

# **Tanaka** Illustrated Parts Manual

Model Number:

**TBC-270PFD/PND**

**LOW EMISSION BRUSHCUTTER**

P/N 30495

Rev 000

Date 08-10-01



*Supplier To The Outdoor Power Equipment Industry*

ISM, Inc. • 1028 4<sup>th</sup> Street SW, Ste "B" • Auburn, WA 98001 • Phone: (253) 333-1200 • Fax: (253) 333-1212



# PRODUCT INFORMATION

**30% More Fuel Efficient**

## TBC-270PFD / PND

Low Emission Trimmer / Brush Cutter

**Note:** This unit comes with a 5" semi-automatic cutting head and a 80-tooth weed blade.

### C.A.R.B. Tier II CERTIFIED

NOTE - The TBC-270PND **IS NOT** C.A.R.B. Tier II certified.  
PF = PureFire Engine & Catalytic Muffler  
PN = PureFire Engine & **NO** Catalytic Muffler



### Features / Benefits

- 26cc, 1.4 hp low emission two-stroke engine** features Tanaka's proven high quality components and reduces emissions by up to 70 percent.
- Increased fuel efficiency** saves up to \$150/yr in oil and gas costs, and increases productivity.
- Split Dual Handles** help reduce fatigue and provides more control during long periods of use.
- Bearing supported, solid steel drive shaft** provides smooth and efficient power transfer from the engine to the cutting head.
- 1 / 2 / 5 Warranty Coverage** provides **One-Year** coverage for professionals, **Two-Year** Coverage for Homeowners, and **Five Years** on the Electronic Ignition Module.

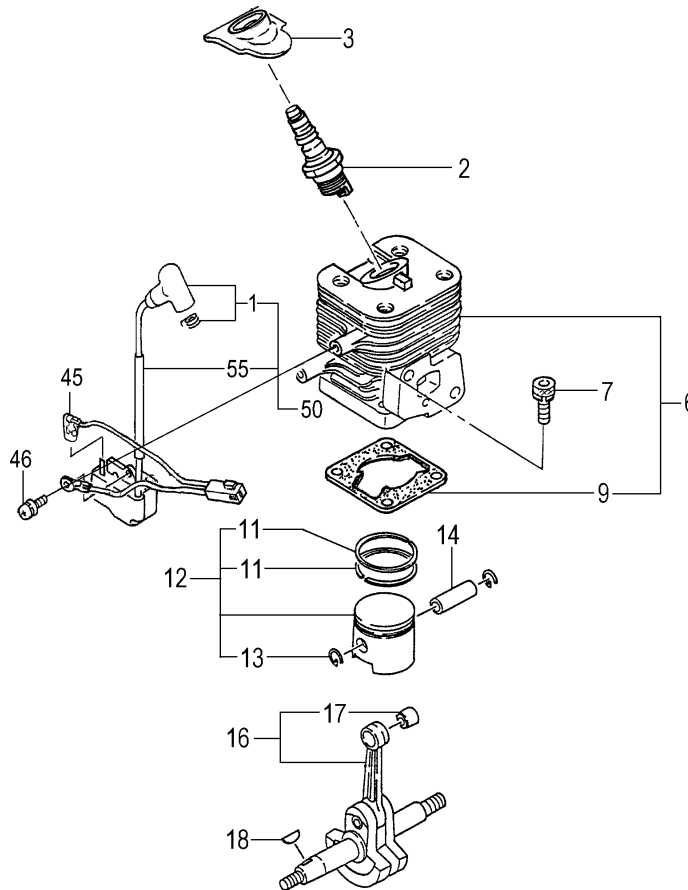
### Specifications

Engine Type	PureFire™ Low Emission
Engine Displacement cc (cu. in.)	26 (1.6)
Power (h.p.)	1.4
Cylinder	Chrome Plated, Stress Relieved
Carburetion	Walbro Diaphragm with Primer
Ignition System	Transistorized Electronic
Fuel Tank Capacity / fl. oz. (cc)	22.1 (650)
Anti-Vibration	Engine Mount & Handle
Clutch System	Heavy-Duty Centrifugal
Shaft Support	5 Shaft Bearings
Drive System	7mm Solid Steel Shaft
Standard Cutting Head	5" Semi-Automatic Feed (.095" Line)
Standard Cutting Blade	9" - 80 Tooth Saw Blade
Dry Weight / lbs. (kg) w/head	13.8 (6.3)

### Optional Accessories:

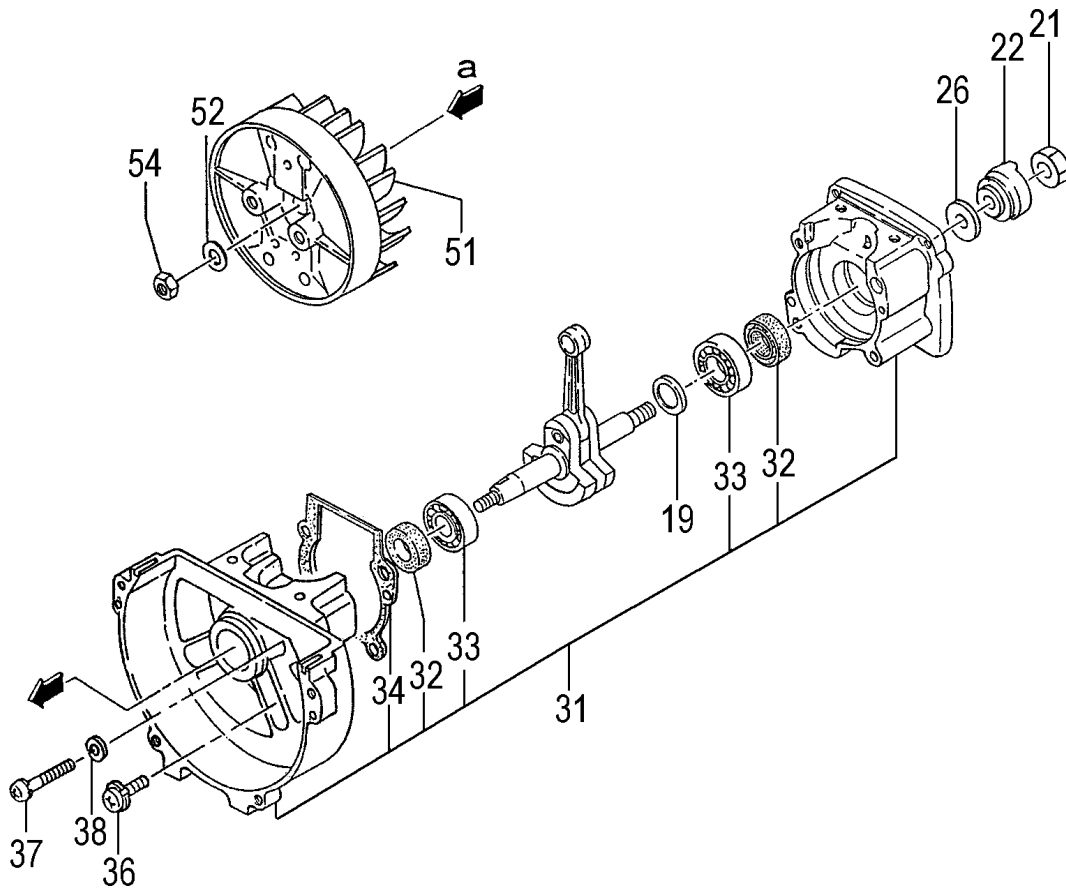
ORDER #	DESCRIPTION
746251	BRAIN™ automatic feed head (TH-95)
746751	BRAIN™ automatic feed head (TH-97)
746280	Aluminum fixed line head
746290	Aluminum manual feed head
746353	6" semi-auto head
Varies	Assorted brush & weed blades
746291	Deluxe shoulder harness
TMC-200	Cultivator attachment
TPS-200	Pole Saw attachment
TPH-200	Pole Hedge Trimmer attachment
Varies	Copolymer Nylon Cutting Line
Varies	Perfect Mix 2-Cycle Engine Oil

All data and specifications are subject to change without notice  
For more information, contact:

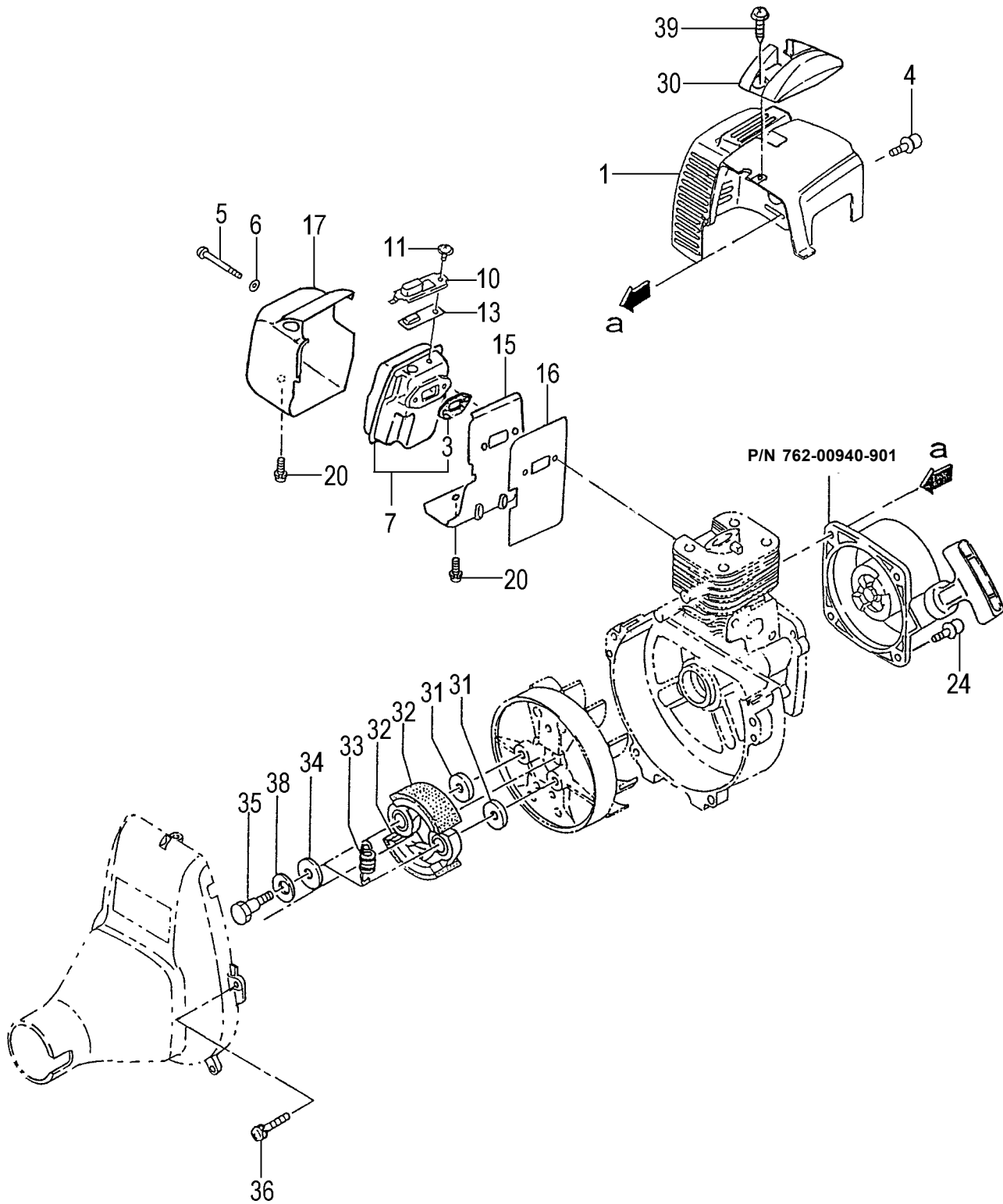


ITEM	PART NUMBER	DESCRIPTION	QTY	COMMENTS
1-1	1570168090	CAP, SPARK PLUG ASS'Y	1	
1-2	0181161021	PLUG, SPARK	1	
1-3	2550168020	COVER, SPARK PLUG, RUBBER	1	
1-6	0010168090	SET, CYLINDER	1	Includes gasket
1-7	99461050184	BOLT, HEX, 5X18, S	4	
1-9	0170168020	GASKET, CYLINDER	1	
1-11	04101601200	RING, PISTON	2	
1-12	0300168090	SET, PISTON	1	Includes rings and circlips
1-13	03900000201	CIRCLIP, PISTON PIN	2	
1-14	03701700200	PIN, PISTON	1	
1-16	0460168080	CRANKSHAFT	1	
1-17	99962091325	BEARING, NEEDLE, F-910	1	
1-18	06810100200	KEY, WOODRUFF, 3X13X4.5	1	
1-45	1910168090	WIRE, LEAD ASS'Y	1	
1-46	99416040186	SCREW, WS, 4X18	2	
1-47	1820186A201	WASHER, SPECIAL	2	
1-50	1672174390	COIL, IGNITION ASS'Y	1	
1-55	2500168020	TUBE, INSULATOR	1	

### FLYWHEEL, STARTER PULLEY, CRANKCASE, CRANKSHAFT • FIGURE 2

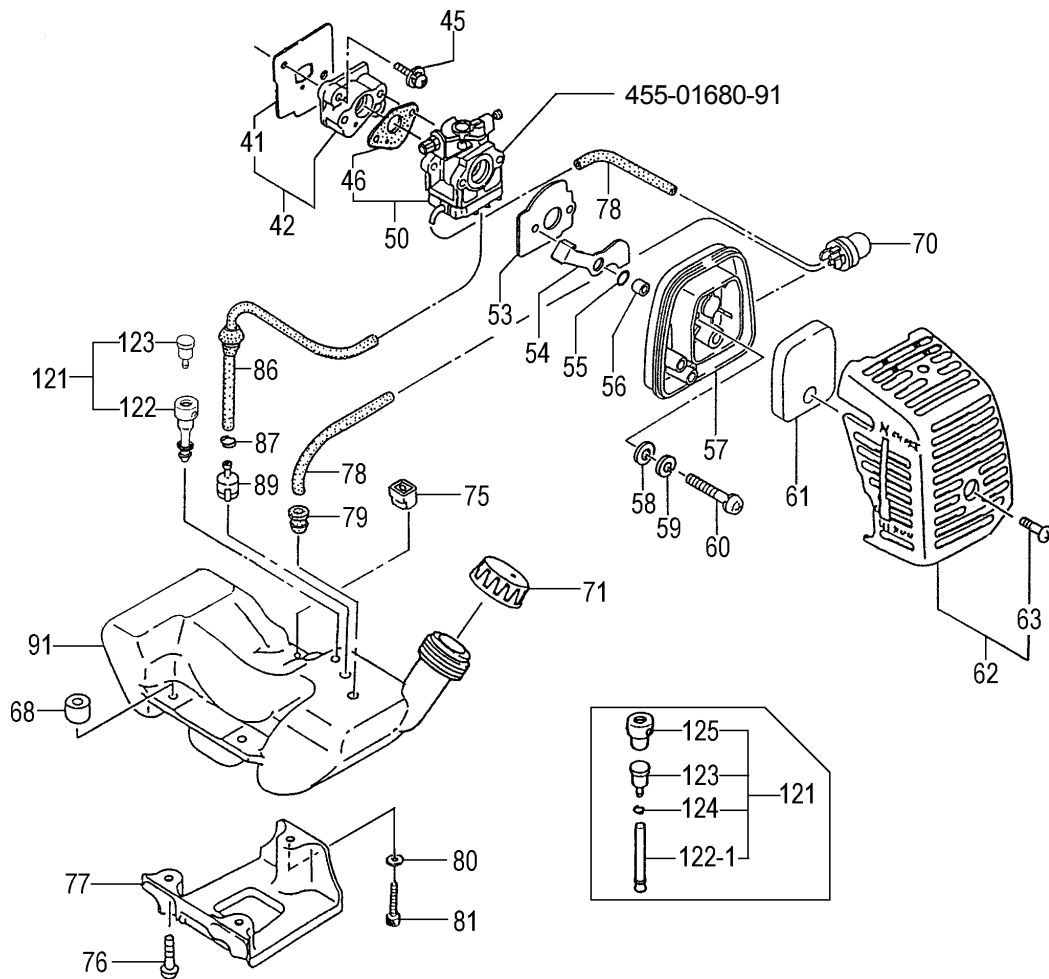


ITEM	PART NUMBER	DESCRIPTION	QTY	COMMENTS
2-19	33000200210	SHIM, 12.2X19X 10	V	*Shims are "as needed" to obtain correct side clearance
2-19	33000200220	SHIM, 12.2X19X 15	V	
2-19	33000200230	SHIM, 12.2X19X 20	V	
2-19	33000200240	SHIM, 12.2X19X 30	V	
2-21	99101080011	NUT, 8	1	
2-22	79801630200	PULLEY, STARTER	1	*Crankcase assy includes bearings, seals and gasket.
2-26	35910112203	WASHER, CLUTCH B	1	
2-31	0720168090	CRANKCASE, ASSY	1	
2-32	99966122240	SEAL, OIL, #12227	2	
2-33	99961600100	BEARING, BALL, #6001	2	
2-34	0900168020	GASKET, CRANKCASE	1	
2-36	99414050251	SCREW, 5X25	2	
2-37	99011050381	SCREW, 5X38	2	
2-38	99210050012	WASHER, S, 5	2	
2-45	1910168090	WIRE, LEAD ASS'Y	1	
2-51	1552174380	ROTOR, MAGNETO	1	
2-52	99200080011	WASHER, 8	1	
2-54	99101080011	NUT, 8	1	



### CLUTCH, RECOIL STARTER, MUFFLER • FIGURE 3

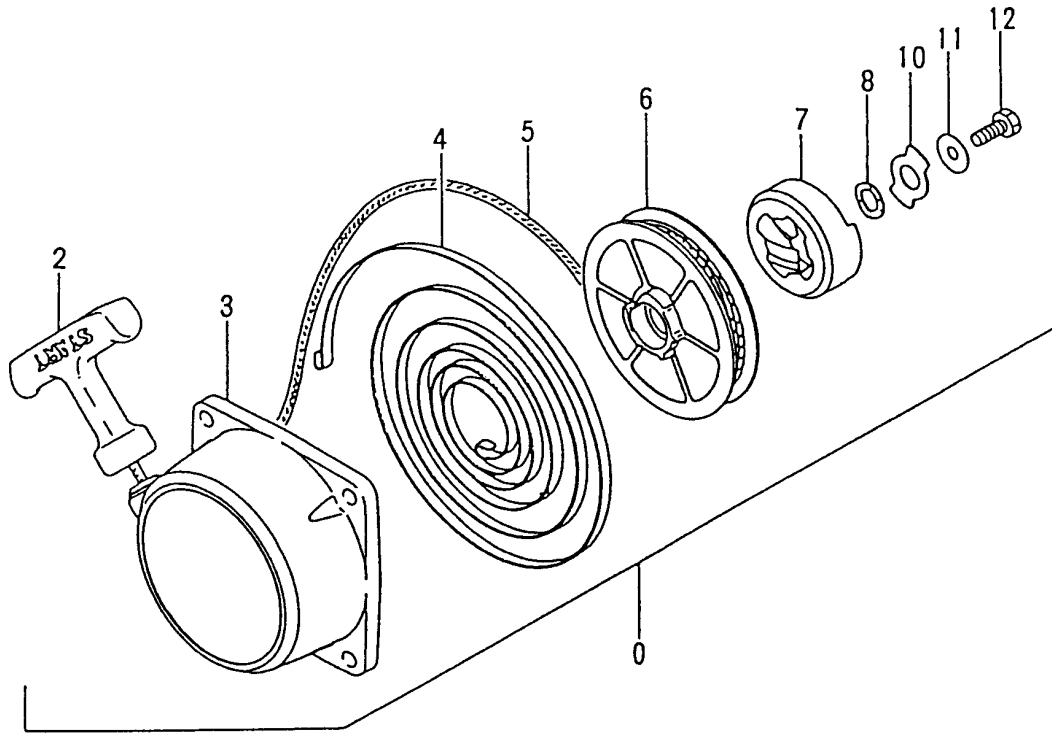
ITEM	PART NUMBER	DESCRIPTION	QTY	COMMENTS
3-1	7380168120	PROTECTOR,MUFFLER	1	
3-3	7370165A201	GASKET,MUFFLER	1	
3-4	99415040182	SCREW,PS,4X18	2	
3-5	99053060653	SCREW,HEX,6X65	2	
3-6	99201060011	WASHER,6	2	
3-7	7040168090	SET,MUFFLER	1	
3-10	7210440020	PIPE, TAIL	1	
3-11	99434040081	SCREW,4X8/S	1	
3-13	7320440020	ARRESTER,SPARK	1	
3-15	7360168022	SHIELD,HEAT	1	
3-16	1330168720	SHIELD,HEAT	1	
3-17	7350168080	COVER,MUFFLER A	1	
3-20	99413050081	SCREW,5X8 P	1	Prior to S/N U097790
3-20	99413050081	SCREW,5X8 P	2	After S/N U097791
3-24	99415040142	SCREW,4X14/PS	2	
3-30	2570168120	COVER,SPARK PLUG	1	
3-31	35902103200	WASHER,CLUTCH,B	2	
3-32	29001620800	SHOE,CLUTCH	2	
3-33	3420630B200	SPRING,CLUTCH	1	
3-34	3480602R200	WASHER,CLUTCH A	2	
3-35	3570075T200	BOLT,STEP	2	
3-36	99416050162	SCREW,5X16/WS	4	
3-38	99205080030	WASHER,8	2	
3-39	99072045164	SCREW,TAPPING,4.5X16	1	



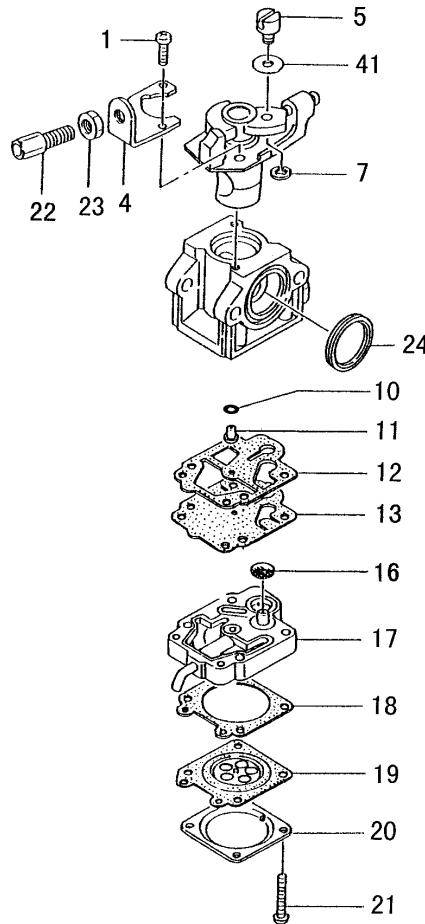
### FUEL TANK, FUEL SYSTEM, AIR CLEANER • FIGURE 4

ITEM	PART NUMBER	DESCRIPTION	QTY	COMMENTS
4-41	4030097A21	GASKET, INLET MANIFOLD	1	
4-42	4040097A90	SET, CARB INSULATOR	1	
4-45	99416050241	SCREW 5x24WS	2	
4-46	4020602K21	GASKET, CARBURETOR	1	
4-50	4550168091	SET, CARBURETOR	1	
4-53	4360162V20	BASE, CLEANER	1	
4-54	5280138021	VALVE, CHOKE	1	
4-55	99967008012	O-RING, S-8	1	
4-56	4700602N200	COLLAR, CLEANER	1	
4-57	4230637C800	BODY, CLEANER	1	
4-58	99200050011	WASHER, SMALL, 5	2	
4-59	99210050012	WASHER, S, 5	2	
4-60	99011050602	SCREW, 5X60	2	
4-61	4460637C200	ELEMENT, CLEANER	1	
4-62	4520168090	SET, CLEANER COVER	1	
4-63	3800637C200	BOLT, CLEANER COVER	1	
4-68	6590430020	COLLAR C	3	
4-70	44225143800	PUMP, PRIMING ASS'Y	1	
4-71	5950168090	CAP, TANK ASS'Y	1	
4-75	6490168020	COLLAR, TANK FIXING	1	
4-76	99463050204	BOLT, HEX 5X20	2	
4-77	9400430020	STAND, ENGINE	1	
4-78	70002504080	PIPE, FUEL, 2.5X4X80	2	
4-79	53432710200	GROMMET, FUEL PIPE	1	
4-80	99201050061	WASHER, 5	1	
4-81	99461050304	BOLT, HEX, 5X30S	1	
4-86	2230162V900	PIPE, FUEL, ASS'Y	1	
4-87	68000731201	CLIP 6.3	1	
4-89	6750404280	FILTER, FUEL	1	
4-91	5910168520	TANK	1	
4-121	5640007091	VENT, AIR	1	
4-122	5650441020	PIPE, AIR VENT	1	After S/N V103818
4-122-1	5650503220	PIPE, AIR VENT	1	Prior to S/N V103817
4-123	6463252L90	AIR VENT VALVE ASSY	1	
4-124	68000731201	CLIP 6.3	1	Prior to S/N V103817
4-125	5610007020	COVER, AIR VENT	1	Prior to S/N V103817

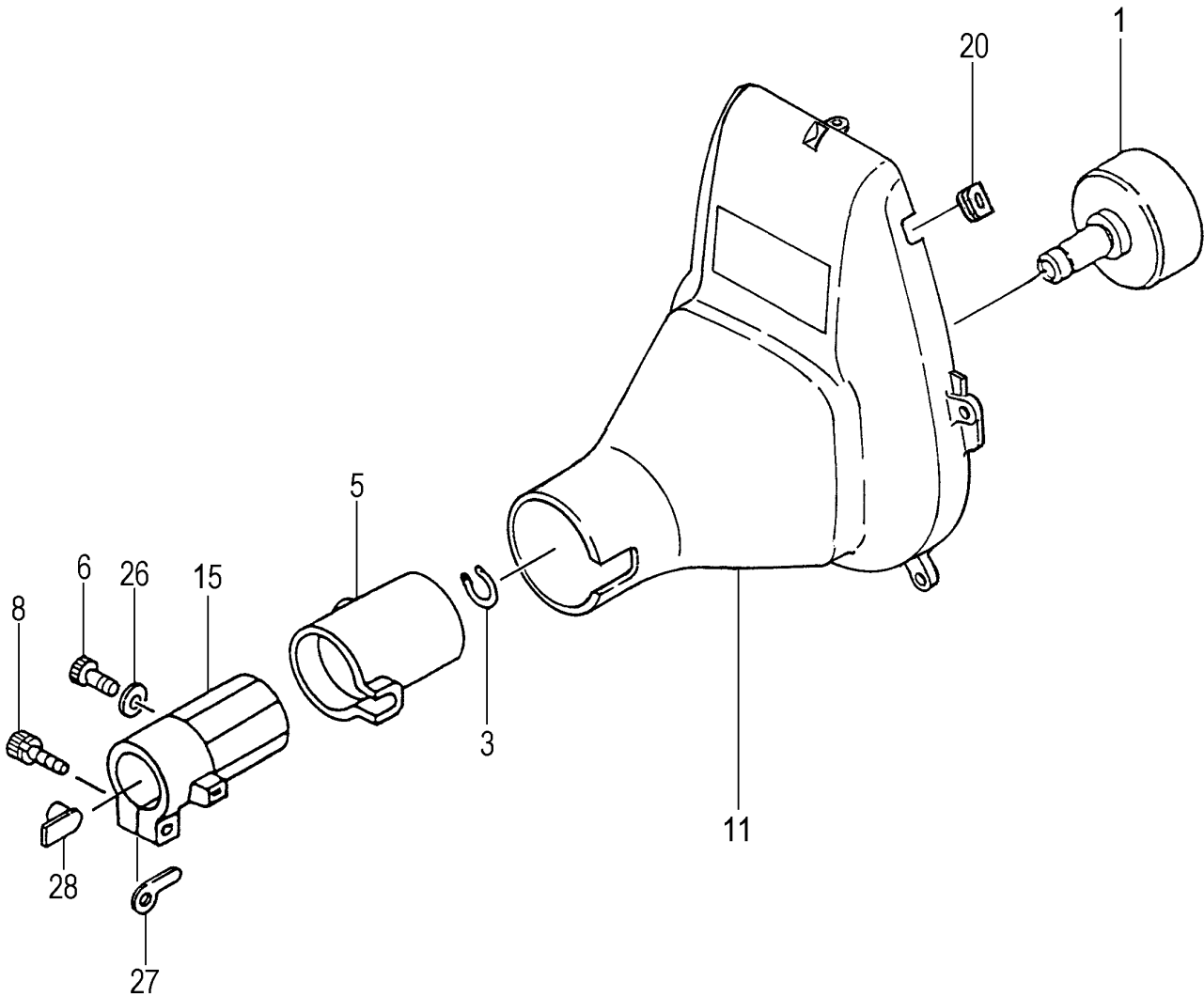




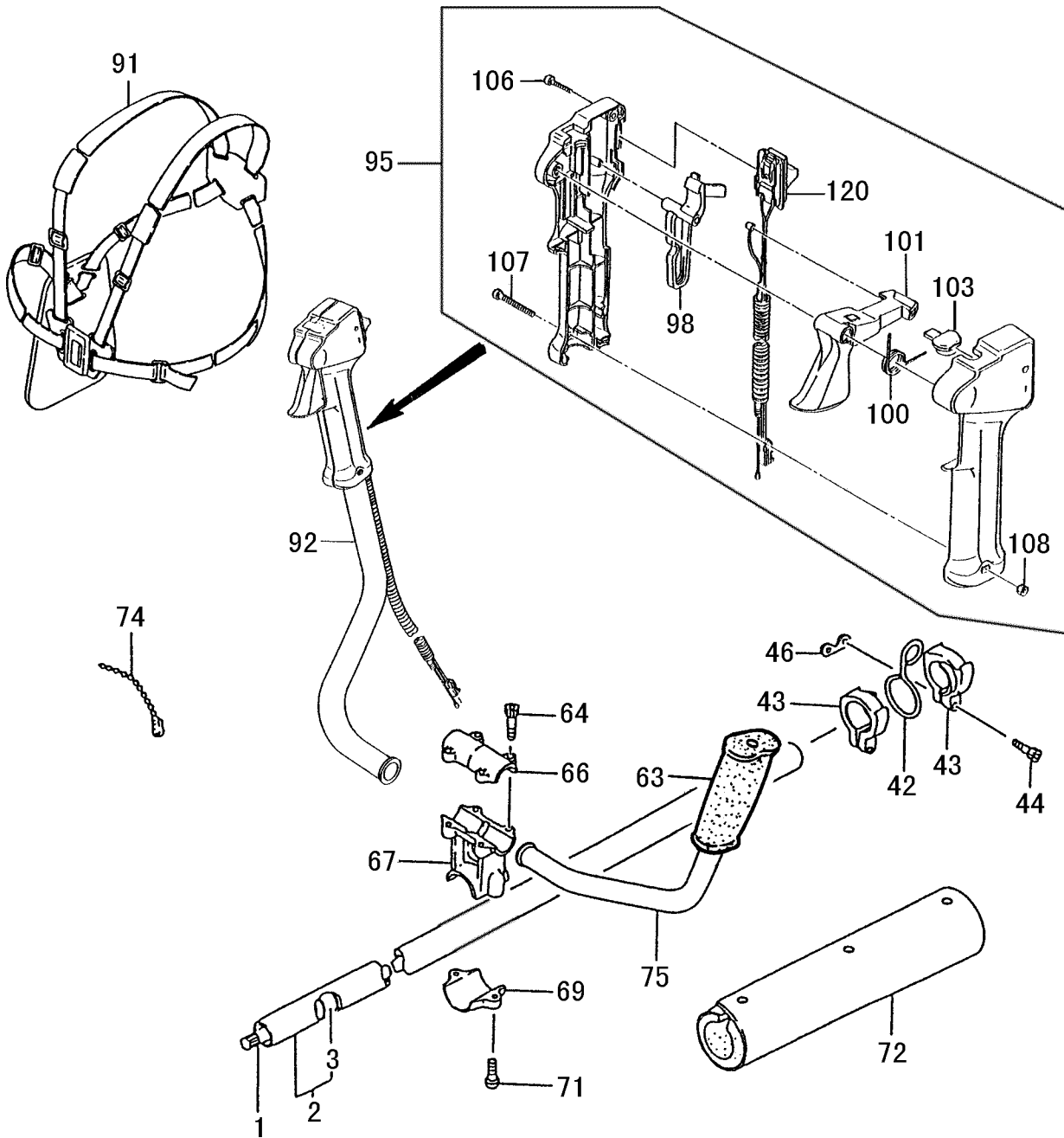
ITEM	PART NUMBER	DESCRIPTION	QTY	COMMENTS
5-0	7620094090	STARTER,RECOIL ASS'Y	1	
5-2	78500940200	HANDLE,STARTER	2	
5-3	77200940801	BODY,STARTER	1	
5-4	78000940200	SPRING,RECOIL	1	
5-5	78300940200	ROPE,STARTER	1	
5-6	77400940200	REEL,STARTER ROPE	1	Prior to S/N V218191
5-6	7740163021	REEL,STARTER ROPE	1	S/N V218191 and after
5-7	7880163021	PAWL,STARTER	1	
5-8	80105015200	WASHER,STARTER PULLEY	1	
5-10	8370501521	PLATE, FRICTION	1	
5-11	82205015200	SHIM,STARTER PULLEY	1	Prior to S/N V218191
5-11	8220423020	SHIM,STARTER PULLEY	1	S/N V218191 and after
5-12	8390423020	BOLT,SET	1	



ITEM	PART NUMBER	DESCRIPTION	QTY	COMMENTS
6-0	4550168091	SET,CARBURETOR	1	
6-1	51425100200	SCREW, THROTTLE SET	2	
6-4	54425164200	STAY, ADJUST, CABLE	1	
6-5	53925120200	SWIVEL	1	~ Contained in Carburetor Repair Kit
6-7	48925100200	RING, STOP	1	P/N 650-25124-900 (Not available individually)
6-10	55025100200	O-RING	1	
6-11	5992001W38	JET, MAIN LONG #38	1	
6-12	~ ~ ~	*GASKET, PUMP	1	
6-13	~ ~ ~	*DIAPHRAGM, PUMP	1	
6-16	~ ~ ~	*SCREEN, INLET	1	
6-17	5752514780	BODY, PUMP ASS'Y	1	
6-18	~ ~ ~	*GASKET, DIAPHRAGM	1	
6-19	~ ~ ~	*DIAPHRAGM, METERING	1	
6-20	47625004200	COVER, DIAPHRAGM	1	
6-21	54825101200	SCREW, SET	4	
6-22	61425137200	ADJUSTER, CABLE	1	
6-23	99101060013	NUT, 6	1	
6-24	4310634C200	GASKET, CLEANER	1	
6-41	5492516520	WASHER, THRUST	1	

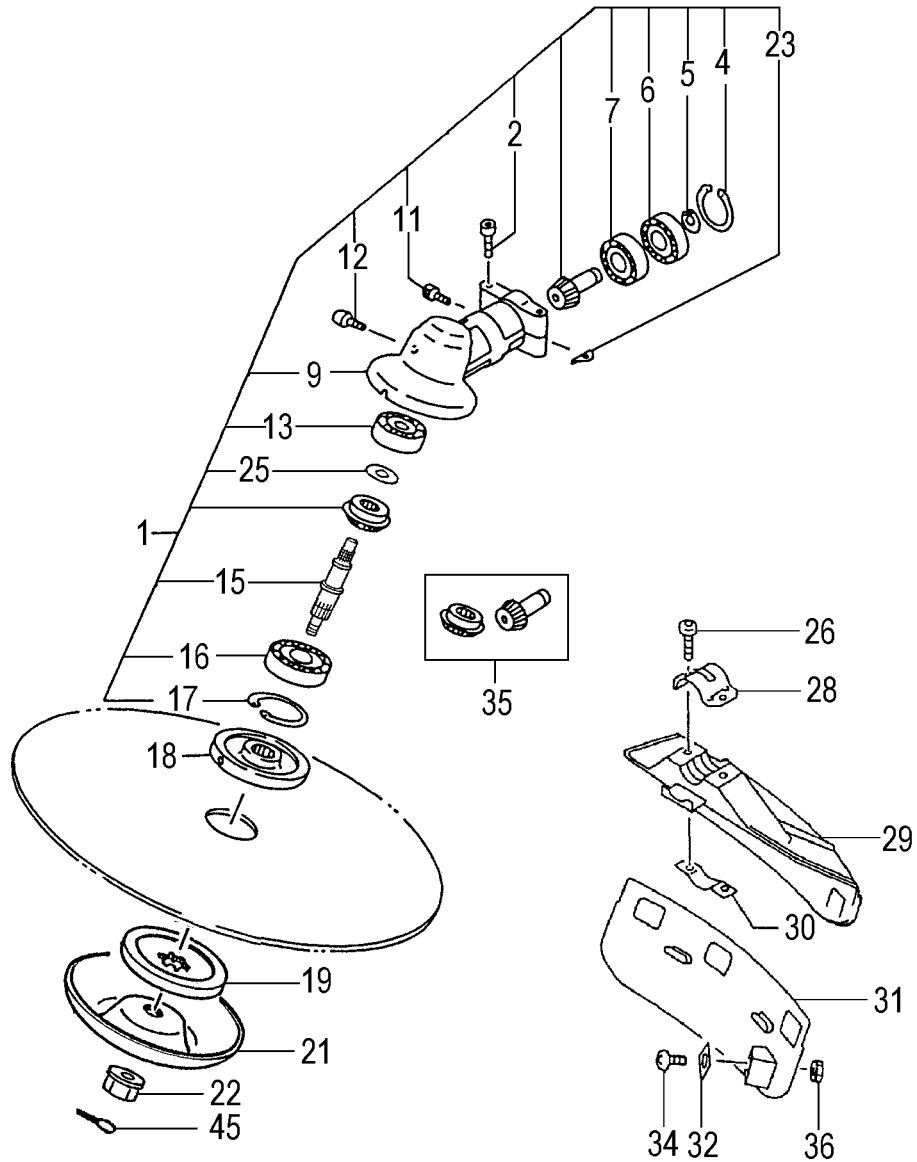


ITEM	PART NUMBER	DESCRIPTION	QTY	COMMENTS
7-1	2890098080	DRUM, CLUTCH	1	
7-3	99350012002	RING, STOP, C-12 EX	1	
7-5	5990098021	CUSHION, RUBBER	1	
7-6	99051050163	BOLT, HEX, 5X16	1	
7-8	99461050254	BOLT, HEX HOLE, 5X25S	1	
7-11	1120168080	CASE, FAN	1	
7-15	3600129020	HOLDER, PIPE 26 DIA	1	
7-20	20311660200	GROMMET, PRIMARY CORD	1	
7-26	99201050061	WASHER, 5	1	
7-27	3243735020	WASHER, GEAR CASE	1	
7-28	3610099020	FITTING, METAL	1	



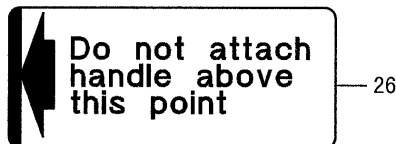
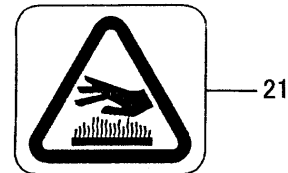
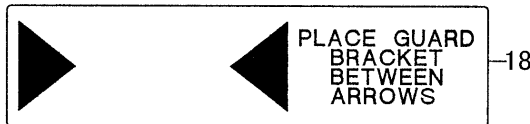
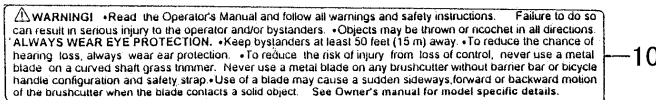
### THROTTLE CONTROL, HANDLES, DRIVE SHAFT • FIGURE 8

ITEM	PART NUMBER	DESCRIPTION	QTY	COMMENTS
8-1	34337300200	SHAFT,DRIVE	1	
8-2	3413735680	PIPE,DRIVE SHAFT	1	
8-3	34737356900	BUSHING,DRIVE SHAFT	5	
8-42	33537307200	METAL,LIFTING	1	
8-43	33437352210	COLLAR,LIFTING METAL	2	
8-44	99462050304	BOLT,HEX HOLE 5x30.P	2	
8-46	31537304200	NUT,SPECIAL	1	
8-63	1653759020	GRIP,HANDLE	1	
8-64	99461050254	BOLT,HEX HOLE,5X25S	4	
8-66	50637304211	BRACKET,HANDLE,A	1	
8-67	5073810020	HANDLE BRACKET B, 26 DIA	1	
8-69	5083758720	BRACKET,HANDLE,26 DIA	1	
8-71	99481060254	SCREW,HEX HOLE 6X25	1	
8-72	3363341182	CUSHION	1	
8-74	4603311120	CLAMP,B	1	
8-75	5023367421	HANDLE,LEFT	1	
8-91	746291	SHOULDER HARNESS ASSY	1	
8-92	5013810220	HANDLE,RIGHT	1	
8-95	8703840190	ASSY,THROTTLE LEVER	1	
8-98	2533840020	LEVER,SAFETY	1	
8-100	8323840020	SPRING,RETURN	1	
8-101	8803840120	LEVER,THROTTLE	1	
8-103	3223840020	GROMMET	1	
8-106	9934604020	SCREW, 4X20	2	
8-107	99431050303	SCREW 5X30 BLACK	1	
8-108	99101050043	NUT,5	1	
8-120	8853840180	WIRE,THROTTLE,W/SWITCH	1	



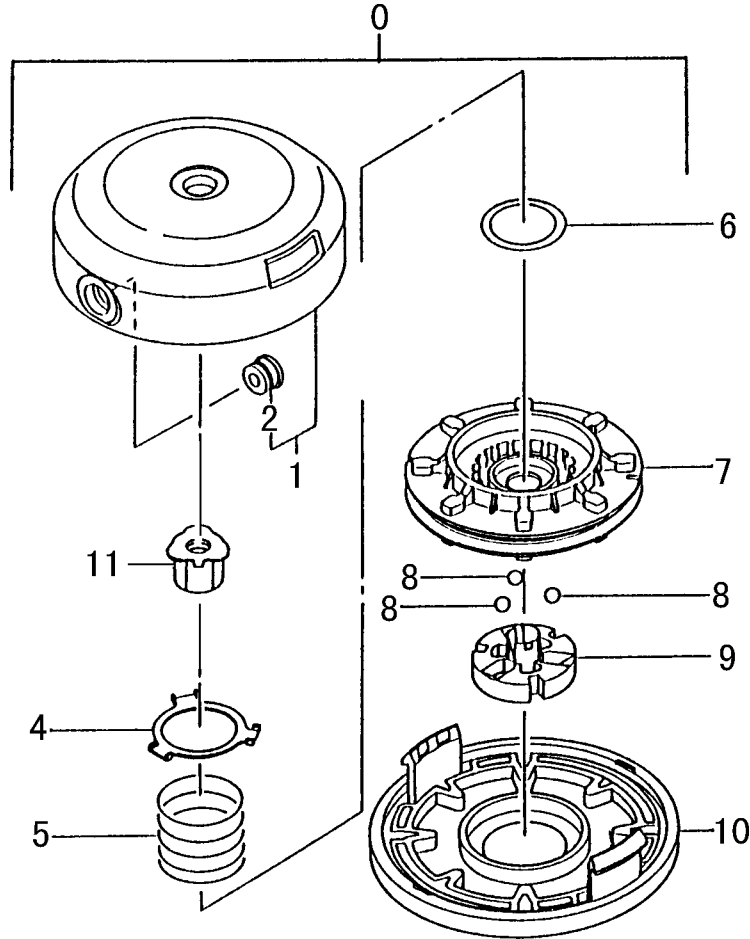
### GEAR CASE, SAFETY GUARD • FIGURE 9

ITEM	PART NUMBER	DESCRIPTION	QTY	COMMENTS
9-1	3003758790	GEAR CASE ASSY, 26 DIA.	1	Units prior to S/N V243831
9-1	3003748090	GEAR CASE ASSY, 26 DIA.	1	S/N V243831 and after
9-2	99461050254	HEX HOLE BOLT 5X25/S	2	
9-4	99351024002	STOP RING C-24, INNER	1	Units prior to S/N V243831
9-4	99351022002	STOP RING C-22, OUTER	1	S/N V243831 and after
9-5	99350009002	RING,STOP,C9	1	Units prior to S/N V243831
9-5	99350010002	RING,STOP,C10,OUTER	1	S/N V243831 and after
9-6	99961609002	BEARING,BALL,#609Z	1	Units prior to S/N V243831
9-6	99961609002	BEARING,BALL,#6900Z	1	S/N V243831 and after
9-7	99961609000	BEARING,BALL,#609Z	1	Units prior to S/N V243831
9-7	99961690000	BEARING,BALL,#6900ST	1	S/N V243831 and after
9-9	3003330B20	CASE,GEAR	1	Units prior to S/N V243831
9-9	3003748020	CASE,GEAR	1	S/N V243831 and after
9-11	99051050103	BOLT,HEX HOLE,5X10	1	Units prior to S/N V243831
9-11	99461050124	BOLT,HEX HOLE,5X12S	1	S/N V243831 and after
9-12	99423080100	BOLT,8X10	1	Units prior to S/N V243831
9-12	3163815020	BOLT,FITTING,M8	1	S/N V243831 and after
9-13	99961628000	BEARING,BALL,#628	1	Units prior to S/N V243831
9-13	99961609000	BEARING,BALL,#609	1	S/N V243831 and after
9-15	3043810020	SHAFT,GEAR	1	Units prior to S/N V243831
9-15	3043815020	SHAFT,GEAR	1	S/N V243831 and after
9-16	99961620103	BEARING,BALL,#6201D	1	
9-17	99351032002	RING,STOP,C-32 IN	1	
9-18	3103810020	HOLDER,CUTTER	1	Units prior to S/N V243831
9-18	3103815020	HOLDER,CUTTER	1	S/N V243831 and after
9-19	3113810020	CAP,CUTTER HOLDER	1	Units prior to S/N V243831
9-19	3113815020	CAP,CUTTER HOLDER	1	S/N V243831 and after
9-21	30833410200	COVER,PROTECTION,B	1	Units prior to S/N V057070
9-21	3083786120	COVER,PROTECTION,B	1	Units from V057070 to V243830
9-21	3083815020	COVER,PROTECTION,B	1	S/N V243831 and after
9-22	3133810020	NUT,FIXING L.H. 10x1.25	1	Units prior to S/N V243831
9-22	3133815020	NUT,FIXING M 10x1.25	1	S/N V243831 and after
9-23	3243735020	WASHER,GEAR CASE	1	
9-25	0673713420	WASHER,SPECIAL	1	
9-26	99481060254	SCREW,HEX HOLE 6X25	2	
9-28	4423369921	BRACKET,SAFETY GUARD	1	
9-29	4413738020	GUARD,SAFETY	1	
9-30	4453738020	HOLDER,GUARD	1	
9-31	4473738020	EXTENSION,GUARD	1	
9-32	7973738021	LIMITER,LINE	1	
9-34	99414050121	SCREW,S,5X12	1	
9-35	3013713400	SET,GEAR PINION	1	Units prior to S/N V243831
9-35	3013815000	SET,GEAR PINION	1	S/N V243831 and after
9-36	99101050011	NUT,5	1	
9-45	3273718090	PIN,COTTER 2X20 (10PK)	1	

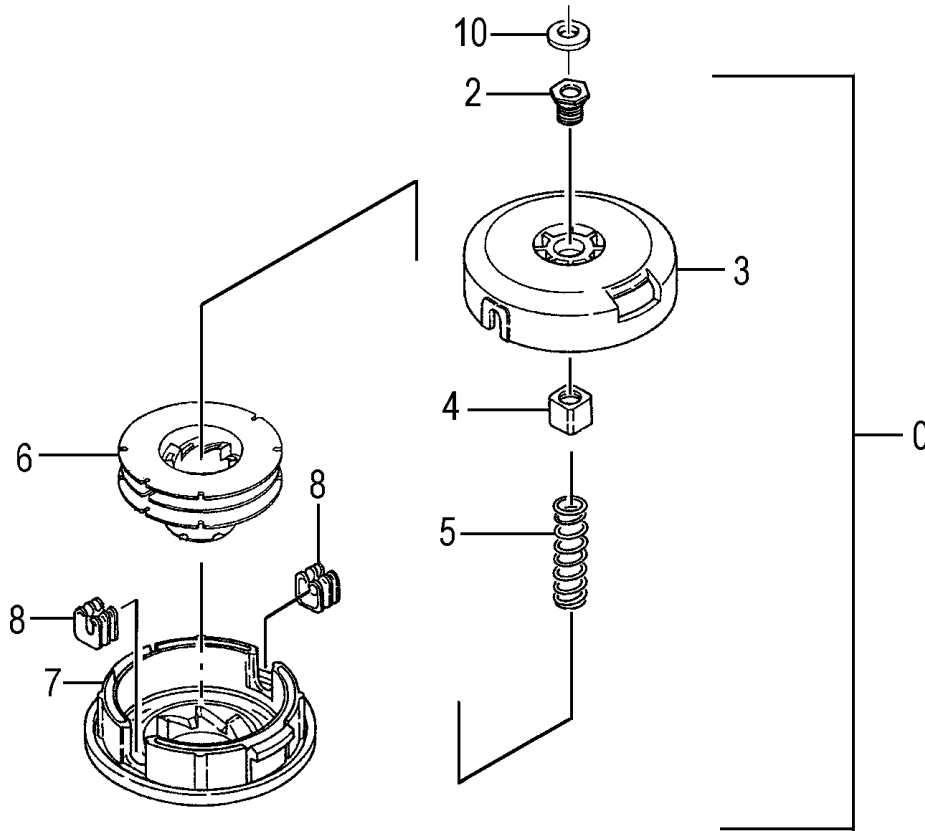


ITEM	PART NUMBER	DESCRIPTION	QTY	COMMENTS
10-1	9060168020	PLATE, NAME, PUREFIRE	1	
10-2	9064815620	NAME PLATE TBC-270PND	1	
10-2	9064815420	NAME PLATE TBC-270PFD	1	
10-3	9210168120	DECAL, CAUTION	1	
10-4	9193738F20	DECAL, CAUTION, A	1	
10-5	9233738F20	DECAL, LEVEL	1	
10-7	9293810020	DECAL, SYMBOL, PF	1	
10-8	92337400200	DECAL, LEVEL	1	
10-15	9233728620	DECAL, LEVEL	1	





ITEM	PART NUMBER	DESCRIPTION	QTY	COMMENTS
	746751	HEAD,BRAIN (TH-97)	1	Units prior to S/N V243831
1	7863381091	CUTTING BODY ASS'Y	1	
2	7883307120	EYELET	1	
3	7603381020	WASHER,MOUNTING	1	
4	7853381020	BASE,ADJUSTMENT	1	
5	7933381022	SPRING,REEL,YELLOW	1	
6	7923381020	WASHER,ADJUSTMENT	1	
7	7873381020	REEL	1	
8	6733560020	BALL,STEEL	3	
9	7903381020	SLIDER,REEL	1	
10	7893381020	CAP,BODY	1	
11	3153381080	MOUNTING NUT	1	



ITEM	PART NUMBER	DESCRIPTION	QTY	COMMENTS
0	746451	HEAD, SEMI-AUTO 5"	1	After serial number V243831
2	3563383B20	ADAPTER, 10X1.25 LHF	1	
3	78633830200	BODY, CUTTING	1	
4	31533830200	NUT, SPECIAL	1	
5	79333830200	SPRING	1	
6	78733830200	REEL	1	
7	78933830200	CAP, BODY	1	
8	78833830200	EYELET	2	
10	99201120011	WASHER, 12	1	After serial number V243831