

# Farm King

## OPERATOR AND PARTS MANUAL

### Disc Mower

Model 245, 280, 320





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**Manufacturer’s Statement:** For technical reasons, Buhler Industries Inc. reserves the right to modify machinery design and specifications provided herein without any preliminary notice. Information provided herein is of descriptive nature. Performance quality may depend on bale structure, applied techniques, weather conditions and other factors.

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# Farm King



## WARRANTY REGISTRATION FORM

This form must be filled out by the dealer and signed by both the dealer and the customer at the time of delivery.

Customer Name:

Dealer Name:

Customer Address:

Dealer Address:

City:

Prov / State:

City:

Prov / State:

Postal / Zip Code:

Phone:

Postal / Zip Code:

Phone:

Equipment Name Model:

Serial Number:

Delivery Date:

I have thoroughly instructed the buyer on the above described equipment which review included the Operator's Manual content, equipment care, adjustments, safe operation and applicable warranty policy.

### Dealer Inspection Report

- Bearing Seals
- Lubricate Machine
- Wheel Bolt Torque
- Fasteners Tight
- Tire Pressure
- Hydraulic Hoses

### Safety

- All Lights And Reflectors Installed
- All Lights And Reflectors Cleaned And Working
- Safety Chain On Hitch
- All Decals Installed
- Guards And Shields Installed And Secure
- Review Operating And Safety Instructions
- General Adjustment And Set-up Procedures
- Transportation Requirements And Regulations

Date:

Dealer Rep. Signature:

The above equipment and Operator And Parts Manual have been received by me and I have been thoroughly instructed as to care, adjustments, safe operation and applicable warranty policy.

Date:

Customer / Owner's Signature:

Remove this Warranty Registration Form from the Operator And Parts Manual. Make two copies of the form. Send original Warranty Registration Form to Farm King. Give one copy to the customer and the dealer will keep one copy.

# Farm King



**INTRODUCTION**

This Operator And Parts Manual was written to give the owner / operator instructions on the safe operation, maintenance and part identification of the Farm King equipment. **READ AND UNDERSTAND THIS OPERATOR AND PARTS MANUAL BEFORE OPERATING YOUR FARM KING EQUIPMENT.** If you have any questions, see your Farm King dealer. This manual may illustrate options and accessories not installed on your Farm King equipment.

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**OWNER'S INFORMATION**

Thank you for your decision to purchase a Farm King Disc Mower. To ensure maximum performance of your equipment, it is mandatory that you thoroughly study the Operator And Parts Manual and follow the recommendations. Proper operation and maintenance are essential to maximize equipment life and prevent personal injury.

Operate and maintain this equipment in a safe manner and in accordance with all applicable local, state, and federal codes, regulations and / or laws. Follow all on-product labeling and instructions.

Make sure that all personnel have read this Operator and Parts Manual and thoroughly understand safe and correct operating, installation and maintenance procedures.

Farm King is continually working to improve its products. Farm King reserves the right to make any improvements or changes as deemed practical and possible without incurring any responsibility or obligation to make any changes or additions to equipment sold previously.

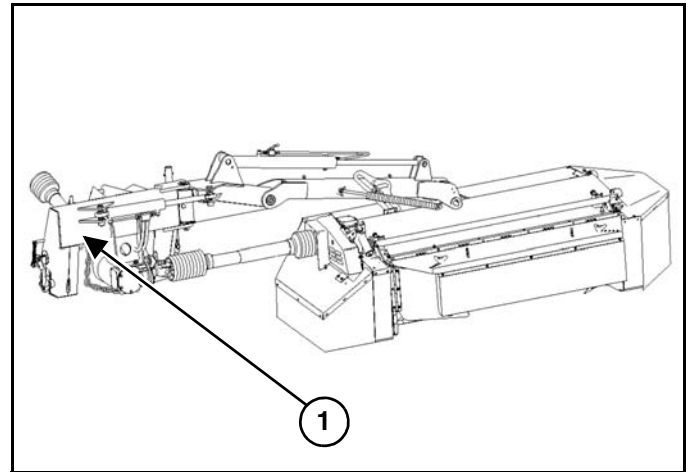
Although great care has been taken to ensure the accuracy of this publication, Farm King makes no warranty or guarantee of any kind, written or expressed, implied or otherwise with regard to the information contained within this manual. Farm King assumes no responsibility for any errors that may appear in this manual and shall not be liable under any circumstances for incidental, consequential or punitive damages in connection with, or arising from the use of this manual.

Keep this manual available for frequent reference. All new operators or owners must review the manual before using the equipment and annually thereafter. Contact your Farm King Dealer if you need assistance, information, or additional copies of the manual. Visit our website at **www.farm-king.com** for a complete list of dealers in your area.

The directions left, right, front and rear, as mentioned throughout this manual, are as viewed from the rear of the equipment.

**Serial Number Location**

Please enter the model and serial number in the space provided for easy reference.

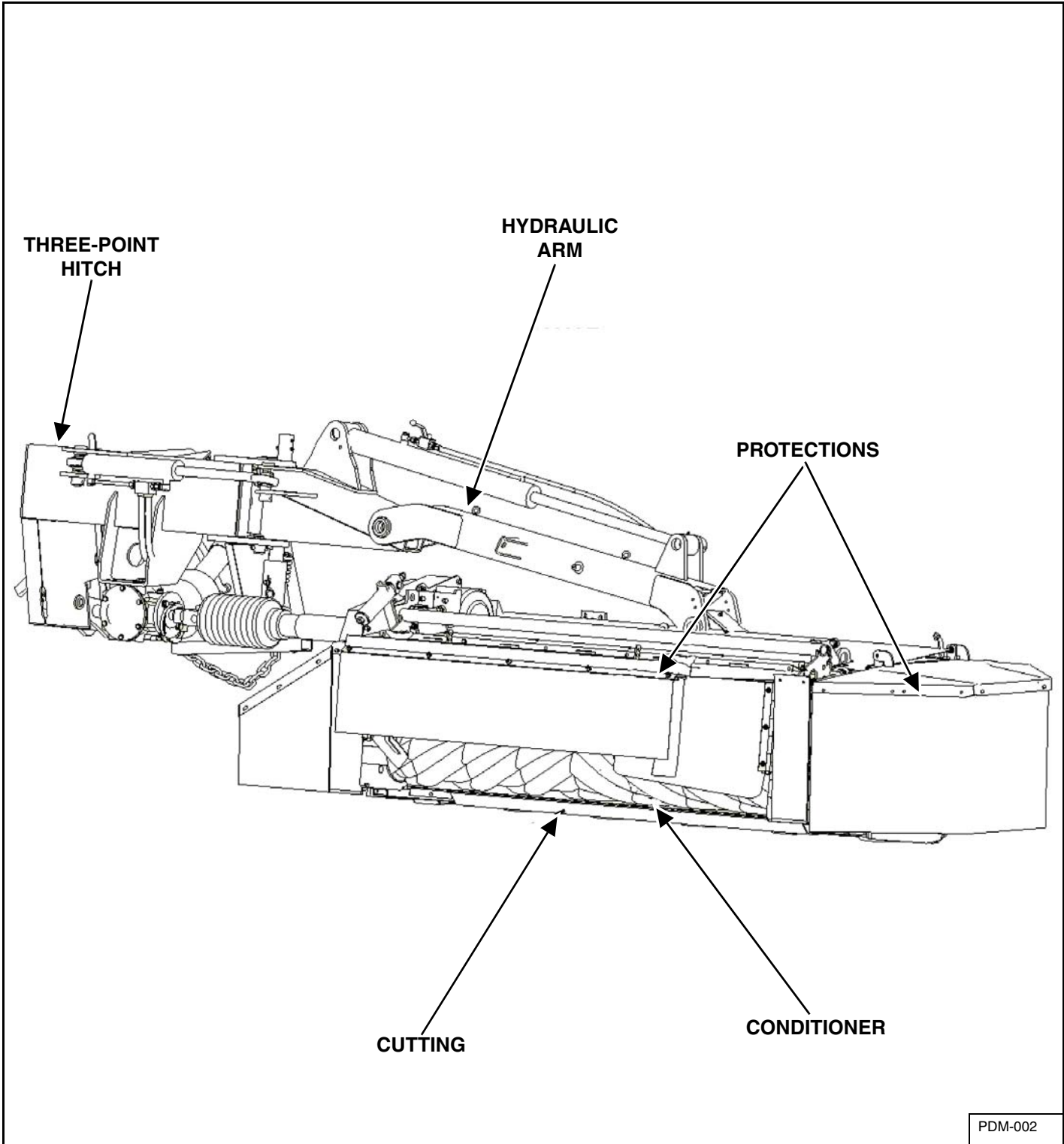
**Figure 1****Model Number:** \_\_\_\_\_**Serial Number:** \_\_\_\_\_

The serial number plate (Item 1) **[Figure 1]** is located on the rear of the three point hitch.

Always use your serial number when requesting information or when ordering parts.

**EQUIPMENT IDENTIFICATION**

**Component Location**



**SAFETY**

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# Farm King



**SAFETY INSTRUCTIONS**

**Safe Operation Is The Operator’s Responsibility**

	<p><b>Safety Alert Symbol</b></p>
<p>This symbol with a warning statement means: “Warning, be alert! Your safety is involved!” Carefully read the message that follows.</p>	



The signal word **CAUTION** on the machine and in the manuals 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.



The signal word **DANGER** on the machine and in the manuals indicates a hazardous situation which, if not avoided, will result in death or serious injury.



The signal word **WARNING** on the machine and in the manuals indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.



This notice identifies procedures which must be followed to avoid damage to the machine.

**Safe Operation Needs A Qualified Operator**



**Operators must have instructions before operating the machine. Untrained operators can cause injury or death.**

For an operator to be qualified, he or she must not use drugs or alcoholic drinks which impair alertness or coordination while working. An operator who is taking prescription drugs must get medical advice to determine if he or she can safely operate a machine and the equipment.

*A Qualified Operator Must Do The Following:*

*Understand the Written Instructions, Rules and Regulations*

- The written instructions from Farm King include the Warranty Registration, Dealer Inspection Report, Operator And Parts Manual and machine signs (decals).
- Check the rules and regulations at your location. The rules may include an employer’s work safety requirements. Regulations may apply to local driving requirements or use of a Slow Moving Vehicle (SMV) emblem. Regulations may identify a hazard such as a utility line.

*Have Training with Actual Operation*

- Operator training must consist of a demonstration and verbal instruction. This training is given by the machine owner prior to operation.
- The new operator must start in an area without bystanders and use all the controls until he or she can operate the machine safely under all conditions of the work area. Always fasten seat belt before operating.

*Know the Work Conditions*

- Clear working area of all bystanders, especially small children and all obstacles that might be hooked or snagged, causing injury or damage.
- Know the location of any overhead or underground power lines. Call local utilities and have all underground power lines marked prior to operation.
- Wear tight fitting clothing. Always wear safety glasses when doing maintenance or service.

**SAFETY INSTRUCTIONS (CONT'D)****Use Safety Rules**

- Read and follow instructions in this manual and the tractor's Operators Manual before operating.
- Under no circumstances should young children be allowed to work with this equipment.
- This equipment is dangerous to children and persons unfamiliar with its operation.
- If the elderly are assisting with work, their physical limitations need to be recognized and accommodated.
- Stay clear of overhead power lines. Electrocutation can occur without direct contact.
- Check for overhead and / or underground lines before operating equipment (if applicable).
- In addition to the design and configuration of equipment, hazard control and accident prevention are dependent upon the awareness, concern, prudence and proper training of personnel involved in the operation, transport, maintenance and storage of equipment.
- Check that the equipment is securely fastened to the tractor / towing vehicle.
- Make sure all the machine controls are in the NEUTRAL position before starting the machine.
- Operate the equipment only from the operator's position.
- Operate the equipment according to the Operator And Parts Manual.
- When learning to operate the equipment, do it at a slow rate in an area clear of bystanders, especially small children.
- DO NOT permit personnel to be in the work area when operating the equipment.
- The equipment must be used ONLY on approved tractors / transport vehicles.
- DO NOT modify the equipment in any way. Unauthorized modification may impair the function and / or safety and could affect the life of the equipment.
- DO NOT make any adjustments or repairs on the equipment while the machine is running.
- Keep shields and guards in place. Replace if damaged.

**Transport Safety**

- DO NOT exceed 20 mph (32 kph). Reduce speed on rough roads and surfaces.
- Comply with state and local laws governing highway safety and movement of machinery on public roads.
- The use of flashing amber lights is acceptable in most localities. However, some localities prohibit their use. Local laws should be checked for all highway lighting and marking requirements.
- Always install transport locks, pins or brackets before transporting.
- Always yield to oncoming traffic in all situations and move to the side of the road so any following traffic may pass.
- Always enter curves or drive up or down hills at a low speed and at a gradual steering angle.
- Never allow riders on either tractor or equipment.
- Keep tractor / towing vehicle in a lower gear at all times when traveling down steep grades.
- Maintain proper brake settings at all times (if equipped).
- Stay away from overhead power lines. Electrocutation can occur without direct contact.

## Machine Requirements And Capabilities

- Stop the machine and engage the parking brake. Install blocks in front of and behind the rear tires of the machine. Install blocks underneath and support the equipment securely before working under raised equipment.
- Keep bystanders clear of moving parts and the work area. Keep children away.
- Use increased caution on slopes and near banks and ditches to prevent overturn.
- Make certain that the Slow Moving Vehicle (SMV) emblem is installed so that it is visible and legible. When transporting the equipment, use the flashing warning lights (if equipped) and follow all local regulations.
- Operate this equipment with a machine equipped with an approved Roll-Over Protective Structure (ROPS). Always wear seat belt when the ROPS is up. Serious injury or death could result from falling off the machine.
- Before leaving the operator's position:
  1. Always park on a flat level surface.
  2. Place all controls in neutral.
  3. Engage the parking brake.
  4. Stop engine.
  5. Wait for all moving parts to stop.
- Carry passengers only in designated seating areas. Never allow riders on the machine or equipment. Falling off can result in serious injury or death.
- Start the equipment only when properly seated in the operator's seat. Starting a machine in gear can result in serious injury or death.
- Operate the machine and equipment from the operator's position only.
- The parking brake must be engaged before leaving the operator's seat. Rollaway can occur because the transmission may not prevent machine movement.

## FIRE PREVENTION



### Maintenance

The machine and some equipment have components that are at high temperatures under normal operating conditions. The primary source of high temperatures is the engine and exhaust system. The electrical system, if damaged or incorrectly maintained, can be a source of arcs or sparks.

Flammable debris (leaves, straw, etc.) must be removed regularly. If flammable debris is allowed to accumulate, it can cause a fire hazard. Clean often to avoid this accumulation.

All fuels, most lubricants and some coolant mixtures are flammable. Flammable fluids that are leaking or spilled onto hot surfaces or onto electrical components can cause a fire.

### Operation

The Farm King machine must be in good operating condition before use.

Check all of the items listed on the service schedule under the 8 hour column. (See "SERVICE SCHEDULE" on page 50.)

Do not use the machine where exhaust, arcs, sparks or hot components can contact flammable material, explosive dust or gases.

### Starting

Use the procedure in the tractor's operator's manual for connecting the battery and for jump starting.

## Electrical



Check all electrical wiring and connections for damage. Keep the battery terminals clean and tight. Repair or replace any damaged part or wires that are loose or frayed.

## Hydraulic System

Check hydraulic tubes, hoses and fittings for damage and leakage. Never use open flame or bare skin to check for leaks. Hydraulic tubes and hoses must be properly routed and have adequate support and secure clamps. Tighten or replace any parts that show leakage.

Always clean fluid spills. Do not use gasoline or diesel fuel for cleaning parts. Use commercial nonflammable solvents.

## Welding And Grinding

Always clean the machine and equipment, disconnect the battery, and disconnect the wiring from the machine controls before welding. Cover rubber hoses, battery and all other flammable parts. Keep a fire extinguisher near the machine when welding.

Have good ventilation when grinding or welding painted parts. Wear dust mask when grinding painted parts. Toxic dust or gas can be produced.

Dust generated from repairing nonmetallic parts such as hoods, fenders or covers can be flammable or explosive. Repair such components in a well ventilated area away from open flames or sparks.

## Fire Extinguishers

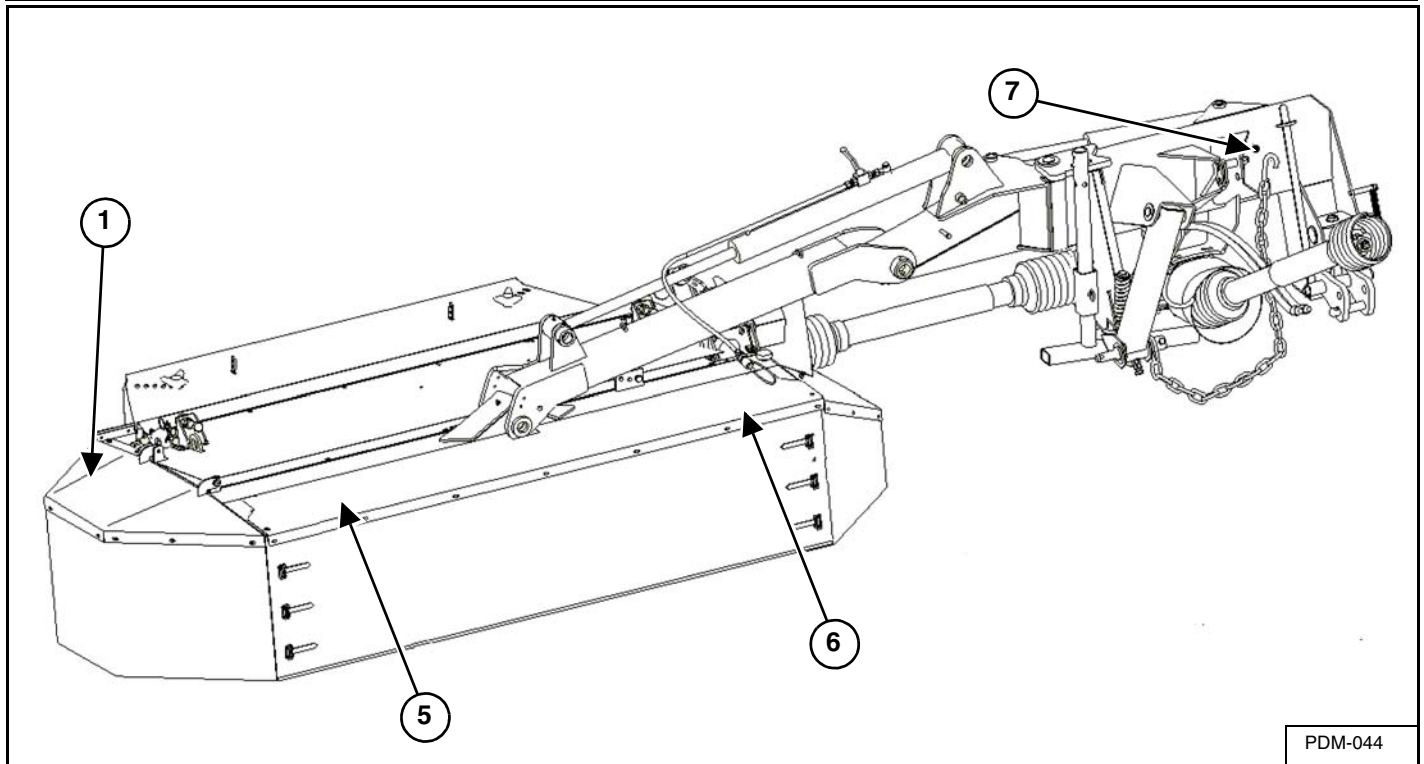
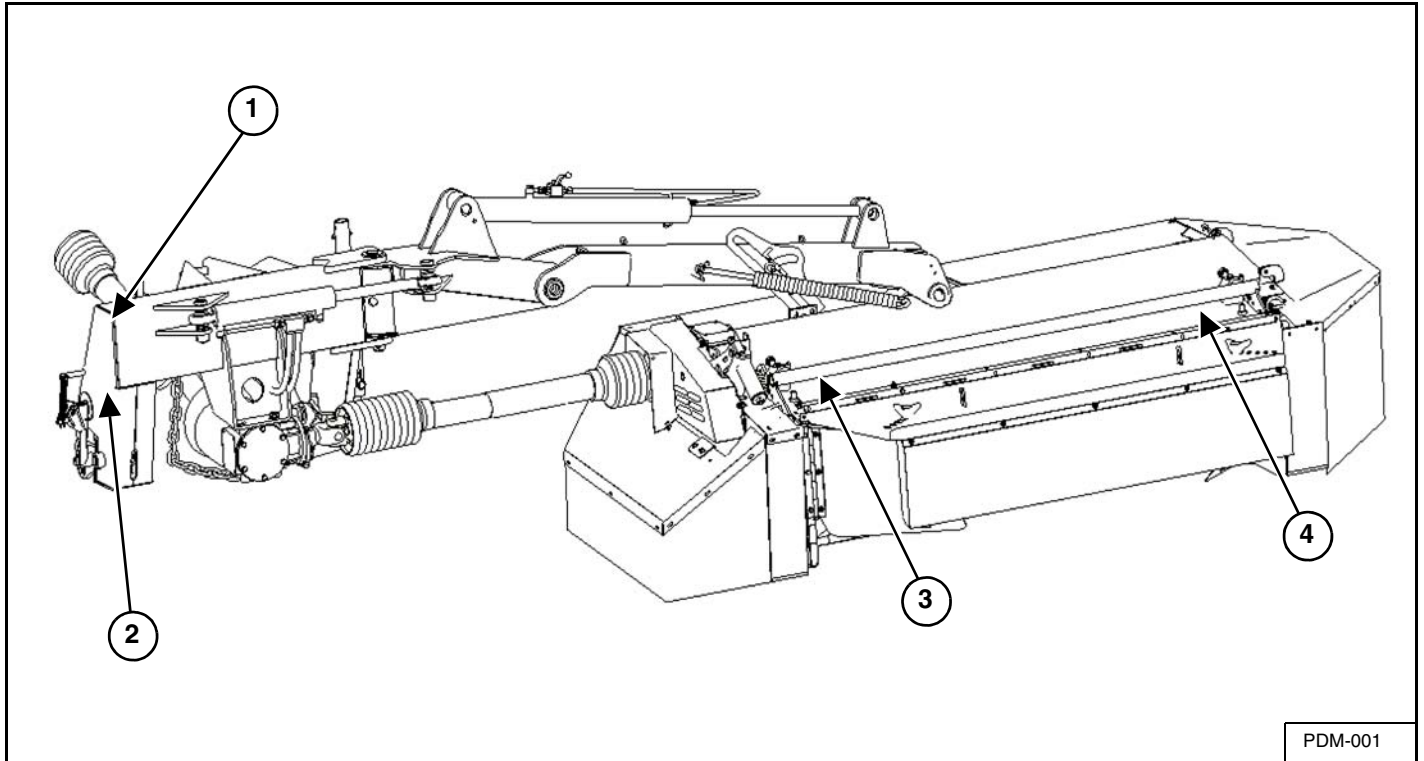


Know where fire extinguishers and first aid kits are located and how to use them. Inspect the fire extinguisher and service the fire extinguisher regularly. Obey the recommendations on the instructions plate.



**SAFETY SIGNS (DECALS)**

Follow the instructions on all the Signs (Decals) that are on the equipment. Replace any damaged signs (decals) and be sure they are in the correct locations. Equipment signs are available from your Farm King equipment dealer.

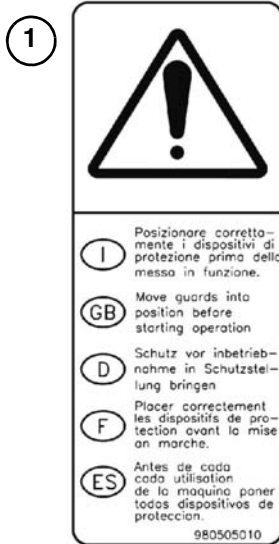


EQUIPMENT DECALS AND SIGNS

**NOTE: All safety related decals are shown in the Safety Signs Section. (See "SAFETY SIGNS (DECALS)" on page 17.)**

Check and replace any worn, torn, hard to read or missing decals on your equipment.

Part Number 980505010



Position all safety devices correctly prior to starting.

Part Number 980505009



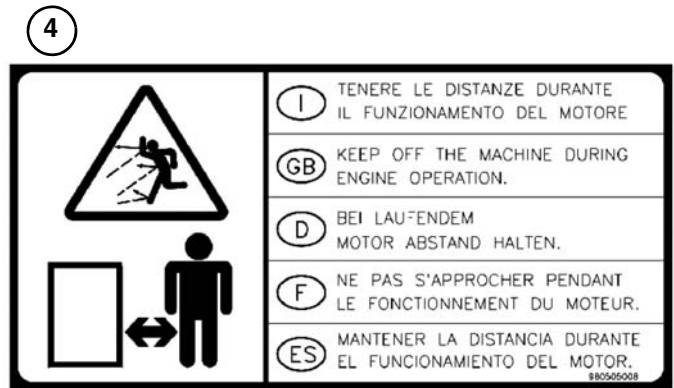
Dangerous for hands.

Part Number 980505015



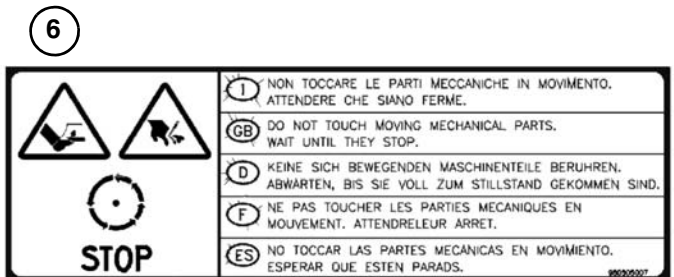
Read the instruction and Maintenance Manual and all safety regulations carefully prior to using the machine. Request such material if lacking. Make sure that all the safety devices have been correctly mounted and that all the screws, nuts and bolts are tightened to the correct torque before using the machine.

Part Number 980505008



Maintain a respectable safety distance while the motor is running.


Part Number 980505007



Never touch moving mechanical parts; wait until they have come to a rest.

Part Number 980505013

5

	<p><b>I</b> ATTENZIONE! ELEMENTI ROTATIVI. PERICOLO A SEGUITO DI PROIEZIONE DI CORPI ESTRANEI. ALLONTANARE TUTTE LE PERSONE DALLA ZONA PERICOLOSA.</p>
	<p><b>GB</b> WARNING! ROTATING ELEMENTS. DANGER DUE TO PROJECTION OF FOREIGN OBJECTS. KEEP ALL PERSONS AWAY FROM THE DANGER AREA.</p>
	<p><b>D</b> VORSICHT! NACHLAUFENDE TEILE. GEFAHR DURCH FORTGESCHLEUDERTE FREMKORPER. PERSONEN AUS DEM GEFAHRENBEREICH VERWEISEN.</p>
	<p><b>F</b> ATTENTION! ELEMENTS ROTATIFS. DANGER PAR SUITE DE PROJECTION DE CORPS ETRANGERS ELOIGNER TOUTE PERSONNE DE LA ZONE DANGEREUSE.</p>
	<p><b>ES</b> ATENCION! ELEMENTOS ROTATIVOS. PELIGRO DEBIDO A LA PROYECCION DE CUERPOS EXTRANOS ALEJAR A TODA PERSONA DE LA ZONA PELIGROSA. 980505013</p>

Beware of foreign objects flying out. Keep away from danger zone.

**SAFETY SIGN-OFF FORM**

**Instructions are necessary before operating or servicing equipment. Read and understand the Operator And Parts Manual and safety signs (decals) on equipment. Follow warnings and instructions in the manuals when making repairs, adjustments or servicing. Check for correct function after adjustments, repairs or service. Untrained operators and failure to follow instructions can cause injury or death.**

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Farm King follows the general Safety Standards specified by the American Society of Agricultural and Biological Engineers (ASABE) and the Occupational Safety and Health Administration (OSHA). Anyone who will be operating and / or maintaining the Disc Mower must read and clearly understand ALL Safety, Operating and Maintenance information presented in this manual.

Annually review this information before the season start-up and make these periodic reviews of SAFETY and OPERATION a standard practice for all of your equipment. An untrained operator is unqualified to operate this machine.

The following sign-off sheet is provided for your record and to show that all personnel who will be working with the equipment have read and understand the information in this Operator And Parts Manual and have been instructed in the operation of the equipment.

**SIGN-OFF SHEET**

Date	Employee's Signature	Employer's Signature

**ASSEMBLY**

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**GENERAL ASSEMBLY INFORMATION****Component Unloading And Identification** **IMPORTANT**

Disc Mowers are shipped without some components installed.

- Using the packing list, locate and count the individual components and verify that you have received the correct number of each component.
- Check all the components for damage. If any components are damaged or missing, contact your Farm King dealer.

Unload the crate(s) and components on a flat level area.

Some system components are delivered in special packaging that ensures the protection from possible damage; keep the equipment in the same position as when it was delivered.

**NOTE: If any components are damaged, missing or replacement parts are required, contact your Farm King Dealer.**

 **WARNING**

- **DO NOT** permit bystanders to be in the work area when unloading and assembling the Disc Mower components.
- **DO NOT** work under suspended parts.
- Keep away from moving parts.
- Always use lifting devices / vehicles, chains or straps of adequate size and strength when unloading and assembling the Disc Mower components.

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# Farm King



**GENERAL INFORMATION**

**Pre - Operation Checklist**

Before operating the Disc Mower for the first time and each time thereafter, check the following items:



**MOVING PART HAZARD**

To prevent serious injury or death from moving parts:

- Keep hands, feet, hair and clothing away from moving parts.
- Disconnect and lockout power source before adjusting or servicing.
- Do not stand or climb on machine when operating.
- Do not approach machine until machine is completely stopped and not running.
- Do not remove any protection panels.



**AVOID INJURY OR DEATH**

Wear safety glasses to prevent eye injury when any of the following conditions exist:

- When fluids are under pressure.
- Flying debris or loose material is present.
- Engine is running.
- Tools are being used.



**AVOID INJURY**

Wear hearing protection to prevent hearing loss when operating.

1. Lubricate the equipment per the schedule outline in the Maintenance Section. (See "SERVICE SCHEDULE" on page 50.)
2. Check the Disc Mower hitch for damaged, loose or missing parts. Repair as needed before operation.
3. Fully clean the equipment.
4. Inspect all safety reflective decals, slow moving vehicle decals and lights where applicable.



Leaking fluids under pressure can enter the skin and cause serious injury or death. Immediate medical attention is required. Wear goggles. Use cardboard to check for leaks.

5. Check condition of all hydraulic components for leaks. Repair as required.

**NOTE: Do not operate with hydraulic leaks.**

6. Verify that the safety lock is in the unlock position.
7. Verify that the Disc Mower is properly connected to the tractor with the safety chain.

**Break - In Checklist**

Check the following mechanical items after 8 hours of operation:

1. Make sure that all hardware are tightened (especially those of the cutters).

Check the following mechanical items after 50 hours of operation:

1. Change oil in the cutting bar.
2. Change oil in the gear box.

Tractor Requirements



**AVOID SERIOUS INJURY OR DEATH**

The tractor must be equipped with an approved Roll Over Protection Structure (ROPS) and safety belts to help prevent personal injury or death caused by tractor roll over.



- Keep shields and all guards in place.
- Keep away from moving parts.
- Keep bystanders away.



Towing Vehicle / Tractor must have adequate braking capacity to safely control GVW trailing load. Do not tow over 20 mph (32 km/h). Towing Vehicle / Tractor unit should weigh approximately 67% of GVW.

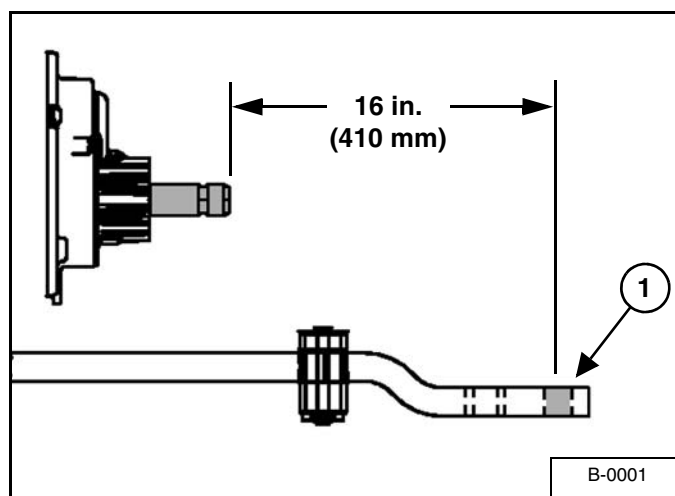
Use the following table for the tractor requirements.

R = Roller Conditioner  
F = Finger Conditioner

MODEL	MACHINE WIDTH	MACHINE LENGTH	MACHINE HEIGHT	MACHINE WEIGHT
245	48.25 IN, 1200 MM	166.9 IN. 4240 MM	53.3 IN. 1354 MM	1366.9 LB. 620 KG
285	48.25 IN, 1200 MM	181.9 IN. 4620 MM	53.3 IN. 1354 MM	1521.2 LB. 690 KG
320	48.25 IN, 1200 MM	199.2 IN. 5060 MM	53.3 IN. 1354 MM	1366.9 LB. 760 KG
245 R	65.57 IN. 1640 MM	166.9 IN. 4240 MM	53.3 IN. 1354 MM	1763.7 LB. 800 KG
285 R	65.57 IN. 1640 MM	181.9 IN. 4620 MM	53.3 IN. 1354 MM	1940.1 LB. 880 KG
320 R	65.57 IN. 1640 MM	199.2 IN. 5060 MM	53.3 IN. 1354 MM	2138.5 LB. 970 KG
245 F	65.57 IN. 1640 MM	166.9 IN. 4240 MM	53.3 IN. 1354 MM	1366.9 LB. 760 KG
285 F	65.57 IN. 1640 MM	181.9 IN. 4620 MM	53.3 IN. 1354 MM	1851.9 LB. 840 KG
320 F	65.57 IN. 1640 MM	199.2 IN. 5060 MM	53.3 IN. 1354 MM	2050.3 LB. 930 KG

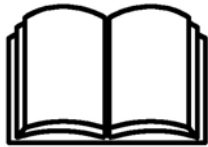
Drawbar Adjustment (Pull-Type Models)

Figure 2



Adjust the tractor's drawbar in / out, until the center of the hitch pin hole (Item 1) [Figure 2] is 16 inches (410 mm) from the end of the tractor's PTO shaft. See your tractor's owner's manual for correct adjustment procedures.

**Entering And Leaving The Operator's Position**



**Follow the instructions in your tractor's operation manual for the correct procedure.**

*Entering The Operator's Position*

Move to the operator's position, start the engine and release the parking brake.

*Leaving The Operator's Position*



**AVOID INJURY OR DEATH**

**Before you leave the operator's position:**

- **Always park on a flat level surface.**
- **Place all controls in NEUTRAL.**
- **Engage the park brake.**
- **Stop the engine and remove the key.**
- **Wait for all moving parts to stop.**

Park the tractor / equipment on a flat level surface.

Place all controls in neutral, engage the park brake, stop the engine and wait for all moving parts to stop. Leave the operator's position.

**INITIAL SET-UP**

**Connecting Three-Point Disc Mower To The Tractor**

Always inspect the tractor's three-point arms and Disc Mower hitch before connecting. See the tractor's owner's manual.

Enter the operator's position. (See "Entering The Operator's Position" on page 30.)

Move the tractor into position in front of the Disc Mower.



**AVOID INJURY OR DEATH**

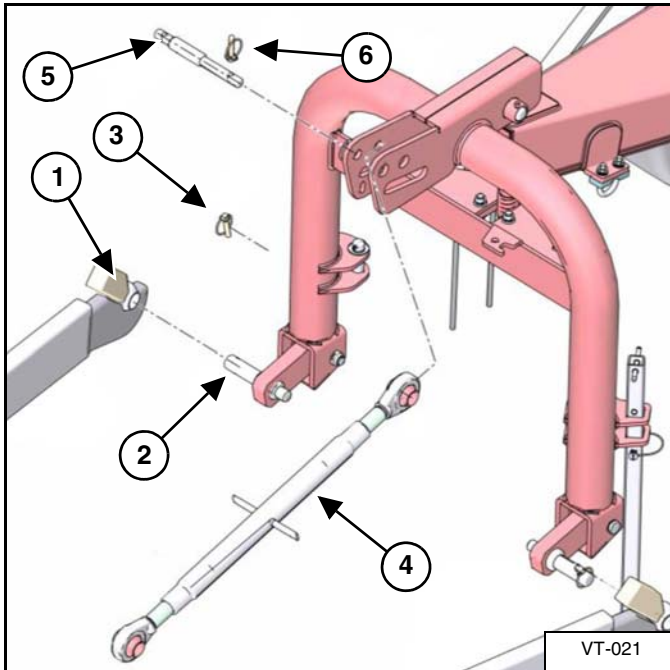
**Before moving the tractor, look in all directions and make sure no bystanders, especially small children are in the work area. Do not allow anyone between the tractor and the equipment when backing up to the equipment for connecting.**

Move the tractor backwards, aligning the three-point arms with the Disc Mower hitch.

**NOTE: The jack may need to be lowered or raised for proper alignment of the drawbar and hitch.**

Leave the operator's position. (See "Leaving The Operator's Position" on page 30.)

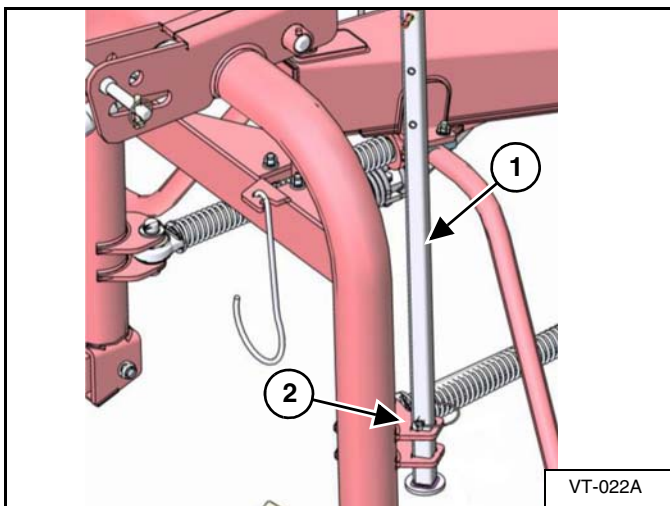
Figure 3



Install the lower lift arms (Item 1) the lower pins (Item 2) on the Disc Mower frame (one side at a time), secure in place with safety pins (Item 3) [Figure 3].

Align the upper adjustable arm (Item 4) in the with Disc Mower frame, install pin (Item 5) through the Disc Mower frame and upper adjustable arm. Install safety pin (Item 6) [Figure 3].

Figure 4



Remove the retaining pin and slide the jack (Item 1) up, reinstall retaining pin (Item 2) [Figure 4] into the lower hole on the jack.

Adjusting Rotating Group Tilt



**AVOID INJURY OR DEATH**

Before adjusting or servicing the machine:

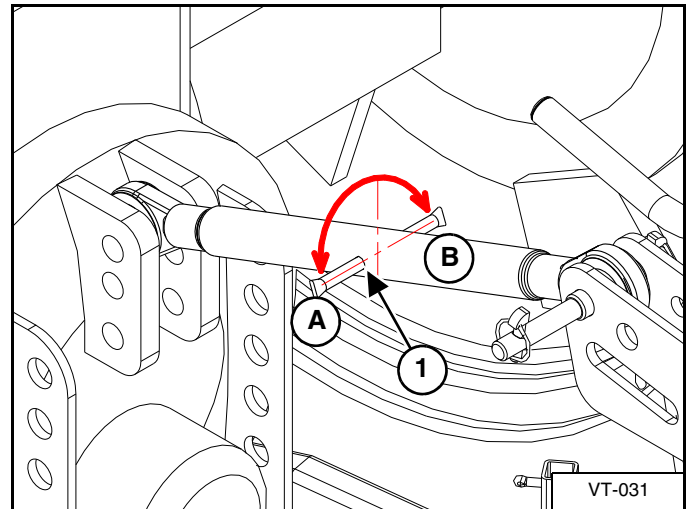
- Always park on a flat level surface.
- Place all controls in NEUTRAL.
- Engage the park brake.
- Stop the engine and remove the key.
- Wait for all moving parts to stop.

Park the tractor / equipment on a flat level surface.

Place all controls in neutral, engage the park brake, stop the engine and wait for all moving parts to stop. Leave the operator's position. (See "Leaving The Operator's Position" on page 30.)

*Three-Point Hitch Models*

Figure 5



To adjust rotary groups angle, turn the lever (Item 1) [Figure 5] counterclockwise (direction A), moving the Disc Mower frame downwards and reducing the angle. Turn the lever clockwise (direction B), moving the Disc Mower frame upwards increasing the angle.



Connecting The PTO Driveline (Three-Point Models)



**AVOID INJURY OR DEATH**

Warnings on the machine and in the manuals are for your safety. Failure to obey warnings can cause serious injury or death.

**NOTE:** Clean and grease tractor's PTO shaft and PTO driveline coupling each time driveline is connected.

Stop the engine and leave the operator's position. (See "Leaving The Operator's Position" on page 30.)

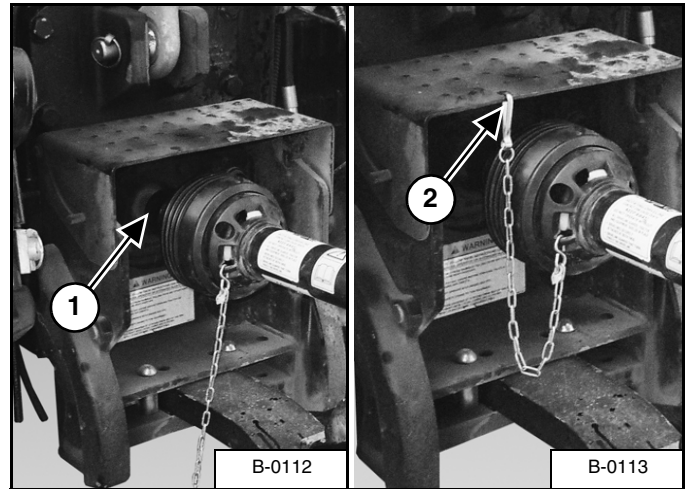


Improper hitch installation can cause PTO driveline damage.

- Do not modify the hitch or use an unapproved hitch.
- Make sure the PTO driveline is of adequate length and that u-joints are in the correct phase.

Remove the PTO driveline from the storage position (if applicable).

Figure 6



Retract the collar and slide the PTO driveline (Item 1) onto the tractor PTO shaft until it locks onto the shaft. Push and pull on the PTO driveline to verify it is securely attached to the PTO shaft. Install PTO driveline safety chain (Item 2) [Figure 6].

**NOTE:** The PTO driveline must have a means to retain it to the PTO shaft on the tractor.



- Do NOT exceed 540 / 1000 RPM PTO.
- Keep PTO shields and all guards in place.
- Keep away from moving parts.
- Keep bystanders away.



**PTO Driveline**

*PTO Driveline Length Check*

**NOTE:** Due to variations in distances between tractor PTO shafts and implement input shafts, drivelines may need to be shortened or a longer shaft may be required. When fitting the implement to the tractor, the PTO driveline, with telescoping sections, must be inspected. When the sections are at the most compressed operating position, the sections must not “bottom out”. At its shortest length, there must be at least 2 in. (50,8 mm) of clearance between each section end and opposite section end at the most compressed operating position. When the sections are at the most extended position, there must be sufficient engagement between the sections. At its farthest operating extension, a minimum section engagement of 33% of shaft length must be maintained.



**AVOID INJURY OR DEATH**

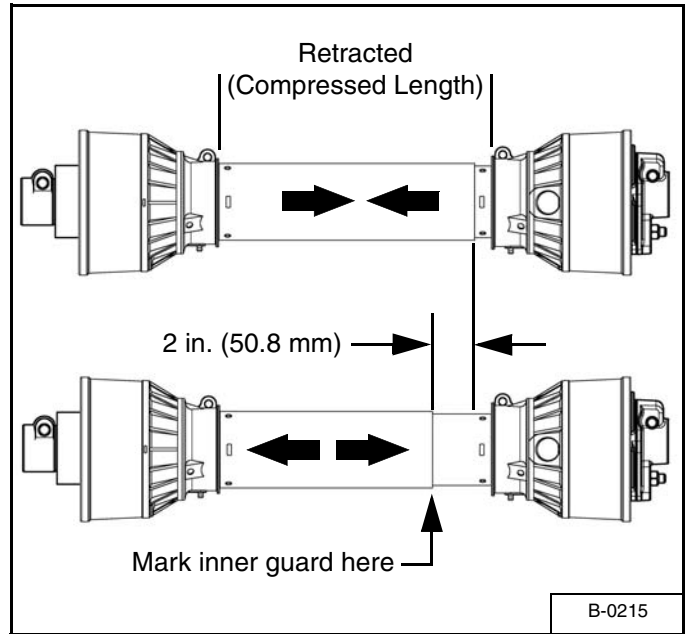
- Do NOT exceed the rated implement PTO speed.
- Stay clear of rotating driveline.
- Keep bystanders away.
- Keep hands, feet, clothing and long hair away.
- Keep PTO shields and all guards in place.
- Disengage PTO, move the tractor controls to the Neutral position, stop the engine and make sure all rotating components are stopped before leaving the operator’s position.
- Do NOT service the tractor or implement with the PTO engaged.
- Do NOT service the implement in a raised position unless properly blocked and with all rotating components stopped.
- Disengage PTO for road travel.

*PTO Driveline Bottoming Out Check*

Stop the engine and leave the operator’s position. (See “Leaving The Operator’s Position” on page 30.)

Make sure the PTO driveline and all rotating components have come to a complete stop before leaving the operator’s position (if applicable).

**Figure 7**



1. Disconnect the PTO driveline from the tractor and slide the PTO driveline together until fully retracted (compressed).
2. Measure the retracted (compressed) length of PTO driveline [Figure 7].
3. Extend the PTO driveline 2 in. (50,8 mm) from the retracted length and place a mark on the inner guard at the end of the outer guard [Figure 7].
4. Reattach the PTO driveline to the tractor PTO shaft.
5. Enter the operator’s position. (See “Entering The Operator’s Position” on page 30.) Start the engine.
6. With the rear PTO DISENGAGED, raise and lower the implement and watch the PTO driveline extend and retract.
7. If the outer PTO driveline guard slides in (retracts) over the mark at any point of travel, the PTO driveline needs to be shortened.

*Reducing The PTO Driveline Length*

Stop the engine and leave the operator's position. (See "Leaving The Operator's Position" on page 30.)

Make sure the PTO driveline and all rotating components have come to a complete stop before leaving the operator's position.



**AVOID INJURY OR DEATH**

- **Do NOT exceed the rated implement PTO speed.**
- **Stay clear of rotating driveline.**
- **Keep bystanders away.**
- **Keep hands, feet, clothing and long hair away.**
- **Keep PTO shields and all guards in place.**
- **Disengage PTO, move the tractor controls to the Neutral position, stop the engine and make sure all rotating components are stopped before leaving the operator's position.**
- **Do NOT service the tractor or implement with the PTO engaged.**
- **Do NOT service the implement in a raised position unless properly blocked and with all rotating components stopped.**
- **Disengage PTO for road travel.**

Remove the PTO driveline from the tractor and place in storage position (if equipped).

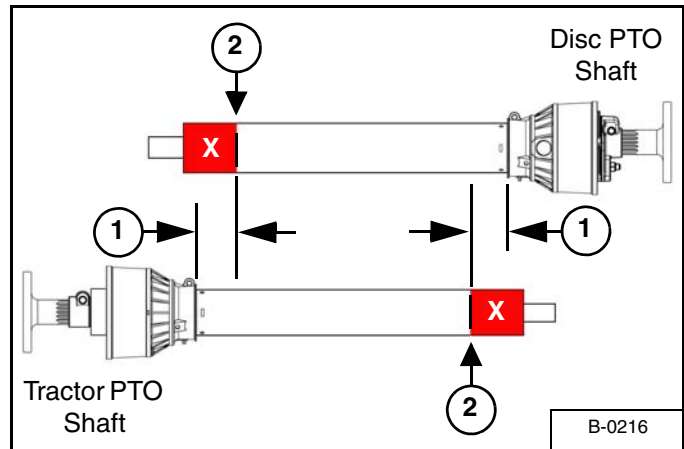
Enter the operator's position. (See "Entering The Operator's Position" on page 30.) Start the engine.

Raise or lower the disc to get the shortest distance between the tractor PTO shaft and disc gearbox PTO shaft.

Stop the engine and leave the operator's position. (See "Leaving The Operator's Position" on page 30.)

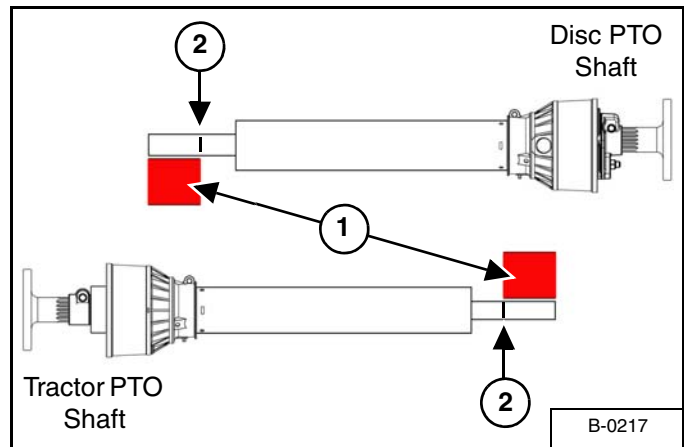
Pull the PTO driveline apart and reinstall each individual section; one half to the tractor PTO shaft and one half to the implement gearbox PTO shaft.

**Figure 8**



1. Hold PTO driveline sections parallel to one another and measure back 2 in. (50,8 mm) (Item 1) from the yoke of each section and place mark on opposite section. Cut the plastic shield at this length (Item 2) [Figure 8].

**Figure 9**



2. Using the plastic guard lengths that were cut off in [Figure 8], align the cut off lengths (Item 1) with the end of the inner & outer shafts. Place a mark (Item 2) [Figure 9] on the inner & outer shafts and cut the inner & outer shafts off at this length.
3. Round off all sharp edges and debur.
4. Thoroughly grease and install the PTO driveline halves together.
5. Recheck for proper operation.

*PTO Driveline Engagement Check*

Stop the engine and leave the operator's position. (See "Leaving The Operator's Position" on page 30.)

Make sure the PTO driveline and all rotating components have come to a complete stop before exiting the compact tractor.

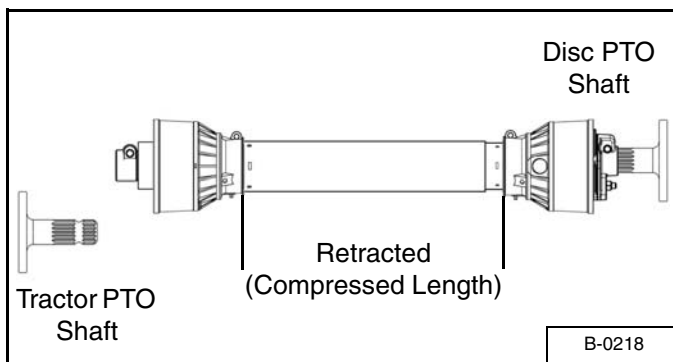


**AVOID INJURY OR DEATH**

- Do NOT exceed the rated implement PTO speed.
- Stay clear of rotating driveline.
- Keep bystanders away.
- Keep hands, feet, clothing and long hair away.
- Keep PTO shields and all guards in place.
- Disengage PTO, move the tractor controls to the Neutral position, stop the engine and make sure all rotating components are stopped before leaving the operator's position.
- Do NOT service the tractor or implement with the PTO engaged.
- Do NOT service the implement in a raised position unless properly blocked and with all rotating components stopped.
- Disengage PTO for road travel.

1. Disconnect the PTO driveline from the tractor and fully slide the driveline sections together (retracted).

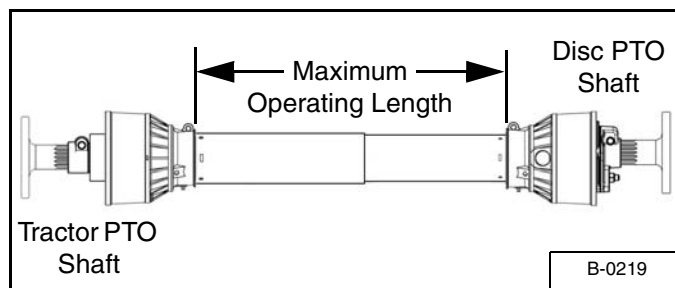
**Figure 10**



2. Measure the retracted (compressed) length of the PTO driveline between the bases of the plastic guards [Figure 10].

3. Multiply the retracted driveline length by 1.667 to determine the PTO driveline Maximum Operating Length. (i.e.: 25.5 in. (647,7 mm) x 1.667= 42.5 in. (1079,7 mm) Maximum Operating Length).
4. Attach the PTO driveline to the tractor PTO output shaft.
5. Enter the operator's position. (See "Entering The Operator's Position" on page 30.)
6. With the PTO driveline attached, position the disc where the telescoping PTO driveline is at its maximum operating extension.
7. Stop the engine and leave the operator's position. (See "Leaving The Operator's Position" on page 30.) Make sure the PTO driveline and all rotating components have come to a complete stop before leaving the operator's position.

**Figure 11**



8. Measure the length of the PTO driveline between the bases of the plastic shields [Figure 11] to determine the maximum operating length.

A. If the measured maximum operating length is less than the Maximum Operating Length calculation (from Step 3), the PTO driveline has adequate engagement

B. If the measured maximum operating length is equal to or more than the Maximum Operating Length calculation (from Step 3), the PTO driveline does not have adequate engagement and should be replaced with a longer driveline. See your Farm King dealer for available PTO drivelines.

**Connecting Hydraulic Lines**



**HIGH PRESSURE FLUID HAZARD**

To prevent serious injury or death from high pressure fluid:

- Relieve pressure on system before repairing or adjusting.
- Wear proper hand and eye protection when searching for leaks. Use wood or cardboard instead of hands.
- Keep all components in good repair.

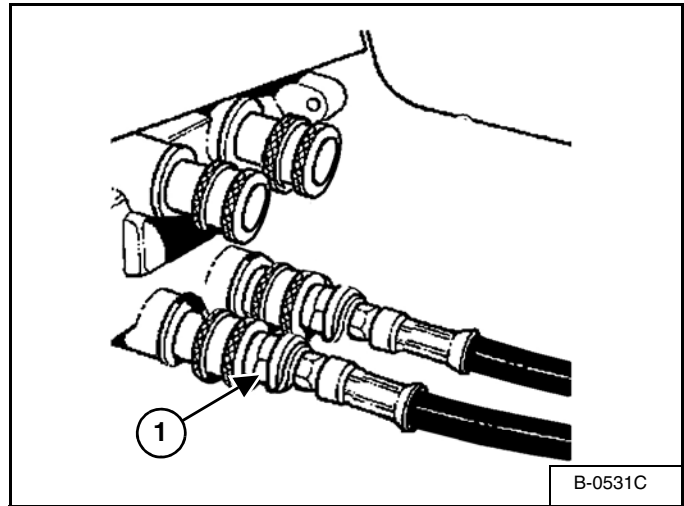


- Contain and dispose of any oil leakage in an environmentally safe manner.
- Thoroughly clean the quick couplers before making connections. Dirt can quickly damage the system.

**NOTE:** Make sure the quick couplers are fully engaged. If the quick couplers do not fully engage, check to see that the couplers are the same size and type.

*To Connect:*

**Figure 12**



Connect the two hydraulic lines to the tractor [Figure 12].

1. Supply Line.

*To Disconnect:*



**AVOID BURNS**

Hydraulic fluid, tubes, fittings and quick couplers can get hot when running equipment. Be careful when connecting and disconnecting quick couplers.

Pull on the hydraulic lines to disconnect.

Operating Disc Mower (All Models)



- Do NOT exceed 540 / 1000 RPM PTO.
- Keep PTO shields and all guards in place.
- Keep away from moving parts.
- Keep bystanders away.



Before operating the equipment:

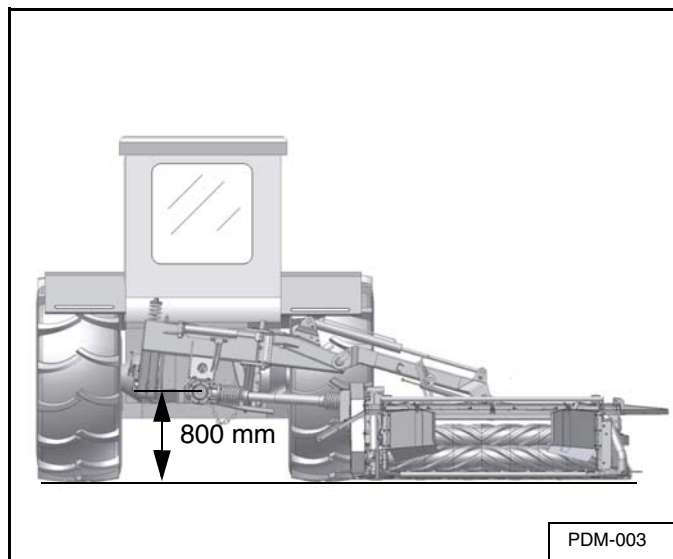
- Clear the work area of all bystanders, especially small children and animals.
- Clear the work area of all obstacles.
- Keep shields and all guards in place.
- Keep away from moving parts.

Move to the operator's position, start the engine and release the parking brake. (See "Entering The Operator's Position" on page 30.)

Move the tractor and Disc Mower to work area.

Adjustment of the Height from the Ground

Figure 13



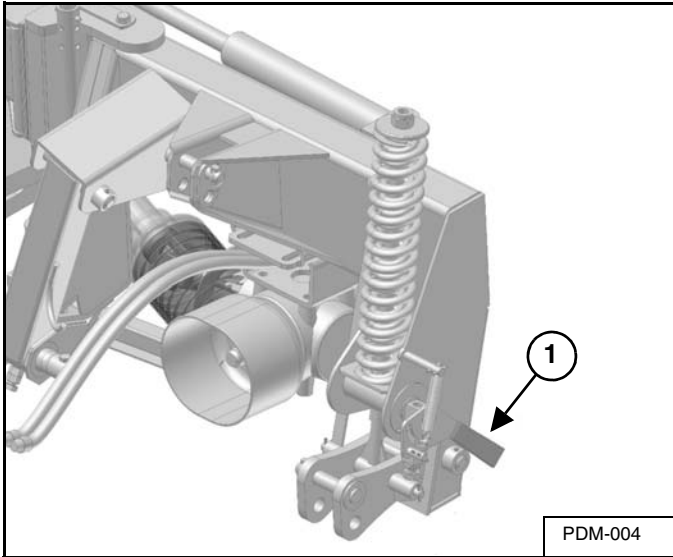
If you have a tractor machine equipped with a limiting device of the hydraulic lifter with position indicator, adjust the low position of the towing-bars so that the power take off gudgeon on the transmission box is at 800 mm from the ground [Figure 13].

If you have a tractor machine without a limiting device of the hydraulic lifter with position indicator, use the check-chain supplied with. To do this:

- Lower the machine so that the power takeoff gudgeon on the transmission box is slightly over 800 mm from the ground [Figure 13].
- Hitch the check-chain with the hook supplied with to one of the holes of the hanger in the tractor third point
- Lower the machine in the work position until (as in the previous case) the power take off gudgeon on the transmission box is 800 mm from the ground [Figure 13].

*Adjustment of the Suspension*

**Figure 14**



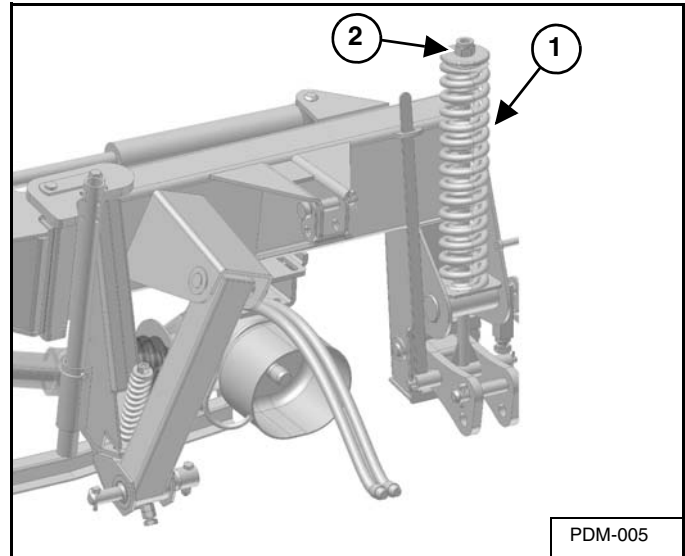
[Figure 14].

By means of the suspension the cutting blade reacts in a different way when you drive the tractor machine on uneven grounds.

To activate the suspension, in the first place you have to act on the handle [Figure 14] by which you can release the second point; then, the suspension will work.

The release happens automatically by lifting the lawnmower with the lifter up to the unhitching of the (Item 1) [Figure 14] safe stop.

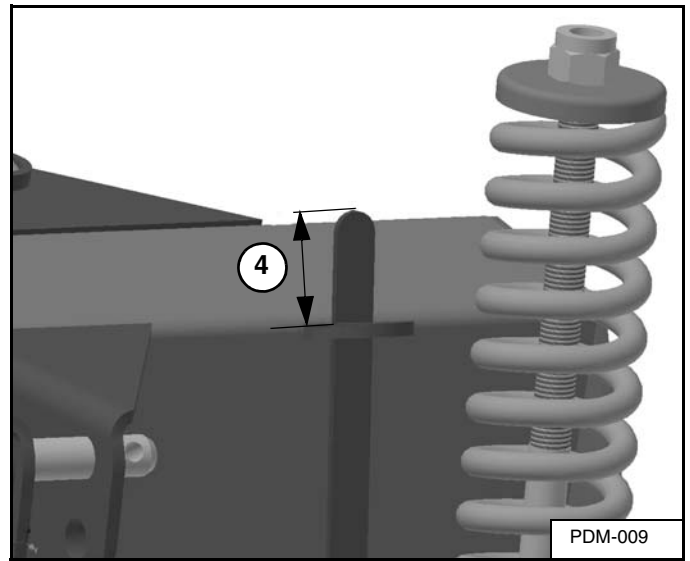
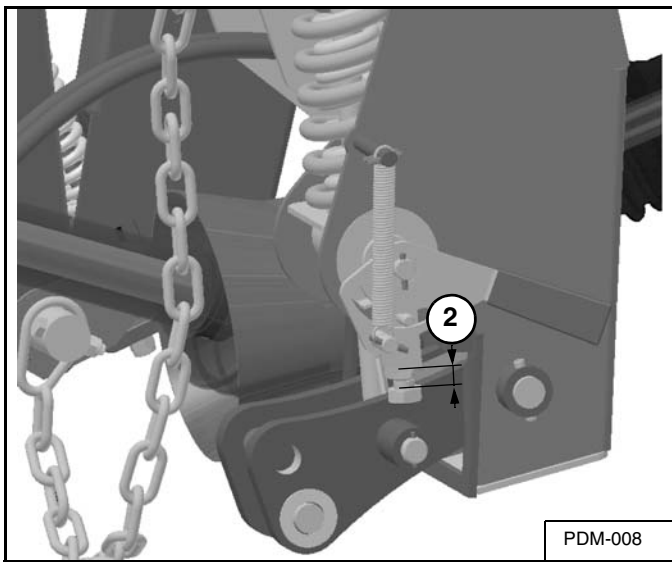
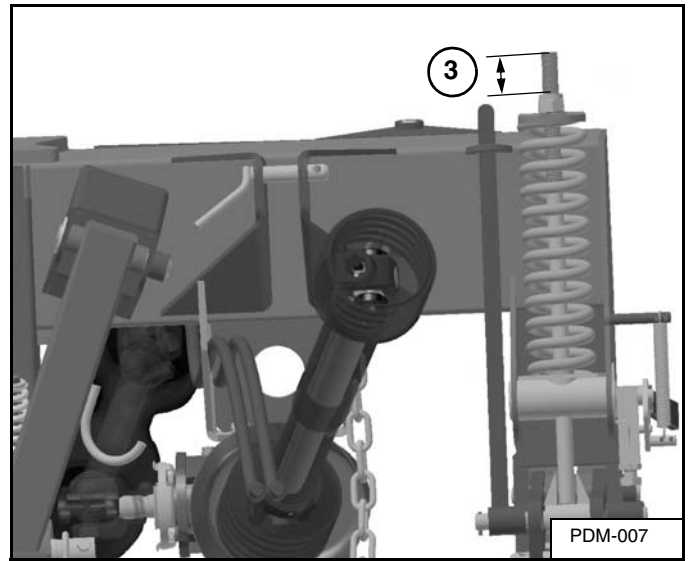
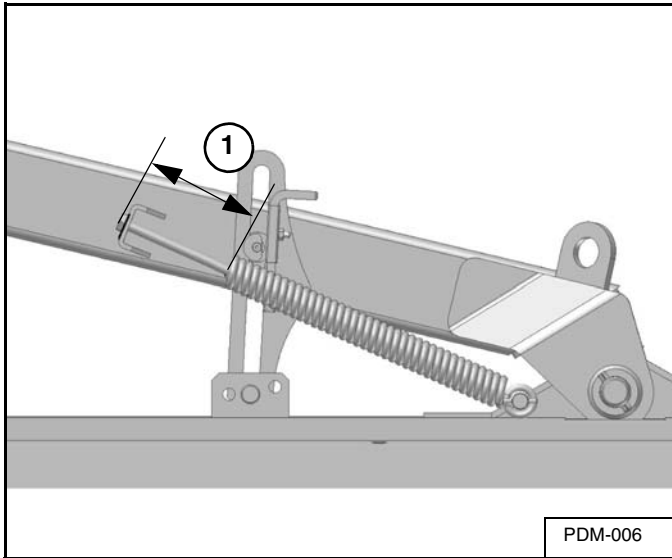
**Figure 15**



By means of the rule, which is positioned beside the (Item 1) [Figure 15] springs, you can check the suspension adjustment.

To adjust the load of the springs, act on the nut (Item 2) [Figure 15] of the tie rod, so as to obtain the correct weight of the machine on the ground. For the correct setting of the suspension, refer to the table on the next page.

Figure 16



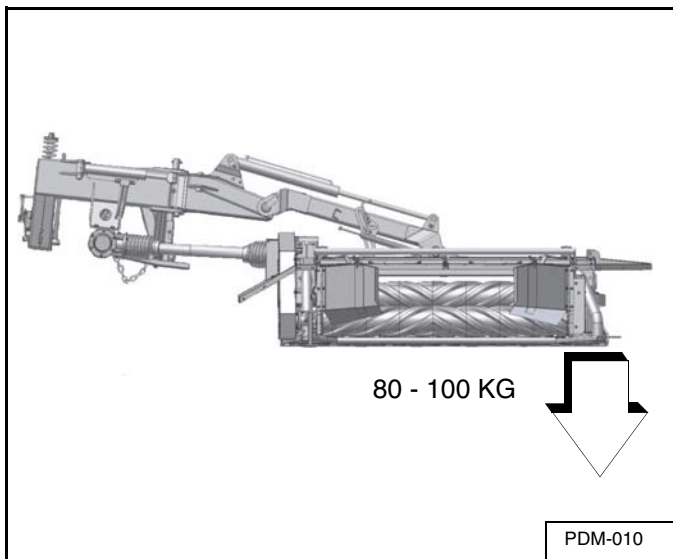
References for the measurement of the suspension [Figure 16] springs, you can check the suspension adjustment.



Tables below for references for the measurement of the suspension [Figure 16].

MODEL	FK 245	FK 285	FK320
(Item 1)	90 mm	100 mm	70 mm
(Item 2)	40 mm	35 mm	27 mm
(Item 3)	20 mm	50 mm </td <td>60 mm</td>	60 mm
(Item 4)	80 mm	85 mm	95 mm
MODEL	FK 245 R	FK 285 R	FK320 R
(Item 1)	/	/	/
(Item 2)	40 mm	30 mm	50 mm
(Item 3)	35 mm	70 mm	80 mm
(Item 4)	/	/	65 mm
MODEL	FK 245 F	FK 285 F	FK320 F
(Item 1)	/	/	/
(Item 2)	40 mm	30 mm	50 mm
(Item 3)	35 mm	50 mm	70 mm
(Item 4)	/	/	65 mm

**Figure 17**



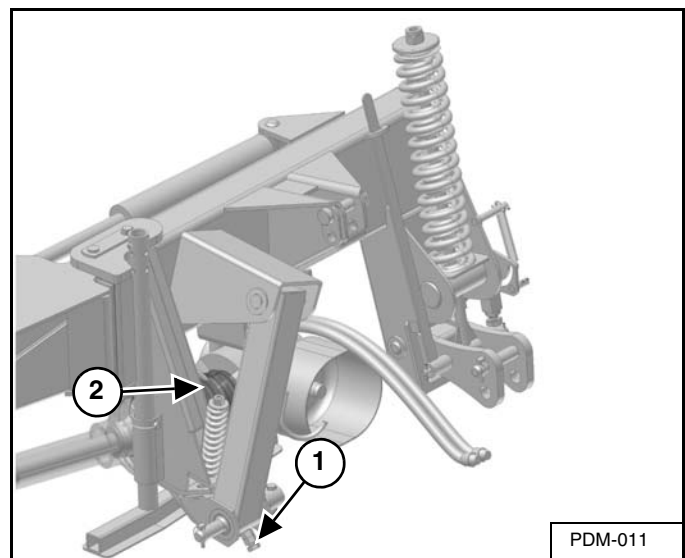
In general, the suspension should be adjusted according to the characteristics of the soil and speed. The weight on the ground must be between 80 and 100 KG, as in [Figure 17].

*Overload Safety*



**The safety unhitching setting is adjusted by machine manufacturer; each alteration of this setting let lose the guarantee and there will be damages of the cutting set.**

**Figure 18**



The lawnmower is also equipped with “non-stop” safety unhitching (with automatic reconnection). The safety unhitching (Item 1) [Figure 18], works if the mower, during processing, should strike obstacles on the ground, where the cutter bar may be damaged, in this case intervenes the safety release. In this way, after some resistance, the mower is raised, passing the obstacle.

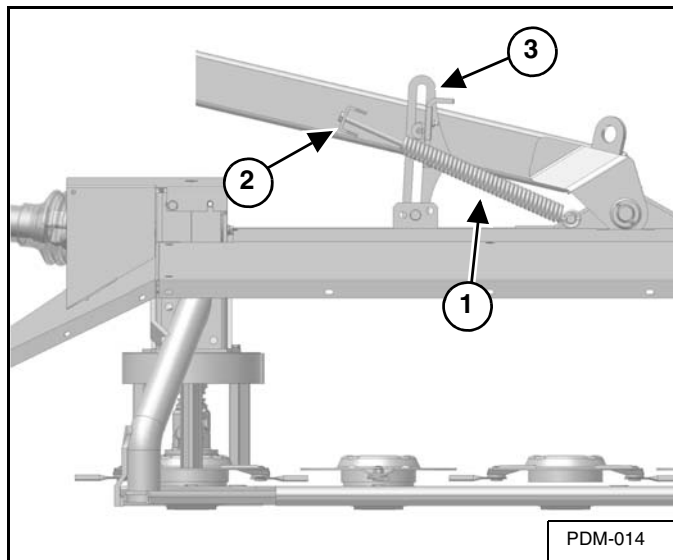
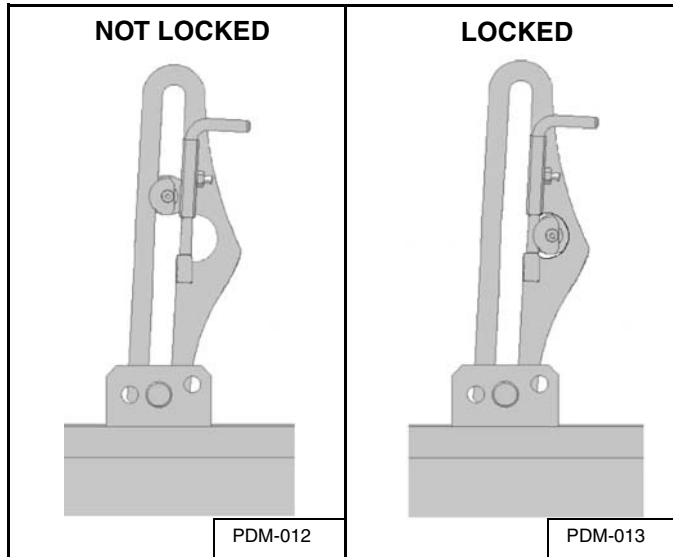
You can adjust the safety unhitching working by lightening or hardening the spring which is located in connection with the first point: you have to work on nut (Item 2) [Figure 18].

When the disc mower ends to cross the obstacle, the safety catch will automatically reset.



*Adjustment of the stabilization of the cutter bar and safety Lock for the Transportation*

**Figure 19**



The spring (Item 1) [Figure 19] balances the mowing bar to the ground.

If the mowing bar shouldn't be parallel to the ground, use screw (Item 2) [Figure 19] to adjust.

Before transporting the lawnmower on the road, operate the (Item 3) [Figure 19] lever to stop the bar. Unlock "C" lever in working position so that the mowing bar floats.

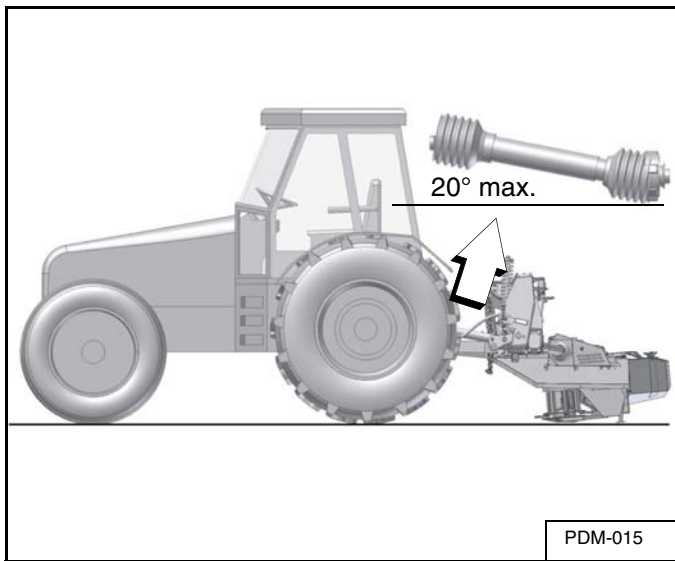
For locking the flotation, place the mower on the ground, then with the hydraulic lift of the tractor, sliding the pin along the guide, until the attainment of locking. Finally, pull down the safety lever. To unlock, leave the mower on the ground, lift the safety lever, and push the block-flotation to the right. So that the pin is put along the guide, finally pull down the safety lever to prevent accidental blockage.

*Adjustment of the Cardan Transmission Shaft*



**Don't let work the cardan transmission shaft too often with a strong angularity (max. 20 °)**

**Figure 20**



Connect one side of the cardan transmission shaft to the control shaft of the machine and the other side to the power takeoff of the tractor. Make sure the length of the cardan transmission shaft is right

In the max. lengthening there must be a re-covering of the tubes for 250 mm at least.

In max. re-covering (with compressed cardan transmission shaft) the tubes have never to point at the joints. There must be a security stroke of 1 cm at least. If necessary, shorten the protections and the tubes of the same length, re-strike the nails of the joint, clean the tubes and grease the inside of the external tube.

Don't let work the cardan transmission shaft too often with a strong angularity (max. 20 °)

*Precautions of the cardan transmission shafts*

It is absolutely necessary to check the cardan transmission shaft and to follow some basic rules, otherwise the cardan transmission shaft is subject to hasty deterioration.

In order to avoid troubles which could be serious, check that the protections of the cardan transmission shaft are steadily in their proper places and immobilized in the rotation by means of the appropriate chains. Fix always the cardan chains on both sides. Substitute immediately the damaged protections.

Periodically grease the cardan shaft, as in the manual of it.

**TRANSPORTING**

**Requirements**

Comply with federal, state, local and provincial laws regarding the transport of farm equipment on public roadways.



**AVOID SERIOUS INJURY OR DEATH**

**Use of an unapproved hitch or tractor / tow vehicle can result in loss of control, leading to serious injury or death.**

**Tractor / tow vehicle and hitch must have the rated capacity to tow equipment.**

---



**AVOID SERIOUS INJURY OR DEATH**

**Excess weight will greatly increase tractor stopping distance and may cause the operator to lose control of the tractor or tow vehicle.**

---



**AVOID SERIOUS INJURY OR DEATH**

**Before putting the cutting set in the transport position, wait for the complete stop of the Disc rotation and send away everyone from the movement zone of the cutting set.**

---



**Towing Vehicle / Tractor must have adequate braking capacity to safely control GVW trailing load. Do not tow over 20 mph (32 km/h). Towing Vehicle / Tractor unit should weigh approximately 67% of GVW.**

---

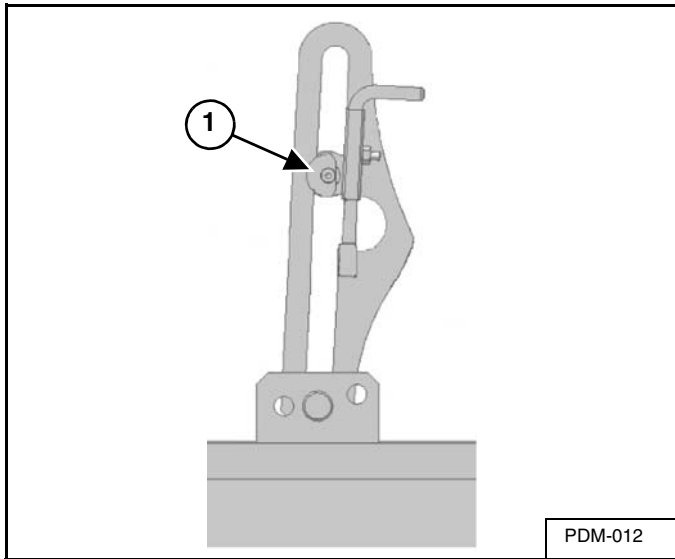
Verify that the tractor / tow vehicle is approved for transporting the equipment and that the equipment is securely attached to the tractor / tow vehicle.

Verify safety chain is installed and properly connected before transporting equipment.

Verify that the SMV (Slow Moving Vehicle) emblem, all lights and reflectors are clean and visible.

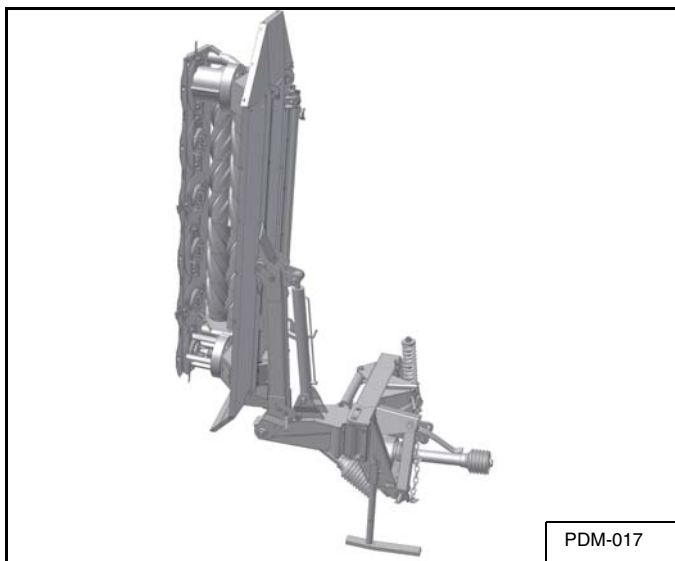
**Transport Position**

**Figure 21**



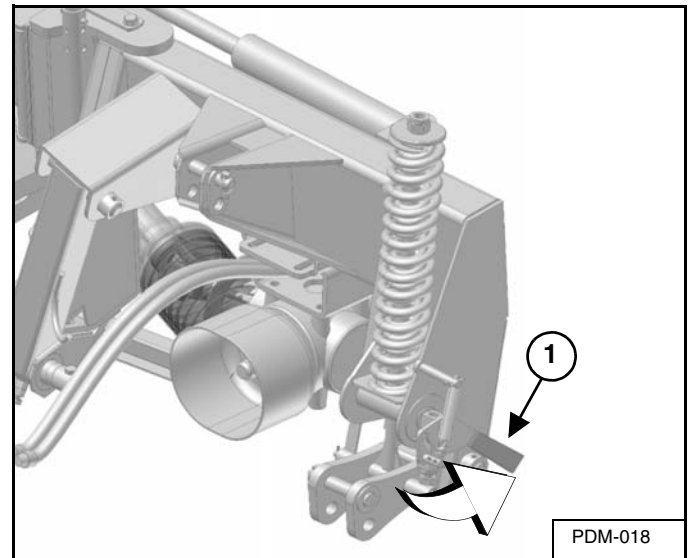
DO NOT LOCK THE BAR through the latch (Item 1) [Figure 21].

**Figure 22**



Operate through the distributor Single-acting cylinder of the tractor that allows the lifting of the mower in the vertical position as shown [Figure 22].

**Figure 23**



By means of the double effect distributor of the tractor, engage the cylinder by which the cutting set moves all around the pivot and put the machine in the transport position as in the picture. The block (Item 1) [Figure 23] of the suspension during transport must be raised.

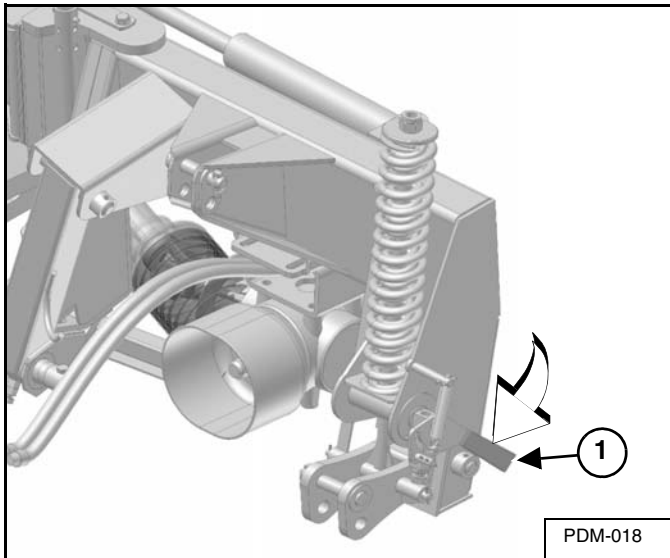
**Removing The Disc Mower**

**NOTE:** Remove the Disc Mower with the cutting set when it is in working position.

**NOTE:** Before lowering the machine (always in working position) position the small foot.

Place the Disc Mower in the working position.

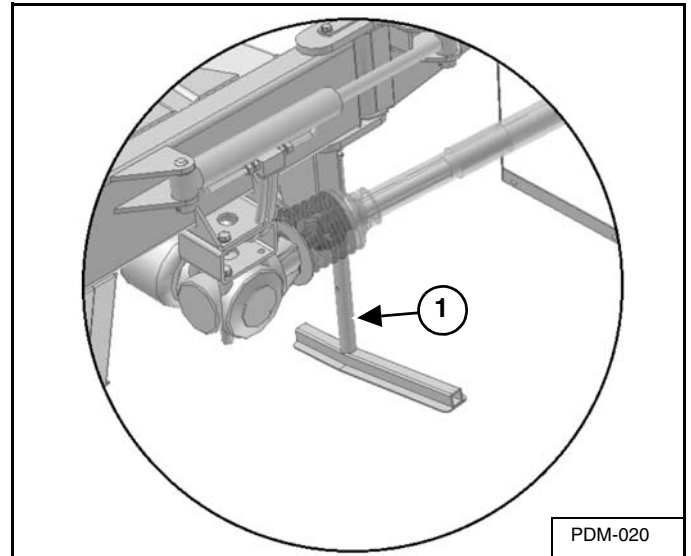
**Figure 24**



Get off the tractor and position the stop lever of the suspension as in (Item 1) [Figure 24].

Lift the Disc Mower by means of the hydraulic lifting device of the tractor in order to engage the suspension stop.

**Figure 25**



Put down the support foot (Item 1) [Figure 25] and position it as in.

Lower the Disc Mower.

Unhitch at first the third point attachment and then the tow bars.

Unhitch the cardan transmission shaft and hang it up at the support hook.

Unhitch the chain.

# Farm King



**MAINTENANCE**

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# Farm King





**TROUBLESHOOTING**

**Chart**



Instructions are necessary before operating or servicing equipment. Read and understand the Operator’s and Parts Manual and safety signs (decals) on equipment. Follow warnings and instructions in the manuals when making repairs, adjustments or servicing. Check for correct function after adjustments, repairs or service. Untrained operators and failure to follow instructions can cause injury or death.

**NOTE:** If a problem is encountered that is difficult to solve, even after having read through this troubleshooting section, please call your local distributor, dealer or factory. Before you call, please have this Operator’s And Parts Manual and the serial number of your machine at hand.

PROBLEM	CAUSE	CORRECTION
The Disc Mower is not leveled sideways.	The spring placed above the arm is badly adjusted.	Adjust the setting of the spring.
The blade does not follow the ground at work	The suspension is too hard	Acting on the suspension as described in the paragraph
Irregular cutting height	Blades worn or missing	Change or replace the blades.
	The rpm of the PTO are too low.	Make sure that the speed of the power takeoff is regular.
	Feed rate is too low (especially sensitive to the couplings dense)	Increase work speed.
Irregular cut.	Machine leans backwards.	Shorten the third point.
Traces of cutting on wet and heavy material	The rpm of the PTO are too low	Make sure that the PTO does not lose power. This happens especially on sloping land.
Traces of cutting on thin grass.	Insufficient inclination of blades.	Shorten the third point.
The grass is rejected by the ventilation of the knives before being cut	Thin grass.	Decrease the number of revolutions of the PTO and increase the feed rate.
	Blades worn or broken.	Change and replace the blades.
		Visually inspect the drive train.
Heating of the cutting bar.	Oil unsuitable.	Remove and replace with prescribed oil.
	Excess oil in the cutter bar.	Check the oil level and remove excess.

**SERVICE SCHEDULE**

**Maintenance Intervals**

Maintenance work must be done at regular intervals. Failure to do so will result in excessive wear and early failures. The service schedule is a guide for correct maintenance of the Disc Mower.



**Instructions are necessary before operating or servicing equipment. Read and understand the Operator and Parts Manual and safety signs (decals) on equipment. Follow warnings and instructions in the manuals when making repairs, adjustments or servicing. Check for correct function after adjustments, repairs or service. Untrained operators and failure to follow instructions can cause injury or death.**

#	DESCRIPTION	SERVICE PROCEDURES						
		Check	Clean	Lube	Change	Adjust	Drain	Locations
<b>First 8 hours</b>								
1	Make sure that all screws are completely tightened (especially those of the cutters)	•						
<b>First 50 hours</b>								
2	Oil in the cutting bar				•			
3	Oil in the gear box.				•			
<b>Every 8 hours</b>								
4	Make sure that all screws are completely tightened (especially those of the cutters)	•						
5	Universal joint spider.			•				
6	Vertical crankshaft.			•				
7	Axis of the beam.			•				
8	Blades	•						
<b>Every 20 hours</b>								
9	Extension tubes of the universal joint spider.			•				
<b>Every 40 hours</b>								
10	Oil of the cutting bar.	•						
11	Oil of the gear box.	•						
12	Forks of the universal joint spider.			•				
13	Input Drive Hanger Bearings			•				
14	Fork pin.			•				
15	Extension tubes of the universal joint spider.			•				

#	DESCRIPTION	SERVICE PROCEDURES						
		Check	Clean	Lube	Change	Adjust	Drain	Locations
<b>After Each Season</b>								
16	Oil of the cutting bar.				•			
17	Oil of the gear box.				•			

## CLEANING AND MAINTENANCE

### General Instructions

The cleaning and maintenance of the machine includes cleaning and greasing of the mobile parts etc.

These operations must be carried out following the instructions of this manual and, when required, using personal protective equipment (gloves, shoes, etc.)

The operations that may be performed at the premises may be brought back to the routine maintenance operations foreseen by this manual.

The machine during periods when it is not used should be parked in a dry and protected area.

After a period of inactivity, is to remember to perform a check in a service center. For any type of maintenance, put the mower on a flat and rigid surface; if you need to take action on the mower, remove it from the tractor.

### Precautionary Measures To Be Adopted During The Cleaning And Maintenance Operations



#### **AVOID INJURY OR DEATH**

**Do not clean, oil or grease by hand and elements of the Disc Mower while in motion. It is prohibited to perform any operation on the moving parts repair or adjustment.**

**In case you need to operate with the machine in an elevated position, the locking devices shall be provided to prevent unintentional lowering.**

In order to perform any operation on the machine, the operators must wear suitable outfits, avoiding outfits that may get easily tangled up in protrusions.

Keep the working area free from obstructions, clean and dry so as to allow the complete mobility of the maintenance man.

Use a suitable equipment (tackles, jacks) for the machine lifting operations. The manual load lifting and handling may not be higher than 30 Kg for each operator.

In case of grease or oil leakages gather them with appropriate absorbing materials and stock them in suitable containers waiting for dismantling.

If the machine has not been used for a long period, make sure that the safety devices are installed correctly; otherwise assemble the ones that have been removed for garaging.

Check The Cutting Blades



**AVOID INJURY OR DEATH**

We recommend the use of glasses and appropriate clothing. Always make sure that the correct locking tools used, respecting the instructions for use. In case of replacement, be careful if are right or left. **Not mow in a rocky or stony field.**

Check them systematically before using the mower

To get a quality mowing and a use security, check the cutting blades carefully and systematically. You have to substitute the cutting blades in the following cases:

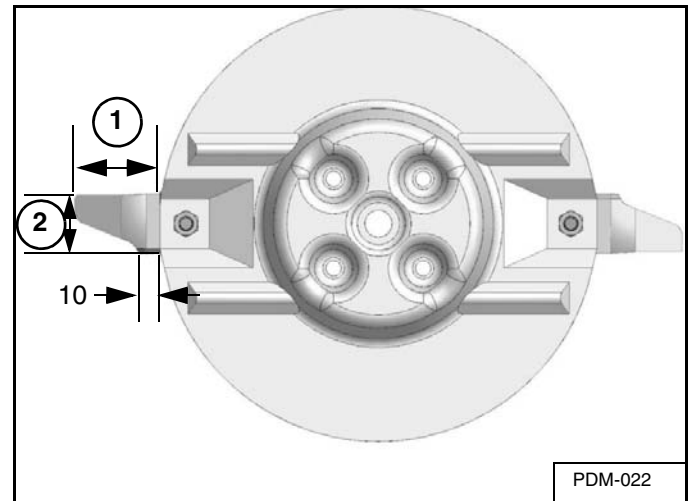
1. Damaged cutting blades.

Because of an uneven ground the cutting blades can have clefts or deformations, which cause:

- an increase of accident risks,
- a reduction in mowing quality,
- deterioration risks of the Disc holder.

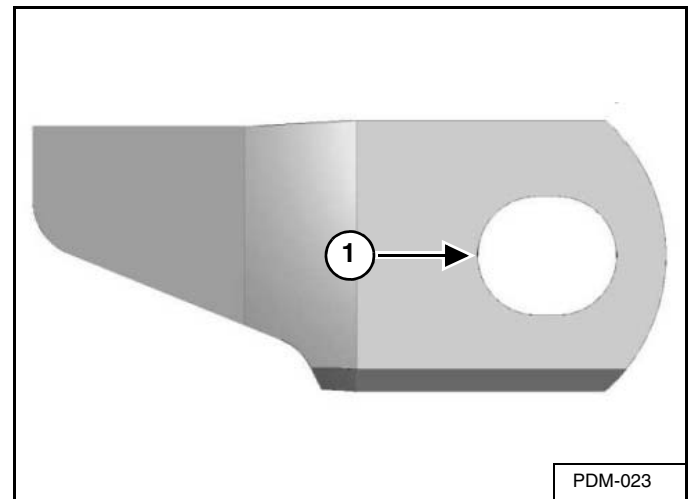
2. Knives consumed

Figure 26



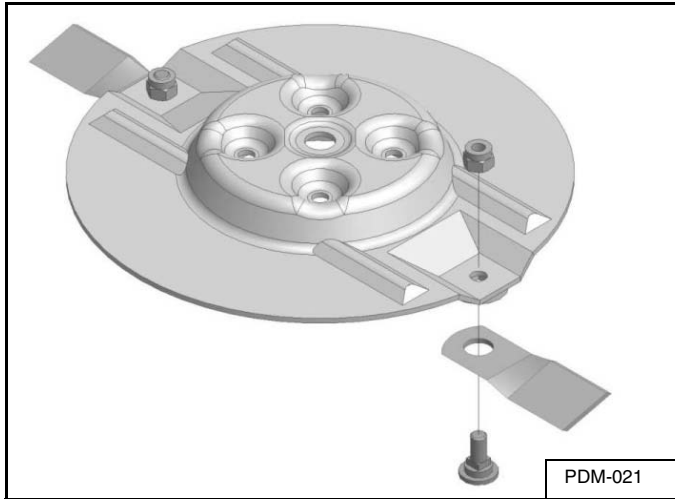
The length (Item 1) of a cutting blade has to be more than 70 mm. The width (Item 2) [Figure 26] of a cutting blade, measured at 10 mm from the Disc, has to be more than 35 mm.

Figure 27



The pitch (Item 1) [Figure 27] of the fixing screw has not to be ovalized more than 23 mm for a boring of 21 mm.

**Figure 28**

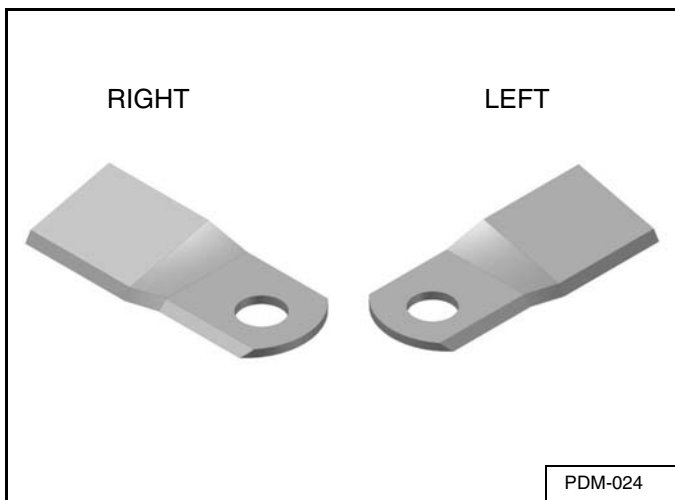


Worn-out, damaged, or deformed cutting blades must be immediately replaced with original blades **[Figure 28]** only.

**NOTE: Farm King cannot guarantee mowing machines that use any other type of cutting blades.**

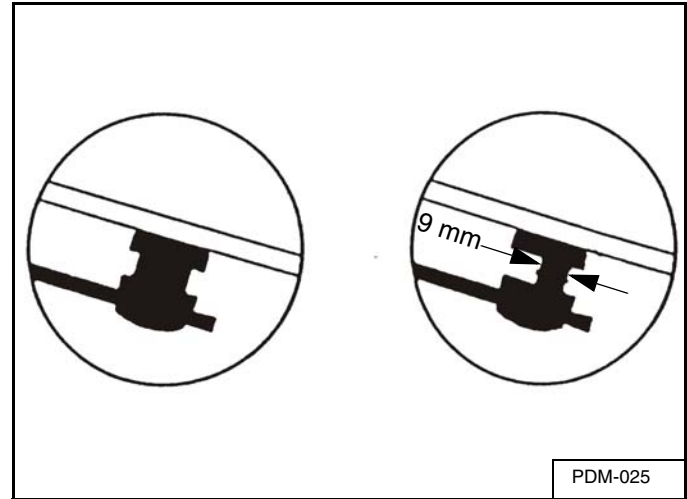
Make sure that the new cutting blades are all of the same length.

**Figure 29**



Cutting blades are either of “right” or “left” type **[Figure 29]**. Pay attention to the Disc rotation direction during installation.

**Figure 30**

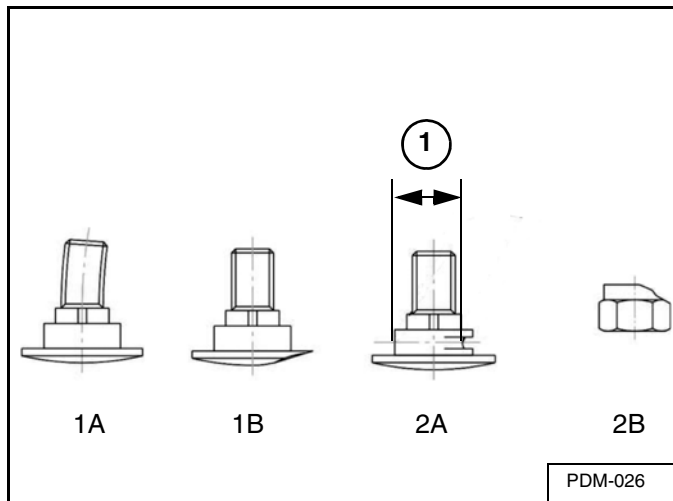


3. Check of the cutting blade fixing set **[Figure 30]**.

Check them regularly. (Above all the closing moment of the nuts: 70 Nm) Check immediately after knocking an obstacle and check when you have to replace the cutting blades. To avoid unbalances, put up always two new Farm King cutting blades on each Disc.

In order to replace worn-out or damaged cutting blades, the lock nuts on the top of the cutting Discs must be unscrewed before the old blade can be replaced with a new one. Make sure that the cutting side is installed facing downwards.

Figure 31



1) The fixing screws [Figure 31] have to be replaced:

When you see a clear deformation;

When the head-wear reaches the bearing circumference of the cutting blades;

When the diameter (Item 1) [Figure 31] of the screw body is less than 18 mm.

2) The nuts have to be replaced:

When the self-locking part of the nut is worn or inefficient (2B) [Figure 31].

### The Hydraulic System

The hydraulic system works at high pressure. Pay attention to connect the flexible hoses correctly to the hydraulic cylinder.

When connecting the flexible hoses to the tractor's hydraulic system, make sure that neither the tractor's nor the mowing machine's hydraulic circuits are under pressure.

During all connections between the tractor and the machine, clearly mark the couplings and power takeoffs in order to avoid all possibility of error, bearing in mind that an inversion of the two a.m. connections leads to a corresponding inversion in the functions (RISK OF ACCIDENT).

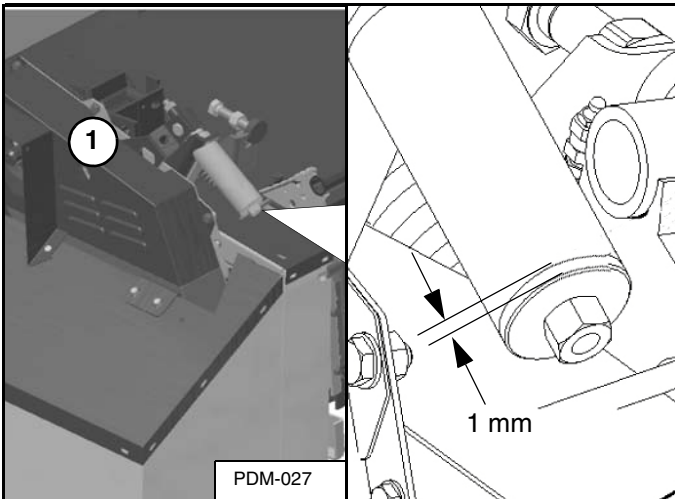
Regularly check the hydraulic hoses and replace when worn-out or damaged.

Be carefully when checking the hydraulic hoses because pressurized fluid (hydraulic oil) might spurt out and cause serious burns.

Prior to working on the hydraulic system, lower the mowing machine, de-pressurize the circuit, and switch off the motor.

**Belt Adjustment Of The Machines With Conditioner**

**Figure 32**



The tightness of the v-belts must be checked frequently, especially when they are new.

Whenever one v-belt is observed to be defective, the entire set must be replaced. The correct tensioning of the belts is performed by a tension spring [Figure 32].

If it is necessary, tighten the nut leaving 1 mm so that between the inner cylinder of the spring and the same [Figure 32], there is 1 mm.

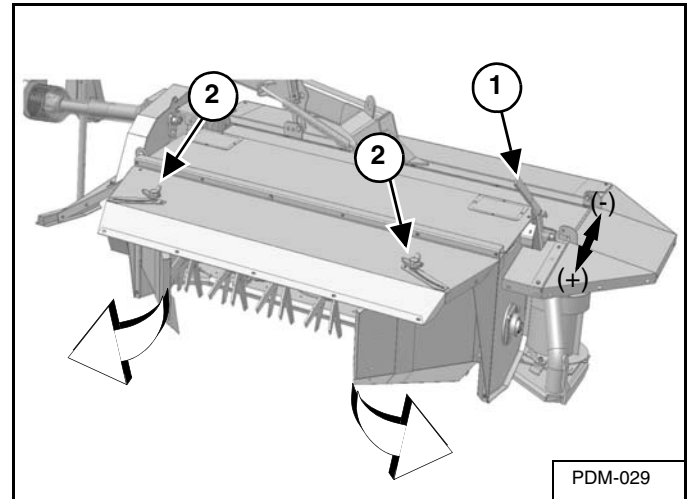
**Belt Replacing**

When it becomes necessary to replace all the belts: make sure to take off the cover and loosen the tensioner. Once you have replaced all the belts, close the cover and tension as described [Figure 32].

**Machines setting with conditioner**

*Machines settings with conditioner F*

**Figure 33**



Depending on the amount of product to be cut, act on the lever (Item 1) [Figure 33] to adjust the entry. The lever in fact controls the internal bulkhead, which can be open or closed.

The lever (Item 1) [Figure 33] has 4 positions, if it is toward the minus sign, then it is closed, if it is toward the plus sign then it is open (see the picture below).

By means of the two handles (Item 2) [Figure 33] you can regulate the mooring width by acting on the two back bulkheads.

**NOTE: Replace always the broken scourges and check periodically the fixing screws.**



Machines Settings With Conditioner R

Figure 34

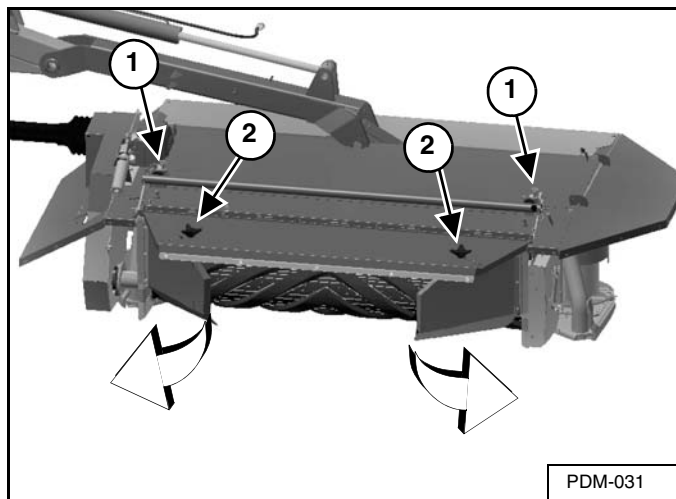
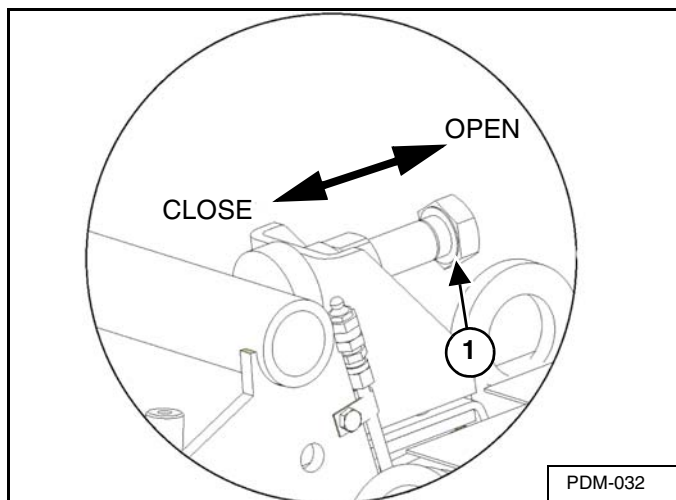


Figure 35



The pressure of conditioning (the distance between the rollers) can be adjusted by the two screws (Item 1) [Figure 34] and [Figure 35]. If the pressure between the rollers is high, then it increases the level of conditioning. Normally the distance between the rollers should be of 3-5 mm to avoid the damage of the product.

Tighten the two screws (Item 1) [Figure 34] and [Figure 35], (which push on the bar), the rollers will close.

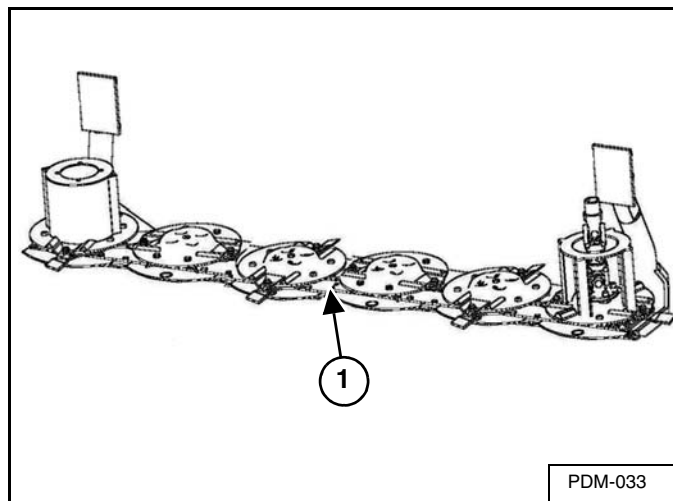
The knobs (Item 2) [Figure 34] allow adjustment of the swath width pulling on the rear bulkhead.

**NOTE: Grease every 12 hours the bearing of the two rollers.**

Lubrication

Check periodically the oil level in the gear box.

Figure 36



With the mower in work position, remove the plug (Item 1) [Figure 36] and check the oil level. The oil quantity from the bottom has to be 1 cm at least, as in picture 10

Accomplish with cold oil.

Oil type: SAE 90 EP

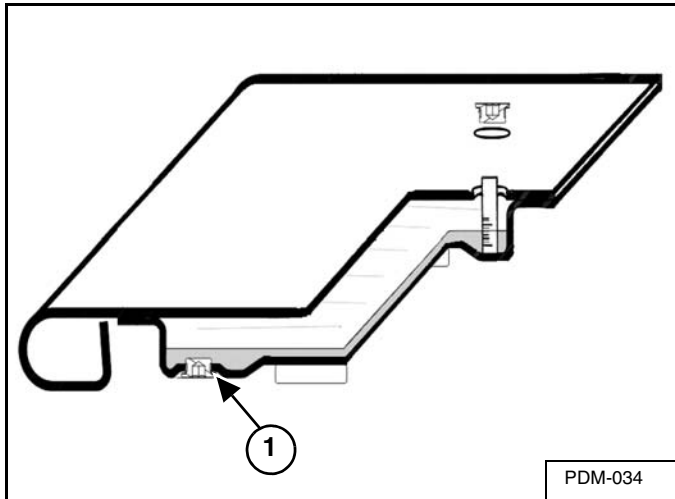
After the first oil change make a complete change every 200 working hours, or at least each season starting.

**NOTE: Each time you open the plug change the washer.**

LUBRICATION OF THE CUTTER BAR			
	FK 245 F/R	FK 285 F/R	FK 320 F/R
Oil Quantity	2.43 qt. 2.3 l	3.17 qt. 3 l	3.91 l 3.7 l

*Discharge Of Oil*

**Figure 37**



Discharge the exhaust oil through the hole (Item 1) [Figure 37] under the Cutter-bar.

**NOTE: 60° C is normal hot in working situation.**

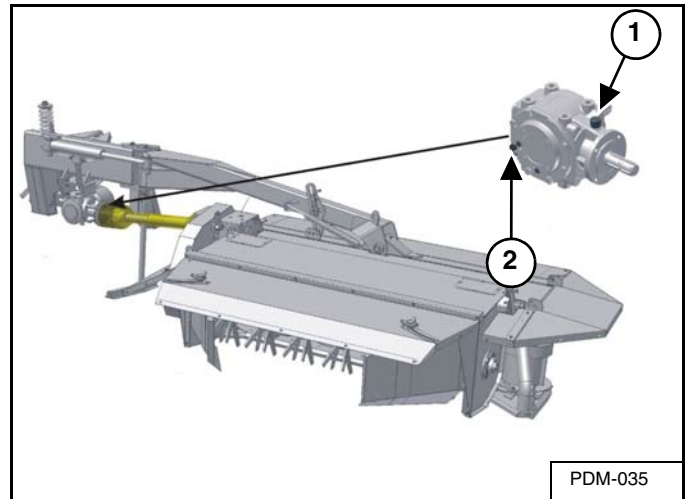
*Gear box*

Checking intervals:

- After 50 working hours.
- Make a complete change every 200 working hours, or at least each season starting.

Type of oil: SAE 90 EP

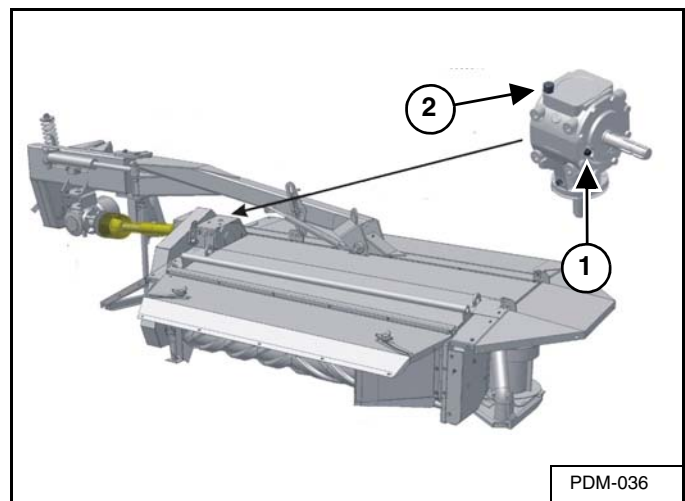
**Figure 38**



For the primary gear box (under the three hitch points) remove the plug (Item 1) [Figure 38]. Oil level should be at the bottom of the plug opening. Add oil as needed.

When adding oil, remove the cap (Item 2) [Figure 38] and add oil until the oil level is at the bottom of the plug opening. Install plug and cap.

**Figure 39**



For the secondary gear box (under the three hitch points) remove the plug (Item 1) [Figure 39]. Oil level should be at the bottom of the plug opening. Add oil as needed.

When adding oil, remove the cap (Item 2) [Figure 39] and add oil until the oil level is at the bottom of the plug opening. Install plug and cap.

Lubrication Locations

Figure 40

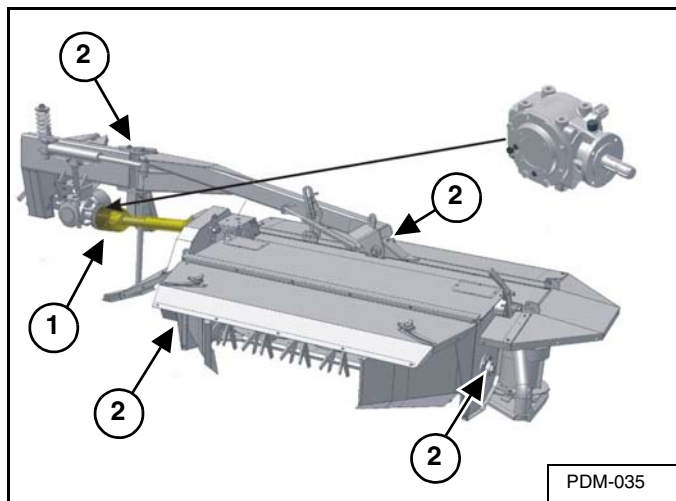
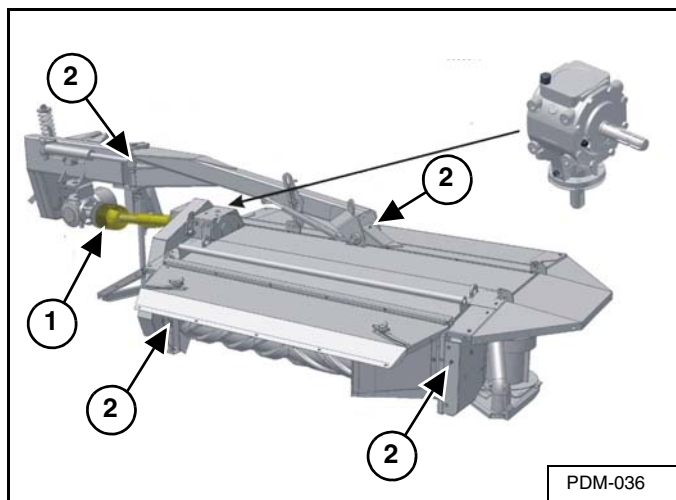


Figure 41



The cardan shaft (Item 1) [Figure 38] and [Figure 39] must be greased daily as prescribed in its enclosed booklet.

All the joints and support points (Item 2) [Figure 38] and [Figure 39] must be regularly lubricated.

STORAGE AND RETURN TO SERVICE

Storage

Sometimes it may be necessary to store your Farm King Disc Mower for an extended period of time. Below is a list of items to perform before storage.



**DO NOT permit children to play on or around the stored machine.**

- Thoroughly clean the equipment.
- Lubricate the equipment.
- Inspect the hitch and all welds on the equipment for wear and damage.
- Check for loose hardware, missing guards, or damaged parts.
- Check for damaged or missing safety signs (decals). Replace if necessary.
- Replace worn or damaged parts.
- Touch up all paint nicks and scratches to prevent rusting.
- Store the Disc Mower in a clean, dry, sheltered area.
- Place the equipment flat on the ground.

**Return To Service**

After the Farm King Disc Mower has been in storage, it is necessary to follow a list of items to return the equipment to service.

- Be sure all shields and guards are in place.
- Lubricate the equipment.
- Clean and inspect pusher chain for excessive wear or stiffness. Check for proper adjustment and alignment.
- Inspect and repack wheel bearings with a SAE multi purpose type grease.
- Check that tires are properly inflated.
- Connect to a tractor and operate equipment, verify all functions operate correctly.
- Check for leaks. Repair as needed.
- Review the Operator's Manual.

**PARTS IDENTIFICATION**

GENERAL INFORMATION .....63

THREE POINT HITCH .....64

FRAME GROUP .....68

    F Group .....68

    R Group .....72

    Normal Group .....76

CUTTER BAR .....82

FINGER CONDITIONER .....86

ROLLER CONDITIONER .....90

TRANSMISSION .....96

    F Group .....96

    R Group .....98

PROTECTION .....100

    F Group .....100

    R Group .....102

    Normal Group .....104

SWATHER .....106

GEAR BOXES .....108

    Part 32031052 .....110

    Part 32031070 .....112

CARDAN SHAFTS .....114

    Part 989931015 540 RPM .....114

    Part 989931044 1000 RPM .....116

    Part 989931018 .....118

# Farm King



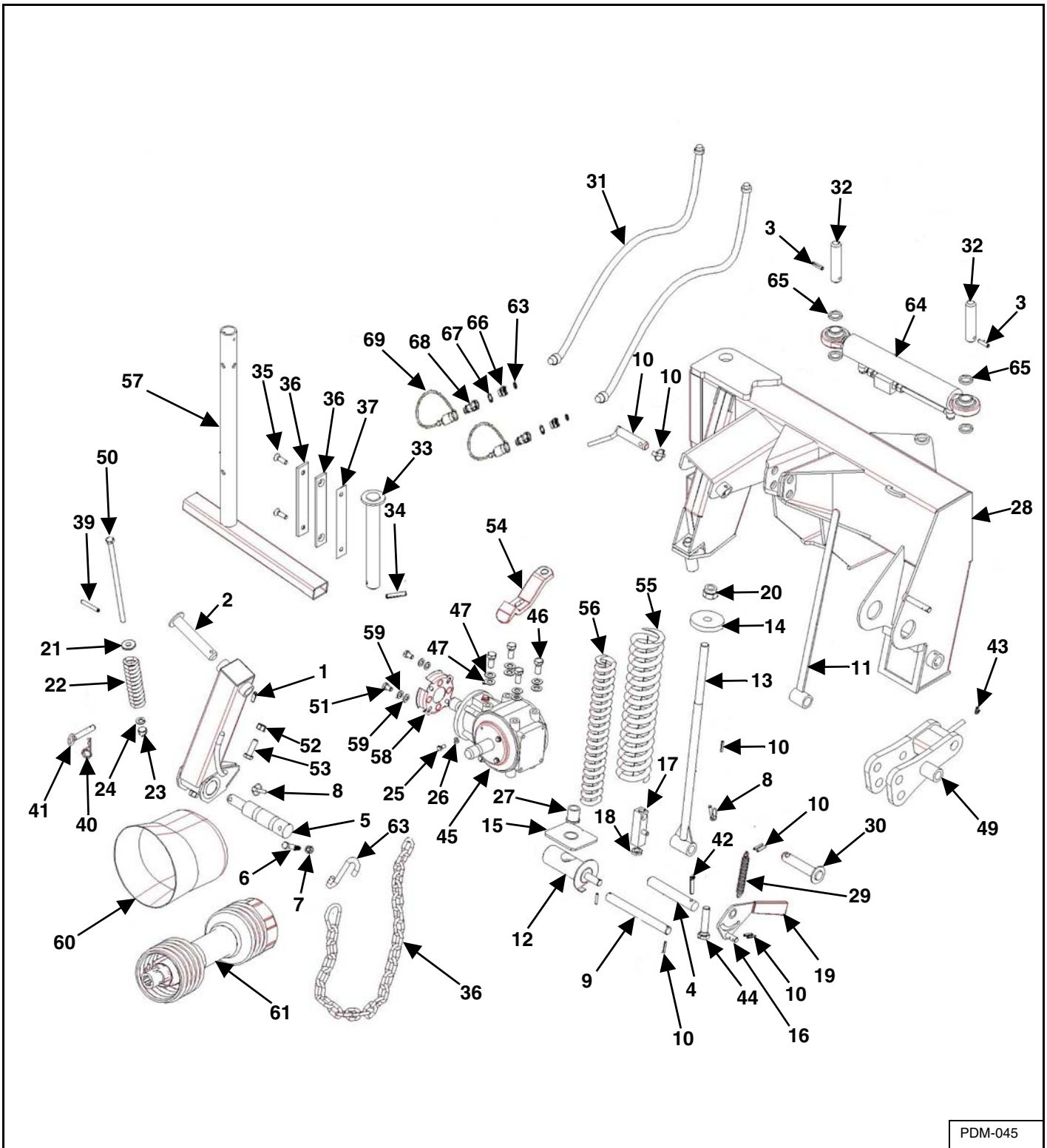
**GENERAL INFORMATION**

The parts identification section lists descriptions, part numbers and quantities for the Disc Mower. Contact your Farm King dealer for additional Disc Mower parts information.





THREE POINT HITCH

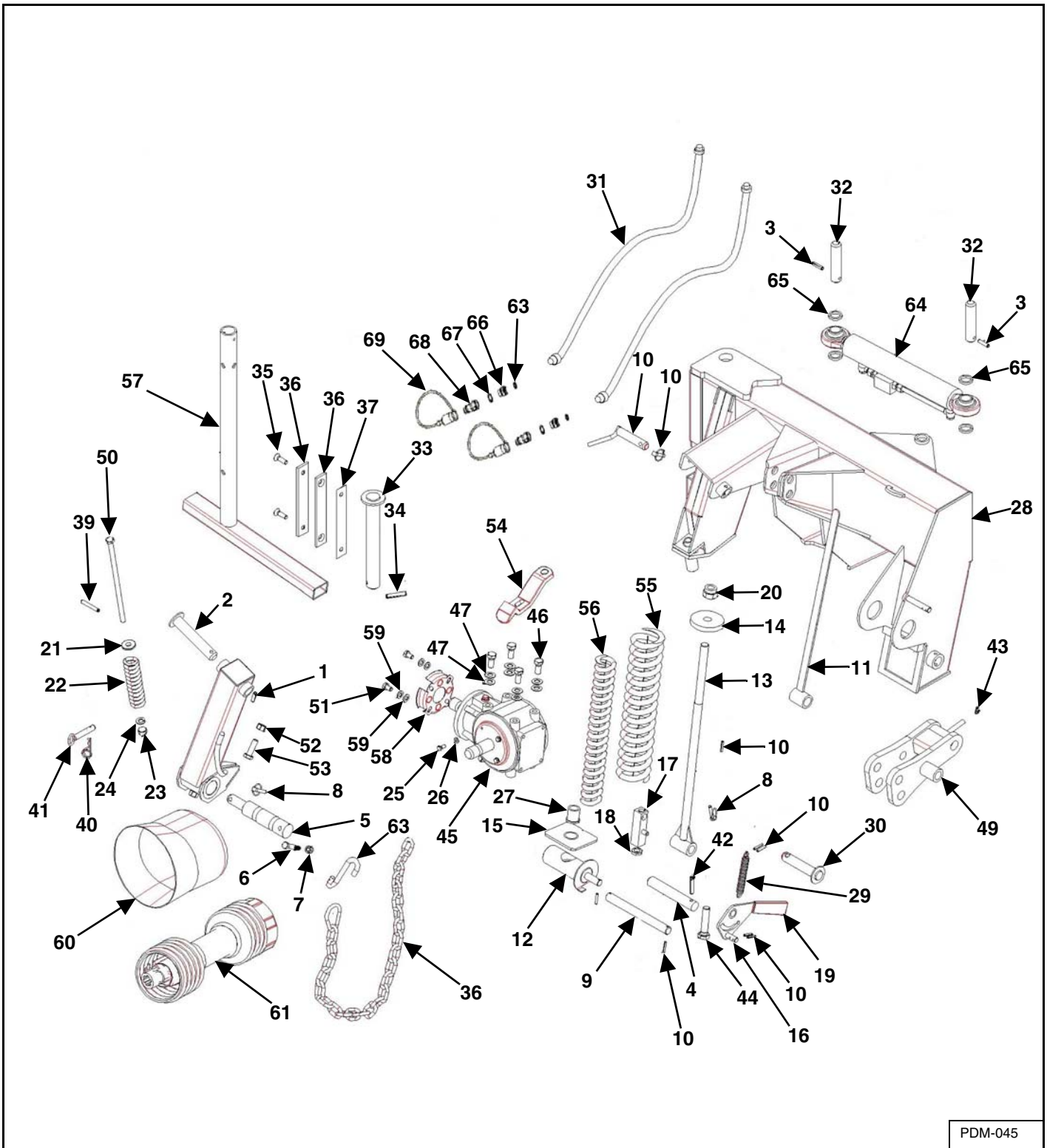


PDM-045



ITEM	PART NUMBER	DESCRIPTION	210 F/R QTY	245 F/R QTY	285 F/R QTY	320 F/R QTY
1	32001410	COMP. RELEASE FIRST POINT	1	1	1	1
2	32002030	COMP. VERTICAL ARM PIN	1	1	1	1
3	981108019	ELASTIC PIN UNI 6873 10X40 ZB	3	3	3	3
4	32002040	LEFT MOBILE ARM PIN	1	1	1	1
5	32002050	PIN DX	1	1	1	1
6	980206140	SCREW TE UNI 5737 8.8 12X65 ZB	1	1	1	1
7	980205699	NUT ES AUT. M12 UNI7473	1	1	1	1
8	980206290	SECURITY SNAP PIN D11 ZG	3	3	3	3
9	32002102	TIE ROD SPRING PIN	1	1	1	1
10	981108210	ELASTIC PIN UNI 6873 6X36 ZB	7	7	7	7
11	32002112	INDEX ROD	1	1	1	1
12	32002120	SPRING SUPPORT COMP	1	1	1	1
13	32002141	COMP. TIE ROD SUSPENSION	1	1	1	1
14	32002160	TIE ROD LOWER Disc	1	1	1	1
15	32002170	LOWER CONSOLE COMP	1	1	1	1
16	32002190	RECALL LEVER COMP.	1	1	1	1
17	32002210	LOOKING SLEEVE COMP.	1	1	1	1
18	980206143	NUT UNI 5589 6.8 PG 20 BASSO ZB	1	1	1	1
19	981400130	GRIP HANDLE MOD.1010 30X8	1	1	1	1
20	980205672	NUT AUTOBLOC N. 6.8 PG 24	1	1	1	1
21	170020008	SPRING GUIDE	1	1	1	1
22	170020014	BELT TIGHTENING SPRING	1	1	1	1
23	980205556	NUT AUTOBLOC N. 6.8 PG 14	1	1	1	1
24	980206515	WASHER UNI6592 D 15X28X2.5 ZB	1	1	1	1
25	980206426	SCREW UNI 5739 8.8 8X20 ZB	4	4	4	4
26	980200144	WASHER UNI6592 D 8.4X17X1.6 ZB	4	4	4	4
27	981200111	SELF-LOCKING BUSHING Ø26	1	1	1	1
28	32001112	3 POINT FRAME COMP.	1	1	1	1
29	150080005	TRACTION SPRING Ø21X152	1	1	1	1
30	170010016	COMP. PIN FIRST AND SECOND CATEGORY	1	1	1	1
31	981013300	CYLINDER OLI TUBE	2	2	2	2
32	32002020	CYLINDER PIN	1	1	1	1
33	32014025	BAR ATTACK HINGE COMP.	1	1	1	1
34	981108023	ELASTIC PIN UNI 6873 12X60 ZINC	1	1	1	1
35	980206041	SCREW TPSEI 5933 10.9 12X40 ZB	2	2	2	2

THREE POINT HITCH (CONT'D)

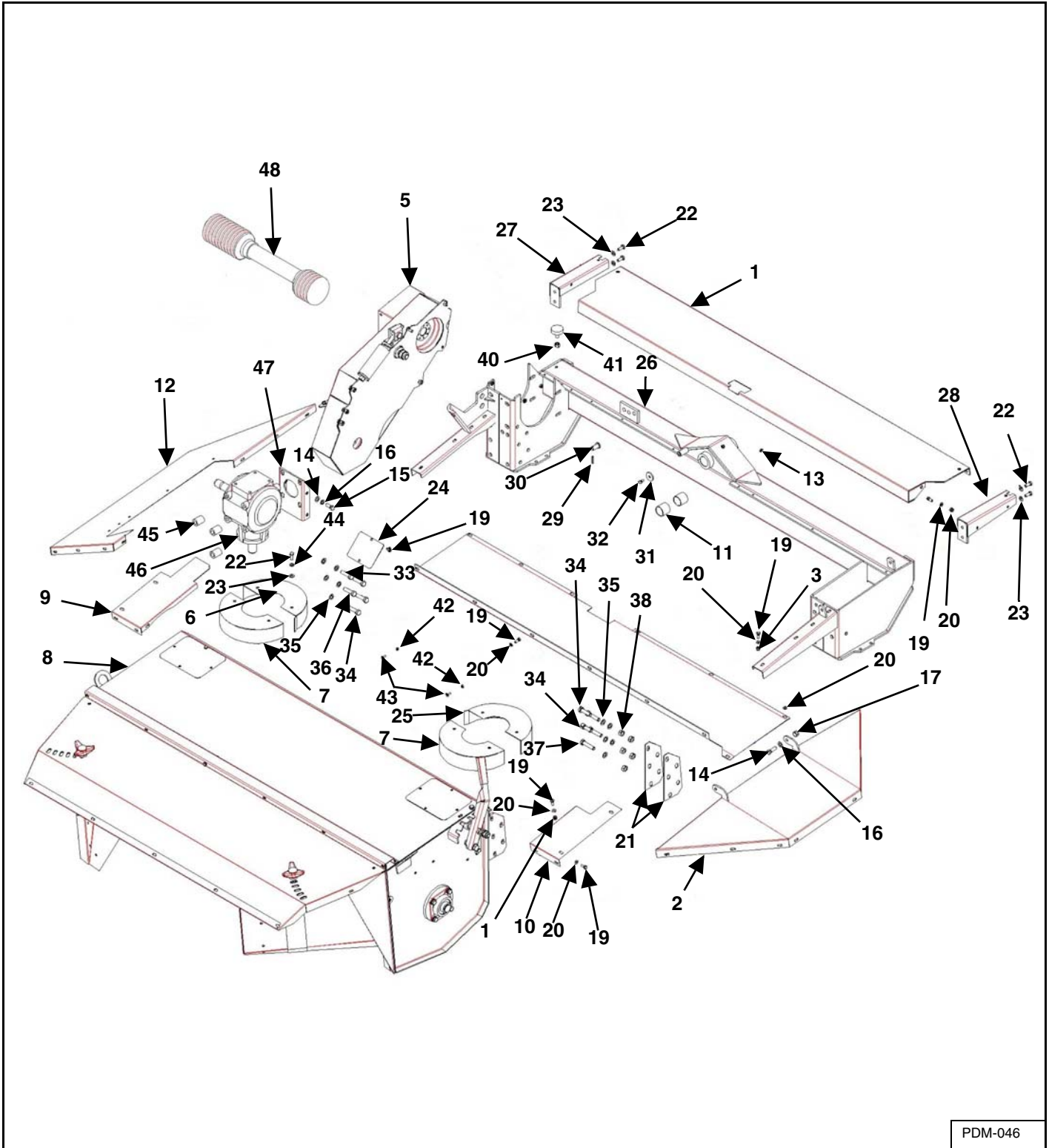


PDM-045

ITEM	PART NUMBER	DESCRIPTION	210 F/R QTY	245 F/R QTY	285 F/R QTY	320 F/R QTY
36	32002080	BAR ADJUSTER SPACER 8 mm	1	1	1	1
37	32002070	BAR ADJUSTER SPACER 1 mm	1	1	1	1
38	110010028	CHAIN 10	1	1	1	1
39	981108246	ELASTIC PIN UNI 6873 10X70 ZB	1	1	1	1
40	981106002	LOCK PIN AD R Ø3.5 UNI8833-B	1	1	1	1
41	32003130	STAND HINGE COMP.	1	1	1	1
42	981108604	ELASTIC PIN UNI 6873 10X60 ZINC	1	1	1	1
43	980206031	STRAIGHT GREASE CUP 8X1	1	1	1	1
44	980206715	SCREW TE UNI 5739 8.8 20X90 ZINC	1	1	1	1
45	32031052	BOX T 278 1000 G/	1	1	1	1
	32031060	BOX T311 R 1:1.93 540 G/	1	1	1	1
46	980206716	SCREW TE UNI 5739 8.8 16X35 ZB	4	4	4	4
47	980205269	BELLEVILLE SPRING M16 DIN2093	8	8	8	8
48	32002090	THIRD POINT PIN COMP.	1	1	1	1
49	32001512	SECOND POINT COMP.	1	1	1	1
50	980205366	SCREW TE UNI 5737 10.9 14X320 ZINC	1	1	1	1
51	980206021	SCREW TE UNI 5739 8.8 12X20 ZINC	2	2	2	2
52	980206134	NUT UNI 5587 6.8 PG 16 ALTO ZB	1	1	1	1
53	980206350	SCREW TE UNI 5739 8.8 16X50 ZINC	1	1	1	1
54	150020023	RELEASE	1	1	1	1
55	32003030	EXTERNAL SPRING SUSPENSION RC	1	1	1	1
56	32003040	INNER SPRING SUSPENSION RC	1	1	1	1
57	32003120	STAND COMP. RC	1	1	1	1
58	989931017	BULCKHEAD+ COLLAR COD.39501126R	1	1	1	1
59	980206704	WASHER UNI6592 D 13X24X2.5 ZB	4	4	4	4
60	989931020	OVAL END-WINDING COVER COD.4170402 CE	1	1	1	1
61	989931015	CARDAN 7C26032CE007N20 540 G/	1	1	1	1
	989931044	CARDAN 1000 G/	1	1	1	1
62	981600630	COPPER WASHER 1/4"	2	2	2	2
63	110010030	CHAIN LATCH	1	1	1	1
64	32004012	BAR OPENING CYLINDER	1	1	1	1
65	32004100	CYLINDER SPACER	4	4	4	4
66	980100710	NIPLES M/M 1/2" - 1/4"	2	2	2	2
67	981600619	COPPER WASHER 1/2"	2	2	2	2
68	980100617	QUICK COPLING	2	2	2	2
69	980100618	GRAFTS COVER	2	2	2	2

FRAME GROUP

F Group

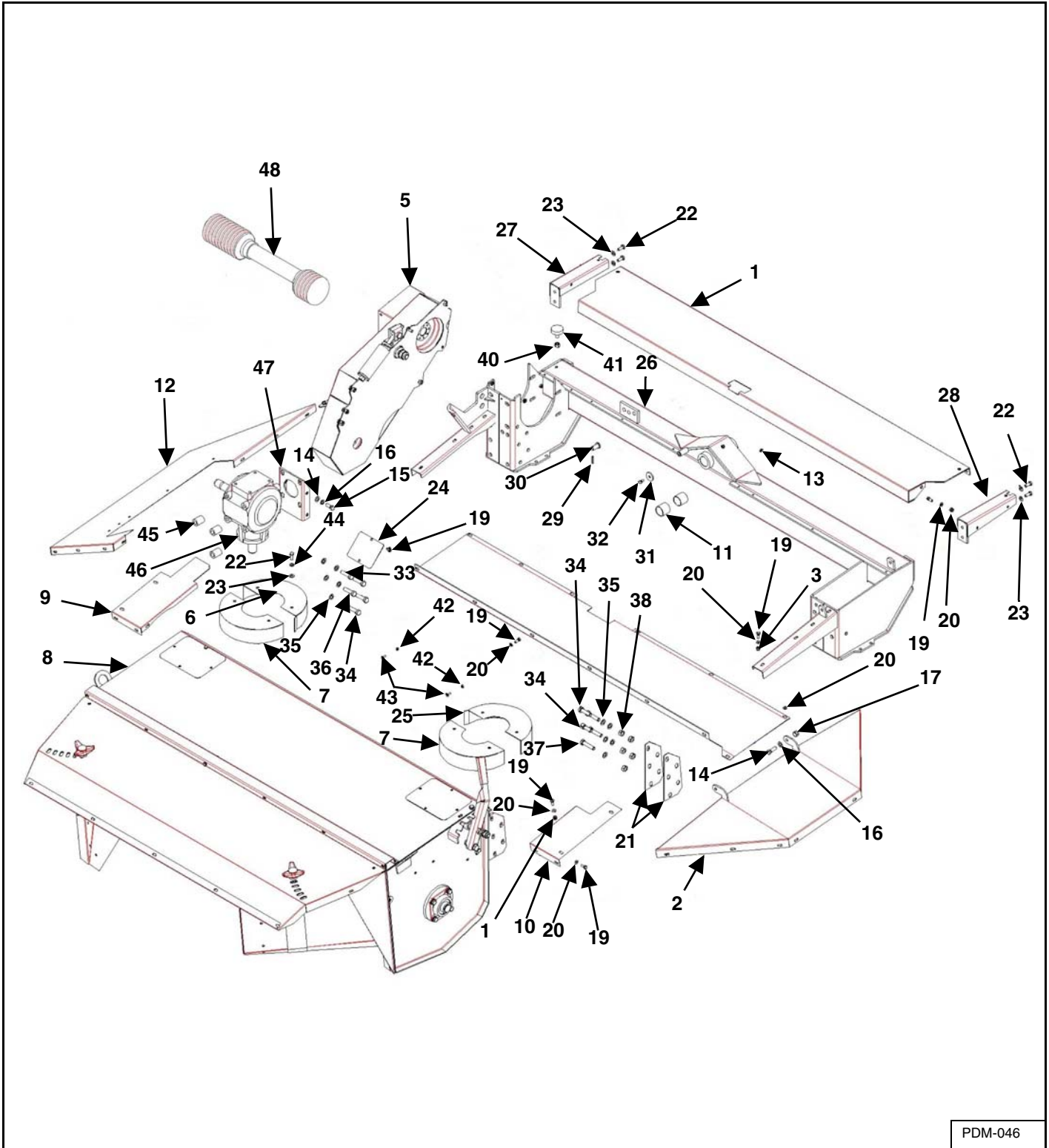


PDM-046

ITEM	PART NUMBER	DESCRIPTION	210 F/R QTY	245 F/R QTY	285 F/R QTY	320 F/R QTY
1	32041000	FRONT COVER 210	1	-	-	-
	32041010	FRONT COVER 245	-	1	-	-
	32041020	FRONT COVER 285	-	-	1	-
	32041030	FRONT COVER 320	-	-	-	1
2	32041210	RIGHT LATERAL COVER	2	1	1	1
3	980205148	AUTOBLOC NUT N. 6.8 PG 8	3	3	3	3
4	32042000	BACK COVER 210 RCF	1	-	-	-
	32042010	BACK COVER 245 RCF	-	1	-	-
	32042020	BACK COVER 285 RCF	-	-	1	v
	32042030	BACK COVER 320 RCF	-	-	-	1
5	32033210	RCF TRASMISSION GROUP	1	1	1	1
6	32015060	FRONT DRUM PROTECTION	1	1	1	1
7	32015062	BACK DRUM PROTECTION	2	2	2	2
8	32051000	CONDITIONING GROUP 210	1	-	-	-
	32051010	CONDITIONING GROUP 245	-	1	-	-
	32051020	CONDITIONING GROUP 285	-	-	1	-
	32051030	CONDITIONING GROUP 320	-	-	-	1
9	32042045	LEFT LATERAL COVER	1	1	1	1
10	32042040	RIGHT LATERAL COVER	1	1	1	1
11	981700029	BRASS AUTOLUB 40X44X40 DX	2	2	2	2
12	32042060	LEFT LATERAL PROTECTION PLATE	1	1	1	1
13	980206031	STRAIGHT GREASE CUP 8X1	1	1	1	1
14	980206704	WASHER UNI6592 D 13X24X2.5 ZB	2	2	2	2
15	980206441	SCREW TE UNI 5739 8.8 12X30 ZINC	1	1	1	1
16	980206552	WASHER GROWER M12 ZB	1	1	1	1
17	980205699	NUT ES AUT. M12 UNI7473	1	1	1	1
18	980206435	SCREW TE UNI 5739 8.8 12X35 ZB	1	1	1	1
19	980206426	SCREW TE UNI 5739 8.8 8X20 ZB	6	6	6	6
20	980206426	WASHER UNI6592 D 8.4X17X1.6 ZB	6	6	6	6

FRAME GROUP (CONT'D)

F Group (Cont'd)



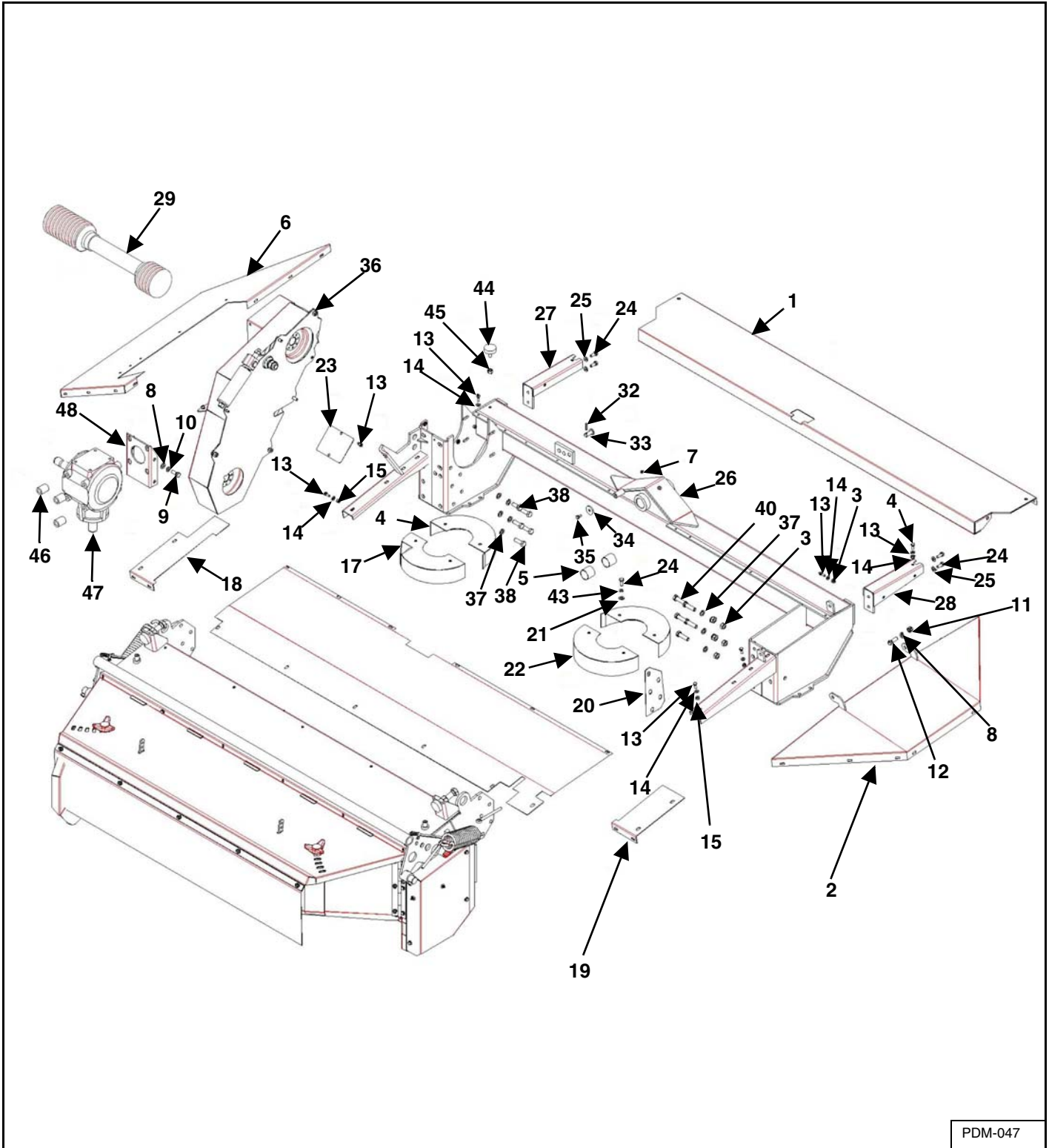
PDM-046



ITEM	PART NUMBER	DESCRIPTION	210 F/R QTY	245 F/R QTY	285 F/R QTY	320 F/R QTY
21	32052075	ATTACK CONSOLE SPACER	2	2	2	2
22	980206109	SCREW TE UNI 5739 8.8 10X25 ZINC	5	5	5	5
23	980206245	WASHER M10 UNI6592 ZB	5	5	5	5
24	32015040	FRAME ISPECTION CLOSING	1	1	1	1
25	32015061	LEFT DRUM PROTECTION	1	1	1	1
26	32011000	FRAME 210	1	1	1	1
	32011010	FRAME 245	-	1	-	-
	32011012	FRAME 285	-	-	1	-
	32011014	FRAME 320	-	-	-	1
27	32011160	FRONT LEFT ARM SET	1	1	1	1
28	32011162	FRONT RIGHT ARM SET	1	1	1	1
29	981108214	ELASTIC PIN UNI 6873 5X36 ZINC	1	1	1	1
30	32013010	PIN D16	1	1	1	1
31	32013062	FLOTATION STOPPER	1	1	1	1
32	980206170	SCREW TE UNI 5739 8.8 8X16 ZB	1	1	1	1
33	980205337	SCREW TE UNI 5739 10.9 14X35	1	1	1	1
34	980205362	SCREW TE UNI 5737 10.9 14X50	4	4	4	4
35	980205392	WASHER GROWER D 14 RINF	10	10	10	10
36	980205221	SCREW TCEI UNI 5931 8.8 14X40	2	2	2	2
37	980205398	SCREW TE UNI 5737 10.9 14X60	3	3	3	3
38	980206556	METABLOC NUT M 14 ZG	5	5	5	5
39	32042910	PROTECTION BURLAP 245 RCF	1	1	1	1
40	980900280	ANTIVIBRATION TYPE 5015	1	1	1	1
41	980205196	NUT UNI 5587 M12	1	1	1	1
42	980206227	METABLOC NUT M 6 ZG	2	2	2	2
43	980206004	SCREW TE UNI 5739 8.8 6X16 ZINC	2	2	2	2
44	980206557	WASHER GROWER D 10 RINF ZINC	1	1	1	1
45	32015035	85HP BOX FIXING BUSHING	3	3	3	3
46	32031070	GEAR BOX TV312H 1:3 9.312.732.00	1	1	1	1
47	32015015	85HP COUNTERBOX SUPPORT	1	1	1	1
48	989931018	CARDAN SHAFT DS40061CE007001	1	1	1	1

FRAME GROUP (CONT'D)

R Group



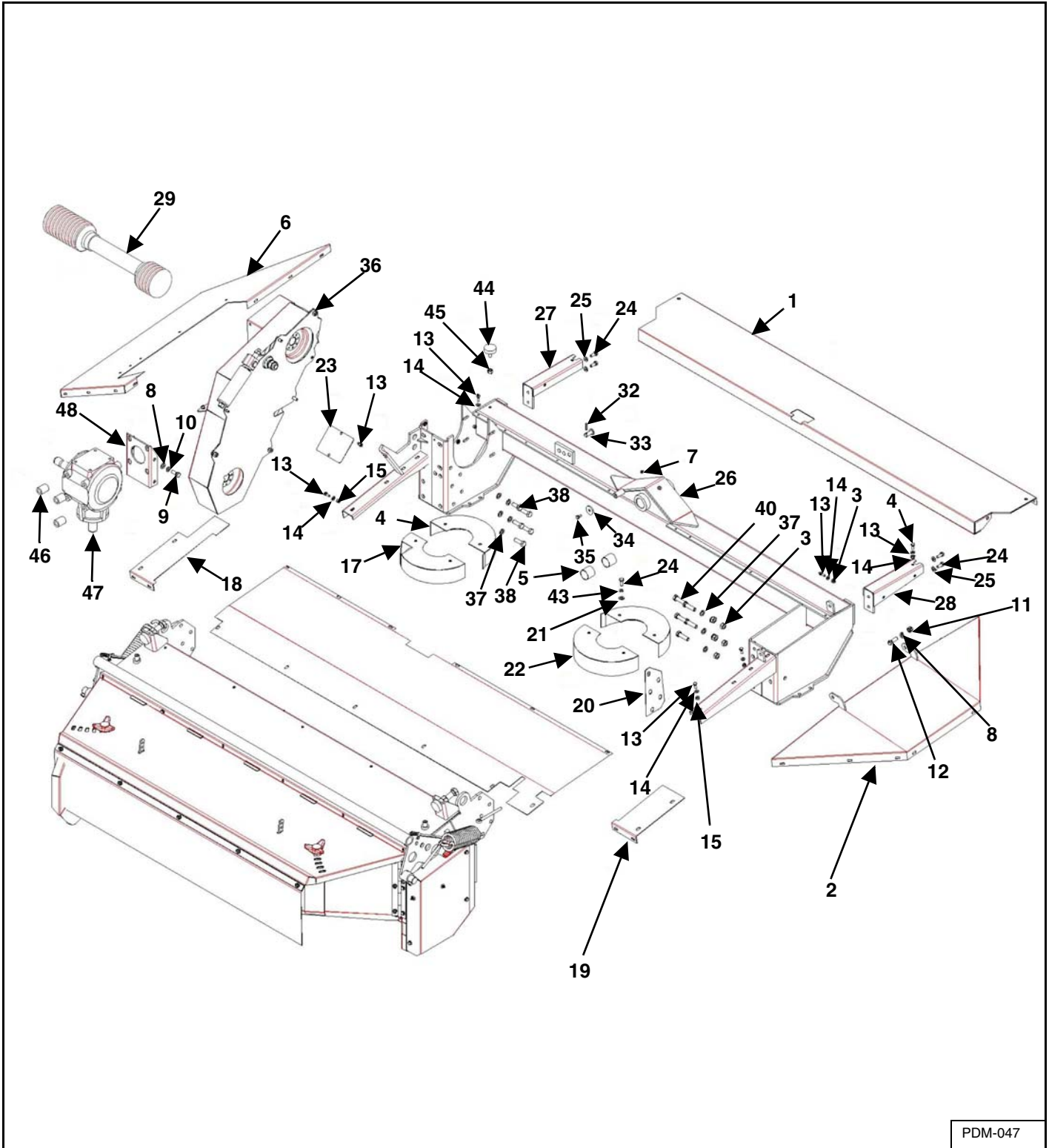
PDM-047



ITEM	PART NUMBER	DESCRIPTION	210 F/R QTY	245 F/R QTY	285 F/R QTY	320 F/R QTY
1	32041000	FRONT DUMP COWLING 210	1	-	-	-
	32041010	FRONT DUMP COWLING 245	-	1	-	-
	32041020	FRONT DUMP COWLING 285	-	-	1	-
	32041030	FRONT DUMP COWLING 320	-	-	-	1
2	32041210	RIGHT LATERAL COVER	1	1	1	1
3	980205148	AUTOBLOC NUT N. 6.8 PG 8	1	1	1	1
4	32015060	FRONT RIGHT DRUM PROTECTION	1	1	1	1
5	981700233	BUSHING AUTOLUB 40X44X40 DX	1	1	1	1
6	32042060	LATERAL PROTECTION SHIELD	1	1	1	1
7	980206031	STRAIGHT GREASE CUP 8X1	1	1	1	1
8	980206704	WASHER UNI6592 D 13X24X2.5 ZB	1	1	1	1
9	980206441	SCREW TE UNI 5739 8.8 12X30 ZINC	5	5	5	5
10	980206552	WASHER GROWER M12 ZB	5	5	5	5
11	980205699	NUT ES AUT. M12 UNI7473	1	1	1	1
12	980206435	SCREW TE UNI 5739 8.8 12X35 ZB	1	1	1	1
13	980206426	SCREW TE UNI 5739 8.8 8X20 ZB	1	1	1	1
14	980200144	WASHER UNI6592 D 8.4X17X1.6 ZB	1	1	1	1
15	980206098	NUT UNI 5587 6.8 PG 8 ALTO ZB	1	1	1	1
16	32042200	REAR PROTECTION 210 RCG	1	-	-	-
	32042210	REAR PROTECTION 245 RCG	-	1	-	-
	32042220	REAR PROTECTION 285 RCG	-	-	1	-
	32042230	REAR PROTECTION 320 RCG	-	-	-	1
17	32015080	DRUM PROTECTION RCG	1	1	1	1
18	32042240	LEFT LATERAL COVER RCG	1	1	1	1
19	32042250	RIGHT LATERAL COVER RCG	1	1	1	1
20	32052075	ATTACK CONSOLE SPACER	1	1	1	1

FRAME GROUP (CONT'D)

R Group (Cont'd)

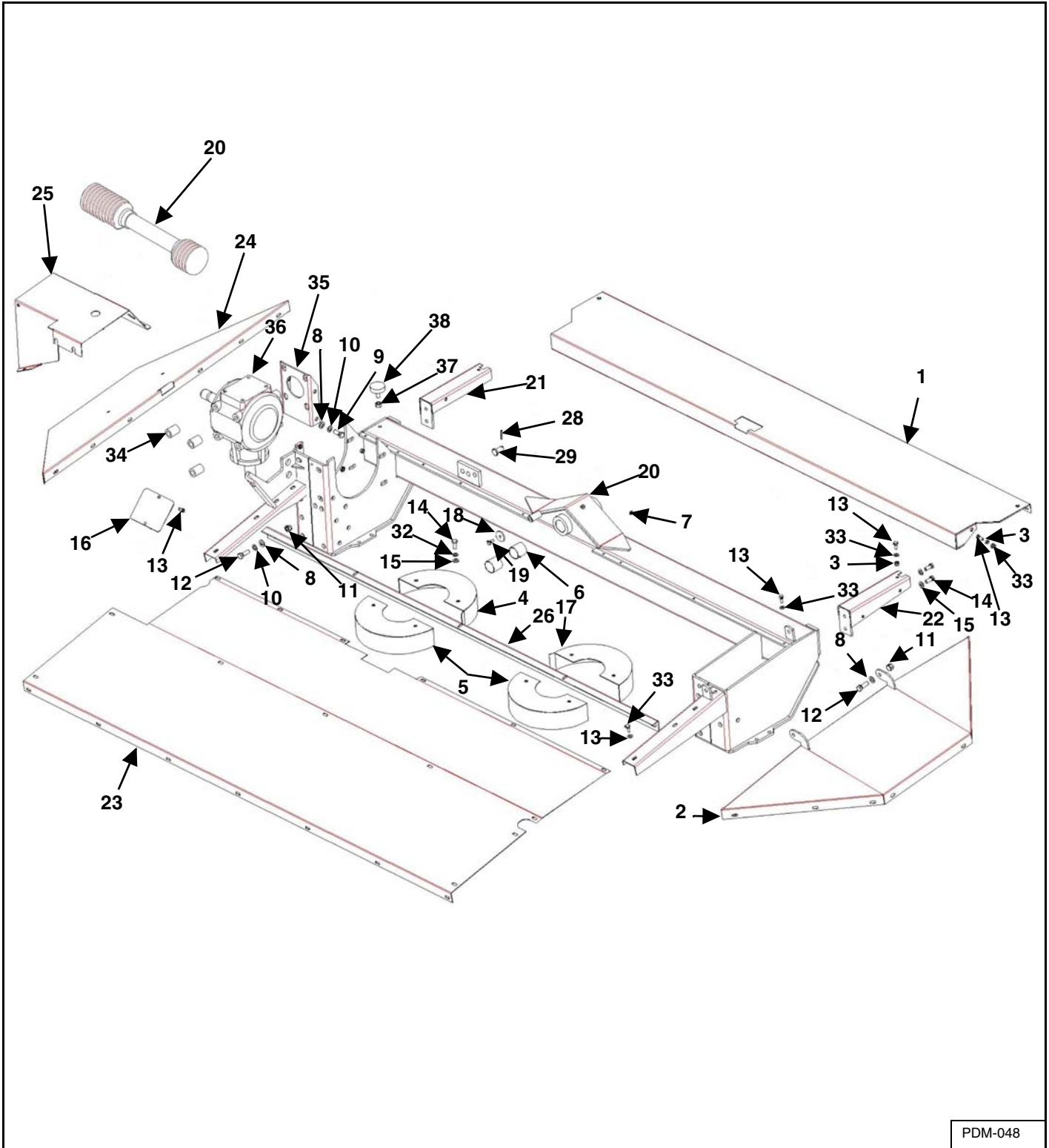


PDM-047

ITEM	PART NUMBER	DESCRIPTION	210 F/R QTY	245 F/R QTY	285 F/R QTY	320 F/R QTY
21	32015061	FRONT LEFT DRUM PROTECTION	1	1	1	1
22	32015062	REAR DRUM PROTECTION	1	1	1	1
23	32015040	FRAME INSPECTION CLOSING	1	1	1	1
24	980206109	SCREW TE UNI 5739 8.8 10X25 ZINC	5	5	5	5
25	980206245	WASHER M10 UNI6592 ZB	5	5	5	5
26	32011010	FRAME 245	1	1	1	1
27	32011160	FRONT LEFT ARM SET	1	1	1	1
28	32011162	FRONT RIGHT ARM SET	1	1	1	1
29	989931018	CARDAN SHAFT DS40061CE007001	1	1	1	1
30	32055002	ROLLER CONDITIONER GROUP 210	1	-	-	-
	32055012	ROLLER CONDITIONER GROUP 245	-	1	-	-
	32055022	ROLLER CONDITIONER GROUP 285	-	-	1	-
	32055032	ROLLER CONDITIONER GROUP 320	-	-	-	1
32	981108214	ELASTIC PIN UNI 6873 5X36 ZINC	1	1	1	1
33	32013010	HINGE D16	1	1	1	1
34	32013062	FLOTATION LOCKING	1	1	1	1
35	980206170	SCREW TE UNI 5739 8.8 8X16 ZB	1	1	1	1
36	32033110	RCG TRASMISSION	1	1	1	1
37	980205392	WASHER GROWER D 14	10	10	10	10
38	980205368	SCREW TE UNI 5739 10.9 14X40	4	4	4	4
39	980205337	SCREW TE UNI 5739 10.9 14X35	1	1	1	1
40	980205362	SCREW TE UNI 5737 10.9 14X50	5	5	5	5
41	980206556	METABLOC NUT M 14 ZG	5	5	5	5
43	980206557	WASHER GROWER D 10 RINF ZINC	1	1	1	1
44	980900280	ANTIVIBRATION 5015	1	1	1	1
45	980205196	NUT ES UNI5587 M12	1	1	1	1
46	32015035	85HP BOX FIXING BUSHING	3	3	3	3
47	32031070	GEAR BOX TV312H 1:3 9.312.732.00	1	1	1	1
48	32015015	85 HP COUNTERBOX SUPPORT	1	1	1	1

FRAME GROUP (CONT'D)

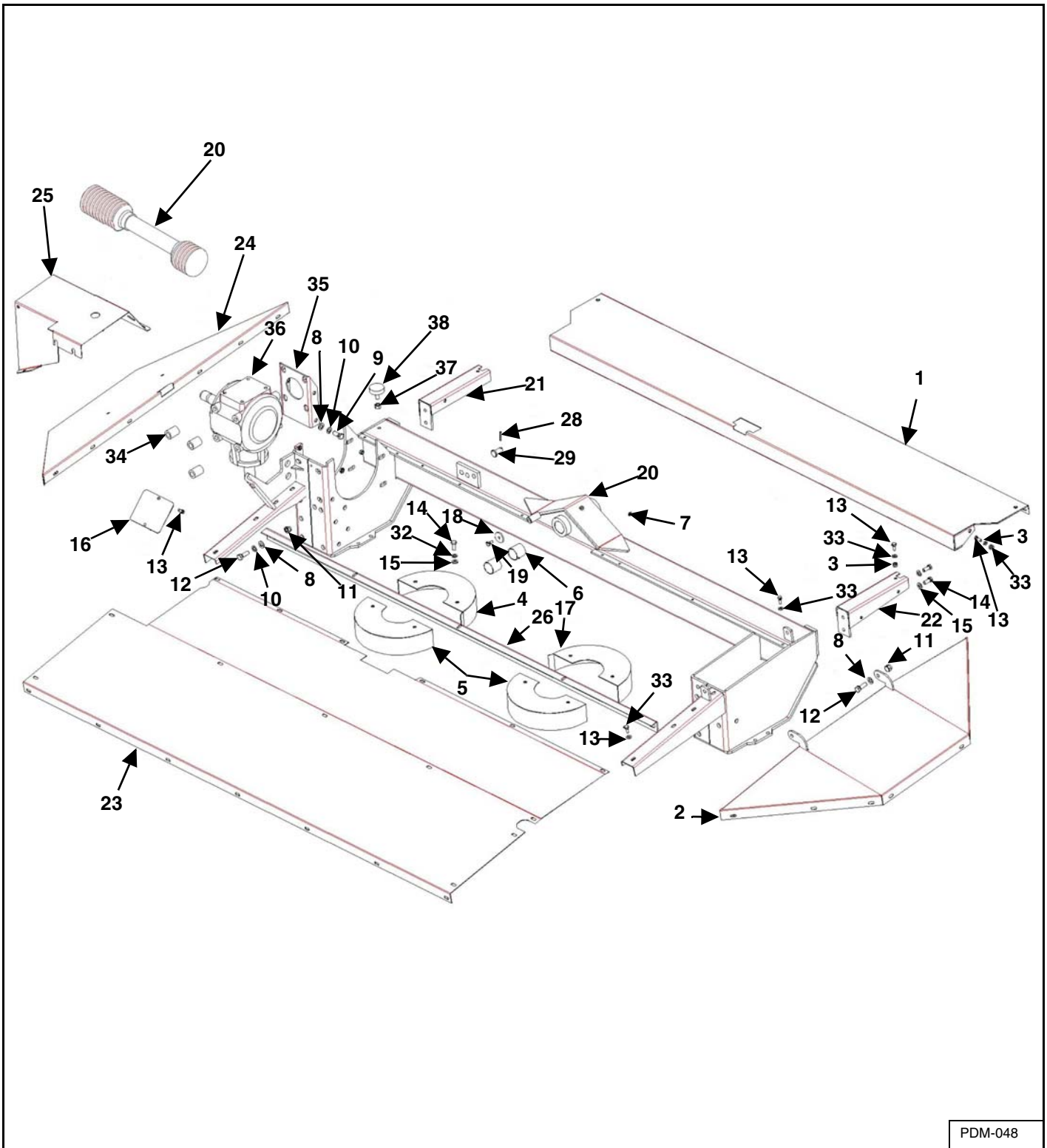
Normal Group



ITEM	PART NUMBER	DESCRIPTION	210 F/R QTY	245 F/R QTY	285 F/R QTY	320 F/R QTY
1	32041000	FRONT DUMP COWLING 210	1	-	-	-
	32041010	FRONT DUMP COWLING 245	-	1	-	-
	32041020	FRONT DUMP COWLING 285	-	-	1	-
	32041030	FRONT DUMP COWLING 320	-	-	-	1
2	32041210	RIGHT COWLING	1	1	1	1
3	980205148	AUTOBLOC NUT N. 6.8 PG 8	3	3	3	3
4	32015060	FRONT DRUM PROTECTION DX	1	1	1	1
5	32015062	REAR DRUM PROTECTION	2	2	2	2
6	981700029	BUSHING AUTOLUB 40X44X40 DX	2	2	2	2
7	980206031	STRAIGHT GREASE CUP 8X1	1	1	1	1
8	980206704	WASHER UNI6592 D 13X24X2.5 ZB	2	2	2	2
9	980206441	SCREW TE UNI 5739 8.8 12X30 ZINC	1	1	1	1
10	980206552	WASHER GROWER M12 ZB	2	2	2	2
11	980205699	NUT ES AUT. M12 UNI7473	2	2	2	2
12	980206435	SCREW TE UNI 5739 8.8 12X35 ZB	2	2	2	2
13	980206426	SCREW TE UNI 5739 8.8 8X20 ZB	5	5	5	5
14	980206109	SCREW TE UNI 5739 8.8 10X25 ZINC	5	5	5	5
15	980206245	WASHER M10 UNI6592 ZB	5	5	5	5
16	32015040	FRAME INSPECTION CLOSING	1	1	1	1
17	32015061	FRONT DRUM PROTECTION SX	1	1	1	1
18	32013062	FLOTATION LOCKING	1	1	1	1
19	980206170	SCREW TE UNI 5739 8.8 8X16 ZB	1	1	1	1
20	32011010	FRAME 245	1	1	1	1

FRAME GROUP (CONT'D)

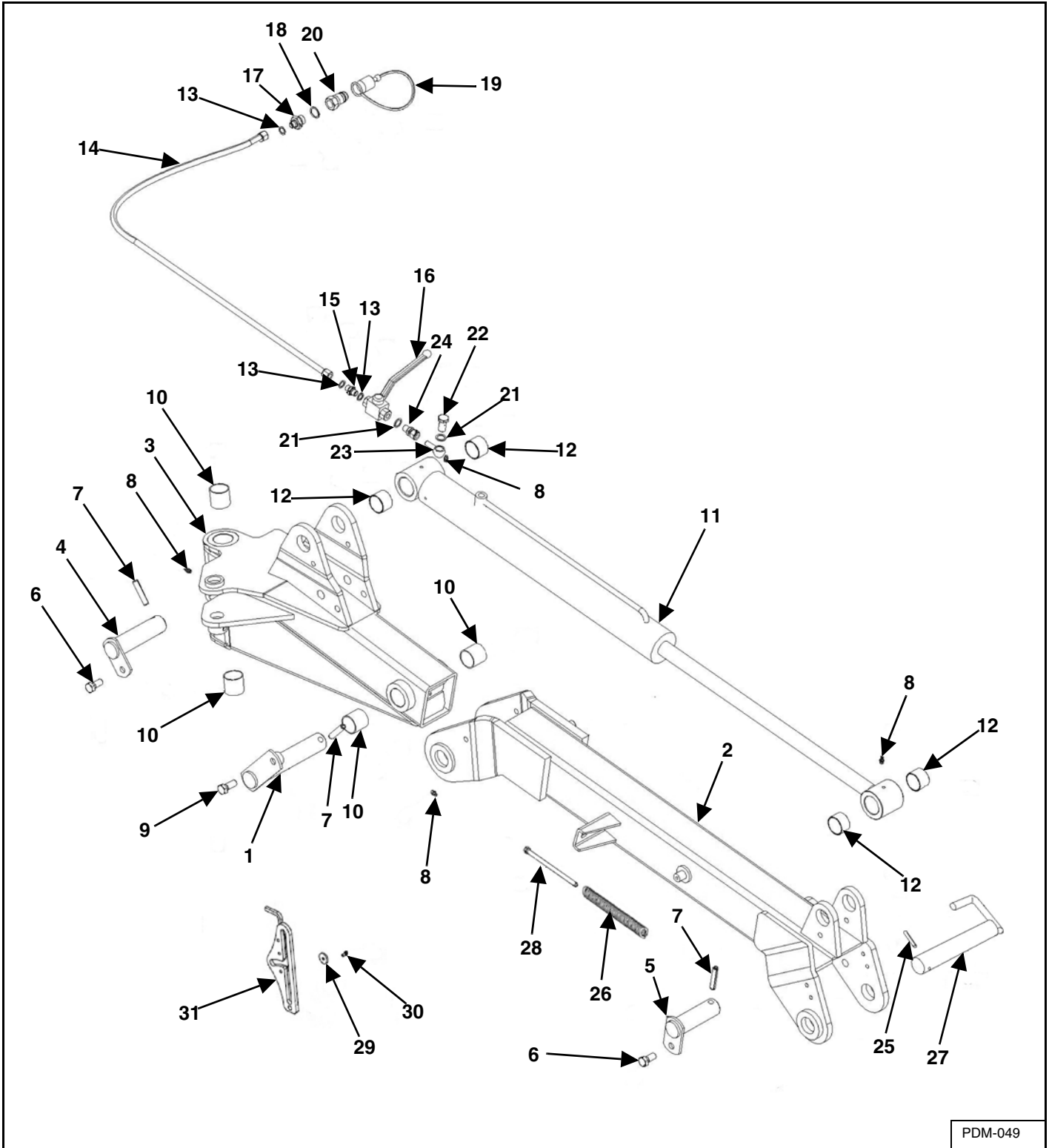
Normal Group (Cont'd)



PDM-048

ITEM	PART NUMBER	DESCRIPTION	210 F/R QTY	245 F/R QTY	285 F/R QTY	320 F/R QTY
21	32011160	FRONT ARM SX	1	1	1	1
22	32011162	FRONT ARM DX	1	1	1	1
23	32041100	REAR COVER 210	1	-	-	-
	32041110	REAR COVER 245	-	1	-	-
	32041120	REAR COVER 285	-	-	1	-
	32041130	REAR COVER 320	-	-	-	1
24	32041240	LATERAL COVER	1	1	1	1
25	32041260	CARDAN PROTECTION SHIELD	1	1	1	1
26	32041105	COVER ANGULAR REINFORCEMENT 210	1	-	-	-
	32041115	COVER ANGULAR REINFORCEMENT 245	-	1	-	-
	32041125	COVER ANGULAR REINFORCEMENT 285	-	-	1	-
	32041175	COVER ANGULAR REINFORCEMENT 320	-	-	-	1
28	981108214	ELASTIC PIN UNI 6873 5X36 ZINC	1	1	1	1
29	32013010	HINGE D16	1	1	1	1
30	989931018	CARDAN SHAFT DS40061CE007001	1	1	1	1
32	980206557	WASHER GROWER D 10 RINF ZINC	1	1	1	1
33	980200144	WASHER UNI6592 D 8.4X17X1.6 ZB	4	4	4	4
34	32015035	85HP BOX FIXING BUSHING	3	3	3	3
35	32015015	85 HP COUNTERBOX SUPPORT	1	1	1	1
36	32031070	GEAR BOX TV312H 1:3 9.312.732.00	1	1	1	1
37	980205196	NUT ES UNI5587 M12	1	1	1	1
38	980900280	ANTIVIBRATION 5015	1	1	1	1

HYDRAULIC ARM

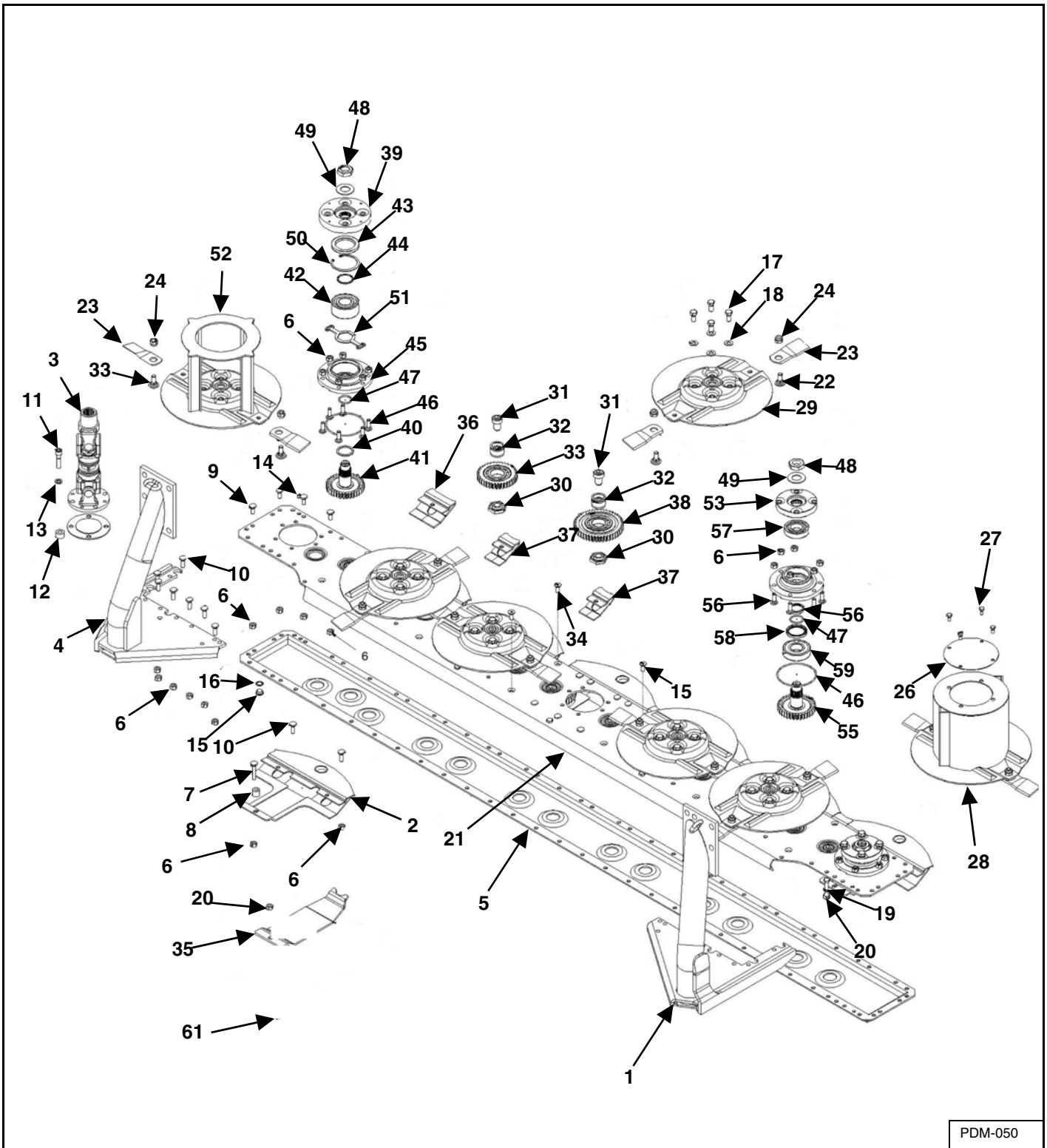


PDM-049



ITEM	PART NUMBER	DESCRIPTION	210 F/R QTY	245 F/R QTY	285 F/R QTY	320 F/R QTY
1	32014030	VERTICAL RISING HINGE	1	1	1	1
2	32012408	MOBILE ARM 210	1	-	-	-
	32012410	MOBILE ARM 245	-	1	-	-
	32012412	MOBILE ARM 285	-	-	1	-
	32012414	MOBILE ARM 320	-	-	-	1
3	32012512	MOBILE ARM ATTACK	1	1	1	1
4	32014070	FRONT CYLINDER HINGE OF VERTICAL RISING	1	1	1	1
5	32014060	CYLINDER HINGE OF VERTICAL RISING	1	1	1	1
6	980205559	SCREW TE UNI 5739 8.8 14X25 ZINC	2	2	2	2
7	981108023	ELASTIC PIN UNI 6873 12X60 ZINC	3	3	3	3
8	980206031	STRAIGHT GREASE CUP 8X1	4	4	4	4
9	980206299	SCREW TE UNI 5739 8.8 14X35 ZINC	1	1	1	1
10	981700018	BRASS AUTOLUB 40X44X50 DX	4	4	4	4
11	32016030	VERTICAL LIFT CYLINDER 70x600	1	1	1	1
12	981700021	BRASS AUTOLUB 40X44X30 DX	4	4	4	4
13	981600630	COPPER WASHER 1/4"	3	3	3	3
14	981013417	TUBE 1/4"L=2900 FD/FD	1	1	1	1
15	980100626	NIPLES M/M 1/4"	1	1	1	1
16	980600397	CLOSER VANE 1/4G	1	1	1	1
17	980100710	NIPLES M/M 1/2"-1/4"	1	1	1	1
18	981600619	COPPER WASHER 1/2"	1	1	1	1
19	980100618	COVER JOINT 1/2"	1	1	1	1
20	980100617	RAPIT JOINT M 1/2"	1	1	1	1
21	981600618	COPPER WASHER 3/8"	2	2	2	2
22	980100662	PIERCED SCREW 3/8"	1	1	1	1
23	980100612	RING 3/8"	1	1	1	1
24	980100611	ROUNDING TN 92-12L 1/4"	1	1	1	1
25	981108023	ELASTIC PIN UNI 6873 12X60 ZINC	1	1	1	1
26	150011023	SUSPENSION SPRING	1	1	1	1
27	32014000	LINK HINGE	1	1	1	1
28	123003750	TIE ROD	1	1	1	1
29	32013062	FLOTATION LOCKING	1	1	1	1
30	980206170	SCREW TE UNI 5739 8X16 8.8 ZINC	1	1	1	1
31	32013110	LOCK LEVER	1	1	1	-
	32013112	LOCK LEVER	-	-	-	1

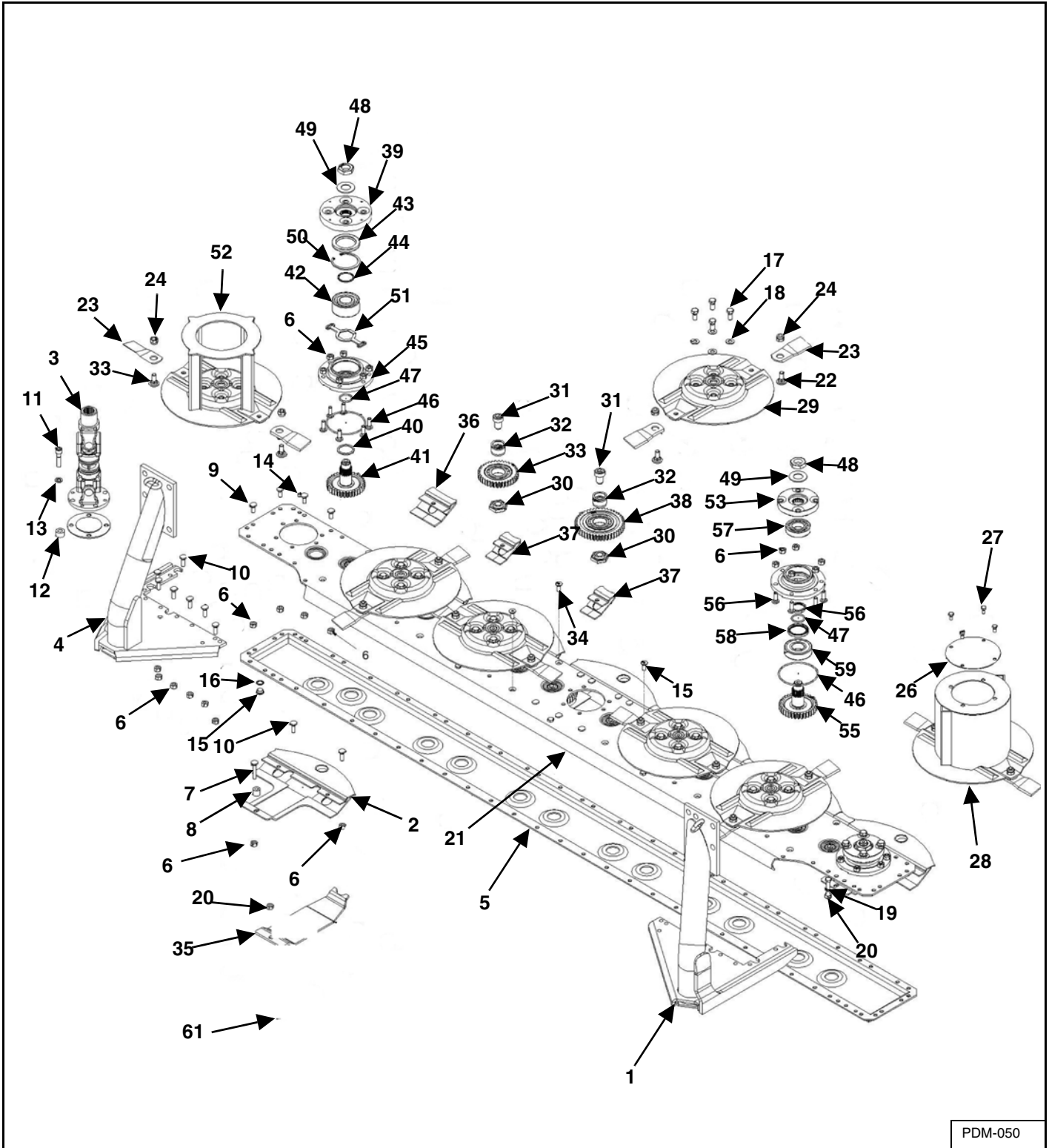
CUTTER BAR



PDM-050

ITEM	PART NUMBER	DESCRIPTION	210 F/R QTY	245 F/R QTY	285 F/R QTY	320 F/R QTY
1	32021181	RIGHT COLUMN	1	1	1	1
2	10021000	STONE BUFFER	5	6	7	8
3	32031010	CARDAN SHAFT W3200 12.35.48	1	1	1	1
4	32021310	LEFT COLUMN	1	1	1	1
5	50021015	GEAR TANK 210	1	-	-	-
	32021020	GEAR TANK 245	-	1	-	-
	32021040	GEAR TANK 285	-	-	1	-
	32021060	GEAR TANK 320	-	-	-	1
6	980205320	NUT UNI 5587 10.9 M10	96	105	119	133
7	113001150	SPECIAL SCREW M10X54	4	5	6	7
8	113001250	STONE-BUFFER MARK UP BUSHING	4	5	6	7
9	113001050	SPECIAL SCREW M10X24	43	49	54	39
10	0404710100	SPECIAL SCREW M10X30	48	54	60	68
11	980206217	SCREW TCEI UNI 5931 12.9 12X50	4	4	4	4
12	32031014	CARDAN FLANGE SPACER	4	4	4	4
13	980206552	WASHER GROWER M12 ZB	4	4	4	4
14	981108024	ELASTIC PIN UNI 6873 10X10	2	2	2	2
15	980206519	PLUG TCE 2-3/8"C.S.CAVA ES	2	2	2	2
16	980600695	ALU WASHER 3/8"	2	2	2	2
17	980205382	SCREW TE UNI 5739 10.9 PG 12X25 ZB	16	20	24	32
18	980205534	CUP SPRING 25X12,2X1,5 ZG	20	24	28	32
19	980206018	SCREW TE UNI 5737 8.8 10X60 ZINC	5	6	7	8
20	980205250	NUT METALBLOC M 10 ZB	10	12	14	16
21	32021011	TANK COVER 245 V2	-	1	-	-
	32021031	TANK COVER 285 V2	-	-	1	-
	32021051	TANK COVER 320 V2	-	-	-	1
22	505060	BLADE CONNECTION SCREW	10	12	14	16
23	980204184	KNIFE MER 129	4	6	6	8
24	980205699	NUT ES AUT. M12 UNI7473	1	1	1	1
25	980204183	KNIFE MEL 129	4	4	4	4
26	32022015	DRUM CUP	1	1	1	1
27	980206170	SCREW TE UNI 5739 8.8 8X16 ZB	4	4	4	4
28	133000250	LATERAL DRUM COMP.	1	1	1	1
29	113000750	CUTTING Disc	3	4	5	6
30	113002050	SPECIAL NUT M20	7	10	13	14

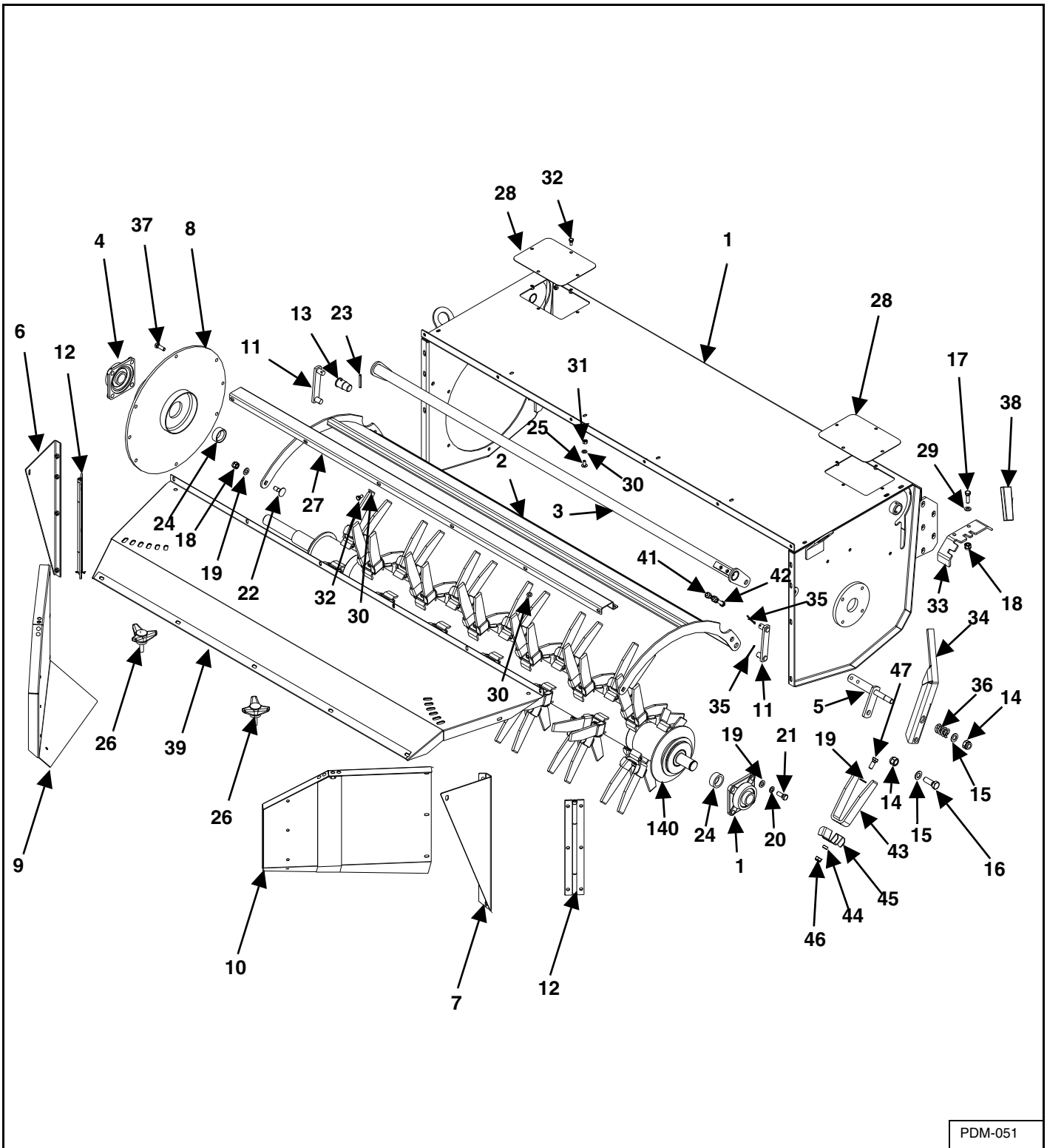
CUTTER BAR (CONT'D)



PDM-050

ITEM	PART NUMBER	DESCRIPTION	210 F/R QTY	245 F/R QTY	285 F/R QTY	320 F/R QTY
31	0404710700	SCREW TCEI M 20X30 VE7986	7	10	13	14
32	10021042	BEARING PIN V2	7	10	13	14
33	113000300	TOOTHED WHEEL Z36	3	-	3	-
34	980205516	SCREW TSEI UNI5933 M10X25 10.9 BR	8	10	12	14
35	32021390	ANTIE WEAR SHOE	5	6	7	8
36	10021131	CURVED WIDE SHOE V2	1	-	1	-
37	10021021	CURVED CLOSE SHOE V2	3	4	5	7
38	113000200	TOOTHET WHEEL Z=45	6	10	10	14
39	32022230	Disc FLANGE	1	1	1	1
40	32022240	LOWER SPACER	1	1	1	1
41	32022250	GEAR Z=34	1	1	1	1
42	981304099	BEARING 3307 2RS C3	1	1	1	1
43	980900168	OIL RETAINER CR 55X80X8 CRW1 V	1	1	1	1
44	980900169	OR 146	1	1	1	1
45	32022220	RENFORCED HUB	1	1	1	1
46	980900691	O-RING 4437 DI=110.72 SP=3.53	5	6	7	8
47	980900079	OR 4131 DI=32.92 SP=3.53	5	6	7	8
48	980205247	NUT ES UNI5589 M27X2	5	6	7	8
49	980205529	BELLEVILLESRING D27.5X52X2.5	5	6	7	8
50	981108100	INT. RING UNI 7437 C70 80	1	1	1	1
51	32022260	STOPPING NUT WRENCH	1	1	1	1
52	32022017	OPEN DRUM COMP.	1	1	1	1
53	113000550	Disc FLANGE STAND	4	5	6	7
54	113000450	BEARING STAND	4	5	6	7
55	113000250	GEAR Z=34	4	5	6	7
56	113000650	BEARING SPACER	4	5	6	7
57	981304161	BEARING 6207 2RS C3	4	5	6	7
58	980900139	OIL RETAINER DIN 3760 45X60X8 NB	4	5	6	7
59	981304154	BEARING 6307 2Z C3	4	5	6	7
60	85501189	WASHER 10 FOR SUPPLEMENTARY SKID	5	6	7	8
61	10021003	SPEC SCREW 10X65	5	6	7	8
62	32022210	DRUM SUPPORT INCOMING MOTION	1	1	1	1
63	32022110	DISC AND EXTERNAL DRUM SUPPORT	4	5	6	7
64	32021397	KIT OPTIONAL ANTIE WEAR SHOE	5	6	7	8

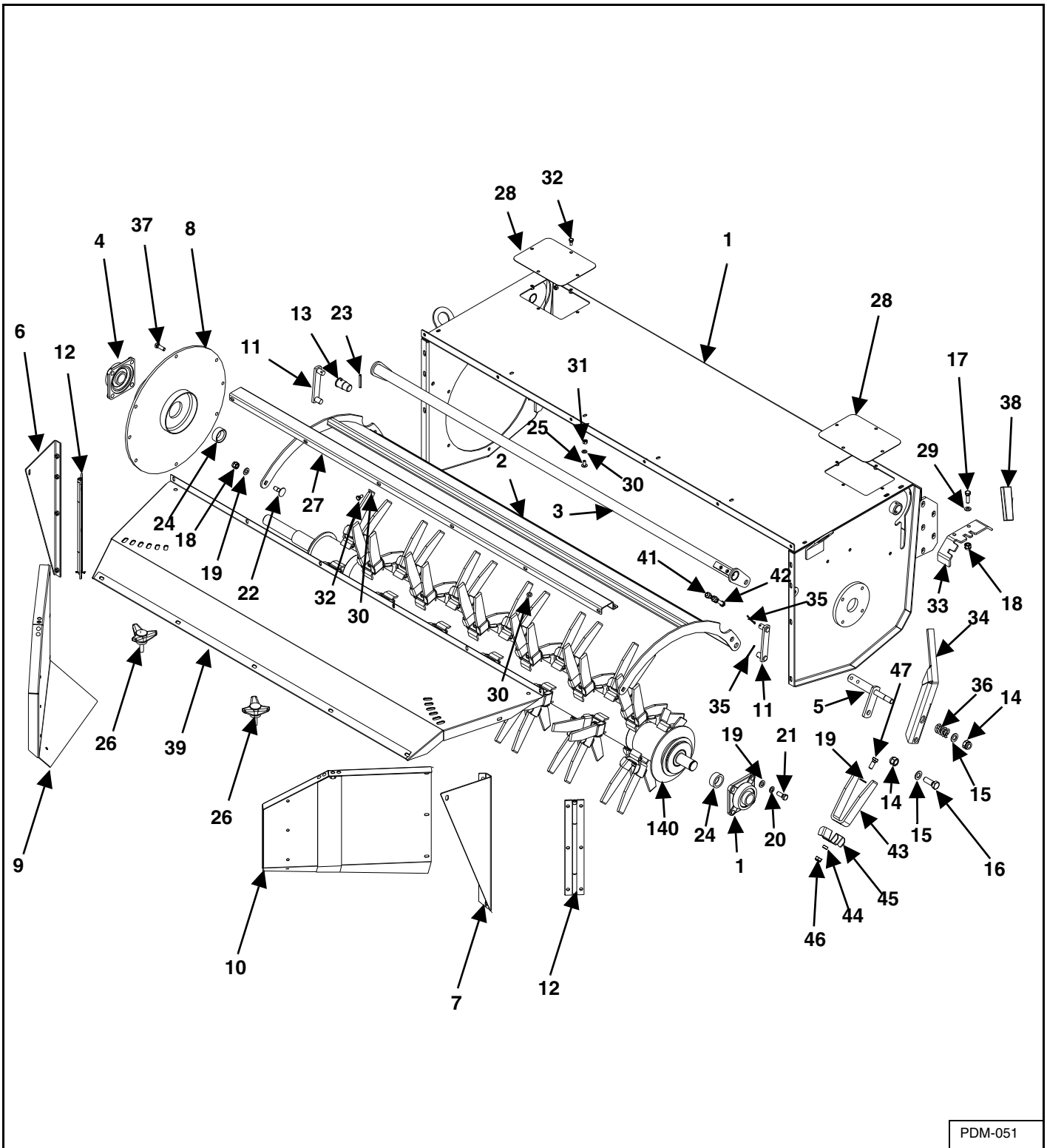
FINGER CONDITIONER



PDM-051

ITEM	PART NUMBER	DESCRIPTION	210 F/R QTY	245 F/R QTY	285 F/R QTY	320 F/R QTY
1	32052000	FRAME CONDITIONER 210 RCF	1	-	-	-
	32052010	FRAME CONDITIONER 245 RCF	-	1	-	-
	32052020	FRAME CONDITIONER 285 RCF	-	-	1	-
	32052030	FRAME CONDITIONER 320 RCF	-	-	-	1
2	32054000	CONDITIONER BALANCE PLATFORM COMP. 210	1	-	-	-
	32054010	CONDITIONER BALANCE PLATFORM COMP. 245	-	1	-	-
	32054020	CONDITIONER BALANCE PLATFORM COMP. 285	-	-	1	-
	32054030	CONDITIONER BALANCE PLATFORM COMP. 320	-	-	-	1
3	32054100	BALANCE PLATFORM CONTROL COMPENSATOR COMP.	1	-	-	-
	32054110	BALANCE PLATFORM CONTROL COMPENSATOR COMP.	-	1	-	-
	32054120	BALANCE PLATFORM CONTROL COMPENSATOR COMP.	-	-	1	-
	32054130	BALANCE PLATFORM CONTROL COMPENSATOR COMP.	-	-	-	1
4	981304041	Stand SKF Y35 TF	2	2	2	2
5	241L02350	PIN DX BEAM	1	1	1	1
6	241L01250	RIGHT SIDE EXTENSION	1	1	1	1
7	241L01350	LEFT SIDE EXTENSION	1	1	1	1
8	32052100	LEFT SIDE COVER CONTROL	1	1	1	1
9	241L01650	LEFT GRASS SCREEN	1	1	1	-
	32054315	LONG LEFT GRASS SCREEN	-	-	-	1
10	241L01750	RIGHT GRASS SCREEN	1	1	1	-
	32054310	LONG WRIGHT GRASS SCREEN	-	-	-	1
11	241L01050	BALANCE PLATFORM CONTROL ROD	2	2	2	2
12	32054400	GRASS SCREEN HINGE	2	2	2	2
13	241L02450	COMPENSATOR LEFT HINGE	1	1	1	1
14	980205671	NUT ES AUT M16 UNI7473	2	2	2	2
15	980206498	WASHER UNI6592 Ø 17X30X3 ZB	2	2	2	2
16	980206340	SCREW TE UNI 5739 8.8 16X45 ZINC	1	1	1	1
17	980206377	SCREW TE UNI 5739 8.8 10X35 ZB	1	1	1	1
18	980205699	NUT ES AUT. M12 UNI7473	2	2	2	2
19	980206704	WASHER UNI6592 D 13X24X2.5 ZB	33	43	53	61
20	980206552	WASHER GROWER M12 ZB	4	4	4	4

FINGER CONDITIONER (CONT'D)

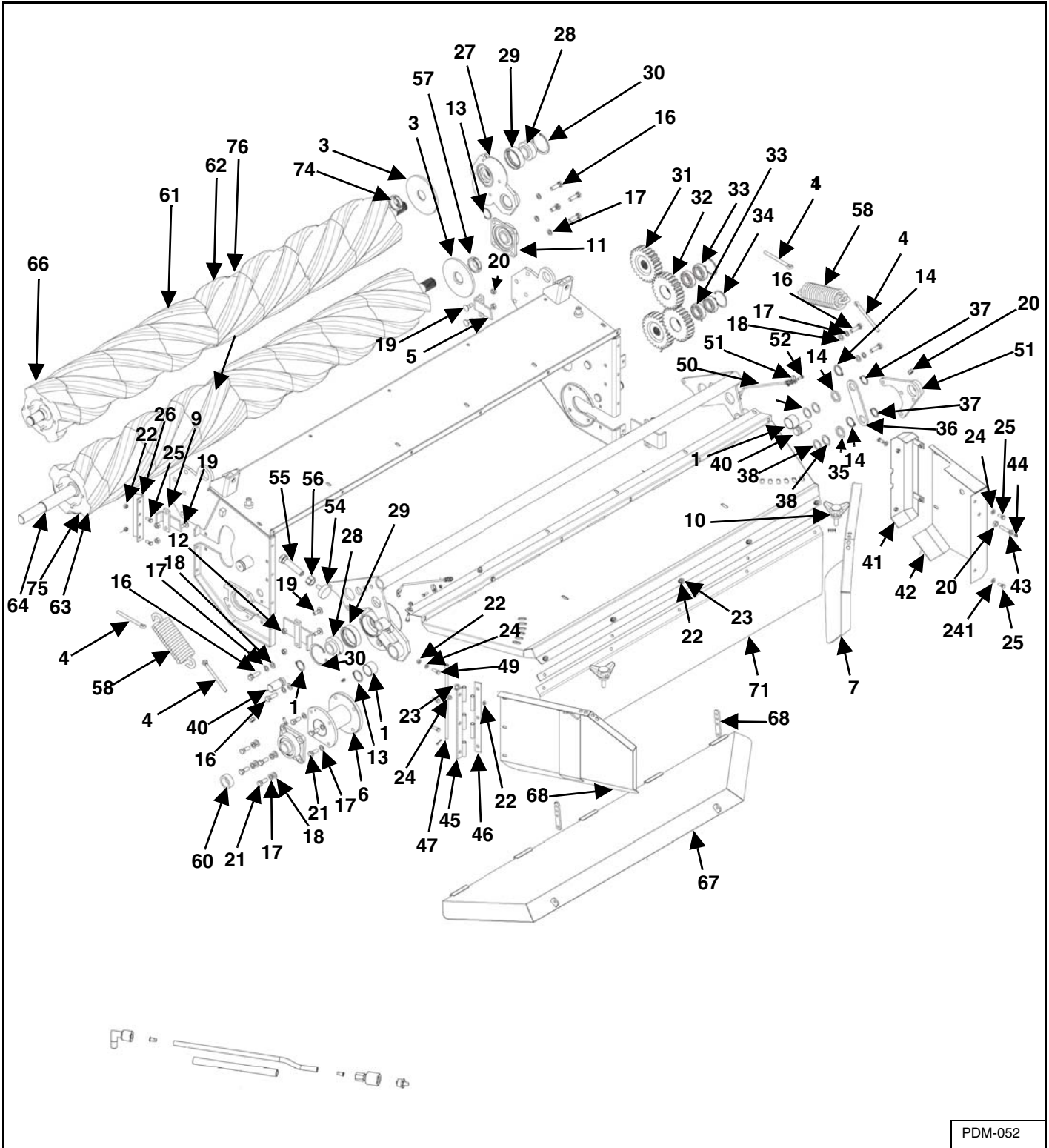


PDM-051



ITEM	PART NUMBER	DESCRIPTION	210 F/R QTY	245 F/R QTY	285 F/R QTY	320 F/R QTY
21	980206441	SCREW TE UNI 5739 8.8 12X30 ZINC	4	4	4	4
22	980206686	SCREW TTDE UNI 5732 12X35 ZINC	1	1	1	1
23	981108608	DOWEL PIN UNI 6873 6X50 ZINC	1	1	1	1
24	241L00950	BEARING SPACER	2	2	2	2
25	980206680	SCREW TTDE UNI 5732 8X20 ZINC	9	11	13	15
26	980304002	HANDLE GRIP VB639/100 P M12X40	2	2	2	2
27	50052330	OMEGA REINFORCEMENT UPPER COWLING 210	1	-	-	-
	32053040	OMEGA REINFORCEMENT UPPER COWLING 245	-	1	-	-
	32053050	OMEGA REINFORCEMENT UPPER COWLING 285	-	-	1	-
	32053060	OMEGA REINFORCEMENT UPPER COWLING 320	-	-	-	1
28	32042100	INSPECTION HOLE CLOSING	2	2	2	2
29	980206245	WASHER M10 UNI6592 ZB	1	1	1	1
30	980200144	WASHER UNI6592 D 8.4X17X1.6 ZB	5	5	5	5
31	980206098	NUT UNI 5587 6.8 PG 8 ALTO ZB	3	3	3	3
32	980206170	SCREW TE UNI 5739 8.8 8X16 ZB	3	3	3	3
33		BALANCE PLATFORM CONTROL LEVEL SELECTOR	1	1	1	1
34		BALANCE PLATFORM ADJUSTMENT LEVER	1	1	1	1
35		SPLINT PIN 4X40 UNI1336	2	2	2	2
36		SPRING 5X25X50	1	1	1	1
37		SCREW TE UNI 5739 8.8 10X30 ZINC	1	1	1	1
38		HANDLE GRIP MOD.1010 30X8	1	1	1	1
39		COMP. REAR BONNET 210	1	-	-	-
		COMP. REAR BONNET 245	-	1	-	-
		COMP. REAR BONNET 285	-	-	1	-
		COMP. REAR BONNET 320	-	-	-	1
40		COM. ROTOR 210	1	-	-	-
		COM. ROTOR 245	-	1	-	-
		COM. ROTOR 285	-	-	1	-
		COM. ROTOR 320	-	-	-	1
41		METABLOC NUT M 10 ZB	2	2	2	2
42		SCREW TE UNI 5737 8.8 10X60 ZINC	2	2	2	2
43		TINE CONDITIONER	32	38	48	56
44		TINE SCREW SPACER	32	38	48	56
45		TINE UPPER BRACKET	32	38	48	56
46		AUTOBLOC NUT N 6.8 PF12X1.25 DOWN	32	38	48	56
47		SCREW TE UNI 5740 8.8 12X30X1.25 ZINC	32	38	48	56

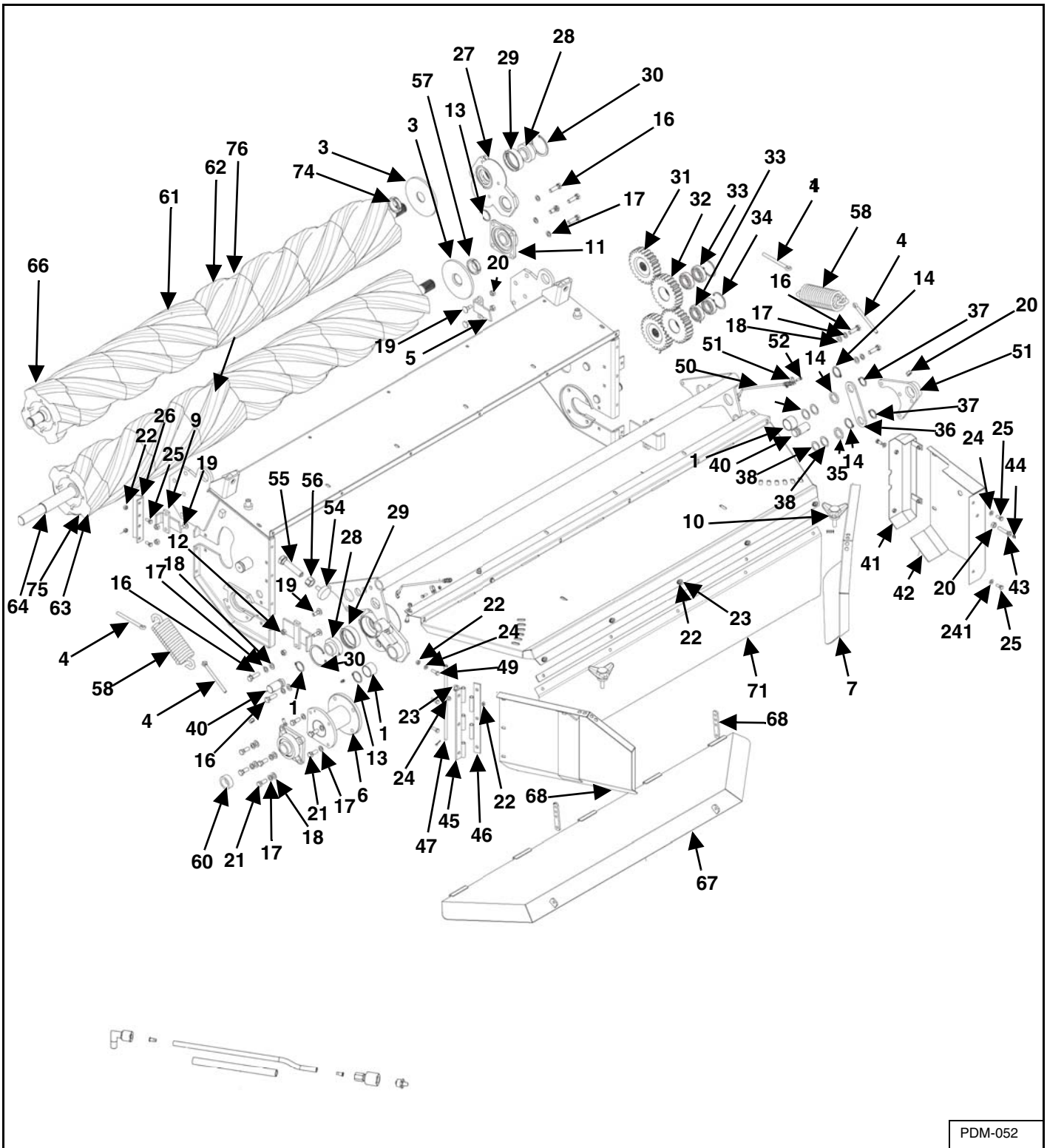
ROLLER CONDITIONER



PDM-052

ITEM	PART NUMBER	DESCRIPTION	210 F/R QTY	245 F/R QTY	285 F/R QTY	320 F/R QTY
1	981700021	AUTOLUB BUSHING 40X44X30 DX	2	2	2	2
2	32055100	CONDITIONER FRAME 210	1	-	-	-
	32055110	CONDITIONER FRAME 245	-	1	-	-
	32055120	CONDITIONER FRAME 285	-	-	1	-
	32055130	CONDITIONER FRAME 320	-	--	-	1
3	32056280	FLANGE PLUGS LOCK	2	2	2	2
4	160060032	TIE ROD M10	4	4	4	4
5	32055765	UPPER ROLLER LEFT HEAD CUP	1	1	1	1
6	32055810	MOTOR EXTENSION ENTRY	1	1	1	1
7	37053040	RIGHT CONVEYOR COMP.	1	1	-	-
	37053042	RIGHT LONG CONVEYOR COMP.	-	-	1	-
	32056720	RIGHT EXTRA LONG CONVEYOR COMP.	-	-	-	1
8	37053030	LEFT CONVEYOR COMP.	1	1	-	-
	37053032	LEFT LONG CONVEYOR COMP.	-	-	1	-
	32056710	LEFT EXTRA LONG CONVEYOR COMP.	-	-	-	1
9	32055760	UPPE ROLLER HEAD CUP	1	1	1	1
10	980304002	HAND WHEEL VB639/100 P M12X40	2	2	2	2
11	981304007	STAND SKF Y35 TR	2	2	2	2
12	32055730	LOWER ROLLER HEAD CUP	2	2	2	2
13	981108260	RING EST. UNI 7435 C70 40	2	2	2	2
14	981108250	RING EST. UNI 7436 C70 35X2.5	3	3	3	3
15	980206031	GREASE CUP 8X1	2	2	2	2
16	980206016	SCREW TE M12X40 8.8 UNI5739 ZB	7	7	7	7
17	980206552	WASHER GROWER M12 ZB	16	16	16	16
18	980206704	WASHER UNI6592 D 13X24X2.5 ZB	8	8	8	8
19	980206685	SCREW TTDE UNI 5732 10X30 ZINC	8	8	8	8
20	980206022	NUT UNI 5587 6.8 PG 10 ALTO ZINC	11	11	11	11
21	980206441	SCREW TE UNI 5739 8.8 12X30 ZINC	9	9	9	9
22	980206098	NUT UNI 5587 6.8 PG 8 ALTO ZB	24	24	24	24
23	980206680	SCREW TTDE UNI 5732 8X20 ZINC	11	11	11	11
24	980200144	WASHER UNI6592 D 8.4X17X1.6 ZB	27	27	27	27
25	980206426	SCREW TE UNI 5739 8.8 8X20 ZB	13	13	13	13
26	32055460	FRONT DEFLECTOR	2	2	2	2
27	32055400	UPPER ROLLER STAND	2	2	2	2
28	981304031	BEARING YAR 207 2RF	2	2	2	2
29	160060024	PIVOT STAND.	2	2	2	2
30	981108100	RING INT. UNI 7437 C70 80	2	2	2	2

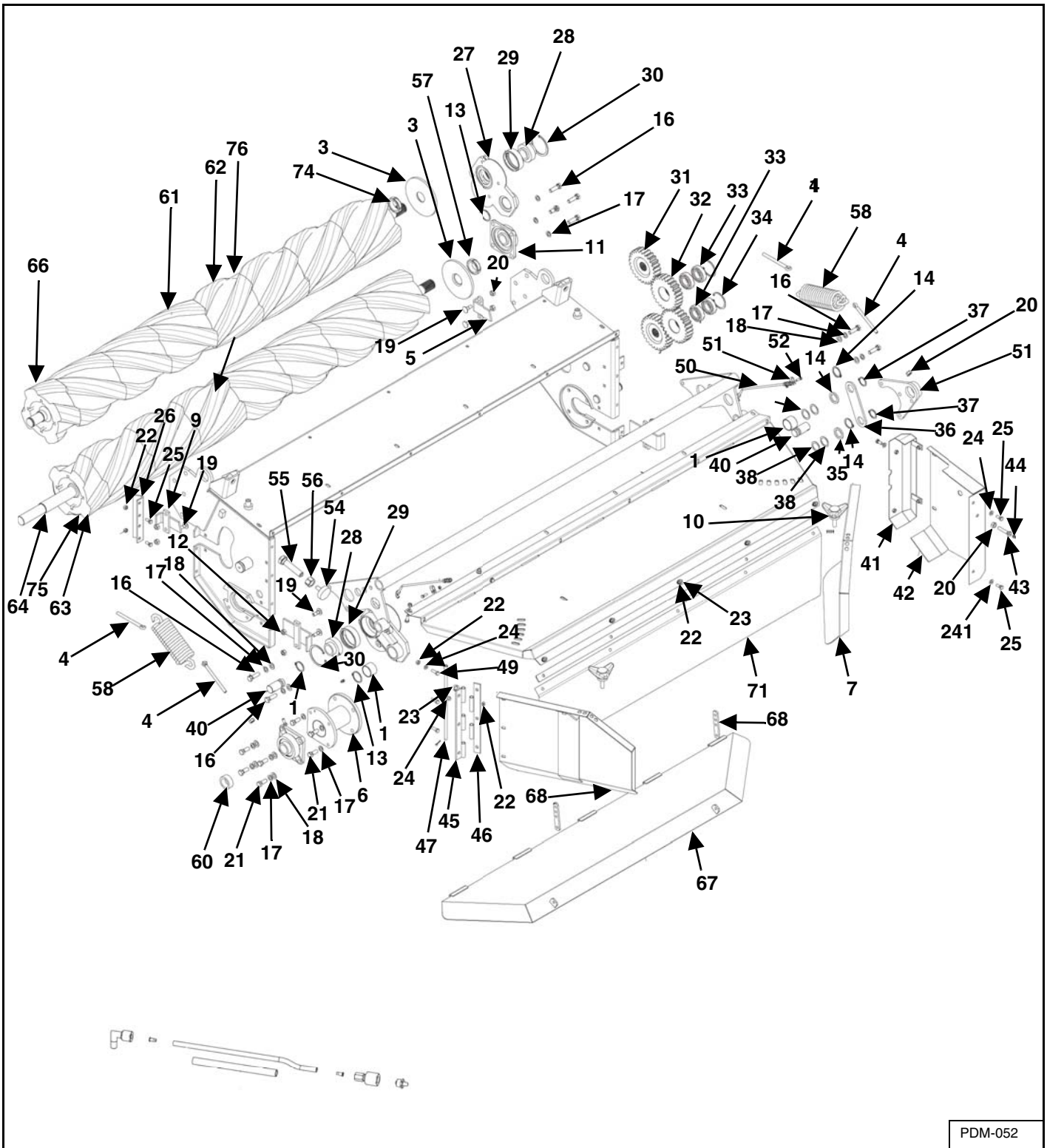
ROLLER CONDITIONER (CONT'D)



PDM-052

ITEM	PART NUMBER	DESCRIPTION	210 F/R QTY	245 F/R QTY	285 F/R QTY	320 F/R QTY
31	32056610	TORQUE TOOTHED WHEEL Z=25	2	2	2	2
32	32056620	TOOTHED WHEEL	2	2	2	2
33	981304162	BEARING 6206 2RS C3	4	4	4	4
34	981108051	RING INT. UNI 7437 C70 62	2	2	2	2
35	150030010	SPACER 35 X 5	2	2	2	2
36	32056630	TOOTHED WHEEL JOINT	1	1	1	1
37	981108247	RING EST. UNI 7436 C70 30X2	2	2	2	2
38	980200736	RING DIN 988 30x40X1	4	4	4	4
39	32055500	MOBILE PIN JOINT 210	1	-	-	-
	32055510	MOBILE PIN JOINT 245	-	1	-	-
	32055512	MOBILE PIN JOINT 285	-	-	1	-
	32055514	MOBILE PIN JOINT 320	-	-	-	1
40	32055560	SPRING PIN TIE ROD	2	2	2	2
41	32042135	FRONT COVER COMP.	1	1	1	1
42	32042140	LATERAL SHIELD COVER	1	1	1	1
43	32056650	EYE SCREW FOR LUBRIFICATION	1	1	1	1
44	980206128	STRAIGHT GREASE CUP 6X1	1	1	1	1
45	32055570	EXTERNAL CONVEYOR HINGE	2	2	2	2
46	32055580	INNER CONVEYOR HINGE	2	2	2	2
47	32055590	HINGE PIN COMP	2	2	2	2
48	980206030	SPLIT PIN	2	2	2	2
49	980206437	SCREW TE UNI 5739 8.8 8X25 ZINC	8	8	8	8
50	32055015	UPPER ROLLER GREASE SOCKET	2	2	2	2

ROLLER CONDITIONER (CONT'D)



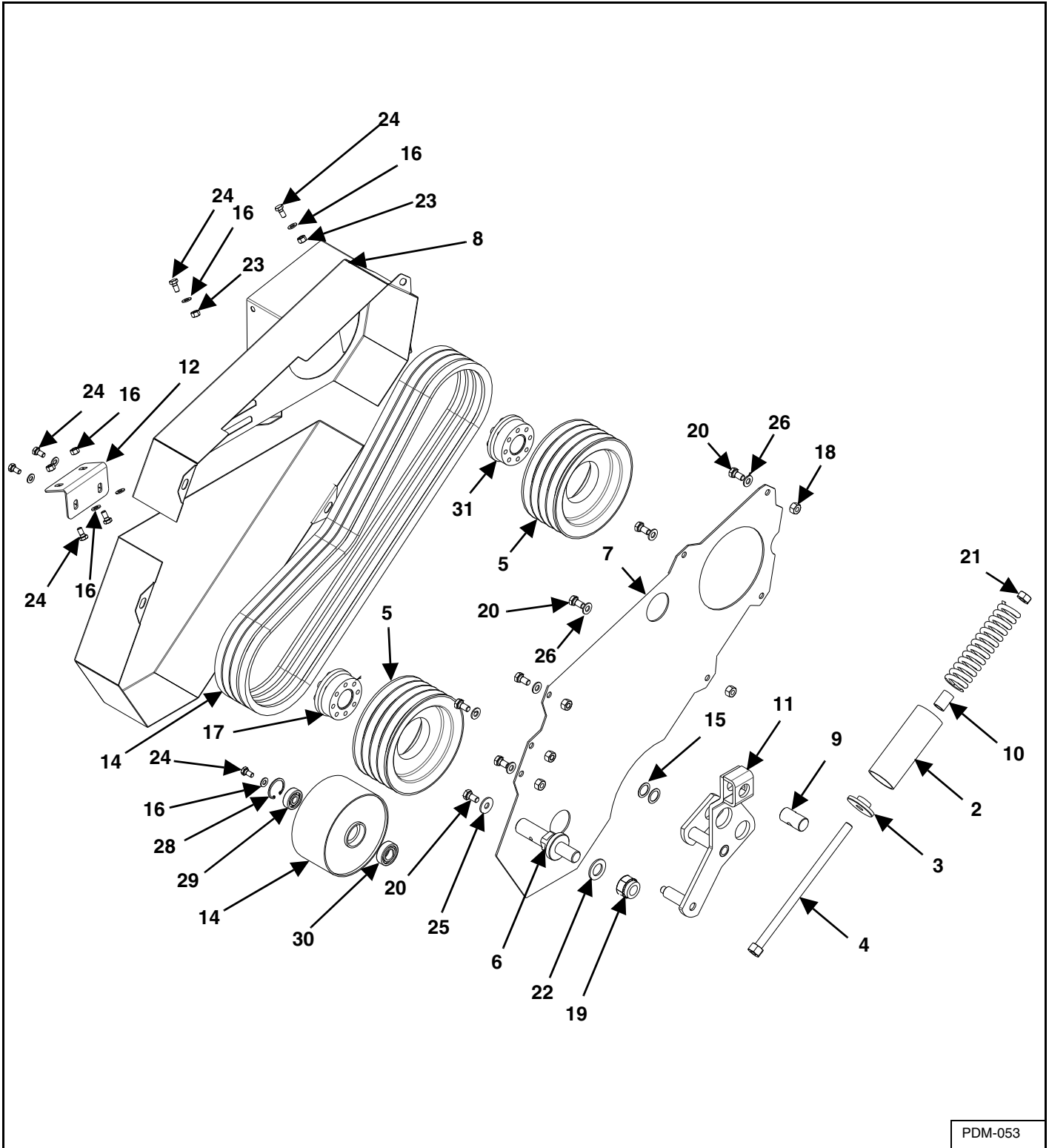
PDM-052



ITEM	PART NUMBER	DESCRIPTION	210 F/R QTY	245 F/R QTY	285 F/R QTY	320 F/R QTY
51	32055604	LOKING SOCKET CLAW	2	2	2	2
52	980206093	SCREW TE UNI 5739 8.8 6X20 ZIN	2	2	2	2
53	980206095	NUT UNI 5587 6.8 PG 6 ALTO ZINC	2	2	2	2
54	980900280	ANTIVIBRATION 5015	2	2	2	2
55	32055565	ROLLE PAD SCREW	2	2	2	2
56	980205238	NUT UNI 5587 6.8 PG 20 ALTO ZINC	2	2	2	2
57	980205248	METAL RING 40X1.5	1	1	1	1
58	50051800	SPRING Ø75X10 16 RIV	2	2	2	2
59	32056640	GEARS REINFORCEMENT	1	1	1	1
60	32055850	LOWER ROLLER PULLEY SPACER	1	1	1	1
61	32056510	RIGHT ELLIPTICAL SECTOR	6	7	8	10
62	32056520	LEFT ELLIPTICAL SECTOR	6	7	8	10
63	32056540	LEFT FINAL ELLIPTICAL SECTOR 245	-	1	-	-
	32056560	LEFT FINAL ELLIPTICAL SECTOR 285	-	-	1	-
	32056580	LEFT FINAL ELLIPTICAL SECTOR 320	-	-	-	1
64	32056040	LOWER ROLLER COMP. 210	1	-	-	-
	32056050	LOWER ROLLER COMP. 245	-	1	-	-
	32056060	LOWER ROLLER COMP. 285	-	-	1	-
	32056070	LOWER ROLLER COMP. 320	-	-	-	1
65	32056340	UPPER ROLLER COMP. 210	1	-	-	-
	32056350	UPPER ROLLER COMP. 245	-	1	-	-
	32056360	UPPER ROLLER COMP. 285	-	-	1	-
	32056370	UPPER ROLLER COMP. 320	-	-	-	1
66	32056530	RIGHT FINAL ELLIPTICAL SECTOR 245	-	1	-	-
	32056550	RIGHT FINAL ELLIPTICAL SECTOR 285	-	-	1	-
	32056570	RIGHT FINAL ELLIPTICAL SECTOR 320	-	-	-	1
67	32055903	REAR BAFFLE PLATE 210 V2	1	-	-	-
	32055913	REAR BAFFLE PLATE 245 V2	-	1	-	-
	32055923	REAR BAFFLE PLATE 285 V2	-	-	1	-
	32055933	REAR BAFFLE PLATE 320 V2	-	-	-	1
68	32055785	PLATE	2	2	2	2

TRANSMISSION

F Group



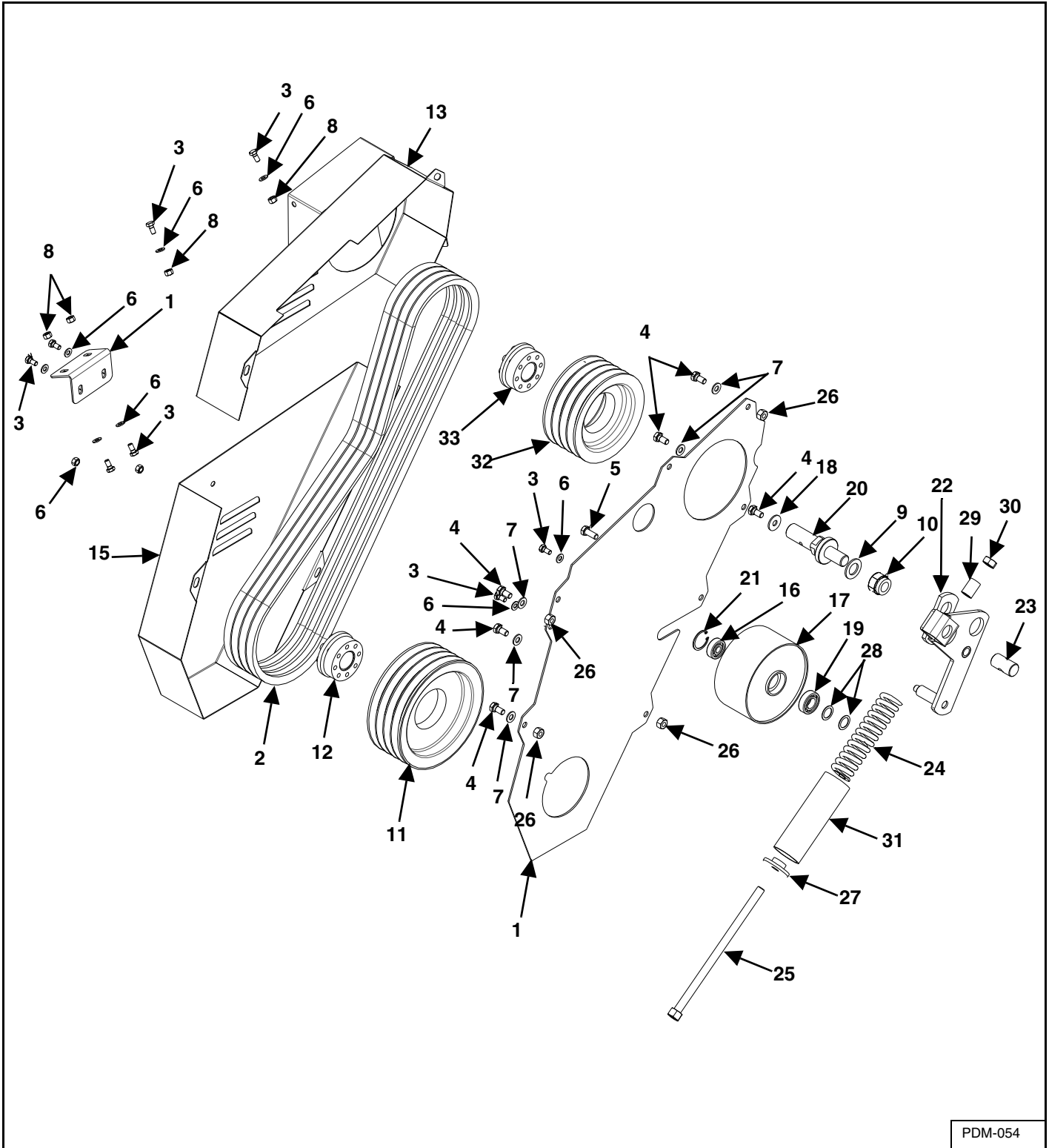
PDM-053



ITEM	PART NUMBER	DESCRIPTION	QTY
1	010020143	SPRING COMPRESSION WIRE 8 D43 L=170	1
2	123002650	SPRING STRESSING BUSHING	1
3	123002750	DISC STOPPING SPRING	1
4	123003750	LEAFTING BEAM SPRING TIE ROD	1
5	32032030	PULLEY SPB190 4 GROOVES	2
6	32032220	BELT TIGHTTENER SHAFT	1
7	32033221	COVER SUPPORT SHIELD RCF MF	1
8	32033241	COMP. COVER UPPER TRASMI. RCF MF	1
9	32033250	LEAFTING BEAM TIE ROD NUT	1
10	32033252	SPACER	1
11	32033260	COMP. SUPP. BELT TIGHTENER RCF	1
12	32042065	EXTERNAL COVER SUPPORT	
13	32042170	COMP. COVER LOVER TRASMIS. RCF	1
14	35032080	SPROCKET	1
15	980200091	RING DIN 988 20X28X1	2
16	980200144	WASHER UNI6592 D 8.4X17X1.6	7
17	980202001	LOCKING SIT-LOCK 8 35X80	1
18	980205250	METABLOC NUT M10 ZB	5
19	980205425	AUTOBLOC NUT N 6.8 PG 22 UNI7473	1
20	980206020	SCREW TE M10X20 UNI5739 ZB	7
21	980206039	NUT UNI 5587 6.8 PG 14 ALTO ZINC	1
22	980206040	WASHER UNI6592 D 23X39X3 ZB	1
23	980206098	NUT UNI 5587 6.8 PG 8 ALTO ZB	4
24	980206170	SCREW UNI 5739 8.8 8X16 ZB	7
25	980206229	WASHER UNI6593 D 11X30X2.5 ZB	1
26	980206245	WASCHER M10 UNI6592 ZB	6
27	980913164	BELT SPB 1700	4
28	981108233	RING INT. UNI 7437 C70 37	1
29	981304575	BEARING 6301 2RS- 12X37X12	1
30	981304647	BEARING 6004 2RS1 20X42X12	1
31	32033150	LOCKING SIT-LOCK 8 35X80 MODIF.	1

TRANSMISSION (CONT'D)

R Group

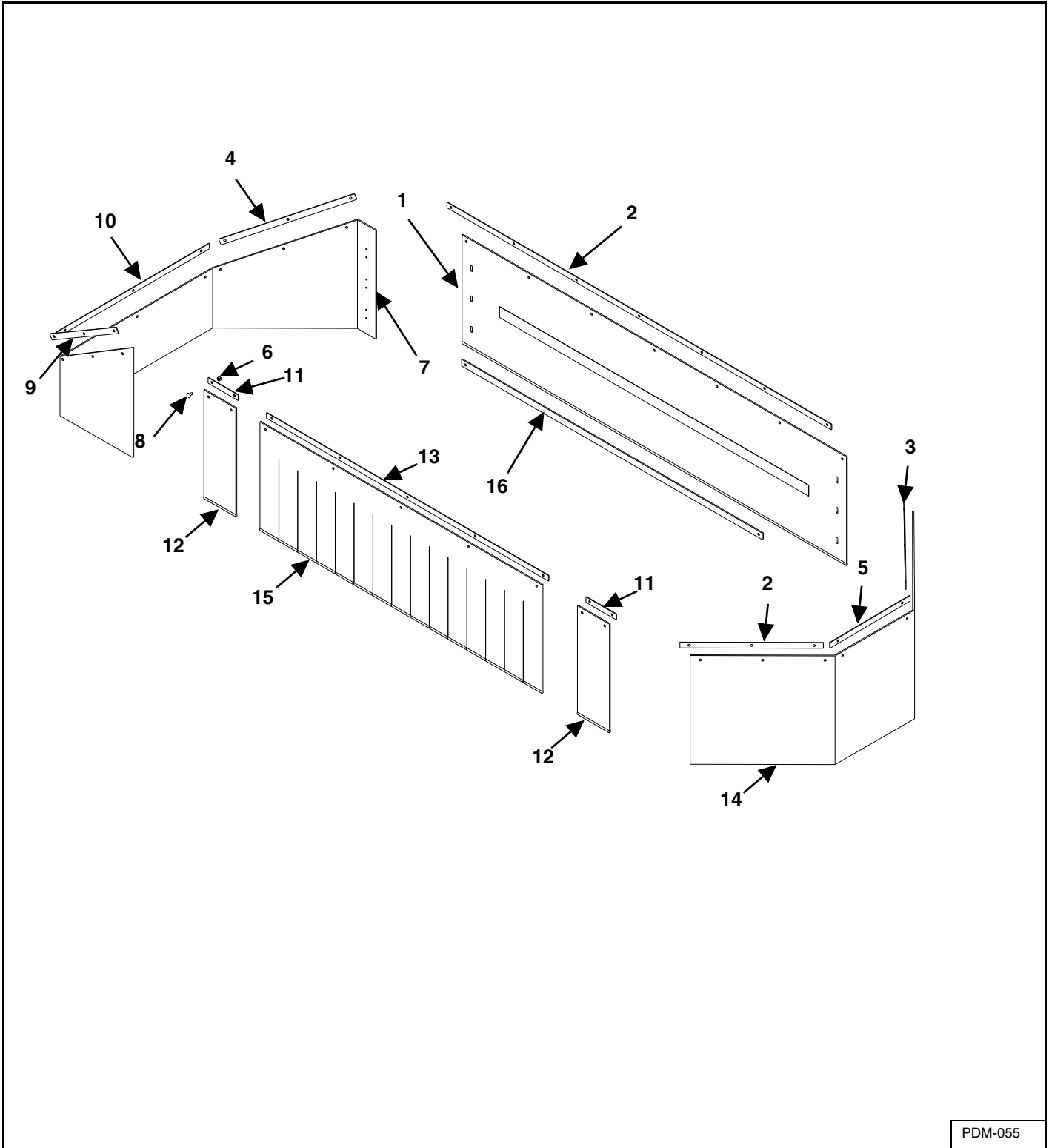


PDM-054

ITEM	PART NUMBER	DESCRIPTION	QTY
1	32042065	EXTERNAL COVER SUPPORT	1
2	980913014	BELT SPB1850	4
3	980206170	SCREW TE UNI 5739 8.8 8X16 ZB	8
4	980206020	SCREW TE M10X20 UNI5739 ZB	6
5	980206109	SCREW TE UNI 5739 8.8 10X25 ZINC	1
6	980200144	WASHER UNI6592 D 8.4X17X1.6 ZB	8
7	980206245	WASHER M10 UNI6592 ZB	5
8	980206098	NUT UNI 5587 6.8 PG 8 ALTO ZB	4
9	980206040	WASHER UNI6592 D 23X39X3 ZB	1
10	980205425	AUTOBLOC NUT N. 6.8 PG 22 UNI7473	1
11	32033030	PULLEY SPB210 4 GROOVES	1
12	980202001	LOCKING SIT-LOCK 8 35X80	1
13	32033141	COMP. COVER UPPER TRASMI. RCG MF	1
14	32033121	COVER SUPPORT SHIELD RCG MF	1
15	32033130	COMP. COVER LOVER TRASMIS. RCG	1
16	981304575	BEARING 6301 2RS - 12x37x12	1
17	35032080	SPROCKET	1
18	980206229	WASHER UNI6593 D 11X30X2.5 ZB	1
19	981304647	BEARING 6004 2RS1 20X42X12	1
20	32032220	BELT TIGHTTENER SHAFT	1
21	981108233	RING INT. UNI 7437 C70 37	1
22	32033230	COMP. SUPP. BELT TIGHTENER RCG	1
23	32033250	LEAFTING BEAM TIE ROD NUT	1
24	010020143	SPRING COMPRESSION WIRE 8 D43 L=170	1
25	123003750	LEAFTING BEAM SPRING TIE ROD	1
26	980205250	METABLOC NUT M 10 ZB	4
27	123002750	DISC STOPPING SPRING	1
28	980200091	RING DIN 988 20X28X1	2
29	32033252	SPACER	1
30	980206039	NUT UNI 5587 6.8 PG 14 ALTO ZINC	1
31	32055040	STRESSING TUBE RCG	1
32	35032020	PULLEY SPB170 4 GROOVES	1
33	32033150	LOCKING SIT-LOCK 8 35X80 MODIF.	1

PROTECTION

F Group

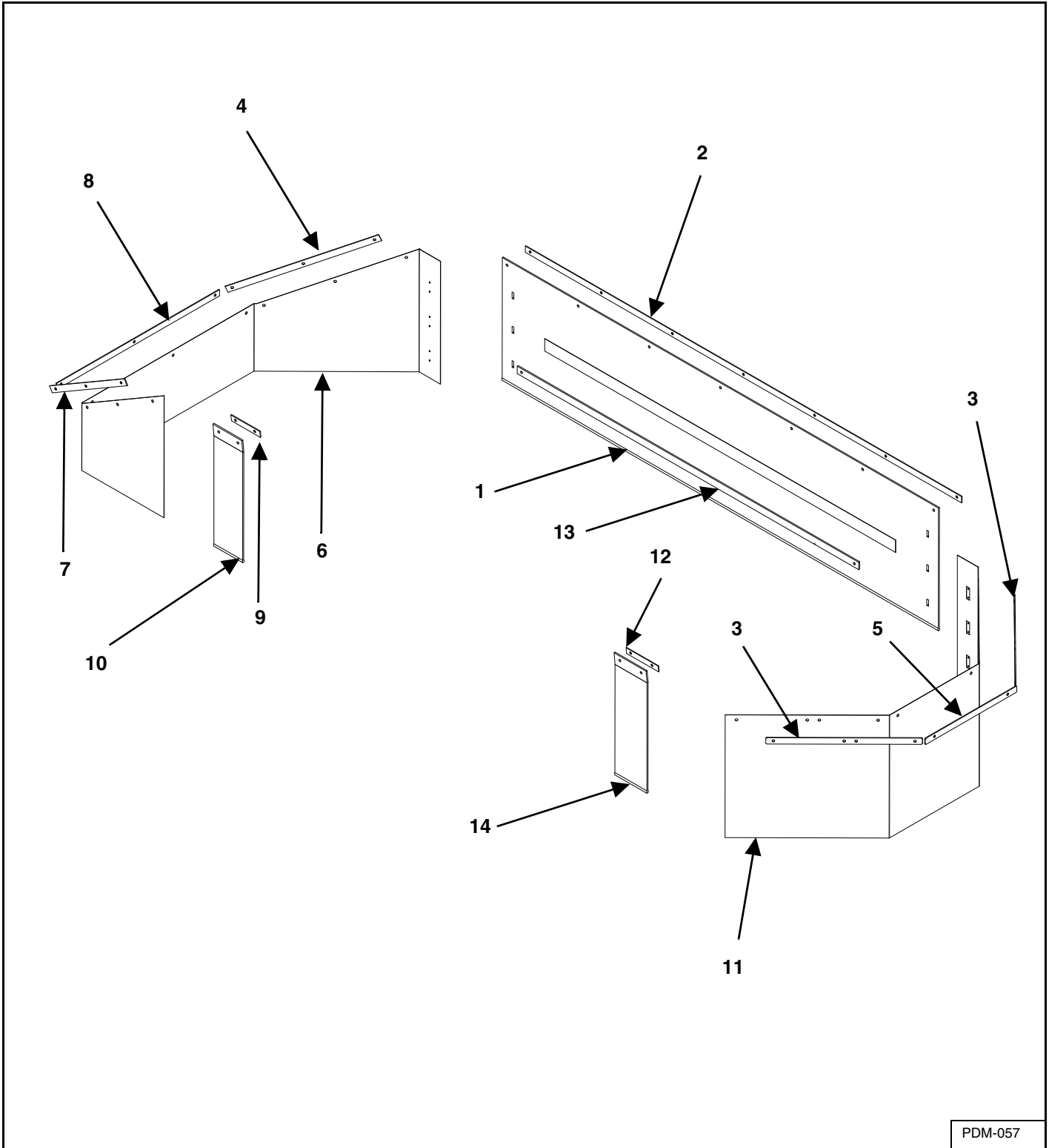


PDM-055

ITEM	PART NUMBER	DESCRIPTION	210 F/R QTY	245 F/R QTY	285 F/R QTY	320 F/R QTY
1	32044001	FRONT COWLING BURLAP 210	1	-	-	-
	32044011	FRONT COWLING BURLAP 245	-	1	-	-
	32044021	FRONT COWLING BURLAP 285	-	-	1	-
	32044031	FRONT COWLING BURLAP 320	-	-	-	1
2	32043000	FRONT LINE OF UPPER BURLAP 210	2	-	-	-
	32043010	FRONT LINE OF UPPER BURLAP 245	-	2	-	-
	32043020	FRONT LINE OF UPPER BURLAP 285	-	-	2	-
	32043030	FRONT LINE OF UPPER BURLAP 320	-	-	-	2
3	32043110	LINE RIGHT FRONT AND BACK SIDE OF UPPER	2	2	2	2
4	32043120	LINE LEFT FRONT AND BACK SIDE OF UPPER	1	1	1	1
5	32043130	LATERAL CENTRAL LINE OF UPPER BURLAP	1	1	1	1
6	980206142	NUT M8	30	36	40	44
	980200144	WASHER UNI6592 D.8,4X17X1,6 ZB	30	36	40	44
7	32044131	LEFT SIDE BURLAP	1	1	1	1
8	980206426	SCREW TE UNI 5739 8.8 8X20 ZINC	30	36	40	44
9	32043150	LEFT BACK AND UPPER SIDE LINE BURLAP	1	1	1	1
10	32043160	LEFT CENTRAL SIDE LINE BURLAP	1	1	1	1
11	32043140	BACK UPPER LINE OF BURLAP WITH COND.	2	2	2	2
12	32044151	BACK LATERAL BURLAP FOR CONDITIONER	2	2	2	2
13	50042430	BACK LINE FOR BURLAP UPPER CONDITIONER	1	-	-	-
	32043210	BACK LINE FOR BURLAP UPPER CONDITIONER	-	1	-	-
	32043220	BACK LINE FOR BURLAP UPPER CONDITIONER	-	-	1	-
	32043230	BACK LINE FOR BURLAP UPPER CONDITIONER	-	-	-	1
14	32044141	RIGHT LATERAL BURLAP	-	1	1	1
15	50042261	CONDITIONER BACK BURLAP 210 RCF	1	-	-	-
	32044161	CONDITIONER BACK BURLAP 245 RCF	-	1	-	-
	32044171	CONDITIONER BACK BURLAP 285 RCF	-	-	1	-
	32044181	CONDITIONER BACK BURLAP 320 RCF	-	-	-	1
16	32043300	BURLAP REINFORCE LINE 210	1	-	-	-
	32043310	BURLAP REINFORCE LINE 210	-	1	-	-
	32043320	BURLAP REINFORCE LINE 210	-	-	1	-
	32043330	BURLAP REINFORCE LINE 320	-	-	-	1

PROTECTION (CONT'D)

R Group

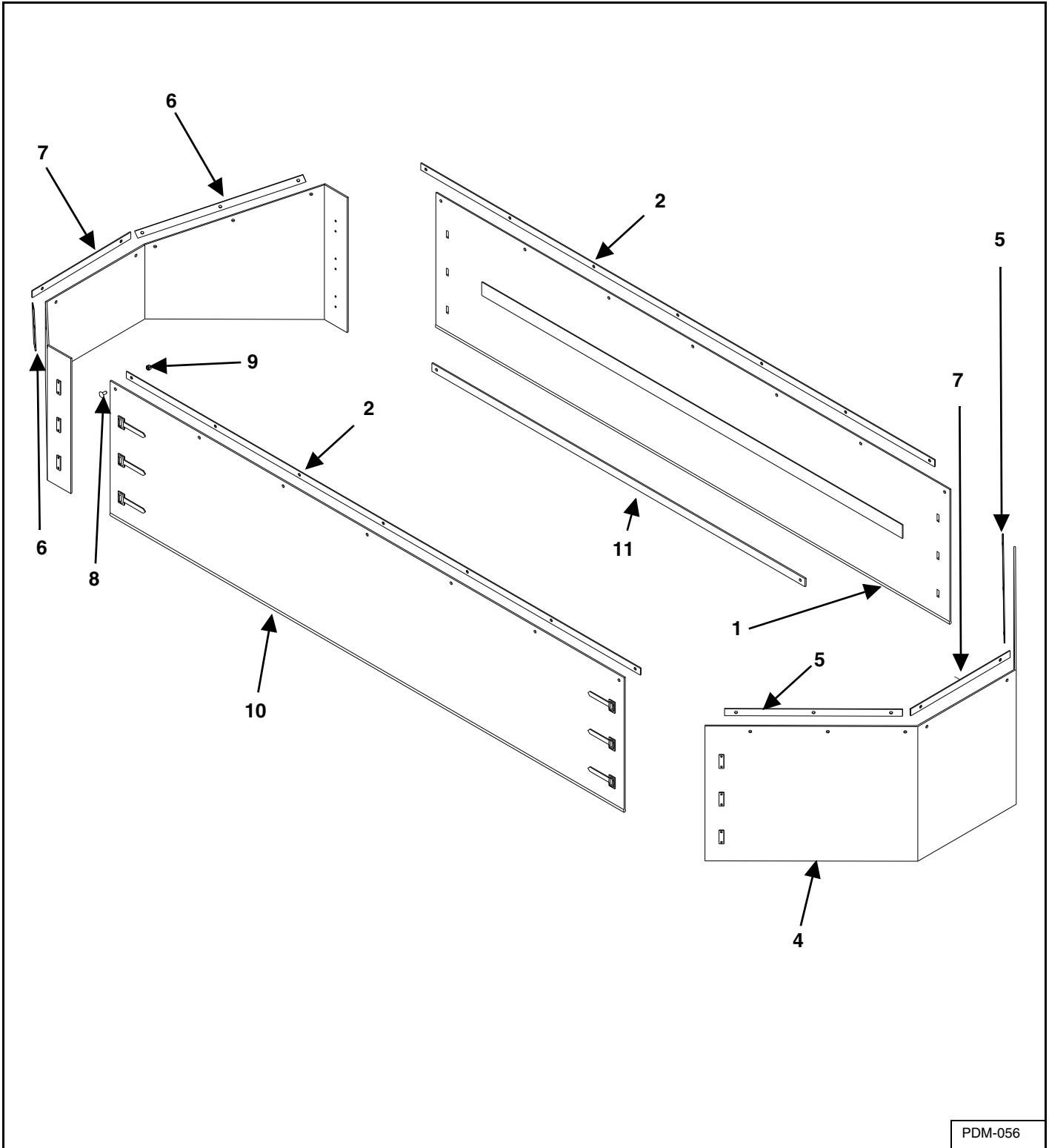


PDM-057

ITEM	PART NUMBER	DESCRIPTION	210 F/R QTY	245 F/R QTY	285 F/R QTY	320 F/R QTY
1	32044001	FRONT COWLING BURLAP 210	1	-	-	-
	32044011	FRONT COWLING BURLAP 245	-	1	-	-
	32044021	FRONT COWLING BURLAP 285	-	-	1	-
	32044031	FRONT COWLING BURLAP 320	-	-	-	1
2	32043000	FRONT LINE OF UPPER BURLAP 210	2	-	-	-
	32043010	FRONT LINE OF UPPER BURLAP 245	-	2	-	-
	32043020	FRONT LINE OF UPPER BURLAP 285	-	-	2	-
	32043030	FRONT LINE OF UPPER BURLAP 320	-	-	-	2
3	32043110	RIGHT BACK AND FRONT SIDE OF UPPER BURLAP	2	2	2	2
4	32043120	RIGHT BACK AND FRONT SIDE OF UPPER BURLAP	1	1	1	1
5	32043130	LEFT BACK AND FRONT SIDE OF UPPER BURLAP	1	1	1	1
6	32044131	LATERAL CENTRAL LINE OF UPPER BURLAP BURLAP LEFT SIDE	1	1	1	1
7	32043150	BACK LEFT SIDE LINE OF UPPER BURLAP	1	1	1	1
8	32043160	CENTRAL LEFT SIDE LINE OF UPPER BURLAP	1	1	1	1
9	32043142	BACK LEFT LATERAL LINE OF RCG	1	1	1	1
10	32044153	BACK LEFT LATERAL BURLAP OF RCG	1	1	1	1
11	32044141	RIGHT LATERAL BURLAP	1	1	1	1
12	32043144	BACK RIGHT LATERAL LINE OF RCG	1	1	1	1
13	32043300	BURLAP REINFORCE LINE 210	1	-	-	-
	32043310	BURLAP REINFORCE LINE 245	-	1	-	-
	32043320	BURLAP REINFORCE LINE 285	-	-	1	-
	32043330	BURLAP REINFORCE LINE 320	-	-	-	1
14	32044155	BACK RIGHT LATERAL BURLAP OF RCG				

PROTECTION (CONT'D)

Normal Group

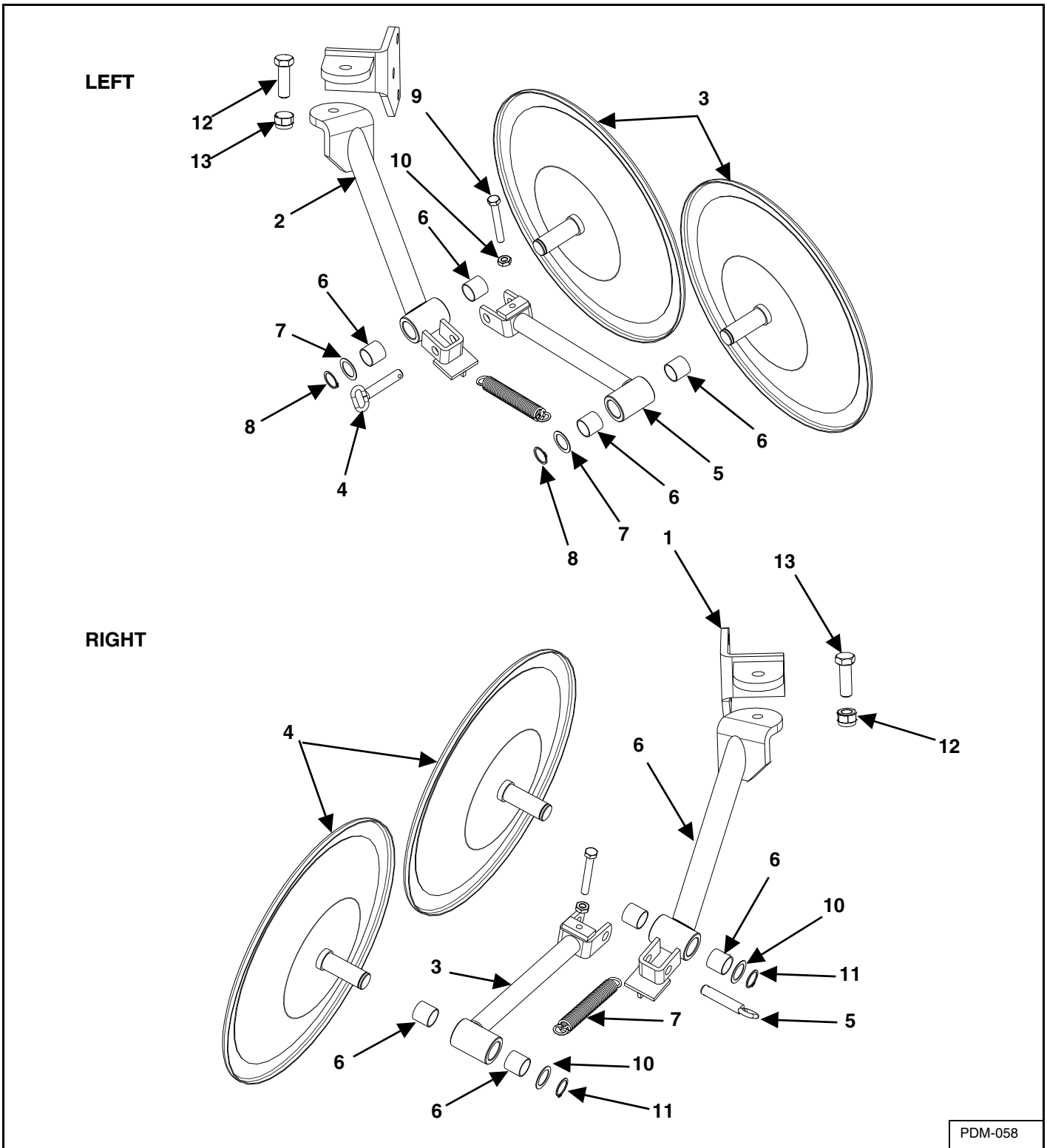


PDM-056



ITEM	PART NUMBER	DESCRIPTION	210 F/R QTY	245 F/R QTY	285 F/R QTY	320 F/R QTY
1	32044001	FRONT COWLING BURLAP 210	1	-	-	-
	32044011	FRONT COWLING BURLAP 245	-	1	-	-
	32044021	FRONT COWLING BURLAP 285	-	-	1	-
	32044031	FRONT COWLING BURLAP 320	-	-	-	1
2	32043000	FRONT LINE OF UPPER BURLAP 210	2	-	-	-
	32043010	FRONT LINE OF UPPER BURLAP 245	-	2	-	-
	32043020	FRONT LINE OF UPPER BURLAP 285	-	-	2	-
	32043030	FRONT LINE OF UPPER BURLAP 320	-	-	-	2
3	32044121	LEFT SIDE BURLAP	1	1	1	1
4	32044111	RIGHT SIDE BURLAP	1	1	1	1
5	32043110	LINE RIGHT FRONT And BACK SIDE OF UPPER BURLAP	2	2	2	2
6	32043120	LINE LEFT FRONT And BACK SIDE OF UPPER BURLAP	2	2	2	2
7	32043130	LATERAL CENTRAL LINE OF UPPER BURLAP	2	2	2	2
8	980206426	SCREW TE UNI 5739 8.8 8X20 ZINC	26	30	34	38
9	980206142	NUT ES M8	26	30	34	38
	980200144	WASHER UNI6592 D.8,4X17X1,6 ZB	26	30	34	38
10	32044016	BACK COWLING BURLAP 245	1	-	-	-
	32044026	BACK COWLING BURLAP 285	-	1	-	-
	32044036	BACK COWLING BURLAP 320	-	-	1	-
11	32043300	BURLAP REINFORCE LINE 210	-	-	-	1
	32043310	BURLAP REINFORCE LINE 245	1	-	-	-
	32043320	BURLAP REINFORCE LINE 285	-	1	-	-
	32043330	BURLAP REINFORCE LINE 320	-	-	1	-

SWATHER



PDM-058

Left Swather

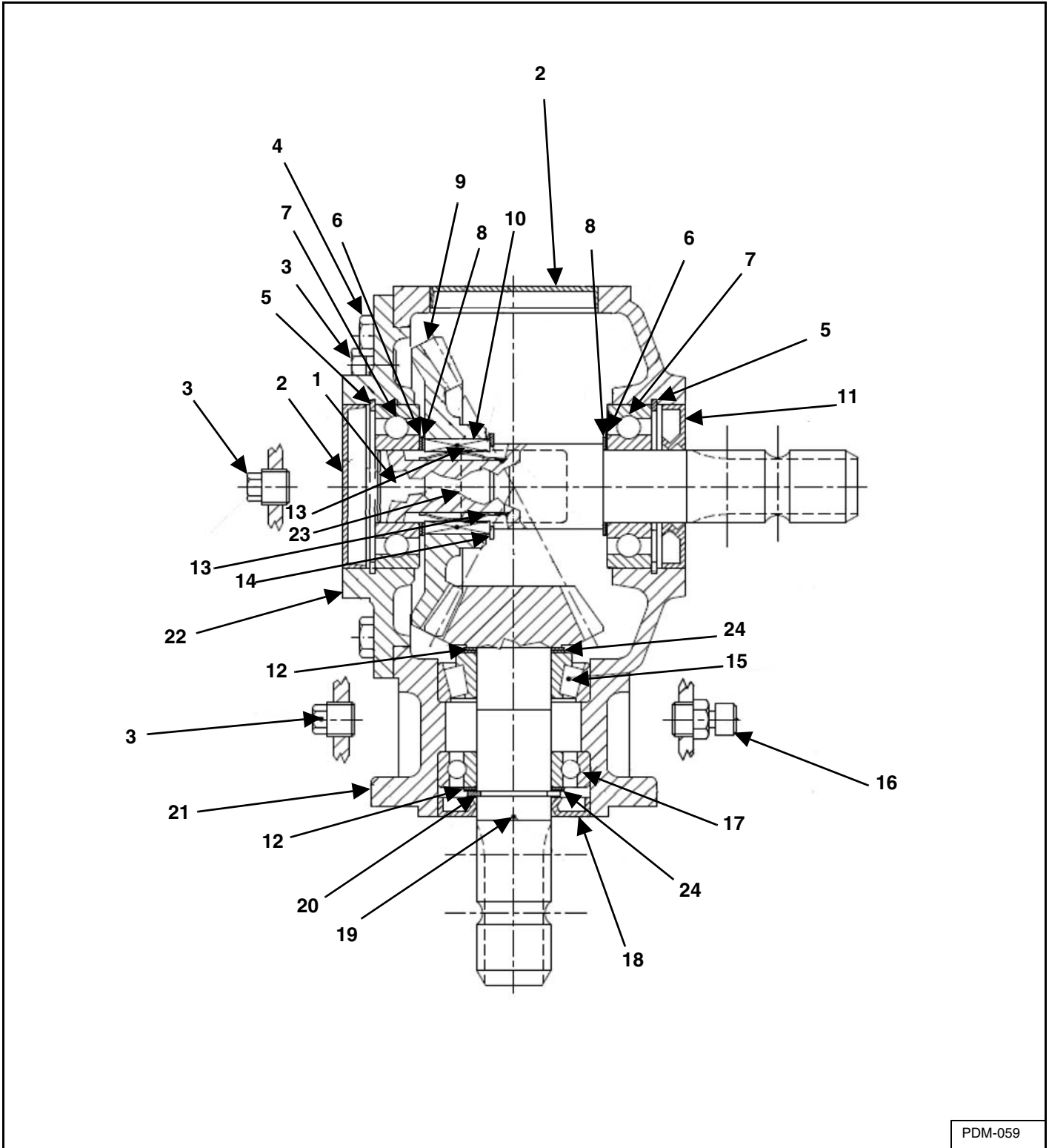
ITEM	PART NUMBER	DESCRIPTION	245 F/R QTY	285 F/R QTY	320 F/R QTY
1	37062042	DISCK ATTACK	1	1	1
2	37062030	ARM SX	1	1	1
3	150080002	CONVEYOR LARGE	1	2	2
4	150080007	COMP. LATCH	-	1	1
5	37062020	ARM SX	-	1	1
6	981700698	BRONZINA AUTOLUB 25X28X25 DU	2	4	4
7	980200041	RING DIN 988 25X35X1	1	2	2
8	981108046	RING UNI C70 25 7435	1	2	2
9	980206626	SCREW UNI 5739 8,8 10CX70 ZINC	-	1	1
10	980206137	NUT UNI 5589 6,8 PG 10 LOW ZINC	-	1	1
11	150080005	SPRING TRACTION Ø21X152	1	1	1
12	980206350	SCREW UNI 5739 8,8 16CX50 ZINC	1	1	1
13	980205671	NUT ES AUT M16 UNI7473	1	1	1

Right Swather

ITEM	PART NUMBER	DESCRIPTION	245 F/R QTY	285 F/R QTY	320 F/R QTY
1	37062040	DISCK ATTACK	1	1	1
2	37062032	ARM LARGE SX	1	1	1
3	37062022	ARM SMALL SX	1	1	1
4	150080002	CONVEYOR LARGE	1	2	2
5	150080007	COMP. LATCH	-	1	1
6	981700698	BRONZINA AUTOLUB 25X28X25 DU	2	4	4
7	150080005	SPRING TRACTION Ø21X152	-	1	1
8	980206626	SCREW UNI 5739 8,8 10CX70 ZINC	-	1	1
9	980206137	NUT UNI 5589 6,8 PG 10 LOW ZINC	-	1	1
10	980200041	RING DIN 988 25X35X1	1	2	2
11	981108046	RING UNI C70 25 7435	1	2	2
12	980205671	NUT ES AUT M16 UNI7473	1	1	1
13	980206350	SCREW UNI 5739 8,8 16CX50 ZINC	1	1	1

GEAR BOXES

Part 32031060

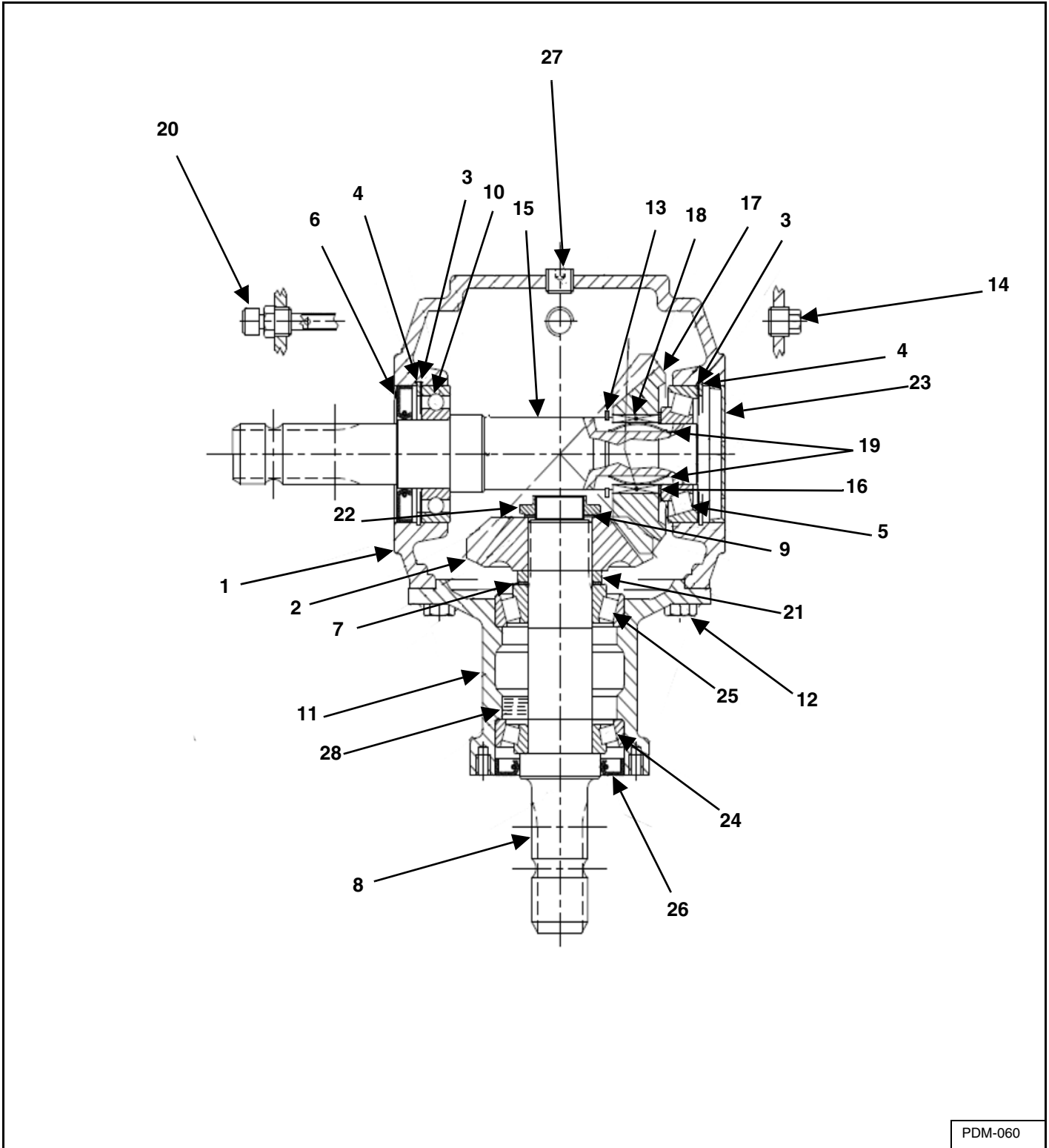


PDM-059

ITEM	PART NUMBER	DESCRIPTION	QTY
1	0.311.3206.00	SHAFT 1 3/8 Z6	1
2	8.7.0.00790	CAP 80X10	2
3	8.6.5.00006	PLUG 3/8" GAS	3
4	8.1.1.00061	SCREW TE M10X25 8.8	8
5	8.5.2.00030	SNAP RING D80 UNI 7437	2
6	0.267.7500.00	SHOE 79.9	2
7	8.0.1.00049	BEARING 6307	2
8	0.259.7510.00	SHOE 35.3X1	2
9	0.311.6209.00	CROWN Z29 M5	1
10	0.267.7109.00	TAB	2
11	8.7.1.00315	RING	1
12	0.259.7513.00	SHOE 35.3X1.3	2
13	0.267.7110.00	SPRING	2
14	8.5.1.00712	EXTERNAL RETAINING 42 UNI 7435	1
15	8.0.9.00127	BEARING 32207	1
16	8.6.7.00161	PLUG 3/8" GAS	1
17	8.0.1.00870	BEARING 6207	1
18	8.7.3.00055	RING 35X72X10	1
19	0.304.5000.00	SHAFT-PIGNON Z15 M5	1
20	8.5.1.00583	EXTERNAL RETAINING 35 UNI 7436	1
21	0.311.0504.00	CASE	1
22	0.311.1300.00	COVER	1
23	0.124.7101.00	PLATE	1
24	0.259.7500.00	SHOE 35.3X48.0	1

GEAR BOXES (CONT'D)

Part 32031052

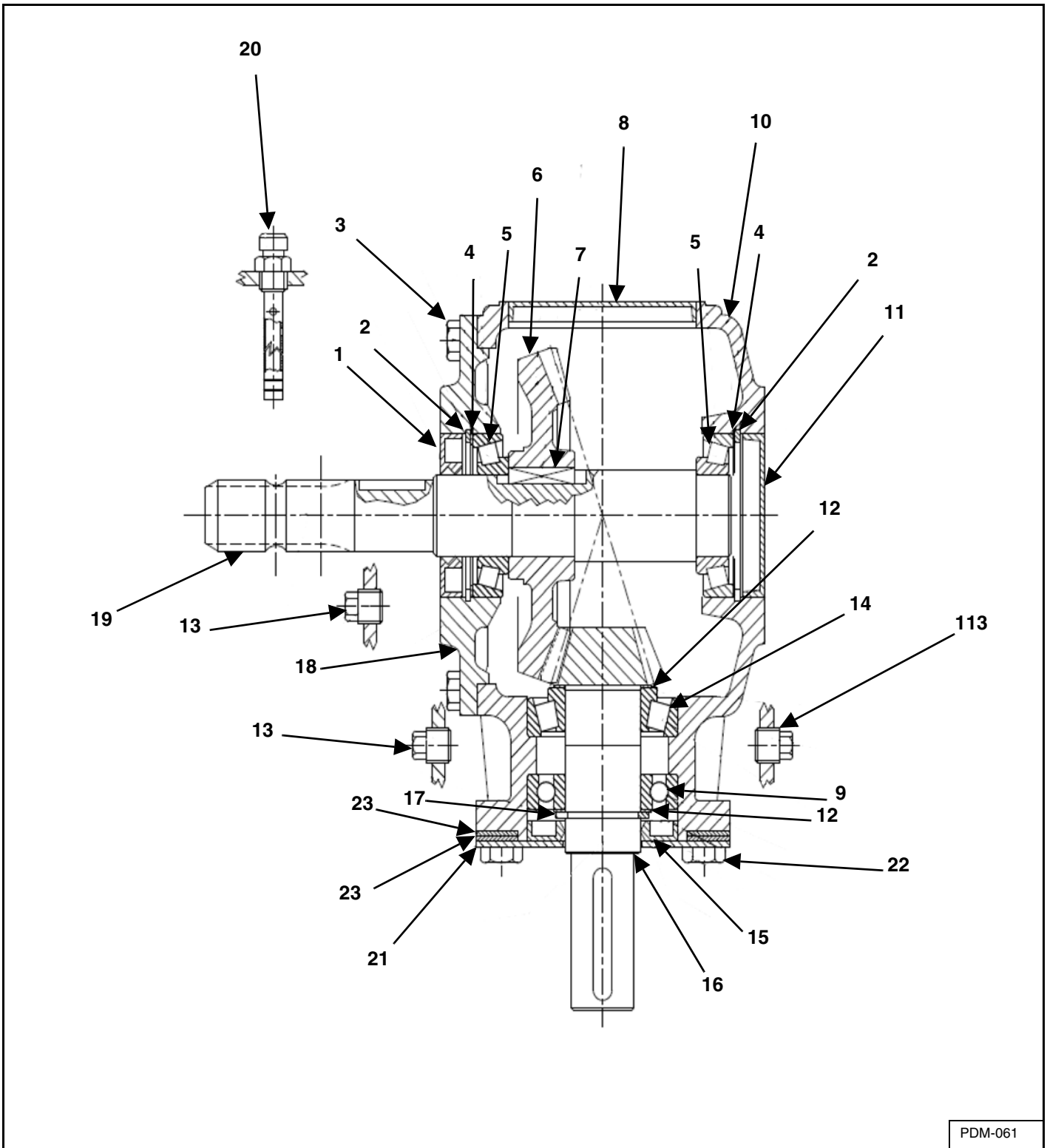


PDM-060

ITEM	PART NUMBER	DESCRIPTION	QTY
1	0.278.0300.00	COVER	1
2	0.267.5000.00	GEAR Z18 M6.15	1
3	0.110.7500.00	HOLD 65.3X79.7	2
4	8.5.2.00030	SNAP RING 80 UNI 7437	2
5	8.0.9.00129	BEARING 30307	1
6	8.7.3.00027	SNAP RING 40X80X10	1
7	0.244.7500.00	HOLD 40.3X51X5	1
8	0.278.2211.00	SHAFT 1" 3/8 Z6-D40	1
9	0.102.7510.00	HOLD 44.0X30.3X1.0	1
10	8.0.1.00871	BEARING 6208	1
11	0.278.1300.00	EXTENSION	1
12	8.1.1.00061	SCREW TE M10X25 8.8	8
13	8.5.1.00712	EXTERNAL RETAINING 42 UNI 7435	1
14	8.6.5.00006	PLUG 3/8" GAS	1
15	0.278.2007.00	SHAFT 1 3/8" Z21	1
16	0.259.7510.00	HOLD 35.3X1	1
17	0.278.6215.00	CROWN M6.15	1
18	0.267.7109.00	TAB	2
19	0.267.7110.00	SPRING	2
20	0.294.7100.00	PLUG 3/8" GAS	1
21	0.606.7114.00	BRACE	1
22	0.783.7101.00	EMBOUT M30X1.5	1
23	8.7.0.00790	CAP 80X10	1
24	8.0.9.00024	BEARING 30208	1
25	8.0.9.00102	BEARING 32208	1
26	8.7.3.00958	RING 50X80X10	1
27	8.6.6.00201	PLUG 3/8" GAS	1
28	8.8.6.00435	OIL OMALA S2G 320	1.44 kg

GEAR BOXES (CONT'D)

Part 32031070



PDM-061



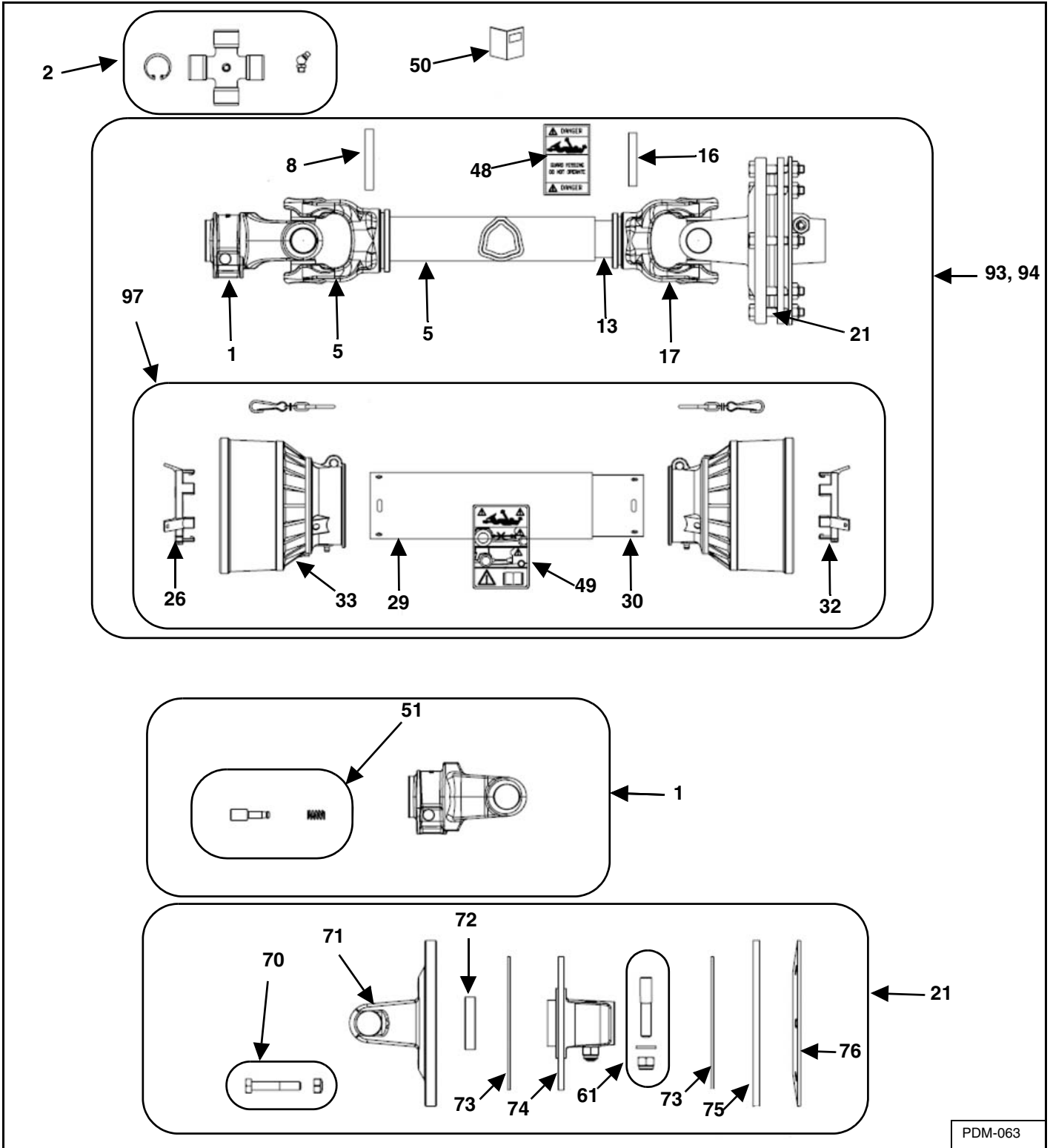
ITEM	PART NUMBER	DESCRIPTION	QTY
1	8.7.1.00748	SEAL 40X80X12	1
2	8.5.2.00030	ELASTIC RING 80 UNI 7437	2
3	8.1.1.00061	SCREW TE UNI 5739 M10X25 8.8	8
4	0.267.7500.00	SPACER 69.0X79.9	2
5	8.0.9.00024	BEARING 30208	2
6	0.312.6002.00	CROWN Z36 M4.58	1
7	8.4.1.01141	TAB HARDENED B 12X8X30	1
8	8.7.0.00975	COVER 100X10	1
9	8.0.1.00871	BEARING 6208	1
10	0.312.0501.00	CASE T3	1
11	8.7.0.00790	COVER 80X10	1
12	0.244.7500.00	SPACER 40.3X51.5	2
13	8.6.5.00006	PLUG 3/8" GAS	3
14	8.0.9.00102	BEARING 32208	1
15	8.7.3.00027	SEAL BA 40X80X10	1
16	0.312.5200.00	BEVEL PINION Z12 M4.58	1
17	8.5.1.00680	RING SEGER H=2.5 40 UNI 7436	1
18	0.312.1320.00	COVER T1	1
19	0.312.3200.00	SHAFT 1" 3/8	1
20	0.312.7106.00	PLUG	1
21	1.312.1307.00	COVER	1
22	8.1.1.00090	SCREW TE UNI 5739 M12X25 8.8	4
23	8.3.2.01236	WASHER 13X24X2.5	8



ITEM	PART NUMBER	DESCRIPTION	QTY
1	5070H0355	FORK S7 1 3/8 Z6 BUTTON -CAST IRON-	1
2	4120H0011R30	CRUISE 106 2 LAB.GREASER 45°	2
5	204066851	FORK 6 T. CARD. EXT. E* 606R	1
8	341042000R10	ELASTIC PIN 10X75 DIN 1481	1
12	225210395	T.C.E. 12512 L=395	1
13	225160395	T.C.I. 12509 L=395	1
16	341043000R10	ELASTIC PIN 10X65 DIN1481	1
17	204066852	FORK 6 T. CARD. INT. D* 607R	1
21	661H51403R	FV42/S7 135NM 1 3/8 Z6	1
40	252000050R02	CHAIN WITH HOOKS L=90	2
48	399143000	LABEL T. CARD. EXT. * DANGER *	1
49	399CEE004	LABEL BYPY CEE	1
50	399CEE003	OPERATION MANUAL REGULATION CEE 399CEE043	1
51	403000001R10	BUTTON	1
61	408000047R02	PIN 310002161 + NUT + WASHER	1
73	247006251R08	FRICTION DISC 141X77X3.2	2
97	5F06056FFCE	COMPLETE PROTECTION 106*056* F11 CE	1

CARDAN SHAFTS (CONT'D)

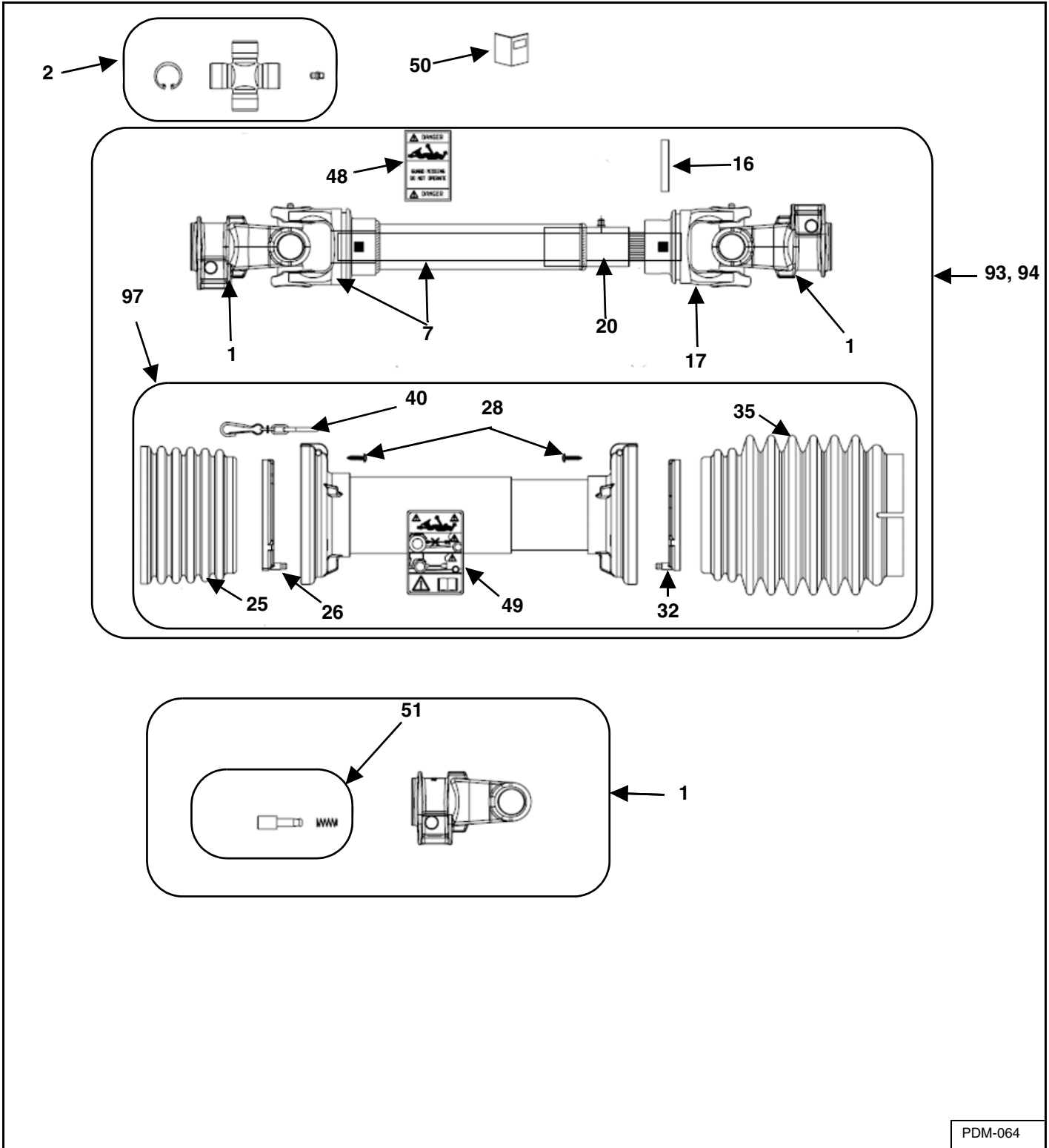
Part 989931044 1000 RPM



ITEM	PART NUMBER	DESCRIPTION	QTY
1	5070H0355	FORK S7 1 3/8 Z6 BUTTON -CAST IRON-	1
2	4120H0011R30	CRUISE 106 2 LAB. GREASER 45°	2
5	204066851	FORK 6 T. CARD. EXT. E* 606R	1
8	341042000R10	ELASTIC PIN 10X75 DIN 1481	1
12	225210395R	T.C.E. 12512 L=395	1
13	225160395R	T.C.I. 12509 L=395	1
16	341043000R10	ELASTIC PIN 10X65 DIN 1481	1
17	204066852	FORK 6 T. CARD. INT. D* 607R	1
21	661H51437R	FV42/S7 1350NM 1 3/8 Z21	1
26	255060005R02	OUTER RING	1
29	236830336R	T.P.E. FOR 5-6-7 13804 L=336	1
30	236820336R	T.P.I. FOR 5-6-7 13803 L=336	1
32	255060006R02	INNER RING	1
33	517050030R	IMB. EXT. + BAND F1X10 5-6-7 5G120	1
35	517050020R	IMB. INT. + BAND F1X10 5-6-7 5G110	1
40	252000050R02	CHAIN WITH HOOKS L=60	2
48	399143000	LABEL T. CARD. EXT. *DANGER*	1
49	399CEE051	LABEL *ATTENTION* REGULATION CEE 125X70	1
50	399CEE010	OPERATION MANUAL REGULATION CEE SERIES 100	1
51	403000001R10	BUTTON	1
61	408000047R02	PIN 310002161 + NUT + WASHER	1
70	432000008R08	SCREW 10X60 + NUT M10 *991010* CL. 8.8	8
71	253069001R	FORK 6 + FLANGE FOR FV/FT42-44	1
72	258005320R02	COPPER BUSH FR/FT	1
73	247006351R08	FRICTION DISC 162X85X3.2	2
74	515873705R	HUB FT42 1 3/8 Z21	1
75	248870007R	THRUST DISC SP.8 FV42	1
76	367009870R	SPRING CUP 202X115X4.25 FT42	1
93	7E16056FX007	EXT. SHAFT 106 *056* FX 007	1
94	7I16056FXN37	INT. SHAFT 106 *056* FX -N37	1
97	5F06056FFFX	COMPLETE PROTECTION 106 *056* F11 FX	1

CARDAN SHAFTS (CONT'D)

Part 989931018



PDM-064

ITEM	PART NUMBER	DESCRIPTION	QTY
1	5070E0355	FORK 4 1 3/8 Z6 BUTTON -CAST IRON-.	2
2	4120E0012R25	COMPLETE CRUISE S4 GREASER	2
7	50AUE9003	FORK S4 2040E5304 + 52632139001	1
16	345013000R10	DOUBLE ELASTIC PIN 8X55 + 5X55	1
17	2040E3252	SPLINED FORK 4 30 CUNA	1
20	249170535	SPLINED 30 CUNA 14952 42CRMO4 INDUCTION HARDENING + HOLE	1
23	348017000	STRAIGHT GREASER 6X1X6	1
25	2190E0201	BAND SFT S2-S4	1
26	2550C0001R02	EXTERNAL RING SFT 30-40	1
28	310001431R30	SCREW TMTL TC 4.8X22 ZINC	1
32	2550C0002R02	INNER RING SFT 30-40	6
35	2191D2054	MEDIUM BAND S2 – S4 – S5	1
40	252000050R02	CHAIN WITH HOOKS L=60	1
48	399143000	LABEL T. CARD. *DANGER*	1
49	399CEE051	LABEL *ATTENTION* REGULATION CEE 125X70	1
50	399CEE053	OPERATION MANUAL CEE SFT-S	1
51	403000001R10	BUTTON	2
93	DS4S061CEE001	EXTERNAL SHAFT SAS *061* CE – 007	1
94	DS4S061CEI001	INTERNAL SHAFT SAS *061* CE – 007	1
97	4CS4061CESH001	COMPLETE PROTECTION FOR DS40061CE007001	1

# Farm King





**SPECIFICATIONS**

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# Farm King



**SPECIFICATIONS**
**Dimensions**

MODEL	LENGTH	WIDTH	HEIGHT	WEIGHT
245	48.25 IN. 1200 MM	166.9 IN. 4240 MM	53.3 IN. 1354 MM	1366.9 LB. 620 KG
285	48.25 IN. 1200 MM	181.9 IN. 4620 MM	53.3 IN. 1354 MM	1521.2 LB. 690 KG
320	48.25 IN. 1200 MM	199.2 IN. 5060 MM	53.3 IN. 1354 MM	1366.9 LB. 760 KG
245 R	65.57 IN. 1640 MM	166.9 IN. 4240 MM	53.3 IN. 1354 MM	1763.7 LB. 800 KG
285 R	65.57 IN. 1640 MM	181.9 IN. 4620 MM	53.3 IN. 1354 MM	1940.1 LB. 880 KG
320 R	65.57 IN. 1640 MM	199.2 IN. 5060 MM	53.3 IN. 1354 MM	2138.5 LB. 970 KG
245 F	65.57 IN. 1640 MM	166.9 IN. 4240 MM	53.3 IN. 1354 MM	1366.9 LB. 760 KG
285 F	65.57 IN. 1640 MM	181.9 IN. 4620 MM	53.3 IN. 1354 MM	1851.9 LB. 840 KG
320 F	65.57 IN. 1640 MM	199.2 IN. 5060 MM	53.3 IN. 1354 MM	2050.3 LB. 930 KG

**Performance**

MODEL	CUTTING WIDTH	VERTICAL LIFT	NUMBER OF DISCS	NUMBER OF BLADES	PTO G/MAX	POWER HP/KW
245	95.28 IN. 2,42 M	HYDRAULIC	6	6 + 6	540/1000	65/48
285	111.8 IN. 2,84 M	HYDRAULIC	7	7 + 7	540/1000	75/56
320	125.2 IN. 3,18 M	HYDRAULIC	8	8 + 8	540/1000	80/60
245 R	95.28 IN. 2,42 M	HYDRAULIC	6	6 + 6	540/1000	75/56
285 R	111.8 IN. 2,84 M	HYDRAULIC	7	7 + 7	540/1000	85/56
320 R	125.2 IN. 3,18 M	HYDRAULIC	8	8 + 8	540/1000	95/71
245 F	95.28 IN. 2,42 M	HYDRAULIC	6	6 + 6	540/1000	70/53
285 F	111.8 IN. 2,84 M	HYDRAULIC	7	7 + 7	540/1000	80/60
320 F	125.2 IN. 3,18 M	HYDRAULIC	8	8 + 8	540/1000	90/65

**HARDWARE TORQUE VALUES**

**Metric Chart**

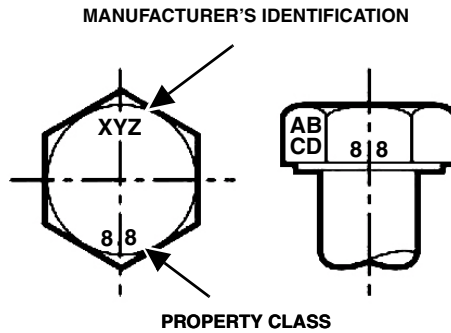
**NOTE: Do not use the values listed in the charts if a different torque value or tightening procedure is specified in this manual for a specific application. Torque values listed are for general use only.**

Use the following charts to determine the correct torque when checking, adjusting or replacing hardware. **Torque values are listed in newton-meters (inch\* or foot pounds) for normal assembly applications.**

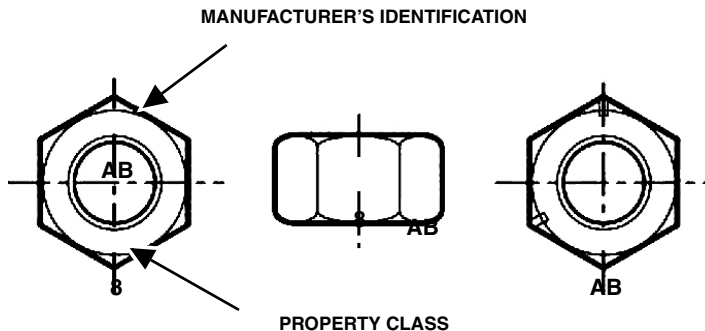
Nominal Size	Class 5.8		Class 8.8		Class 10.9		Lock nuts
	Unplated	Plated W / ZnCr	Unplated	Plated W / ZnCr	Unplated	Plated W / ZnCr	CL.8 w/ CL. 8.8 Bolt
M4	1.7 (15*)	2.2 (19*)	2.6 (23*)	3.4 (30*)	3.7 (33*)	4.8 (42*)	1.8 (16*)
M6	5.8 (51*)	7.6 (67*)	8.9 (79*)	12 (102*)	13 (115*)	17 (150*)	6.3 (56*)
M8	14 (124*)	18 (159*)	22 (195*)	28 (248*)	31 (274*)	40 (354*)	15 (133*)
M10	28 (21)	36 (27)	43 (32)	56 (41)	61 (45)	79 (58)	30 (22)
M12	49 (36)	63 (46)	75 (55)	97 (72)	107 (79)	138 (102)	53 (39)
M16	121 (89)	158 (117)	186 (137)	240 (177)	266 (196)	344 (254)	131 (97)
M20	237 (175)	307 (226)	375 (277)	485 (358)	519 (383)	671 (495)	265 (195)
M24	411 (303)	531 (392)	648 (478)	839 (619)	897 (662)	1160 (855)	458 (338)

**NOTE: Torque values shown with \* are inch pounds.**

**Identification of Hex Cap Screws and Carriage Bolts - Classes 5 and up**



**Identification of Hex Nuts and Lock Nuts - Classes 5 and up**



**HARDWARE TORQUE VALUES (CONT'D)**

**Imperial Chart**

**NOTE: Do not use the values listed in the charts if a different torque value or tightening procedure is specified in this manual for a specific application. Torque values listed are for general use only.**

Use the following charts to determine the correct torque when checking, adjusting or replacing hardware. **Torque values are listed in newton-meters (inch\* or foot pounds) for normal assembly applications.**

Nominal Size	SAE Grade 5		SAE Grade 8		LOCK NUTS			
	Unplated or Plated Silver	Plated W / ZnCr Gold	Unplated or Plated Silver	Plated W / ZnCr Gold	Unplated or Plated Silver	Plated W / ZnCr Gold	Grade W / Gr. 5 Bolt	Grade W / Gr. 8 Bolt
1/4	6.2 (55*)	8.1 (72*)	9.7 (86*)	12.6 (112*)	13.6 (121*)	17.7 (157*)	6.9 (61*)	9.8 (86*)
5/16	13 (115*)	17 (149*)	20 (178*)	26 (229*)	28 (250*)	37 (324*)	14 (125*)	20 (176*)
3/8	23 (17)	30 (22)	35 (26)	46 (34)	50 (37)	65 (48)	26 (19)	35 (26)
7/16	37 (27)	47 (35)	57 (42)	73 (54)	80 (59)	104 (77)	41 (30)	57 (42)
1/2	57 (42)	73 (54)	87 (64)	113 (83)	123 (91)	159 (117)	61 (45)	88 (64)
9/16	81 (60)	104 (77)	125 (92)	163 (120)	176 (130)	229 (169)	88 (65)	125 (92)
5/8	112 (83)	145 (107)	174 (128)	224 (165)	244 (180)	316 (233)	122 (90)	172 (127)
3/4	198 (146)	256 (189)	306 (226)	397 (293)	432 (319)	560 (413)	217 (160)	306 (226)
7/8	193 (142)	248 (183)	495 (365)	641 (473)	698 (515)	904 (667)	350 (258)	494 (364)
1	289 (213)	373 (275)	742 (547)	960 (708)	1048 (773)	1356 (1000)	523 (386)	739 (545)

**NOTE: Torque values shown with \* are inch pounds.**

**Identification of Hex Cap Screws and Carriage Bolts**



SAE GRADE 2 BOLTS



SAE GRADE 5 BOLTS



SAE GRADE 8 BOLTS



SAE GRADE 2 NUTS

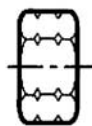


SAE GRADE 5 NUTS



SAE GRADE 8 NUTS

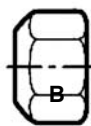
**Identification of Hex Nuts and Lock Nuts**



Grade A - No Notches

Grade B - One Circumferential Notch

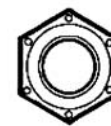
Grade C - Two Circumferential Notches



Grade A - No Mark

Grade B - Letter B

Grade C - Letter C



Grade A - No Marks

Grade B - Three Marks

Grade C - Six Marks

(Marks not always located at corners)

**HYDRAULIC CONNECTION SPECIFICATIONS**

**O-Ring Fitting (Straight Thread)**

Lubricate the O-ring before installing the fitting. Loosen the jam nut and install the fitting. Tighten the jam nut until the washer is tight against the surface.

**O-ring Face Seal Connection**

**Figure 42**

O-ring Face Seal Tightening Torque		
Tubeline O.D.	Thread Size	N•m (ft-lb)
1/4"	9/16" - 18	13 (18)
3/8"	11/16" - 16	22 (30)
1/2"	13/16" - 16	40 (54)
5/8"	1" - 14	60 (81)
3/4"	1-3/16" - 12	84 (114)
7/8"	1-3/16" - 12	98 (133)
1"	1-7/16" - 12	118 (160)
1-1/4"	1-11/16" - 12	154 (209)
1-1/2"	2" - 12	163 (221)

When the fitting is tightened, you can feel when the fitting is tight to eliminate leakage caused by under or over torqued fittings. Use petroleum jelly to hold the O-ring in position until the fittings are assembled.

**Flare Fitting**

**Figure 43**

Flare Fitting Tightening Torque		
Tubeline O.D.	Thread Size	N•m (ft-lb)
1/4"	7/16" - 20	13 (18)
5/16"	1/2" - 20	17 (23)
3/8"	9/16" - 18	22 (30)
1/2"	3/4" - 16	40 (54)
5/8"	7/8" - 14	60 (81)
3/4"	1-1/16" - 12	84 (114)
7/8"	1-3/16" - 12	98 (133)
1"	1-5/16" - 12	118 (160)
1-1/4"	1-5/8" - 12	154 (209)
1-1/2"	1-7/8" - 12	163 (221)
2"	2-1/2" - 12	252 (342)

Tighten until the nut makes contact with the seat. Use the chart [Figure 43] to find the correct tightness needed.

**NOTE: If the fitting leaks, disconnect and inspect the seat area for damage.**

**Port Seal (O-ring Boss) Fitting**

**Figure 44**

Port Seal And O-ring Boss Tightening Torque		
Tubeline O.D.	Thread Size	N•m (ft-lb)
1/4"	7/16" - 20	13 (18)
3/8"	9/16" - 18	22 (30)
1/2"	3/4" - 16	40 (54)
5/8"	7/8" - 14	60 (81)
3/4"	1-1/16" - 12	84 (114)
7/8"	1-3/16" - 12	98 (133)
1"	1-5/16" - 12	118 (160)
1-1/8"	1-7/16" - 12	154 (209)
1-1/4"	1-5/8" - 12	163 (221)

**NOTE: Port seal and nut, washer and O-ring (O-ring Boss) fittings use the same tightening torque valve chart.**

If a torque wrench cannot be used, use the following method.

Tighten the nut until it just makes metal to metal contact, you can feel the resistance.

Tighten the nut with a wrench no more than one hex flat maximum.

Do not over tighten the port seal fitting.

**NOTE: If a torque wrench cannot be used, use the hex flat tightening method as an approximate guideline.**

**NOTE: Port seal fittings are not recommended in all applications. Use O-ring boss fittings in these applications.**

**Tubelines And Hoses**

Replace any tubelines that are bent or flattened. They will restrict flow, which will slow hydraulic action and cause heat.

Replace hoses which show signs of wear, damage or weather cracked rubber.

Always use two wrenches when loosening and tightening hose or tubeline fittings.

**WARRANTY**

WARRANTY ..... 129

# Farm King





**WARRANTY**

# **Farm King**

## **Limited Warranty**

**BASE LIMITED WARRANTY**

Farm King provides this warranty only to original retail purchasers of its products. Farm King warrants to such purchasers that all Farm King manufactured parts and components used and serviced as provided for in the Operator's Manual shall be free from defects in materials and workmanship for a period following delivery to the original retail purchaser of one (1) year. This limited warranty applies only to those parts and components manufactured by Farm King. Parts and components manufactured by others are subject to their manufacturer's warranties, if any.

Farm King will fulfill this limited warranty by, at its option, repairing or replacing any covered part that is defective or is the result of improper workmanship, provided that the part is returned to Farm King within thirty (30) days of the date that such defect or improper workmanship is, or should have been, discovered. Parts must be returned through the selling representative and the buyer must prepay transportation charges.

Farm King will not be responsible for repairs or replacements that are necessitated, in whole or part, by the use of parts not manufactured by or obtained from Farm King. Under no circumstances are component parts warranted against normal wear and tear. There is no warranty on product pump seals, product pump bearings, rubber product hoses, pressure gauges, or other components that require replacement as part of normal maintenance.

**REPAIR PARTS LIMITED WARRANTY**

Farm King warrants genuine Farm King replacement parts purchased after the expiration of the Farm King Limited Warranty, and used and serviced as provided for in the Operator's Manual, to be free from defects in materials or workmanship for a period of thirty (30) days from the invoice date for the parts. Farm King will fulfill this limited warranty by, at its option, repairing or replacing any covered part that is defective or is the result of improper workmanship, provided that the part is returned to Farm King within thirty (30) days of the date that such defect or improper workmanship is, or should have been, discovered. Such parts must be shipped to the Farm King factory at the purchaser's expense.

**WHAT IS NOT COVERED**

Under no circumstances does this limited warranty cover any components or parts that have been subject to the following: negligence; alteration or modification not approved by Farm King; misuse; improper storage; lack of reasonable and proper maintenance, service, or repair; normal wear; damage from failure to follow operating instructions; accident; and/or repairs that have been made with parts other than those manufactured, supplied, and / or authorized by Farm King.

**AUTHORIZED DEALER AND LABOR COSTS**

Repairs eligible for labor under this limited warranty must be made by Farm King or an authorized Farm King dealer. Farm King retains the exclusive discretion to determine whether it will pay labor costs for warranty repairs or replacements, and the amount of such costs that it will pay and the time in which the repairs will be made. If Farm King determines that it will pay labor costs for warranty work, it will do so by issuing a credit to the dealer's or distributor's account. Farm King will not approve or pay invoices sent for repairs that Farm King has not previously approved. Warranty service does not extend the original term of this limited warranty.

# Farm King

## Limited Warranty

### WARRANTY REQUIREMENTS

To be covered by warranty, each new product must be registered with Farm King within thirty (30) days of delivery to original retail purchaser. If the customer decides to purchase replacement components before the warranty disposition of such components is determined, Farm King will bill the customer for such components and then credit the replacement invoice for those components later determined to be covered by this limited warranty. Any such replacement components that are determined not be covered by this limited warranty will be subject to the terms of the invoice and shall be paid for by the purchaser.

### EXCLUSIVE EFFECT OF WARRANTY AND LIMITATION OF LIABILITY

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# Farm King





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