

Technical Information



T.20.82

Spare Parts Suggestion For The New Stihl 024 Chain Saw (Model 1121)

The following is a spare parts suggestion furnished by Stihl, Germany. Spare parts suggestions by STIHL will be made known to you only in such a way from now on. Saw chain, guide bars and tools, however, will not be listed any longer.

Description and explanation

1. All parts listed are for the first execution to be made available which will be the 024 AVEQZ.
2. Column #1 lists the part numbers of the individual spare parts.
3. Column #2 shows, in the first line, the part names. The second and the following line indicate whether or not the part is a new one or a back-fit part. A back-fit part is already used in another STIHL product. If it is a back-fit part the model number in which the respective part is already being used is printed below the part name. If no model number is shown, then the part is a new part which has to be purchased for the first time for the referenced model in this parts suggestion.
4. In column #3 you will find the recommended "A", "B" and "C" quantities and the factory prepacked minimum quantities (MAM). These quantities do not necessarily pertain to dealers.

The recommended spare parts quantities are divided as follows:

- "A" = Spare parts needs for approx. five (5) units sold.
- "B" = Spare parts needs for approx. twenty (20) units sold.
- "C" = Spare parts needs for approx. one-hundred (100) units sold.

To help assure a dealer's ability to service the 024 units he is sold the spare parts quantities listed under "A" and should be available as minimum quantity in each service shop. If 20 or 100 saws are sold, then the recommendations under "B" and "C" parts stock should be considered accordingly.

U/TSM:tc

10292/92

Part Number	Part Name	Quantity			Mam	
		.A	.B	.C		
0000 792 9111	Chain Protection 1108 1110 1113 1115 1117 1118 1119 1202 1203				25	
0000 903 1505	Hose Clip		5	10	10	
0000 951 5800	Threaded Pin 1110 1111 1113 1114 1115 1117 1118 1119 1120 4109 4110 4207		2	5	100	
0000 953 0800	Stud 1114 1117 4109		5	10	50	
0000 953 0806	Stud M5x43 1114 1118 4109 4207		5	10	25	
0000 953 6605	Shoulder Stud 1118 1119		5	10	10	
0000 955 0801	Nut 1118 1119		5	10	30	10
0000 958 0506	Washer 1118 1120		5	10	10	
0000 958 0806	Washer 1113 1118 1120		2	5	10	50
0000 967 2020	Trade Mark 1110 1111 1113 1114 1115 1117 1118 1119 4109 4110 4205 4207		3	10	10	
0000 974 1000	Button Headed Rivet 1106 1108 1109 1110 1111 1113 1114 1115 1116 1117 1118 1119 1120 1204 4108 4109 4110 4111 4201 4205 4206 4207 4208 4209		5	10	20	50
0000 988 5211	Connector		2	5	25	
0000 988 7800	Locking Cover 1110 1114		2	5	25	
0000 989 0507	Rubber Ferrule 1117 1118 1119		10	25	25	
0000 992 6302	Gasket Ring 1106 1108 1109 1111 1117 1118 1119		5	10	25	

Part Number	Part Name	Quantity			
		.A	.B	.C	MAM
0000 992 6305	Gasket 0000 1110 1113 1114 1115 1116 1117 1118 1119 1120 1202 1203 1204 4111	5	10	25	
0000 997 0628	Spring	5	10	25	
0000 997 1335	Helical Spring	5	10	10	
0000 997 5505	Tension Spring 0000 1118 1119	5	10	10	
0000 997 5625	Tension Spring 1114 1116 4109 4111 4207 4209	15	25	25	
0000 998 0603	Spring 1106 1108 1109 1110 1111 1114 1116 1117 1118 1119 4109 4110 4111 4201 4202 4205 4207	2	5	10	100
1106 122 3000	Spring 1106 1108 1109 1110 1111 1113 1114 1115 1117 1118 1120 4109 4110 4201 4205 4207	10	25	25	
1106 122 7400	Button-Headed Screw 1106 1108 1109 1110 1111 1113 1114 1115 1116 1117 1118 1120 4109 4110 4111 4201 4205 4207	10	25	25	
1106 405 1000	Ignition Circuit Plug 1110 1111 1114 1116 1117 1118 1119 4109 4110 4111 4112 4114 4117 4202 4205 4207 4210	2	5	50	
1106 405 8500	Connecting Nut 1108 1115 4201 4202	5	10	25	
1110 084 9102	Bushing 0000 1106 1108 1109 1110 1111 1113 1114 1115 1117 1118 1119 1120 4109 4110 4201 4205 4207	5	10	100	
1110 121 5100	Inlet Needle 1110 1111 1113 1114 1115 1116 1117 1118 4109 4110 4111 4205 4207	2	5	25	
1110 121 7810	Screen 1110 1111 1113 1115 1118 4110 4205	3	10	100	

Part Number	Part Name	Quantity			
		.A	.B	.C	MAM
1110 122 7400	Button-Headed Screw 1110 1111 1113 1114 1115 1116 1118 1119 1120 4109 4110 4111 4205 4207	10	20	10	
1110 122 7800	Lens-Head Screw 1106 1109 1110 1113 1114 1115 1118 1120 4109 4110 4207	10	20	10	
1110 122 9005	Retaining Washer 1110	10	20	10	
1110 358 1800	Filter 1106 1108 1109 1110 1111 1113 1114 1115 1117 1118 1119 4109 4110 4201 4205 4207	5	10	100	
1110 400 7005	Spark Plug 1115	2	5	10	200
1110 664 0501	Spiked Bumper 1110 1113 1117 1118 1119 1203	1	3	10	
1110 893 4000	Filing Gauge 1110 1113 1115 1117 1118 1119 1203 5202				5
1111 350 3500	Pickup Body Assembly 0000 1106 1108 1109 1110 1111 1113 1114 1115 1117 1118 1119 4109 4110 4201 4205 4207	1	5	10	25
1111 358 2500	Cap 1106 1108 1109 1110 1111 1113 1114 1115 1117 1118 1119 4109 4110 4201 4205 4207	5	10	25	
1111 358 9100	Insert 0000 1106 1108 1109 1110 1111 1113 1114 1115 1117 1118 1119 4109 4110 4201 4205 4207	2	5	25	
1111 358 9300	Screen 0000 1106 1108 1109 1110 1111 1113 1114 1115 1117 1118 1119 4109 4110 4201 4205 4207	5	10	25	

Part Number	Part Name	Quantity			
		.A	.B	.C	MAM
1113 121 0800	Cover Plate 1113 1118 1120	1	5	10	
1113 121 3300	Throttle Shutter 1113 1118	2	5	10	
1113 121 4700	Metering Diaphragm 1113 1118	5	10	5	
1113 121 4800	Fuel Pump Diaphragm 1113 1118	5	10	25	
1113 121 5000	Inlet Control Lever 1113 1114 1118 1120 4109 4207	3	10	10	
1113 121 5400	Valve Nozzle 1113 1118	2	5	5	
1113 121 9200	Shaft 1113 1114 1118 1120 4109 4207	5	10	10	
1113 122 3000	Spring 1113 1118	5	20	10	
1113 122 6700	Main Adjustment Screw 1118	2	5	10	
1113 122 6800	Idle Adjustment Screw 1118	2	5	10	
1113 129 0900	Gasket 1113 1118	5	10	25	
1113 129 0910	Gasket 1113 1118	5	10	25	
1113 141 1805	Sleeve 1113 1118	5	10	25	
1113 141 8600	Impulse Line 1113	5	10	25	
1113 149 0600	Exhaust Gasket 1113 1118	2	5	10	25
1113 195 8200	Starter Rope 0000 1113 1114 1116 1118 1120 4109 4111 4207	2	10	20	200
1115 350 3501	Pickup Body Assembly 1106 1108 1109 1110 1111 1113 1114 1115 1117 1118 1119 4109 4110 4201 4205 4207	1	5	10	25

Part Number	Part Name	Quantity			
		.A	.B	.C	MAM
1117 182 0800	Lever 1113 1117 1118 1119		5	10	5
1117 182 4500	Hock On Spring 1113 1117 1118 1119		3	10	5
1117 350 0500	Fuel Filler Cap Assembly 1111 1117 1118 1119	1	3	5	25
1117 350 0900	Oil Cap Holder 0000 1108 1111 1113 1114 1115 1116 1117 1118 1119 1120 4109 4111 4201 4205 4207		3	5	25
1117 640 3600	Oil Filler Cap 1113 1117 1118 1119 1120	1	3	5	25
1117 646 0600	Oil Filler Cap Assy. 1113 1117 1118 1119 1120		2	5	25
1117 647 5800	Connector 1117		2	5	10
1117 647 6800	Screen 1117		3	10	10
1118 029 2305	Cylinder Gasket 1113 1118		5	10	10
1118 034 1500	Piston Pin		2	5	10
1118 123 7500	Grommet 1118		5	10	10
1118 182 1000	Throttle Lever 1118 1119		2	5	10
1118 190 0600	Rewind Spring 1113 1118	1	5	10	10
1118 195 3500	Spring 1113 1118 1120	5	10	20	10
1118 195 7200	Pawl 1113 1118 1120	2	5	20	10
1118 640 9100	Valve 1117 1118 1119		2	5	5
1118 656 1500	Guard 1118 1119		2	5	25

Part Number	Part Name	Quantity			
		.A	.B	.C	MAM
1118 791 6105	Collar Screw 1118 1119	5	10	10	
1118 791 7305	Plug 1118 1119	2	5	10	
1118 792 3300	Screw 1118 1119	5	20	25	
1119 648 0400	Chain Sprocket Cover 1118 1119	1	3	1	
1119 656 7705	Chain Catcher 1119	3	10	10	
1119 791 7305	Plug 1119	2	5	10	
1119 890 3400	Multi Purpose Wrench 1119				10
1120 195 0400	Rope Rotor 1118 1120	1	3	5	
1120 664 1500	Tightening Nut 1120	5	10	10	
1121 020 1200	Cylinder W. Piston		2	1	
1121 020 2105	Crankcase	1	2	1	
1121 021 1100	Cover	1	2	5	
1121 029 0500	Gasket	5	10	25	
1121 030 0400	Crankshaft		2	1	
1121 030 2000	Piston	2	3	1	
1121 034 3000	Compression Ring	4	10	10	
1121 036 1600	Wormgear	1	3	10	
1121 080 1800	Fan Housing	1	3	1	
1121 084 0900	Shroud		2	1	
1121 084 6900	Insulator	3	5	10	
1121 084 7000	Slotted Nut	2	5	1	
1121 084 7100	Cap	3	10	10	
1121 084 8200	Cover Plate	2	5	1	

Part Number	Part Name	Quantity			
		.A	.B	.C	MAM
1121 120 0600	Carburetor		1	2	1
1121 120 1610	Air Filter	2	5	10	10
1121 120 7100	Throttle Shaft W. Lever			5	10
1121 121 0800	Cover Plate		1	3	10
1121 121 2900	Choke Shutter		2	5	10
1121 121 8600	Washer 1118		5	10	25
1121 122 3200	Hook On Spring		10	20	10
1121 122 6200	Idle Speed Adjustment Screw		3	10	10
1121 122 7000	Grommet		5	10	10
1121 122 7100	Screw 1113		10	20	15
1121 124 0810	Prefilter	2	5	10	10
1121 140 0601	Muffler			2	1
1121 140 1900	Carburetor Box Cover			2	1
1121 141 2100	Catch		2	5	10
1121 141 2200	Elbow		3	10	5
1121 141 2300	Buckle		2	5	10
1121 160 2000	Clutch	1	2	5	5
1121 160 2300	Clutch Rotor		1	3	5
1121 160 5000	Lever			3	5
1121 160 5400	Brake Strap		1	3	10
1121 162 0800	Clutch Shoe		3	15	15
1121 162 1000	Cover Washer		5	10	10
1121 162 5010	Lever		2	5	10
1121 162 7900	Tension Spring		2	5	10
1121 182 0900	Control Shaft Assy.		2	5	10
1121 182 1500	Throttle Rod		2	5	10
1121 195 3400	Handle 1113 1114 1116 1118 1120 4109 4111 4207		2	5	10

Part Number	Part Name	Quantity			
		.A	.B	.C	MAM
1121 350 0800	Tank Housing			2	1
1121 350 5800	Tank Ventilation		2	5	10
1121 358 7705	Hose		2	5	10
1121 400 1200	Flywheel			2	1
1121 400 1300	Ignition Coil		1	3	1
1121 440 2200	Impregnated Cable		2	5	5
1121 442 1600	Contact Spring		2	5	10
1121 640 2000	Chain Sprocket	2	5	10	1
1121 640 3000	Pump Housing		1	3	5
1121 640 3200	Oil Pump			2	1
1121 647 0600	Pump Piston		1	3	10
1121 647 7000	Plug		5	10	10
1121 647 9400	Hose		5	10	10
1121 647 9401	Hose		5	10	5
1121 648 6600	Slide Rail 1120		2	5	25
1121 656 1500	Guard		2	5	1
1121 664 2400	Shoulder Stud		5	10	10
1121 664 2800	Guide Piece		5	10	10
1121 790 1701	Handle Bar		1	2	1
1121 790 9900	Annual Buffer	1	5	10	10
1121 790 9905	Annular Buffer	1	5	10	10
1121 790 9910	Annualr Buffer	1	5	10	10
1121 791 0600	Handle Grip		1	3	10
1121 791 7200	Sleeve		5	10	10
1121 792 9101	Hand Guard		1	5	10
1121 890 1400	Set of Tools				1
1121 967 1501	Name Plate		2	5	10

Part Number	Part Name	Quantity			
		.A	.B	.C	MAM
3862 662 1201	Link		3	10	100
9022 313 0660	Screw (M4x12) 1119	10	20	40	100
9022 313 0680	Screw (M4x16) 1119	10	20	40	100
9022 341 0960	Screw (M5x12) 1119	10	20	40	100
9022 341 1020	Screw (M5x20) 1119	10	20	40	200
9039 488 0340	Pan Head-Self Tapping Screw	10	20	40	100
9041 319 0660	Screw (M4x12) 4202		5	10	100
9043 319 1110	Screw (M5 x50x30) 1120		10	20	100
9073 478 4290	Screw HI-LO (M5.6x19) 1118	10	20	30	100
9099 021 0160	Screw 1114 1120 1204 4109 4207		10	25	25
9099 021 2360	Pan Head-Self Tapping Screw	5	10	20	50
9099 021 2770	Screw 1118 1119 1120		5	10	50
9099 021 2810	Screw 1117 1118 1119 1203 1204		5	10	100
9100 021 4290	Screw 1118 1119	10	20	50	50
9210 261 1140	Nut (M8x1) 1110 1111 1113 1114 1116 1117 1118 1119 1120 4109 4110 4111 4202 4205 4207	2	5	10	200
9214 320 0700	Nut (M5) 1108 1110 1113 1115 1117 1118 1119 1120 1203 4201	5	10	25	300
9291 021 0120	Washer 1106 1109 1110 1117 1120 4112 4114 4201 4210 5202 5203		5	10	300
9371 470 2610	Cylindrical Pin 1114 1120 4109 4207		2	5	50

Part Number	Part Name	Quantity			
		.A	.B	.C	MAM
9372 470 1650	Pin	2	5	25	
9385 620 2640	Adaptor Sleeve	3	10	25	
9395 825 1090	Cotter Pin 0000 1113 1118 1119	3	10	10	
9441 065 1310	Notched Pin 4108 4109 4110	10	20	100	
9441 065 1910	Notched Pin (3x8) 1106 1108 1109 1110 1111 1113 1115 1118 1119 1202 1203 4201 4205	4	10	25	200
9443 825 4700	Tubular Rivet 1120	5	10	10	
9460 624 0400	Circlip 0000 1108 1116 1120 4202	5	10	20	100
9460 624 0801	Retaining Washer 1118	5	10	25	50
9463 650 1000	Ring	5	20	50	
9482 435 0030	Woodruff Key 1110 1111 1113 1114 1116 1117 1118 1119 1120 4109 4110 4111 4202 4205 4207	5	10	100	
9503 003 0320	Grooved Ball Bearing	2	5	1	
9512 003 2250	Rim	5	10	20	
9512 003 2260	Needle Cage	2	5	10	
9512 933 2260	Rim	2	5	10	
9516 003 1720	Ball (4MM) 0000 1106 1108 1109 1110 1111 1113 1114 1115 1117 1118 1119 1120 1202 1203 1204 4110 4205 5202 5203	3	10	100	
9517 003 5000	Cylindrical Roller 1114	2	10	100	
9523 003 4260	Ball Bearing 1118	2	5	10	
9640 003 1190	Oil Seal 1114 4109 4207	3	10	20	
9640 003 1600	Oil Seal 1118	3	10	20	

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Technical Information



T.26.82

New STIHL 024 Chain Saws (Series 1121):

The following is some general news on Stihl's 024 model saw. The basic design concept of model 024 saws is the same as that of models 028, 038 and 048, but there are a few details which differ. For this reason the 028 service manual can be used as a temporary reference for repair work until a separate service manual is published. The following notes cover points relating specifically to model 024 saws including some service notes.

- 1) Engine Specifications
- 2) Cutting Attachments
- 3) Tightening Torques
- 4) Dimensions (P.H. only)
- 5) Weights
- 6) Hardware (Torx)
- 7) Special Tools
- 8) Ignition System
- 9) Oil Pump
- 10) Elbow Connector Clamping
- 11) Chain Brake



1. Engine Specifications:

1.1 Engine:

STIHL single cylinder two-stroke engine

Displacement: 42 cm³ (2.56 cu. in.)

Bore: 42 mm (1.65 in)

Stroke: 30 mm (1.18 in)

Cylinder wall: highly wear resistant coating

Max. permissible engine speed with bar and chain : 12,500 r.p.m.

Mean idle speed : 2,200 r.p.m.

Crankshaft : two-part drop forging

Crankshaft bearings: 2 ball bearings

Crankpin dia.: 12 mm (0.47 in)

Big end bearing: Needle cage

Piston pin dia.: 10 mm (0.39 in)

Small end bearing: Needle cage

Conrod length: 53 mm (2.1 in)

Starter mechanism: Pawl engagement with automatic starter rope rewind

Starter rope: 3.5 mm (0.14 in) dia., 960 mm (37.8 in) long
 Clutch: Centrifugal clutch without linings, 69 mm (2.7 in) dia.
 Clutch engages at: approx. 3,200 r.p.m.
 Leakage testing crankcase
 with pressure: 0.5 bar (7.25 lbf/in²)
 with vacuum: 0.5 bar (7.25 lbf/in²)

1.2 Fuel System:

Carburetor: All position diaphragm carburetor with integral fuel pump

Setting
 High-speed adjustment screw H: open approx. 1 turn
 Low-speed adjustment screw L: open approx. 1 turn
 (basic setting with screws initially against their seats)

Leakage testing carburetor
 at gauge pressure: 0.4 bar (5.8 lbf/in²)
 Fuel capacity: 0.47 l (1.0 U.S.pt)
 Fuel mixture: Regular grade gasoline and branded two-stroke engine oil;
 Mix ratio 1:40 with STIHL special oil;
 1:25 with other branded two-stroke engine oils

Air filter: Large area two-part flat wire mesh element

1.3 Ignition System:

024 AVEQ:

Type: Transistor controlled (contactless) magneto ignition with integral trigger unit

Air gap: 0.2 - 0.3 mm (0.008 - 0.012 in)

Ignition timing: 2.1 mm (0.083 in) before T.D.C. at 8,000 r.p.m.

Advance angle: 27° before T.D.C. at 8,000 r.p.m.

Ignition coil: Resistances of coil windings
 Primary Secondary
 0.7 - 1.0 OHMS 7.7 - 10.3 OHMS

Spark plug (suppressed): Bosch WSR 6 F or Champion RCJ 6 Y
 Electrode gap 0.5 mm (0.02 in)

Spark plug thread: M 14 x 1.25; 9.5 mm (0.37 in) long

2. Cutting Attachments:

Guide bars: STIHL Rollomatic with sprocket nose, corrosion resistant, induction hardened rails.

Bar lengths: Rollomatic 16 in. and 18 in. = 40 cm and 45 cm

Oilomatic chain: 0.325" (8.25 mm), Rapid-Micro 1, Rapid-Super 1 and Topic-Super

Chain sprocket: 7-tooth for 0.325" (8.25 mm) pitch
 8-tooth (same pitch) available as special accessory

Chain speed: 18.3 m/s (60 ft/sec) at 9,500 r.p.m.
 Chain lubrication: speed controlled, fully automatic plunger-type oil pump
 Oil feed rate: 6 cm³/min (0.24 cu.in/min) at 6,000 r.p.m.
 Oil capacity: 0.32 l (0.67 U.S. pt)

3. Tightening Torques:

Crankshaft nut (ignition side) (8 x 1)	30 Nm (22 lbf. ft.)
Clutch spider (12 x 1 L)	50 Nm (36.8 lbf.ft.)
M 8 collar studs for bar mounting:	15 Nm (11 lbf.ft.)
M 6 screws for vibration dampers:	7 Nm (5.2 lbf.ft.)
M 5 pan head screws for cylinder, muffler and vibration damper plate:	10 Nm (7.4 lbf.ft.)
M 5 pan head screws for crankcase, ignition coil and bumper spike:	8 Nm (6 lbf.ft.)
M 5 nuts for carburetor	4 Nm (3 lbf.ft.)
M 4 pan head screws for oil pump and fan housing:	4 Nm (3 lbf.ft.)
M 4 pan head screws for cover and generator:	2 Nm (1.5 lbf.ft.)
M4 slotted screws (all):	3 Nm (2.2 lbf.ft.)
Spark plug:	25 Nm (18.4 lbf.ft.)

Important: The following screws should be secured with LOCTITE #242:

IS M 5 x 20 pan head screws	9022 341 1020 (ignition coil)
M 5 x 43 studs	0000 953 0806 (carburetor)
M 8 collar studs	0000 953 6605 (bar mounting)
and	1121 664 2400
IS M 5 x 12 pan head screws	9022 341 0960 (muffler)
M 3.5 x 12 pan head screws	9041 216 0540 (generator)

The studs 0000 953 0800 (for fastening shroud to cylinder) are secured with LOCTITE, #270 or #273.

4. Physical Dimensions (without cutting attachments):

Overall length:	435 mm (17.1 in)
Overall width:	240 mm (9.5 in)
Overall height:	280 mm (11.0 in)

5. Weights:

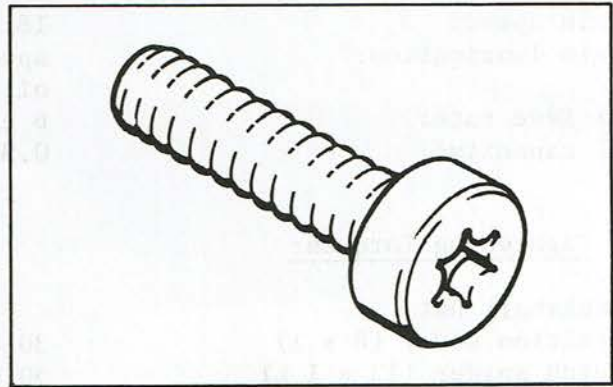
AVEQ

Dry powerhead less cutting attachment:	4.5 kg (9.9 lb)
Dry powerhead with 32 cm (12.5") bar and chain:	5.4 kg (11.9 lb)

6. New Hardware System:

The new screw system introduced on model 038 is also used on the 024. The new screws have recessed spline heads.

Compared with conventional pan head screws with a hexagonal recess, this type of screw offers major advantages:



The star-shaped recess for the wrench offers a relatively large contact area on which the wrench can act. This results in a considerable reduction of the load on the material of the screw and tool when applying the tightening or releasing torque. This in turn reduces the risk of the screw head and tool being damaged. The star-shaped head recess also permits a higher tightening torque to be used as well as allowing a lower head profile.

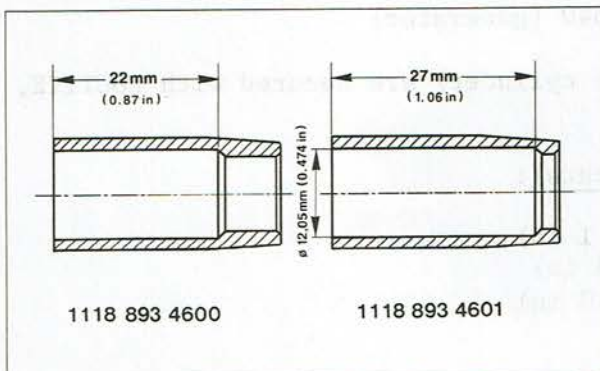
A further advantage of these screws is the fact that the thread sizes M 4 and M 5 have the same size spline recess so that the same tool can be used for both.

7. Special Tools and Materials:

7.1 Special Tools which have been newly developed for the model 024 saws:

The Clamping Bracket, 5910 850 5700, which is used to support the dial gauge used to check ignition timing, must be equipped with a new plastic spreader plate because of the wider spaced cylinder fins on the 024. This spreader plate is available as a separate item under part number 5910 855 8105. It will also be included in the testing tool kit in the not too distant future.

Puller jaws (profile No. 5), 0000 893 3710 are needed so that the universal oil seal puller can also be used for 024 saws.



For installation of the oil seal at the clutch side it is necessary to use Assembly Sleeve, 1118 893 4601, which is a modified version of Assembly Sleeve, 1118 893 4600. The depth of the bore was changed from 22 mm (0.87 in) to 27 mm (1.06 in). Assembly Sleeve, 1118 893 4601 can also be used on 028 saws. Assembly tool 5910 890 2200 is required for fitting the hose clamp on the manifold.

Part Name	Part Number	Application
Spreader plate	5910 855 8105	Clamping bracket (dial gauge, ignition timing).
Jaw (profile No. 5)	0000 893 3710	Universal oil seal puller
Assembly sleeve	1118 893 4601	Oil seals
Assembly tool	5910 890 2200	Hose clamp on manifold

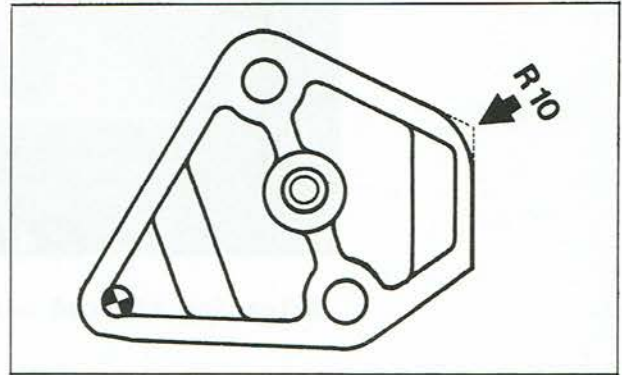
7.2 Existing special tools:

Apart from the universal servicing tools, such as the carburetor and crankcase tester, vacuum pump, ignition timing unit, timing light, ohmmeter as so on, the following existing special tools are required. Some of these are contained in the special tool kit 0000 890 1705 and testing tool kit 0000 890 1710.

The universal Oil Seal Puller, 0000 890 4400, can also be used for the 024. However, when removing the oil seal at the ignition side it is necessary to extend the screw spindle by about 6 mm (0.24 in) (e.g. by adding an M 7 nut).

Once existing stocks of the present pullers have been exhausted only pullers with longer screw spindles will be supplied.

The test flange 1118 850 4200 can be used for leakage testing of the 024 if the flange contour is modified. Only the new shape of flange will be supplied in the future. An existing test flange can be modified as shown in the sketch on the right.

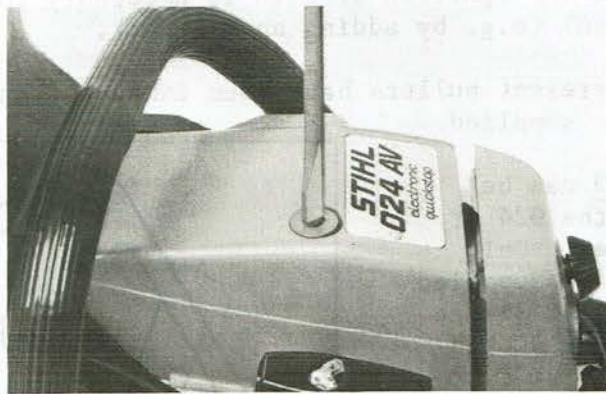


Tool Name	Part Number	Application
Universal oil seal puller	0000 890 4400	Oil seals
Sealing plate	0000 855 8105	Leakage test
Clamping strap	0000 893 2600	Assembly of cylinder
Locking strip	0000 893 5900	Blocking crankshaft
Puller	1110 890 4500	Flywheel
Assembly drift	1110 893 4700	Piston pin
Setting gauge	1111 890 6400	Edge gap
Assembly tube	1117 890 0900	Brake spring
Test flange	1118 850 4200	Leakage test
Installing sleeve	1118 893 2400	Oil seal
Centering tool	1118 893 3500	Heating generator
Press arbor	1118 893 7200	Crankshaft bearings
Assembly tool	5910 890 2200	Hose clamp
Stud wrench M 8	5910 893 0501	Bar mounting
Socket 13 mm (0.51 in)	5910 893 5608	Torque wrench
Socket 19 mm (0.75 in) long	5910 893 5613	Clutch

8. Ignition system servicing:

On the 024 AVEQ it is not necessary to pull off the flywheel in order to remove the ignition system.

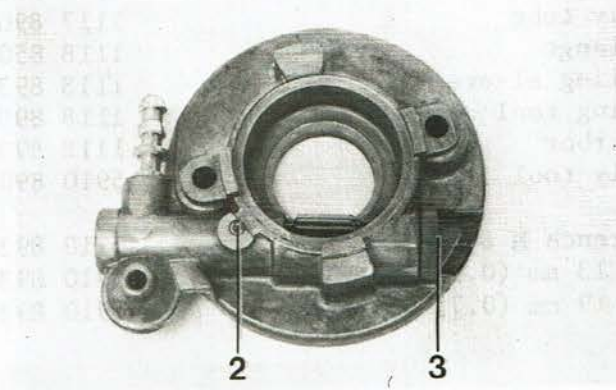
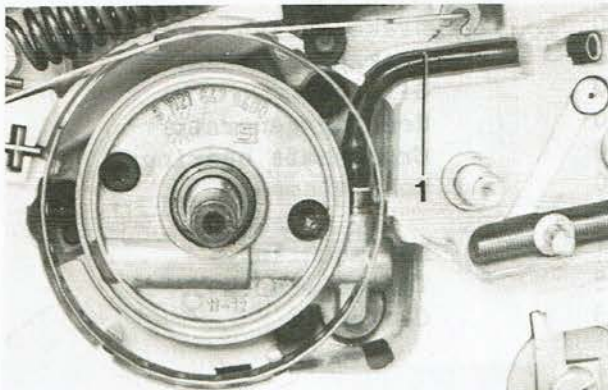
On the 024 AVEQ the electronic trigger unit and the ignition coil are combined to form a single component, the "ignition module". If a failure occurs in one of the integrated elements, it will interrupt the function of the whole module, which then has to be replaced. If a damaged spark plug or ground lead has to be replaced the service work can generally be performed as described in the 028 service manual. However, the shroud must be removed before pulling off the spark plug terminal and unscrewing the spark plug. This is done by unscrewing the slotted nut on the top of the shroud (illustration below).



Releasing slotted nut

9. Oil pump:

The oil pump on the 024 is located behind the chain drive. To remove the oil pump, first take off the sprocket cover, bar and chain and drain the oil tank. Then unscrew the cover and take off the chain sprocket as well. Take out the spark plug and block the piston with Locking Piece, 0000 893 5900, so that the clutch can be removed. Unscrew the clutch spider, clockwise. The oil pump is exposed after the clutch and cover plate have been removed.

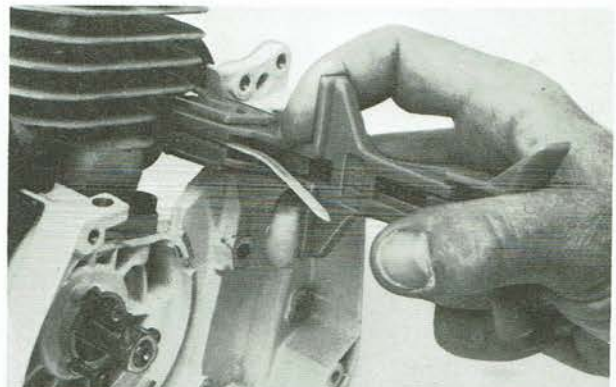
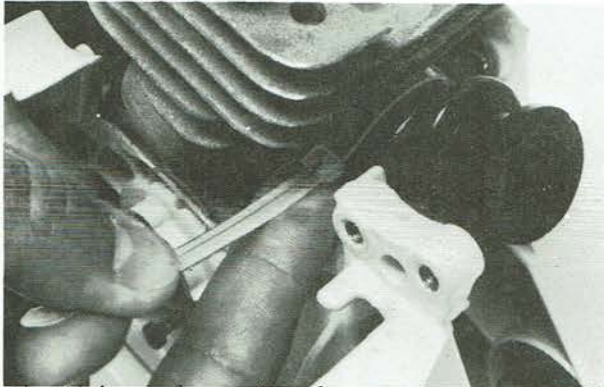


Now pull the hose (1) off the nipple. This is easier if the brake band is detached first. Then unscrew the two M 4 x 12 mounting screws and lift out the oil pump. If the oil pump has to be disassembled, first pull the cylindrical roller (2) out of the pump housing with a magnet. The roller will come out easier if the pump plunger is turned back and forth at the same time. Then lever the plug (3) out of the pump housing and push out the plunger. "Wash" all parts, blow out pump body with compressed air and replace any damaged parts.

Coat control groove of pump plunger and teeth with a light grease before reassembling. Installation is then a reversal of the removal sequence.

10. Fitting hose tie:

A plastic "hose tie" is used to secure the elbow connector to the cylinder. It is the first time such a hose tie has been used. It must be fitted with Assembly Tool 5910 890 2200.

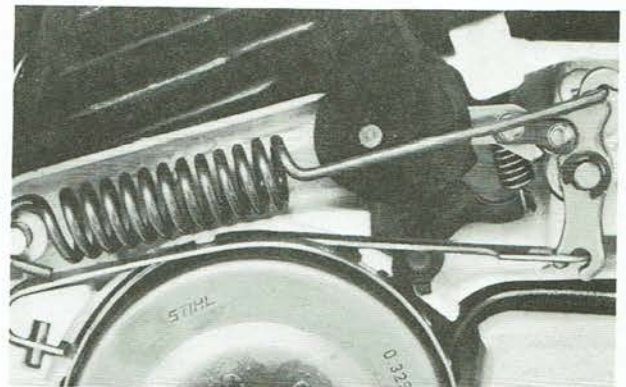


To do this, place the hose tie around the manifold and pretension it slightly by hand. Insert the end of the hose tie in the tool's slide so that the pressure plate is against the hose tie's fastener.

Now tension the hose tie by firmly pulling back the slide and cut off the excess length of material by twisting the tool.

11. Chain brake:

The construction of the 024 chain brake differs from the chain brakes of other STIHL chain saws. When the hand guard is moved to engage or release the chain brake, the movement is transmitted to a toggle lever and then acts on the brake band. The toggle lever is connected to a preloaded tension spring (brake spring). A cam lever, also connected to a tension spring, holds the hand guard in a position after it is moved. The use of the toggle lever reduces the friction in the brake mechanism to such an extent that actuation by inertia is possible: when the guide bar kicks up and back, the mass moment of inertia, of the hand guard, causes the braking process to start.



Brake mechanism

In the event of repairs, please note that no modifications may be made to this system and only STIHL spare parts may be used. After carrying out a repair, apply a little grease to the pivot points and test the function of the chain brake.

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