



FPM DELJANIN

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HYDRAULIC WHEEL LOADER FS-400



ENG Instruction for work and maintenance

CE



SADRŽAJ



1.0	DECLARATION OF CONFORMITY.....	3
2.0	INTRODUCTION	4
2.1	The instructions purpose	4
2.2	Safety measures	4
2.2.1	General remarks.....	4
2.2.2	General instructions for safe operation	4
2.2.3	Warning signs on the machine for safe operation	4
2.3	Technical characteristics of loaders FS-400	5
2.3.1	Main parts and terminology	5
2.4	Technical characteristics of loaders FS-400	5
2.5	Machine identification	6
3.0	HANDLING OPERATORS.....	6
3.1	Procedure for connecting the loader to the tractor	6
3.2	Unloading the loaders from the tractor	7
4.0	WORK WITH LOADER	7
4.1	Preparing for the work of loaders	7
4.2	Arrangement of control commands	7
4.3	Exchangeable extensions	7
5.0	MAINTENANCE OF THE LOADERS	8
6.0	POSSIBLE WELCOME	8
7.0	SPECIFICATION OF SPARE PARTS	8
8.0	GUARANTEE DECLARATION	8
	WARRANTY	9

1.0 DECLARATION OF CONFORMITY

This device is manufactured in accordance with European standards on product safety and the Regulations on Machinery Safety

DECLARATION OF CONFORMITY

Issue: 01-2019

Manufacturer:	FPM "DELJANIN", 18430 Kuršumlija, Toplička 121
Product name:	LOADER FS-400
Model/type:	FS-400
<p>FPM "DELJANIN" declares that the Product named above complies with the requirements of Annex I Machinery directive 2006/42EC and that the product is constructed and designed in accordance with the referenced harmonized standards.</p>	
<p>The product was a subject of conformity assessment procedure described in Annex VIII Machine Directive 2006/42 EC</p>	
Harmonized standards:	<ul style="list-style-type: none"> – EN ISO 4254-1: 2015 Agricultural machinery - Safety - Part 1: General requirements – EN ISO 13849-1:2015 Safety of machinery-Safety –related parts of control systems- Part 1: General requirements for designed – EN ISO 13849-2:2012- Safety of machinery-Safety –related parts of control systems- Part 1: Validation – EN ISO 12100:2010 Safety of machinery-General principles for design - Risk assessment and risk reduction – ISO/TR 14121-2:2012 Safety of machinery — Risk assesment Practical guidance and examples of metods
<p>FPM DELJANIN declares that the products named above have been designed to comply with the essential health and safety requirements relating to the design and construction of machinery of Annex I Machine Directive 2006/42EC and referenced harmonized standards.</p> <p>Signed by: </p>	
<p>Issue: 18430 Kursumlija , 17.01.2019</p> <p>Name: Nenad Deljanin</p> <p>Position: director</p>	  <p>19</p>

2.0 INTRODUCTION

2.1. purpose of the instruction

The purpose of this manual is to enable the correct application of the machine, the successful handling and maintenance of the machine. careful study of this manual will give you useful information both in preparing the machine and working with it.

The great variety of working conditions in practice does not give the possibility that everything will be covered by this instruction, but they clearly set out all the essential elements of the machine's adjustment to the requirements of practical application.

2.2. The instructions purpose

- 2.2.1 Safety measures.



Before starting any loader, it is necessary for the operator to read the operating and maintenance manual and adhere to these warnings and thus protect both yourself and other possible injuries. In this way, they will provide reliable work of the tools.



CAUTION! For your safety, carefully read the instructions

2.2.2 General instructions for safe operation

The FS-400 hydraulic loader should not be handled by anyone, who did not read the entire manual and understood all the notes.

Before each use of the loader, adjust according to the condition of the terrain:

the angle under which the machine stands in relation to the horizontal of the soil in the direction normal to the axis of the tractor, and the angle under which the machine stands in relation to the ground in the direction of the axis of the tractor.

When the machine is separated from the tractor, pay attention to take a stable position while lying on the ground.

2.2.3 Warning signs on the machine for safe operation

Warning signs for safe operation in the form of labels with a visual representation of potential hazards, which could not be avoided by design solutions, are placed on the carrier's construction. Their meaning is described below. Read carefully all about them and keep stickers in good condition. If the labels are invisible, damaged or dropped, they should be replaced with new ones. The existing danger is indicated by a warning triangle, and an alert on avoiding injury is illustrated.

Here are these signs::



Examine the operating instructions - The operating manual contains important information for the safe operation of the tools.



Maintain a safe distance from the machine during operation. The working field of the machine is in the diameter of 8 m.



After a couple of hours of work control if the screw, nuts and washers are tightened enough.

2.3 Technical characteristics of loaders FS-400

Hydraulic loader FS-400, here in after referred to as the loader, is a tool for the loading of manure, hay, straw and bulk materials such as earth, sand, pebbles, sawdust and the like. For the intended purpose, interchangeable attachments in the form of a fair or a basket shape are used.

The articulated elements of the structure with hydraulic cylinders as executive bodies enable the operation of the loader. The tractor is connected via a hydraulic pump to the tractor output from the tractor.

It is a worn-type tool and it is connected to the I and II category trains that have a three-point binding system.

2.3.1 Main parts and terminology

- [1] Bracket,
- [2] Stops,
- [3] Pillar,
- [4] Hydraulic distributor,
- [5] First hand,
- [6] The second hand,
- [7] Operating element,

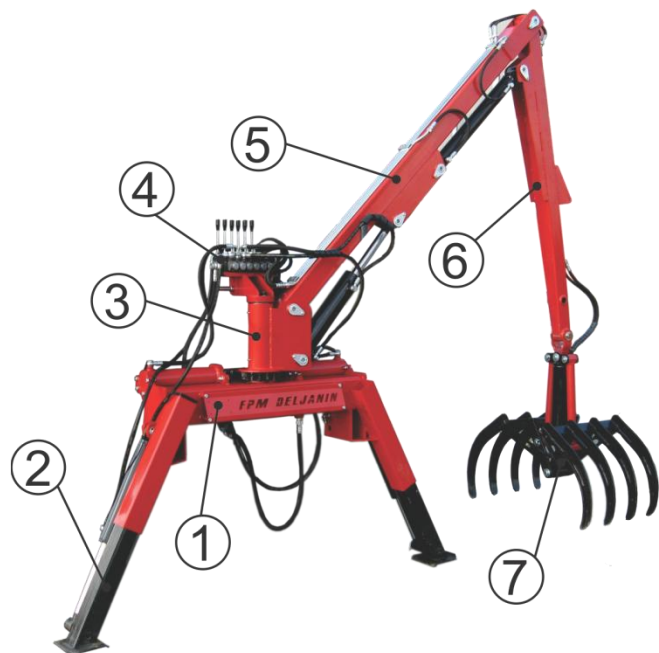


Figure 1.

2.4 Technical characteristics of loaders FS-400



MODEL	FS-400
Maximum reach	4,3 m
Maximum lift height	3,5 m
Maximum depth of reach	2,5 m
Maximum lift weight	300 kg
Turning angle	180°
Mass	430 kg
Work pressure	150-160 bar
Volume of the tank	18 lit
Maximum speed of the tractor when transporting the loader	15 km/h
Required power	25 KW (34 KS)

2.5 Machine identification

The identification of the weapon was made using the nameplate, which is located on the left side of the load carriage.

- The tile contains the following labels:
- Name and address of the manufacturer;
- In the field the name of the machine is its real name;
- In the "Type" box, a product's commercial label is entered;
- The serial number of the machine number entered in the field;
- The weight of the machine is expressed in (kg) in the Mass field.

When ordering spare parts and searching for explanations, it is necessary to indicate the machine type and serial number.

FPM "DELJANIN" 18430 Kuršumlija Toplička 121		 
Machine name:	Loader FS-400	
MODEL/TYP	FS-400	
Serial number:		
Year of manufacture:		
Mass :	430 kg	

3.0 HANDLING OPERATORS

before use it is necessary to check that all parts (nut, bolts and other) are sufficiently tightened.

3.1. Procedure for attachment of the loader to the tractor

the attachment of the loader to the tractor should always be performed on a flat surface in the following way:

- the tractor should be reversed so that the axle of the tractor covers an angle of 90° in relation to the axle of the loader. with the handle, the hydraulics lower the lower tractor levers at the height of the axis of the attachment points of the loader.
- move the tractor to the loader by aligning the tractor levers to the two bottom mount points and then pressing the parking brake
- mount the upper tractor lever - "top link" for the upper terminal point on the loader
- attach the left lower tractor lever for the left sleeve and in that position securing the existing wedge
- attach the right lower tractor lever for the right hand crank loader and in that position secure with the existing wedge
- connect the hydraulic pump of the loader to the output shaft of the tractor and to hide the chain against rotation around its own axis fig. 2.
- when the loader is connected to a tractor, the loader carrier must be brought to the horizontal position by extending or shortening the upper link lever ("top link").
- adjust the swinging of the loader during transport, adjust by means of lower tractor lever sizing or releasing chains.
- When the connected loader is brought to the horizontal position, the remaining settings are necessary for normal operation.



Figure 2. Hydraulic pump connected to the output shaft of the tractor

3.2 Unloading the tractor from the tractor

Upon completion of the work, the loader slowly descends onto the ground and afterwards it is done in the following order:

- Remove the end of the upper link lever from the tractor from the tractor cabin. To make it easier to pull out the "top link" axle it is necessary to move the tractor slightly backwards.
- unload the hydraulic pump from the tractor's outlet
- Unscrew the lower right tractor lever, whereby the tractor leveling lever can be used to facilitate the unscrewing of this lever
- Unscrew the lower left tractor lever

4.0 WORK WITH LOADER

4.1. preparation for the operation of the loader

Before starting work, check the oil level in the tank and make the lubrication of the moving parts. activate the work of the pto shaft by turning the handle on the tractor to start the hydraulic pump of the fs-400. Lower the rates on a solid surface and require that any persons present move to a safe distance.

Prior to the first loading of the load, it is necessary for the hydraulic pump to run 5-10 minutes to achieve the operating temperature. After that, check all loader loading positions by using the load handler control lever.

4.2 Arrangement of control commands

the control of the loader is done via the image control divider 3. by moving the levers shown in the given image.

1. left foot cylinder
2. cylinder for fairies
3. cylinder of the other hand
4. cylinder of first-hand
5. Pillar cylinder (turning)
6. right-hand cylinder



Figure 3.

The left arrow represents the oil flow from the tank to the distributor, and the right arrow returns excess oil to the tank through the filter.

4.3 EXCHANGE SETTINGS

The basic extension is the villas and the basket for the bulk matrix of Figure 4. The basket is made of steel sheet and is mounted on the loader by the same procedure as the villa.



Figure 4.

5.0 MAINTENANCE OF LOADERS

in order for your loader to function successfully, it is necessary to maintain it, which includes:

- regular cleaning of the loader after each use
- filling all the parts on which the paint is removed
- carry out regular cleaning of the oil filter after every 100 hours of operation
- replenished oils after every 1000 hours of operation and filling as needed
- perform regular lubrication of the designated areas

6.0 POSSIBLE DEADLOCK

if the loader is used in accordance with the recommendations of this manual, there is no downtime.

7.0 SPECIFICATION OF SPARE PARTS

- piston stops, left and right
- hydraulic distributor
- hydraulic gear pump with multiplier
- pipes first and second hands
- clip bucket
- beveled battens

8.0 GUARANTEE DECLARATION:

All devices are checked for technical and safety during each step of the production process. In spite of this, the device may be malfunctioning. Therefore, get familiar with the warranty conditions:

1. We guarantee that the product will function impeccably and we will remove all defects and defects on the product resulting from exclusively factory faults and which have arisen during the warranty period, in the normal use of the product and in compliance with the instructions.
2. The warranty period shall be 25 months, and shall begin to run from the date of purchase of the device as evidenced by the original and legible fiscal account. The guarantee is valid only with the submission of a duly and fully completed and certified, on the date of purchase, of the warranty certificate by the seller. Unreadable by ignorance of the risk of being misled.
3. Repairs, claims within the warranty period provided by the manufacturer, through an authorized distributor.

4. At your request, all defects and defects will be repaired or removed, if you announce it within the warranty period. We will repair the damage free of charge within 45 days from the date of the failure. A machine that we do not repair within 45 days, at your request, we will replace it with a new one. During the repairs performed by the machine at the service, we will extend your warranty period.

The guarantee does not cover the following cases:

1. if instructions are not applied
2. due to the negligent handling of the machine, the overloads that cause the breakage of the parts
3. due to any work on the machine carried out by an unauthorized person, from mechanical impacts, due to the fault of the buyer or third party.
4. for damages from flood, fire, lightning

In the event of a malfunction, contact us by letter or by phone to us or to our authorized distributor:

1. name, type and factory number of the machine
2. description of the fault
3. the correct address

Service Provision Time:

this is the time in which we guarantee service, accessories and spare parts, and it starts to be valid from the date of purchase of the machine, and it lasts for 10 years.

In Kuršumljaja, 17.01.2019

Director: Nenad Deljanin

WARRANTY

PRODUCT NAME:		TYP		SERIAL NUMBER:	
LOADER		FS-400			
YEAR PRODUCTION		SIGNATURE CONTROL:			
DATE OF SALE					
Day		Month (letters):		Year:	
_____		_____		_____	
Customer data:					
Customer Name:		_____			
Place:		_____			
Adress:		_____			

Sales clerk:

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