

Manual



Grapple

FG-120 FG-120S

Fredbjergvej 132, Denmark-9640 Farsø. www.fransgard.dk				
Model	FG-120			
Kg.	100			
Serie nr.				
	Made in Denmark			

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TECHNICAL DATA of the grapple FG-120 / FG-120S

Cylinder diameter	80 mm
Cylinder closing force	
Working pressure, max	
Opening width, max	
Weight	
Tractor performance, max	25-50 HP / 18-36 kW

SAFETY INSTRUCTIONS

***** WARNING!

Please pay special attention to all safety instructions labelled with this

sign* They are extremely important to read.

- 1. Become familiar with the instruction manual, carefully read through the safety regulations. Before using the grapple, the user (the person who will be operating the grapple) must be familiar with this Instruction Manual, i.e. have read it.
- 2. The user must be at least 18 years old.
- 3. The user must not be under the influence of alcohol, drugs or medication.
- 4. Remove all loose parts that do not belong to the machine.
- 5. All operating instructions must be carefully studied.
- 6. Place the machine in a position where it cannot move during: maintenance, cleaning, adjustment, fitting of accessories or spare parts and during storage.
- 7. The construction of the grapple must not be altered if it jeopardizes safety.
- 8. Do not use the machine for purposes other than those described in the instruction manual.
- 9. The safety zone is 20 metres, people should never be within this area. Pay special attention to the proximity of children.
- 10. Never leave the grapple hanging freely in the lift.
- 11. Do not use oversized or torn clothing (it may get caught in hydraulic handles).
- 12. Operate the grapple from inside the cab of the machine, never outside. Staying beneath the grapple and its load must never occur.
- 13. After 1 hour of use, check that all nuts are in place, and subsequently inspect them at regular intervals.
- 14. Be aware of any leaks in the hydraulics during work, if they occur, the fault must be rectified immediately. **Please note!** Oil pollutes the nature.
- 15. Use only original Fransgård spare parts and accessories.
- 16. The grapple is intended for loading logs onto forestry trailers. Transport on public roads must comply with applicable regulations.

* SECURITY, PERSON!!!

Working in loud noisy environments for long periods of time can lead to hearing damage or even deafness. The noise level depends on the tractor's cabin insulation, so wear appropriate hearing protection if necessary.

Avoid physical contact with the oil during maintenance/repair; therefore, wear gloves.

* TRANSPORT, ROAD!

- When transporting on public roads, adhere to all prescribed laws regarding lighting arrangements, etc., and install a warning triangle on the tractor.
- Keep reflectors and lights clean.
- **Take special care!** Due to the weight, the steering will be reduced.
- Absolutely no load in the grapple during transport on public roads.

SAFETY PRECAUTIONS DURING USE

For the tool to perform at its best, it needs to be checked regularly. After 1 hour of use, hydraulic hoses and cylinder for oil leakage should be checked, and then inspections should be conducted continuously. If there is equipment or protective gear that is not explicitly described in these instruction manuals, it does not fall under the standard program from Fransgård Maskinfabrik A/S.

CONSTRUCTION CHANGES

Changes to the construction of the grapple may only be made with the explicit permission of the manufacturer. Failure to do so will result in functional safety restrictions and a shorter lifespan.

PROPERTIES OF THE MACHINE (in short form)

The grapple is intended for loading logs onto forestry vehicles, use for other purposes is not permitted without prior approval from the manufacturer. Any use in addition to the above will void the warranty.

COUPLING

The grapple must be in a normal position, i.e., supported on a flat, solid surface, resting on the claw. Once this is ensured, the customisation happens as follows:

- 1. Drive carefully to the grapple so that it does not tip over during installation
- 2. Install the grapple, but be careful, lateral swinging occurs easily as there is no oil in the hydraulic system.
- 3. Make sure the hydraulic handles are in the centre position.
- 4. Connect the hydraulic hoses to the hydraulic outlets.
- 5. Supply the cylinder with oil via the hydraulic levers. During this action, make sure there is plenty of space around the claw, as it can react abnormally due to air in the system. Run back and forth a few times to let all the air out of the system.
- 6. Check the length of the hydraulic hoses to make sure they are not too short or too long.

At the same time, be aware of the possibility of them getting caught on protruding tractor structures around the lift. If necessary, the hoses must be secured.

UNCOUPLING

- 1. Close the stem grip completely and lower the grapple onto a stable/level surface.
- 2. Deactivate the hydraulic parking lever and remove the hydraulic hoses and the grapple.
- 3. Carefully drive the machine away from the tool.

***** WARNING!

- 1. Always be especially cautious in hilly terrain! In such situations, the forest grab should be immediately lowered so that the logs are always close to the ground. Otherwise, the logs hanging in the air, due to the floating position of the locking pin, can swing violently to the side, posing a significant risk of the tractor tipping over.
- 2. During transport, the logs can "settle" a little, which means they will take up less space. Therefore, the cylinder for gripping the claws must be activated afterwards while driving so that the logs stay in the grapple.
- **3.** When driving the forest grapple without logs, the claws must be fully closed **SAFETY DURING MAINTENANCE**

Before carrying out maintenance, e.g. adjustment, cleaning, installation and repair, please note the following:

- 1. All power transmission from the machine to the grapple must be decoupled.
- 2. The grapple must be placed in the lowest position, on a flat and firm surface.
- 3. Switch off the machine.
- 4. WAIT until all moving parts are at a standstill.
- 5. Secure the grapple so that it cannot move, even if the hydraulic outlets are operated.

MAINTENANCE

Thorough and always timely maintenance of your grapple is a good guarantee of functionality and longevity.

- Always keep disassembled items clean during repairs.
- Make sure no oil leaks out, as this can harm the environment.
- To avoid damage during dismantling, always use recognised tools.
- Always detect a defect as early as possible to avoid further defects and unnecessary costs.
- Always use original Fransgård spare parts.

LUBRICATION

After every 16 hours of use, the grapple should be lubricated so that there is always grease in the various moving parts.

HYDRAULICS

Hydraulic hoses, pipes and couplings should be checked from time to time for leaks, breaks or signs of leakage. To avoid major damage, replace worn and broken parts immediately.

When installing hydraulic components, it is important that hoses are cleaned of dust, rubber residue, etc. before installation.

Replacement of hydraulic HOSES

Correctly fitted hydraulic hoses last the longest! When replacing, the following should be noted:

- Keep the hose clean both inside and outside.
- Ensure that hoses are positioned correctly and that they can move freely in all working positions.
- Do not twist the hoses as this will significantly reduce their lifespan.
- After installation, check the hose joints for leaks.

Ordering spare parts

When ordering original Fransgård spare parts, please specify the following:

- Machine designation
- Production number
- Item number of the desired spare part
- Name of the spare part
- Address and name of the order giver
- Preferred shipping method (urgent/normal)

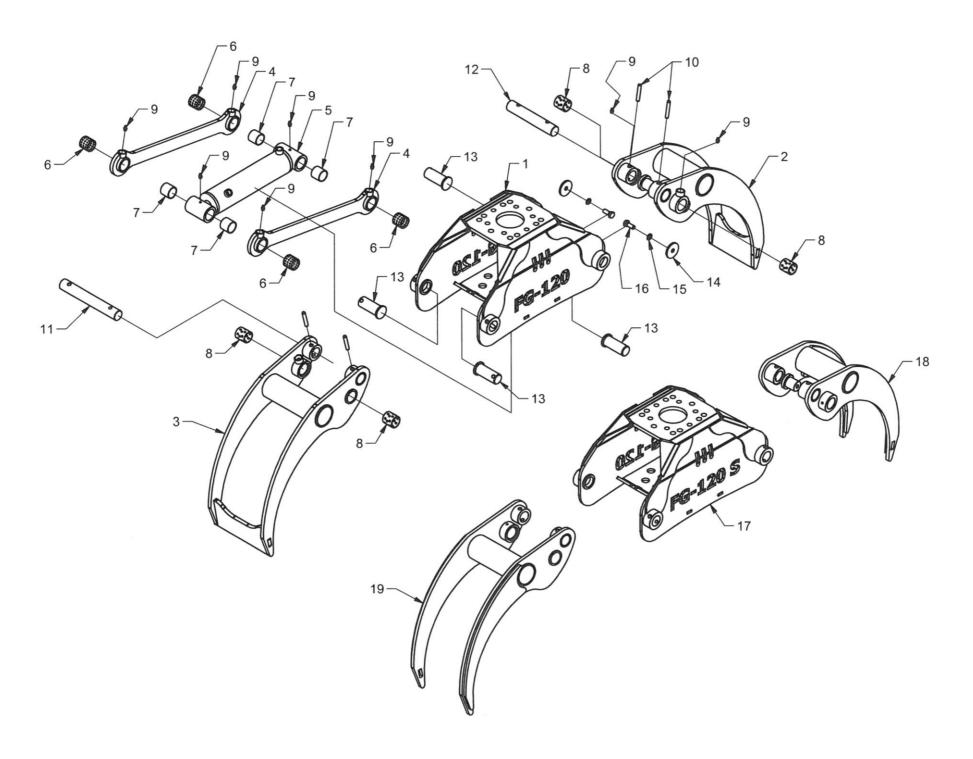
STORAGE

For longer periods of non-use, store the grapple in a dry and safe place.

Before it is set aside, it should be lubricated with grease in all grease nipples. If paintwork is missing, it's a good idea to spot-paint these areas. However, if the paint is missing due to wear and tear, oil/grease lubrication is preferable.

Disposal of the machine

- Be careful when disassembling, as several of the parts are very heavy.
- Make sure that the dismantled parts and oil are delivered to recycling and a recognised chemical waste disposal site, respectively.



Nr. No. Nr.	Vare nr. Part No. Teil Nr.	Antal Quantity Anzahl	,				Bemærkninger Remarks
No.	No.de pièce		Description	Description	Bezeichnung	Désignation	Bemerkung Remarques
1	10420	1	Hovedramme	Main frame	Hauptrahmen	Châssis principal	
2	10424	1	Tang højre	Tong right	Zange R.	Demi-mâchoire de grappin,	droite
3	10422	1	Tang venstre	Tong left	Zange L.	Demi-mâchoire de grappin,	gauche
4	10425	2	Parallel stang	Parallel bar	Parallel Stange	Barre stabilisatrice	
5	10423	1	Hydraulikcylinder	Hydraulic cylinder	Hydraulikzylinder	Cylindre de hydrauliques	
6	10537	4	Bøsning	Sleeve	Buchse	Douilles	35x39x35mm
7	10535	4	Bøsning	Sleeve	Buchse	Douilles	35x39x35mm
8	10536	4	Bøsning	Sleeve	Buchse	Douilles	35x39x40mm
9	881500240	10	Smørenippel	Lubricator nipple	Schmiernippel	Grasseur	M8x1,25 mm.
10	741190293	8	Spændstift	Tension spring pin	Spannhülse	Goupille de blocage	10x60mm.
11	10428	1	Aksel	Shaft	Horizontalwelle	Arbre horizontal	
12	10427	1	Aksel	Shaft	Horizontalwelle	Arbre horizontal	
13	10429	4	Bolt	Screw	Schraube	Boulon	M10x100 8.8 FZB
14	521350	2	Skive	Washer	Scheibe	Rondelle	ø12,5x52x5mm
15	740760030	2	Tandskive	Disk	Scheibe	Bague	12,5mm
16	740210405	2	Sætskrue	Set Screw	Schraube	Vis	M12x30 8.8 FZB
17	10440	1	Hovedramme	Main frame	Hauptrahmen	Châssis principal	
18	10444	1	Tang højre	Tong right	Zange R.	Demi-mâchoire de grappin,	droite
19	10442	1	Tang venstre	Tong left	Zange L.	Demi-mâchoire de grappin,	gauche

