

Tanaka Illustrated Parts Manual

Model Number:

AST-210

AutoStart Trimmer

P/N 27124

Rev 000

Date 8-31-06



Supplier To The Outdoor Power Equipment Industry

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

WHILE QUANTITIES LAST!

AST-210

Auto-Start™ Grass Trimmer



Instant Starts with the Push of a Button!



New Low Profile Guard

Features / Benefits

- **Auto-Start™** electric starting system provides instant starts with the push of a button.
- **Re-designed cutting guard** provides a less restricted cutting view while conforming to ANSI standards.
- **Bearing supported, solid steel drive shaft** provides smooth and efficient power transfer from the engine to the cutting head.
- **“D” style handle** provides added comfort at any trimming angle.
- **Removable Battery** allows you to charge the battery anywhere at any time.
- **2 / 5 Warranty Coverage** provides **Two-Year** Coverage for Homeowners and **Five Years** on the Electronic Ignition Module.

Specifications	
Engine Displacement cc (cu. in.)	20 (1.2)
Power (h.p.)	1.0
Cylinder	Chrome Plated, Stress Relieved
Carburetion	Diaphragm w/Primer & Fuel Injection
Ignition System	Transistorized Electronic
Fuel Tank Capacity / fl. oz. (cc)	11.2 (330)
Anti-Vibration System	Rubber Engine Mount
Clutch System	Heavy-Duty Centrifugal
Shaft Support	5 Shaft Bearings
Drive System	7mm Solid Steel
Standard Cutting Head	5" Semi-Automatic Feed (.095" Line)
Dry Weight / lbs. (kg) w/head	12.8 (5.8)

Optional Accessories:

ORDER #	DESCRIPTION
746751	BRAIN™ automatic feed head
746280	Aluminum fixed line head
746551	4" manual feed 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:

Grass Trimmer Attachments

TPS-200

Pruning Saw Attachment

The versatile TPS-200 Pruning Saw attachment easily converts Tanaka straight shaft grass trimmers / brushcutters into a powerful pruning saw.



TPS-200 Features:

- 24" Shaft Provides a 98" Overall Length when mounted
- 10" Oregon® Bar & Chain
- Easy-Mount Coupler

To be used with the following Tanaka models:

- AST-7000 / 7000S / 210
- TBC-4500 / 4501 / 2211
- TBC-220 / 240
- TBC-250 / 2501 / 2510 / 265
- TBC-270PF/PN



TPS-EXT Pruning Saw **Extension** (Part # 748511) Add an **extra two feet of reach** with this pruning saw extension that will fit on both the TPS-2510 and TPS-270PN Pruning Saws. In addition, it can be added to Tanaka straight shaft grass trimmers that utilize the TPS-200 Pole Saw Attachment.

TPH-200

Pole Hedge Trimmer Attachment

For added reach and maneuverability, the TPH-200 Pole Hedge Trimmer attachment can be added to several Tanaka straight shaft grass trimmers / brushcutters.



TPH-200 Features:

- 22" Double Sided Cutting Blades
- Articulating / Pivoting Cutting Angle up to 130 degrees.

To be used with the following Tanaka models:

- AST-7000 / 7000S / 210
- TBC-4500 / 4501 / 2211
- TBC-220 / 240
- TBC-250 / 2501 / 2510 / 265
- TBC-270PF/PN

TMC-200

Mini-Cultivator

This simple, easy to install attachment is ideal for quick garden / flower bed weeding and cultivation. For maximum depth, the TMC-200 can dig up to 4 inches into the ground and 6" wide.

With a 49:1 reduction ratio, this heavy duty gear box gives you more tilling power.



To be used with the following Tanaka models:

- AST-7000 / 7000S / 210
- TBC-4500 / 4501 / 2211
- TBC-220 / 240
- TBC-250 / 2501 / 2510 / 265
- TBC-270PF/PN
- TBC-300 / 3010
- TBC-420PF

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For more information, contact:

FIG. 1 ENGINE

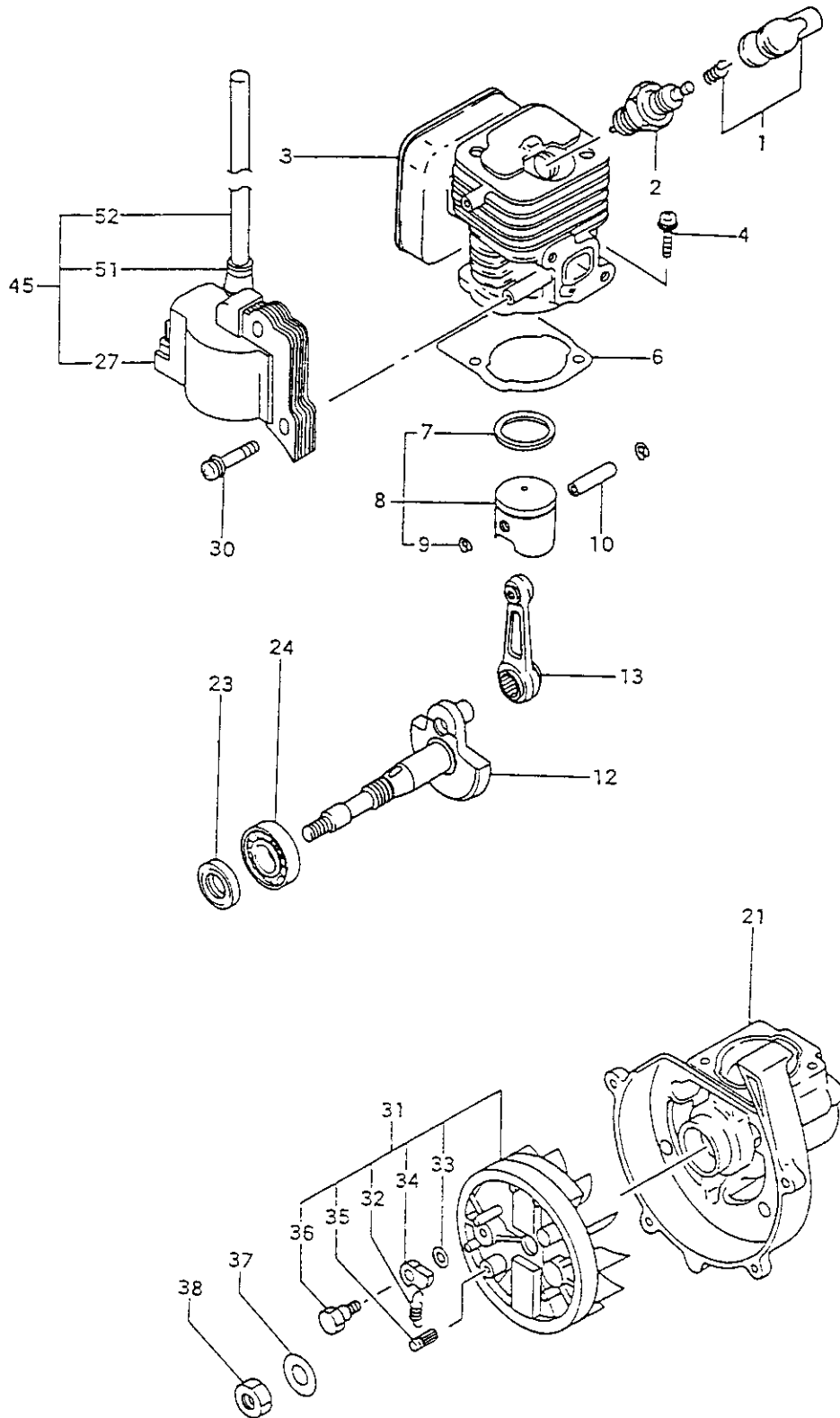


FIGURE 1

AST-210 PARTS LISTING

REF.	PART NO.	PART DESCRIPTION	Q	C	S	SERIAL NO	REMARKS
1	157-01570-900	CAP, SPARK PLUG, ASS'Y	1		C		
2	018-11660-21	PLUG, SPARK	1		B		
3	001-0006D-90	CYLINDER, AST-210	1		B		Includes gasket
4	994-16050-221	SCREW, 5X22/WS	2		C		
6	017-00025-200	GASKET, CYLINDER	1		A		
7	041-00000-210	RING, PISTON, LOWER	1		A		
8	030-00045-90	PISTON, AST-210	1		B		Includes ring & circlips
9	039-06100-200	CIRCLIP, PISTON PIN	2		A		
10	037-06097-20	PIN, PISTON	1		B		
12	046-00025-80	CRANKSHAFT	1		D		
13	061-00025-800	ROD, CONNECTING	1		C		
21	077-00025-21	CRANKCASE	1		D		
23	999-66152-511	SEAL, OIL, #VE15X25X7	1		A		
24	999-61600-200	BEARING, BALL, #6002	1		B		
27	167-20526-80	COIL, IGNITION	1		C		Without H.T. lead
30	994-16040-201	SCREW 4x20 WS	2		D		
31	155-20526-90	ROTOR, MAGNETO	1		D		Includes pawls & springs
32	790-0006A-20	PAWL, STARTER SPRING	2		C		
33	871-32600-200	WASHER, SPECIAL, B	2		D		
34	788-0006A-20	PAWL, STARTER	2		C		
35	792-0006A-20	PIN, STARTER PAWL	2		C		
36	793-0006A-20	BOLT, STEP	2		C		
37	992-00120-011	WASHER, 12	1		D		
38	991-11120-011	NUT, 12	1		A		
45	167-20526-90	COIL, IGNITION ASSY	1		D		Complete
51	560-20517-200	CAP, RUBBER	1		C		
52	264-20526-20	CORD, HGIIH TENSION 180L	1		C		

* Indicates the part is included in a kit or assembly and is not available individually. Q=Quan. used
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E=N.L.A. F=Superseded or replaced by a new part

FIG. 2 ENGINE COMPONENTS

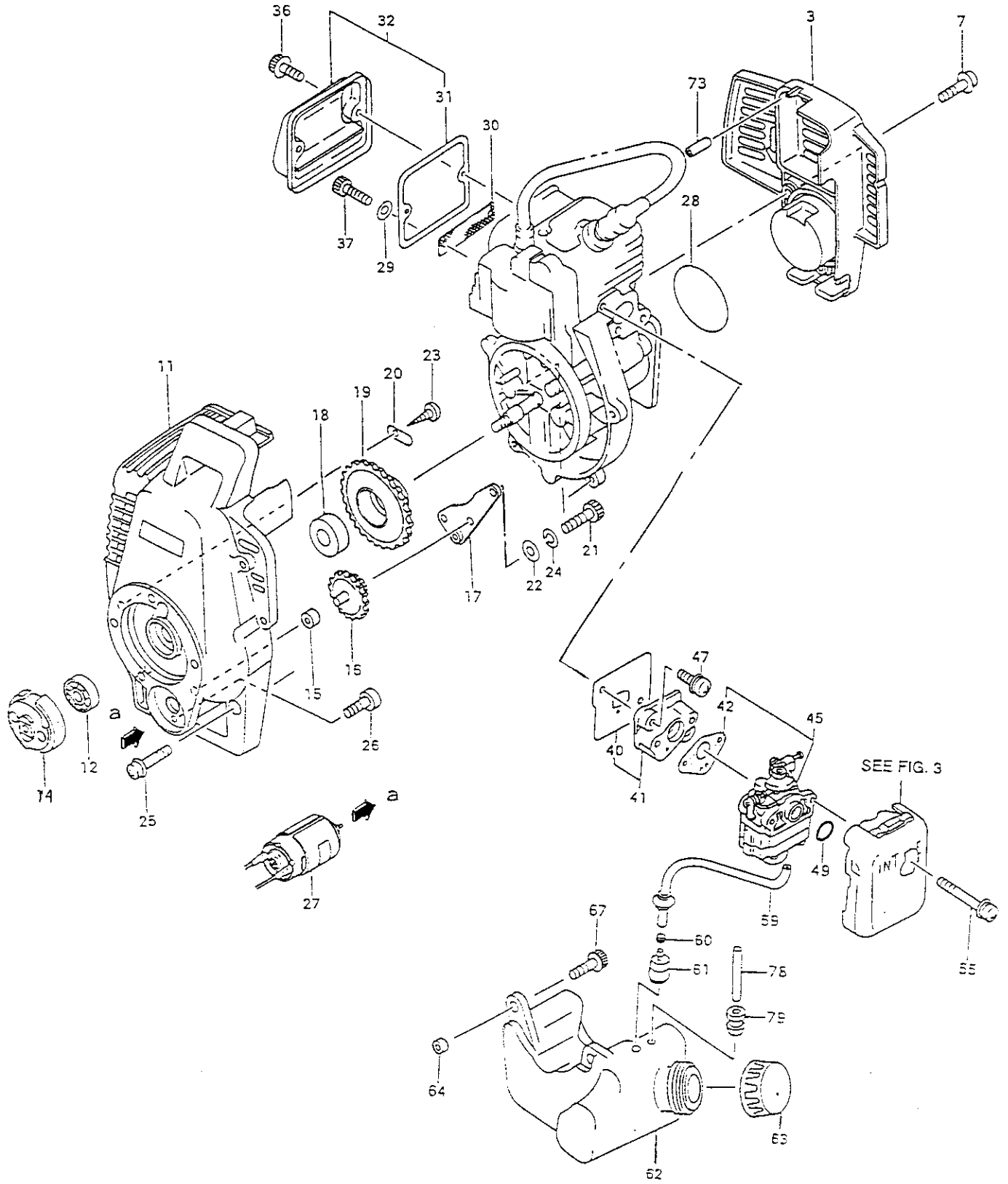


FIGURE 2

AST-210 PARTS LISTING

REF.	PART NO.	PART DESCRIPTION	Q	C	S	SERIAL NO	REMARKS
3	752-0006A-21	PROTECTOR,MUFFLER B	1		B		
7	994-15050-161	SCREW,5X16/PS	3		C		
11	112-0006D-81	CASE,FAN ORANGE	1		B		
12	999-61600-001	BEARING,BALL,#6000ZZ	1		B		
14	277-0631Q-900	CLUTCH,ASS'Y	1		C		
15	328-0006B-20	BUSHING	1		D		
16	285-0006A-80	GEAR 2.3	1		B		
17	670-37750-20	RECEIVER,SHAFT	1		C		
18	791-0006A-20	BUSHING,STARTER	1		C		
19	309-0006A-20	GEAR 4	1		C		
20	283-0006A-20	GEAR HOLDER	2		C		
21	990-51040-153	BOLT,HEX HOLE 4x15	2		C		
22	992-01040-061	WASHER 4	2		D		
23	990-74045-124	SCREW,TAPPING,4.5X12	2		D		
24	992-10040-062	WASHER,SPRING 4	2		C		
25	994-16050-202	SCREW,5X20/WS	4		D		
26	990-54030-085	SCREW,HEX,3X8	2		D		
27	306-0006A-80	MOTOR,WITH GEAR 1	1		C		
28	999-67048-012	O-RING,S-48	1		C		
29	992-00040-011	WASHER,4	2		C		
30	732-00025-200	ARRESTER,SPARK	1		C		
31	739-00025-201	GASKET,MUFFLER	1		C		
32	717-00025-90	MUFFLER BODY, B	1		D		
36	994-60050-104	BOLT,HEX 5x10W	1		D		
37	990-51040-083	BOLT,HEX.HOLE 4X8	2		D		
40	403-0631A-202	GASKET,INLET MANIFOLD	1		A		
41	404-0099F-90	INSULATOR,CARBURETOR	1		C		
42	402-0602K-21	GASKET,CARBURETOR	1		C		
45	455-00045-90	CARBURETOR AST-210	1		B		
47	994-16050-221	SCREW,5X22/WS	2		C		
49	999-67015-000	O-RING,P15	1		C		
55	994-16050-601	SCREW 5x60WS	2		D		
59	223-06500-90	PIPE,FUEL,ASS'Y	1		C		
60	680-00731-201	CLIP 6.3	V		B		
61	675-04042-80	FILTER,FUEL	V		A		
62	591-0006D-20	TANK,FUEL	V		B		
63	595-0654A-90	CAP,TANK,BLACK	1		A		
64	659-00801-200	COLLAR,TANK HOLDING METAL	2		C		
67	994-63050-185	BOLT,HEX 5X18PS	1		D		

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FIGURE 2 cont.

AST-210 PARTS LISTING

REF.	PART NO.	PART DESCRIPTION	Q	C	S	SERIAL NO.	REMARKS
73	700-15007-01	PIPE,RUBBER	1		B		
78	700-03005-065	PIPE,FUEL,3X5X65	1		D		
79	534-32710-200	GROMMET, FUEL PIPE	1		B		

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FIG.3 AIR CLEANER

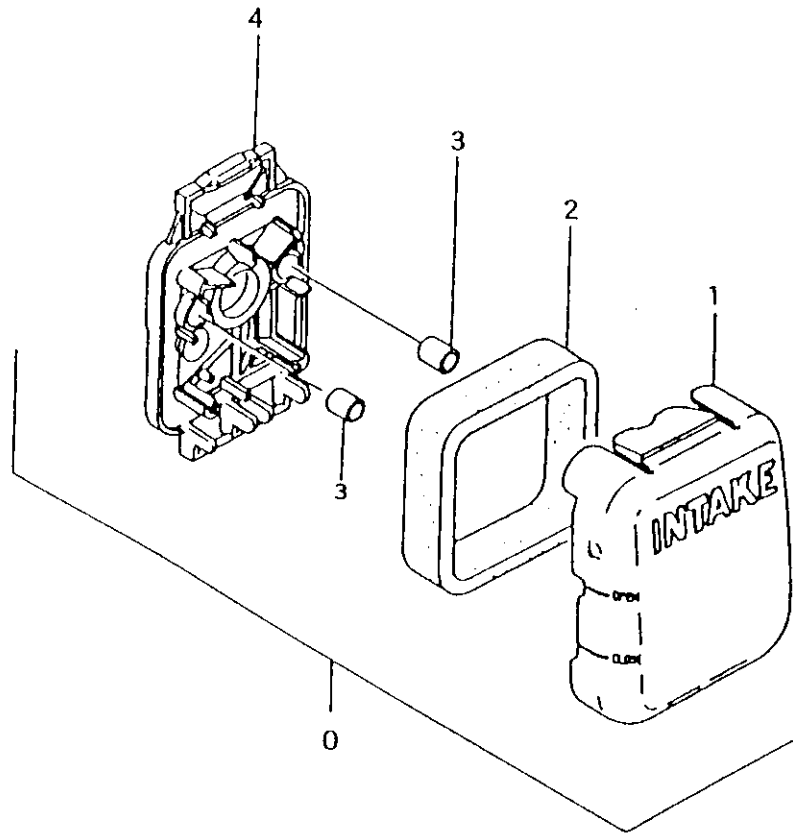


FIGURE 3

AST-210 PARTS LISTING

REF.	PART NO.	PART DESCRIPTION	Q	C	S	SERIAL NO.	REMARKS
0	410-0006D-90	CLEANER,AIR	1		B		
1	424-0006D-20	CAP,AIR CLEANER	1		B		
2	446-00025-200	ELEMENT,CLEANER	1		A		
3	470-00025-200	COLLAR	2		C		
4	423-0006A-20	BODY,AIR CLEANER	1		C		

FIG. 4 CARBURETOR

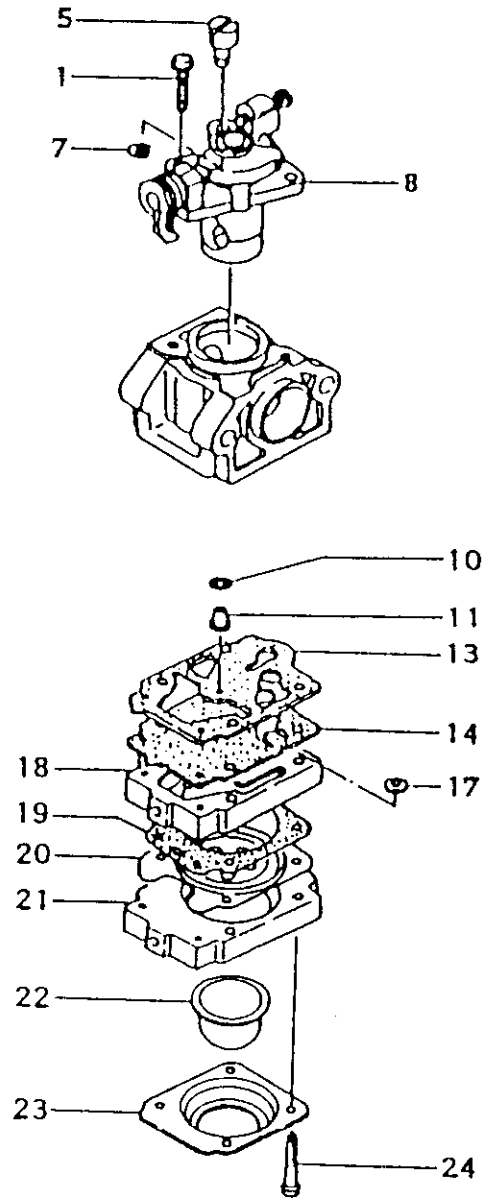


FIGURE 4

AST-210 PARTS LISTING

REF.	PART NO.	PART DESCRIPTION	Q	C	S	SERIAL NO.	REMARKS
0	455-00045-90	CARBURETOR,ASS'Y	1		B	~S096459	* Contained in Carb. Repair Kit 650-25140-900 (Not available individually)
0	455-0006E-90	CARBURETOR,ASS'Y	1		B	S096460~	
1	548-25140-200	SCREW,THROTTLE SET	2		A		
5	539-25120-200	SWIVEL	1		C		
7	489-25100-200	RING,STOP	1		C		
8	488-25158-80	VALVE,THROTTLE	1		C		
10	----	*O-RING	1		B		
11	599-2000W-370	JET,MAIN,#37	1		C	~S096459	
11	599-2000W-38	JET,MAIN # 38	1		C	S096460~	
13	----	*GASKET,PUMP	1		C		
14	----	*DIAPHRAGM,PUMP	1		C		
17	----	*SCREEN,INLET	1		C		
18	575-25153-80	BODY,PUMP	1		D		
19	----	*GASKET,DIAPHRAGM	1		C		
20	----	*DIAPHRAGM,METERING	1		C		
21	442-25151-80	PUMP,PRIMING	1		D		
22	447-25108-200	BULB,PRIMING	1		D		
23	476-25151-20	COVER,DIAPHRAGM	1		D		
24	548-25151-20	SCREW,SET	4		D		

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FIG. 5 CLUTCH CASE & WIRES

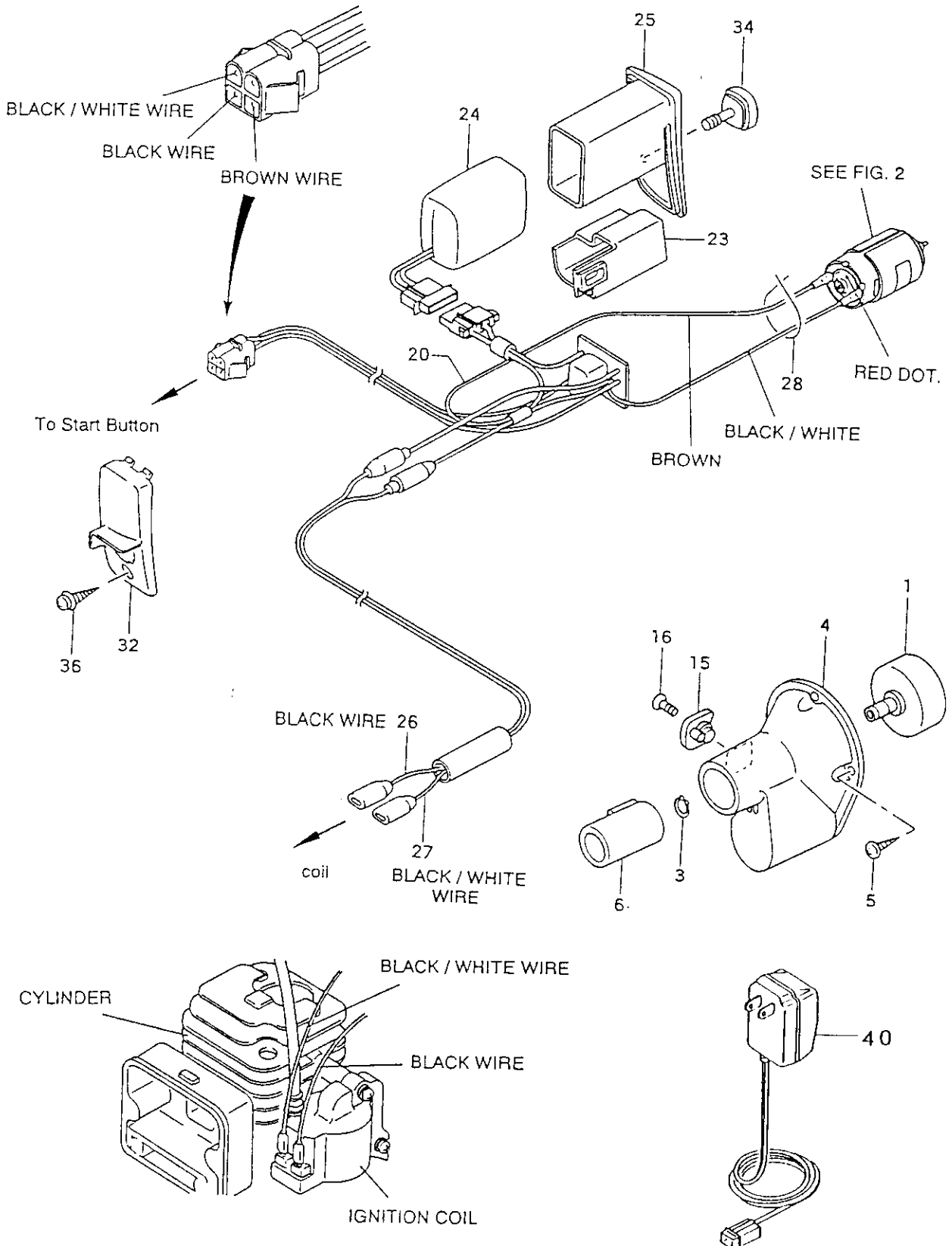


FIGURE 5

AST-210 PARTS LISTING

REF.	PART NO.	PART DESCRIPTION	Q	C	S	SERIAL NO	REMARKS
1	289-0006A-80	SHAFT,CLUTCH	1		B		
3	993-50010-002	RING,STOP,C-10 EX	1		C		
4	331-0006D-80	CASE,CLUTCH	1		D		
5	990-73050-184	SCREW,TAPPING,5X18	4		D		
6	599-0654C-21	CUSHION,ANTI-VIBE	1		A		
15	538-06540-21	LOCATOR,CUSHION RUBBER	1		C		
16	990-51050-153	BOLT,HEX.HOLE,5X15	1		C		
20	655-37754-80	HARNESS,WIRE	1		D		
23	599-0006A-20	CUSHION,RUBBER	1		D		
24	BP-210	BATTERY,ASS'Y	1		C		
25	985-0006A-22	CASE,BATTERY	1		D		
26	173-0006A-80	CORD,PRIMARY B260M	1		D		
27	274-0006A-80	CORD,GROUND W/B260M	1		D		
28	266-37600-200	CLAMP,WIRE	1		D		
32	136-0006D-20	COVER,FANCASE	1		D		
34	450-0006A-81	BOLT,COVER FIXING	1		D		
36	990-73050-184	SCREW,TAPPING,5X18	1		D		
40	BC-210	CHARGER,BATTERY AST-210	1		B		

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FIG. 6 HANDLE

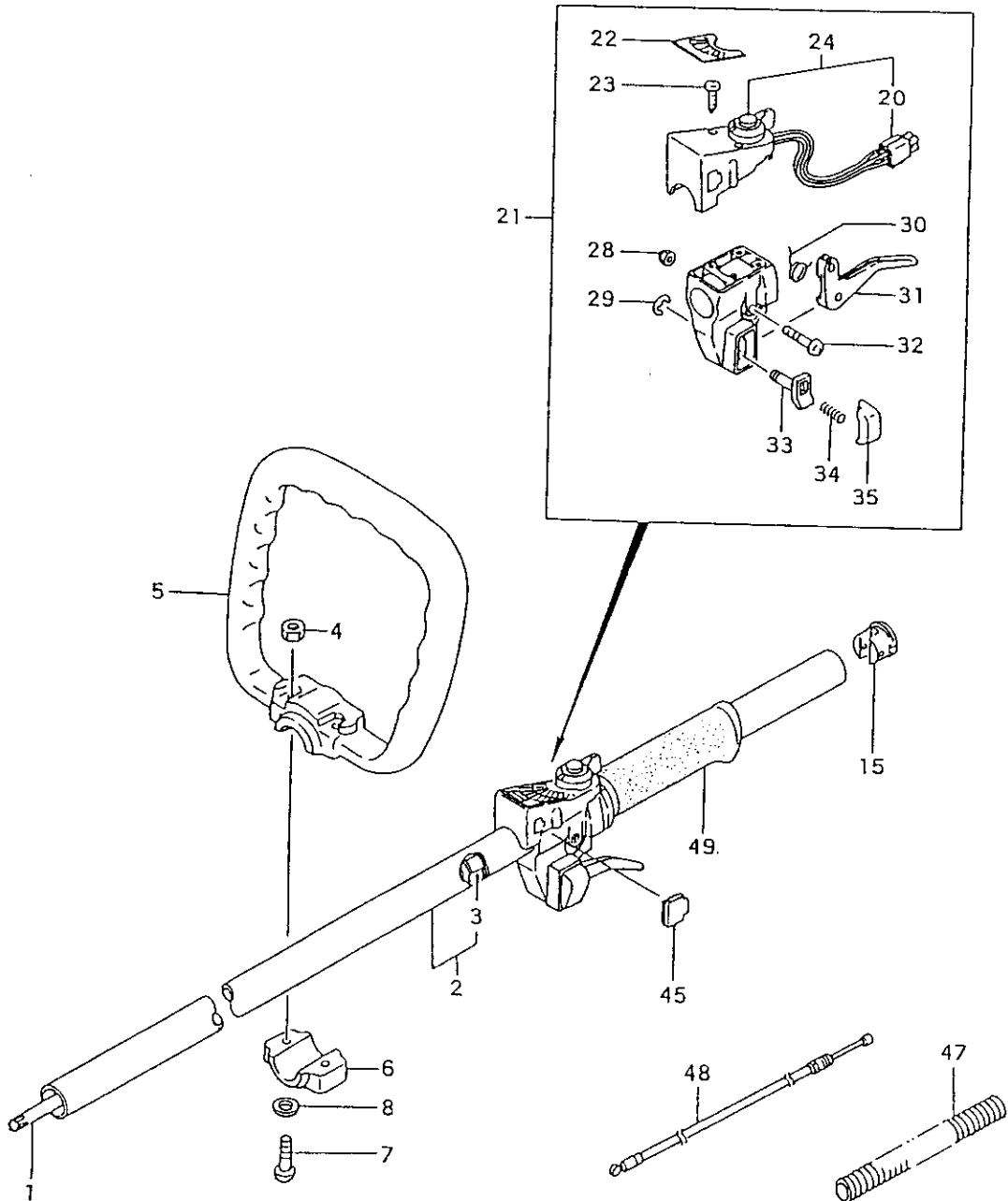


FIGURE 6

AST-210 PARTS LISTING

REF.	PART NO.	PART DESCRIPTION	Q	C	S	SERIAL NO	REMARKS
1	343-37617-200	SHAFT.DRIVE 1491mm	1		C		
2	341-33950-80	PIPE,DRIVE SHAFT	1		C		
3	347-37300-90	BUSHING ASSY	5		D		
4	991-01060-011	NUT,6	2		A		
5	500-33316-20	HANDLE	1		D		
6	506-33316-200	BRACKET,HANDLE A	1		D		
7	990-23060-401	BOLT,P,6X40	2		D		
8	992-01060-011	WASHER,6	2		A		
15	346-33950-20	HOLDER,PIPE	1		D		
20	656-37600-200	CONNECTOR,MALE,4P	1		D		
21	870-37754-90	LEVER,THROTTLE ASSY	1		B		
22	169-37602-200	DECAL, OFF/ON	1		D		
23	993-42030-251	SCREW,TAP	2		D		
24	156-37754-90	SWITCH,STOP	1		C		
28	991-86050-000	NUT,LOCK,5	1		D		
29	993-55060-001	RING,STOP,6	1		D		
30	832-37101-200	SPRING,RETURN	1		C		
31	880-37101-200	LEVER,THROTTLE	1		B		
32	994-31050-251	SCREW,S,.5X25	1		C		
33	853-37101-200	SHAFT,LOCK BUTTON	1		D		
34	958-37101-200	SPRING,LOCK,BUTTON	1		D		
35	956-37101-200	BUTTON,LOCK	1		D		
45	204-0006D-20	CORD,BLIND GROMMET	1		D		
47	164-07014-00	TUBE, PROTECTION 140L	1		D		
48	885-00032-80	WIRE,THROTTLE	1		B		
49	504-37300-200	GRIP,SHAFT	1		D		

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FIG. 7 GEAR CASE

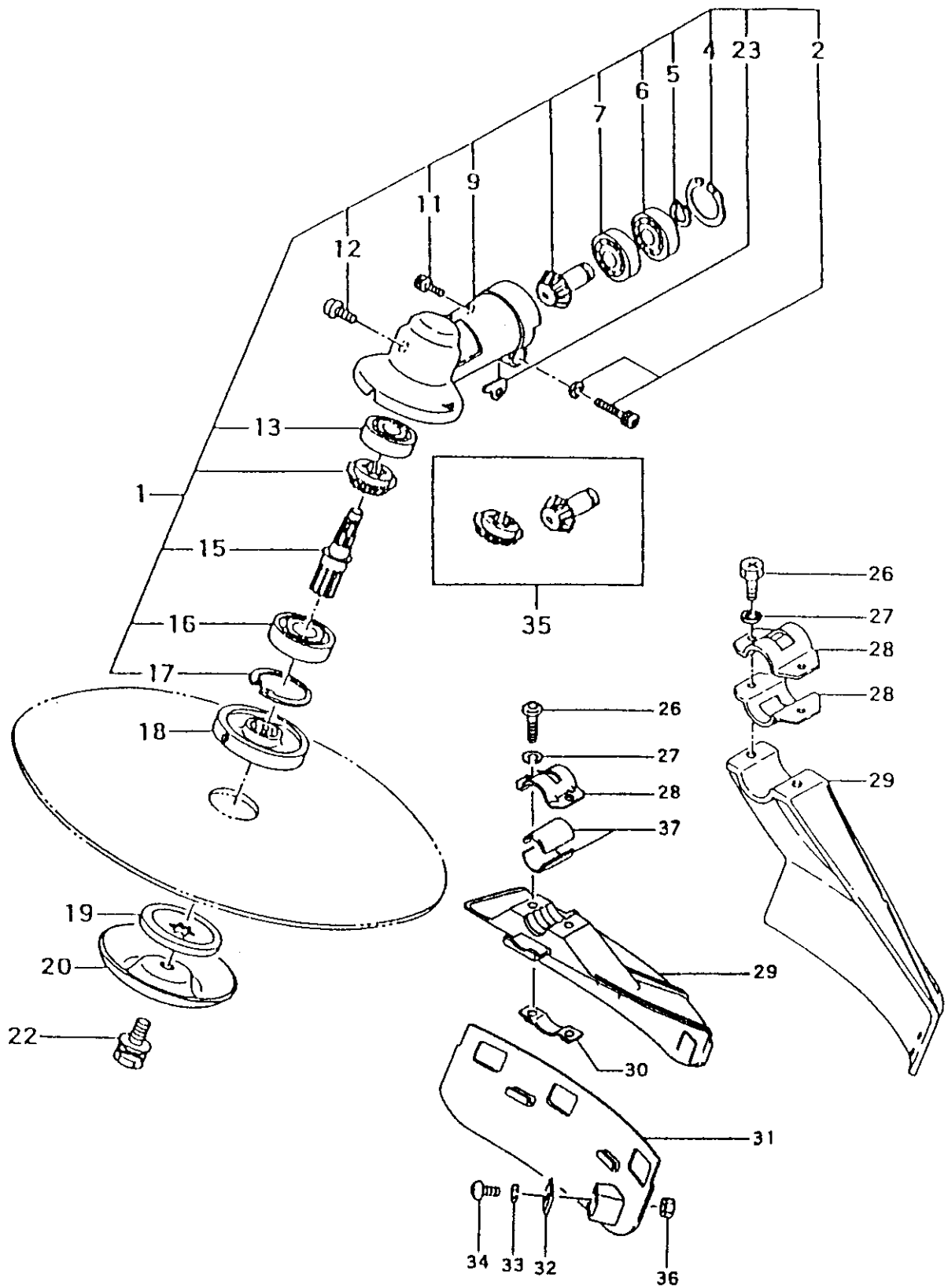


FIGURE 7

AST-210 PARTS LISTING

REF.	PART NO.	PART DESCRIPTION	Q	C	S	SERIAL NO.	REMARKS
1	300-37417-91	CASE,GEAR ASS'Y	1		D		
2	994-61050-254	BOLT,HEX HOLE,5X25S	1		C		
4	993-53022-002	RING,STOP,R22 IN	1		C		
5	993-50010-002	RING,STOP,C-10 EX	1		C		
6	999-61690-001	BEARING,BALL,#6900ZZ	1		B		
7	999-61690-000	BEARING,BALL,#6900	1		B		
9	300-37623-20	CASE,GEAR	1		D		
11	990-51050-103	BOLT,HEX.HOLE,5X10	1		C		
12	994-23080-100	BOLT,8X10	1		D		
13	999-61626-000	BEARING,BALL,#626	1		B		
15	304-37307-200	SHAFT,GEAR	1		B		
16	999-61600-104	BEARING,BALL,#6001DD	1		B		
17	993-51028-002	RING,STOP,IN,C-28	1		C		
18	310-37623-202	HOLDER,CUTTER	1		C		
19	311-37300-20	CAP,CUTTER HOLDER	1		A		
22	312-33386-20	BOLT, FIXING, L.H.	1		C		
23	324-37350-20	WASHER,GEAR CASE	1		D		
26	990-23060-161	BOLT,6X16 PLUS	2		C	~S257150	
26	990-53060-253	BOLT,HEX,6X25	2		C	S257151~	
27	992-10060-012	WASHER,S,6	2		A	~S257150	
27	992-10060-062	WASHER,S,6	2		A	S257151~	
28	442-37417-20	BRACKET,SAFETY GUARD	2		C	~S257150	
28	442-33699-20	BRACKET, SAFETY GUARD	1		C		
29	441-33905-800	GUARD,SAFETY	1		D	~S257150	
29	441-37380-20	GUARD, SAFETY	1		B	S257151~	ANSI
30	445-37380-20	HOLDER, GUARD	1		C	S257151~	
31	447-37380-20	EXTENSION, GUARD	1		C		
32	797-37380-21	BLADE, LINE LIMITER	1		C		
33	307-37307-20	WASHER, SPECIAL	1		B		
34	994-14050-121	SCREW,S,5X12	1		C		
35	301-37300-01	SET,GEAR/PINION	1		A		
36	991-01050-011	NUT,5	1		D		
37	444-37609-200	SPACER,BRACKET	2		D		

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FIG. 8 TOOLS & NYLON HEAD

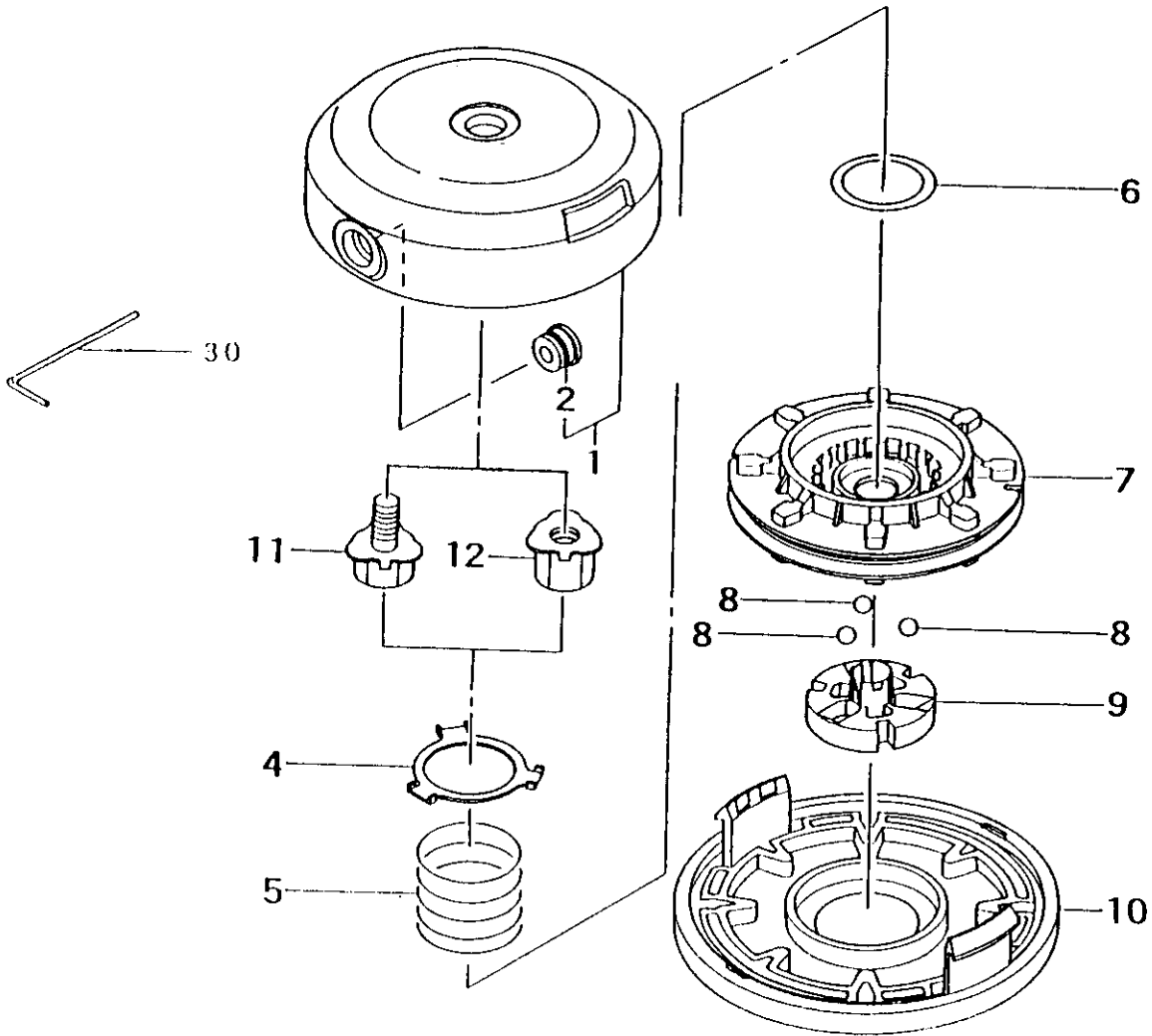


FIGURE 8

AST-210 PARTS LISTING

REF.	PART NO.	PART DESCRIPTION	Q	C	S	SERIAL NO.	REMARKS
0	783-33810-90	HEAD,AUTO,(TH-96)	1		B	~S257150	
0	783-33812-90	HEAD,AUTO,(TH-97B)	1		B	S257151~	
1	786-33810-90	BODY,CUTTING	1		B		
2	788-33071-20	EYELET	1		A		
3	760-33810-20	WASHER,MOUNTING	1		C		
4	785-33810-20	BASE,ADJUSTMENT	1		B		
5	793-33810-21	SPRING,REEL,BLACK	1		A		
6	792-33810-20	WASHER,ADJUSTMENT	1		A		
7	787-33810-20	REEL	1		D	~S257150	
7	787-33821-20	REEL,TH-97	1		D	S257151~	Can be used in TH-96 head
8	673-35600-20	BALL,STEEL	3		B		
9	790-33810-20	SLIDER,REEL	1		B		
10	789-33810-20	CAP,BODY	1		B		
11	314-33812-80	BOLT, MOUNTING	1		C	S257151~	Can be used in TH-96 head
30	813-20000-200	WRENCH,HEX,4	1		D		

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FIG. 9 DECALS

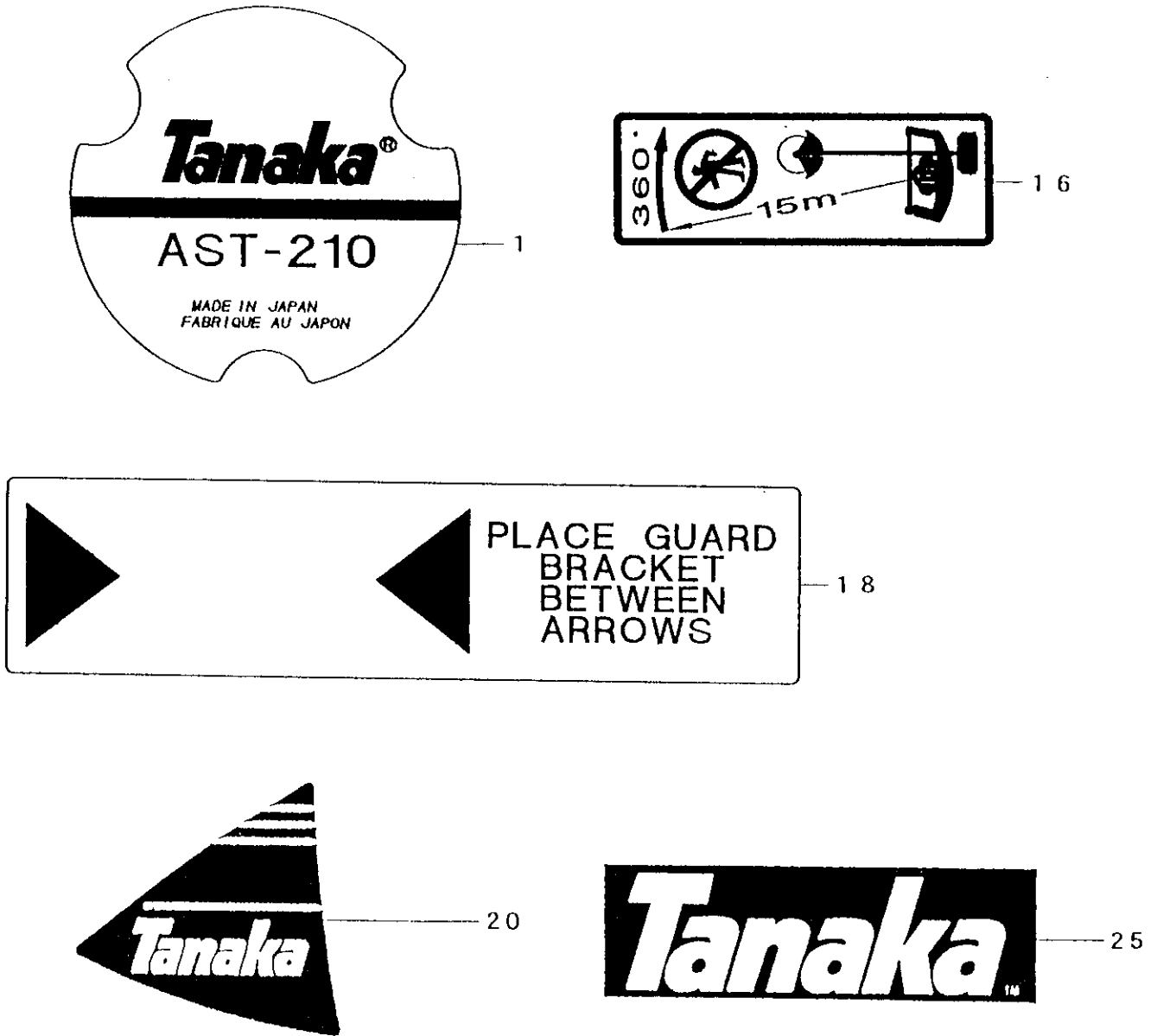


FIGURE 9

AST-210 PARTS LISTING

REF.	PART NO.	PART DESCRIPTION	Q	C	S	SERIAL NO.	REMARKS
1	906-0006D-20	DECAL,AST-210	1		D		
16	919-37286-20	DECAL,CAUTION	1		D		
18	923-37286-20	DECAL,LEVEL MARK	1		D		
20	933-37301-200	DECAL,SYMBOL	1		D		
25	915-05015-200	DECAL,SYMBOL	1		D		

Date: September 2000

Model & Serial: AST-210, TBC-2211 (1)
TBC-4001, TBC-2251 (2)

Reason: Some units experienced difficulty in properly feeding line. The spring within the head has been changed to ensure proper feeding.

Part Number Changes:

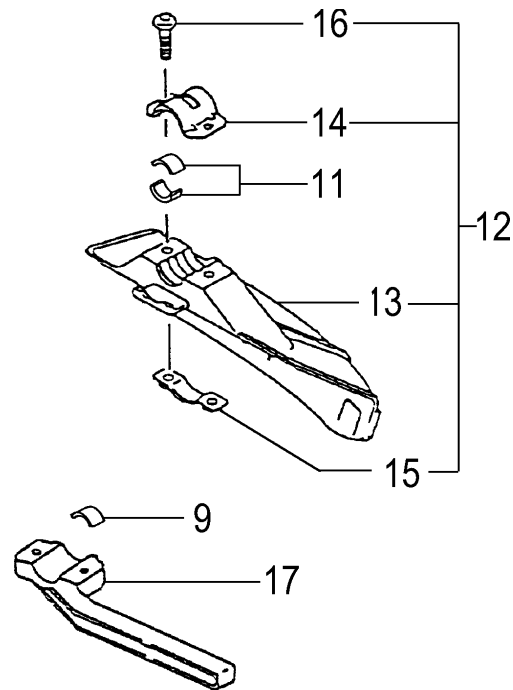
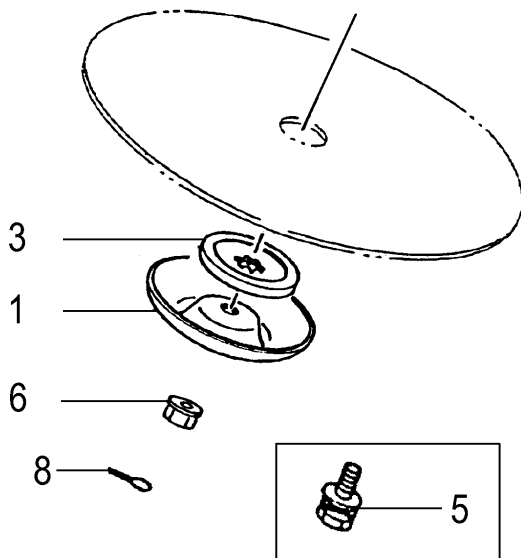
Old Part #	New Part #	Description	Remarks
783-33815-90	783-33817-90	Brain Head (1)	Marking on body changed from NB to NBY
793-33810-21	793-33810-22	Spring (1)	Color has been changed from black to black & yellow
783-33822-90	783-33823-90	Brain Head (2)	Marking on body changed from RB to RYB
793-33820-20	793-33820-21	Spring (2)	Color has been changed from silver to silver & yellow

Tanaka is marketed exclusively by:





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