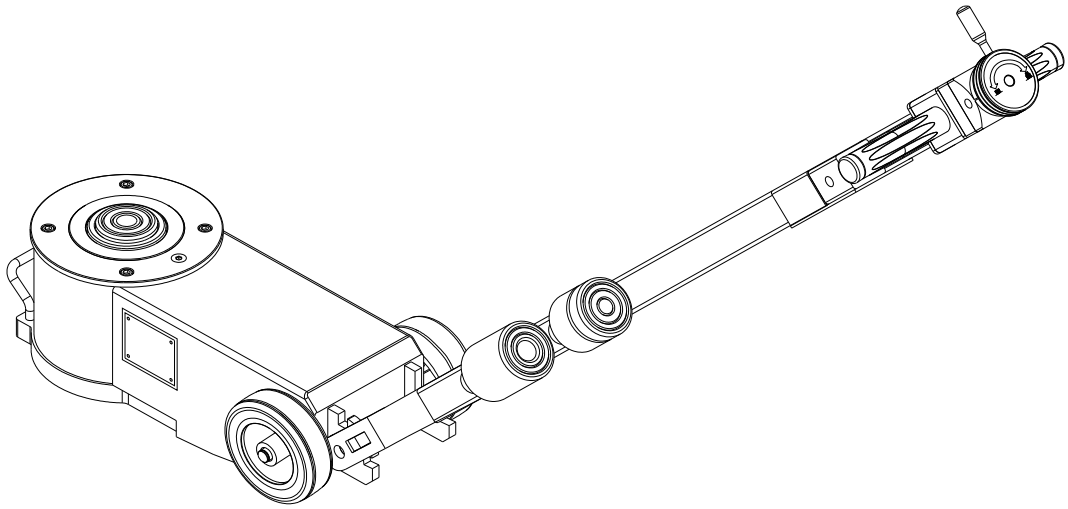
Air-operated Hydraulic Pressure Jack

GT-4042

Manual

Min.H.: 150 mm

Stroke : 140 mm



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Please read the warnings and instructions carefully in the present manual since they are concerning the important indications and safety of operation and maintenance. The Manufacturer is in no way responsible for eventual damages to persons, animals or equipments caused by improper, erroneous, incorrect and unreasonable application.

Usage notice.

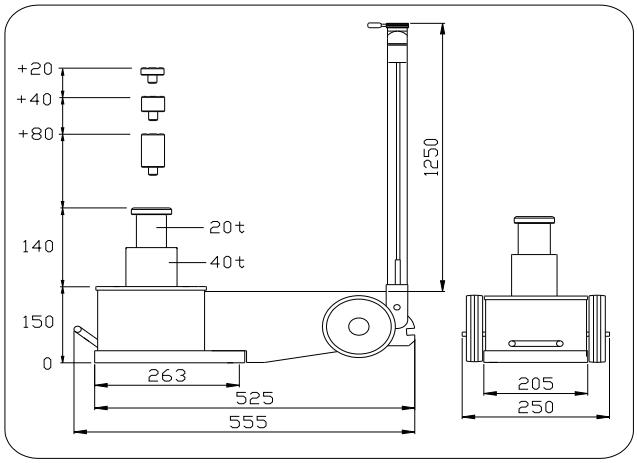
1. Please read the operator's instruction manual before using this equipment.
2. Instruction book must be read carefully when using air hydraulic Jack.
3. The manufacturer reserves the rights to improve equipment without giving prior notice to buyer in advance.
4. The operator shall read and operate the Jack according to the manual, paying special attention to the safety warnings. Bodily inquiry or death may occur if the safety warnings are ignored.
5. Please do not damage or disassemble the safety valve.
6. please place the air hydraulic Jack in the middle of heavy loading object when using.
7. During and after lifting the vehicle, make sure to properly position jack stands (supports).
8. Please make sure there is plenty of room to operate the Jack according to the manual.
9. When lifting or lowering, please check and make sure no body is under the heavy loading object.
10. When lowering, the operation rod must be kept in the lowest position to avoid damages.

Application:

Air hydraulic jack is a newly-type lifting equipment. It utilizes compressed air to promote booster cylinder, to make the hydraulic oil which is stored in oil tank infuse into oil cylinder to move hydraulic cylinder up & down. It adopts the machinery design combination of hydraulic pressure with great advantages of delicate design, small dimension, convenient moving, wide scope of usage, strong jacking capacity and low lifting part. It is a convenient lifting equipment and low labor intensity of automobile manufacturing, repairing, engineering mechanism or heavy-facility.

Specification & Parameter.

Model No.	GT-4042
Jacking Capacity	40t/20t
Air Pressure	8-12 bar
Lowest Height	150mm
Hoisting Height	140mm
Weight	42 kg

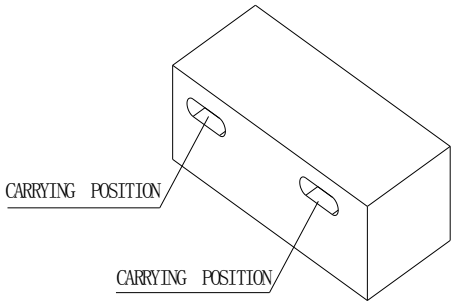


Safety Notice

1. Installation: please insert “A、B、C “airpipes into adaptors accordingly. Install the operation rod and main body together with fixed axis of operation rod. Place the retaining ring in good order. Pull the operation rod to three different directions: horizontal direction of operation rod & main body, direction of 45 degrees, and direction of 90 degrees. (As for operation procedure, please see the label of <Air hydraulic Jack installation instruction> which sticks on the operation rod.)
2. Make reasonable choice of clean and dry air pressure (Grease filter must be installed on the air resource), its application scope should be 8-12 bar (The MAX. air pressure of safety valve is 10bar) and within the rated air pressure scope to guarantee life.
3. Connect it with air pipe. (See picture A)
4. Place the air hydraulic jack on a stable, flat, resistant, dry surface without drains or holes when using. If necessary, place a wood board under the air hydraulic jack to avoid any deflection. (Please carefully read the label of <Warnings> which sticks on the operation rod.) .
5. When lifting, place some secured stands or solid supports on the suitable area under raised vehicle to assure security.
6. Before lifting, please estimate the weight of vehicle to avoid overloaded. The life of Jack will be affected strongly if it is overloaded.
7. When lifing, position the equipment under the strongest centre point of the vehicle. Do not position the Jack near or allow it to hit any bolt.
8. When Jack is lifting or lowering, in order to protect the Jack and oil cylinder, Please take hold of the handle of operation rod to use Jack.
9. The air hydraulic jack applies to 32# hydraulic oil. Make sure there is enough filtered & clean hydraulic oil to support the jack, otherwise the jack is unable to reach it rated hoisting height. If it lacks of oil, please screw off the bolt of oil tank’s filling opening and fill suitable amount of oil then screw on.
10. Don’t shake it sharply when using. To move the air hydraulic jack, please keep the wheels balanced with the operation rod in intermediate position.
11. Don’t place the Jack upside down when using.
12. Please keep the equipment cleaned & out of the reach of children when it is not using.
13. It is natural & normal to appear a little bit of oil leaking when transporting, loading and using it in the first time.
14. If oil volume is too much, the oil will be exhausted by the way of fog through suction pump. After the extra oil exhausted and this appearance will disappear.
15. If the oil is overfilled, pls use the available way to make it less to return to normal volume.

Transport:

The Jack should be packed in carton. Please see the carrying position as below picture:.



Notice:

1. Carry the Jack with hands in the (carrying position), see picture in left side.
2. If necessary, please use the transporting tools to move the Jack so that will not be damaged.
3. Please operate it according to the relative warning indication which sticks on carton.
4. The user can move the equipment to any places with the help of operation rod and wheels.

Installation, operation and maintenance.

1. Equipment installation, when Disassemble, please see (picture A/B/C/D/E/F).
2. Air hydraulic Jack operation
   a. Operate the handle of hand valve clockwise to carry out lifting. When the Jack lifts to the rated height then it will stop lifting automatically by itself with the limitation system.
   b. Operate the handle of hand valve anticlockwise to carry out moving down. The Jack moves down automatically by itself with reasonable design principle of air structure.
3. Jack maintenance
   a. Add lubricating oil regularly on the air inlet every 15 days once time, the lubricating oil volume is 5mL each time.
   b. Do not use the jack in a sloped area or in bad conditions.
   d. Check the oil tank to make sure whether there is enough hydraulic oil or not. Every 30 days once time. If it is needed to add oil, pls make sure the new filled oil is compatible with the original old oil, otherwise it will damage the hardness of machine.
   c. Keep it clean daily after using, especially the outer of oil cylinder.

Warning:

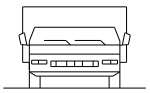
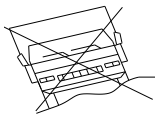
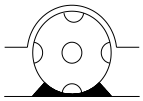
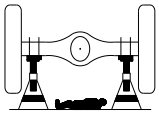
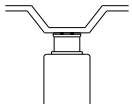
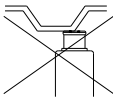
1. Air hydraulic jack is just only a lifting tool when using. It can not be used as a supporting tool. Without any secured stands or solid supports on the suitable area under raised vehicle to assure security, any operators are strictly prohibited to work after the equipment moved up. (Please carefully read the label of <Warnings> which sticks to the operation rod).
2. Use the Air hydraulic jack on a flat and resistant surface away from drains and holes. It is not allowed to use it on a slope floor to avoid lifting objects moving or slipping, especially those vehicle. Make sure to place some supports under the wheel to avoid slip then the Jack can be moved up or down. (Please carefully read the label of <Warnings> which sticks to the operation rod).
3. Always respect production requirement and use the Jack within the scope of jacking capacity. Don't be against the operation instruction to use it with overload.
4. Use clean and dry air pressure. its application scope should be 8-12 bar and at the same time to apply

the filtered & clean 32# hydraulic oil. (The MAX. air pressure of safety valve is 10 bar)

ttachment:

1. The extension rod is packed in another small carton and put together with the Jack body. Please take them out and put into the places of operation rod of where it should be.
2. The operation rod is packed in another carton. Please take it out and install it in the Jack body according to the installation indication of operation rod.

Safty warnings.

	Air hydraulic Jack should be used in the flat floor. Don't use it in slope or inclined floor.
	Don't use it in slope or inclined floor.
	When lifting, please support the landed wheels by some objects to avoid the vehicle moving after lifting.
	Air hydraulic jack is just only a lifting tool when using. It can not be used as a supporting tool. It should be used with some secured stands or solid supports together.
	When lifting, please make sure the extension rod should be straight head on the heavy loading object.
	It should not be head on the single side or other sizes which is far away from the heavy loading object.

The Way of Troubleshooting.

Condition	Possible reason	Troubleshooting
Gas-leak under the host	Connector or air pipe doesn't connect in a right way, or air pipe is broken.	Connect again or replace the air pipe or connector after checking.
Gas-leak on oil cylinder	Dustband or sealing and cylinder are broken	Check and replace the dustband or sealing or spare parts.
A little bit of oil leak	Oil runs into air pipe during the course of transporting.	It is unnecessary to repair if it works in good order
A great deal of oil leak	1. The equipment started under the condition of turnover. 2. Connector of oil inlet or sealing of oil cylinder is broken. 3. Inside wall of cylinder is broken	1. Starting the equipment under the condition of turnover is strictly prohibited. If it is not in this condition, check and make sure whether there is enough oil in oil tank or not, if not, it should add more. 2. Check and replace spare parts. 3. Check and repair cylinder.
Booster pump does not work	1. One-way valve or spring is broken. (see picture B) 2. Booster piston or booster cylinder is broken 3. Air pressure is not enough, air pipe removed or air inlet is plugged up.	1. Check and replace the spare part. 2. Check and repair, replace the spare part if necessary. 3. Check the air pressure whether is within 8-12bar and the air way is broken or not.
Booster pump works in good order but cylinder does not move up.	1. Lack of oil. 2. The steel ball of one-way valve is plugged up. 3. Oil Cylinder is broken.	1. Fill it with hydraulic oil. 2. Take the connector of oil inlet apart and take out the one-way valve and spring to clean it. 3. Check and repair cylinder.
It works with off load but it does not move up or move up slowly with heavy load.	1. Air pressure is not enough, air pipe removed or air inlet is plug up. 2. one-way valve is plugged up. 3. Hydraulic oil became thick	1. Check the air pressure whether is within 8-12bar and the air way is broken or not. 2. Check and Take every one-way valve apart and clean them. 3. Replace the hydraulic oil.

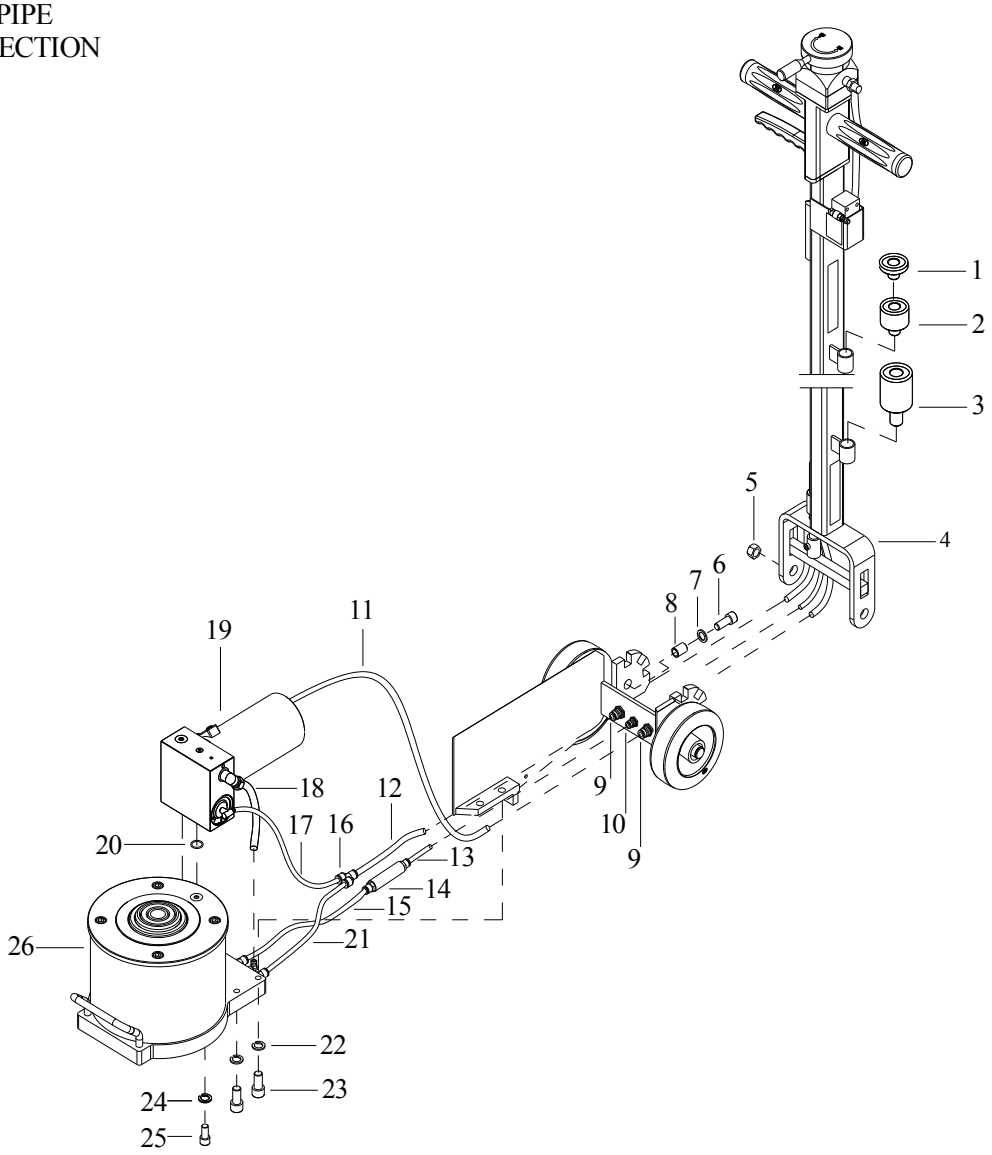
Bitte lesen Sie die Warnhinweise und Anweisungen in diesem Handbuch sorgfältig durch, da es sich dabei um wichtige Hinweise auf Betrieb und Wartung und die dabei zu beachtende Sicherheit handelt. Der Hersteller übernimmt keinerlei Haftung für Schäden an Personen, Tieren oder Ausrüstungsteilen, die durch unsachgemäßen, fehlerhaften, inkorrekten und fahrlässigen Gebrauch verursacht werden.

Hinweise für den Einsatz:

1. Bitte lesen Sie die Anleitung sorgfältig durch, um die Sicherheitshinweise besser verstehen zu können.
2. Vor dem Einsatz des lufthydraulischen Wagenhebers muss das Anleitungsbuch gründlich gelesen werden.
3. Der Hersteller ist berechtigt, den in der Betriebsanleitung beschriebenen lufthydraulischen Wagenheber ohne vorherige Mitteilung oder Ankündigung zu verbessern oder zu ergänzen, wobei dies nicht zum Gegenstand von Gerichts- oder Sachverständigenverfahren gemacht werden kann.
4. Damit der Anwender den Wagenheber in angemessener Weise nutzen und Schäden vermeiden kann, muss er die Anweisungen in der Betriebsanleitung und die Sicherheits¬hinweise beachten. Das Ignorieren der Sicherheitshinweise kann zu Verletzungen und manchmal zu lebensbedrohlichen oder tödlichen Personenschäden führen.
5. Bitte beschädigen Sie das Sicherheitsventil nicht und entfernen Sie es nicht von der Ausrüstung.
6. Bitte setzten Sie den lufthydraulischen Wagenheber beim Einsatz mittig unter das Schwerlastobjekt.
7. Bitte stellen Sie sicher, nach dem Anheben das Stützgestell unter Schwerlastobjekt zu setzen.
8. Bitte stellen Sie vor dem Anheben zwei Keile an die Räder, um deren Bewegung zu blockieren und stellen Sie sicher, dass sich der Wagen nicht bewegt. Bitte verwenden Sie den Wagenheber nicht in beengten Bereichen, da dadurch die Last herabfallen kann.
9. Vergewissern Sie sich beim Anheben oder Absenken, dass sich keine Personen unter dem Schwerlastobjekt befinden.
10. Bitte stellen Sie die Bedienungsstange beim Absenken in die aufrechte Position, um Schäden am Wagenheber zu vermeiden.

Anwendung: Bei dem lufthydraulischen Wagenheber handelt es sich um eine Hebevorrichtung neuerer Art. Er verwendet Druckluft zum Vortrieb des Drucküberträgers (Booster- oder Hilfszylinder), damit das in einem Öltank befindliche Hydrauliköl in den Ölzylinder eintritt und den Hydraulikstempel dadurch auf und ab bewegt. Er vereinigt das Maschinendesign für die Druckhydraulik mit großen Nutzenvorteilen: filigrane Konstruktion, kleine Abmessungen, einfache Verfahrbarkeit, breiter Anwendungsbereich, kräftiges Hubvermögen und niedrige Hubeinheit. Er ist eine bequeme Hebevorrichtung zum Anheben ohne starke körperliche Anstrengung für die Automobilindustrie, Reparatur- und Ingenieurtechnik oder Schwerlastumschlageinrichtungen.

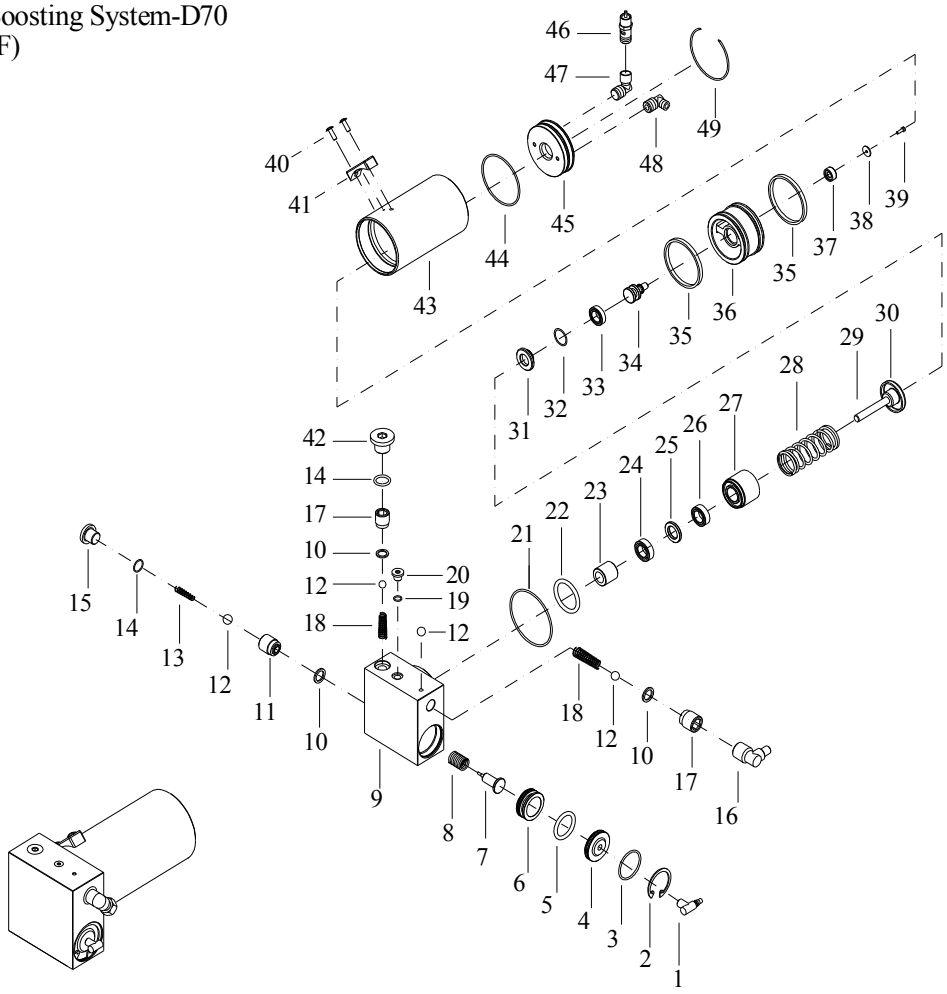
WINDPIPE
CONNECTION



Code	No.	PART NAME	QTY	Code	No.	PART NAME	QTY	Code	No.	PART NAME	QTY
1	02001	Extension Rod 20mm	1	10	Z24	Adaptor	1	19	D70F	Boosting System-D70	1
2	02003	Extension Rod 40mm	1	11	Q1	Windpipe	1	20	M7	O Ring	1
3	02004	Extension Rod 80mm	1	12	Q18	Windpipe	1	21	Q16	Windpipe	1
4	FG1250	Operation Rod(FL)	1	13	Q17	Windpipe	1	22	J6	M10 Spring Gasket	4
5	J26	M10 Bolt	2	14	TV5	Oil mist resistance pot	1	23	J4	M10 Screw	4
6	J24	M10 Gasket	2	15	Q14	Windpipe	1	24	J5	M8 Spring Gasket	4
7	J25	M10 Gasket	2	16	Z22	Adaptor	1	25	J3	M8 Screw	4
8	FG2	Screw thread insert	2	17	Q15	Windpipe	1	26	4042-1	Oil Cylinder(4042-1)	1
9	Z25	Adaptor	2	18	Q19	Windpipe	1				

GT-4042 EXPLODED VIEW
Picture A

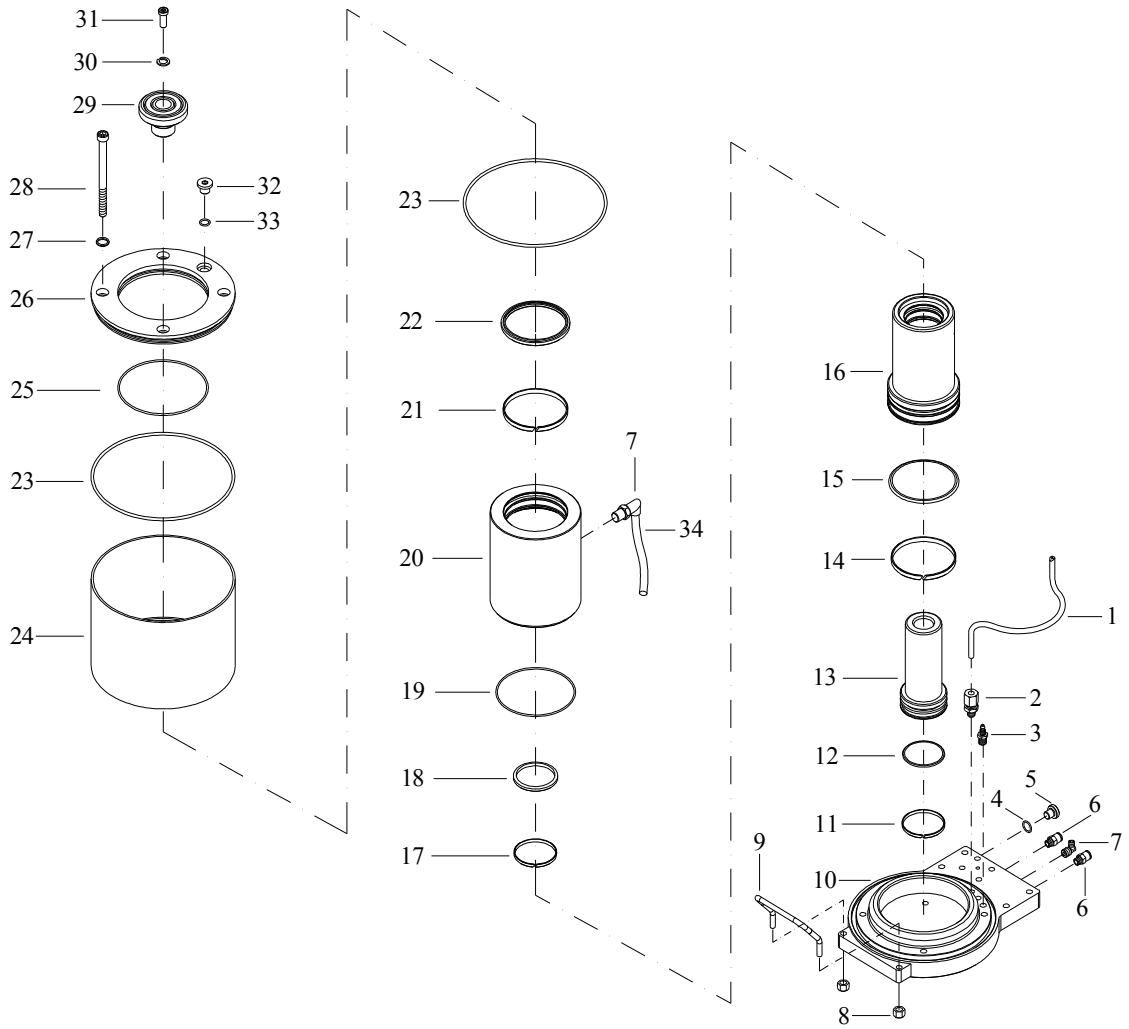
Boosting System-D70
(F)



Code	No.	PART NAME	QTY	Code	No.	PART NAME	QTY	Code	No.	PART NAME	QTY
1	Z10	Adaptor	1	18	W11	Spring	2	35	HS2	Glgy Ring	2
2	W14	Retaining Ring	1	19	M9	O Ring	1	36	702	Piston	1
3	M4	O Ring	1	20	W6	Screw-plug	1	37	M12	Sealing Gasket	1
4	813	Piston Cover	1	21	M16	O Ring	1	38	W2	Strengthened Piece	1
5	M5	O Ring	1	22	M6	O Ring	1	39	J1	Screw	1
6	808	Fuel Return Piston	1	23	706	Shaft Sleeve	1	40	J2	Screw	2
7	812	Fuel Return Thimble	1	24	M14	IDI-9*19*8	1	41	W15	Vent Cover	1
8	W9	Fuel Return Spring	1	25	705	Pump Gasket	1	42	W7	Screw-plug	1
9	707	Hydraulic Intergration	1	26	M15	IDI-9*17*5	1	43	701	Boosting cylinder	1
10	W3	Gasket	3	27	704	Hydraulic Pump	1	44	M18	O Ring	1
11	814	Screw-plug	1	28	W49	Spring	1	45	711	Cover	1
12	W13	Steel Ball	4	29	W16	Piston rod	1	46	Z5	Safe Valve	1
13	W10	Spring	1	30	703	Cover	1	47	Z4	Adaptor	1
14	M8	O Ring	2	31	710	Cover	1	48	Z1	Adaptor	1
15	W5	Screw-plug	1	32	M17	O Ring	1	49	W17	Retaining Ring	1
16	Z23	Adaptor	1	33	M19	Sealing kit	1				
17	815	Screw-plug	2	34	709	Piston	1				

Boosting System Drawings
Picture B

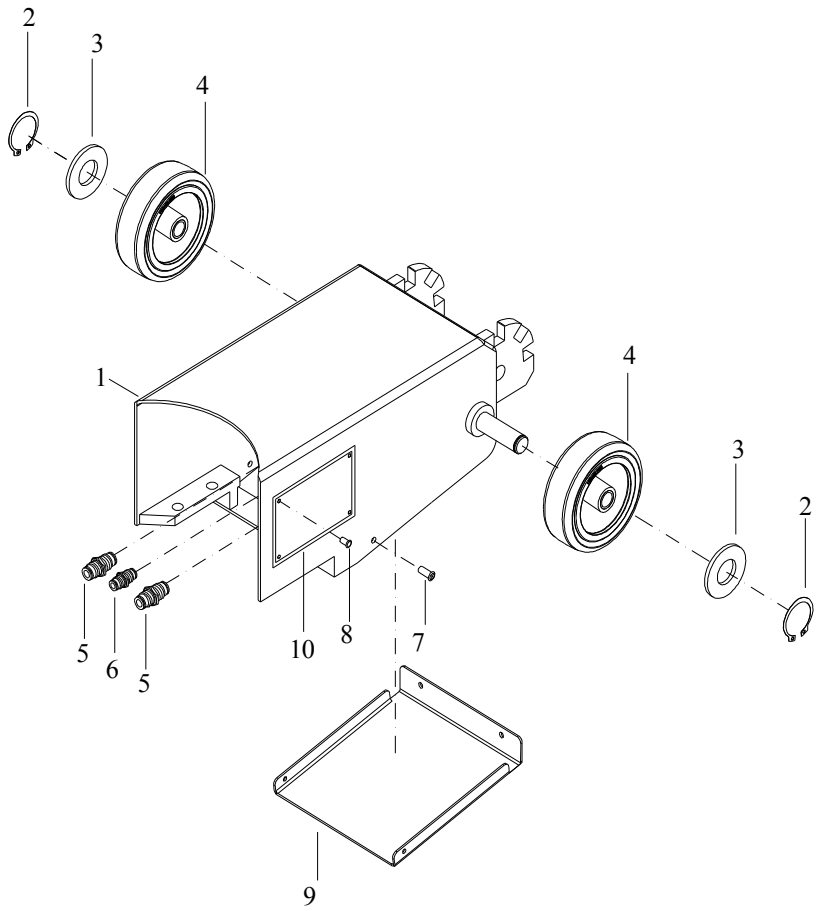
Oil Cylinder(4042-1)



Code	No.	PART NAME	QTY	Code	No.	PART NAME	QTY	Code	No.	PART NAME	QTY
1	F014	Tube for Oil Tank	1	13	F012	20FL Piston	1	25	M26	O Ring	1
2	Z20	Adaptor	1	14	ZS8	40FL Wearing Ring	1	26	F006	Cover of Oil Tank	1
3	Z19	Adaptor	1	15	HS6	Glyd Ring	1	27	W42	Gasket	4
4	M9	O Ring	1	16	F011	20FL Oil Cylinder	1	28	J27	Screw	4
5	W6	Screw-plug	1	17	ZG7	20FL Wearing Ring	1	29	V005	Short Extension Rod	1
6	Z21	Adaptor	2	18	H55	Dustband	1	30	J5	M8 Spring Gasket	1
7	Z1	Adaptor	2	19	M24	O Ring	1	31	J7	Screw	1
8	J19	M8 Bolt	2	20	F010	40FL Oil Cylinder	1	32	W5	Screw-plug	1
9	W43	Handle FLS	1	21	ZG8	40FL Wearing Ring	1	33	M8	O Ring	1
10	F004	40FL Bottom	1	22	H90	Dustband	1	34	Q13	Windpipe	1
11	ZS7	20FL Wearing Ring	1	23	M25	O Ring	2				
12	HS7	Glyd Ring	1	24	F013	Oil Tank	1				

Oil Cylinder Drawings
Picture C

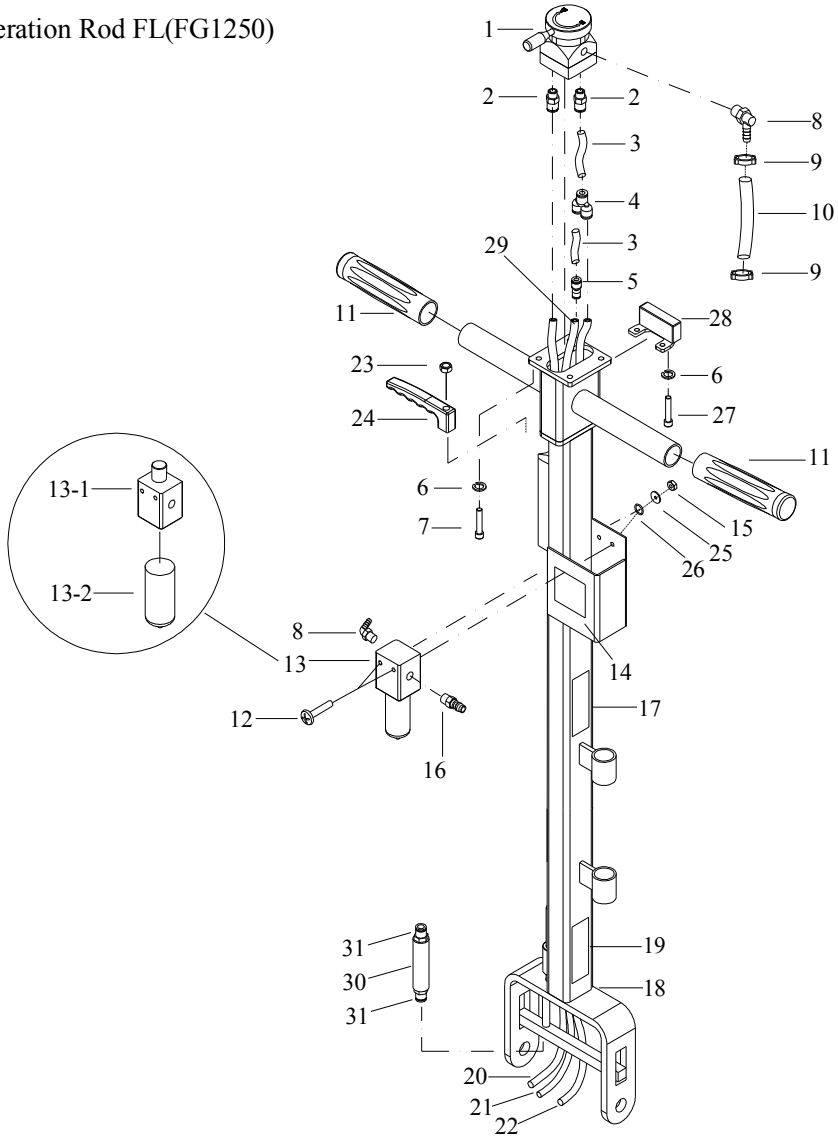
Frame(4042-2)



Code	No.	PART NAME	QTY	Code	No.	PART NAME	QTY
1	F007	Frame	1	6	Z24	Adaptor	1
2	J10	Outer Retainer Ring	2	7	J9	Screw	4
3	N010	Truckle Gasket	2	8	J11	Nail	4
4	W44	Truckle	2	9	F008	Protected Plate	1
5	Z25	Adaptor	2	10	B29	Nameplate	1

Frame Drawings
Picture D

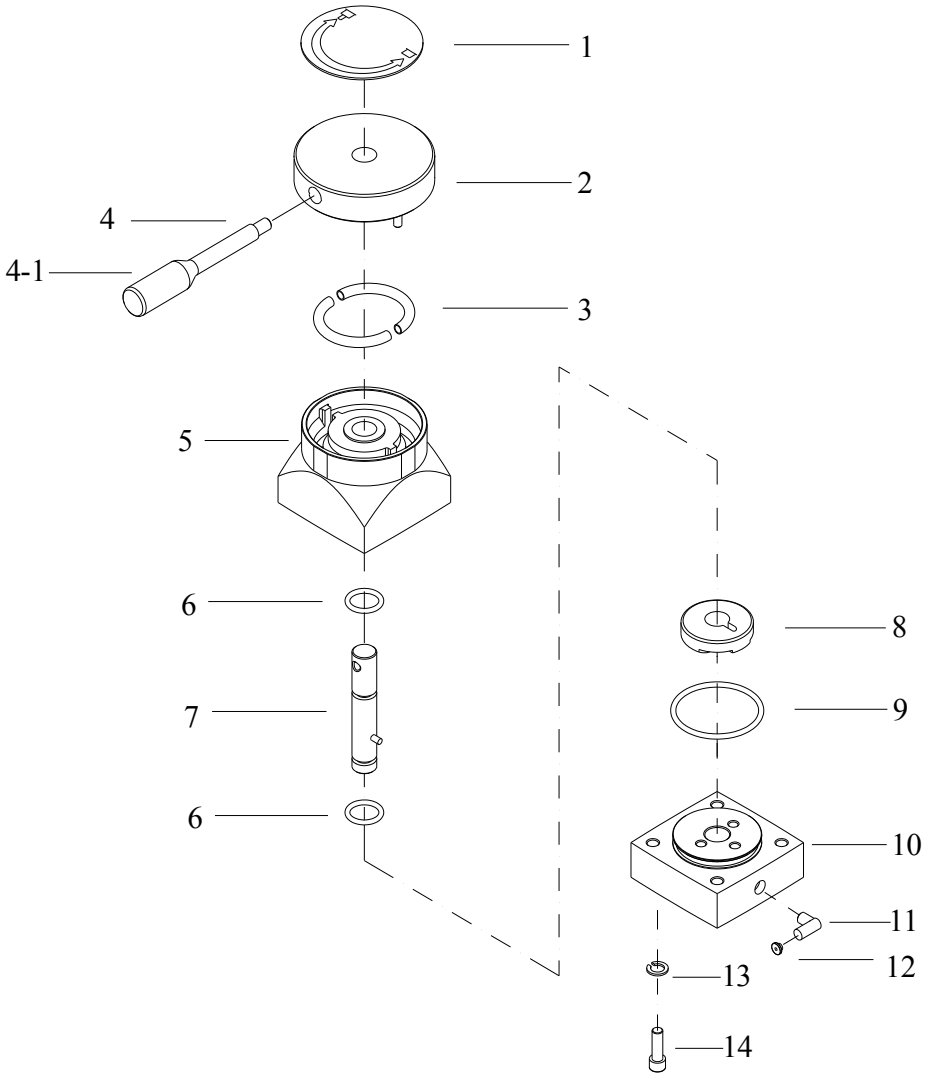
Operation Rod FL(FG1250)



Code	No.	PART NAME	QTY	Code	No.	PART NAME	QTY	Code	No.	PART NAME	QTY
1	TV-04	Hand Valve	1	13	W24	Filter	1	23	J19	M8 Bolt	1
2	Z13	Adaptor	2	13-1	W24-1	Valve Body	1	24	NG3	Handle	1
3	Q21	Windpipe	2	13-2	W24-2	Glass	1	25	J16	Spring Gasket	2
4	Z16	Adaptor	1	14	B13	Filter Instruction	1	26	J15	Gasket	2
5	Z15	Adaptor	1	15	J17	M5 Bolt	2	27	J12	Screw	2
6	J15	Spring Gasket	3	16	14020	Adaptor	1	28	NG4	Bumper of operation rod	1
7	J14	Screw	1	17	B26	Label of Caution	1	29	Q25	Windpipe	1
8	Z12	Adaptor	2	18	FG1	Frame of Operation Rod FL	1	30	TV5	Oil mist resistance pot	1
9	J20	Lock Code	2	19	B27	Instruction	1	31	Z14	Adaptor	2
10	Q4	Oil Pipe	1	20	Q21	Windpipe	1				
11	W25	Handle Cover	2	21	Q24	Windpipe	1				
12	J13	Screw	2	22	Q26	Windpipe	1				

Operation Rod Exploded View
Picture E

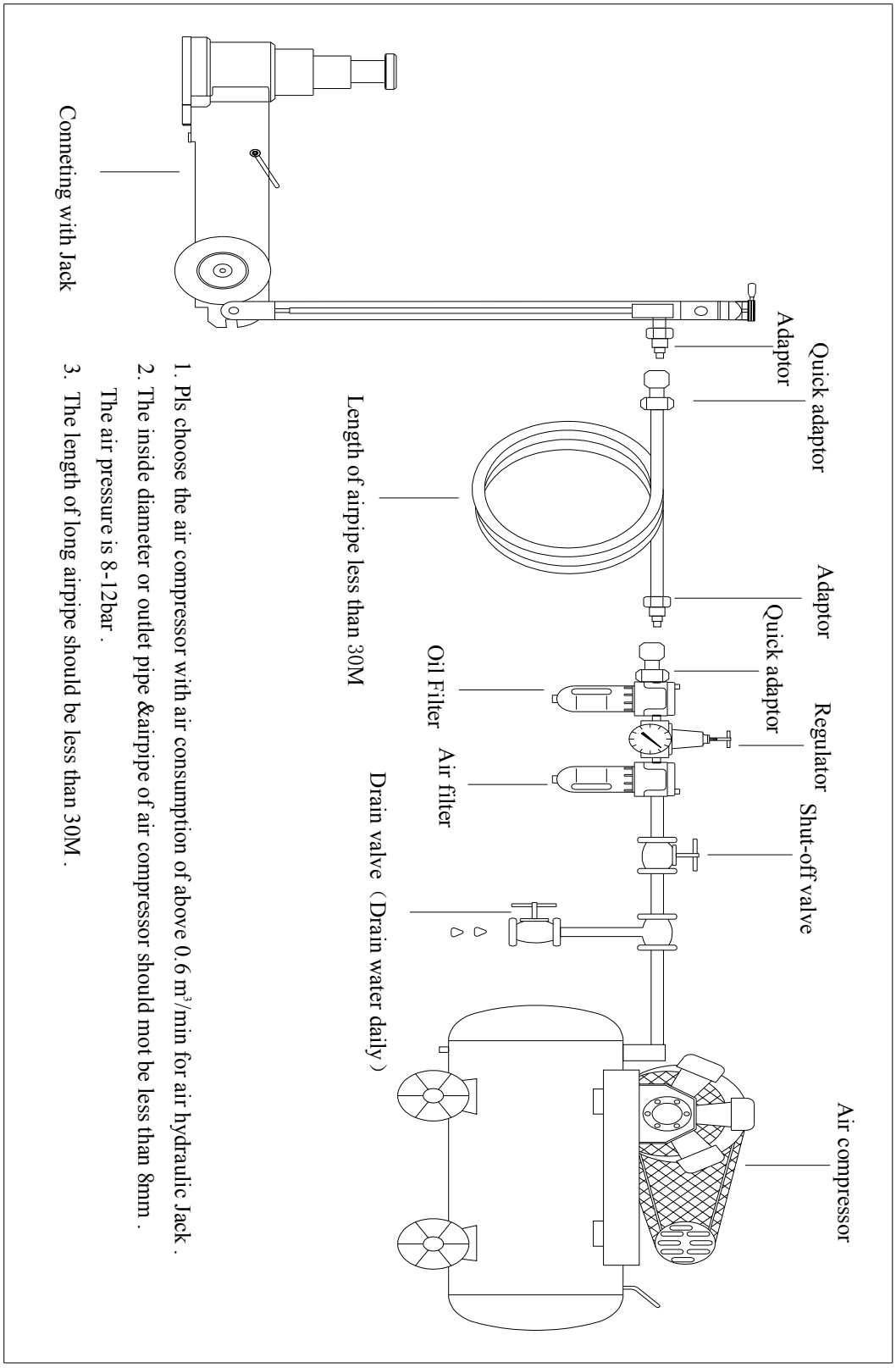
Hand Valve(TV-04)



Code	No.	PART NAME	QTY	Code	No.	PART NAME	QTY
1	B18	Label	1	8	TV1	Valve Core	1
2	TV2	Cover of Hand Valve	1	9	M4	O Ring	1
3	W29	Return Spring of Hand Valve	2	10	TV7	Conversion Base(FV)	1
4	TV9	Handle Shaft	1	11	Z4	Adaptor	1
4-1	TV8	Handle head	1	12	W190	Exhaust Plug	1
5	TV6	Cover of Reversing Valve	1	13	J15	Spring Gasket	1
6	M21	O Ring	2	14	J21	Screw	1
7	W26	Shaft	1				

Hand Valve
Picture F

Werking



1. Pls choose the air compressor with air consumption of above 0.6 m^3/min for air hydraulic Jack .
2. The inside diameter or outlet pipe &airpipe of air compressor should mot be less than 8mm . The air pressure is 8-12bar .
3. The length of long airpipe should be less than 30M .