

INSTRUCTION MANUAL

WINCH STACKER

CAPACITY: 1000kg



LIFTING HEIGHT: 1500mm

NOTE: Owner/Operator must read and understand this instruction

Manual before using the winch stacker.

IMPORTANT

Please read, understand and follow these safety rules and operating instructions before operating this machine.

Only trained and authorized personnel should be permitted to operate this machine.

1. Safety Rules



Warning

Failure to obey the instructions and safety rules in this manual may result in death or serious injury.

1.1 Do Not Operate Unless:

1) You learn and practice the principles of safe machine operation contained in this operating manual.

- Avoid hazardous situations.
- Always perform a pre-operation inspection.
- Always perform the Function tests prior to use,
- Inspect the workplace.
- Only use the machine as a material lift.

2) You read, understand and obey.

- Manufacturer's instructions and safety rules
- Employee's safety rules and worksite regulations
- Applicable governmental regulations

1.2 To Avoid Hazardous Situations:

1) Fall Hazards

Do not use a personnel lifting platform or step.

Do not load unstable or loosely stacked loads.

2) Tip-over Hazards

Do not overload the winch stacker.

Do not raise the load unless the machine is on a firm, level surface.

Do not move the machine with a raised load, except for minor positioning.

Do not tilt the machine back with a raised load.

Do not operate the machine in strong or gusty winds.

Prior to use, check the work area for drop-offs, holes, bumps, debris. Unstable surfaces or other possible hazardous conditions

Do not subject the machine to horizontal force by raising or lowering a fixed or

overhanging load.

User refer to prEN1005-3 for further guidance.

If the load exceeds the actual operational capacity, the operator must be assisted by one or more persons.

The machine can be only used in the light environment of at least 50LUX.

3) Collision Hazards

Do not lift it the load is not properly centered on the forks.

Check the work area for overhead obstruction or other possible hazards.

Do not stand under or allow personnel under the machine when the load is raised.

Do not lower the load unless the area below is clear of personnel and obstructions.

4) Bodily Injury Hazards

Do not grasp the cable.

Keep hands and fingers away from pulleys, the carriage and other potential pinch points.

Recommended operators to wear safety shoes and gloves.

Do not put the feet under the forks to avoid any damages when using the machine.

5) Improper Use Hazard

Never leave a machine unattended with a load. Unauthorized personnel may attempt to operate the machine without proper instruction, creating an unsafe situation.

6) Damaged Machine Hazards

Do not use a damaged or malfunctioning machine.

Do not use a machine with a worn, frayed, kinked or damaged cable,

Do not use a machine with less than 4 wraps of cable on the winch drum when the carriage is fully lowered. If you see the red mark on the cable, at least 4 wraps are on the winch drum.

Conduct a thorough pre-operation inspection prior to each use.

Be sure that all decals are in place and legible.

Maintain proper lubrication of the winch.

7) Crushing Hazard

Do not release grasp on the winch handle until the brake is locked.

B) Lifting Hazard

Use proper liting techniques to load or tip the machine.

9) Other items

When pushing the machine on the rough floor the force will be bigger.

To avoid overloading, the operating force will increase and reach to 400N when reaching to the nominal load.

Pay attention to the balance of the goods to avoid their turning over when lifting them.

Do pay attention to avoid the goods turn over towards the back when using the machine on a slope.

2. Pre-operation Inspection

The operator should perform a visual inspection prior to each work shift to discover if anything is wrong with a machine.

2.1 Be sure that the instruction manual is complete, legible and available for reference.

2.2 Be sure that all decals are legible and in place.

2.3 Checking the following components or areas for damage and improperly installed, loose or missing parts:

Winch and Related Components

Base Components

Legs

Rollers

Frame

Cable Anchor

Cable and Pulleys

Casters

Forks

Brake System

Handle

Nuts, Bolts and Other Fasteners

2.4 Check entire machine for:

Defects or damage

Corrosion or oxidation

Cracks in welds or structural components

2.5 Be sure that there is a minimum of 4 wraps of cable around the winch drum when the carriage is fully lowered.

3. Function Tests

The operator must follow the step-by-step instructions to test all machine functions.

3.1 Test the Brake Operation

- 1) Press down on the foot pedal to lock the brake,
- 2) Push the machine. The machine should not move.
- 3) Pull up on the foot pedal to release the brake.
- 4) Push the machine. It should now move freely.

3.2 Test the Winch Operation

- 1) Rotate the winch handle clockwise to raise the carriage,
The carriage should rise to the top of the frame. The carriage should move smoothly, free of hesitation and binding
- 2) Rotate the winch handle counterclockwise to lower the carriage.
The carriage should lower into the frame. The carriage should move smoothly, free of hesitation and binding.

* There are several layers of cable on the drum. During the course of raising and

lowering, the noise the cable makes will change, as more, or less cable is wound onto the drum. This change in sound is perfectly normal. It will not attest the functions of the machine.

Note.

A damaged or malfunctioning machine must never be used. If damage or malfunctions are discovered during pre-operation inspection or function tests, the machine must be tagged and removed from service.

Repairs to the machine may only be made by a qualified service technician and according to the manufacturer's instructions.

After repairs are completed, the operator must perform a pre-operation inspection and, function test again before putting the machine into service.

Not do modifications shall be carried out which adversely affect any safety requirements and the compliance of the truck with this standard (EN1757-1).

4. Workplace inspection

To operate the machine safely, the operator should inspect the workplace prior to moving the machine to the workplace.

Be aware of and avoid the following hazardous situations

- T) Drop-offs or holes
- 2) Bumps and floor obstructions
- 3) Debris
- 4) Overhead obstructions and high voltage conductors
- 5) Hazardous locations
- 6) Inadequate surface support to withstand all load forces imposed by the machine
- 7) Wind and weather Conditions
- 8) All other possible unsafe conditions

5. Operating Instructions

The working grade of the winch stacker: 1BM.

Warning: pay attention to the winch lever kick back when in lifting will cause a risk.

- The machine shall not be used on gradients due to possible excessive efforts and loss of control.

- The machine shall not be used in places insufficiently illuminated.

- The machine shall not be used to lift or to transport persons.

The machine shall not be used as a vehicle jack.

The extremity of fork arms shall not be used as a lever to lift a load.

- The machine shall not be used in applications where a risk of exceeding the rated capacity exists.

- The machine shall not be used in applications where a risk of unintentional movement exists.

-The machine shall not be used for handling free swinging loads.

-The machine shall not be travel with its fork arms in the upper position except for loading and unloading operations.

- The machine shall not be have direct Contact with foodstuffs.
- The machine shall not be used in a potentially explosive atmosphere.
- Using the machine for any purpose other than lifting material is unsafe.

5.1 Raising and Lowering Load

- 1) Centre the load on the forks.
- 2) Raise the load by firmly grasping the winch handle and rotating it clockwise. Do not allow the cable to wind unevenly onto the winch drum.
- 3) Lower the load by firmly grasping the winch handle and rotating it Counter clockwise. After lowering to the desired position, loosen the winch handle.

5.2 Moving Machine with a Load

It IS best to move the machine without load. Moving a raised load should be restricted to positioning for loading and unloading. If it is necessary to move the machine with a raised load, understand and obey the following safety rules:

- 1) Area is level and clear of obstructions.
- 2) Load is centred on the forks.
- 3) Avoid sudden starts and stops.
- 4) Travel with load in the lowest possible position,
- 5) Keep personnel away from machine and load.
- 6) Do not tilt the machine back with a raised load.
- 7) The machine shall be moved slowly and smoothly.
- 8) While moving no part of the fork arms or of the load shall come into contact with an obstacle.
- 9) During moving neither the fork arms nor the load shall rest upon an obstacle.

6. Maintenance, repair & placement of this machine:

The maintenance, repair shall be carried out by qualified mechanic under the instruction of manufacturer.

6.1 Routine maintenance

Routine maintenance of the machine will prolong the working life of this machine. For the frequency of maintenance please refer to the following table.

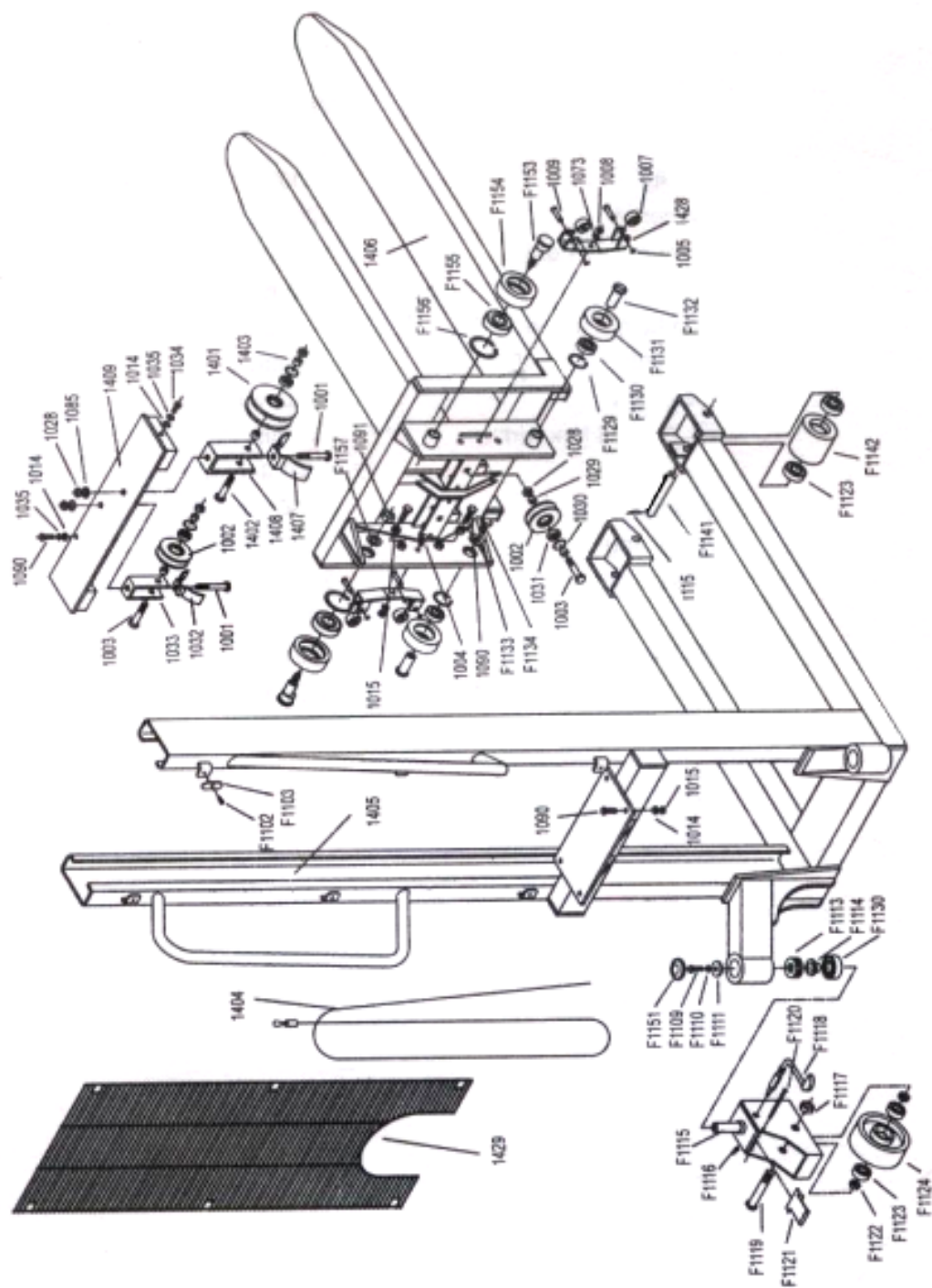
Items	Inspection Content	Cycle		
		1month	6months	12months
*Chassis	Check the loading parts		•	
*Front and rear roller	Check wearing of the bearing and bearing housing	•		
*Turning	Check whether it turns properly	•		
*Winch device	Check whether the transmission of gears is proper	•		
*Lifting Steel Wire	Check the extension rate and wearing	•		
*Brake	check whether it functions properly	•		
*Moveable parts	Check lubrication & wearing	•		

6.2 Placement while store

Alter work is over, the forks of the stacker shall be placed to its lowest position. The stacker shall be kept on firm flat floor without any load. During placement, the brakes of the stacker shall be on.

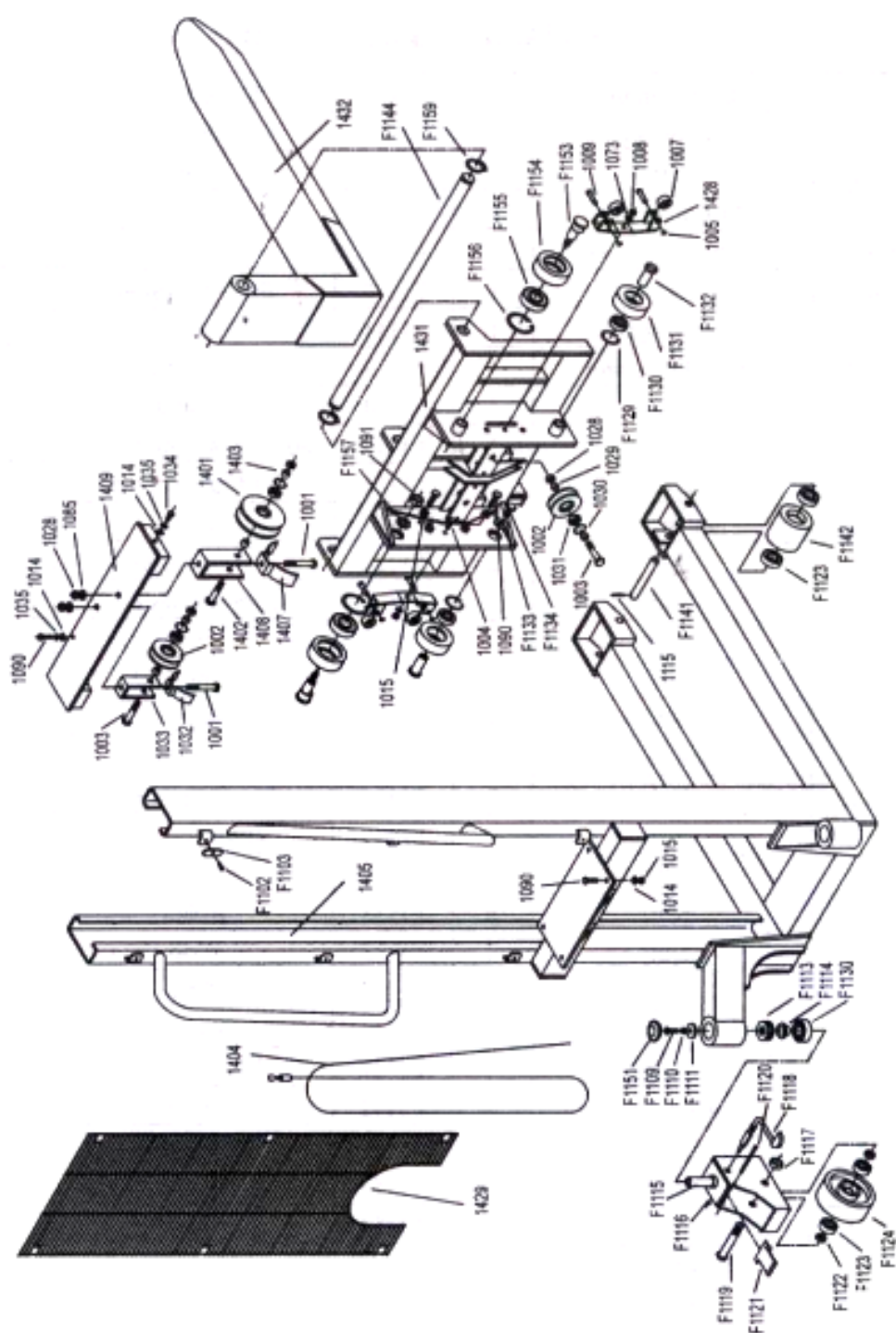
7. Specifications

Model	WS100
Capacity	1000kg
Load center	575mm
Maximum fork height	1500mm
Min fork height	88mm
Lifting height range	88-1500mm
Fork width	160mm
Fork length	1150mm
Max. Overall fork width	540mm
Load roller	Ø80*94mm
Steering wheel	Ø150mm
Overall length	1600mm
Overall width	725mm
Overall height	1930mm
Net weight	182kg
Cable dia.	4.2mm
Cable capacity	1960Mpa



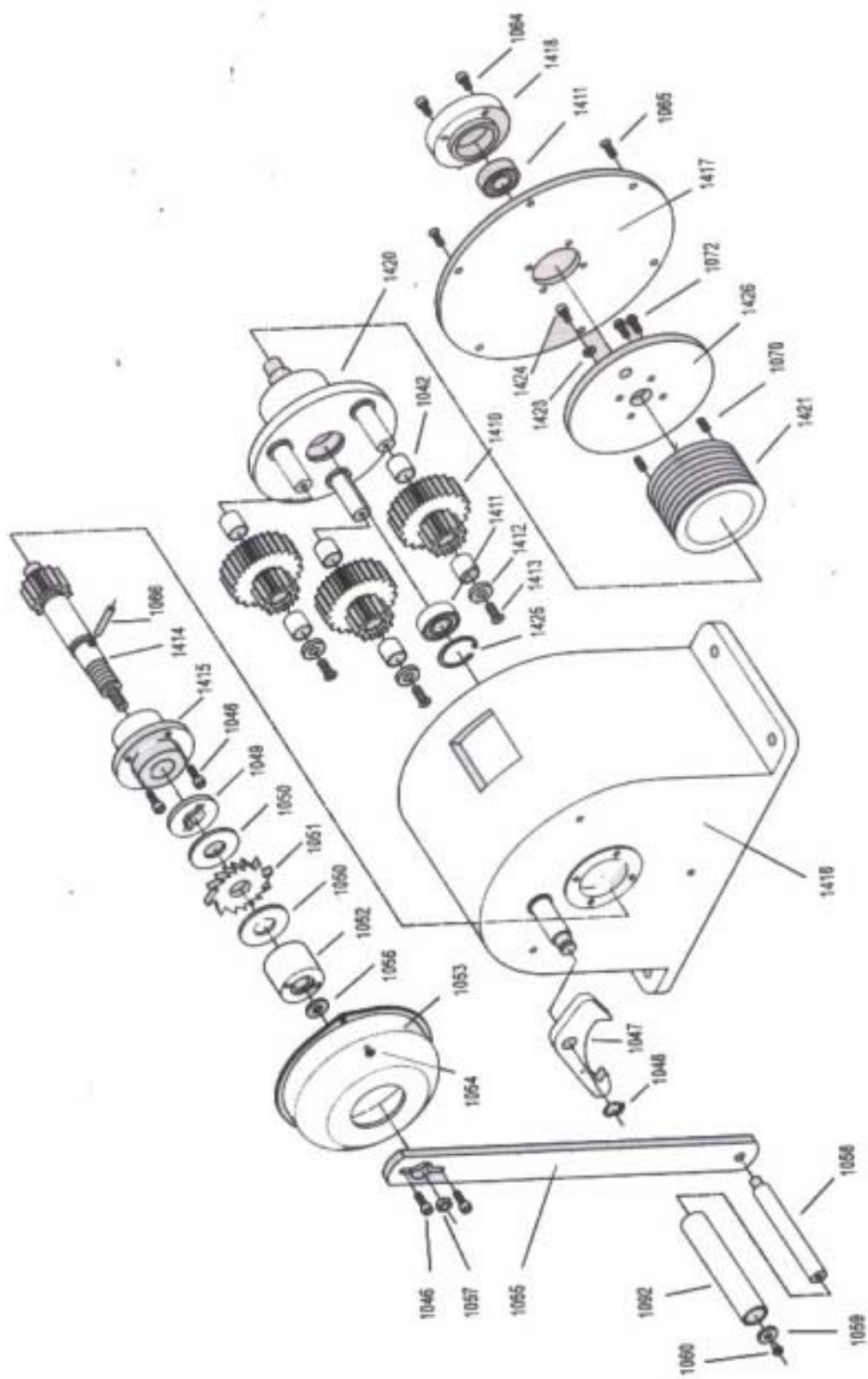
Parts List of Frame

No.	Description	Q'ty	No.	Description	Q'ty
1401	Big pulley	1	1115	Spring pin	2
1402	Axle	1	F1102	Screw	6
1403	Axle bushing	2	F1103	Washer	6
1404	Cable Assembly	1	F1109	Bolt	2
1405	Frame	1	F1110	Spring washer	4
1406	Carriage	1	F1111	Washer	2
1407	Big pulley cover	1	F1113	Bearing	2
1408	Roller	1	F1114	Casing	2
1409	Top beam	1	F1115	Steering wheel bracket	2
1428	Carriage Assembly	2	F1116	Self-locking nut	2
1429	Net cover	1	F1117	Nut	2
1001	Bolt	2	F1118	Foot pedal	2
1002	Pulley	3	F1119	Steering wheel axle	2
1003	Axle	3	F1120	Pin	2
1004	Bolt	2	F1121	Spring leaf	2
1005	Retaining ring	4	F1122	Casing	4
1007	Small pulley	4	F1123	Bearing	8
1008	Nut	2	F1124	Steering wheel	2
1009	Axle	4	F1129	Retaining ring	4
1014	Washer	15	F1130	Bearing	6
1015	Nut	8	F1131	Roller	2
1028	Nut	4	F1132	Axle	2
1029	Bushing	6	F1133	Bolt	2
1030	Retaining ring	4	F1134	Washer	2
1031	Bearing	4	F1141	Pivoted axle	2
1032	Pulley cover	1	F1142	Load roller	2
1033	Roller	1	F1151	Dust cover	2
1034	Bolt	2	F1153	Axle	2
1035	Spring washer	3	F1154	Roller	2
1073	Washer	2	F1155	Bearing	2
1085	Washer	2	F1156	Retaining ring	2
1090	Bolt	9	F1157	Washer	2
1091	Nut	2			



Parts List of Frame

No.	Description	Q'ty	No.	Description	Q'ty
1401	Big pulley	1	1115	Spring pin	2
1402	Axle	1	F1102	Screw	6
1403	Axle bushing	2	F1103	Washer	6
1404	Cable Assembly	1	F1109	Bolt	2
1405	Frame	1	F1110	Spring washer	4
1407	Big pulley cover	1	F1111	Washer	2
1408	Roller	1	F1113	Bearing	2
1409	Top beam	1	F1114	Casing	2
1428	Carriage Assembly	2	F1115	Steering wheel bracket	2
1429	Net cover	1	F1116	Self-locking nut	2
1431	Carriage Assembly	1	F1117	Nut	2
1432	Adjustable fork	2	F1118	Foot pedal	2
1001	Bolt	2	F1119	Steering wheel axle	2
1002	Pulley	3	F1120	Pin	2
1003	Axle	3	F1121	Spring leaf	2
1004	Bolt	2	F1122	Casing	4
1005	Retaining ring	4	F1123	Bearing	8
1007	Small pulley	4	F1124	Steering wheel	2
1008	Nut	2	F1129	Retaining ring	4
1009	Axle	4	F1130	Bearing	6
1014	Washer	15	F1131	Roller	2
1015	Nut	8	F1132	Axle	2
1028	Nut	4	F1133	Bolt	2
1029	Bushing	6	F1134	Washer	2
1030	Retaining ring	4	F1141	Pivoted axle	2
1031	Bearing	4	F1142	Load roller	2
1032	Pulley cover	1	F1144	Shaft	1
1033	Roller	1	F1151	Dust cover	2
1034	Bolt	2	F1153	Axle	2
1035	Spring washer	3	F1154	Roller	2
1073	Washer	2	F1155	Bearing	2
1085	Washer	2	F1156	Retaining ring	2
1090	Bolt	9	F1157	Washer	2
1091	Nut	2	F1159	Retaining ring	2



Parts List of Hand Device

No.	Description	Q'ty	No.	Description	Q'ty
1410	Planetary gear	3	1049	Pin bracket	1
1411	Bearing	2	1050	Washer	2
1412	Washer	3	1051	Ratchet	1
1413	Screw	3	1052	Handle bushing	1
1414	Gear axle	1	1053	Roller cover	1
1415	Flange bushing	1	1054	Screw	3
1416	Case body	1	1055	Handle	1
1417	Back plate	1	1056	Washer	1
1418	Back plate cover	1	1057	Nut	1
1420	Bracket	1	1057A	Nut	1
1421	Drum	1	1058	Handle axle	1
1423	Spring washer	4	1059	Washer	1
1424	Screw	4	1060	Screw	1
1425	Retaining ring	1	1064	Screw	4
1426	Plate	1	1065	Screw	6
1042	Axle bushing	6	1066	Pin	1
1046	Screw	6	1070	Screw	2
1047	Pawl	1	1072	Screw	2
1048	Retaining ring	1	1092	Handle bushing	1