



FISH SCALER

INSTRUCTION MANUAL

SAFETY, ASSEMBLY, AND MAINTENANCE INSTRUCTIONS FOR MODEL:

Model: Pro 30



NORTHROCK INDUSTRIES, INC.
31 CROSSWAY EAST
BOHEMIA, NY 11716

TEL: 1-800-989-8423
1-631-924-6130
FAX: 1-800-315-1277
1-631-924-6369

WARNING

When using fish scalers as with any electric tool basic safety precautions should always be followed to reduce the risk of fire, electric shock, and personal injury, including the following:

READ ALL INSTRUCTIONS

GROUNDING INSTRUCTIONS

This tool should be grounded while in use to protect the operator from electric shock. The tool is equipped with a three conductor cord and three prong grounding type plug to fit the proper grounding type receptacle. The green conductor in the cord is the grounding wire. Never connect the green wire to a live terminal.

GENERAL SAFETY PROCEDURES

- Keep work area clean. Cluttered areas invite injury.
- Keep children away. Do not let visitors contact tool or extension cord. All visitors should be kept away from work area.
- Do not use the tool for any purpose for which it is not intended.
- Dress properly, do not wear loose clothing or jewelry as they can get caught in moving parts.
- Wear safety glasses to protect against flying debris.
- Don't overreach, keep proper footing and balance at all times.
- Disconnect power cord when not in use, before servicing and when changing flexible shafts, handpieces, and tools.
- Avoid unintentional starting. Be sure switch is off (handpiece holder down) before plugging tool in.
- Stay alert, be aware of what you are doing and others around you. Do not operate the tool when you are tired
- Check for damaged parts before use of the tool. Any part damaged such as a guard should be repaired or replaced by an authorized service center. Do not use tool if switch does not turn it on and off.

Assembly Instructions:

! Be sure unit is unplugged and switch is in the off position before proceeding.

Align and insert flexible core into motor core adapter. Insert outer casing into motor casing adapter until the shoulder on the coupling bottoms out. Tighten both socket cap screws using a 3/16" hex key. Insert the flexible core into the adapter on the handpiece, and then thread handpiece onto flexible shaft. Hang unit from a secure mounting at a height that allows the shaft to have a gradual arc while the operator is using the tool.

The scaler is now ready for use.

Operating Instruction:

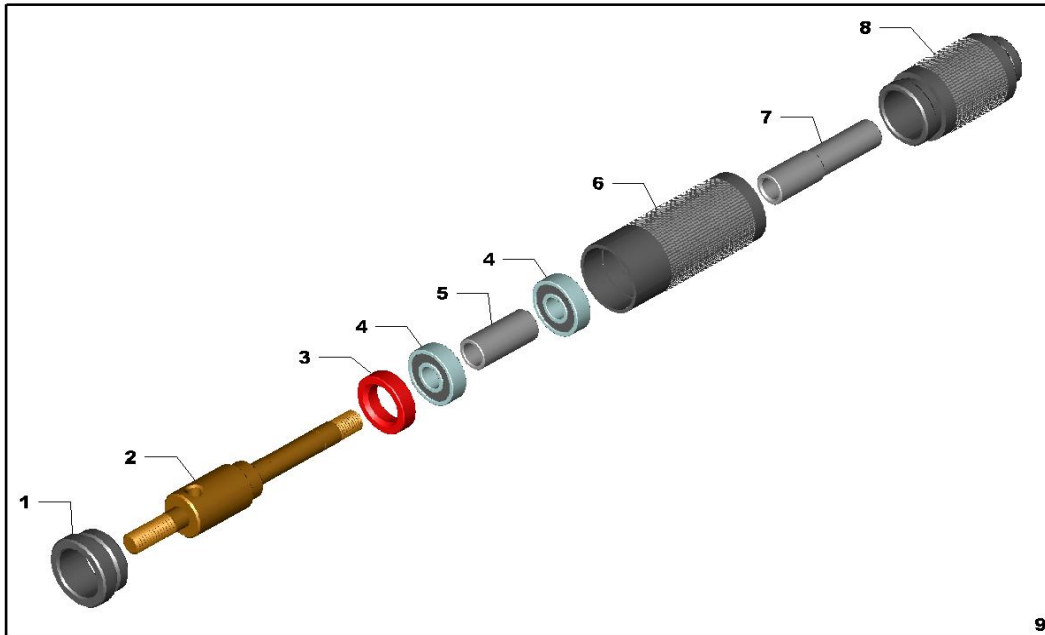
Hold the handpiece securely by the knurled anti slip handle. Keep hands away from the cutter head. Lift the yellow handpiece holder to start the motor. Beginning with the tail end of the fish, slowly move the cutter head toward the head of the fish. Repeat this motion until all the scales have been removed. When you are finished scaling turn the power off by pulling the hanger down, and replacing the handpiece on the holder after it has stopped spinning.

Maintenance:

The motor and the handpiece use sealed bearings which require no maintenance over their life span.

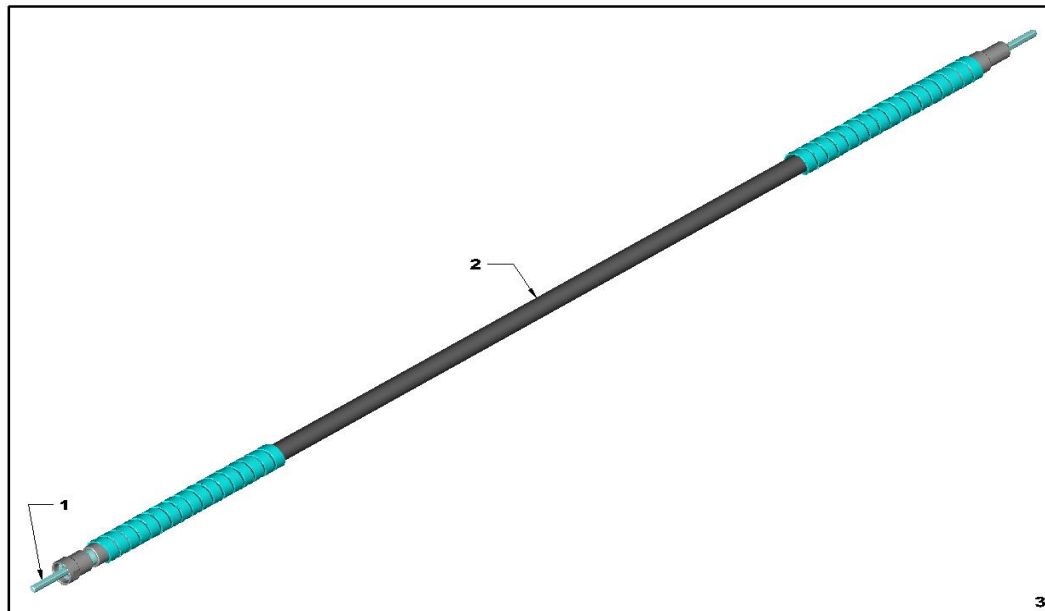
The life expectancy of the flexible shaft can be increased by lubricating the inner core after every one hundred hours of use. To lubricate the inner core remove the shaft from the motor and then slide the inner flexible shaft out of the rubber housing. Wipe the old grease off and then reinstall the core applying approximately 1/16" of Northrock shaft lubricant (P/N 520A1) along the whole length.

STANDARD DUTY HAND PIECE



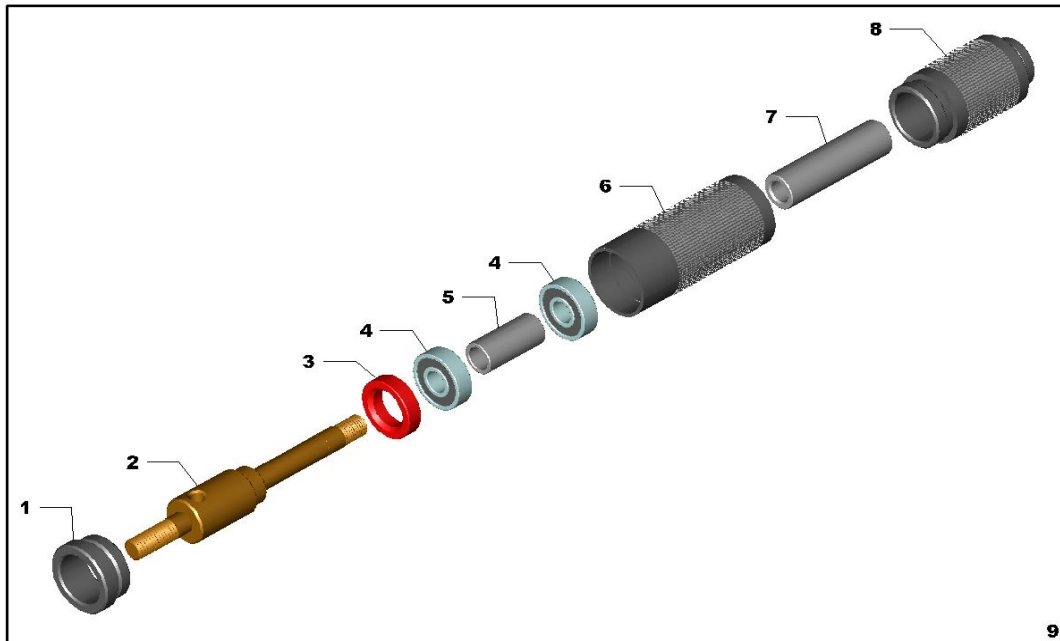
Ref.	Part No.	Description
1	305C1	CAP, BEARING
2	155BG1	SPINDLE
3	110A5	OIL SEAL
4	140C00	BEARING (2 req'd)
5	200S1	SPACER
6	105BC1	HOUSING
7	160DN1	CORE ADPATER
8	150GL1	CASING ADAPTER
9	25AE2	COMPLETE HAND PIECE

STANDARD DUTY SHAFT ASSEMBLY



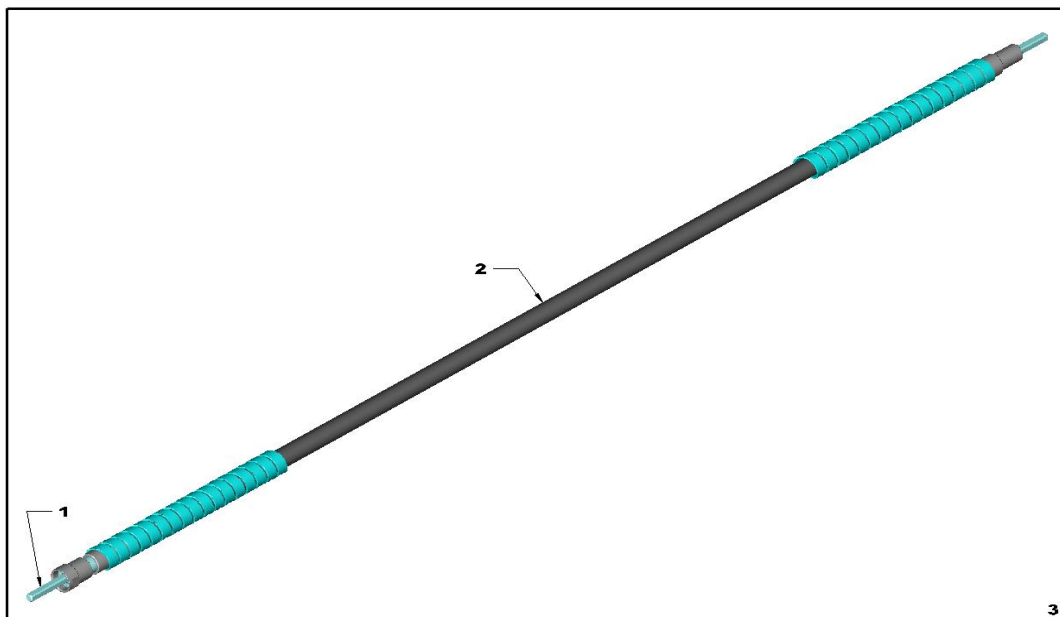
Ref.	Part No.	Description
1	250CC4	CORE
2	275BH4	CASING
3	25BB4	COMPLETE SHAFT ASSEMBLY

HEAVY DUTY HAND PIECE



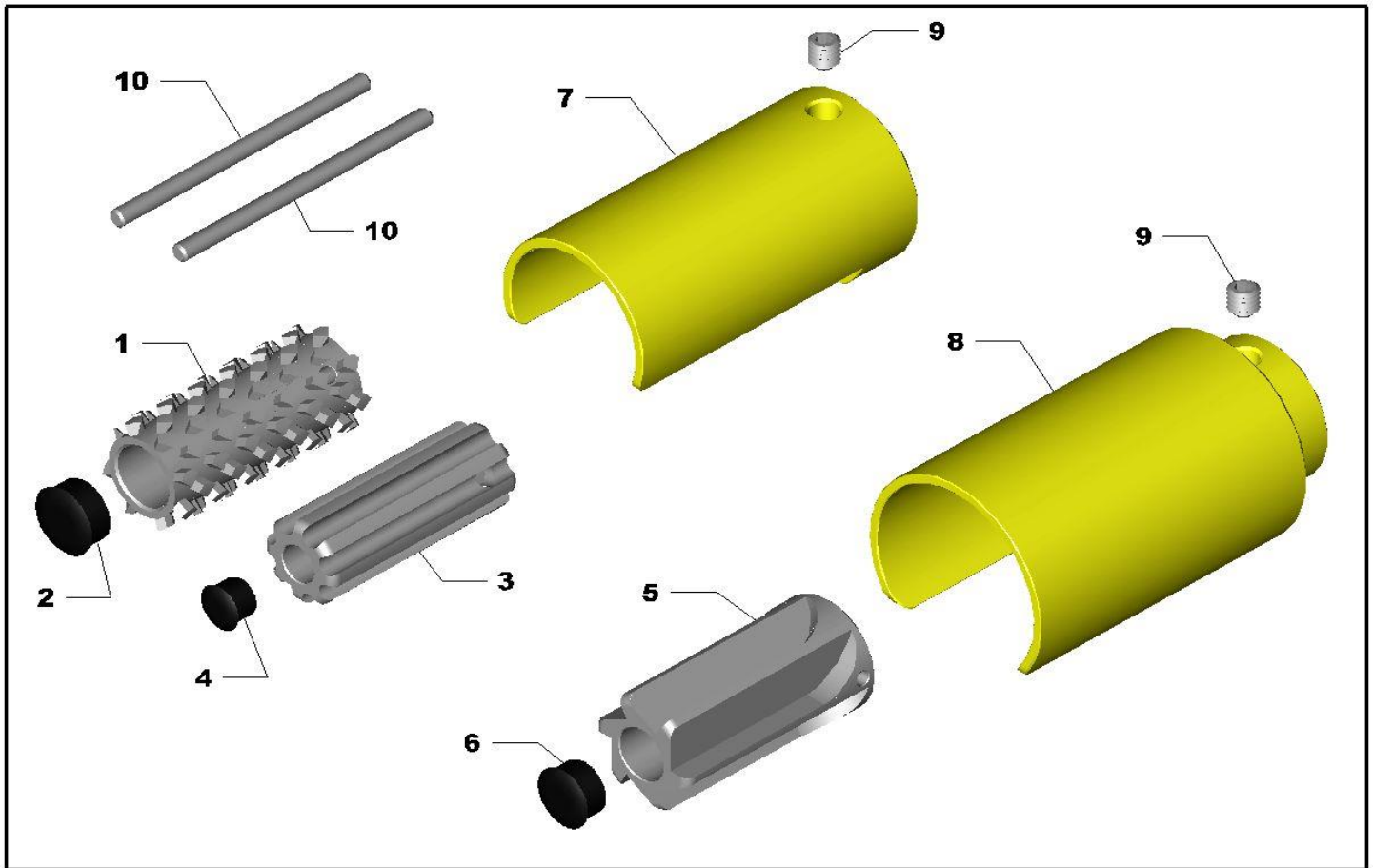
Ref.	Part No.	Description
1	305C1	CAP, BEARING
2	155BG1	SPINDLE
3	110A5	OIL SEAL
4	140C00	BEARING (2 req'd)
5	200S1	SPACER
6	105BC1	HOUSING
7	160CW2	CORE ADAPTER
8	150GL1	CASING ADAPTER
9	25AE1	COMPLETE HAND PIECE

HEAVY DUTY SHAFT ASSEMBLY



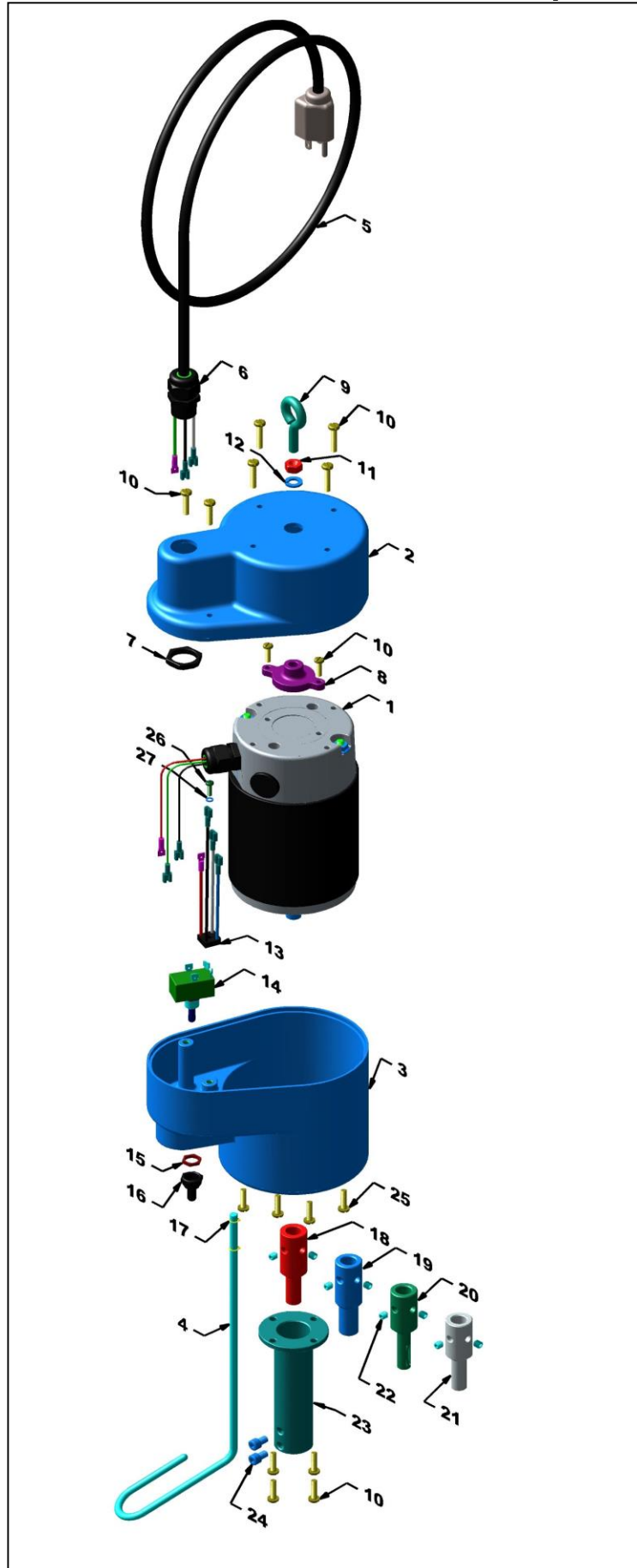
Ref.	Part No.	Description
1	250CD4	CORE
2	275BH4	CASING
3	25BC4	COMPLETE SHAFT ASSEMBLY

CUTTERS & GUARDS FOR 25AE1 & 25AE2



Ref.	Part No.	Description
1	225C1	DIAMOND PATTERN CUTTER
2	400K1	END CAP
3	225A1	8-FLUTE CUTTER
4	400H1	END CAP
5	225B1	6-FLUTE CUTTER
6	400J1	END CAP
7	270B4	GUARD (for 225A1 & 225C1)
7A	270B3	270B4 (with #9)
8	270A4	GUARD (for 225B1)
8A	270A3	270A4 (with #9)
9	190B250	SET SCREW
10	180H1	PIN (for cutter assembly, 2 req'd)

POWER UNIT ASSEMBLY (2020)



POWER UNIT ASSEMBLY (2020)

Ref.	Part No.	Description
1	555E1	ELECTRIC MOTOR
1A	555E2	COMPLETE POWER UNIT (less core & casing adapters)
2	105CF1	COVER (TOP)
3	105CG1	COVER (BOTTOM)
4	485F1	HANGER
4A	485F1	HANGER, FISH SCALER (with #17)
5	505C2	ELECTRIC CORD
6	435C1	STRAIN RELIEF (with #7)
7	-----	STRAIN RELIEF NUT (1 req'd) [sold with #6]
8	485E1	HANGER, FISH SCALER
9	570A1	EYE BOLT
10	190F187	PAN HEAD SCREW
11	211A31	NUT
12	285A312	LOCK WASHER
13	705A1	RECTIFIER (ac/dc)
14	425C1	SWITCH (comes with #15)
15	-----	NUT (2 req'd) [sold with #14]
16	430A1	WATER RESISTANT SWITCH SEAL
17	225H1	RETAINING RING (2 req'd)
18	160DW1	CORE ADAPTER (STANDARD DUTY) for 25BB4
18A	160DW2	160DW1 (with #22)
19	160DX1	CORE ADAPTER (HEAVY DUTY) for 25BC4
19A	160DX2	160DX1 (with #22)
20	160AA1	CORE ADAPTER (STANDARD DUTY) for 10K1
20A	160AA2	160AA1 (with #22)
21	160Y1	CORE ADAPTER (HEAVY DUTY) for 10L1
21A	160Y2	160Y1 (with #22)
22	190B218	SET SCREW (2 req'd with each core adapter)
23	150CC1	CASING ADAPTER
23A	150CC2	CASING ADAPTER (with #24)
24	320B237	SOCKET CAP SCREW (2 req'd)
25	190F150	PAN HEAD SCREW
26	190F650	PAN HEAD SCREW
27	285A138	LOCK WASHER

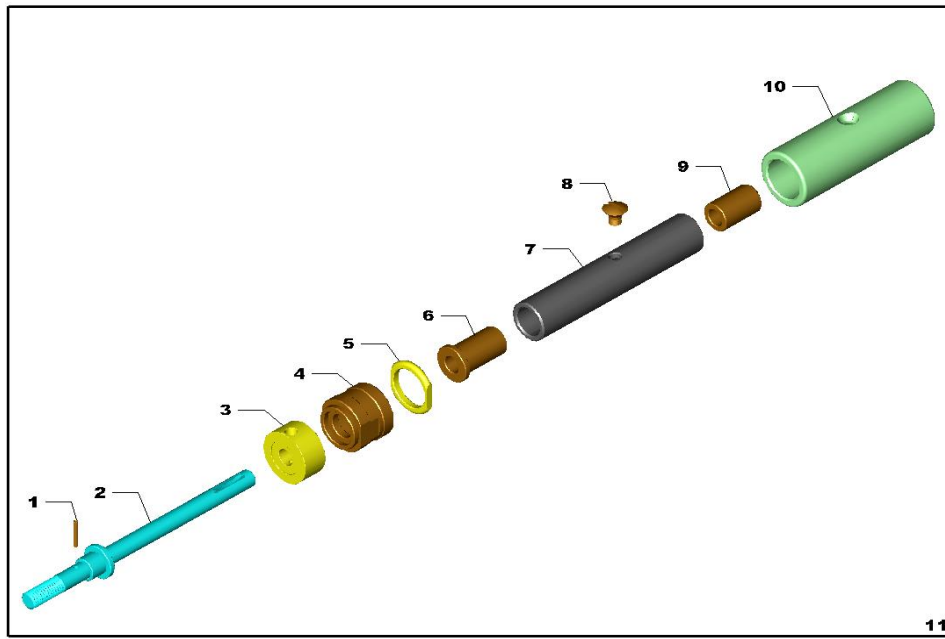
This exploded view diagram illustrates the assembly of a water pump system. The components are numbered 1 through 40:

- 1-4:** Base plate, mounting plate, and vertical support pipe with a U-shaped foot.
- 5-18:** Various fasteners, including screws, nuts, washers, and a green bracket, used to secure the base and support structures.
- 19-25:** A green L-shaped pipe assembly with associated seals and fasteners.
- 26-28:** A power cord with a black plug and a strain relief fitting.
- 29:** A blue cylindrical pump unit with mounting brackets.
- 30-40:** A vertical discharge pipe assembly, including a red coupling, a grey pipe, and various fittings and fasteners.

POWER UNIT ASSEMBLY

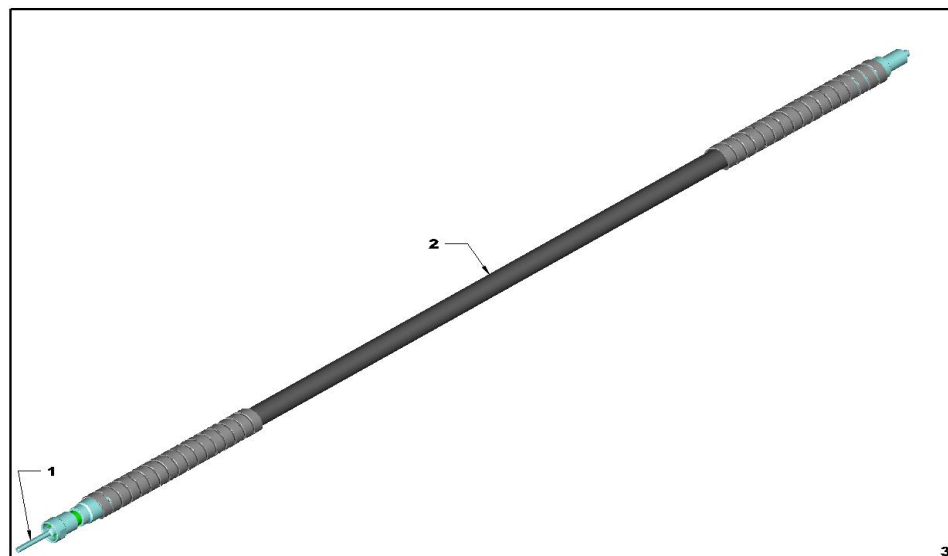
Ref.	Part No.	Description
1	-----	SCREW (4 req'd)
2	215AJ1	COVER (sold with #1 & #3)
3	-----	COVER GASKET
4	485A1	HANGER
4A	485A2	485A1 (with #5, #8 & #9)
5	180A1	SPRING PIN
6	200H1	SWITCH SPACER (2 req'd)
6A	200H2	200H1 (with #7)
7	190B125	SET SCREW (2 req'd)
8	211A25	NUT
9	212A25	ACORN NUT
10	211A18	NUT (2 req'd)
11	285A187	LOCK WASHER (2 req'd)
12	215R1	SWITCH PLATE
13	200J1	SPACER (2 req'd)
14	190D127	SCREW (2 req'd)
15	425C1	SWITCH (comes with #18)
16	190G10	SCREW (4 req'd)
17	560A1	SWITCH HOUSING (comes with #16, #26, & #27)
18	-----	NUT (2 req'd) [sold with #15]
19	280A315	BOLT (2 req'd)
20	370A312	WASHER (5 req'd)
21	285A312	LOCK WASHER (3 req'd)
22	211A31	NUT (3 req'd)
23	440E1	HANGER
23A	440E2	440E1 (with #19, #20, #21, #22, #24, #25)
24	570A1	EYE BOLT
25	400D1	END CAP (2 req'd)
26	-----	GROUND SCREW (sold with #17)
27	285A187	LOCK WASHER
28	435C1	STRAIN RELIEF
29	505C2	ELECTRIC CORD
30	555A1	ELECTRIC MOTOR
30A	555A3	COMPLETE POWER UNIT (less core & casing adapters)
31	505D2	WIRING HARNESS
32	565A1	WIRE NUT-ORANGE (2 req'd) [inside, not shown]
33	160DW1	CORE ADAPTER (STANDARD DUTY) for 25BB4
33A	160DW2	160DW1 (with #37)
34	160DX1	CORE ADAPTER (HEAVY DUTY) for 25BC4
34A	160DX2	160DX1 (with #37)
35	160AA1	CORE ADAPTER (STANDARD DUTY) for 10K1
35A	160AA2	160AA1 (with #37)
36	160Y1	CORE ADAPTER (HEAVY DUTY) for 10L1
36A	160Y2	160Y1 (with #37)
37	190B218	SET SCREW (2 req'd with each core adapter)
38	150CC1	CASING ADAPTER
38A	150CC2	150CC1 (with #39)
39	320B237	SOCKET CAP SCREW
40	190F175	PAN HEAD SCREW

HEAVY DUTY HAND PIECE



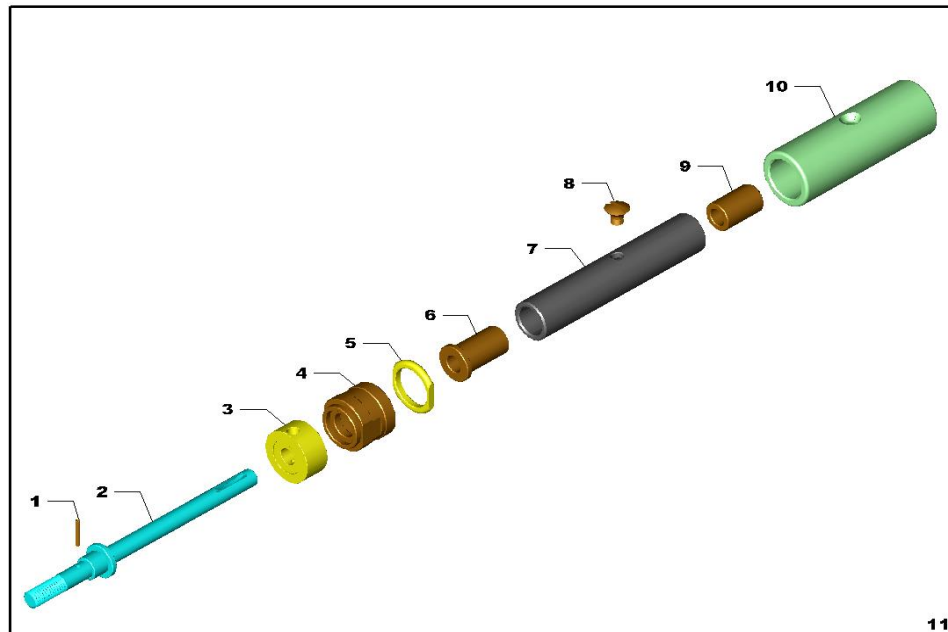
Ref.	Part No.	Description
1	180A1	SPRING PIN
2	155A2	SPINDLE
3	170B1	CAP
4	170A1	CAP, BEARING
5	145B1	LOCK NUT
6	175A1	BRONZE BEARING
7	105J1	HOUSING
7A	105J2	105J1 (with #6 & #9)
8	190C237	SCREW
9	175B1	BRONZE BEARING
10	165A1	HANDLE
11	10A2	COMPLETE HAND PIECE

HEAVY DUTY SHAFT ASSEMBLY



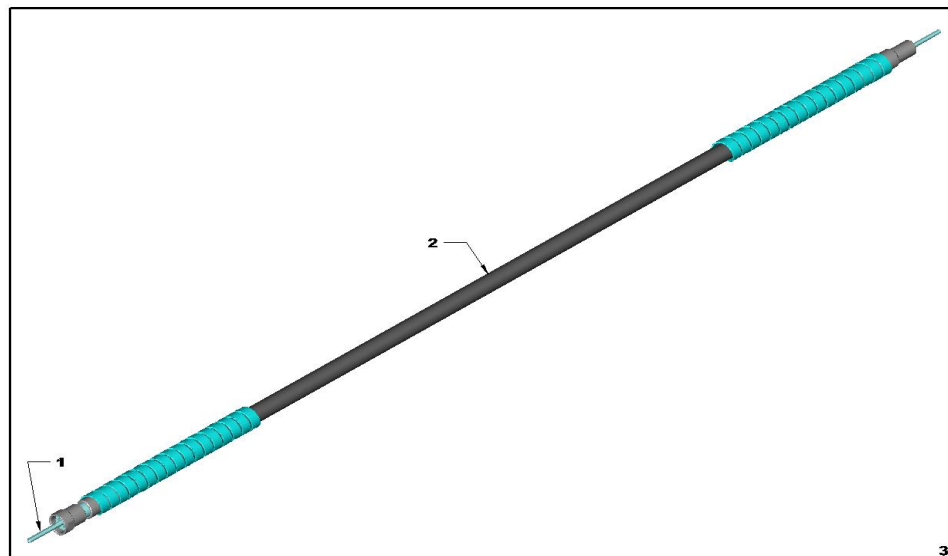
Ref.	Part No.	Description
1	250BB4	CORE
2	275BJ4	CASING
3	10L1	COMPLETE SHAFT ASSEMBLY

STANDARD DUTY HAND PIECE



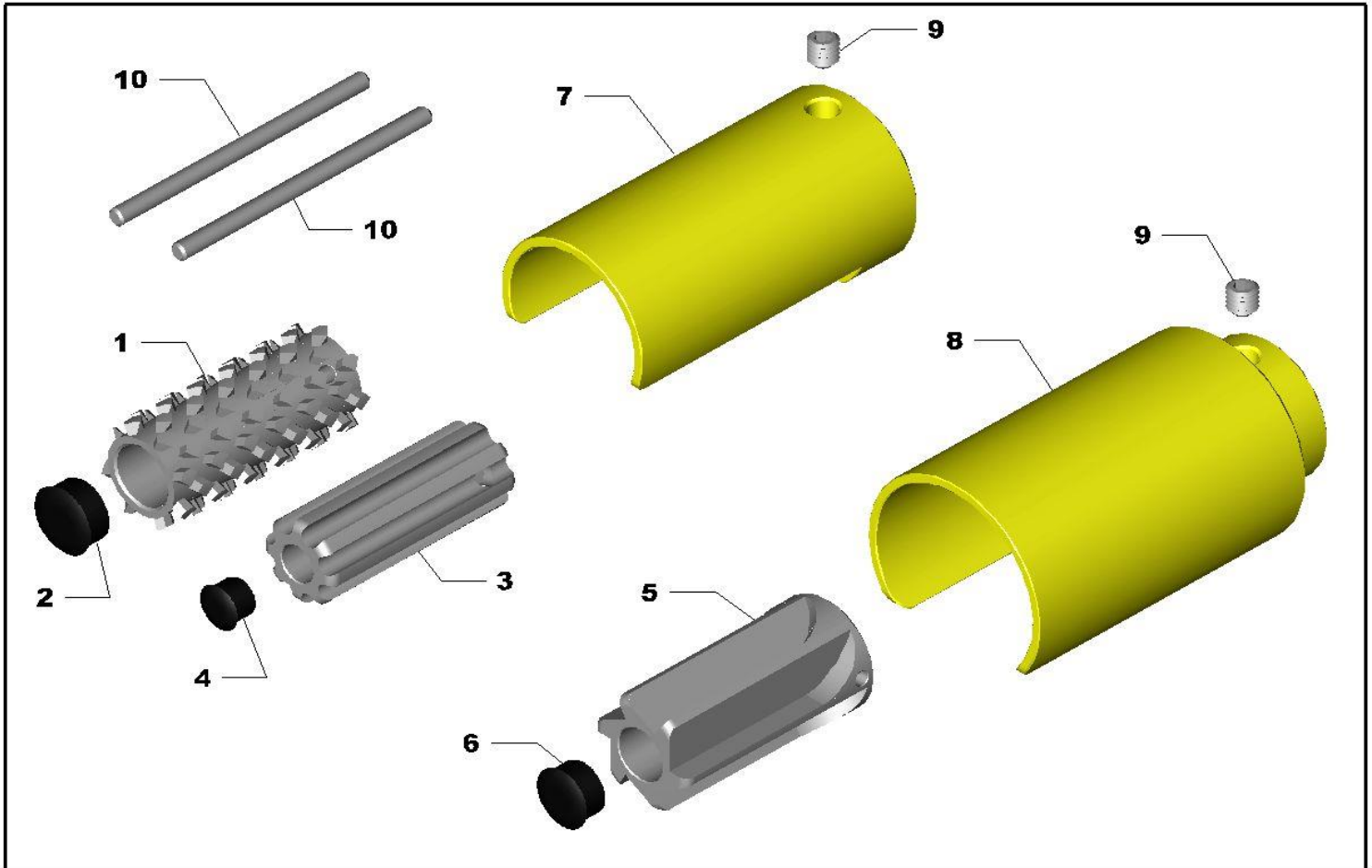
Ref.	Part No.	Description
1	180A1	SPRING PIN
2	155A1	SPINDLE
3	170B1	CAP
4	170A1	CAP, BEARING
5	145B1	LOCK NUT
6	175A1	BRONZE BEARING
7	105J1	HOUSING
7A	105J2	105J1 (with #6 & #9)
8	190C237	SCREW
9	175B1	BRONZE BEARING
10	165A1	HANDLE
11	10A1	COMPLETE HAND PIECE

STANDARD DUTY SHAFT ASSEMBLY



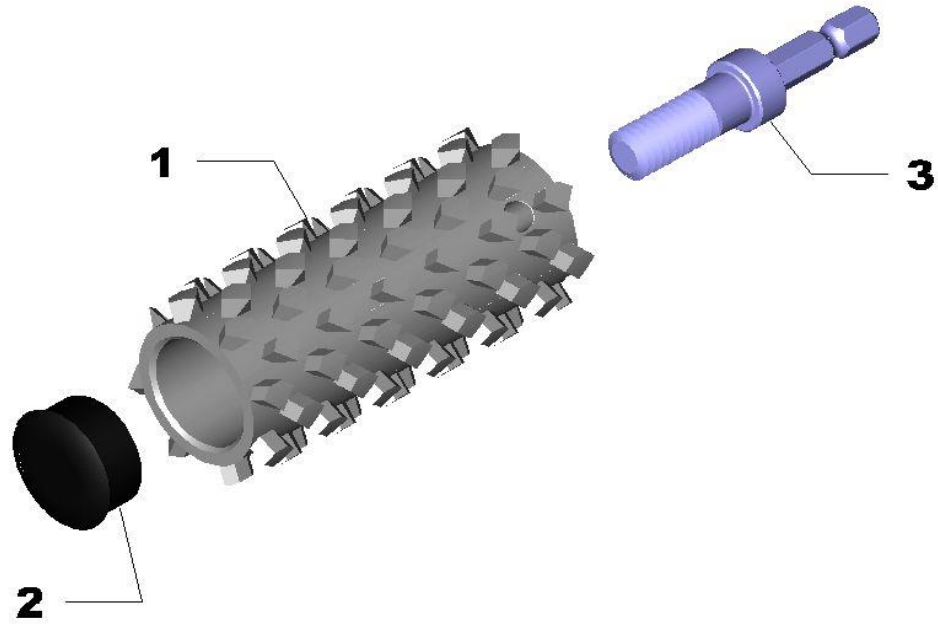
Ref.	Part No.	Description
1	250BA4	CORE
2	275BH4	CASING
3	10K1	COMPLETE SHAFT ASSEMBLY

CUTTERS & GUARDS FOR 10A1 & 10A2



Ref.	Part No.	Description
1	225C1	DIAMOND PATTERN CUTTER
2	400K1	END CAP
3	225A1	8-FLUTE CUTTER
4	400H1	END CAP
5	225B1	6-FLUTE CUTTER
6	400J1	END CAP
7	270B1	GUARD (for 225A1 & 225C1)
7A	270B2	270B1 (with #9)
8	270A1	GUARD (for 225B1)
8A	270A2	270A1 (with #9)
9	190B250	SET SCREW
10	180H1	PIN (for cutter assembly, 2 req'd)

PORTABLE FISH SCALER

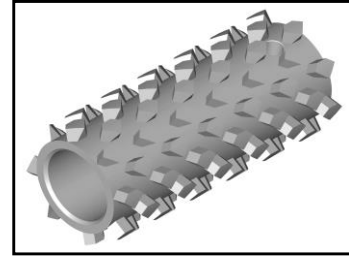


Ref.	Part No.	Description
1	225C1	DIAMOND PATTERN CUTTER
2	400K1	END CAP
3	155CM1	SPINDLE
4	25BD1	PORTABLE FISH SCALER

Commercial Fish Scaler

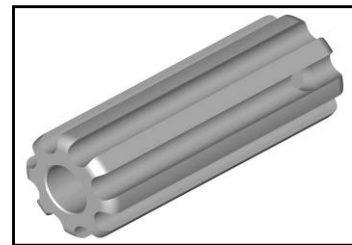
DIAMOND TOOTH TOOL

Supplied as standard equipment on all scalers. This will handle the majority of fish. Some examples include Flounder, Snapper, Perch, Whitefish, Salmon, Haddock and Sea Bass.



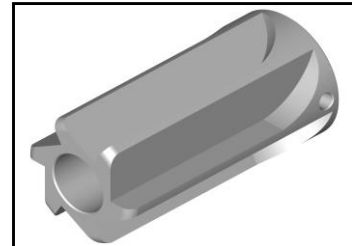
SIX FLUTE TOOL

This tool can be supplied in place of the diamond tooth tool on a new machine for an additional charge or as an extra accessory. Used mainly on large scale fish with thick skin. Some examples include Carp, Buffalo and Grouper.



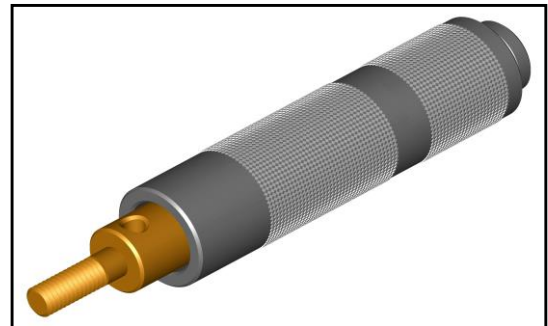
EIGHT FLUTE TOOL

This tool can be supplied in place of the diamond tooth tool on a new machine or as an accessory. Used on small to medium scale fish with thin skin that can be prone to damage when scaled by coarser tools.



HANDPIECE

The handle grip is manufactured from high quality corrosion resistant aluminum. The drive shaft is constructed of rugged stainless steel. Two sealed ball bearings provide smooth operation and long handpiece life. All scaler tools will interchange.



[illegible]