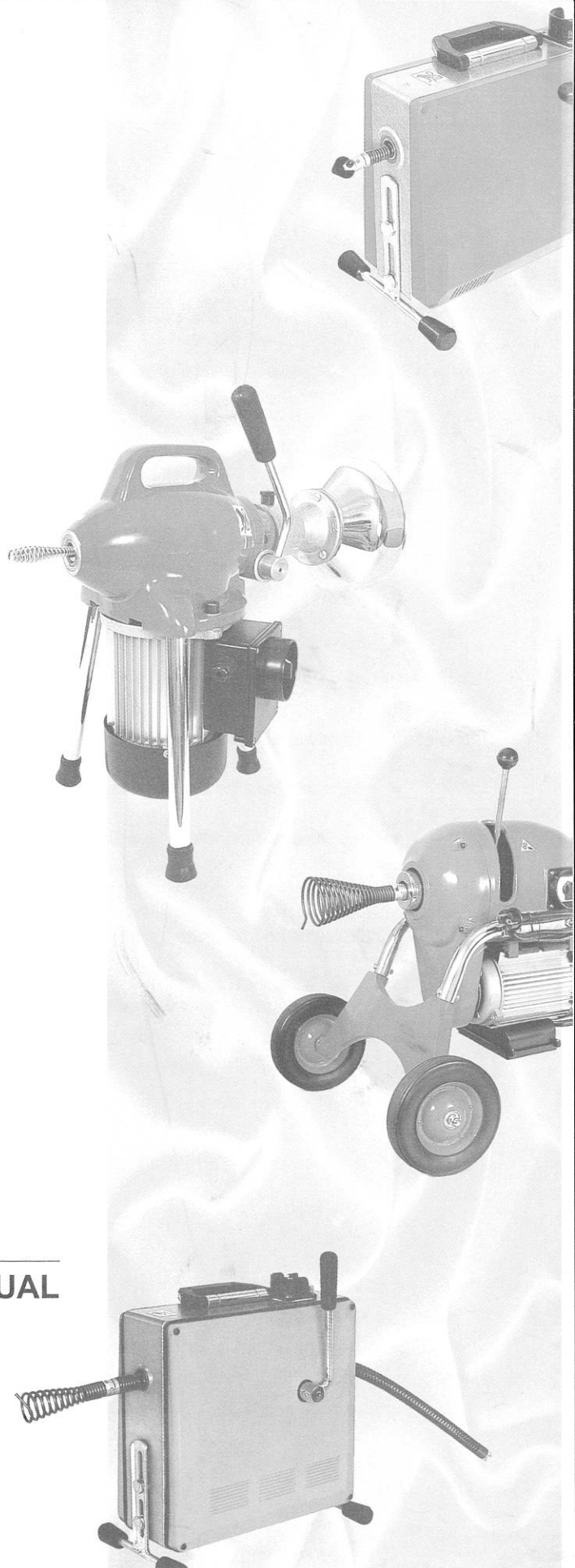


PIPE CLEANER

OPERATION INSTRUCTION MANUAL

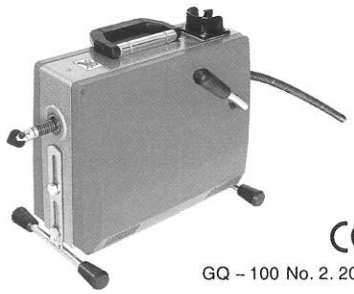
TABLE OF CONTENTS

CE

GQ – 75 No. 2. 2011

Type GQ – 75

- Applicable for indoor pipelines of Φ20 ~ 100mm in diameter, up to 30m in extension length.
- Light, strong, fast, easy to operate. Can be connected with soft shafts of Φ8 andΦ16.



CE

GQ – 100 No. 2. 2012

Type GQ – 100

- Applicable for indoor pipelines of Φ32 ~ 100mm in diameter, up to 30m in extension length.
- Compact structure and lightweight. Easy to operate and save manpower.

CE

GQ – 150 No. 2. 2013

Type GQ – 150

- Applicable for indoor pipelines of Φ20 ~ 150mm in diameter, up to 30m in extension length.
- Multifunction and high power with wide applications. Can be connected with soft shafts of Φ8 , Φ16 and Φ22.

CE

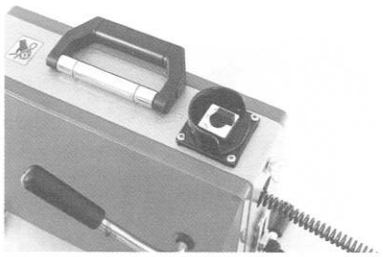
GQ – 200 No. 2. 2014

Type GQ – 200

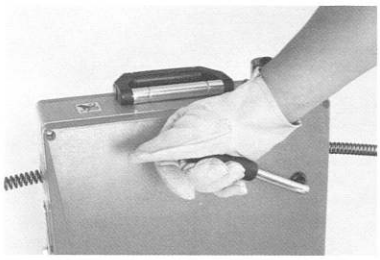
- Applicable for outdoor pipelines ofΦ50 ~ 200mm in diameter, up to 50m in extension length.
- Preferable for operation of multifunction and heavy duty. The machine and the flexible shaft are all equipped with walking wheels. Easy to operate and save manpower.

	GQ – 75	GQ – 100	GQ – 150	GQ – 200
Indoor Pipeline	•	•	•	
Outdoor Pipeline			•	•
Applicable diameter. (Φmm)	20 – 100	32 – 100	20 – 150	50 – 200
Ext. Length (m)	30	30	30	50
Soft Shaft Spec. (Φmm × m)	8 × 5 15 × 2. 5 16 × 2. 5	16 × 2. 5	8 × 5 15 × 2. 5 16 × 2. 5 22 × 5	30 × 5
Rated Voltage (~V)	230	230	230	230
Rated Frequency (Hz)	50	50	50	50
Input Power (W)	390	390	390	1100
Rotate speed (r. p. m)	400	400	400	700
Protection Class	IP44	IP44	IP44	IP44
Noise (dB(A))	≤75	≤75	≤75	≤75
Machine Mass (kg)	27. 3	20. 9	43. 54	77. 56

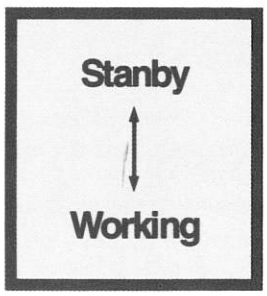
MAJOR COMPONENT DESCRIPTION AND OPERATING CHARACTERISTICS



- Control Knob
  For switching on / off circuit and controlling rotation direction of output shaft.
  OFF : stop
  FOR : forward rotation
  REV : reversed rotation
  * Warning: Prior to connecting electric power supply check switch first for position off.

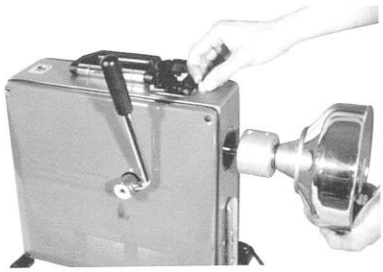


- Operate Control Handle
  Press the handle to move the machine clutch, which makes the flexible shaft to rotate.
  Releasing the handle stops the flexible shaft rotation immediately.
  * Warning: The pressing force shall not exceed 20kg, preferably to the extent of locking the flexible shaft. Do not use force multiplication tool.

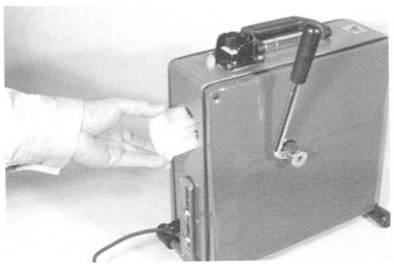


- Initial state is"standby". Cog down state is"working".

MAJOR COMPONENT DESCRIPTION AND OPERATING CHARACTERISTICS



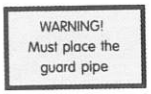
- Locking screw
  For connecting the machine with Φ8 flexible shaft attachment and protective sleeve. Raise and insert the screw. It is simple and fast.



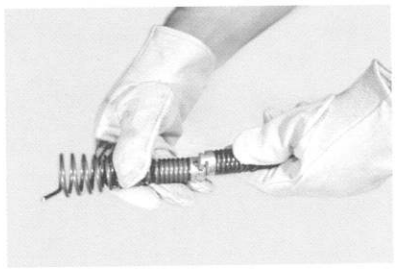
- Note: For machines GQ – 100 and GQ – 150 removethe white sleeve from the machine tail first.

  * Warning: Switch off the machine beforeinstalling flexible shaft, protectivesleeve or attachments.

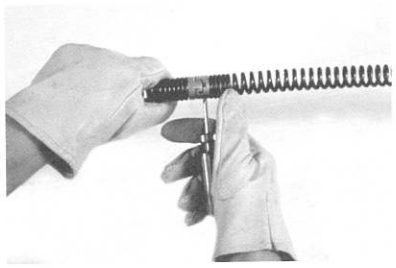
- Sleeve pipe
  Use it for protect manipulator against revolving spring shaft.



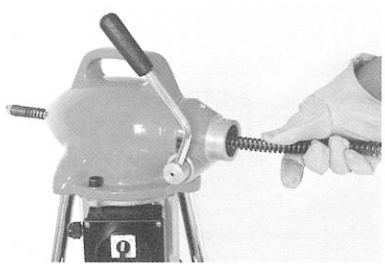
* Nameplate of against hurt hand.



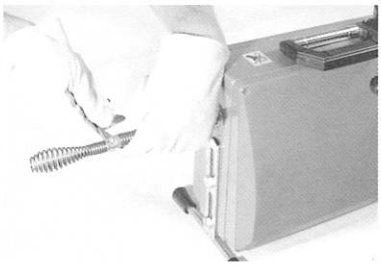
- Connect the soft shaft with drills
  Push the drill along 67°slider slot of the shaft to engage. This makes connection more reliable, easy and fast.
  Caution: Observe through the hole of the drill to see the pop-out of the flexible shaft pin. It is only safe when the pin is out.



- Remove the soft shaft
  Insert the key and push the shaft with both hands in direction opposite to the T slot of the terminal to remove the shaft. It saves time and manpower.



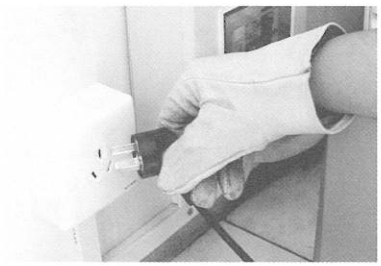
1. Insert the soft shaft through the machine shaft.



2. Select an appropriate drill and securely connect it to the soft shaft.

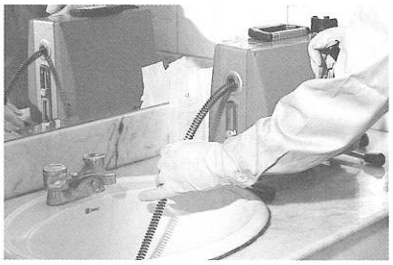
3. Put the machine to a suitable position(do not touch waste water) with the drill and the flexible shaft inserting into the pipeline as much as possible.

4. Let the soft shaft be 2 ~ 4 m out of the machine tail. Remove the rest of the shaft and cover it with a protection sleeve for future use.



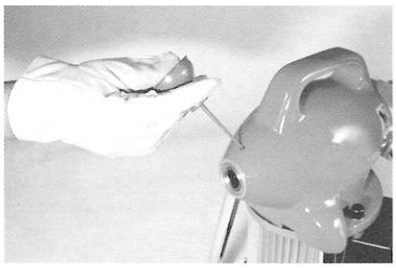
5. Insert the plug into a well grounded 3 – hole single phase socket.

6. Turn on the control knob and let the machine shaft rotate clockwise.



7. Keep one segment (200 ~ 300mm) of the soft shaft between the machine and the pipeline opening. Press the control knob and hold the rotating soft shaft and push it into the pipeline. Repeat the above actions until the pipeline is through.

8. After shutting down the machine pull the soft shaft out of the pipeline. Remove the waste and clean it dry. Keep it for future use.
Caution : Avoid the soft shaft bringing the waste water into the machine or contaminate the facilities indoors.



9. After using machine let it free rotate for 2 – 3 minutes. Inject the lubrication oil into oil holes. Keep the machines at a dry place for future uses.

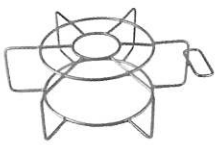
SPECIAL SOFT SHAFT AND ACCESSORY

Φ8 soft shaft Combination
Used for machines of GQ – 75 and GQ – 150. The length of the shaft is 5m. It can be used in pipes of 20 – 50mm in diameter, with reverse water bend.

Flexible soft shaft
A combination of flexible shaft and drill, with igh strength and good flexibility, suitable for pipes of small diameter or with reverse water bend.

Sectional elastic soft shaft
Made with high quality spring wires, assure sufficient mechanical strength and flexibility, as well as bending resistance, twisting resistance and ductility resistance. It can be connected for any length.

Enhanced strong soft shaft
A shaft made in heavy load and with intensive wires. Enhanced mechanical strength and twisting resistance, suitable for complicated working environment.



Soft Shaft Holder
For keeping and storing flexible shafts.

Protection tube
To avoid personal injuries from rotating flexible shaft and assure personal safety.

SPECIAL DRILL – UNIQUE, NEW AND DURABLE

Straight helical drill
For exploring the pipe of the blockage and of the position to drill, usually used in the first step.

Olive – shaped helical drill
For guiding the flexible shaft through the complicated path and drilling though the blocked position. Best for its guide function.

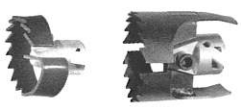
Flexible olive – shaped helical drill
For pipes that are hard to drill. Good flexibility and optimal guiding function.

Funnel – shaped helical drill
Used in the second step, to effectively remove the blockage residue left on the pipe wall by straight helical drilling.

Collection helical drill
For collecting the broken flexible shaft or drill in the pipe.

4 – edge saw cutter High strength.
Used for removing hard materials like chemical deposits.

Spade – shaped cutter
Used to remove the cream on the pipe wall or used in the second step to remove residues on the pipe wall.

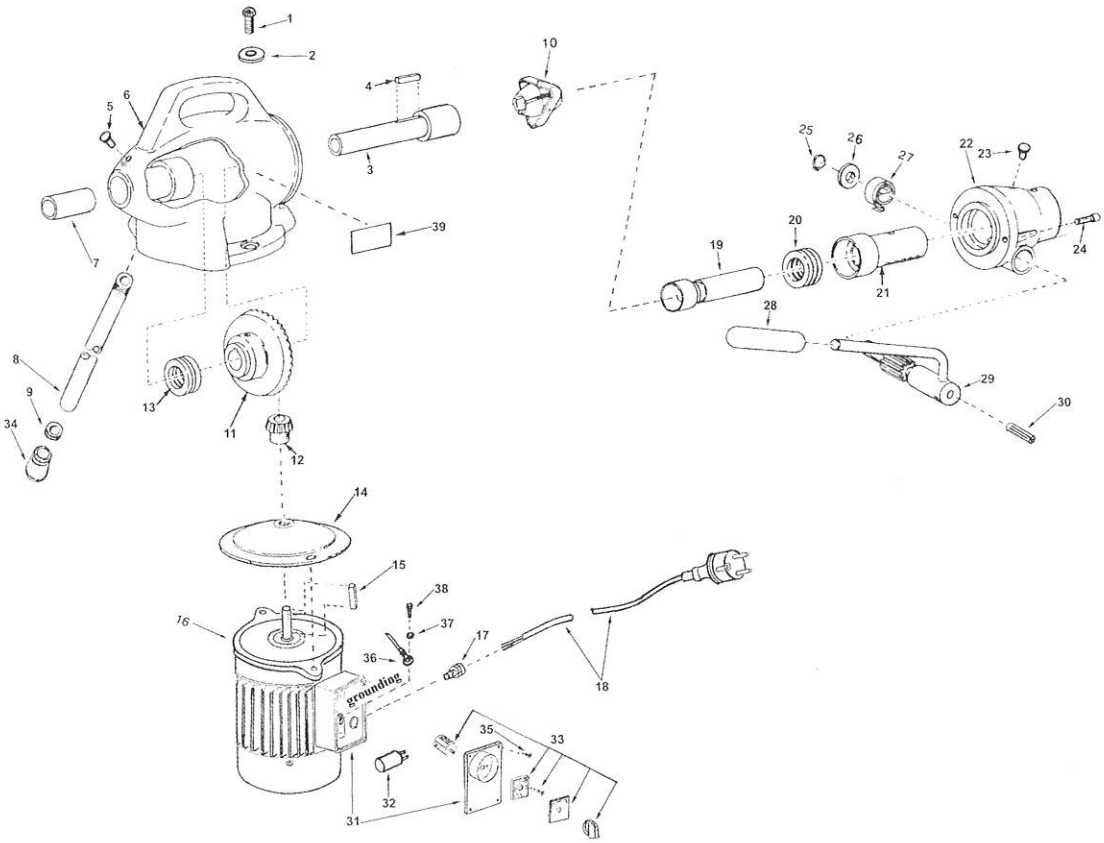


Helical saw cutter
For removing blockage like roots, branches, debris or creams from pipe.

C – shaped cutter
For removing materials like cream, soap etc which adhere to the pipe wall.

Catalg No.	Type	Accessory Description	Unit	Spec. mm × m	Application type			
					GQ – 75	GQ – 100	GQ – 150	GQ – 200
2. 0321	F – 2 – a	Φ8 soft shaft combination	set	Φ8 × 5	•			
2. 0322	F – 2 – b	Φ8 soft shaft combination	set	Φ8 × 5			•	
2. 0131	R – 3 – 1	Sectional flexible soft shaft	rod	Φ15 × 2. 5	•		•	
2. 0141	R – 4 – 1	Sectional elastic soft shaft	rod	Φ16 × 2. 5	•	•	•	
2. 0142	R – 4 – 2	Sectional elastic soft shaft	rod	Φ22 × 5			•	
2. 0143	R – 4 – 3	Segment elasic shaft	rod	Φ30 × 5				•
2. 0211	T – 1 – a	Straight helical drill	piece	Φ16	•	•	•	
2. 0212	T – 1 – b	Straight helical drill	piece	Φ22			•	
2. 0213	T – 1 – c	Straight helical drill	piece	Φ30				•
2. 0221	T – 2 – a	Olive – shaped helical drill	piece	Φ16	•			
2. 0231	T – 3 – a	Flexible olive – shaped helical drill	piece	Φ16	•		•	
2. 0242	T – 4 – b	Funnel – shaped helical drill	piece	Φ22			•	
2. 0243	T – 4 – c	Funnel – shaped helical drill	piece	Φ30				•
2. 0251	T – 5 – a	Collection helical drill	piece	Φ16	•	•	•	
2. 0253	T – 5 – c	Collection helical drill	piece	Φ30				•
2. 0261	T – 6 – a	4 – edge saw cutter	piece	Φ16	•	•	•	
2. 0262	T – 6 – b	4 – edge saw cutter	piece	Φ22			•	
2. 0271	T – 7 – a	Spade – shaped cutter	piece	Φ16	•	•		
2. 0272	T – 7 – b	Spade – shaped cutter	piece	Φ22			•	
2. 0273	T – 7 – c	Spade – shaped cutter	piece	Φ30				•
2. 0281	T – 8 – a	Helical saw cutter	piece	Φ16	•			
2. 0283	T – 8 – c	Helical saw cutter	piece	Φ30				•
2. 0291	T – 9 – a	C – shaped cutter	piece	Φ16	•			
2. 0293	T – 9 – c	C – shaped cutter	piece	Φ30				•
2. 0315	F – 1 – e	Soft shaft holder	piece	Φ360		•		
2. 0316	F – 1 – f	Soft shaft holder	piece	Φ430	•		•	
2. 0317	F – 1 – g	Soft shaft holder	piece	Φ500				•
2. 0331	F – 3 – a	Key	piece	Φ4	•	•	•	
2. 0332	F – 3 – b	Key	piece	Φ6				•
2. 0341	F – 4 – a	Stand	piece			•	•	
2. 0351	F – 5 – a	Protection gloves	piece		•	•	•	•
2. 0361	F – 6 – a	Accessory barrel	piece		•		•	
2. 0371	F – 7 – a	Protection tube	set	Φ32	•	•	•	
2. 0372	F – 7 – b	Protection tube	set	Φ42				•
2. 0391	F – 9 – a	Drill shelves	piece					•

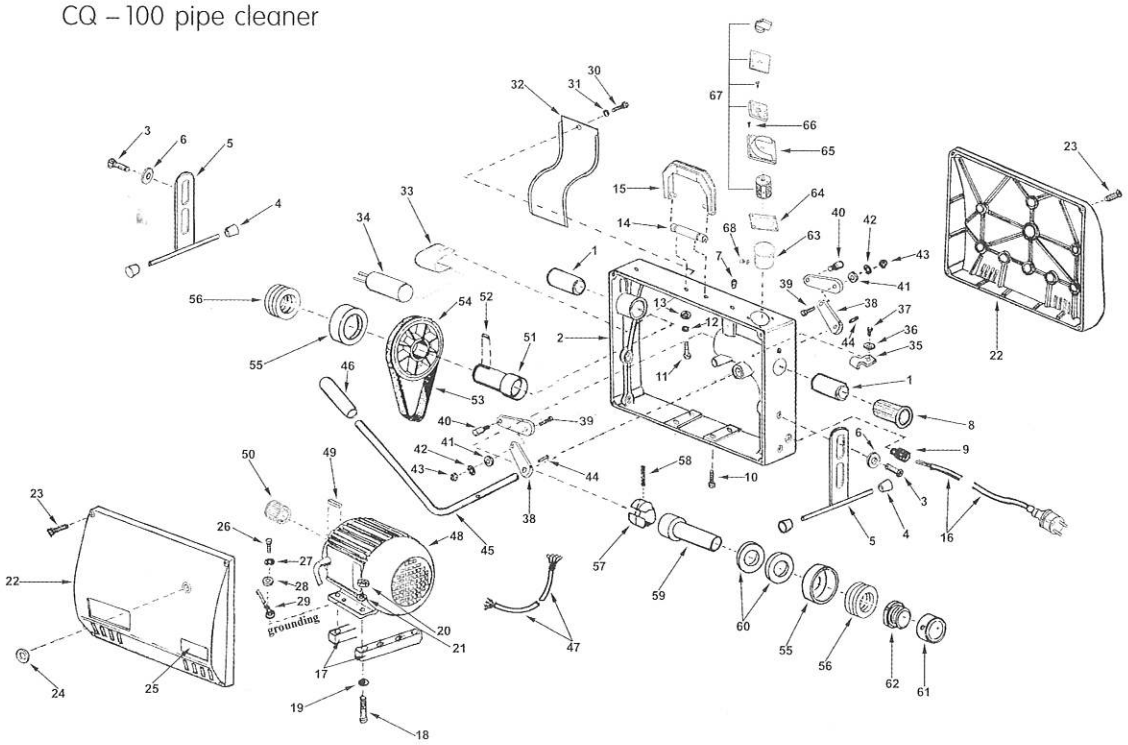
CQ – 75 pipe cleaner



GQ – 75 SPECIFY ACTION

Rtl No:	Name	Model No:	Quantity	Rtl No:	Name	Model No:	Quantity
1	Screw	M10*25	2	22	Cack and pinion housing		1
2	Flat washer	Φ10	2	23	Cap	Φ5*5 plastic	1
3	Axle		1	24	Screw	M6*25	2
4	Flat key	4*18	1	25	Retaining ring	12	1
5	Cap	Φ5*5 plastic	1	26	Washer	Φ30	1
6	Casing		1	27	Spring		1
7	Bush		1	28	Handle grip	Φ26*86 plastic	1
8	Post		1	29	Handle with pinion		1
9	Washer		3		Assembly		
10	Fixing blocks		3	30	Pin		
11	Bevel gear	Φ105*24 PA6	1	31	Juncting box	96*95*53 plastic	1
12	Pinion gear		1	32	Capacity	10A / 400v plastic	1
13	Bearing	8205	1	33	Switch	10uf / 400v	1
14	Insulating motor gasket	Φ140 PVC	1	34	Rubber feet	Φ32*36 rubber	3
15	Flat key	4*20	1	35	Screw	M4*12	4
16	Motor	250w / 230v	1	36	Earth lead	Φ4	1
17	Strain relies	M16 plastic	1	37	Spring washer	Φ4	1
18	Mains cable	0.75^2 / 250v rubber	1	38	Screw	M4*10	1
19	Axle		1	39	Name plate	90*45	1
20	Bearing	8205	1	40	Spring support		1
21	Gear rack		1	41	Sign	26*40 PVC	1

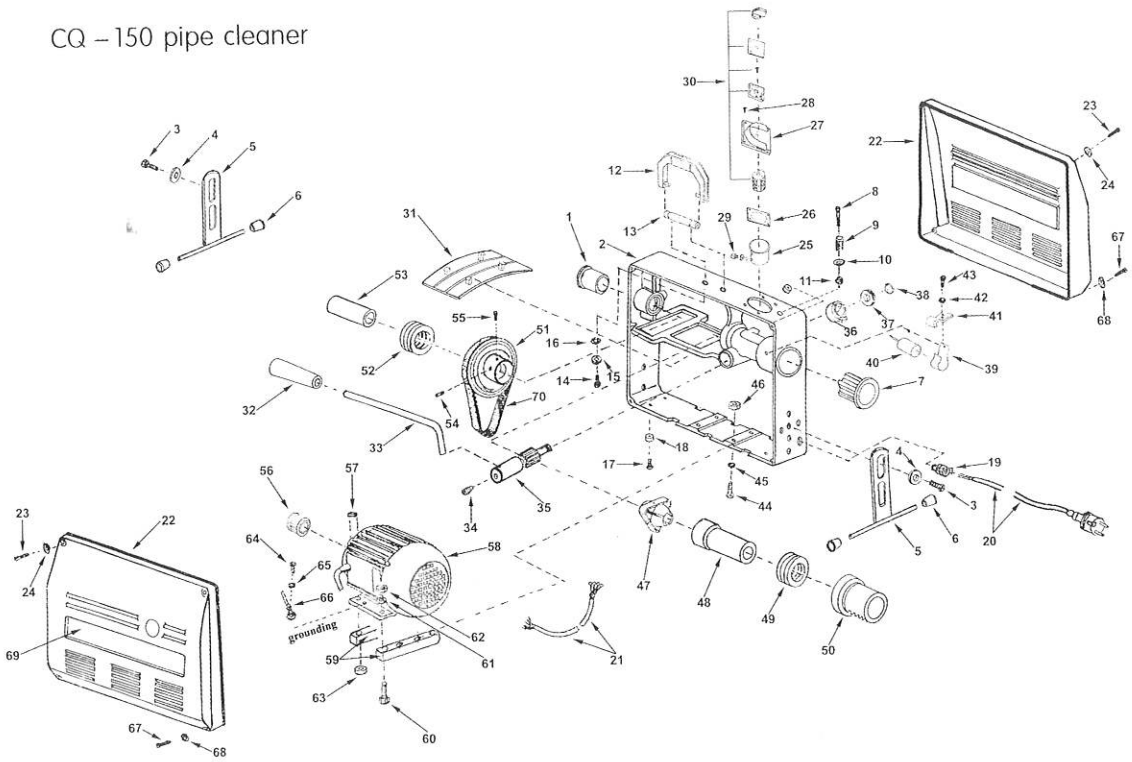
CQ – 100 pipe cleaner



GQ – 100 SPECITY ACTION

Rtl No:	Name	Model No:	Quantity	Rtl No:	Name	Model No:	Quantity
1	bush		2	36	Washer	Φ3	1
2	Body casting		1	37	Screw	M3*10	2
3	Screw	M10*16	4	38	Connecting rod		4
4	Rubber feet	Φ30*45mm ABS	4	39	Screw	M8*16	2
5	stand		2	40	Pin	8*20	2
6	Washer	Φ10	4	41	Washer	Φ8	2
7	Oil cup	Φ6	2	42	Spring washer	Φ8	2
8	Protective shield	Φ40*68 PA6	1	43	Hexagonal nut	M8	2
9	Strain relies	M16 plastic	1	44	Pin	Φ4*25	2
10	Screw	M8*20	4	45	Handle assembly		1
11	Screw	M6*20	2	46	Handle grip	Φ26*86 plastic	1
12	Spring washer	Φ6	2	47	Conducting wire	0.75mm2	1
13	Washer	Φ6	2	48	motor	250w / 230v	1
14	Support		1	49	Flat key	4*20	1
15	Handle	135*72*20mm ABS	1	50	Pulley	Φ31*30mm PA6	1
16	Mains cable	0.752 / 250v rubber	1	51	Shaft		1
17	Pad	130*20*11mm PA6	2	52	Flat key	4*14	1
18	Bolt	M6*20	4	53	belt	2*71*20 rubber	1
19	Washer	Φ6	4	54	Pulley	Φ114*25mm PA6	1
20	Spring washer	Φ6	4	55	Hood	Φ50*16 ABS	1
21	Hexagonal nut	M6	4	56	bearing	8205	1
22	Cover	330*260*49mm ABS	2	57	Fixing blocks		1
23	Screw	M4*10	8	58	Spring		3
24	Ring	Φ23*14mm rubber	1	59	Shaft		1
25	Name plate	90*40	1	60	Spring washer		2
26	Screw	M4*10	1	61	Adjusting nut		1
27	Spring washer	Φ4	1	62	Adjusting washer		1
28	Washer	Φ4	1	63	Protective shield	58*58*Φ49mm PA6	1
29	Earth lead	Φ4	1	64	insertion	58*58*1.5mm rubber	1
30	Screw	M6*10	1	65	guard	58*58*35mm plastic	1
31	Washer	Φ6	1	66	screw	M4*10	4
32	Guard		1	67	switch	10A / 400V	1
33	Spring support		1	68	Strain rtlies	M12 plastic	4
34	Capacity	10uf / 400v	1	69	box	60*50*60plastic1	1
35	Fixed wire reel	Φ4 plastic	2	70	sign	26*40 PVC	1

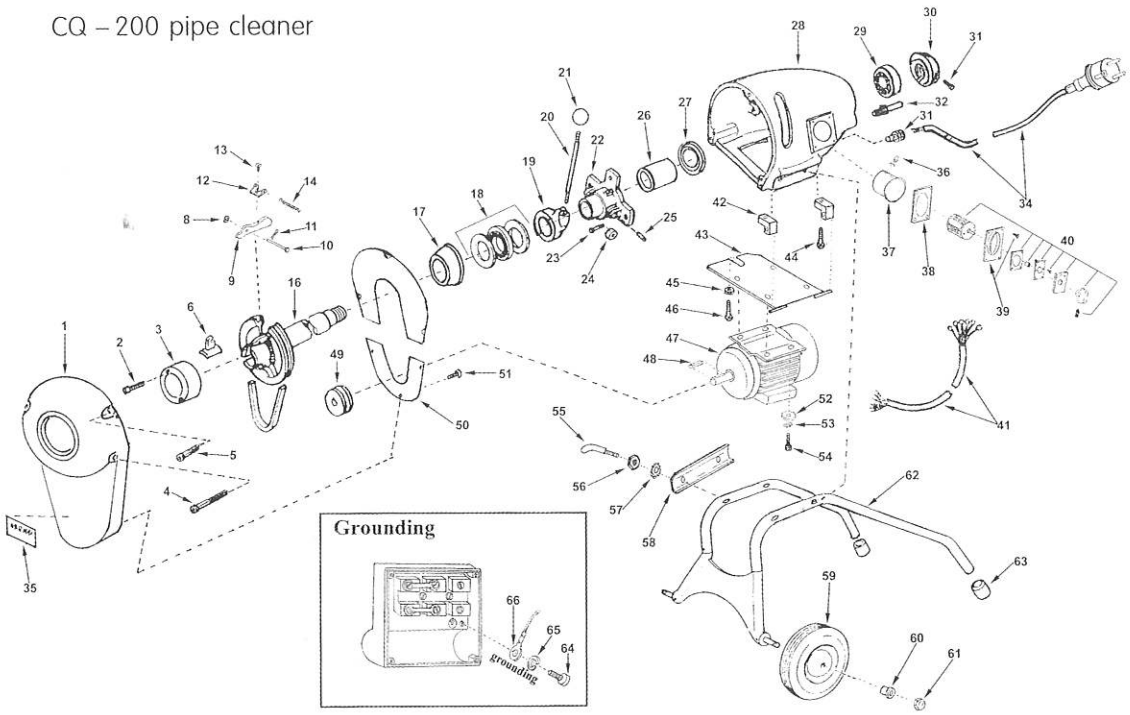
CQ – 150 pipe cleaner



GQ – 150 SPECITY ACTION

Rtl No:	Name	Model No:	Quantity	Rtl No:	Name	Model No:	Quantity
1	bush		1	36	Spring		1
2	Body casting		1	37	Washer	Φ30	1
3	Screw	M10*16	4	38	Retaining ring	Φ12	1
4	Washer	Φ10	4	39	Spring support		1
5	Elevator bracket		2	40	Capacity	10uf / 400v	1
6	Rubber feet	Φ30*45mm ABS	4	41	Fixed wire reel	Φ4 plastic	2
7	Protective shield	Φ74*50 plastic	1	42	Washer	Φ3	2
8	Pin		1	43	Screw	M3*10	2
9	Spring		1	44	Screw	M6*35	4
10	Washer	Φ10	1	45	Spring washer	Φ6	4
11	Hexagonal nut	M10	1	46	Hexagonal nut		4
12	Handle	135*72*20mm ABS	1	47	Fixing blocks		1
13	Support		1	48	Shaft		1
14	Screw	M6*20	2	49	Bearing	8206	1
15	Spring washer	Φ6	1	50	Gear rack		1
16	Washer	Φ6	1	51	Pulley		1
17	Screw	M6*12	4	52	Bearing	8206	1
18	Rubber plug	Φ20*14 rubber	4	53	Hollow shafe		1
19	Strain relies	M16 plastic	1	54	Set screw	M5*12	1
20	Mains cable	0.75^2 / 250v rubber	1	55	Screw	M5*12	1
21	Conducting wire	$0.75mm^2$	1	56	Pulley		1
22	Cover		2	57	Flat key	4*20	1
23	Screw	M5*25	4	58	Motor	250w / 230v	1
24	box	65*50*60 plastic	8	59	Pad	140*20*18 PA6	2
25	Protective shield	58*58*Φ49 PA6	1	60	Screw	M6*25	4
26	Insertion	58*58*1.5mm rubber	1	61	Washer	Φ6	4
27	Guard	58*58*35mm plastic	1	62	Hexagonal nut		4
28	Screw	M4*10	4	63	Adjusting packing	Φ14*10 rubber	2
29	Strain relies	M12 plastic	4	64	Screw	M4*10	1
30	Switch	10A / 400v plastic	1	65	Spring washer	Φ4	1
31	Guard	130*80 ABS	1	66	Earth lead	Φ4	1
32	Handle grip	Φ26*86 plastic	1	67	Screw	M5*40	4
33	Handle assembly		1	68	Name plate		1
34	Set screw	M8*10	1	69	Belt	L202 rubber	1
35	Gear shafe		1	70	Sign	26*40 PVC	1

CQ – 200 pipe cleaner



GQ – 200 SPECITY ACTION

Rtl No:	Name	Model No:	Quantity	Rtl No:	Name	Model No:	Quantity
1	Hull		1	36	Strain relies	M12 plastic	4
2	Screw	M5*35	2	37	Portative shield	74*74*Φ69 PA6	1
3	Gland		1	38	Insertion	74*74*1.5mm rubber	1
4	Screw	M6*50	2	39	Guard	74*74*40mm plastic	1
5	Screw	M6*30	2	40	Switch	10A / 400v	1
6	brakes		3	41	Conducting wire	1.0^2 plastic	1
7	Belt	0 - 528 rubber	1	42	Stay		2
8	Washer	Φ6	3	43	Anchor plate		1
9	Rocker arm set		3	44	Screw	M10*30	2
10	Pin	Φ6*45	3	45	Awt	M10	1
11	Pin	Φ2*16	3	46	Bolt	M10*45	1
12	Support		3	47	Motor	750w / 230v	1
13	Screw	M5*8	3	48	Flat key	8*30	1
14	Spring		3	49	Pulley		1
15	Damper		1	50	Damper		1
16	Driving shafe		1	51	Screw	M5*103	3
17	Clutch cone		1	52	Washer	Φ10	4
18	Bearing	8112	1	53	Spring washer	Φ10	4
19	Cam		1	54	Screw	M10*20	4
20	Handle		1	55	Fixed wire reel		4
21	Ball	Φ40 plastic	1	56	Aut	M10	4
22	Plate assembly		1	57	Spring washer	Φ10	4
23	Screw	M8*30	3	58	Support		2
24	Jockey pulley		2	59	Wheel	70kg 8"	2
25	Pin	8*30	2	60	Ring		2
26	Sleeve pipe	Φ50*185 plastic	1	61	Aut	M12	2
27	Yoke		1	62	Stand		1
28	Casing		1	63	Rubber feet		2
29	Ball bearing	208	1	64	Screw	M5*10	1
30	Bearing end cover	Φ86*35 BMC	1	65	Spring washer	Φ5	1
31	Screw	M8*30	1	66	Earth lead	Φ5	1
32	Guide hose pin		2	67	Sign	26*40PVC	
33	Strain relies	M16 plastic	1	68	Sign	42*28PVC	
34	Mains cable	1.0^2 / 250v rubber	1	69	Sign	35*35PVC	
35	Name plate	90*45	1				

- Keep the machine well lubricated. Inject the lubrication oil (20# and 30# oil) into oil holes before and after each use. It is highly recommended, when finishing the operation, that you lubricate the machine after 2 – 3 minute free rotation and keep it at a dry place.
- Keep the electric part of the machine from getting wet. It is prohibited to operate the machine in water. If a small amount of the waste water accidentally getting into the machine, open the machine cover immediately and clear the water.
- When the insulation resistance of the machine is less than 2MΩ, it indicates the machine is wet. To assure personal safety and prevent the machine from damage, stop operating the machine and put it at a place dry and ventilated until the insulation resistance restored to more than 2MΩ.
- Prior to the next use after long time storage, check the machine for free rotation, then turn on the control switch. If the machine shaft does not rotate after the motor is running or the handle is pressed, it indicates the machine rusted inside. Turn off the electric power immediately to avoid the electric damage. Reoperate the machine only after a self – check or an inspection by an authorized dealer is done.
- After finishing use of the flexible shaft and drills, flush and dry them clean. Lubricate them with oil and keep them at a dry place to prevent rusting.
- Warning: Shut down the machine and disconnect the electric power before making any adjustment, accessory assembly and maintenance.
- Warning: Use approved rated power supply and less – than – 10A fuse.

1. Keeps work area clear

   Cluttered area and benches invite injuries.

2. Consider work area environment

   Do not expose tools to rain.

   Do not use tools in dam or wet locations.

   Keeps work area well lit.

   Do not use tools in the presence of flammable liquids or gases.

3. Guard against electric shock

   Avoid body contact with earthed or grounded surfaces (e. g. pipes, radiators, ranges, and refrigerators).

4. Keep other persons away

   Do not let persons, especially children, not involved in the work touch the tool or the extension cord and keep them away from the work area.

5. Store idle tools

   When not in use, tools should be stored in a dry locked – up place, out of reach of children.

6. Do not force the tool

   Do not force small tools to do the job of a heavy duty tool.

   Do not use tools for purposes not intended; for example does not use circular saws to cut tree limbs or logs.

7. Use the right tool

   Do not force small tools to do the job of a heavy duty tool

   Do not use tools for purposes not intended forexample do not use circular saws to cut tree limbs or logs.

8. Dress properly

   Do not wear loose clothing or jewelry, the can be caught in moving parts.

   Non – skid footwear is recommended when working outdoors.

   Wear protective hair covering to contain long hair.

9. Use protective equipment

   Use safety glasses.

   Use face or dust mask if working operations create dust.

10. Connect dust extraction equipment

    If the tool is provided for the connection of dust extraction and collecting equipment, ensure these are connected and properly used.

11. Do not abuse the cord

    Never yank the cord to disconnect it from the socket. Keep the cord away from heat, oil and sharp edges

12. Secure work

    Where possible use clamps or vice to hold the work. It is safer than using your hand.

13. Do not overreach

    Keep proper footing and balance at all times.

14. Maintain tools with care

    Keep cutting tools sharp and clean for better and safer performance.

    Follow instruction for lubricating and changing accessories.

    Inspect tool cords periodically and if damaged have them repaired by an authorized service facility.

    Inspect extension cords periodically and replace if damaged.

15. Disconnect tools

    When not in use, before servicing and when changing accessories such as blades, bits and cutters, disconnect tools from the power supply.

16. Remove adjusting keys and wrenches

    Form the habit of checking to see that keys and adjusting wrenches are removed from the tool before turning it on.

17. Avoid unintentional starting

    Ensure switch is in "off" position when plugging in.

18. Use outdoor extension leads

    When the tool is used outdoors, use only extension cords intended for outdoor use and so marked.

19. Stay alert

    Watch what you are doing, use common sense and do not operate the tool when you are tired.

20. Check damaged parts

    Before further use of tool, it should be carefully checked to determine that it would operate properly and perform its intended function.

    Check for alignment of moving parts, binding of moving parts, breakage of parts, mounting and any other conditions that may affect its operation.

    A guard or other part that is damaged should be properly repaired or replaced by an authorized service center unless otherwise indicated in this instruction manual.

    Have defective switches replaced by an authorized service center.

    Do not use the tool if the switch does not turn it on and off.

21. Warning

    The use of any accessory or attachment other than one recommended in this instruction manual may present a risk of personal injury.

22. Have your tool repaired by a qualified person

    This electric tool complies with the relevant safety rules. Repairs should only be carried out by qualified persons using original spare parts; otherwise this may result in considerable danger to the user.

23. A well – grounded three – hole single – phase socket must be used.

24. When a pipeline gets blocked it can easily cause a water puddle. To operate the

    Pipeline cleaner under a wet and damp condition, relevant safety measures, e. g. using electricity leak protector, put the machine to a dry place, must be taken. And the operator must wear insulation gloves, shoes or stand on insulation pad.

25. Use rated voltage and standard capacity fuse. Do not use a metal wire as fuse substitute.

26. Do not yank cord when moving the machine or unplugging power supply.

27. Keep watch when operating in narrow working site or in special surrounding (like boiler room, inside pipeline, damp area etc).

28. Disassembly and repair of this product by non – qualified personnel is forbidden.

29. When work finished, disconnect the power supply first, and then do site cleaning and machine servicing.

30. When operating and cleaning the machine, avoid water get into the machine. If water accidentally get into the machine, dry it before next use.

31. Operating a defective machine is forbidden.

Problems encountered in machine running

Finding	Cause	Solution
The machine shaft does not rotate after turning on the machine.	• Bad connection • Fuse burned • Control knob not turned on	• Check cord for good power connection • Install a good fuse • Turn on the control knob
After turning on the machine a buzz can be heard but the machine shaft does not rotate.	• The machine shaft rusts.	• Turn off the control knob immediately and unplug power supply. Open the machine to remove the rust. • Send to authorized dealer for inspection and repair.
After turning on the machine and pressing the handle the flexible shaft does not rotate.	• Machine shaft rusts • Clutch wear or loose • Handle was not pressed to the position.	• Open the machine cover to remove rust and lubricate. • Replace clutch • Force presses the handle to hold the flexible shaft tight. • Send to authorized dealer for inspection and repair.
Check metal case with electric pen and it shows red(have e-faradism)	• Not use three – hole single phase socket • Though three – hole single phase socket is used but not grounded	• Use well grounded three – hole single – phase socket • If no three – hole single – phase socket is available, take appropriate grounding measure
Machine's temperature is higher	• high ambient temperature • long time continuous operation	• Not defect. Can continue to operate. • Break for a while and operate again.

Problems encountered in the removing process

Finding	Cause	Solution
The flexible shaft only rotates but not moves forward.	• You use a non – aautomatic pipeline cleaner.	• Follow the operation method of mobile machine. • Use automatic pipeline cleaner.
Flexible shaft and drill stuck.	• Blockage too hard. • Complicated path inside the pipeline.	• Push and pull, with the machine rotates clockwise and counterclockwise to slowly pull the flexible shaft out. Warning: Do not yank and rotate the machine counterclockwise for long time. • Use flexible shaft without drill to clear.
Flexible shaft can not move forward and backward.	• Pipe with more zigzag and long path.	• Increase the push-pull force during operation • Change direction or angle of the flexible shaft. • Use double olive shaped drill or soft flexible shaft.
Flexible shaft broken in the pipe.	• Inappropriate operation • Long time rotate counterclockwise.	• Based on the position the broken shaft located, use collection-helical drill connected with a flexible shaft to hook the broken shaft, and pull out the broken shaft.

USER FEEDBACK FORM

Respected User:

We are highly appreciated that you feedback what problems you found during using this product and your comments and suggestion for the product improvement.

Product Type		Date of Purchase	
Serial No.		Qty. Purchased	
User Name:	Tel:	Contact Person:	