

Operating and Service Manual



Portable Gas Drill w/Reverse

(Serial Number UD-100-00 and Higher)

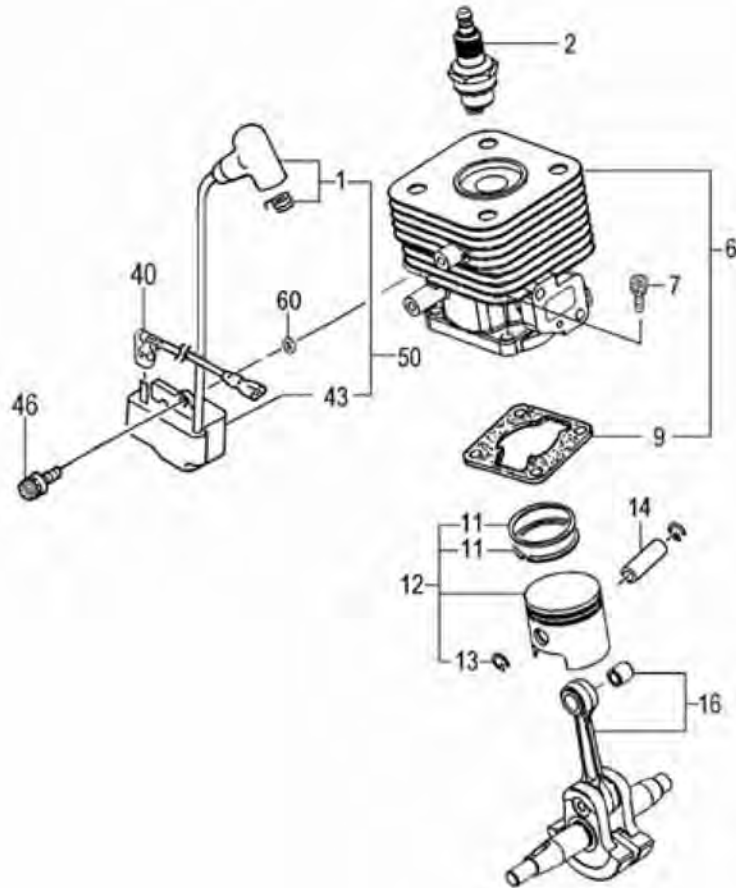


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PARTS INFORMATION

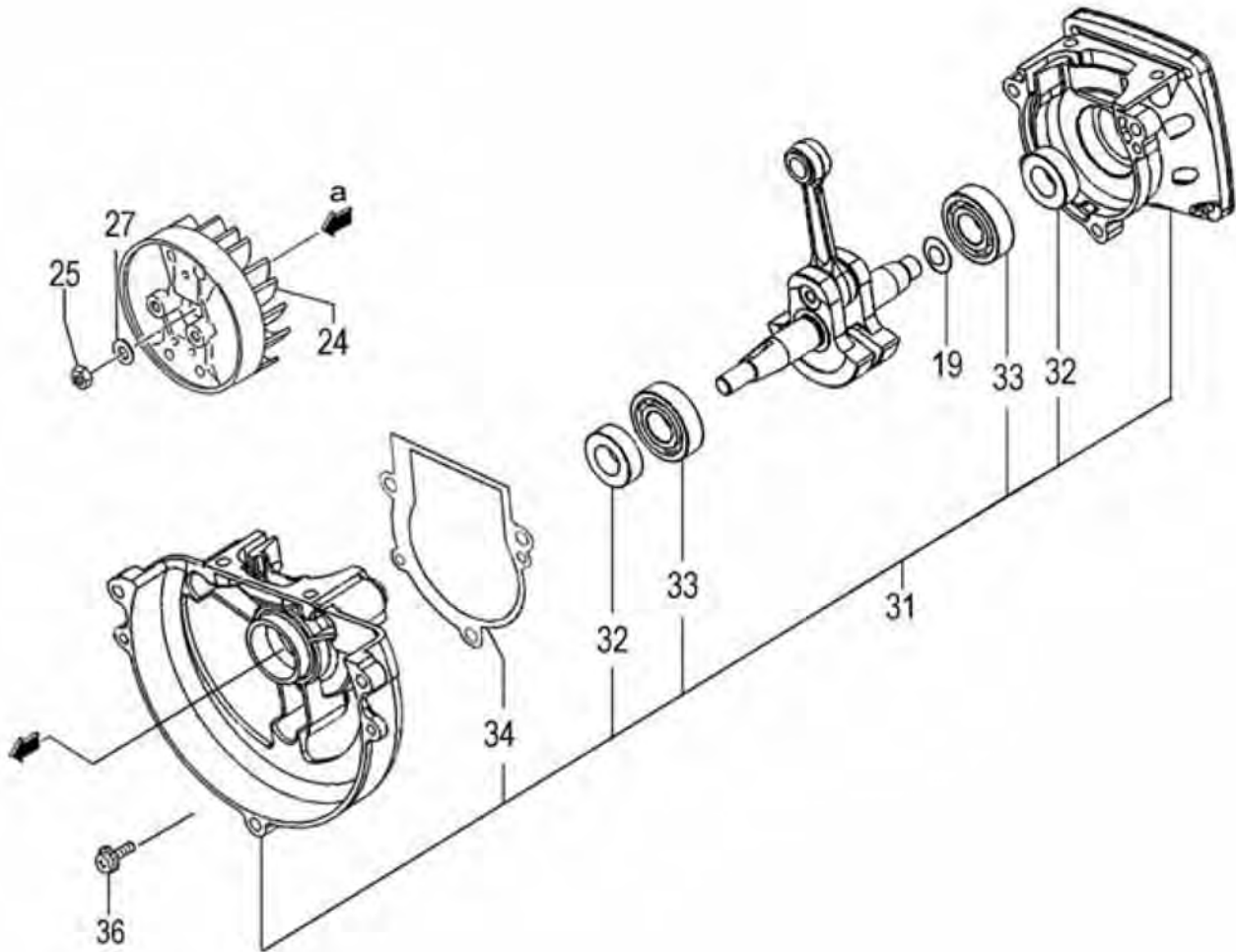
CYLINDER, PISTON, CRANKSHAFT • FIGURE 1



ITEM	PART NUMBER	DESCRIPTION	QTY	COMMENTS
1-1		CAP, SPARK PLUG ASS'Y	1	
1-2	469817	PLUG, SPARK	1	
1-6		CYLINDER SET	1	Includes gasket
1-7		BOLT, HEX, 5X18, S	1	
1-9		GASKET, CYLINDER	1	
1-11		RING, PISTON	2	
1-12		PISTON SET	1	Includes piston rings & circlips
1-13		CIRCLIP, PISTON PIN	2	
1-14		PIN, PISTON	1	
1-16		CRANKSHAFT	1	
1-40		CORD, STOP	1	
1-46		BOLT, HEX 4x18WS	2	
1-50	470314	COIL, IGNITION	1	
1-60		WASHER, SPECIAL	2	

PARTS INFORMATION

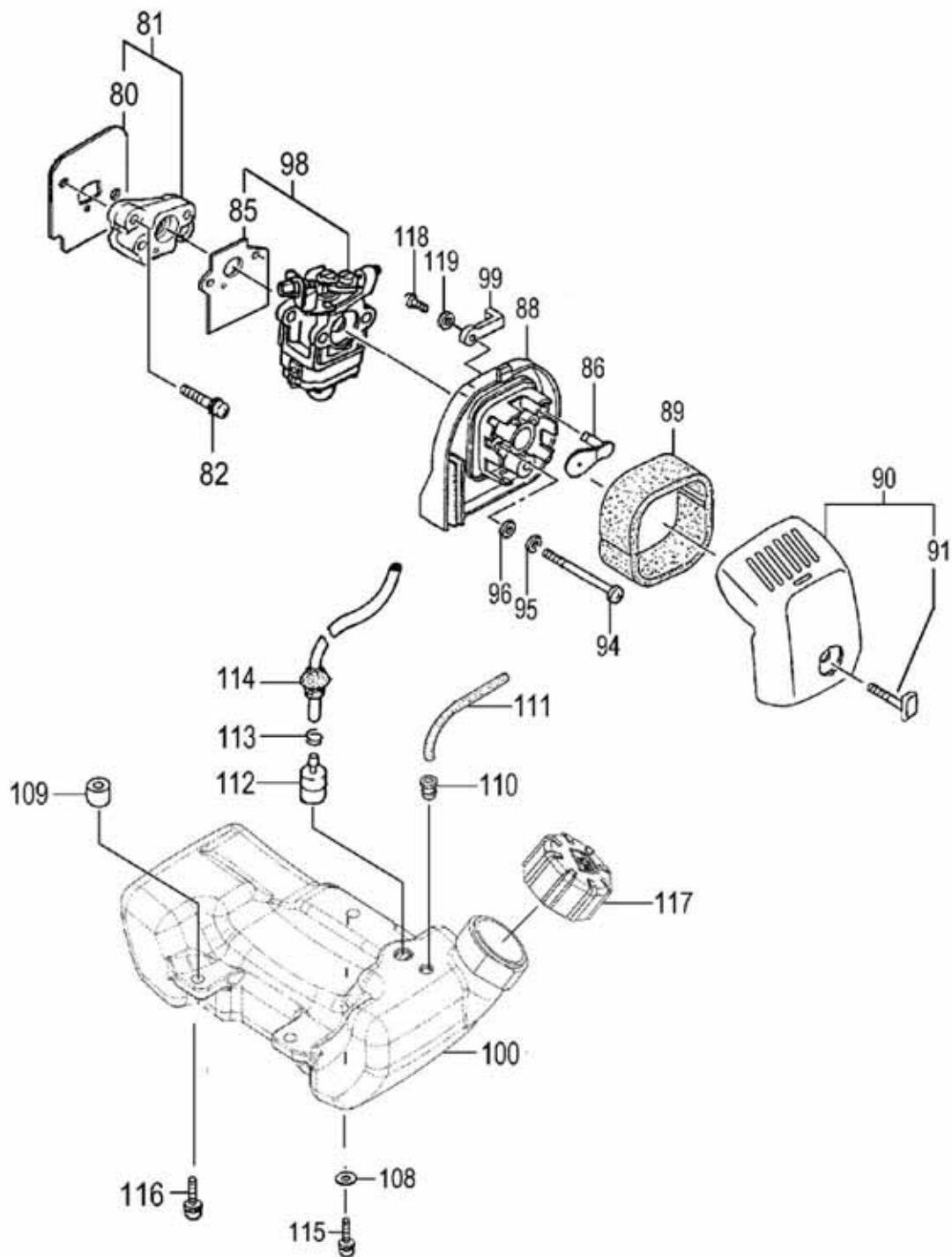
CRANKCASE & FLYWHEEL • FIGURE 2



ITEM	PART NUMBER	DESCRIPTION	QTY	COMMENTS
2-19		SHIM,12.2X19X.20	1	
2-19		SHIM,12.2X19X.30	1	
2-24		FLYWHEEL	1	
2-25		NUT,8	1	
2-27		WASHER,8	1	
2-31		CRANKCASE ASSY	1	Includes seals & bearings
2-32	467794	SEAL,OIL,#TC12227	2	
2-33		BEARING,BALL,#6001 C3	2	
2-34		GASKET,CRANKCASE	1	
2-36		BOLT,HEX,5X16,S	4	

PARTS INFORMATION

FUEL SYSTEM • FIGURE 3



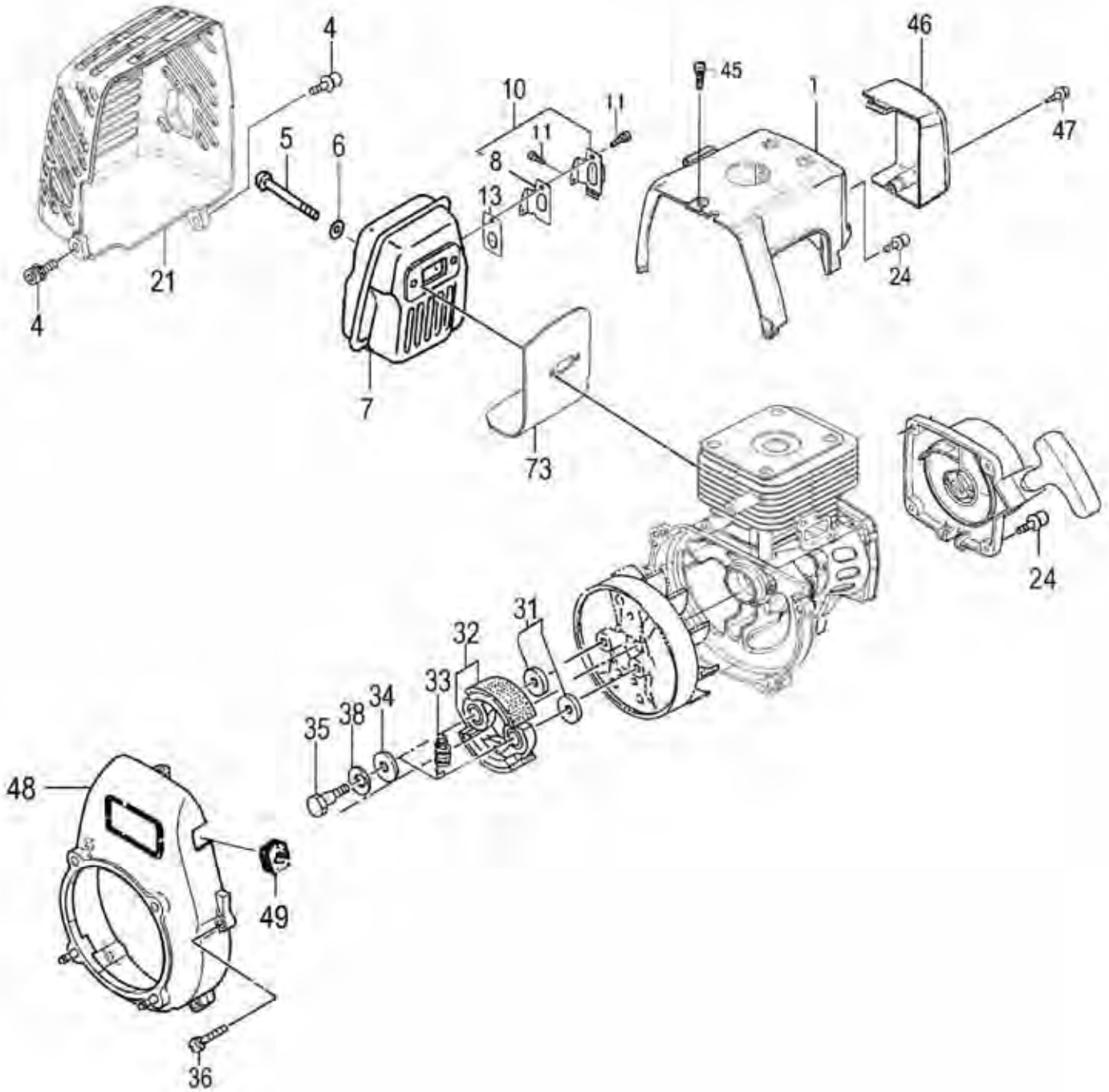
PARTS INFORMATION

FUEL SYSTEM • FIGURE 3

ITEM	PART NUMBER	DESCRIPTION	QTY	COMMENTS
3-80		GASKET, INLET MANIFOLD	1	
3-81		INSULATOR SET	1	Includes gasket
3-82		BOLT, HEX HOLE, 5X25WS	2	
3-85		GASKET	1	
3-86		PLATE, CHOKE, 2.0	1	
3-88		BODY, AIR CLEANER	1	
3-89	470710	CLEANER, ELEMENT	1	
3-90	470711	COVER, BLACK	1	
3-91	470712	BOLT, CLEANER COVER	1	
3-94		SCREW, 5X55	2	
3-95		WASHER, S, 5	2	
3-96		WASHER, SMALL, 5	2	
3-98	469818	CARBURETOR SET	1	Includes gasket
3-99		LEVER, CHOKE	1	
3-100	469749	TANK, FUEL, WHITE	1	
3-108		WASHER, BRAKE SHAFT	1	
3-109		COLLAR	3	
3-110	470727	GROMMET, FUEL PIPE	1	
3-111		PIPE, FUEL, 3X5X350	1	
3-112		FILTER, FUEL	1	
3-113	467065	CLIP 6.3	1	
3-114	472703	PIPE, FUEL, 3x5x160	1	
3-115		BOLT, HEX, 5X20PS	1	
3-116		BOLT, HEX, 5X16, PS	2	
3-117	469827	CAP, TANK (BLACK/RED)	1	
3-118		SCREW, TAPPING, 4x14P	1	
3-119		WASHER, 4	1	

PARTS INFORMATION

CLUTCH, MUFFLER & COVERS • FIGURE 4



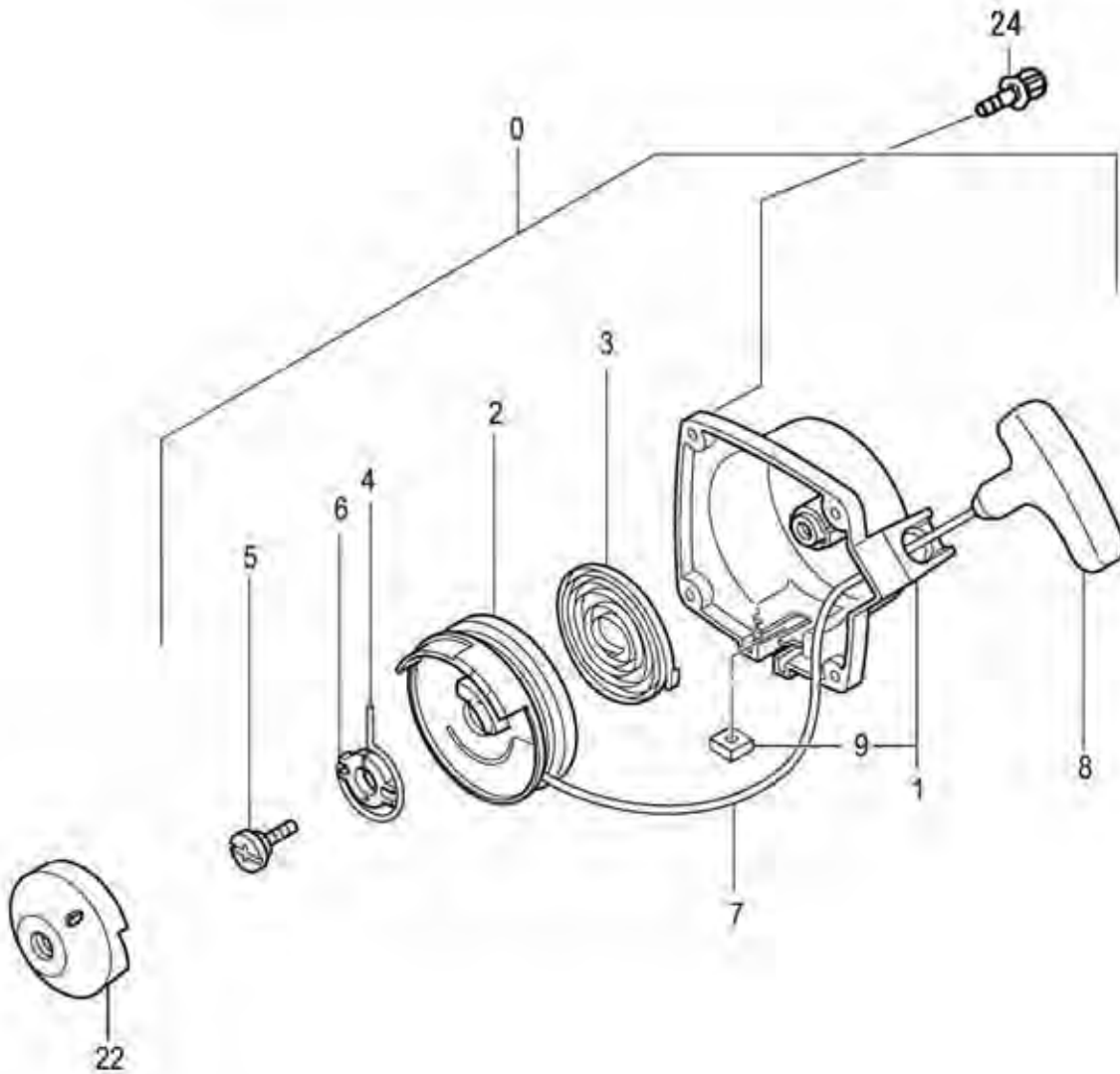
PARTS INFORMATION

CLUTCH, MUFFLER, & COVERS – FIGURE 4

ITEM	PART NUMBER	DESCRIPTION	QTY	COMMENTS
4-1		COVER, CYLINDER	1	
4-4		BOLT, HEX 5X16	2	
4-5		BOLT, HEX 6X65	2	
4-6		WASHER, 6	2	
4-7		MUFFLER	1	
4-8		GASKET, MUFFLER	1	
4-10		TAIL PIPE SET	1	
4-11		SCREW 4X18	2	
4-13		ARRESTER, SPARK	1	
4-21		PROTECTOR, MUFFLER	1	
4-24		BOLT, HEX 4X18	2	
4-31		WASHER, CLUTCH B	2	
4-32		SHOE, CLUTCH	2	
4-33		SPRING, CLUTCH	1	
4-34		PLATE, CLUTCH	2	
4-35	456271	BOLT, STEP	2	
4-36		BOLT, HEX 5X18	3	
4-38		WASHER 8	2	
4-45		BOLT, HEX 4X15	1	
4-46		DEFECTOR, AIR	1	
4-47		SCREW, TAPPING 4X14	1	
4-48		CASE, FAN	1	
4-49		GROMMET, PRIMARY CORD	1	
4-73		SHIELD, HEAT	1	

PARTS INFORMATION

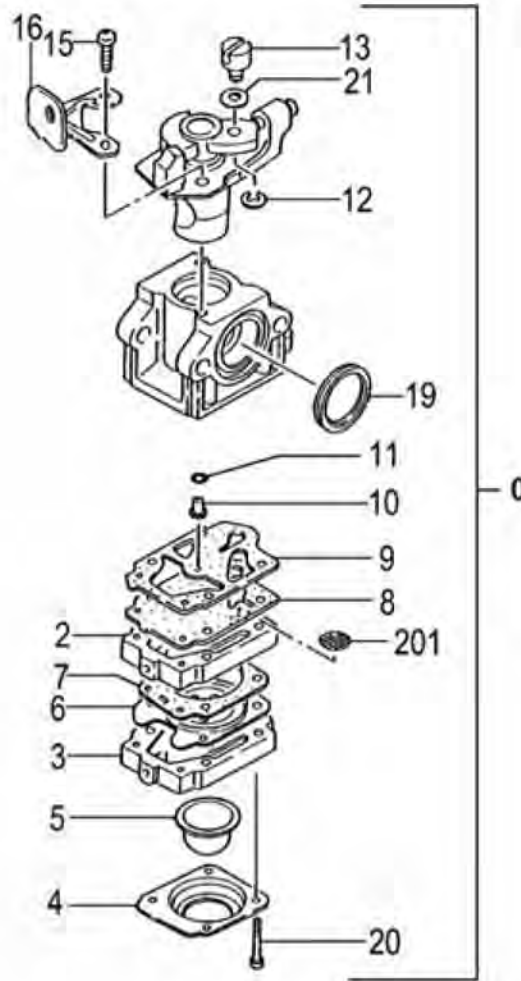
STARTER • FIGURE 5



ITEM	PART NUMBER	DESCRIPTION	QTY	COMMENTS
5-0		STARTER ASS'Y	1	
5-1		BODY, STARTER	1	
5-2		PULLEY, STARTER	1	
5-3		SPRING, RECOIL	1	
5-4		ARM, SWING	1	
5-5		SCREW, SET	1	
5-6		STAY, PULLEY	1	
5-7		ROPE, STARTER	1	
5-8		HANDLE, STARTER	1	
5-9		NUT, SPECIAL 5MM	1	
5-22		PULLEY, STARTER	1	
5-24		BOLT, HEX, 4x18WS	2	

PARTS INFORMATION

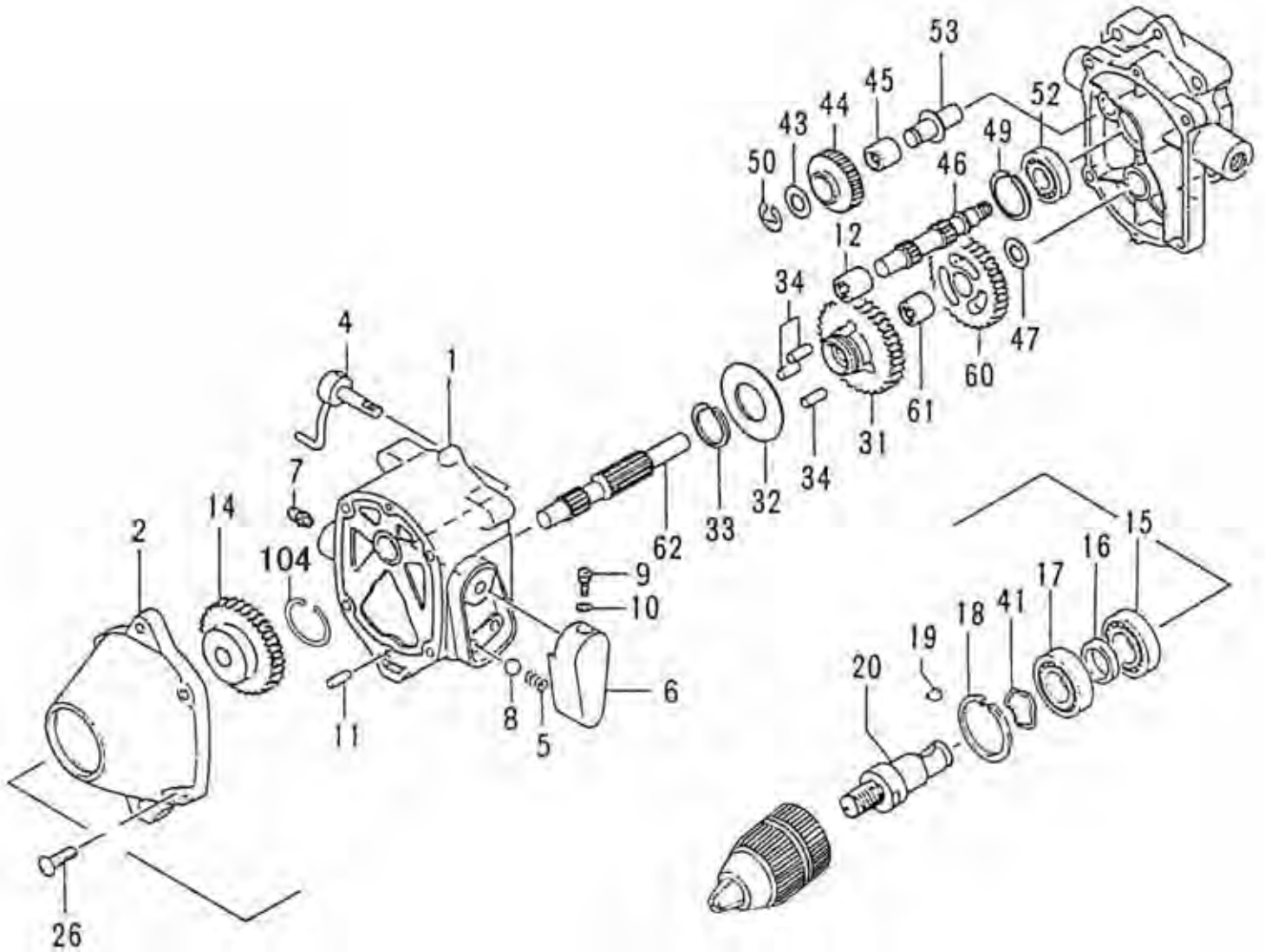
CARBURETOR • FIGURE 6



ITEM	PART NUMBER	DESCRIPTION	QTY	COMMENTS
6-0	469818	CARBURETOR SET	1	Includes gasket
6-2		BODY,PUMP	1	
6-3		PUMP,PRIMING	1	
6-4		COVER,DIAPHRAGM	1	
6-5		BULB,PRIMING	1	
6-6	---	DIAPHRAGM,METERING	1	- Included in carb kit
6-7	---	GASKET,DIAPHRAGM	1	(parts not sold individually)
6-8	---	DIAPHRAGM,PUMP	1	
6-9	---	GASKET,PUMP	1	
6-10		JET,MAIN,LONG #38	1	
6-11		O-RING	1	
6-12		RING,STOP	1	
6-13		SWIVEL	1	
6-15		SCREW,THROTTLE SET	2	
6-16		STAY,ADJUST,CABLE	1	
6-19		GASKET,CLEANER	1	
6-20		SCREW,SET	4	
6-21		WASHER,THRUST	1	
6-201		SCREEN,INLET	1	

PARTS INFORMATION

GEAR CASE • FIGURE 7



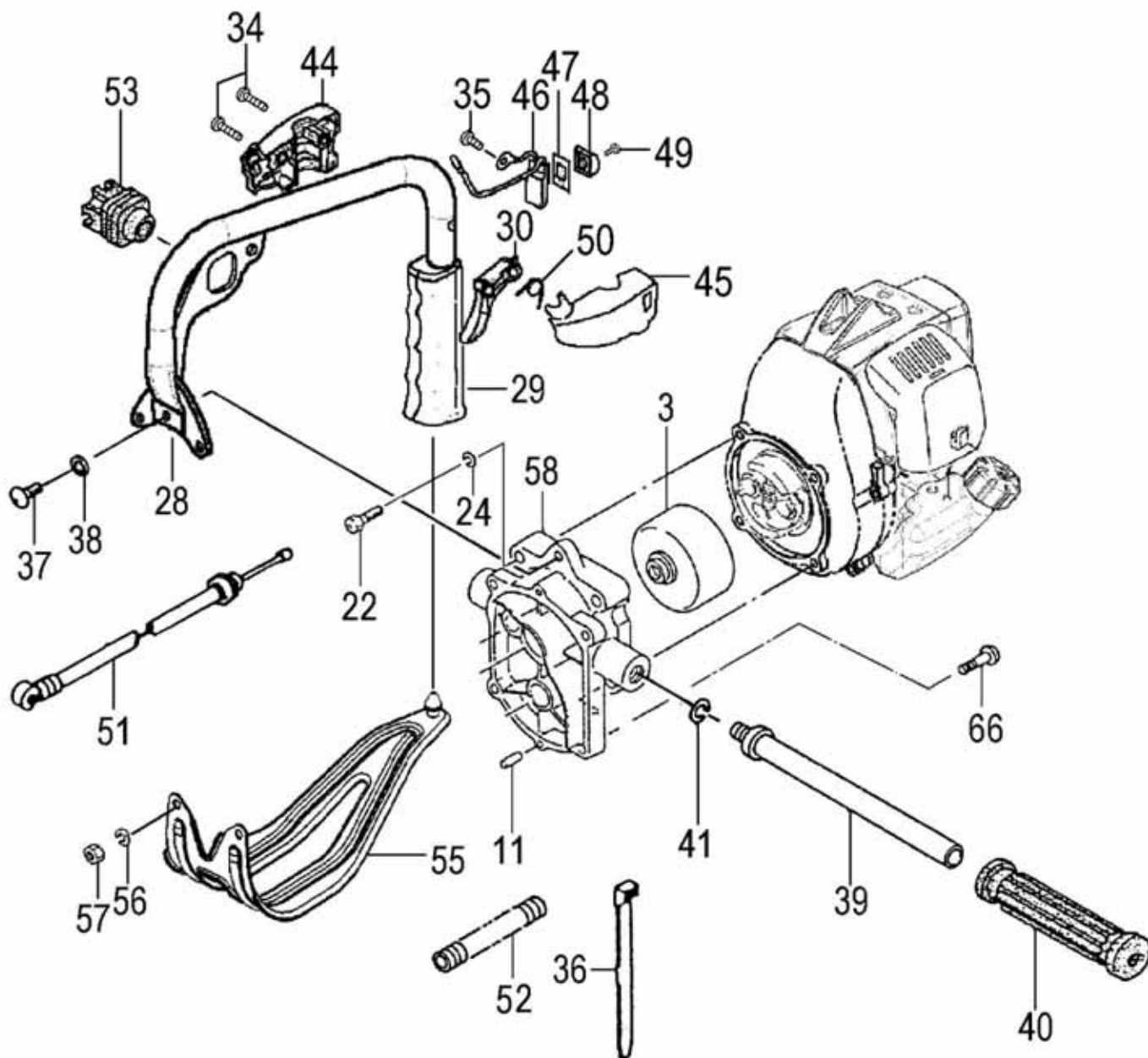
PARTS INFORMATION

GEAR CASE – FIGURE 7

ITEM	PART NUMBER	DESCRIPTION	QTY	COMMENTS
7-1	469767	CASE, GEAR A	1	
7-2	469768	CASE, GEAR B	1	
7-4	469769	FORK, SHIFT	1	
7-5	469770	SPRING, SHIFT GUIDE	1	
7-6	469771	LEVER, SHIFT	1	
7-7	469772	FITTING, GREASE	1	
7-8	469773	BALL, STEEL	1	
7-9	469774	BOLT, HEX HOLE 4X8	1	
7-10	469775	WASHER, 4	1	
7-11		PIN, KNOCK, 4X12	2	
7-12	466369	BEARING, NEEDLE TLA912	1	
7-14	472445	GEAR 4	1	
7-15	472446	BEARING, BALL #7202B	1	
7-16		WASHER, BEARING	1	
7-17	472447	BEARING, BALL #6202Z	1	
7-18	472448	RING, C-35 STOP	1	
7-19	470706	KEY, WOODRUFF 3X13X5	1	
7-20	470707	SHAFT, GEAR	1	
7-26		SCREW, 5X18	4	
7-31	466762	GEAR, FORWARD	1	
7-32		WASHER, THRUST 2.0	1	
7-33		RING, STOP 20	1	
7-34		BEARING, NEEDLE 6X12	3	
7-41	472449	WASHER, WAVE B.B.35	1	
7-43		WASHER, THRUST 0.8	1	
7-44	466367	GEAR, NEUTRAL	1	
7-45	466369	BEARING, NEEDLE TLA912	1	
7-46	470754	SHAFT, SHIFT	1	
7-47		WASHER, THRUST 0.8	1	
7-49	467915	RING, STOP C-24 IN	1	
7-50		RING, STOP E-8	1	
7-52	466370	BEARING, BALL #609Z	1	
7-53	466368	SHAFT, NEUTRAL	1	
7-60		GEAR, REVERSE	1	
7-61	466369	BEARING, NEEDLE TLA912	1	
7-62		COUNTER SHAFT	1	
7-104		RING, STOP	1	

PARTS INFORMATION

HANDLE & THROTTLE • FIGURE 8



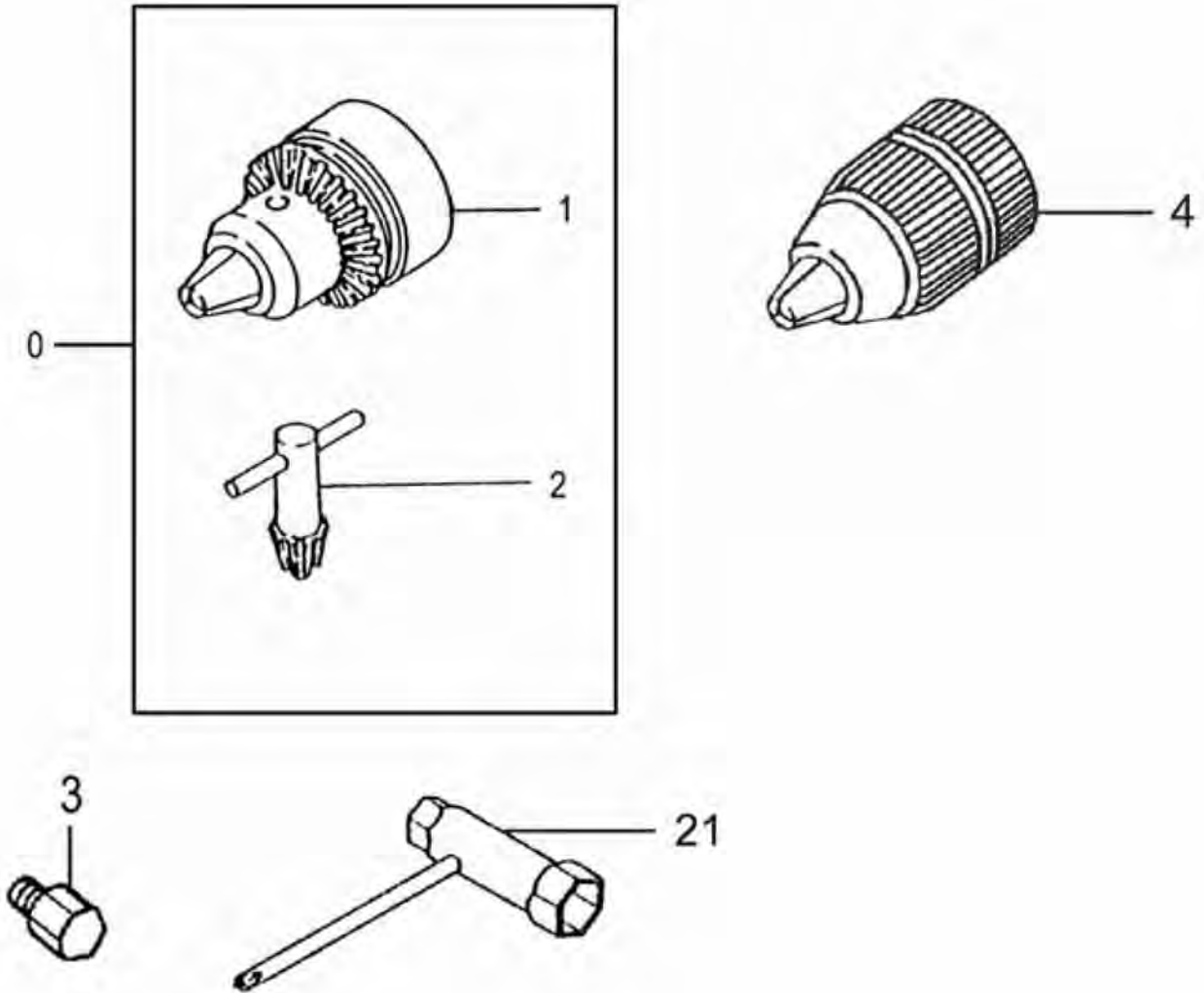
PARTS INFORMATION

CARBURETOR – FIGURE 8

ITEM	PART NUMBER	DESCRIPTION	QTY	COMMENTS
8-3		HOUSING, CLUTCH	1	
8-11		PIN, KNOCK, 4x12	2	
8-22	467531	BOLT, 6X30	2	
8-24	501133	WASHER, 6	2	
8-28	470553	HANDLE A	1	
8-29	467716	HANDLE, GRIP A	1	
8-30	471277	LEVER, THROTTLE	1	
8-34	471199	SCREW, TAPPING 4X14	2	
8-35	470728	SCREW, 4X6	1	
8-36		CLAMP, CORD	2	
8-37		BOLT, 6X16 PLUS	1	
8-38		WASHER, 6	1	
8-39	467191	HANDLE, B	1	
8-40	471075	GRIP, HANDLE	1	
8-41	467192	WASHER, 10	1	
8-44	471200	BODY, THROTTLE B	1	
8-45	471201	BODY, THROTTLE A	1	
8-46	472925	SWITCH, STOP	1	
8-47	472934	DECAL, STOP BUTTON	1	
8-48	465323	BUTTON, STOP	1	
8-49	472935	SCREW, 3X10	1	
8-50	471217	SPRING, THROTTLE LEVER	1	
8-51	470670	WIRE, THROTTLE	1	
8-52		TUBE, PROTECTION	1	
8-53		HOLDER, CHUCK KEY	1	
8-55	472937	BRACE, HANDLE	1	
8-56	470724	WASHER, 6	2	
8-57	472701	NUT, 6	2	
8-58	472702	CASE, CLUTCH	1	
8-59	467521	SCREW, 5X18	4	

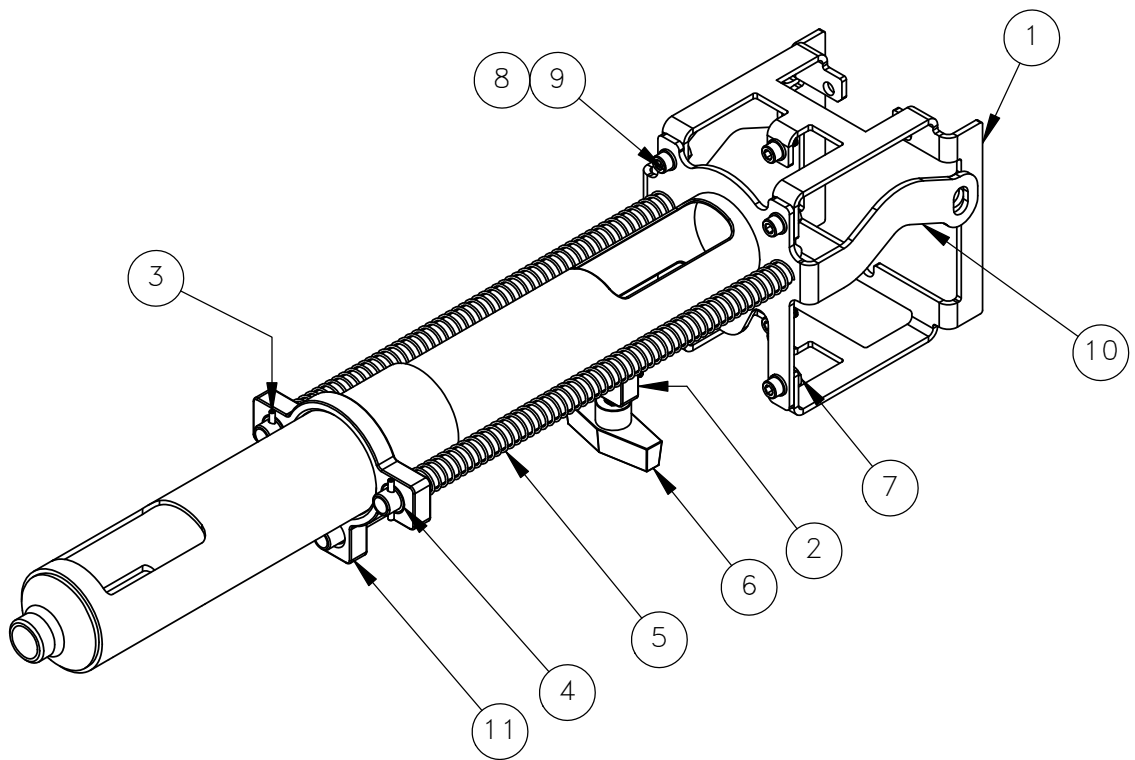
PARTS INFORMATION

CHUCK & KEY • FIGURE 9



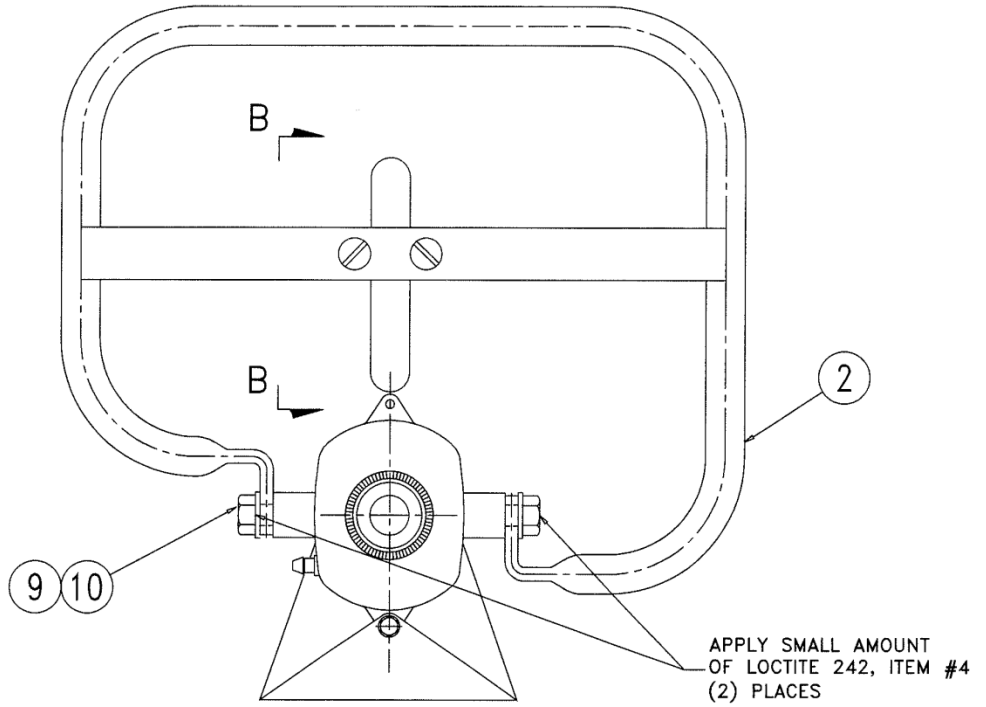
ITEM	PART NUMBER	DESCRIPTION	QTY	COMMENTS
9-0	467193	CHUCK & KEY 1/2in	1	
9-1		CHUCK, 1/2in	1	
9-2		CHUCK KEY 1/2in	1	
9-3		ADPATER, TED, L-H	1	
9-4		KEYLESS CHUCK	1	Optional
9-21		SPANNER	1	

NO.	QTY	DESCRIPTION	PART NO.
1	1	BRACKET, MOUNTING	314311
2	1	BLOCK, STOP	314321
3	3	PIN, ROLL: .12 x 1	402387
4	2	BRG, SHLD SLV: .5 ID OILITE	471068
5	2	SPRING, COMPRESSION	471073
6	1	KNOB, PLASTIC: 3/8-16 X 1/2	471087
7	4	NUT, HEX M6-1.00	501007
8	6	WASHER, LOCK: M6 PLTD	501133
9	6	SCR, SOC: M6-1 X 14	501195
10	1	MOUNT, GUARD	780533
11	1	GUARD	780534

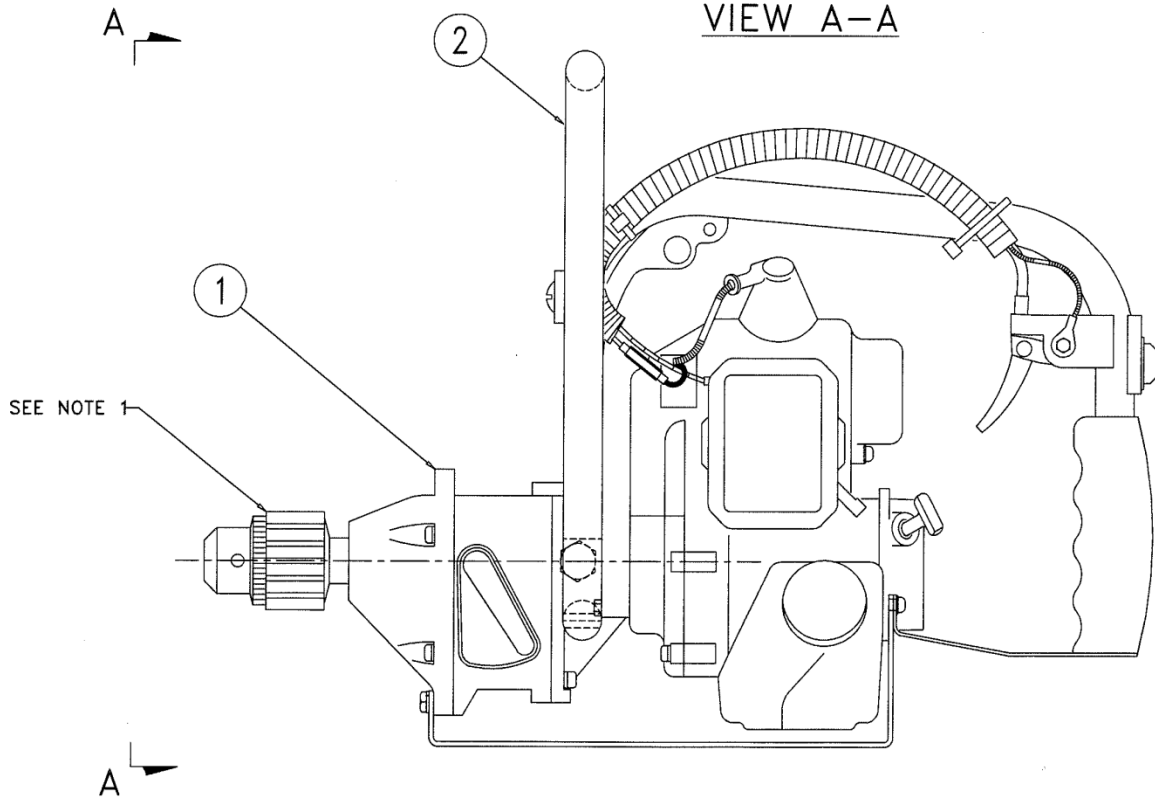


RACINE RAILROAD PRODUCTS MOUNT PLEASANT, WI U.S.A.	DESCRIPTION	REVISION	SHEET
	GUARD, DRILL	B	1 OF 1
		DWG NO	
		717090	

Tie Drill – Page 1 of 2



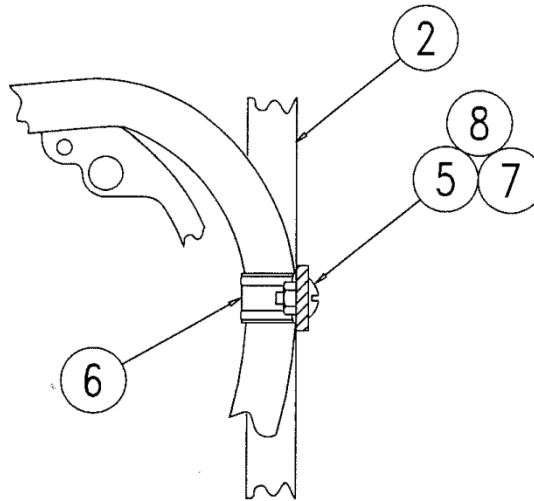
VIEW A-A



Tie Drill – Page 2 of 2

NOTES:

- 1) PRIOR TO ASSEMBLY, CLEAN MALE THREAD SUPPLIED WITH UNIT AND FEMALE THREAD ON CHUCK WITH SOLVENT. FOLLOW UP WITH LOCTITE PRIMER AND REMOVEABLE 242 LOCTITE.



VIEW B-B

NO.	QTY.	DESCRIPTION	PART NO.
1	1	DRILL, GAS TIE	465240
2	1	BAR, ROLL	778242
3	AR	LOCTITE, 242	008806
4	AR	LOCTITE, PRIMER T	008825
5	2	SCR, HEX SLT: 10-24 X .75	491797
6	1	STRAP, PIPE	491795
7	2	NUT, HEX ES: 10-24	456470
8	2	WASHER, FLT: #10	491646
9	2	SCR, HEX: M10-1.25 X 25	491794
10	2	WASHER, FLT: M10	501172