Instruction manual

& spare parts list



AG-PRO SERIES
AIR DRIVEN
ANGLE GRINDERS



1. General Safety and Operation Instruction

1. Unpacking

- When unpacking this product, carefully inspect for any damage that may have occurred during transit. Make sure any loose fittings, bolts, etc, are tightened before putting this product into service.
- 2. This product is a part of a high pressure system and the following safety precautions must be followed at all times along with any other existing safety rules.
- 3. Read all manuals included with this product carefully. Be thoroughly familiar with the controls and the proper use of the equipment.
- 4. Only persons well acquainted with these rules of safe operation should be allowed to use the air tool.

Do not exceed maximum operation pressure of the air tool (6.2BAR/90 PSI). The air tool could explode and result in death or serious personal injury.

- 5. Do not exceed any pressure rating of any component in the system.
- 6. Disconnect the air tool from air supply before changing tools or attachments, servicing and during non-operation.
- 7. Always wear safety glasses during operation.
- 8. Do not wear loose fitting clothing, scarves, or neck ties. Loose clothing may become caught in moving parts and result serious personal injury.
- 9. Do not wear jewelry when operation any tool. Jewelry may become caught in moving parts and result in serious personal injury.
- 10. Do not depress trigger when connecting the air supply hose.
- 11. Always use attachments designed for use with air powered tools.

 Do not use damaged or worn attachments.
- 12. Never trigger the tool when not applied to a work object. Attachments must be securely attached. Loose attachments can cause serious injury.
- 13. Protect air lines from damage or puncture.
- 14. Never point an air tool at oneself or any other person. Serious injury could occur.
- 15. Check air hoses for weak or worn condition before each use. Make sure all connections are secured.

Release all pressure from the system before attempting to install, service, relocate or performs any maintenance.



- 16. Keep all nuts, bolts and screws tight and ensure equipment is in safe working condition.
- 17. Do not put hands near or under moving parts.

18. Air Hose

It is not recommended to install a quick coupler between the hammer and leader (whip) hose. Using fittings or air hoses which are too small can create a pressure drop and reduce the power of the tool. For most of the hammers, using 9.525 mm (3/8") I.D. fittings with 6.35 mm (I/4") NPT threads are recommended. For the others hammer, using 12.7 mm(1/2") I.D. with 9.525 mm(3/8") NPT threads are recommended. Most compressors are shipped with a short, 6.35 mm (1/4") I.D. hose. For proper performance and more convenience, use a 9.525 mm (3/8") I.D. hose. Hoses longer than 15.24 m (50 feet) should have a 12.7 mm (I/2") I.D.

Never carry a tool by the hose or pull the hose to move the tool or a compressor. Keep hoses away from heat, oil and sharp edges. Replace any hose that is damaged, weak or worn.

19. Storage

The scaling hammer must be lubricated before storing. Follow the air cylinder lubrication instructions with an exception to step 4. Only run the scaling hammer for 2 to 3 seconds instead of 20 to 30 seconds because more oil needs to remain in the scaling hammer when storing.

2. Particular Safety Instruction

1. Information of Noise Level

(1) The noise level at the operator's position is about:

Model No.:	A-weighted sound pressure level (Lpf)	A-weighted sound power level (Lw)	Uncertainty K _{wA}	
AG-PRO 4B	99.4(dB)	109.5(dB)	3(dB)	
AG-PRO 5	86.6(dB)	96.7(dB)	3(dB)	
AG-PRO 7	91.2(dB)	101.4(dB)	3(dB)	

(2)Reference standard :ISO 15744.

(3) Always wear ear protectors during operation.



2. Information of Vibration Level

(1) The vibration level at the handle is about :

Model No.:	Vibration Level (m/s²)	Uncertainty K (m/s²)
AG-PRO 4B	2.6	0.21
AG-PRO 5	2.6	0.22
AG-PRO 7	3.7	0.32

(2)Reference standard: EN 28927-1.

3. Safety Information

Rated rotational speed of the spindle

Model No.: AG-PRO 4B		AG-PRO 5	AG-PRO 7		
Free speed	13600 rpm	10900 rpm	7600		

4. Safety Information

a. General

- (1) The Grinder shall be stored in a safe way.
- (2) After the control device has been released, it is recommended that the grinder shall be laid down in a suitable position.
- (3) Only lubricants recommended by the manufacturer shall be used.
- (4) Rest after continuous operation.

b. Potential injuries

Warning against the following hazards:

- (1) Cutting and severing.
- (2) Drawing in or trapping of long hair, loose clothing.
- (3) Eye injuries.
- (4) A whipping compressed air hose.

c. Grinding wheel

- (1) Check that maximum operation speed of the abrasive product converted to r/min. is equal to or greater than the rated speed of the spindle.
- (2) Ensure that the wheel dimensions are compatible with the grinder and that the wheel fits the spindle.
- (3) Ensure that the rated type and size of the wheel exactly matches the thread type and size of the spindle.
- (4) Grinding wheels shall be stored and handled with care in accordance with manufacturer's instructions.
- (5) Inspect the grinding wheel before use, warn against the use of chipped, cracked or otherwise defective products.
- (6) The blotters are used when they are provided with the bonded abrasive product.
- (7) Ensure that the abrasive product Is correctly mounted and tightened before use and run the tool at no-load for 30 seconds in a safe position, stop immediately if there is considerable vibration or if other defects are defected.

If this condition occurs, check the grinder to determine the cause.



6. Explanations Of Warning Signs Used For This Tool



7. Application

Power tool driving a rotating spindle on which a bonded abrasive product is mounted.

8. The weight of this tools

Model No.:	AG-PRO 4B	AG-PRO 5	AG-PRO 7
Weight	1.3 kg	1.4 kg	3.32 kg

Note: If the weight of this tool exceeds 15Kgs, the following attention shall be paid to:

- (1) Be sure that you can afford the weight.
- (2) Be sure to wear foot protection, to prevent the risk of impact due to the drop of tool.

3. Maintenance Instruction

1. Lubrication

Proper lubrication is the owner's responsibility. Failure to lubricate the air too properly will dramatically shorten the life of the tool and will void the warranty.

This grinder requires lubrication before the initial use and before and after each additional use.

- 2. Grinder require lubrication throughout the life of the tool and must be lubricated in two separate areas : the air motor and the grinder mechanism. Follow the outlined procedures.
- 3. Air Motor Lubrication.

The motor must be lubricated daily. An air motor cannot be oiled too often.



Disconnect the grinder from the air supply before lubricating.

- (1) Disconnect the grinder from the air supply.
- (2) Remove the slotted screw or Allen head screw from the oil porthole on the right side of the tool that has "OIL" stamped below the hole for.
- (3) Put three teaspoons of air tool oil in the oil porthole. Replace the screw.
- (4) Reconnect the air supply to the tools and run for 20 to 30 seconds.

 Lubricate the entire tools by rotating upside down and sideways while running the tool.
- (5) Remove the screw and hold the oil porthole over a suitable container to allow excess oil to drain.
- (6) If the oil is dirty, repeat the procedure above until the oil comes out clear. Install the screw and tighten. The residual oil remaining in the grinding mechanism chamber is all that is needed for proper lubrication.

After an air tool has been lubricated, oil will discharge through the exhaust port during the first few seconds of operation. Thus, the exhaust port must be covered with a towel before applying air pressure. Failure to cover the exhaust port can result in serious injury.

- 4. Connect the grinder to the air supply and cover the exhaust port with a towel.

 Run the die grinder and oil will discharge from the exhaust port when air pressure is applied.
- Grinding mechanism lubricationThe grinder should be lubricated monthly.

Special care has to be taken when assembling the speed governor and any other protective device.

Inspecting spindles, threads and clamping devices regularly in respect of wear and tolerances for location of abrasive products.

Check the speed after each service and maintenance without the wheel on the spindle.



General Troubleshooting Guide

Possible Cause(s) Grit or gum in tool	Corrective Action 1.Flush the tool with air tool oil, gum solvent, or an
Grit or gum in tool	1 Flush the tool with air tool oil gum solvent or an
	equal mixture of SAE # 10 motor oil and kerosene. Lubricate the tool after cleaning.
No oil in tool.	2.Lubricate the tool according to the lubrication instructions in this manual.
Low air pressure	3.Adjust the compressor regulator to tool maximum while the tool is running free.
Air hose leaks	4. Tighten and seal hose fittings if leaks are found.
Pressure drops Worn ball bearing in	 5-1.Be sure the hose is the proper size. Long hoses or tools using large volumes of air may require a hose with an I.D. of 9.5 mm (3/8") or larger depending on the total length of the hose. 5-2.Do not use a multiple number of hoses connected together with quick connect fittings. This causes additional pressure drops and reduces the tool power Directly connect the hoses together. 6.Remove and inspect bearing for rust, dirt and grit
motor	or worn race. Clean and regress bearing with bearing grease.
Vater in tank.	 Drain tank. (See air compressor manual). Oil tool and run until no water is evident. Oil tool again and run 1-2 seconds.
lines/hoses.	2-1.Install a water separator/filter. Note: Separators only work properly when the air passing through the separator is cool Locate the separator / filter as far as possible from the compressor 2-2.Install an air dryer.
\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	Low air pressure Air hose leaks Pressure drops Worn ball bearing in notor Vater in tank.



UNITOR AG-PRO 4B

SPECIFICATIONS:

*GRINDING WHEEL ------ 13,600 RPM *AIR PRESSURE ----- 90 PSI *HOSE SIZE ----- 3/8" ID *AIR INLET ----- 1/4" PT(NPT)

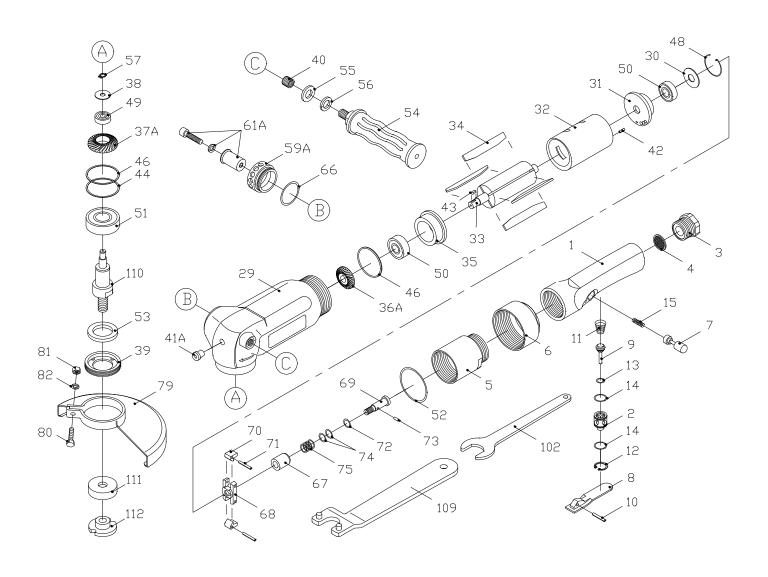
REF NO.	PARTS NO.	DESCRIPTION	QʻTY	REF NO.	PARTS NO.	DESCRIPTION	QʻTY
1	752281	HANDLE (LEVER TYPE)	1	48	752313	SNAP RING	1
2	752282	VALVE BUSHING ❷	1	49	752314	BALL BEARING (606) 1 4	1
3	752283	AIR INLET BUSHING ❷	1	50	752315	BALL BEARING (629 Z) ●	2
4	752284	FILTER ❷	1	51	752316	BALL BEARING (6202 Z) 1 4	1
5	752285	VALVE BODY CONNECTOR	1	52	752317	O-RING (52)	1
6	752286	VALVE BODY NUT	1	53	752318	FLAT RING (d22×D32×W4)	1
7	752287	SAFETY PIN 2	1	54	752319	DEAD HANDLE	1
8	752288	VALVE LEVER ②	1	55	752320	FLAT WASHER (M8)	1
9	752289	VALVE 2	1	56	752321	SPRING WASHER (M8)	1
10	752290	SPRING PIN (Ø3.5×20L) ②	1	57	752322	OUSTER SNEP RING (S-6) ④	1
11	752291	CONE SPRING (10×16×16) 1 2	1	59A	752323	EXHAUST STACK	1
12	752292	INNER SNAP RING	1	61A	752324	MUFFLER STEM ASSEMBLY	1
13	752293	O-RING (13) 1 2	1	66	752325	O-RING (66)	1
14	752294	O-RING (14) 1	2	67	752326	GOVERNOR VALVE ■	1
15	752295	SPRING 1 2	1	68	752327	GOVERNOR CAGE €	1
29	752296	CARING	1	69	752328	GOVERNOR SPINDLE €	1
30	752297	REAR PLATE SPACER	1	70	752329	GOVERNOR WEIGHT®	1
31	752298	REAR PLATE	1	71	752330	SPRING PIN (Ø3×18L)❸	1
32	752299	CYLINDER	1	72	752331	ADJUSTING SPACER (d8×D12×t) 3	1
33	752300	ROTOR	1	73	752332	PIN (Ø2.5×5) ⑤	1
34	752301	BLADE 1	4	74	752333	SPACER (d8.6×D12×W1.5)	1
35	752302	FRONT PLATE	1	75	752334	4" SERIES SPRING €	1
36A	752303	DIRVING GEAR (36A) ூ	1	79	752336	WHEEL GUARD	1
37A	752304	DIRVING GEAR (37A) ❹	1	80	HEX. BOLT	(not supplied as spare)	1
38	752305	CASING REAR COVER 4	1	81	HEX. NUT	(not supplied as spare)	1
39	752306	CASING FRONT COVER	1	82	WASHER	(not supplied as spare)	1
40	752307	HELI SERT (M8)	1	102	752344	SPANNER 102	1
41A	752308	OILER	1	109	756944	SPANNER 109	1
42	752309	SPRING PIN (Ø3×10L)	1	110	756945	4" WHEEL SPINDLE (3/8"×24 UNF)	1
43	752310	KEY (3×8)	1	111	756946	WHEEL HOLDER FLANGE	1
44	752311	SPACER (d31×D35×W0.5) €	1	112	756947	WHEEL NUT FLANGE (3/8"×24UNF) ●	1
46	752312	ADJUSTING SPACER ■	2				

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To get maximum performance and life of your tool, replace the whole set of parts included in the Spare part kits:

Tune-up kit 722801
Throttle valve overhaul kit 722819
Governor overhaul kit 722827
Bevel gear overhaul kit 722835

UNITOR AG-PRO 4B



SPECIFICATIONS:

*GRINDING WHEEL ----- 5" *AIR PRESSURE ----- 90 PSI *AIR INLET ----- 1/4" PT(NPT) *FREE SPEED ------ 10,900 RPM *HOSE SIZE ----- 3/8" ID

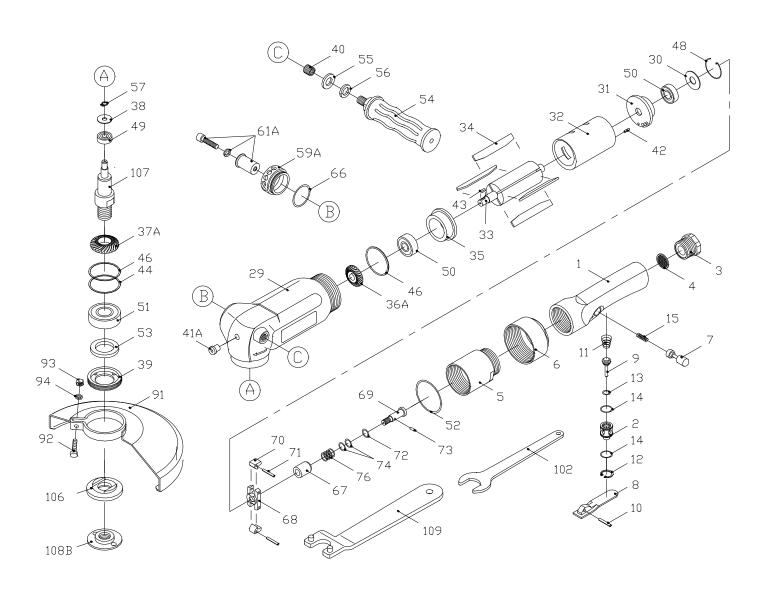
REF NO.	PARTS NO.	DESCRIPTION	QʻTY	REF NO.	PARTS NO.	DESCRIPTION	QʻTY
1	T7043A-01	HANDLE (LEVER TYPE)	1	48	T7043A-48	SNAP RING	1
2	T7043A-02	VALVE BUSHING 2	1	49	T7043A-49	BALL BEARING (606) 1 4	1
3	T7043A-03	AIR INLET BUSHING 2	1	50	T7043A-50	BALL BEARING (629 Z) 1	2
4	T7043A-04	FILTER 2	1	51	T7043A-51	BALL BEARING (6202 Z) 1 4	1
5	T7043A-05	VALVE BODY CONNECTOR	1	52	T7043A-52	"O" RING	1
6	T7043A-06	VALVE BODY NUT	1	53	T7043A-53	FLAT RING (d22×D32×W4)	1
7	T7043A-07	SAFETY PIN 2	1	54	T7043A-54	DEAD HANDLE	1
8	T7043A-08	VALVE LEVER 2	1	55	T7043A-55	FLAT WASHER (M8)	1
9	T7043A-09	VALVE 2	1	56	T7043A-56	SPRING WASHER (M8)	1
10	T7043A-10	ROIL PIN (Ø3.5×20L) ②	1	57	T7043A-57	OUSTER SNEP RING (S-6)	1
11	T7043A-11	CONE SPRING (10×16×16) 1 2	1	59A	T7043A-59A	EXHAUST STACK	1
12	T7043A-12	INNER SNAP RING 2	1	61A	T7043A-61A	MUFFLER STEM ASSEMBLY	1
13	T7043A-13	O-RING (13) 12	1	66	T7043A-66	"O" RING (66)	1
14	T7043A-14	O-RING (14) 1 2	2	67	T7043A-67	GOVERNOR VALVE 6	1
15	T7043A-15	SPRING 12	1	68	T7043A-68	GOVERNOR CAGE 6	1
29	T7043A-29	CARING	1	69	T7043A-69	GOVERNOR SPINDLE 3	1
30	T7043A-30	REAR PLATE SPACER	1	70	T7043A-70	GOVERNOR WEIGHT 3	1
31	T7043A-31	REAR PLATE	1	71	T7043A-71	ROLL PIN (Ø3×18L) ⑤	1
32	T7043A-32	CYLINDER	1	72	T7043A-72	ADJUSTING SPACER 3	1
33	T7043A-33	ROTOR	1	73	T7043A-73	PIN (Ø2.5x5L) 3	1
34	T7043A-34	BLADE 1	4	74	T7043A-74	SPACER (d8.6×D12×W1.5) 3	1
35	T7043A-35	FRONT PLATE	1	76	T7043A-76	5" SERIES SPRING 3	1
36A	T7043A-36A	DRIVING GEAR (15T) 4	1	91	T7043A-91	WHEEL GUARD	1
37A	T7043A-37A	DRIVEN GEAR (18T) 4	1	92	BOLT	(not supplied as spare)	1
38	T7043A-38	CASING REAR COVER 4	1	93	HEX. NUT	(not supplied as spare)	1
39	T7043A-39	CASING FRONT COVER	1	94	WASHER	(not supplied as spare)	1
40	T7043A-40	HELI SERT (M8)	1	102	T7043A-102	SPANNER	1
41A	T7043A-41A	OILER	1	106	T7043A-106	WHEEL HOLDER FLANGE	1
42	T7043A-42	ROLL PIN (Ø3×10L)	1	107	T7043A-107	5" WHEEL SPINDLE (5/8"-11 UNC)	1
43	T7043A-43	KEY (3x8)	1	108B	T7043A-108B	WHEEL NUT FL. (5/8"-11UNC) 1	1
44	T7043A-44	SPACER (d31×D35×W0.5) 4	1	109	T7043A-109	SPANNER	1
46	T7043A-46	SPACER (d31xD35xt) 4	2				

Optional Parts

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Tune-up kit 728683
Throttle valve overhaul kit 722819
Governor overhaul kit 728709
Bevel gear overhaul kit 722835

^{**} To get maximum performance and life of your tool, replace the whole set of Parts Kit is highly recommended.



SPECIFICATIONS:

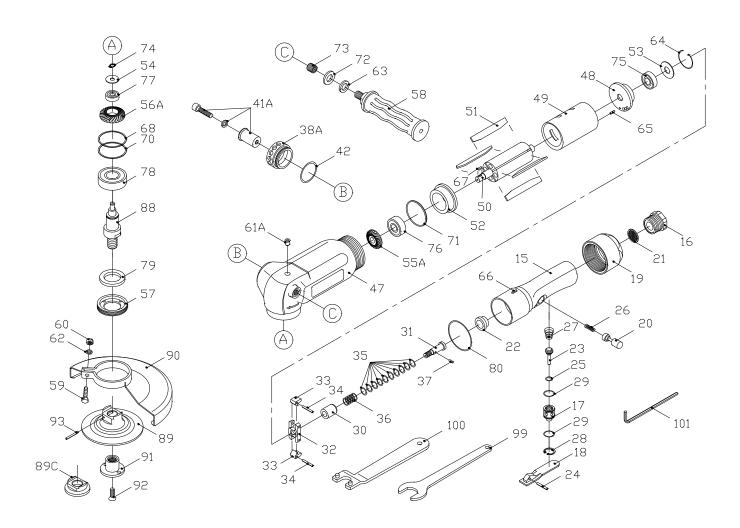
REF	PARTS NO.	DESCRIPTION	QʻTY	REF	PARTS NO.	DESCRIPTION	QʻTY
15	T7044BA-15	HANDLE (LEVER TYPE)	1	56A	T7044BA-56A	DRIVEN GEAR 4	1
16	T7044BA-16	AIR INLET BUSHING 2	1	57	T7044BA-57	CASING FRONT COVER	1
17	T7044BA-17	VALVE BUSHING 2	1	58	T7044BA-58	DEAD HANDLE	1
18	T7044BA-18	VALVE LEVER 2	1	59	T7044BA-59	HEX. HEAD BOLD (M6×22L)	1
19	T7044BA-19	VALVE BODY NUT	1	60	T7044BA-60	HEX. HEAD NUT (M6)	1
20	T7044BA-20	SAFETY PIN 2	1	61A	T7044BA-61A	OILER	1
21	T7044BA-21	FILTER 2	1	62	T7044BA-62	SPRING WASHER (6MM)	1
22	T7044BA-22	GOVERNOR VLAVE BUS. 3	1	63	T7044BA-63	SPRING WASHER (12MM)	1
23	T7044BA-23	VALVE STEM 2	1	64	T7044BA-64	SNAP RING	1
24	T7044BA-24	SPRING PIN (Ø3.5×24L) 2	1	65	T7044BA-65	SPRING PIN (Ø3×8L)	1
25	T7044BA-25	"O" RING 12	1	66	T7044BA-66	KEY	1
26	T7044BA-26	SPRING 12	1	67	T7044BA-67	KEY 4	1
27	T7044BA-27	CONE SPRING 1 2	1	68	T7044BA-68	SPACER (47×43×1) 4	1
28	T7044BA-28	INNER SNAP RING (18) 2	1	70	T7044BA-70	ADJUSTING SPACER 4	2
29	T7044BA-29	"O" RING 12	2	71	T7044BA-71	ADJUSTING SPACER 4	2
30	T7044BA-30	GOVERNOR VALVE	1	72	T7044BA-72	SPACER (18×13×1)	1
31	T7044BA-31	GOVERNOR SPINDLE 6	1	73	T7044BA-73	HOLICO INSERT (M12×1)	1
32	T7044BA-32	GOVERNOR CAGE 3	1	74	T7044BA-74	OUTER SNAP RING (S-7) 14	1
33	T7044BA-33	GOVERNOR WEIGHT 3	2	75	T7044BA-75	BALL BEARING (6001 ZZ) 1	1
34	T7044BA-34	ROLL PIN (Ø3×20L) ⑤	2	76	T7044BA-76	BALL BEARING (6201 ZZ) 1	1
35	T7044BA-35	ADJUSTING SPACER 3	10	77	T7044BA-77	BALL BEARING (627 ZZ) 1 4	1
36	T7044BA-36	SPRING 6	1	78	T7044BA-78	BALL BEARING (6204 ZZ) 14	1
37	T7044BA-37	PIN (Ø3×7L)	1	79	T7044BA-79	FLAT RING (28×42×5)	1
38A	T7044BA-38A	EXHAUST STACK	1	80	T7044BA-80	"O" RING 1 ⑤	1
41A	T7044BA-41A	MUFFLER STEM ASSEMBLY	1	88	T7044BA-88	WHEEL SPINDLE (5/8"×11UNC)	1
42	T7044BA-42	"O" RING	1	89	T7044BA-89	WHEEL HOLDER FLANGE	1
47	T7044BA-47	CASING	1	##89C	T7044BA-89C	WHEEL HOLDER FLANGE	1
48	T7044BA-48	CYLINDER REAR PLATE	1	90	T7044BA-90	WHEEL GUARD	1
49	T7044BA-49	CYLINDER	1	91	T7044BA-91	WHEEL NUT FLANGE	1
50	T7044BA-50	ROTOR	1	92	T7044BA-92	ALLEN HEAD SCREW (M6×18L)	1
51	T7044BA-51	ROTOR BLADE 1	4	93	T7044BA-93	SPRING PIN (Ø3×22L)	1
52	T7044BA-52	FRONT PLATE	1	94	T7044BA-94	INNER SNAP RING 4	1
53	T7044BA-53	REAR PLATE SPACER	1	99	T7044BA-99	SPANNER (24MM)	1
54	T7044BA-54	WHEEL SPINDLE R. COVER 4	1	100	T7044BA-100	SPANNER (6×30×17)	1
55A	T7044BA-55A	DRIVING GEAR 4	1	101	T7044BA-101	ALLEN WRENCH (4MM)	1

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Optional Parts

** To get maximum performance and life of your tool, replace the whole set of Parts Kit is highly recommended.

Tune-up kit 722843
Throttle valve overhaul kit 722868
Governor overhaul kit 722876
Bevel gear overhaul kit 722884



Fraser/surrey Gaspe Gros Caouna Halifax Hamilton Harbour Grace H Westminster Bc Pictou/halifax Pointe Aux Pic.quebec Port Alfred Port C halifax Squamish St. Catherines St.john's, Nfld St.romuald Stephens alleyfield Vancouver Victoria Weymouth Windsor Yarmouth Ancud / L.

Instruction manual

& spare parts list

Coronel Corral Huasco Las Ventanas Lirquen Lota Penco Puerto Montt Puerto Williams Punta Arenas Quintero San Antonio San Vicente Talcahuano Tocopilla Valparaiso Antilla Bahia Honda Banes Baracoa Cabanas Caibarien Cardenas Casilda Ceiba Hueca Cienfuegos Guantanamo Guayabal Havana Isabel De Sagua Manati Mariel Media Luna Moa Nicaro Niguero Nuevitas Pilon Puerto Padre Santiago De Cuba Sigloo Genoa Finn Tanamo Tunas De Zaza Vita Balao Esmeraldas Guayaquil La Libertad Manta Puerto Guaymas La Paz Lazaro Cardenas Mazatlan Progreso Puerto Vallarta Salina Cruz Tampico Topolobampo Tuxpan Vera Cruz Bonaire Chimbote Ilo Matarani Paita Pisco Guayama Guayanilla Mayaguez Ponce San Juan Yabucoa St. Vincent Chaguaramas La Brea Point Fortin Point Lisas Pointe-a-pierre Port Of Spain Tembladora Aberdeen, wa Alameda Albany, n.y. Alexandria, Va Algiers Point Amelia Anacortes, Wa Anchorage, ak Annapolis, md Antioch Aransas Pass Tx Astoria, Or Baltimore Baton Rouge Bayonne Baytown Beaumont Bellingham, Ma Bellingham, Wa Benicia, Ca Boston, Ma Bridgeport Bridgeport, Conn Brooklyn, Ny Brownsville Tx Brunswick Brunswick, Eureka Everett, Wa Fairless Hills Famagusta Ferndale wa Freenort Tv Galveston Tv Garvville Geismar Georgetown, Sc Gloucester, Ni Good Hope Gramercy Grand Isl aii Hoquiam, Wa Houma Jacksonville Kalama Kalama, Wa Kenai Key V

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