

Remove
all screws
as shown

x11

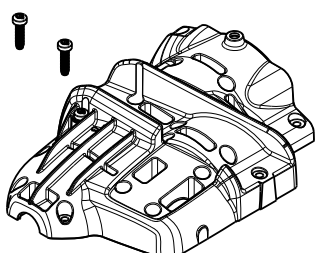
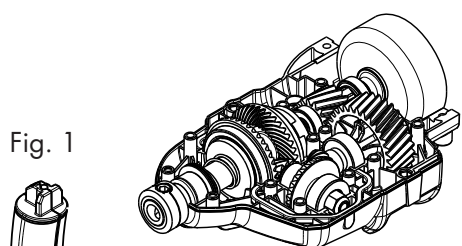
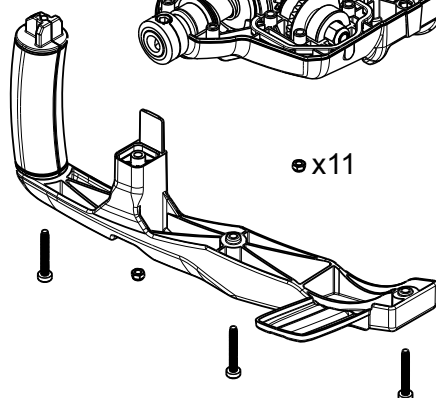


Fig. 1



x11



STEP 1

View after removing
handles and LH
Casing Fig. 2

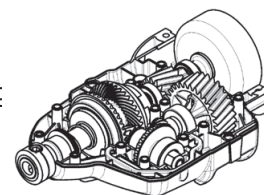


Fig. 2

STEP 2

Lift out clutch drum
and spur gear
assembly
Fig. 3

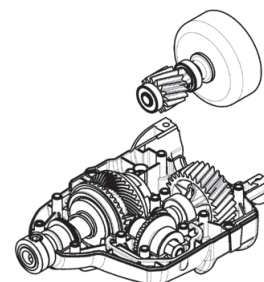


Fig. 3

STEP 3

Lift out spur drive
gear and pinion
assembly
Fig. 4

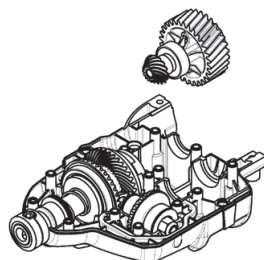


Fig. 4

STEP 4

Lift out pinion and
spiral crown gear
assembly
Fig. 5

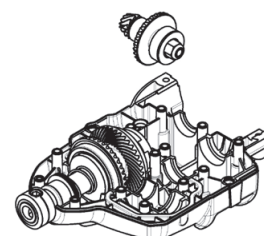


Fig. 5

STEP 5

Lift out main drive
gear assembly
Fig. 6

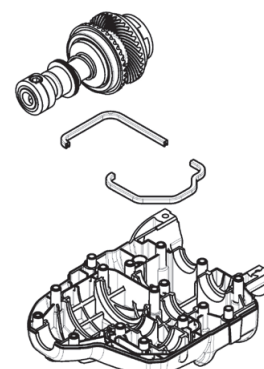


Fig. 6

Thoroughly
clean all parts

Atom products, including developments of **AIRLIFT**® and **BLOWMASTER**® blowers, blower anti-vibration handle system, **SMARTFAN**® impellers, and **DRILLMASTER**® engine powered drills with automatic reverse gear and rotary throttle control, are extensively protected by many Patents Pending, Patents, Registered Designs, and Registered Shapes and many Trade Marks including Atom Trade Mark 1,463,4000. Additionally, US Patent No. 8,210,272-B2 tiller construction also covers and protects Atom Lawn Edger construction.

Registration No. 1470990 is a REGISTERED SHAPE of the Atom Lawn Edger consisting of three dimensional shape of lawn edgers having a ground engaging wheel supporting a motor or engine and a pair of handles in a wheelbarrow-like configuration.

Atom Engine Drill: Inspect – Clean – Repair – Assemble

2. Lift Drum and spur gear shaft out of casing. To replace Drum, hold tightly in gloved hand and spin off clutch nut in left hand rotation (normal RH thread) with air ratchet Fig. 7.

To reassemble fit clutch hub, drum, washer and screw nut up fully by hand.

! NOTE Washer under nut must fit over and around clutch rib spigot.

Tighten nut by holding drum with gloved hand and air ratchet drive (right hand rotation).

! NOTE Spur gear and shaft replaced as on assembly as in Fig. 3.

3. To repair drive and pinion gears, remove 6mm screw. Slide parts off. Replace parts if required. Fig. 8.

To remove pinion hold shaft in vice fitted with soft jaws (use two pieces aluminium angle) and remove pinion in right hand rotation (left hand thread). Fig. 9.

4. To replace pinion or spiral crown gear assembly, hold outer gear diameter in vice with soft jaws and remove nut in left hand (normal RH thread) rotation. Fig. 10.

5. To replace gears, bearings, clutch dogs, place rear end dog clutch vertically in a strong vice (Fig. 11) fitted with soft jaws or use two pieces of aluminium angle.

Remove locking collar, insert 12mm bar through grub screw hole as shown in Fig. 11. Turn shaft clockwise (LH thread) to remove clutch dog. Slide off all parts and inspect. Replace as required. Reverse process to assemble.

6. To remove front gear dog, place shaft in vice (Fig. 12) and tap counter clockwise (normal RH thread).

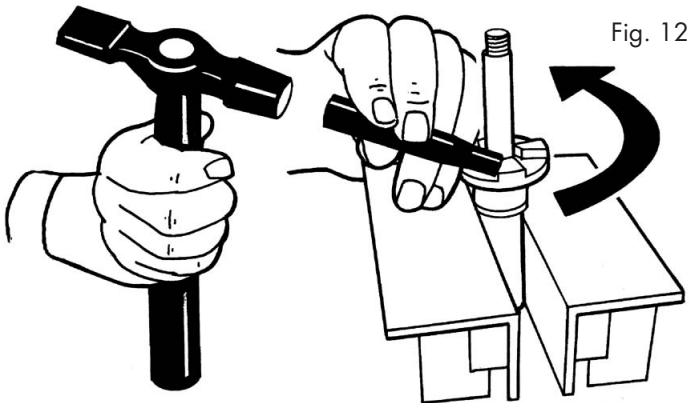


Fig. 12

Clean all parts before reassembly. To assemble reverse above procedure. Re-assemble in (reverse) sequence of Fig. 6, 5, 4, 3 and 2. Thoroughly grease all parts and pack about 30cc of grease in and around all gear teeth. Install 2 casings rubber gaskets, place top casing on, use 4-5 screws to hold together then check gears turn smoothly. Complete final assembly.

! NOTE For engine explosions and Parts list, visit our website: www.atomindustries.com

Go to **Find Parts, Order & Service Info** page and enter the engine model number. Refer to Parts List attached.

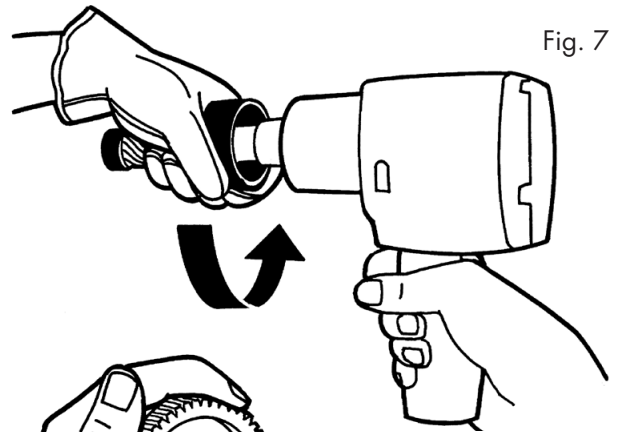


Fig. 7

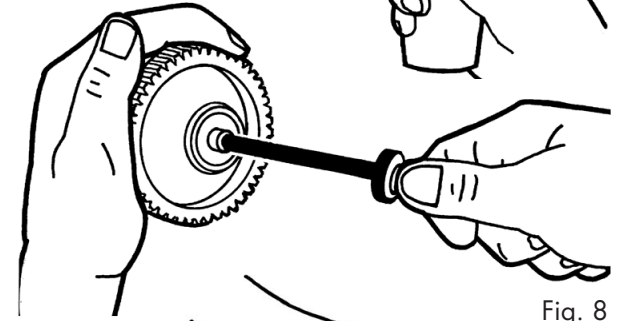


Fig. 8

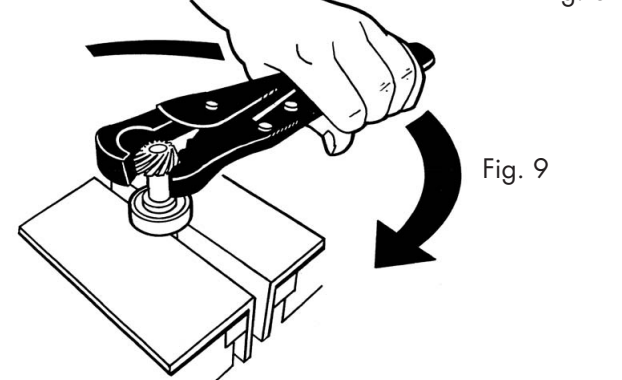


Fig. 9

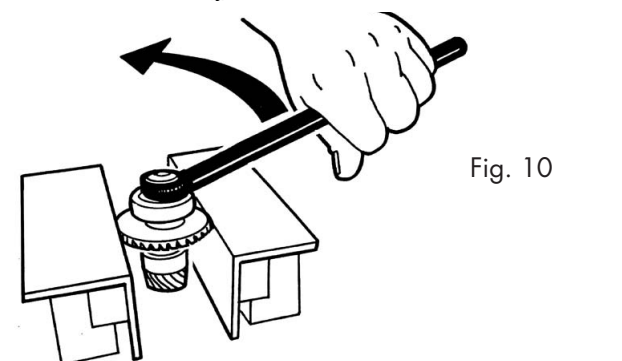


Fig. 10

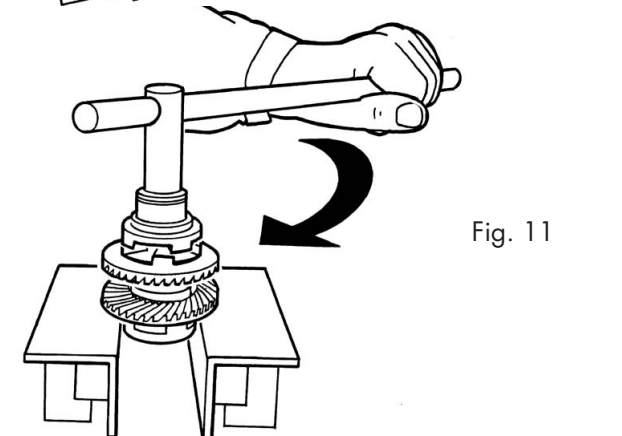
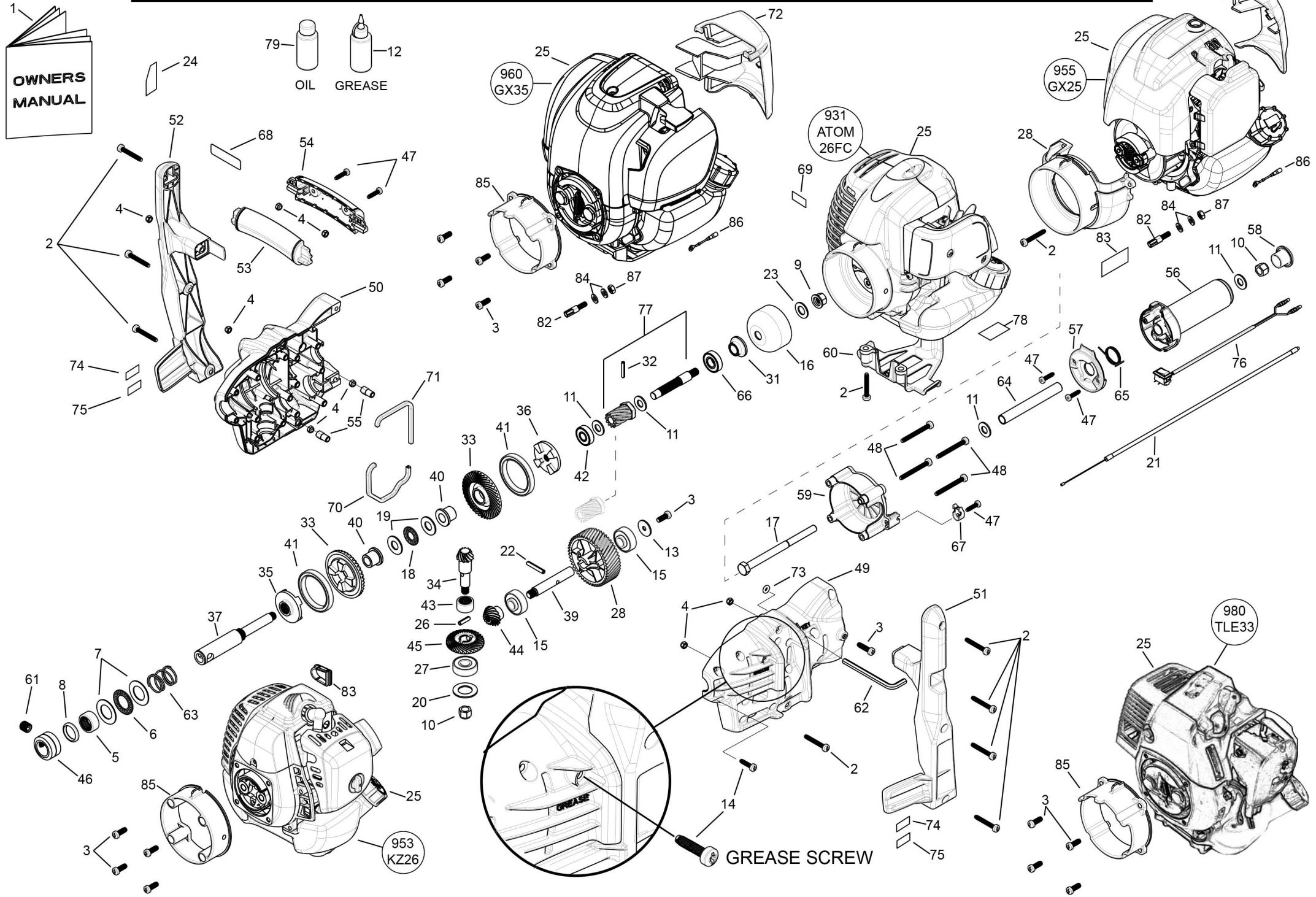


Fig. 11

Atom Industries is a division of Solo Industries Pty Ltd – an Australian owned company that invents, designs and manufactures unique and outstanding products for local tough and hard Australian conditions with a history of international award winning gold medals, great backup and service since 1961. Atom has a policy of continuous product improvement and development and reserves the right to modify the design and appearance of products without notice.

ATOM DRILLMASTER COMBINED PARTS LIST MODELS 931, 953, 955, 960, 980



ATOM PRODUCT: ATOM ENGINE DRILL COMBINED PARTS LIST - ALL MODELS

MODEL NO: 931,953,950,960,980

Key	Part No	Substitute Part No	Description	Key	Part No	Substitute Part No	Description	Key	Part No	Substitute Part No	Description
1	21775		MANUAL ALL MODELS(PDF)	31	64119		HUB SINTERED	62	64230		KEY ALLEN 6AF x 90
2	40650		SCREW M5 x 36	32	64130		PIN ROLL 4 x 24	63	64231		DR REVERSE SPRING
3	40651		SCREW M6 x 16mm	33	64176		DR CROWN GEAR WITH DOG	64	64232		DR HAN SPACER TUBE
4	40652		NUT NYLOC 5mm	34	64177		DR PINION	65	64233		DR THRO RET SPRING
5	40912		BEAR NEEDLE 20 x 12mm	35	64178		DR FORWARD GEAR DOG	66	64235		BEARING 6001-2RS GRSEALS
6	40914		BEAR THR 20x35x2	36	64179		DR REVERSE GEAR DOG	67	64333WP		DR CABLE RETAINER
7	40915		WASHER REAR THRUST	37	64181		DR MAIN SHAFT	68	64335		LABEL WARNING DRILL HANDLE
8	40922		SEAL SHAFT 20 x 26 x 4mm	38	43966RN		DEFLECTOR HONDA GX25	69	64337		LABEL
9	43163		NUT FLANGE RH 3/8	39	64183		DR SPUR GEAR SHAFT	70	64347		DR CASING SEAL 1
10	43172		NUT NYLOC 3/8 UNC	40	64184		DR SPACER SINTERED	71	64348		DR CASING SEAL 2
11	43218		WASHER 3/8 FLAT	41	64185		BEAR 6809-2RS 45x58x7	72	43965RN		DEFLECTOR HONDA GX35
12	43227		GREASE & DISPENSER	42	64187		BEAR 10x26x8	73	64355		O RING 3 x 11 OD x 5 ID
13	43484		WASHER 22.43 x 5.94 Z/P	43	64188		BEAR NEEDLE 16x22x12	74	64382		LABEL DR HAN LOGO
14	43790		SCREW M5.5 x 22mm	44	64189		DR GEAR BEVEL T15	75	64383		LABEL DR HAN DRILLMASTER
15	43860		BEARING 32 x 10 x 12 + 4mm	45	64190		DR GEAR BEVEL T30	76	64411		DR SWITCH & WIRE
16	44312		DRUM CUP PRO 79x32mm (960,980)	46	64192		DR LOCKING COLLAR 12mm	77	64414		DR SHAFT & GEAR ASSY 12/48 (931)
16	44318		DRUM CLUTCH CUP 54mm (931,953,955)	47	64194		SCREW T20 x 19.50 SELF TAP	77	64415		DR SHAFT & GEAR ASSY 12/33 (953,950)
17	44439		BOLT G.WHEEL AXLE 3/8" x 5"	48	64206		SCREW M5 x 50mm TORX-25	77	64416		DR SHAFT & GEAR ASSY 15/30 (960,980)
18	62964		BEARING NEEDLE 12 x 26 x 2	48	64384		SCREW T20 4 x 50	78	63219		LABEL HOT MOT/OIL
19	62965		WASHER THRUST 12 x 26 x 1.5	48	64385		WASHER 4 x 9 x 1	79	48100		OIL 100ML (HON GX35)
20	62982		WASHER BEARING 32x18x1.6	49	64210GN	64859GN	DR MAIN CAS LH #64859GN	79	48101		OIL 80ML (HON GX25)
21	63263		CABLE THROTTLE (931)	49	64210RN	64859RN	DR MAIN CAS LH #64859RN	80	64859GN		SET ENG DRILL CASING
21	64227		DR THROTTLE CABLE 345+77	50	64211GN	64859GN	DR MAIN CAS RH #64859GN	81	64859RN		SET ENG DRILL CASING
22	63275		PIN ROLL 5 x 30	50	64211RN	64859RN	DR MAIN CAS RH #64859RN	82	62968		CABLE CONNECTOR M6 x 1.00
23	63277		WASHER 12x22.22x1 (931,953,955)	51	64212WN		DR MAIN HANDLE LH	83	62969RN		PLUG MUFFLER Z26
23	43116		WASHER 45 x 12 x 2 (960,980)	52	64213WN		DR MAIN HANDLE RH	84	63457		WASHER 6.4 x 12.5 x 1.5 ZP
24	63322		LABEL BL WARN SYMBOLS	53	64216WP		DR GRIP FRONT W/RUBBER	85	63360RN		MOUNT ENGINE Z26
25	48002A		ENG HONDA GX35 Model No 765	54	64217WP		DR GRIP BACK W/RUBBER	85	63361RN		MOUNT ENGINE PRO
25	48004A		ENG HONDA GX25 Model No 764	55	64218WP		DR NUT RETAINER	86	63355		GROUND WIRE
25	62993A		ENG Z26 Model No 763	56	64219WP		DR THROTTLE HANDLE (931)	87	63169		NUT M6 X 1mm
25	63405A		ENG ATOM 26FCS Model No 767	56	64234WP		DR THR HAN W/RUB (953,955,960,980)				
26	63440		PIN ROLL 5 x 18	57	64220WP		DR THRO HANDLE COV				
27	63474		BEARING 32 x 10 x 12	58	64221WP		DR THR HANDLE CAP				
28	63780		DR HELIC GEAR 48T/12	59	64222WN		DR THR MOUNT ATOM				
28	64344		DR HELIC GEAR T33/12 (953,955)	59	64224WN		DR THR MOUNT GX35				
28	64346		DR GEAR HELIC T30/15 (960,980)	59	64225RN		DR THR MOUNT Mitsu TLE 33				
29	63806RN		MOUNT/FAN COWL GX25	60	64226WP		DR TANK GUARD A26FC				
30				61	64229		SCREW GRUB M12x1.25x13				