

# **Tanaka** Illustrated Parts Manual

Model Number:

## **TBC-250PF/PFD**

**LOW EMISSION GRASS TRIMMER/BRUSHCUTTER**

P/N 30730

Rev 000

Date 1-17-07



*Supplier To The Outdoor Power Equipment Industry*

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

# Tanaka **PRODUCT INFORMATION**

## **TBC-250PFD**

Grass Trimmer / Brush Cutter

**NEW for 2002**

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

**C.A.R.B. Tier III  
CERTIFIED**



Deluxe double shoulder strap included



**Exceeds EPA's 2005 Requirements!**

### Features / Benefits:

- **24cc, 1.2 hp PureFire® low emission two-stroke engine** features Tanaka's proven high quality components and reduces emissions by up to 70%!
- **Increased fuel efficiency** can save up to \$150/yr in gas and oil costs, and increases productivity.
- **Bearing supported, solid steel drive shaft** provides smooth and efficient power transfer from the engine to the cutting head.
- **Split dual handles** help reduce fatigue and provides more control during extended periods of use.
- **1 / 2 / 5 Warranty coverage** provides **One-Year** coverage for professionals, **Two-Year** Coverage for Homeowners, and **Five Years** on the Electronic Ignition Module.

### TBC-250PFD Specifications

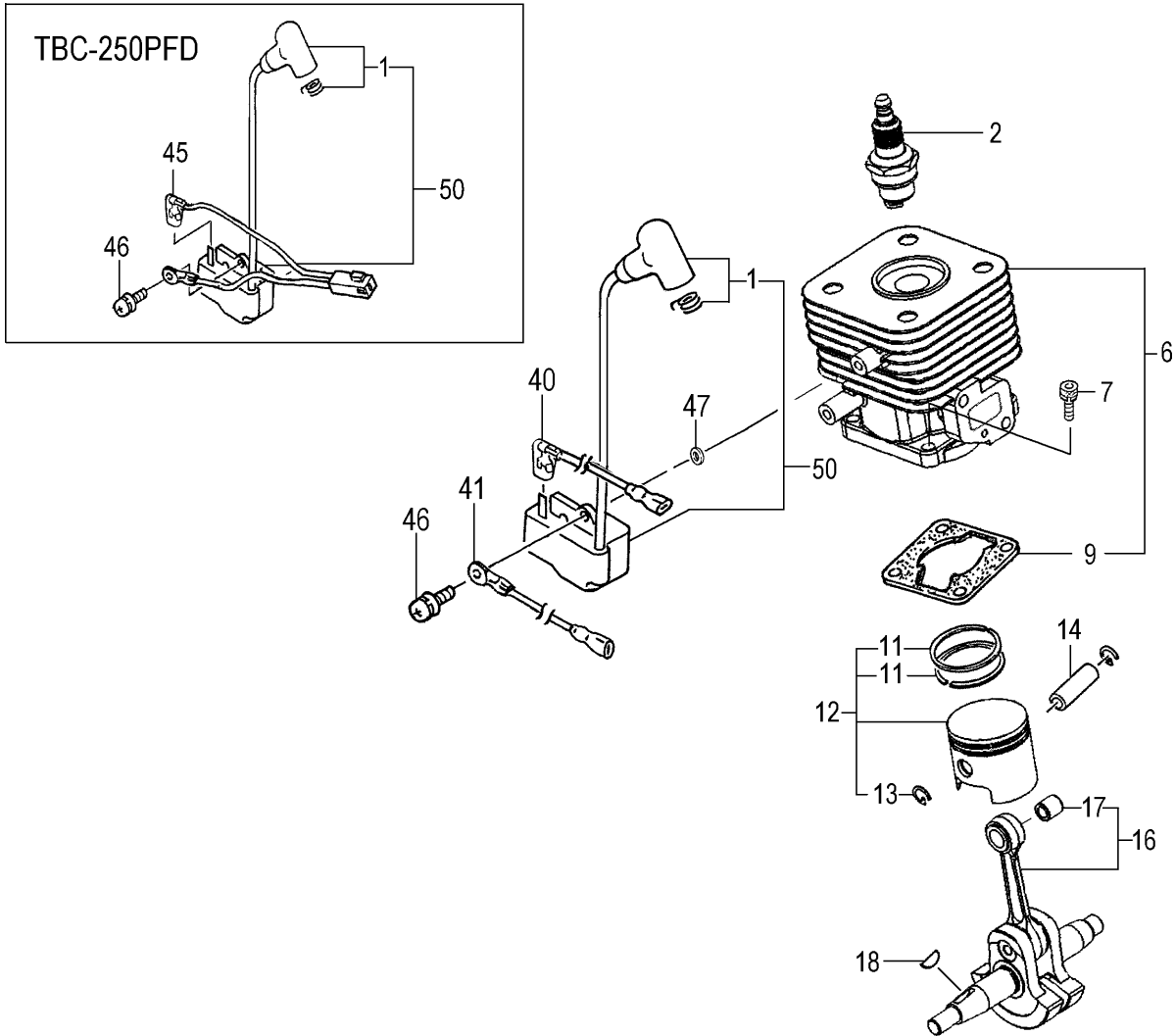
Engine Displacement cc (cu. in.)	24 (1.4)
Power (h.p.)	1.2
Cylinder	Chrome Plated, Stress Relieved
Carburetion	Walbro Diaphragm w/ Primer
Ignition System	Transistorized Electronic
Fuel Tank Capacity / fl. oz. (cc)	16.9 (500)
Anti-Vibration	Engine Mount & Handle
Clutch System	Heavy Duty Centrifugal
Shaft Support	5 Shaft Bearings
Drive System	7mm Solid Steel Shaft
Standard Cutting Head (746451)	5" Semi-Automatic Feed (.095" Line)
Standard Cutting Blade (746104)	9" - 80 Tooth Saw Blade
Dry Weight / lbs. (kg) w/head	13.8 (6.3)

### Optional Accessories:

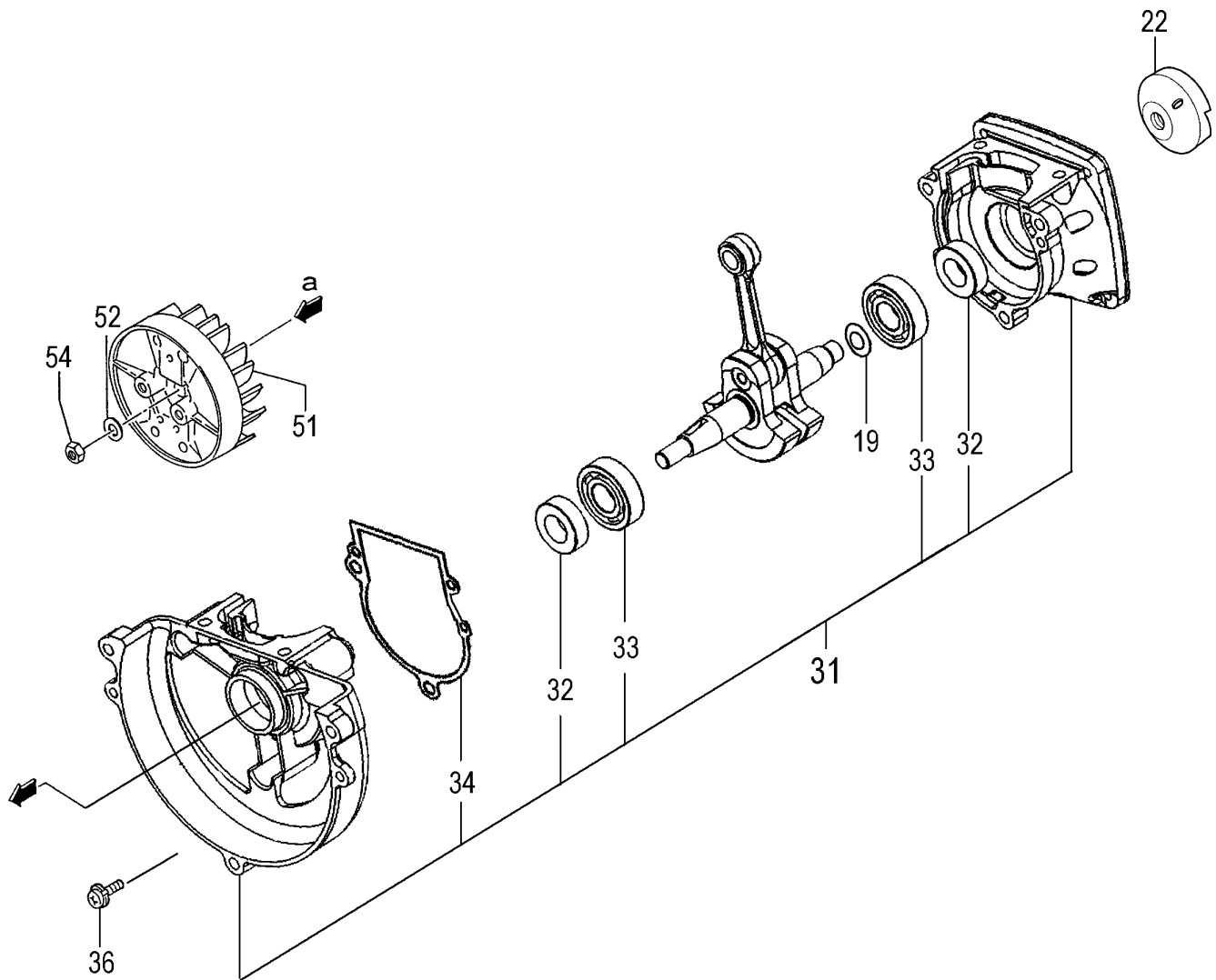
ORDER #	DESCRIPTION
Varies	Perfect Mix® 2-Cycle Engine Oil
746751	BRAIN® automatic feed head
746280	Aluminum fixed line head
746290	Aluminum manual feed head
746551	4" manual feed head
Varies	Assorted brush & weed blades
746191	Single shoulder strap
746291	Deluxe double shoulder harness
TMC-200	Cultivator attachment
TPH-200	Pole Hedge Trimmer attachment
TPS-200	Pole Saw attachment
Varies	Copolymer nylon cutting line

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

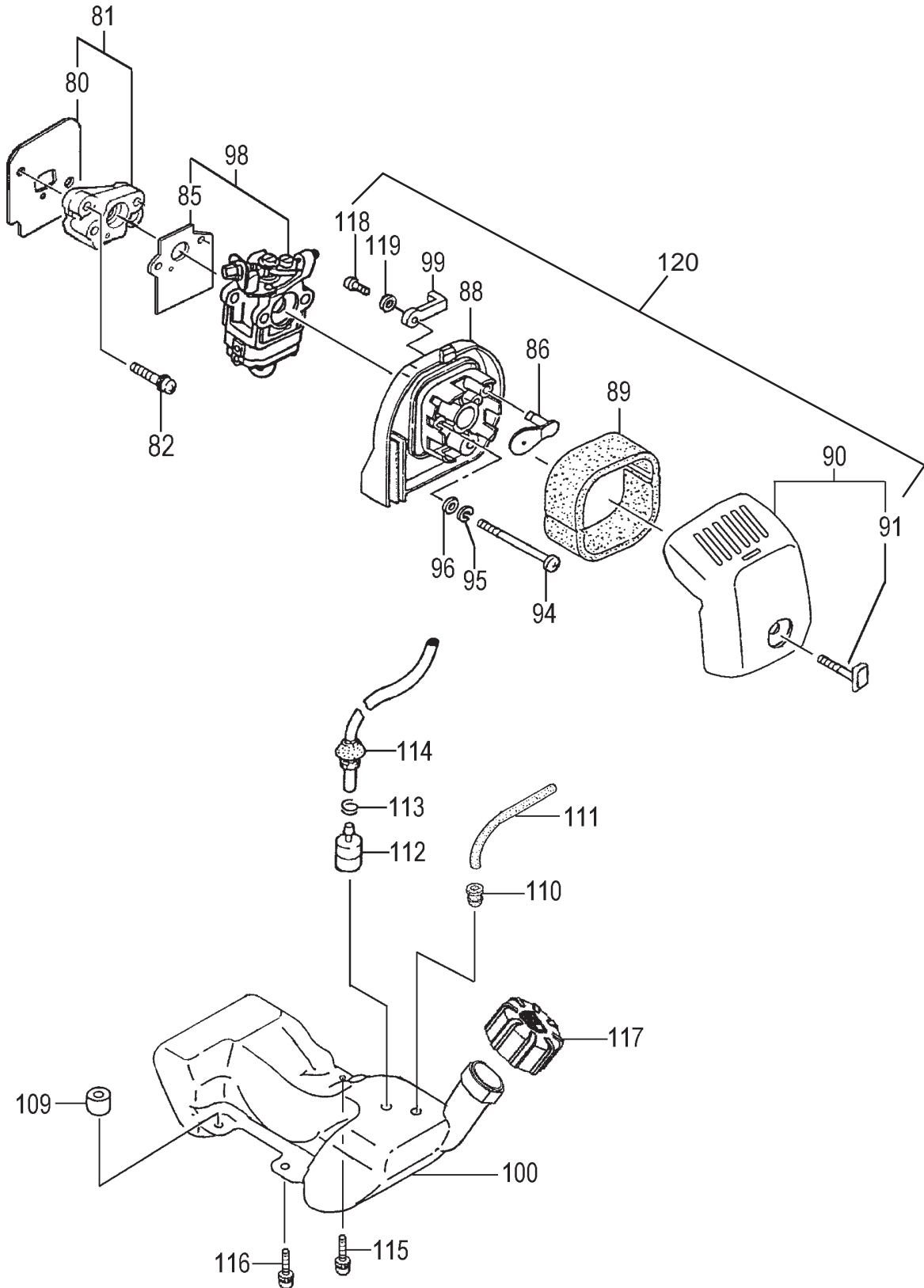
### CYLINDER, PISTON, CRANKSHAFT, IGNITION • FIGURE 1



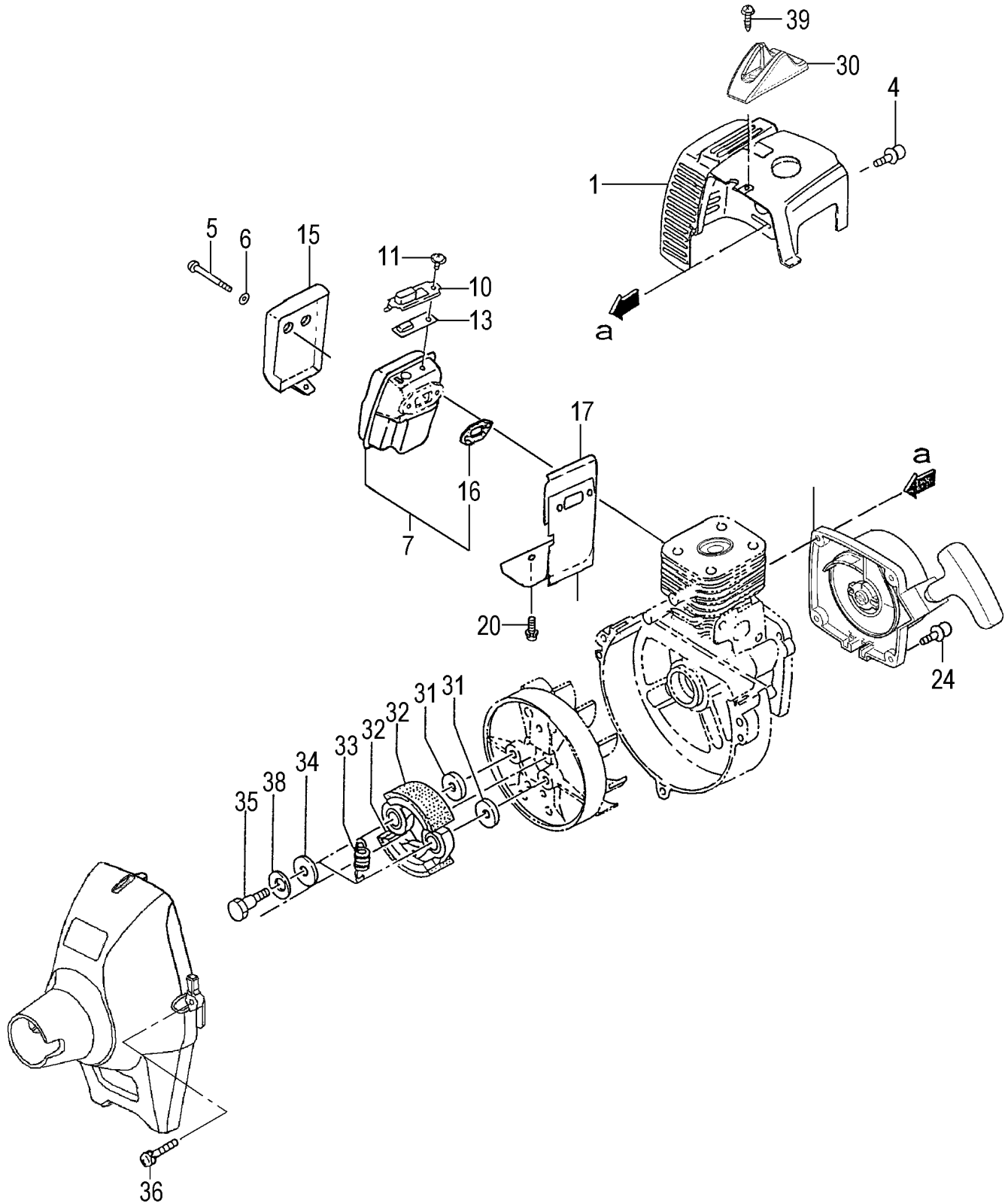
ITEM	PART NUMBER	DESCRIPTION	QTY	COMMENTS
1-1	1570168090	CAP, SPARK PLUG ASS'Y	1	
1-2	0181161021	PLUG, SPARK	1	
1-6	0010304590	CYLINDER, SET	1	Includes cylinder gasket
1-7	99461050184	BOLT, HEX, 5X18, S	4	
1-9	0170300221	GASKET, CYLINDER	1	
1-11	04101601200	RING, PISTON	2	
1-12	0300704590	PISTON SET	1	Includes rings & circlips
1-13	03901620200	CIRCLIP, PISTON PIN	2	
1-14	0370704520	PIN, PISTON	1	
1-16	0460304580	CRANKSHAFT	1	
1-17	99962081225	BEARING, NEEDLE, F-810	1	
1-18	06810100200	KEY, WOODRUFF, 3X13X4.5	1	
1-40	1780168080	CORD, STOP	1	
1-41	2740168080	CORD, EARTH	1	
1-45	1910168090	WIRE, LEAD ASS'Y	1	
1-46	99464040184	BOLT, HEX 4X18WS	2	
1-47	1820186A201	WASHER, SPECIAL	2	
1-50	1672101090	COIL, IGNITION	1	



ITEM	PART NUMBER	DESCRIPTION	QTY	COMMENTS
2-19	33000200210	SHIM,12.2X19X.10	1	
2-19	33000200220	SHIM,12.2X19X.15	1	
2-19	33000200230	SHIM,12.2X19X.20	1	
2-19	33000200240	SHIM,12.2X19X.30	1	
2-22	7980304520	PULLEY,STARTER	1	
2-31	0720304590	CRANKCASE ASS'Y	1	
2-32	99966122240	SEAL,OIL,#12227	2	
2-33	99961600100	BEARING,BALL,#6001	2	
2-34	0900304520	GASKET,CRANKCASE	1	
2-36	99461050164	BOLT,HEX,5X16,S	3	
2-51	1552174380	ROTOR,MAGNETO	1	
2-52	99201070011	WASHER,7	1	
2-54	06600000200	NUT,FLYWHEEL	1	

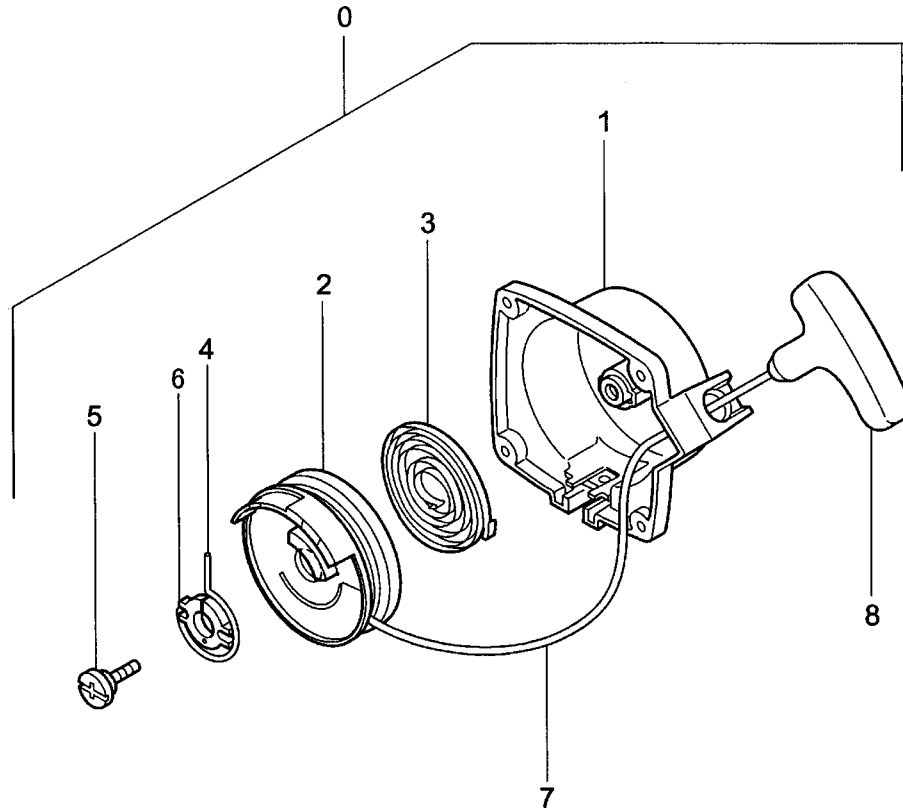


ITEM	PART NUMBER	DESCRIPTION	QTY	COMMENTS
3-80	4030702021	GASKET,INLET MANIFOLD	1	
3-81	4040702090	INSULATOR SET	1	
3-82	99416050241	SCREW 5x24WS	2	
3-85	4020656A200	GASKET	1	
3-86	5280652N21	VALVE,CHOKE	1	
3-88	4230652N80	BODY,AIR CLEANER	1	
3-89	4460652N20	CLEANER,ELEMENT	1	
3-90	4520304690	COVER,AIR CLEANER ASSY	1	
3-91	4500702480	BOLT,CLEANER COVER	1	
3-94	99011050552	SCREW,5X55	2	
3-95	99210050012	WASHER,S,5	2	
3-96	99200050011	WASHER,SMALL,5	2	
3-98	4550304590	CARBURETOR SET	1	Includes gasket
3-99	5230652N20	LEVER,CHOKE	1	
3-100	5910304520	TANK,FUEL	1	
3-109	65900801200	COLLAR	3	
3-110	53432710200	GROMMET,FUEL PIPE	1	
3-111	70003005065	PIPE,FUEL,3X5X65	1	
3-112	6750404280	FILTER,FUEL	1	
3-113	68000731201	CLIP 6.3	1	
3-114	2230162V900	PIPE,FUEL,ASS'Y	1	
3-115	99463050205	BOLT,HEX,5X20PS	1	
3-116	99463050204	BOLT, HEX 5X20	2	
3-117	5950300290	CAP,TANK (BLACK/RED)	1	
3-118	99075040154	SCREW,TAPPING,4X15	1	
3-119	99201040011	WASHER,4	1	
3-120	4100304690	AIR CLEANER ASS'Y	1	

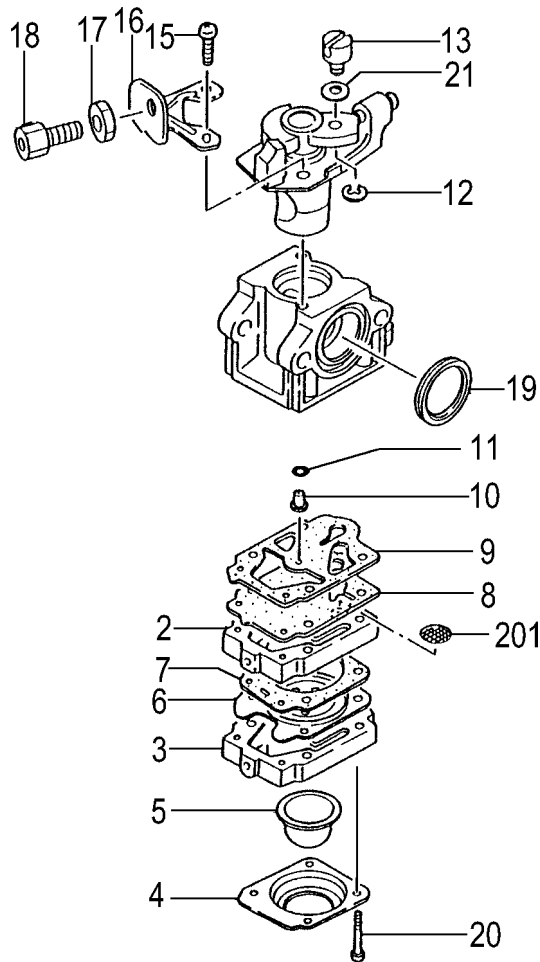


ITEM	PART NUMBER	DESCRIPTION	QTY	COMMENTS
4-1	7380304620	PROTECTOR,MUFFLER	1	
4-4	99415040182	SCREW,PS,4X18	2	
4-5	99053060553	SCREW,HEX.HOLE	2	
4-6	99201060011	WASHER,6	2	
4-7	7040304590	MUFFLER SET	1	
4-10	7210440020	PIPE,TAIL	1	
4-11	99436040081	SCREW,4X18WS	1	
4-13	7320440020	ARRESTER,SPARK	1	
4-15	7360304580	COVER,MUFFLER B	1	
4-16	7370168020	GASKET,MUFFLER	1	
4-17	7350304580	SHIELD,HEAT	1	
4-20	99415050101	SCREW,5X10/PS	2	
4-24	99415040182	SCREW,PS,4X18	2	
4-30	2570304520	PROTECTOR,SPARK PLUG	1	
4-31	35902103200	WASHER,CLUTCH,B	2	
4-32	29001620800	SHOE,CLUTCH	2	
4-33	3420630B200	SPRING,CLUTCH	1	
4-34	3480602R200	WASHER,CLUTCH A	2	
4-35	3570075T200	BOLT,STEP	2	
4-36	99415050202	SCREW,5X20/PS	3	
4-38	99205080030	WASHER,8	2	
4-39	99072045164	SCREW,TAPPING,4.5X16	1	

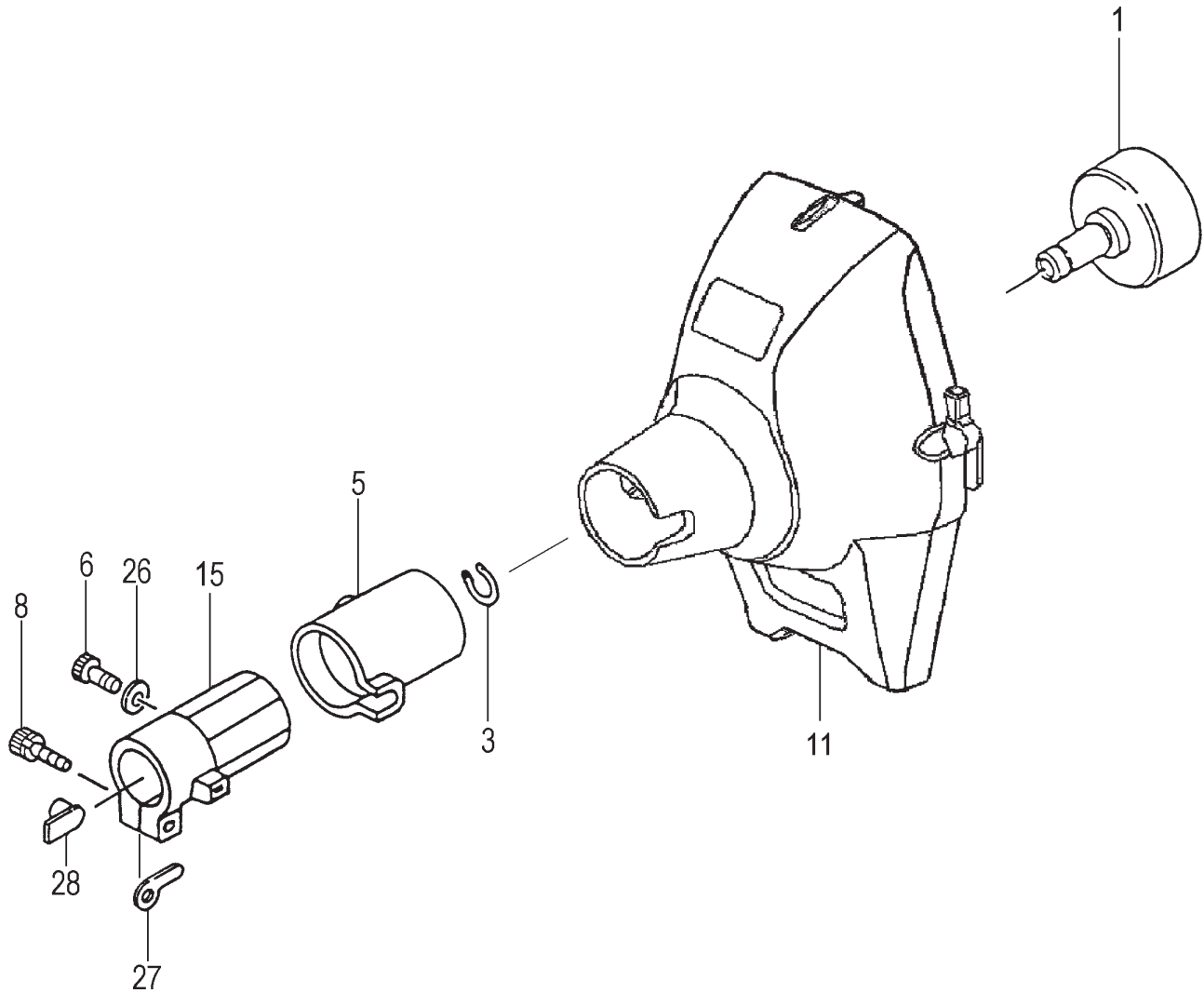




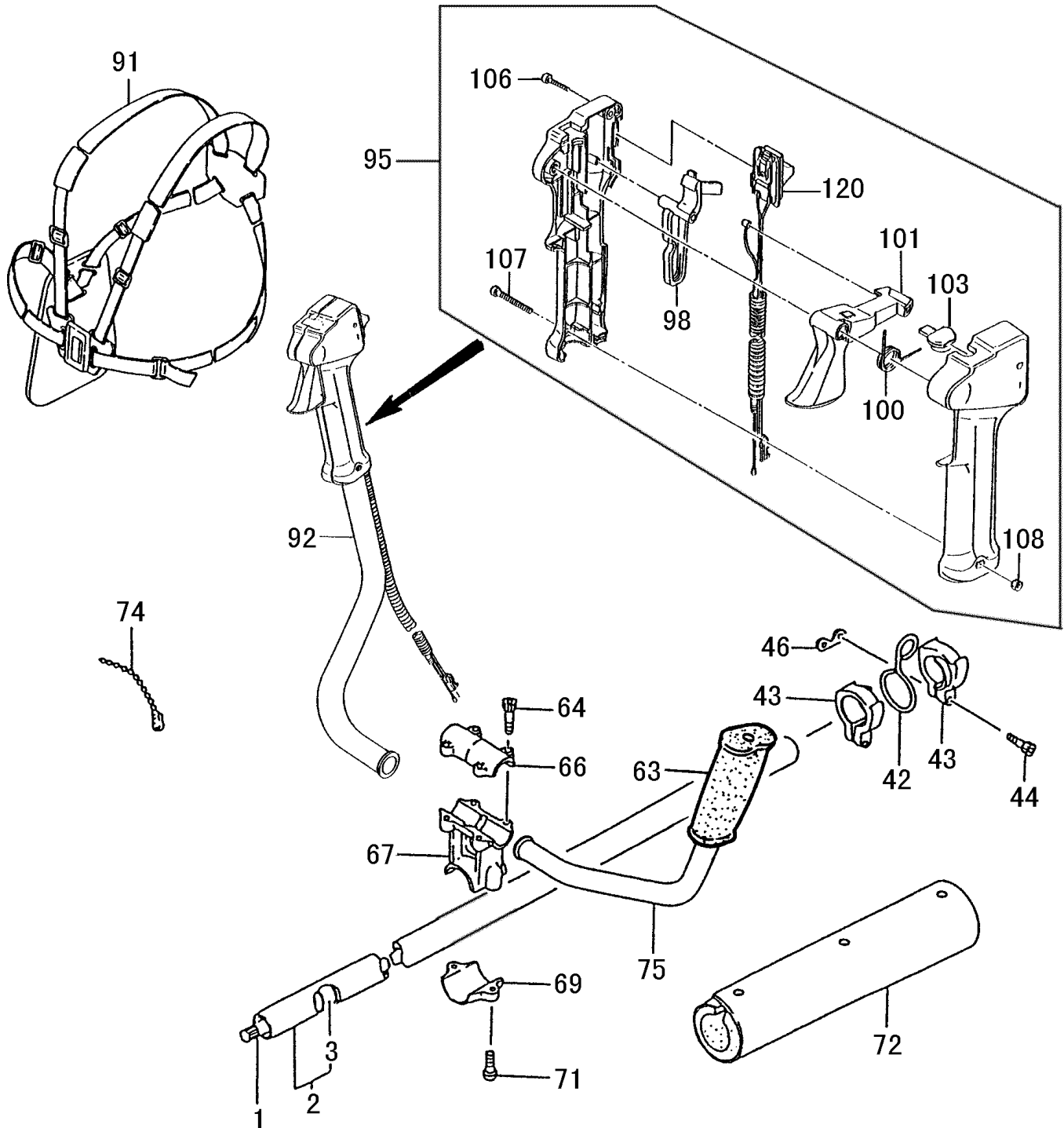
ITEM	PART NUMBER	DESCRIPTION	QTY	COMMENTS
5-0	7620304590	STARTER ASS'Y	1	
5-1	7720304580	BODY,STARTER	1	
5-2	7740304520	PULLEY,STARTER	1	
5-3	7790304520	SPRING,RECOIL	1	
5-4	7770304520	ARM,SWING	1	
5-5	8390304520	SCREW,SET	1	
5-6	7710304520	STAY,PULLEY	1	
5-7	7830304520	ROPE,STARTER	1	
5-8	7850304520	HANDLE,STARTER	1	



ITEM	PART NUMBER	DESCRIPTION	QTY	COMMENTS
	4550304590	CARBURETOR SET	1	
6-2	5752515380	BODY,PUMP	1	
6-3	4422515180	PUMP,PRIMING	1	
6-4	4762515120	COVER,DIAPHRAGM	1	
6-5	44725108200	BULB,PRIMING	1	
6-6	~ ~ ~	METERING DIAPHRAGM	1	~ Contained in Carb Repair Kit
6-7	~ ~ ~	GASKET,DIAPHRAGM	1	P/N 650-25124-900
6-8	~ ~ ~	DIAPHRAGM,PUMP	1	(not available individually)
6-9	~ ~ ~	GASKET,PUMP	1	
6-10	5992001W38	JET,MAIN LONG #38	1	
6-11	55025100200	O-RING	1	
6-12	48925100200	RING,STOP	1	
6-13	53925120200	SWIVEL	1	
6-15	51425100200	SCREW,THROTTLE SET	2	
6-16	54425164200	STAY,ADJUST,CABLE	1	
6-17	99101060013	NUT,6	1	
6-18	61425137200	ADJUSTER,CABLE	1	
6-19	4310634C200	GASKET,CLEANER	1	
6-20	5482515120	SCREW,SET	4	
6-21	5492516520	WASHER,THRUST	1	
6-201	57825007200	SCREEN,INLET	1	

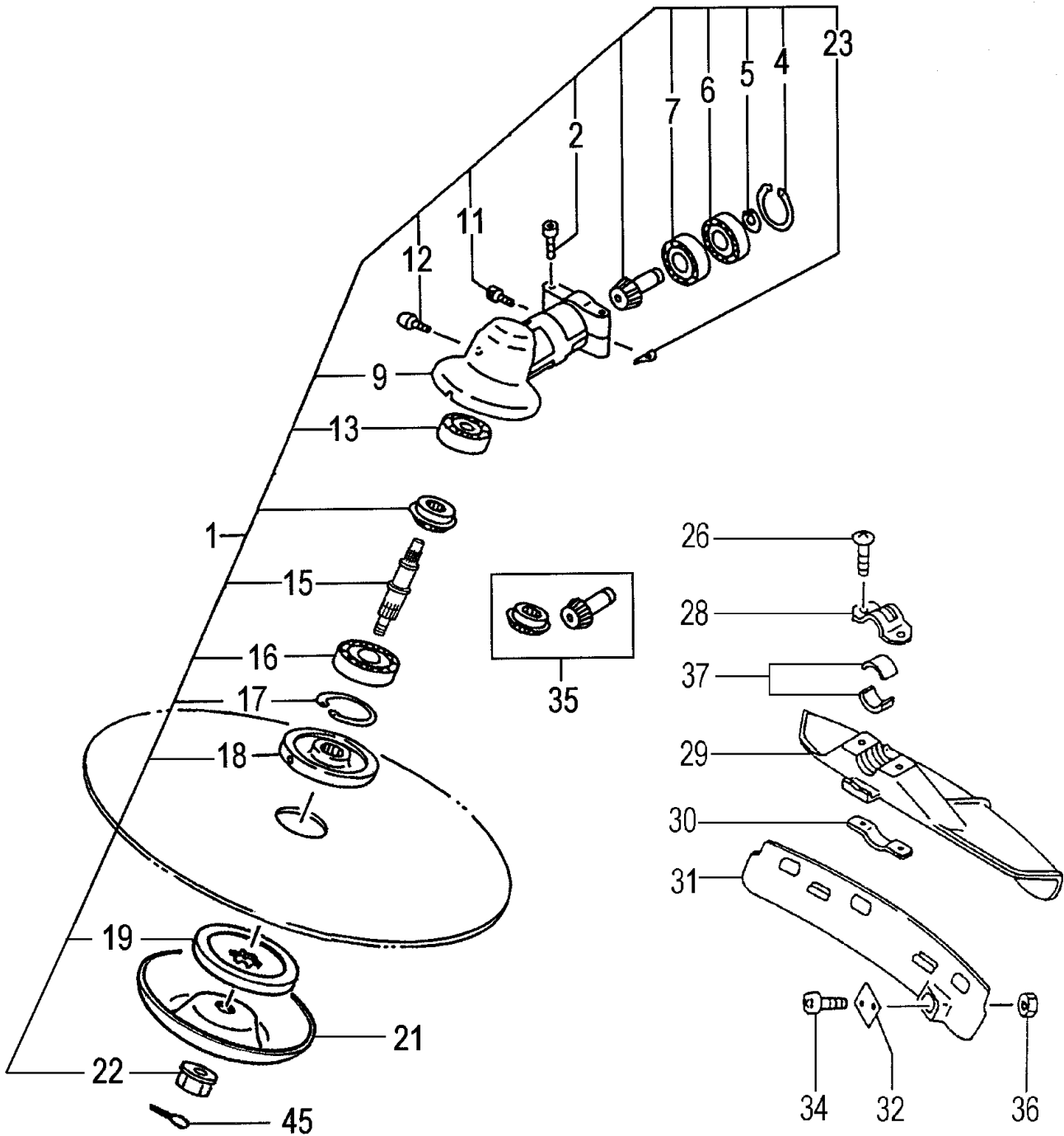


ITEM	PART NUMBER	DESCRIPTION	QTY	COMMENTS
7-1	2890707880	SHAFT,CLUTCH	1	Replace shaft and clutch drum as set
7-3	99350012002	RING,STOP,C-12 EX	1	
7-5	5990098021	CUSHION,RUBBER	1	
7-6	99051050163	BOLT,HEX,5X16	1	
7-8	99461050254	BOLT,HEX HOLE,5X25S	1	
7-11	1120304580	CASE,FAN	1	
7-15	3600099020	HOLDER,PIPE	1	
7-26	99201050061	WASHER,5	1	
7-27	3243735020	WASHER,GEAR CASE	1	
7-28	3610099020	FITTING,METAL	1	



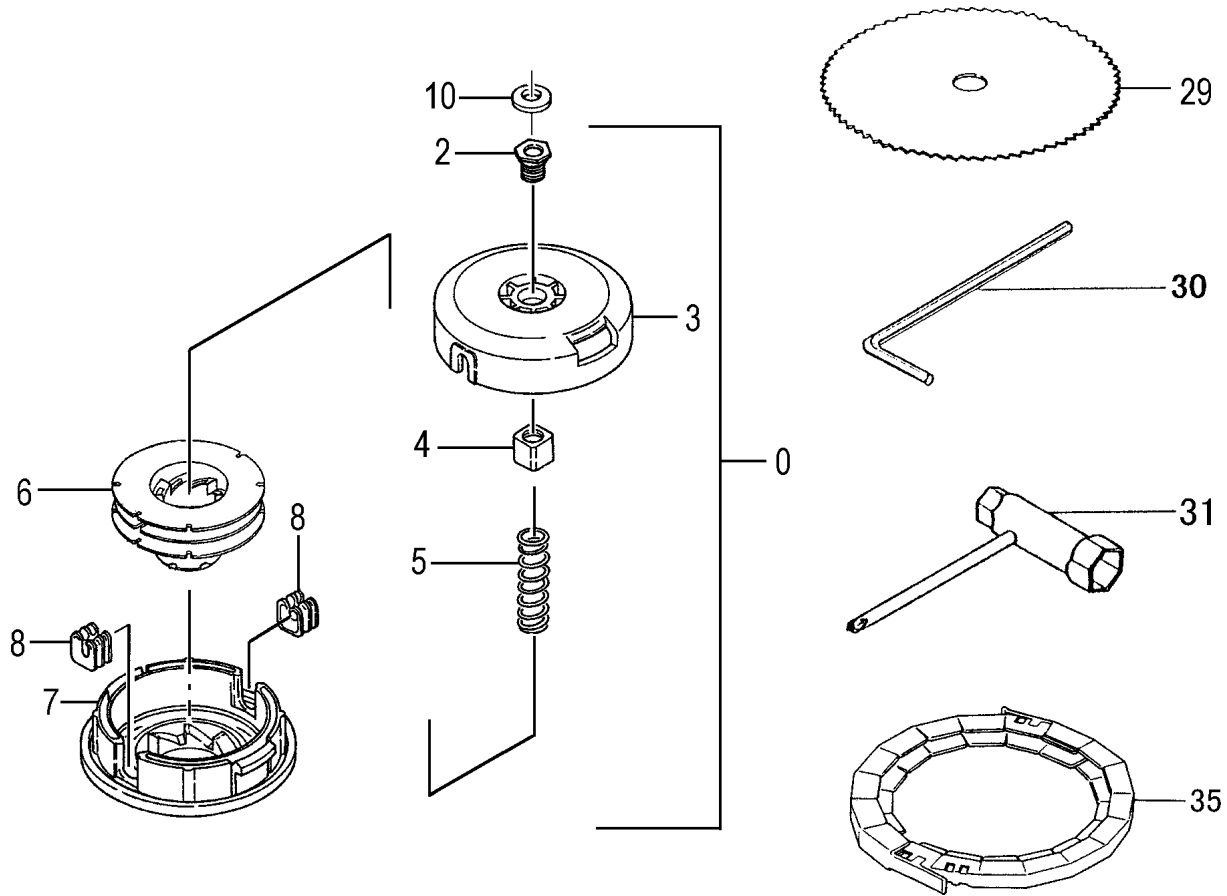
### HANDLE, SHAFT & THROTTLE (TBC-250PFD) • FIGURE 9

ITEM	PART NUMBER	DESCRIPTION	QTY	COMMENTS
9-1	3433817020	SHAFT,DRIVE	1	<i>Replace shaft and clutch drum as set</i>
9-2	3413762381	PIPE,DRIVE SHAFT	1	
9-3	34737601900	BUSHING,DRIVE SHAFT	5	
9-42	33537307200	METAL,LIFTING	1	
9-43	3343730421	COLLAR,LIFTING METAL	2	
9-44	99462050304	BOLT,HEX HOLE 5x30.P	2	
9-46	31537304200	NUT,SPECIAL	1	
9-63	1653759020	GRIP,HANDLE	1	
9-64	99461050254	BOLT,HEX HOLE,5X25S	4	
9-66	50637623200	BRACKET,HANDLE,A	1	
9-67	5073782220	BRACKET,HANDLE B	1	
9-69	5083840220	BRACKET,HANDLE C	1	
9-71	99481060254	SCREW,HEX HOLE 6X25	2	
9-72	3363341182	CUSHION	1	
9-74	4603311120	CLAMP,B	1	
9-75	5023741521	HANDLE,LEFT	1	
9-91	746291	SHOULDER HARNESS ASSY	1	
9-92	5013782220	HANDLE,RIGHT	1	
9-95	8703840190	LEVER,THROTTLE ASSY	1	
9-98	2533840020	LEVER,SAFETY	1	
9-100	8323840020	SPRING,RETURN	1	
9-101	8803840120	LEVER,THROTTLE	1	
9-103	3223840020	GROMMET	1	
9-106	9934604020	SCREW,4X20	2	
9-107	99431050303	SCREW 5X30 BLACK	1	
9-108	99101050043	NUT,5	1	
9-120	8853840180	WIRE,THROTTLE,W/SWITCH	1	



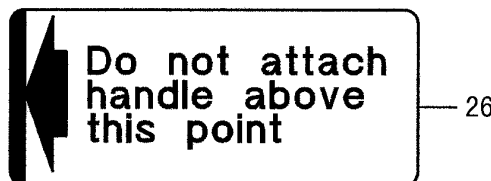
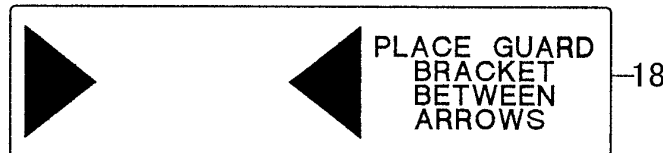
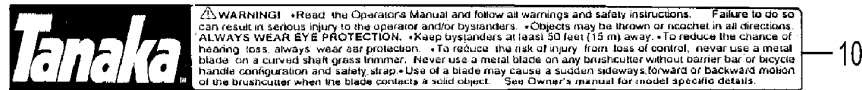
### GEAR CASE & SAFETY GUARD (TBC-250PFD) • FIGURE 11

ITEM	PART NUMBER	DESCRIPTION	QTY	COMMENTS
11-1	3003815090	CASE,GEAR ASS'Y	1	
11-2	99461050254	BOLT,HEX HOLE,5X25S	2	
11-4	99351022002	RING,STOP,C22,IN	1	
11-5	99357010002	RING,STOP,OUTER 10	1	
11-6	99961690002	BEARING,BALL,#6900Z	1	
11-7	99961690000	BEARING,BALL,#6900	1	
11-9	3003815020	CASE,GEAR	1	
11-11	99461050124	BOLT,HEX,5X12S	1	
11-12	3163815020	BOLT,FITTING,M8	1	
11-13	99961609000	BEARING,BALL,#609	1	
11-15	3043815020	SHAFT,GEAR	1	
11-16	99961620103	BEARING,BALL #6201D	1	
11-17	99351032002	RING,STOP,C-32 IN	1	
11-18	3103815020	HOLDER,CUTTER	1	
11-19	3113815020	CAP,CUTTER HOLDER	1	
11-21	3083815020	COVER,BOLT PROTECTOR	1	
11-22	3133815020	NUT,FIXING L.H. 10X1.25	1	
11-23	3243815020	WASHER,GEAR CASE	1	
11-26	99481060254	SCREW,HEX HOLE 6X25	2	
11-28	4423369921	BRACKET,SAFETY GUARD	1	
11-29	4413738020	GUARD,SAFETY	1	
11-30	4453738020	HOLDER,GUARD	1	
11-31	4473738020	EXTENSION,GUARD	1	
11-32	7973738021	LIMITER,LINE	1	
11-34	99414050121	SCREW,S,5X12	1	
11-35	3013815000	SET,GEAR PINION	1	
11-37	44437609200	SPACER,BRACKET	2	
11-45	3273718090	PIN,COTTER 2X20 (10 PK)	1	



ITEM	PART NUMBER	DESCRIPTION	QTY	COMMENTS
12-0	746451	HEAD,SEMI-AUTO,5"	1	TBC-250PF & TBC-250PFD
12-2	3563383B20	ADAPTER,10x1.25 LHF	1	
12-3	7863383020	BODY,CUTTING	1	
12-4	3153383020	NUT,SPECIAL	1	
12-5	7933383020	SPRING,REEL	1	
12-6	7873383020	REEL	1	
12-7	7893383020	CAP,BODY	1	
12-8	7883383020	EYELET	2	
12-10	99201120011	WASHER,12	1	
12-29	746104	BLADE,SAW,9X80	1	TBC-250PFD only
12-30	81320000200	WRENCH,HEX,4	1	
12-31	8262000080	SPANNER,COMBI,17X19	1	
12-35	6153722420	COVER,9-10"(SET OF 2)	2	TBC-250PFD only

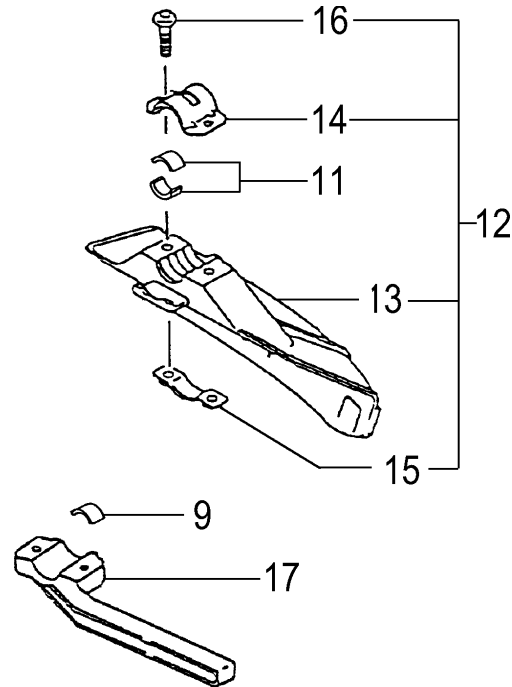
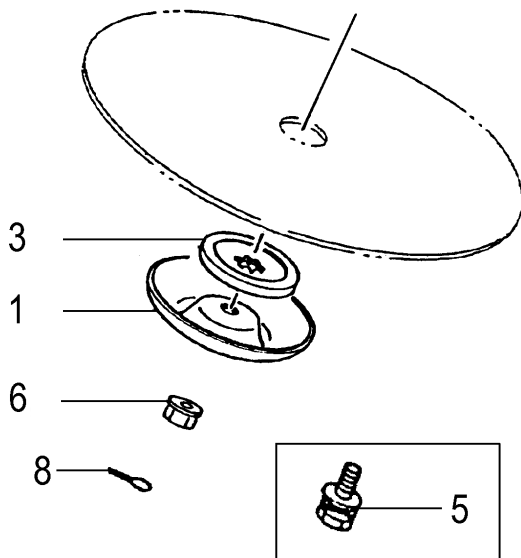




ITEM	PART NUMBER	DESCRIPTION	QTY	COMMENTS
13-1	9060304520	DECAL,TBC-250PF	1	
13-2	9064822020	DECAL,TBC-250PF	1	
13-4	9233370020	DECAL,LEVEL	1	
13-7	9293810020	DECAL,SYMBOL,PF	1	
13-10	9193782020	DECAL,CAUTION A	1	
13-18	9233728620	DECAL,LEVEL	1	
13-26	9233738F20	DECAL,LEVEL	1	
13-40	9064822120	DECAL,TBC-250PFD	1	



**WARNING!** Read the owners manual and follow all warnings and safety instructions. Failure to do so can result in serious injury to the operator and/or bystanders. Never attempt to mount a steel blade to a machine that is not specifically designed for that purpose. Never attempt to mount a steel blade without using all components of the blade attachment kit, including shoulder strap and barrier safety bar.



ITEM	PART NUMBER	DESCRIPTION	QTY	COMMENTS
1	30833410200	COVER,PROTECTION,B,8mm	1	8mm
1	3083786120	COVER,BOLT PROTECTOR,10mm	1	10mm
3	3113754720	CAP,CUTTER HOLDER,8mm	1	for use with 8x1.25 nut
3	3113815020	CAP,CUTTER HOLDER,10mm	1	for use with 10x1.25 nut
5	3123338620	BOLT,FLANGED,10x1.25,LH	1	10x1.25 bolt
6	3133754720	NUT,FIXING L.H. 8X1.25	1	8x1.25 nut
6	3133833220	NUT,FIXING L.H.,10X1.25	1	10x1.25 nut
8	3273718090	PIN,COTTER 2X20 (10 PACK)	1	
9	44437609200	SPACER,BRACKET	1	for use with barrier bar, 24mm shafts
11	44437609200	SPACER,BRACKET	2	
12	30060	KIT,BLADE GUARD	1	
13	4413738020	GUARD,SAFETY	1	
14	4423369921	BRACKET,SAFETY GUARD	1	
15	4453738020	HOLDER,GUIDE	1	
16	99481060254	SCREW,HEX HOLE 6X25	2	
17	5203339820	BAR,BARRIER 26mm	1	
18	746191	STRAP,SHOULDER,PSS-175	1	Includes mounting bracket/hardware