shut off engine and remove ignition key before performing maintenance or repair work.

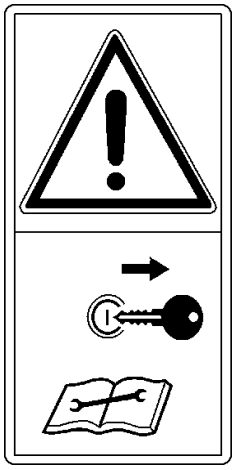

Fig. 3

Decal 4, (Fig. 4)
Sound the horn twice before starting the engine.

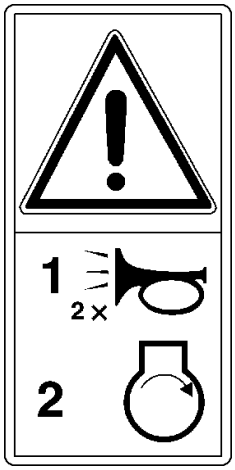

Fig. 4

Decal 5, (Fig. 5)
Do not ride on platform or ladder.

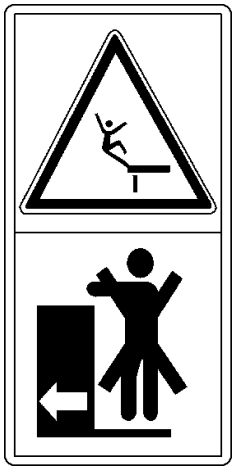

Fig. 5

Decal 6, (Fig. 6)
Avoid fluid escaping under pressure. Consult technical manuals for service procedures.

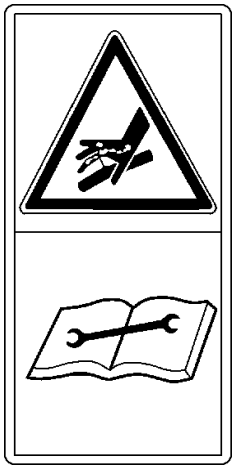

Fig. 6

Decal 7, (Fig. 7)
Never reach nor climb into grain tank while engine is running.

Fig. 7

Decal 8, (Fig. 8)
Do not open or remove safety shields while engine is running.

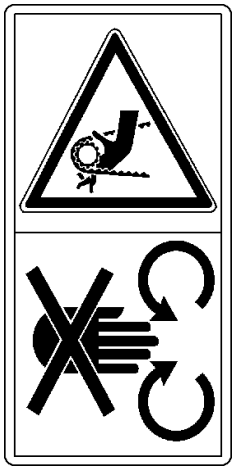

Fig. 8

Decal 9, *(Fig. 9)*
Danger - stay clear of rotating machine parts.

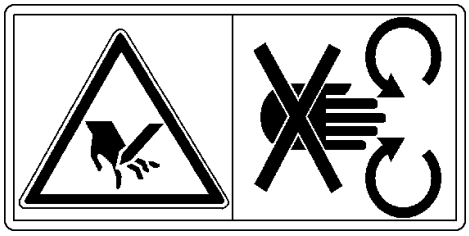

Fig. 9

Decal 10, *(Fig. 10)*
Stay clear of danger area between front attachment and engine.

Fig. 10

Decal 11, *(Fig. 11)*
Do not open or remove safety shields while engine is running.

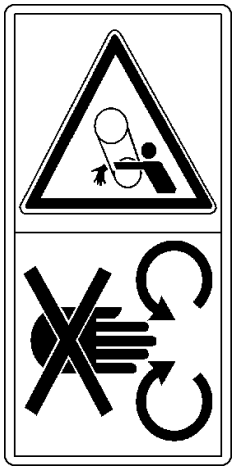

Fig. 11

Decal 12, (Fig. 12)
Danger - stay clear of rotating machine parts.

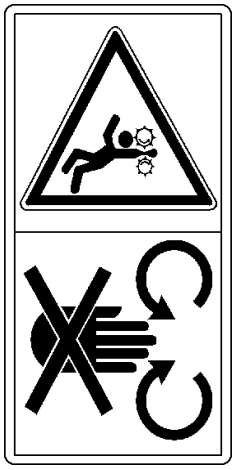

Fig. 12

Decal 13, (Fig. 13)
Secure the lifting rams with locking devices before getting in the dangerous area beneath table, main crop elevator or reel.

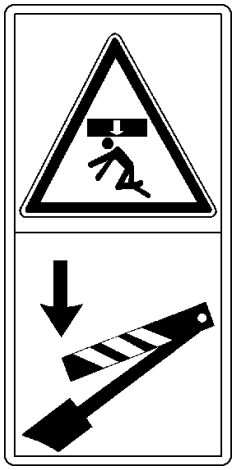

Fig. 13

Decal 14, (Fig. 14)
Never reach into rotating auger.

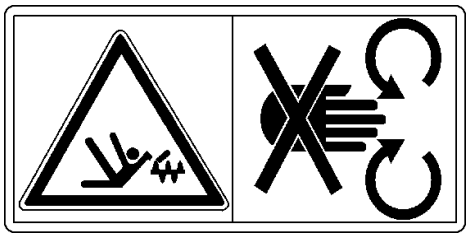

Fig. 14

Decal 15, (Fig. 15)
Wait until all machine components have stopped completely before touching them.

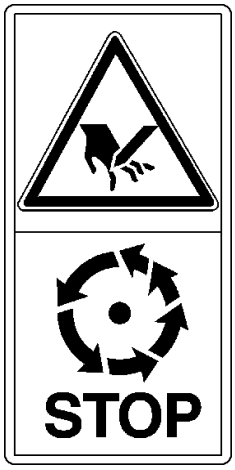

Fig. 15

Decal 16, (Fig. 16)
Stay clear of straw chopper while engine is running

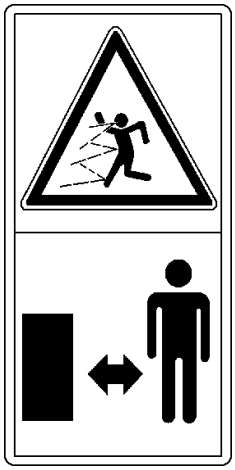

Fig. 16

Decal 17, (Fig. 17)
Do not reach into straw walkers while engine is running.

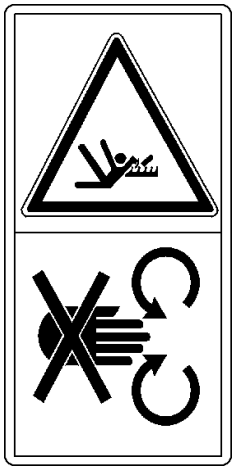

Fig. 17