

Operating Instructions for the GRANIT Index group 200 type Hydraulic Top link

***Please read and follow these operating instructions before use.
Please keep them in a safe place for further use***

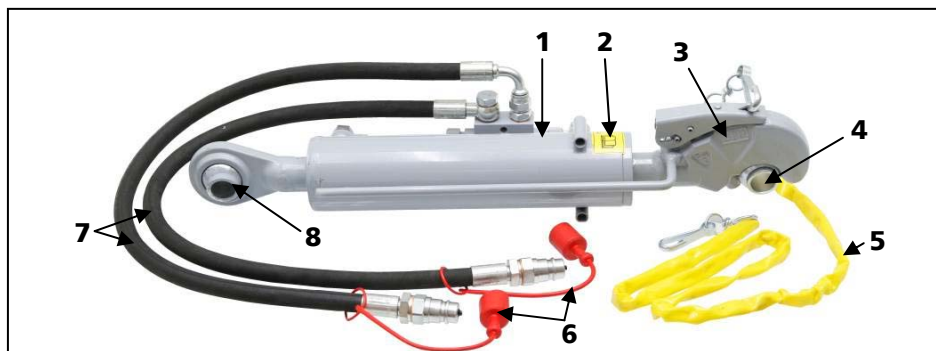


Fig.1



Fig.2

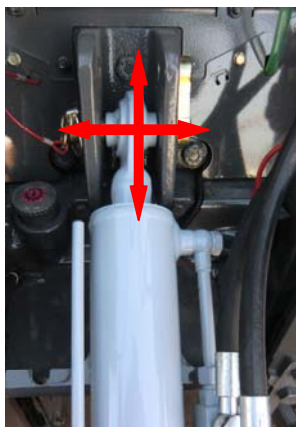


Fig.3



Fig.4






Fig.5

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1. Explanation of Warnings and Symbols in these Operating Instructions

Information in these operating instructions is identified as follows:

	DANGER	Risk of personal injury or environmental damage
	IMPORTANT	Risk of product damage
	NOTE	Useful information

- Numbers in illustrations (1, 2, 3) correspond to the numbers in brackets (1), (2), (3) in the accompanying text and positions in tables.
- Procedures which must be completed in the correct order are numbered as such.
- Lists are identified with bullet points (•, •).

2. Safety Procedures and Accident Prevention Regulations

2.1 General Notes on Safety

- These operating instructions have been produced in such a way as to ensure your safety.
- Personnel who are not familiar with the points made in these instructions should not be allowed to use the product.
- Read the entire operating instructions before using the product. Take particular note of the safety notes.
- These operating instructions are aimed at personnel with prior technical experience of this type of product. If you do not have experience of this type of device, seek advice from an experienced operator.
- Keep all paperwork delivered with this product in a safe place for reference purposes. Keep your invoice in case of guarantee claims.
- If the product is to be hired out or sold on, ensure that you forward all paperwork with it.
- Follow all maintenance schedules and care plans outlined in these operating instructions.
- Be aware of children, and ensure that they are not allowed to come into contact with, or play with, the product.
- The product may not be used after the consumption of alcohol, drugs or medication which may cause drowsiness. This product is not suitable for use by persons with reduced mental capacity, inexperienced operators or children. The manufacturer accepts no responsibility for injury or damage which occurs due to these instructions not having been read.
- The machine operative is responsible for injury or damage caused to third parties during operation.
- This product is not suitable for the lifting or towing of objects, people or animals.
- The hydraulic system operates under high pressure.

- All relevant safety regulations should be followed during the connection of hydraulic cylinders or hydraulic motors. When connecting hydraulic hoses to the tractor's hydraulic system, ensure that the system is unpressurised.
- Hydraulic connections must be clearly identified to avoid the risk of incorrect connection.
- Check hydraulic hoses regularly, and replace if they show signs of damage or aging. Replacement hoses must conform to the manufacturer's specifications. Where no replacement schedule is specified, hoses must be replaced after a maximum of six years to prevent aging.
- Use appropriate tools to prevent injury when searching for leaks.
- Fluid escaping under high pressure can penetrate the skin and cause serious injury and risk of infection. If injured, seek medical advice immediately! Before working on the hydraulic system, detach the product, depressurise the system and switch off the engine.

2.2 Product-specific Safety Regulations



- Adjustment, maintenance and cleaning work should only be carried out wearing protective gloves, to avoid the risk of injury against sharp edges.
- Well fitting protective gloves must be worn during the operation of, and working on, the product.
- Carry out a visual inspection and function test before every use to avoid damage and to identify worn components. Use of the product with damaged, worn or missing components is strictly forbidden.
- Only pass this product on to personnel who are experienced in the use of this type of product. All relevant paperwork must also be passed on.
- Do not make any technical alterations to the product.
- Maintenance schedules and cleaning plans as set out by the manufacturer in Chapter 6 "*Maintenance and Care*" must be followed carefully.
- Adjustment and maintenance should only be carried out by authorised, qualified personnel.
- Only replacement parts from Wilhelm Fricke GmbH (GRANIT) should be used for maintenance / replacement.

3. Description of Use and Technical Specifications

3.1. Designated Use

!! WARNING !!

The Hydraulic Top link acts as an upper mounting point for the attachment and retention of add-on devices to the rear three-point linkage of tractors. Due to the hydraulic control, mounting and dismounting of devices can be carried out from the

driving cab. Control of the product from the cab does not replace the requirement to check the device following attachment or detachment.

In addition, it is possible to adjust the angle of the device without having to leave the cab or loosen the linkage. The hydraulic top link is not to be used for any procedure or purpose other than those outlined above.

For dimensions and weight of the hydraulic top link, please see paragraph 3.2 of these operating instructions: *"Technical Specifications"*.

For further technical enquiries please contact the sales office at Granit Parts Limited Partnership. The address can be found in chapter 12 of these operating instructions: *"Addresses"*.

The technical requirements on the tractor where a hydraulic top link is used can be found in the Technical Specifications in paragraph 3.2 of these instructions or in the operating instructions for the tractor.



Any use other than described above is strictly forbidden and constitutes non-designated use, which can lead to serious injury or damage to property or the environment.

RISK OF ACCIDENTS

Use which exceeds the stated capacity of the product is strictly forbidden and can give rise to extreme risk of accidents with serious consequences for personnel and the environment, as well as damage to the product.

All safety warnings and hints, as well as the instructions for use contained in this document must be read thoroughly.

3.2. Technical Specifications

GRANIT Index Group 200 version

Mechanical attachment to tractor and load capacity relating to the enclosed product (Table 2)

Max. authorised working pressure: 180 bar

Hydraulic connection: 1x DW push connector group 3

Medium: Mineral-based hydraulic oil HLP 46



Do not use in environments where there is a risk of explosion.

4. Product description

4.1. Included in Delivery

- Hydraulic top link partly assembled
Technical documentation consisting of operating instructions to be used in conjunction with the operating instructions of the tractor.

4.2. Description and individual components



WARNING: Replacement of the parts outlined in this paragraph is authorised only for qualified personnel. Incorrect use and construction can increase the risk of injury or damage.

List relating to Fig. 1:

No.	Qty.	Description
1	1	Hydraulic cylinder
2	1	Warning sign
3	1	Arrestor hook (according to version)
4	1	Top link ball
5	1	Control cable
6	2	Dust cap
7	2	Hydraulic hoses complete
8	1	Ball joint (according to version)

Table 1

Replacement parts and information about part numbers are available from your authorised GRANIT Dealer.

5.1. Handling the Hydraulic Top link

Before mounting the top link onto the tractor, take note of the following points to ensure safe operation.

- Before installing the product onto the tractor, check the mounting points for damage and cleanliness.



WARNING: Damage and cleanliness can have a negative effect on the safety of the product. **RISK OF ACCIDENT!!!**

- Check the connection material for trueness and integrity.



WARNING: Use only the connection materials delivered with the product. Where the connection material is damaged, it should be replaced with parts from GRANIT Parts. **RISK OF ACCIDENT!!!**

- Check the product specifications against the details given in these operating instructions.



WARNING: The use of unsuitable or defective tools can lead to injury or accident. **RISK OF INJURY**



WARNING: The installation of the product should only be carried out by qualified personnel. **RISK OF ACCIDENT!!!**

1. Remove all components from its packaging and lay on a clean, robust surface.



WARNING: The use of defective components can lead to injury or accident.

2. Install the control cable as per Fig.4
3. Connect the hydraulic hoses to the hydraulic cylinder (Fig.1).



WARNING: Tighten hose connections fully. Escaping hydraulic fluid can lead to serious injury.

4. Install the handle (Fig.1 / optional) according to the relevant instructions.
5. Check the work completed so far and make adjustments where necessary.

5.2. Installation and Removal



WARNING: Before installation, the tractor must be protected against unintentional starting. **RISK OF ACCIDENT!!!**

5.2.1. Installation on Tractor

1. Check that the mounting points on tractor and product match exactly. In case of doubt, seek professional advice.



WARNING: Connection on parts that do not match exactly increase the risk of accidents.

2. Make the connection between the tractor and the hydraulic top link according to the operating instructions for the tractors.
3. Connect the hydraulic connections to the tractor hydraulic system according to the operating instructions of the tractor.



WARNING: Badly made connections can burst and cause increased risk of injury or damage to the environment.



IMPORTANT: Low fluid levels (e.g. due to leakage) can lead to damage to the tractor's hydraulic system. Check the fluid level before use. Refer to the technical specifications of the tractor.

4. Check the connections for correct seating and sufficient movement in relation to the tractor components (Fig. 3).



IMPORTANT: Insufficient movement can lead to damage to the tractor and the hydraulic top link.

The hydraulic cylinder may only be loaded in a straight line corresponding to the stroke of the hydraulic cylinder.



IMPORTANT: Never place tangential loads on the hydraulic top link, as this can cause damage and constitutes non-designated use.

5. Protect the top link from uncontrolled twisting, according to the operating instructions of the tractor.



WARNING: When incorrectly secured, the top link can twist around, causing injury.

6. Where twisting has occurred, reset the position carefully.
7. Bleed the cylinder unit through repeated extension and retraction of the piston rod.



WARNING: Do not touch the moving piston rod, as this can cause serious injury, including severe bruising up to amputation.

5.2.2. Removal from Tractor

1. Completely retract the piston rod.



IMPORTANT: Ensure that the exposed piston rod is not damaged – this can lead to oil leakage and further damage to the top link.

2. Depressurise the hydraulic system, and then break the hydraulic connections between the tractor and the top link.



WARNING: Pressurised fluid can escape, causing severe injury.

3. Close the hydraulic connections with the dust caps.
4. Fold the top link downwards, holding securely.



WARNING: There is a risk of squashing between the tractor and the top link when folding the top link down.

5. Loosen the mechanical connection according to the operating instructions of the tractor.
6. Remove the top link.
7. Lay the top link on a clean, robust surface.

5.3. Use of the hydraulic top link



WARNING: Before entering the danger zone, protect the tractor against unintentional starting and lower the device as far as it will go.

RISK OF ACCIDENT!!!

5.3.1. Connection and use of a device

1. Check that the categories of the top link and the device match, and that the device is suitable for use with the tractor.



WARNING: Non-matching categories can lead to serious accidents.

2. Secure the ball to the top link pin on the device.
3. Connect the mounting points to the lower arrestor hooks.
4. Pull the cable to open the arrestor hooks. (Fig. 2).



WARNING: Do not allow the cable to loop around your hand or finger, as this increases the risk of squashing or amputation.

5. Set the required length using the adjustment points on the tractor.



WARNING: Touching the moving parts or piston rod can lead to serious injury, including squashing up to amputation.

6. Lock the top link arrestor hooks by pulling down using the control cable.
7. Check the mechanical locking and the free movement of the control cable (Fig. 5).



WARNING: Locks which are not completely engaged, or pinched cable can lead to unintentional opening of the arrestor hooks. **RISK OF ACCIDENT!!!**

8. Adjust the length of the hydraulic top link to achieve the required working and transport positions.
9. Lock the length adjuster to prevent unintentional movements.



WARNING: unintentional movement can lead to serious accidents.

10. Check the installation according to the specifications of the device.

5.3.2. Removal of the Device

1. Lower the device onto a clean and robust surface.



WARNING: Failure to do this can lead to tipping of the device and with it a risk of serious accident.

2. De-tension the arrestor hooks by adjusting the length of the hydraulic top link.
3. Pull the control cable to unlock the arrestor hooks.



WARNING: Only control the topline using the control cable, do not allow it to loop around any part of your body. Risk of squashing or amputation.

4. Hook the top link to the holding bracket on the tractor, and secure against twisting.



WARNING: Insecure topline can twist and cause injury.

5. Retract the piston rod completely.
6. Disconnect any remaining connections between tractor and device.



WARNING: Protect the tractor against unintentional starting before stepping between the tractor and device.

7. After removal, detach the top link ball and store in a safe place.
8. Check that the device is stable, and that the top link is secured.

6. Maintenance and Servicing

- Maintenance and servicing should only be carried out by qualified personnel.
- The maintenance and servicing requirements outlined in these operating instructions are mandatory and must be observed.
- Use only original replacement and wear parts.
- Welding of the hydraulic cylinder or its pick-up points is strictly forbidden.
- When repainting, ensure that all product plates and warning signs remain visible and legible, or are replaced with parts from GRANIT Parts.

6.1. Maintenance Schedule

All components should be thoroughly checked before first use, after any alterations and at least once a year. These checks should be documented appropriately.

Before each use, the operator should check the product for wear and damage. In particular the integrity of the mounting points must be checked.



WARNING: Non-adherence to the maintenance schedule can lead to serious accidents and reduced performance of the product.

All lubrication points should be lubricated according to the following plan using an environmentally-friendly lubricant.

Lubrication schedule	Before laying up (Winter break)	After laying up	After max. 20 operating hours
Grease the pins and linkages	Environmentally-friendly multipurpose grease		

6.2. Cleaning Plan

Clean all equipment after every use. Cleanliness when handling will ensure that equipment is protected from damage, and will extend its lifespan.

If you are unable to remove dirt using a brush, we recommend using a jet of water. Do not use aggressive cleaning agents.



WARNING: Never direct the jet of water onto hydraulic components, seals or bearings. This could lead to costly repairs.



WARNING: Wash only in authorised areas. Grease and hydraulic oil run-off can lead to environmental damage. Please note your regional bylaws.

7. Transport and Storage



- When storing the top link long term, it should be washed and lubricated according to the specifications given in section 6.
- Check the condition of wear parts and that all components are correctly located. Carry out any necessary maintenance work or parts replacement prior to storage.



WARNING: RISK OF INJURY due to muscle strain when lifting and carrying this product.

- Ensure that the top link is stored on a flat, stable surface.
- The storage area should be dry. Cover the top link with a clean, dry tarpaulin.

8. Environmental Protection and Disposal

Separate disposal of different types of waste ensures that many materials can be re-used. This is also true of materials that can be reclaimed from the unit itself, from lubricants, packing and wear parts after the normal, expected lifespan of the product. Please ensure that you dispose of any waste material appropriately and safely.

Ensure that a life-expired unit is rendered inoperative prior to disposal.



WARNING: In case of doubt, please seek professional advice relating to removal and disposal. RISK OF INJURY!



WARNING: Hydraulic fluid can be damaging to health. When working with it, always wear protective gloves.



WARNING: Do not eat, drink or smoke when working with hydraulic fluid.



WARNING: Hydraulic fluid run-off can lead to environmental damage. Please store fluid only in a suitable location (i.e. with a hard-standing floor).

!!! Please take note of any relevant regional bylaws!!!

9. Troubleshooting

Fault / Symptom	Cause of fault	Solution
Arrestor hook does not open.	Top link is not de-tensioned	De-tension top link using tractor hydraulics.
	Dirt or corrosion in release mechanism.	Clean according to instructions and spray with penetrating fluid.
	Component damaged (e.g. spring)	Have unit repaired at a suitable workshop.
Arrestor hook does not close.	Dirt or corrosion in locking mechanism.	Clean according to instructions and spray with penetrating fluid.
	Component damaged (e.g. spring)	Have unit repaired at a suitable workshop.
Oil leakage at the piston rod.	Seal damaged	Have the seal replaced at a suitable workshop.
Hydraulic connector cannot be plugged in.	System is pressurised.	De-pressurise system according to tractor operating instructions.
	Connector damaged	Have connector replaced at a suitable workshop.
Piston rod does not fully extend / retract.	Piston rod bent or damaged	Have unit repaired at a suitable workshop
Piston rod does not fully extend / retract.	Pressure is too low, or load is too heavy	Have pressure tested (max. 180bar). Check the weight of the device.
	Control block is defective.	Have block replaced at a suitable workshop

10. EU Conformity

EU Conformity for machinery (EG – RL 2006 / 42 IEG)

The company,

Granit Parts Ltd Partnership

Wilhelm Fricke GmbH

Zum Kreuzkamp 7

D-27404 Heeslingen

hereby certifies that the machinery *hydraulic top link*,
lifting component for devices

Type / Series identification: **GRANIT Index Group 200**

conforms to the machinery regulation **2006 / 42 / EG**.

The product has been developed in accordance with the following norms:

EN ISO 12100-1 A1/A2 EN 349 ISO 730 DIN EN 982

Technical documentation retained by:

Mr Holger Wachholtz, *Wilhelm Fricke GmbH*

Heeslingen, 20/03/2011



(Holger Wachholtz, Managing Director, Wilhelm Fricke & Co GmbH)

11. Guarantee

The normal guarantee policy of GRANIT Parts Ltd Partnership (Wilhelm Fricke GmbH) apply to this product as set out on our sales documentation and in our general business terms and conditions. Please direct any enquiries to the sales office.

12. Addresses

Sales/Parts/Enquiries/ Customer Service:

Tel.: 01480 479 380
Fax: 01480 215 041
sales.uk@granit-parts.com
www.granit-parts.co.uk

Postal Address:

GRANIT Parts Limited Partnership
The Knowledge Centre
Wyboston Lakes
Wyboston
Bedfordshire MK44 3BY

13. Overview o hydraulic top link

The following tables Table 2 (a) to (d) give information about the technical specifications of the hydraulic top link variants within GRANIT Index Group 200.

Oberlenker beidseitig mit Kugelgelenk

nicht verstellbar

Best.-Nr.	Gewinde	Kat. A	Kat. B	Hub C	Kolbenstangen-Ø D	Zylinder-Ø innen E	F min.	F max.	G	Hubkraft (to)	Zugkraft (to)
20003001	Sperrblock oben	1/19,2	1/19,2	95	30	50	352	447	44	3	2
20000057	Sperrblock oben	1/19,2	1/19,2	160	30	50	410	570	44	3	2
20000058	Sperrblock oben	1/19,2	1/19,2	210	30	50	460	670	44	3	2
20000059	Sperrblock oben	1/19,2	1/19,2	280	30	50	530	810	44	3	2
20000060	Sperrblock oben	1/19,2	1/19,2	400	30	50	650	1050	44	3	2
20000061	Sperrblock oben	1/19,2	1/19,2	225	35	63	500	725	44	5	4
20003002	Sperrblock oben	2/25,4	2/25,4	95	30	50	368	463	41	3	2
20000062	Sperrblock oben	2/25,4	2/25,4	160	30	50	430	590	51	3	2
20000063	Sperrblock oben	2/25,4	2/25,4	210	30	50	480	690	51	3	2
20000064	Sperrblock oben	2/25,4	2/25,4	280	30	50	550	830	51	3	2
20000065	Sperrblock oben	2/25,4	2/25,4	400	30	50	670	1070	51	3	2
20000066	Sperrblock oben	2/25,4	2/25,4	160	35	63	450	610	51	5	4
20000067	Sperrblock oben	2/25,4	2/25,4	210	35	63	500	710	51	5	4
20000068	Sperrblock oben	2/25,4	2/25,4	280	35	63	570	850	51	5	4
20000069	Sperrblock oben	2/25,4	2/25,4	400	35	63	690	1090	51	5	4
20000070	Sperrblock oben	2/25,4	2/25,4	160	40	80	480	640	51	9	6
20000071	Sperrblock oben	2/25,4	2/25,4	210	40	80	530	740	51	9	6
20000072	Sperrblock oben	2/25,4	2/25,4	280	40	80	600	880	51	9	6
20000073	Sperrblock oben	2/25,4	2/25,4	400	40	80	720	1120	51	9	6
20003004	verstellbar, Gewinde M36 x 3	2/25,4	2/25,4	240	45	90	625	865	51	11	8
20003006	verstellbar, Gewinde M30 x 3	2/25,4	2/25,4	240	36	63	575	815	51	5	4
20003005	verstellbar, mit Gewindespindel M36 x 3	3	3	240	45	90	625	865	51	11	8

Table 2a

Oberlenker mit Fanghaken und Kugelgelenk

nicht verstellbar

Best.-Nr.	Ausführung	Kat. A	Kat. B	Hub C	Kolbenstangen-Ø D	Zylinder-Ø innen E	F min.	F max.	G	H	Hubkraft (to)	Zugkraft (to)
20021195	oben	1	1	95	30	50	352	447	51	19	3	2
20021216	oben	2	1	95	30	50	362	457	51	25,4	3	2
20000041	Sperrblock oben	2	2	160	30	50	510	670	51	25,4	3	2
20000042	Sperrblock oben	2	2	210	30	50	560	770	51	25,4	3	2
20000043	Sperrblock oben	2	2	280	30	50	630	910	51	25,4	3	2
20000044	Sperrblock oben	2	2	400	30	50	750	1150	51	25,4	3	2
20011238	Sperrblock seitlich	2	2	220	30	60	565	775	51	25,4	5	3
20011255	Sperrblock oben	2	2	280	30	60	635	915	51	25,4	5	3
20000045	Sperrblock oben	2	2	160	35	63	500	660	51	25,4	5	4
200820002	Sperrblock seitlich	2	2	190	35	63	510	700	51	25,4	5	4
20000046	Sperrblock oben	2	2	210	35	63	550	760	51	25,4	5	4
20000047	Sperrblock oben	2	2	280	35	63	620	800	51	25,4	5	4
20000048	Sperrblock oben	2	2	400	35	63	740	1140	51	25,4	5	4
20011989	Sperrblock oben	2	2	160	35	70	485	645	51	25,4	6	5
20010572	Sperrblock seitlich	2	2	220	35	70	570	790	51	25,4	6	5
20010573	Sperrblock seitlich	2	2	280	35	70	640	920	51	25,4	6	5
20000051	Sperrblock oben	2	2	160	35	70	474	634	51	25,4	6	5
20000052	Sperrblock oben	2	2	240	35	70	554	794	51	25,4	6	5
20000053	Sperrblock oben	2	2	280	35	70	594	874	51	25,4	6	5
20000049	Sperrblock oben	2	2	160	40	80	540	700	51	25,4	9	6
20011571	Sperrblock seitlich	2	2	210	40	80	590	800	51	25,4	9	6
20011220	Sperrblock seitlich	2	2	280	40	80	660	940	51	25,4	9	6
20000050	Sperrblock oben	2	2	400	40	80	780	1180	51	25,4	9	5
20000054	Sperrblock oben	3	3	160	40	80	608	848	51	32	9	6
20000055	Sperrblock oben	3	3	240	40	80	648	928	51	32	9	6
20000056	Sperrblock oben	3	3	280	40	80	768	1168	51	32	9	6

Table 2b

Oberlenker mit Fanghaken und Kugelkopf

verstellbar, Sperrblock oben

Best.-Nr.	Gewinde	Kat. A	Kat. B	Hub C	Kolbenstangen-Ø D	Zylinder-Ø innen E	F min.	F max.	G	H	Hubkraft (to)	Zugkraft (to)
20000085	M30 x 3	2	1	240	35	63	637	877	487	357	5	4
20000088	M30 x 3	2	1	310	35	63	707	1017	557	427	5	4
20000089	M30 x 3	2	1	240	35	70	637	877	487	374	6	5
20000090	M30 x 3	2	1	310	35	70	707	1017	557	432	6	5
20000091	M30 x 3	2	2	240	35	63	657	897	487	357	5	4
20000092	M30 x 3	2	2	310	35	63	727	1037	557	427	5	4
20000093	M30 x 3	2	2	240	35	70	657	897	487	374	6	5
20000094	M30 x 3	2	2	310	35	70	727	1037	557	432	6	5
20011260	M30 x 3	2	2	240	36	63	585	825			5	4
20011257	M30 x 3	2	2	240	36	63	675	915			5	4
20011256	M30 x 3	2	2	240	36	63	585	825			5	4
20000095	M36 x 3	3	2	150	45	90	592	742	452	285	11	8
20000096	M36 x 3	3	2	240	45	90	692	932	552	390	11	8
20000097	M36 x 3	3	2	255	45	90	742	997	602	405	11	8
20000098	M36 x 3	3	2	200	45	90	652	852	512	350	11	8
20011245	M36 x 3	3	2	210	45	100	670	880			14	9
20010649	M36 x 3	3	2	240	45	90	645	885			11	8
20000099	M36 x 3	3	2 schwer	150	45	90	607	757	452	285	11	8
20000100	M36 x 3	3	2 schwer	240	45	90	707	947	552	390	11	8
20000101	M36 x 3	3	2 schwer	255	45	90	757	1012	602	405	11	8
20000102	M36 x 3	3	2 schwer	200	45	90	667	867	512	350	11	8
20000103	M36 x 3	3	3 schwer	150	45	90	667	817	512	350	11	8
20000104	M36 x 3	3	3 schwer	240	45	90	707	947	552	390	11	8
20000105	M36 x 3	3	3 schwer	255	45	90	757	1012	602	405	11	8
20000106	M36 x 3	3	3 schwer	200	45	90	667	867	512	350	11	8

Table 2c

Oberlenker mit Fanghaken und Gabelkopf

verstellbar, Sperrblock oben

Best.-Nr.	Gewinde	Kat. A	Kat. B	Hub C	Kolbenstangen-Ø D	Zylinder-Ø innen E	F min.	F max.	G	H	Hubkraft (to)	Zugkraft (to)
20000107	M30 x 3	2	2	240	35	63	649	889	487	357	5	4
20000108	M30 x 3	2	2	310	35	63	719	1029	557	427	5	4
20000109	M30 x 3	2	2	240	35	70	649	889	487	374	6	5
20000110	M30 x 3	2	2	310	35	70	719	1023	557	432	6	5
20000111	M30 x 3	2	28	240	35	63	649	889	487	357	5	4
20000112	M30 x 3	2	28	310	35	63	719	1029	557	427	5	4
20000113	M30 x 3	2	28	240	35	70	649	889	487	374	6	5
20000114	M30 x 3	2	28	310	35	70	719	1029	557	432	6	5
20000115	M30 x 3	2	30	240	35	63	649	889	487	357	5	4
20000116	M30 x 3	2	30	310	35	63	719	1029	557	427	5	4
20000117	M30 x 3	2	30	240	35	70	649	889	487	374	6	5
20000118	M30 x 3	2	30	310	35	70	719	1029	557	432	6	5
20000119	M36 x 3	3	2	150	45	90	614	754	452	285	11	8
20000122	M36 x 3	3	2	200	45	90	674	874	512	350	11	8
20000120	M36 x 3	3	2	240	45	90	714	954	552	390	11	8
20000121	M36 x 3	3	2	255	45	90	764	1019	602	405	11	8
20000123	M36 x 3	3	28	150	45	90	614	754	452	285	11	8
20000126	M36 x 3	3	28	200	45	90	674	874	512	350	11	8
20000124	M36 x 3	3	28	240	45	90	714	954	552	390	11	8
20000125	M36 x 3	3	28	255	45	90	764	1019	602	405	11	8
20000127	M36 x 3	3	30	150	45	90	614	754	452	285	11	8
20000130	M36 x 3	3	30	200	45	90	674	874	512	350	11	8
20000128	M36 x 3	3	30	240	45	90	714	954	552	390	11	8
20000129	M36 x 3	3	30	255	45	90	764	1019	602	405	11	8
20000131	M36 x 3	3	32	150	45	90	614	754	452	285	11	8
20000134	M36 x 3	3	32	200	45	90	674	874	512	350	11	8
20000132	M36 x 3	3	32	240	45	90	714	954	552	390	11	8
20000133	M36 x 3	3	32	255	45	90	764	1019	602	405	11	8
20010649G	M36 x 3	3	32	240	45	90	666	906			11	8
20011240G	M36 x 3	3	32	240	45	90	726	966			11	8

Table 2

14. Legal information

Original Operating Instructions for the Hydraulic Top link type: Granit Index Group 200.
Manufacturer: GRANIT Parts (Wilhelm Fricke GmbH - D-27404 Heeslingen)
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