



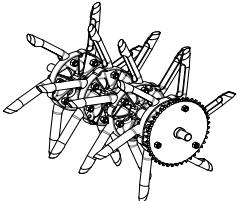
AE401 Owner's Manual



AERATOR Owner's Manual

AE401H, AE401V

Beginning Serial #: 100515001
Replacement Parts and Accessories

TINE REEL KIT	SOLID SPIKE TINE	TINE KIT
Replacement reel with tines for your aerator. 	Complete set of spike tines for the AE's reel. 	Individual coring tine for replacement of worn or broken tines. 
P/N 360352	P/N 360394-S	P/N 360100

Original Instructions

IMPORTANT- READ CAREFULLY BEFORE USE AND KEEP FOR FUTURE REFERENCE.



AE401 Owner's Manual

CONTENTS

SPECIFICATIONS AND SOUND/VIBRATION	3
INSTRUCTION LABELS	4
PACKING CHECKLIST & ASSEMBLY	5
OPERATION	6
MAINTENANCE AND TROUBLESHOOTING	7-8
ILLUSTRATED PARTS & PARTS LIST	10-13
DECLARATION OF CONFORMITY	14-16

Go to <http://www.billygoat.com> for translations of the product manuals.

Visitez <http://www.billygoat.com> pour la version canadienne-française des manuels de produits



AE401 Owner's Manual

SPECIFICATIONS

	AE401H	AE401V
Engine: HP	4.0 (2.98 kW)	5.5HP (4.1 Kw)
Engine: Model	GX120K1HX2	GX120K1HX2
Engine: Type	HONDA OHV	B&S VANGUARD
Engine: Fuel Capacity	2.1 qt. (2.0 L)	3.0 qt. (2.84 L)
Engine: Oil Capacity	0.63 qt. (0.6 L)	0.66 qt. (0.62 L)
Total Unit Weight:	242# (109.8 Kg)	244# (109.8 Kg)
Max. operating slope	20°	20°
Sound test in accordance with 2000/14/EC	99 dB(a)	99 dB(a)
Sound at operators ear	79 dB(a)	79 dB(a)
Vibration at operator position	0.3g (2.97 m/s ²)	0.3g (2.97 m/s ²)

SOUND



SOUND LEVEL 79 dB(a) at Operators Position

99

Sound tests were conducted in accordance with 2000/14/EC, and were performed on 9-19-2007 under the conditions listed below.

⚠ Sound power level listed is the highest value for any model covered in this manual. Please refer to serial plate on the unit for the sound power level for your model.

General Conditions:

Temperature:

Wind Speed:

Wind Direction:

Humidity:

Barometric Pressure:

Sunny

80°F (26.6°C)

8 mph (13 kmh)

Southwest

65%

30.16Hg (766 mm Hg)

VIBRATION DATA

VIBRATION LEVEL .3g (2.97 m/s²)

Vibration levels at the operator's handles were measured in the vertical, lateral and longitudinal directions using calibrated vibration test equipment. Tests were performed on 5-25-2006 under the conditions listed below.

General Conditions:

Temperature:

Wind Speed:

Wind Direction:

Humidity:

Barometric Pressure:

Sunny

72.32°F (22.4°C)

3.8 mph (6.12kph)

East

62.2%

29.9Hg (101.3kpa)



AE401 Owner's Manual

INSTRUCTION LABELS

The labels shown below were installed on your BILLY GOAT® Aerator. If any labels are damaged or missing, replace them before operating this equipment. Part numbers from the Illustrated Parts List are provided for convenience in ordering replacement labels. The correct position for each label may be determined by referring to the part numbers shown.



LABEL WARNING GUARDS
P/N 900327

LABEL EXPLOSIVE FUEL
P/N 400268

LABEL PATENT
P/N 360286

LABEL WARNING UNIT WEIGHT
P/N 360188

LIFT HERE

LABEL LIFT HERE
P/N 360187

LABEL INSTRUCTIONS AE
P/N 360025



ENGINE LABELS

HONDA

■ READ OWNER'S MANUAL BEFORE OPERATION.
■ LIRE LE MANUEL D'UTILISATEUR AVANT USAGE.
■ VOR INBETRIEBNAHME UNBEDINGT BEDIENUNGSANLEITUNG DURCHLESEN.
■ NO UTILIZAR SINANTES NO HABER LEIDO EL MANUAL

HONDA MOTOR CO., LTD. MADE IN JAPAN

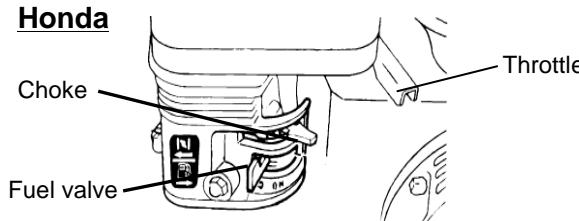
OIL ALERT
■ WHEN OIL LEVEL LOW,
ENGINE STOPS IMMEDIATELY.

IMPORTANT ENGINE INFORMATION-HONDA MOTOR CO., LTD.
ENGINE FAMILY THN165U/1G1RA DISPLACEMENT - 163cm³ HONDA
TUNE UP SPECIFICATION "REFER TO OWNER'S MANUAL FOR
MAINTENANCE SPECIFICATIONS AND ADJUSTMENTS" THIS ENGINE
MEETS 1995 CALIFORNIA EMISSION REGULATIONS FOR
UTILITY AND LAWN AND GARDEN EQUIPMENT ENGINES

E M
TE

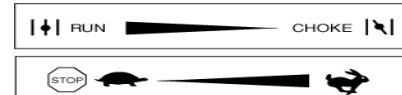
THROTTLE CONTROLS

Honda



Briggs

Set lever to choke when starting cold



Set lever to desired engine speed.
Move lever completely to the left to
stop engine



AE401 Owner's Manual

PACKING CHECKLIST

Your Billy Goat is shipped from the factory in one carton, completely assembled.



READ all safety instructions before assembling unit.
TAKE CAUTION when removing the unit from the box.



PUT OIL IN ENGINE BEFORE STARTING

PARTS BAG & LITERATURE ASSY

Warranty card P/N- 400972, Owner's Manual P/N-360390, General Safety and Warnings Manual Renovation-100295, Declaration of Conformity P/N-360194.

**FILL WITH WATER
ONLY!**



Boxing Parts Checklist

**Owner's Manual
AE 360390**

Engine Manual Per Model

Honda 4.0 HP
 Vanguard 5.5 HP

ASSEMBLY

NOTE: Items in () can be referenced in the Parts Illustrations and Parts Lists on pages 10-13.

1. **UNFOLD** the upper handle (item 48) and slide handle lock loops (item 118) into place to secure the upper handle to the lower handle (item 82 & 83).
2. **ASSEMBLE** the water tank to the unit and secure with the two carriage bolts, two locknuts and washers (items 137, 105 and 111) that can be found in the parts bag.
3. **FILL** the water tank (item 2) to desired weight with water **ONLY**.
4. **CHECK** engine oil level and fill to proper level. Also check oil in gear reduction reservoir and fill if necessary. See engine owner's manual for type and amount of oil to use. Move the tine engagement lever to the down position, to level engine during checking.
5. **CONNECT** spark plug wire. Set the engine stop switch to the **ON** position. You will use the stop switch on the handle during operation.



AE401 Owner's Manual

OPERATION

AERATING OPERATION

NOTE: NEVER PARK THIS UNIT ON A SLOPE OF ANY KIND. Always keep tines in the up position when parking the unit.

TINES RAISING/LOWERING: The tines are raised or lowered into the ground by operating the tine engagement lever on the upper handle. Tine penetration is very dependent on surface preparation. READ the entire operation section before aerating. (See Fig. 1)

SET SPEED: The ground speed of your aerator varies with the engine speed. Set the engine at approximately half throttle to start. Speed may be increased based on the turf conditions (i.e. large flat areas) and operator experience. Speed should be lowered when operating under adverse turf conditions (i.e. fenced areas, hills, or slopes).

ENGAGE TINES: With the aerator in the work area, release the clutch bail and push forward on the tine engagement lever, lowering the tines into the dirt.

AERATE: Engage the operators clutch bail by pushing it backwards from the handle, and start aerating.

MOVE: Be sure the tine engagement control is in the up position (tines out of the ground) and engage the wheel drive by squeezing the operators clutch bail against the handle. Transport the aerator to the work area.

NOTE: For maximum tine penetration apply downward pressure on the handle.

TURNING: At the end of an aerating run, release the clutch bail and lift up on the tine engagement control to lift the tines out of the ground. Using the handle lift the front of the unit to pivot it around and line up for the next pass.

TRANSPORT: Be sure to lift the tine engagement lever (tines out of the ground) before transporting away from the work area. (See Fig. 2)

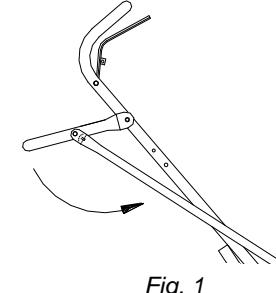


Fig. 1

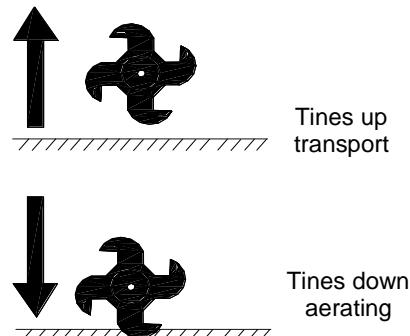


Fig. 2



Fig. 3



Fig. 4

*****TIPS*****

MOW

Mow the lawn to its normal cut height.

WATER

For the best performance and maximum tine penetration the lawn should be thoroughly watered the day before aeration.

INSPECT

Check the lawn before beginning work. Remove all rocks, wire, string, or other objects that can present a hazard during work prior to starting.

IDENTIFY

Mark all fixed objects to be avoided during work, such as sprinkler heads, water valves, buried cables, or clothes line anchors, etc.

SLOPES

Do not operate the aerator on steep slopes. Use extreme caution when operating on any sloped surface. For lesser sloped areas operate the unit, traversing up and down at a 45 degree angle to the slope rather than straight across. Extended operation on steep slopes can cause engine damage. **NOTE:** DO NOT release the operators clutch bail when operating on a slope. This will allow the unit to free wheel and allow the unit to roll down the slope. **NOTE:** Honda engines are equipped with a low oil sensor to prevent engine damage. When it senses a low oil condition (i.e. unit is operating or sitting on a steep slope) the engine shuts down. The maximum operating slope for the engine is 20°. The low oil condition must be corrected before the engine can be restarted. See the engine owner's manual for more information.



AE401 Owner's Manual

MAINTENANCE

PERIODIC MAINTENANCE

Periodic maintenance should be performed at the following intervals:

Maintenance Operation	Every Use (daily)	Every 25 hrs	Every 50 Hours
Inspect for loose, worn or damaged parts.		●	
Check engine oil.	●		
Inspect belt for wear.			●
Engine (See Engine Manual)			
Oil chains (see lubrication).		●	
Thoroughly clean all debris from unit and tine reel	●		
Check tine reel nut torque. Torque to min. 100 ft.lbs.			●
Check gear reduction oil level		●	
Grease bearings (see lubrication).			●

ENGINE MUST BE LEVEL WHEN CHECKING OR FILLING OIL

NOTE: Items in () can be referenced in the Parts Illustrations and Parts Lists on pages 10-13.

TINE REEL REMOVAL (See pages 12 and 13 for Parts Illustration and Parts List)

NOTE: Tine reel removal is only necessary to replace an entire tine row or for other major unit maintenance. Individual tines can be replaced by following the INDIVIDUAL TINE REPLACEMENT instructions.

1. Wait for engine to cool and disconnect spark plug.
2. Remove the top guard by removing the four nuts, two on each side that secures it to the frame.
3. Release the tension on the chain. See CHAIN TENSION ADJUSTMENT in this manual.
4. Remove the four bolts and nuts, two on each side, holding the tine reel bearings in place. BE CAREFUL the tine reel is heavy and sharp. Take precautions to not allow it to fall when the bearing bolts are removed.
5. Lift the reel up and to the side to remove it from the drive chain.
6. Replace the reel with a new one.
7. To reinstall the reel follow the above steps in reverse. Make sure all hardware is tightened securely
8. Replace the guard and reinstall the four nuts that secure it in place.

INDIVIDUAL TINES REPLACEMENT (See pages 12 and 13 for Parts Illustration and Parts List)

1. Wait for engine to cool and disconnect spark plug.
2. Remove the bolt and nut holding the tine to the plate.
3. Replace the tine with a new one along with a new bolt and nut.

NOTE: Tines are a normal wear item and should be inspected regularly for signs of wear or damage.

BELT AND CHAIN TENSION ADJUSTMENT

ADJUSTING BELT TENSION (See pages 12 and 13 for Parts Illustration and Parts List)

1. Remove the top guard (item 3) by removing the four nuts (item 87), two on each side, that secure it to the frame.
2. Locate the top of the belt idler assembly where the clutch cable (item 55) is secured in place. A properly tensioned belt should stretch the idler spring (located next to the idler pulley) between 1/4" - 3/8" when the clutch bail (item 54) is held in the drive position.
3. Using a 1/2" wrench loosen the two nuts that secure the cable (item 55) in place.

Continued next page.



AE401 Owner's Manual

4. TO INCREASE belt tension adjust these two nuts so that the cable (item 55) is secured in place with an additional 1/4" of the threaded adjuster at the top of the assembly.
TO DECREASE belt tension, adjust these two nuts so that the cable (item 55) is secured in place with 1/4" less of the threaded adjuster at the top of the assembly.
5. Replace the guard (item 3) and reinstall the four nuts (item 87) that secure it in place.
6. Run the unit to test your adjustment. Repeat as necessary to achieve proper adjustment. A properly adjusted belt will pull the unit up a 15 degree slope when clutched without any belt slip, and will declutch and stop the unit completely when the clutch is released.

NOTE: Never release the clutch on a slope. The unit is heavy and will free wheel downhill.

NOTE: A worn belt will not allow for proper adjustment and must be replaced.

ADJUSTING CHAIN TENSION (See pages 12 and 13 for Parts Illustration and Parts List)

1. Remove the top guard (item 3) by removing the four nuts (item 87), two on each side, that secure it to the frame.
2. Locate the bolt (item 31, 33) and nut (item 80) that hold each idler sprocket to the frame of the unit. One idler sprocket sets tension on the wheel drive chain and one sets tension on the tine drive chain.
3. Loosen the bolt and nut and slide the idler sprocket (item 29) in the desired direction.
INCREASED TENSION: Slide the sprocket to the rear.
DECREASED TENSION: Slide the idler sprocket to the front.
4. Tighten the bolt and nut to secure the sprocket in place.
5. Replace the guard and reinstall the four nuts that secure it in place.

NOTE: Over tensioning the chain will cause premature chain and sprocket wear. DO NOT OVER TENSION THE CHAIN. A properly tensioned chain will have slack of 1/4"-3/8" when moved by hand.

DRIVE BELT REPLACEMENT (See pages 12 and 13 for Parts Illustration and Parts List)

1. Wait for engine to cool and disconnect spark plug.
2. Remove the top guard by removing the four nuts, two on each side, that secure it to the frame.
3. Slide the belt off of the engine drive pulley, and off of the jackshaft drive pulley.
4. Continue sliding the belt along the jackshaft to the right jackshaft bearing away from the pulley and sprockets.
5. Using a 9/16" wrench, remove the two bolts and nuts that hold the jackshaft bearing in place.
6. Carefully lift the jackshaft up until the belt can be slid out underneath the bearing.
7. Slide the new belt in place over the jackshaft.
8. Replace and tighten the bolts and nuts holding the jackshaft bearing in place. Be sure that the jackshaft is aligned straight across between both bearings.
9. Slide the belt along the jackshaft and over both engine and jackshaft pulleys. Be sure the idler pulley is positioned on the flat side of the belt.
10. Check proper belt tension. See BELT TENSION ADJUSTMENT in this manual.

CHAIN REPLACEMENT (See pages 12 and 13 for Parts Illustration and Parts List)

NOTE: This procedure will work to change the wheel drive chain or the tine drive chain.

1. Wait for engine to cool and disconnect spark plug.
2. Remove the top guard by removing the four nuts, two on each side, that secure it to the frame.
3. Roll the unit until the master link of the chain that you want to replace is exposed near the jackshaft sprocket.
4. Release the tension on the chain. See CHAIN TENSION ADJUSTMENT in this manual.
5. Using a screwdriver or similar device, remove the spring clip that secures the master link in the chain.
6. With the master link removed unwind the chain from the two sprockets that it connects.
7. Carefully string the replacement chain around the same two sprockets and reconnect it with the new master link provided with your replacement chain.
8. Reset the tension on the chain.
9. Replace the guard and reinstall the four nuts that secure it in place.



AE401 Owner's Manual

LUBRICATION

BEARINGS (See pages 12 and 13 for Parts Illustration and Parts List)

1. Remove the top guard by removing the four nuts, two on each side that secures it to the frame. *NOTE:* Guard must be removed to lubricate the jackshaft bearings only. All other bearings can be lubed without removing the guard.
2. Lubricate all 6 bearings using a pressurized grease gun with standard lithium based grease.
3. Wipe any excess grease off of all bearings and fittings after each lubrication.
4. Replace the guard and reinstall the four screws that secure it in place.

CHAINS (See pages 12 and 13 for Parts Illustration and Parts List)

1. Remove the top guard by removing the four nuts, two on each side that secures it to the frame.
2. Apply a light coat of No. 30 Oil or a penetrating chain lubricant to keep the chain clean and in good running order.
3. Replace the guard and reinstall the four screws that secure it in place.

NOTE: If machine is cleaned with a pressure washer the chains and bearings should be lubricated after each cleaning.

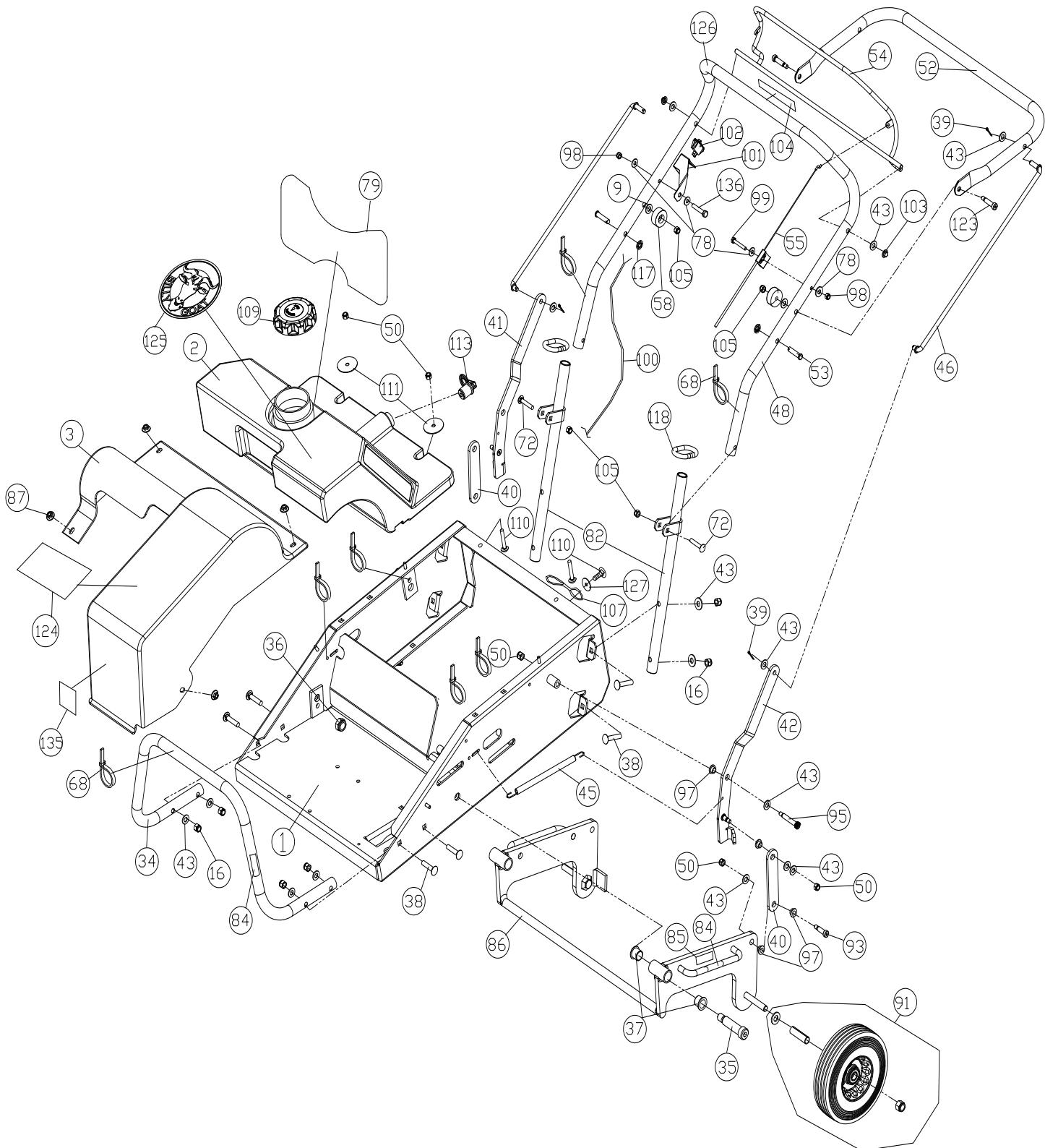
TROUBLESHOOTING

Problem	Possible Cause	Solution
Engine will not start	Stop switch off (Honda only). Throttle in off position. Engine not in full choke position. Out of gasoline. Bad or old gasoline. Spark plug wire disconnected. Dirty air cleaner. Engine oil level too low (Honda only).	Check stop switches, throttle, choke position and gasoline. Connect spark plug wire. Clean or replace air cleaner. Or contact a qualified service person. Check and fill engine oil.
Abnormal vibration	Damaged or missing tines. Loose handle bolts. Loose engine bolts.	Stop work immediately. Replace any damaged or missing tines. Tighten all loose bolts and nuts.
Engine is making loud noise or squealing	Gear reduction oil level is low	Check and add oil according to engine owner's manual
Engine stalls or labors when aerating	Working on too steep of a slope. Not enough oil in the engine.	Work at 45 degrees to the slope moving up and down instead of across. Check and add engine oil.
Engine is locked, will not pull over	Debris locked against reel, or drive pulleys. Engine problem.	Pull spark plug wire and remove debris. Contact an engine servicing dealer for engine problems.
Unit does not move when clutch is engaged	Belt drive out of adjustment. Worn drive belt. Loose or damaged chain or sprockets. Loose or damaged pulleys. Damaged or broken clutch cable.	See maintenance on pg. 7 of this manual. Contact a qualified servicing dealer.



AE401 Owner's Manual

AE401 HANDLE PARTS DRAWING





AE401 Owner's Manual

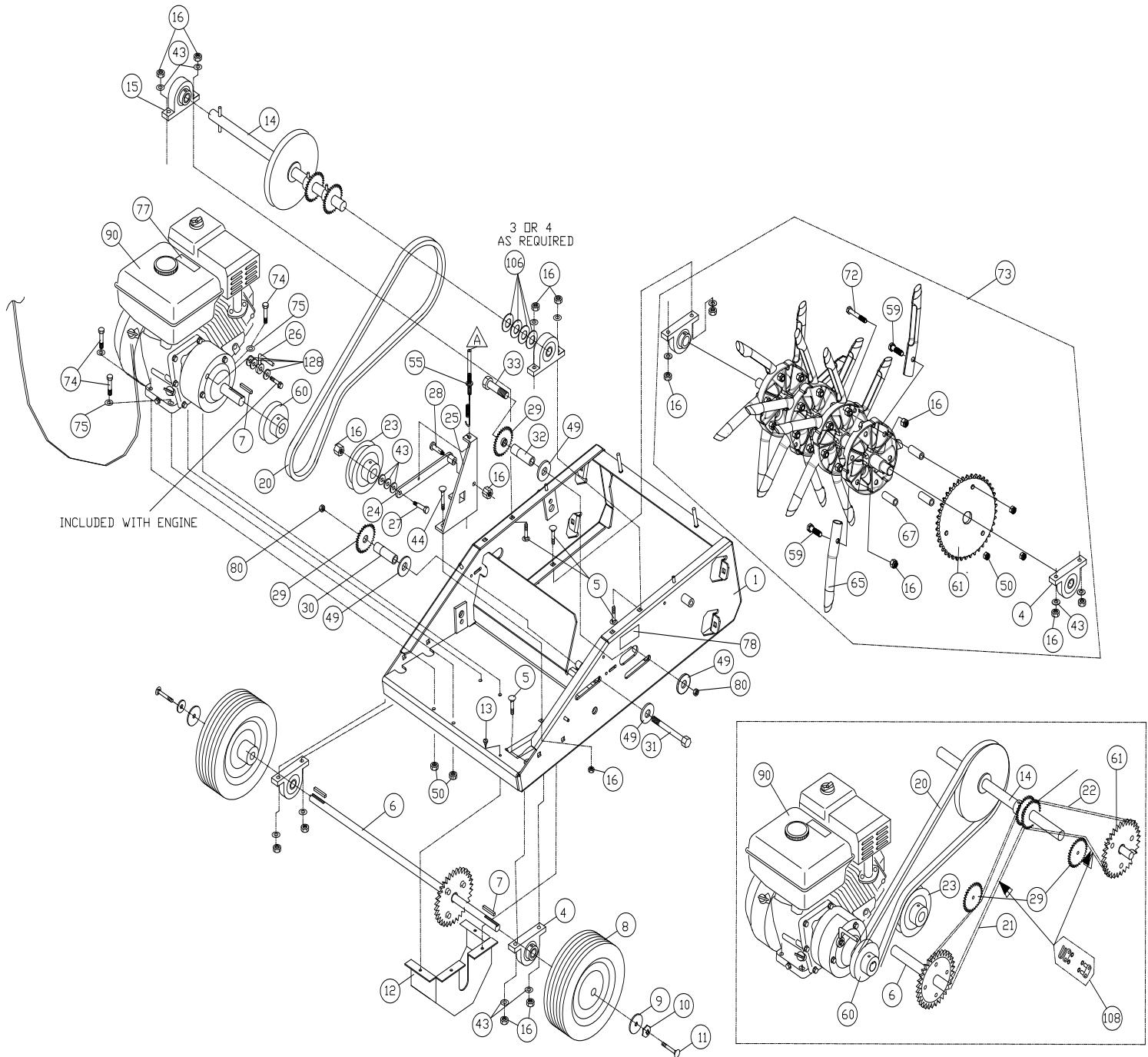
AE401 HANDLE PARTS LIST

ITEM NO.	DESCRIPTION	AE401H	QTY	AE401V	QTY
		Part No.		Part No.	
1	FRAME ASSEMBLY WA AE402	360324	1	360324	1
2	WATER TANK 5.5 GAL	360238	1	360238	1
3	GUARD DRIVE COVER	360280	1	360201	1
9	WASHER 5/16 FENDER	8172020	2	8172020	2
16	NUT LOCK 3/8-16	8160003	8	8160003	8
34	TUBE FRONT BUMPER	360329	1	360329	1
35	BOLT SHOULDER 3/4 x 2.5	360146	2	360146	2
36	NUT LOCK 5/8-11 THIN	8161046	2	8161046	2
37	BUSHING PIVOT	360183	4	360183	4
38	BOLT CARRIAGE 3/8-16 x 1.75"	8024061	8	8024061	8
39	COTTER PIN	8197031	4	8197031	4
40	BRACKET LIFT LINK	360246	2	360246	2
41	PLATE LINKAGE RH LONG WA AE	360328	1	360328	1
42	PLATE LINKAGE LH LONG WA AE	360327	1	360327	1
43	WASHER FLAT 3/8 SAE	8172009	22	8172009	22
45	SPRING EXTENSION	360154	2	360154	2
46	ROD LIFT	360330	2	360330	2
48	HANDLE UPPER AE	350375	1	350375	1
50	NUT LOCK 5/16-18	8160002	8	8160002	8
52	HANDLE LIFT	360296	1	360296	1
53	CLEVIS PIN 3/8" X 1.625	520119	2	520119	2
54	BAIL CLUTCH	350374	1	350374	1
55	CABLE CLUTCH ASSY	360313	1	360313	1
58	BUMPER RECESS	360298	2	360298	2
68	TY-WRAP	900407	8	900407	8
72	CARRIAGE BOLT 5/16-18X1.75	8024043	2	8024043	2
78	WASHER 1/4 SAE	8172007	4	8172007	4
79	LABEL TANK INSTRUCTIONS AE	360025	1	360025	1
82	HANDLE LOWER WA	360321	2	360321	2
84	LABEL LIFT HERE	360187	4	360187	4
85	LABEL WARNING WEIGHT	360188	2	360188	2
86	FRAME REAR WA	360267	1	360267	1
87	NUT FLANGE 1/4-20	900453	4	900453	4
91	TIRE & WHEEL 8" ASSY	360334	2	360334	2
93	BOLT SHOULDER 3/8 x 1"	360152	2	360152	2
95	BOLT SHOULDER 3/8 x 2"	360153	2	360153	2
97	BUSHING SHOULDER NYLON 3/8 ID	360175	8	360175	8
98	NUT LOCK 1/4x20 THIN	8160001	2	8160001	2
99	SCREW CAP 1/4 - 20 x 1 1/2"	8041009	1	8041009	1
100	HARNESS WIRE AE	360316	1	360316	1
101	BRACKET MOUNT SWITCH	430141	1	430141	1
102	SWITCH ON-OFF	500281	1	500281	1
103	NUT - PAL 3/8	360218	2	360218	2
104	CLUTCH LABEL	830503	1	830503	1
105	NUT LOCK 5/16 -18 THIN	8161041	4	8161041	4
107	PLASTIC LANYARD	360243	2	360243	2
109	CAP WATER TANK	360256	1	360256	1
110	SCREW SELF TAP 1/4-20 x 5/8"	890359	1	890359	1
111	WASHER - EXTENSION	810652	2	810652	2
113	PLUG DRAIN 1"	360293	1	360293	1
117	RETAINER 3/8"	360279	2	360279	2
118	LOOP FOLDING HANDLE	350138	2	350138	2
123	BOLT SHOULDER 3/8 x 1 1/4"	360284	2	360284	2
124	LABEL AE BADGING	360395	1	360395	1
125	LABEL LOGO CIRCLE 3.5"	100387	1	100387	1
126	GRIP	400570	2	400570	2
127	1/4 WASHER FLAT FENDER	8172019	1	8172019	1
135	LABEL MADE IN U.S.A.	520116	1	520116	1
136	SCREWCAP 1/4"-20 X 1 1/2" HCS ZP	8041008	1	8041008	1
137	BOLT CARRIAGE 5/16"-18 X 2" ZP	8024044	2	8024044	2



AE401 Owner's Manual

AE401 ENGINE PARTS DRAWING





AE401 Owner's Manual

AE401 ENGINE PARTS LIST

ITEM NO.	DESCRIPTION	AE401H	QTY	AE401V	QTY
		Part No.		Part No.	
1	FRAME ASSEMBLY WA AE402	360324	1	360324	1
4	BEARING 3/4" PILLOW BLOCK	350133	4	350133	4
5	CARRIAGE BOLT 3/8-16 x 1 1/2	8024060	12	8024060	12
6	FRONT AXLE ASSY	360332	1	360332	1
7	KEY SQUARE 3/16 x 3/16 x 1.25	9201080	3	9201080	3
8	WHEEL 10.5" SEMI PN. W3/4" KEYED HUB	360388	2	360388	2
9	FENDER WASHER 5/16"	8172020	2	8172020	2
10	WASHER LOCK 5/16 TWISTED TOOTH	430298	2	430298	2
11	SCREWCAP 5/16-18 x 1"	8041028	2	8041028	2
12	GUARD DIFFERENTIAL AE	360248	1	360248	1
13	SCREW SELF TAP 1/4 x 1/2"	890359	2	890359	2
14	JACKSHAFT AERATOR ASSY	360331	1	360331	1
15	BEARING 1" PILLOW BLOCK	810700	2	810700	2
16	NUT LOCK 3/8-16	8160003	28	8160003	28
20	BELT 4L x 43" POWER RATED	360120	1	360120	1
21	CHAIN #40 x 94 PITCH O-RING (WHEEL)	360115	1	360115	1
22	CHAIN #40 x 76 PITCH O-RING (TINE)	360114	1	360114	1
23	PULLEY IDLER 4.5"	500270	1	500270	1
24	ARM IDLER WA	510199	1	510199	1
25	BRACKET MOUNT IDLER	360121	1	360121	1
26	BELT FINGER FRONT AE	360219	1	360219	1
27	SCREWCAP 3/8"-16 X 2" HCS ZP	8041054	1	8041054	1
28	BOLT SHOULDER 1/2 x 1	500114	1	500114	1
29	SPROCKET IDLER 17T x 5/8" BORE	360116	2	360116	2
30	SPACER SPROCKET IDLER 2.5"	360123	1	360123	1
31	SCREW CAP 1/2 - 13 x 4	8041106	1	8041106	1
32	SPACER SPROCKET IDLER 1.175"	360124	1	360124	1
33	SCREW CAP 1/2 - 13 x 3"	8041102	1	8041102	1
43	WASHER FLAT 3/8 SAE	8172009	17	8172009	17
44	CARRIAGE BOLT 3/8"-16 X 1"	8024058	2	8024058	2
49	FLAT WASHER 1/2"	8171006	4	8171006	4
50	NUT LOCK 5/16-18	8160002	7	8160002	7
55	CABLE CLUTCH ASSY	360313	1	360313	1
59	SCREWCAP 3/8 - 16 X 1/2"	8041052	1	8041052	24
60	PULLEY ENGINE	610417	1	610417	1
61	SPROCKET 42 T 1" CENTER HOLE	360350	1	360350	1
65	TINE	360100	24	360100	24
67	SPACER SPROCKET AE REEL	360351	3	360351	3
72	SCREWCAP 5/16"-18 X 2 1/2" GR 5	8041034	3	8041034	3
73	TINER ASSY AE401	360352	1	360352	1
74	SCREW CAP 5/16 - 18 x 1.5"	8041030	4	8041030	4
75	WASHER FLAT CUT 5/16	8171003	4	8171003	4
77	LABEL WARNING FUEL EN/SP	-	-	100261	1
78	LABEL DANGER GUARD	900327	2	900327	2
80	NUT LOCK 1/2 - 13 THIN	8161044	2	8161044	2
90	ENGINE	360278	1	360355	1
106	WASHER 1.062" ID X 1.75 OD	8172021	3 OR 4	8172021	3 OR 4
108	CHAIN MASTER LINK	360205	2	360205	2
128	WASHER 1/4" FC	8171002	3	8171002	3



AE401 Owner's Manual



en English	fi Suomi	lv Latviešu	ru Русский
bg български език	fr Français	nl Nederlands	sl Slovenčina
cs Čeština	el Ελληνικά	no Norsk	sk Slovák
da Dansk	hr Hrvatski	pl Polski	sv Svenska
de Deutsch	hu Magyar	pt Português	tr Türkçe
es Español	it Italiano	ro Română	
et eesti keel	lt Lietuvių		

en EC Declaration of Conformity	el Δήλωση συμμόρφωσης EK	pl Deklaracja zgodności UE
bg Декларация за съответствие с европейските стандарти	hu EU Megfelelőségi nyilatkozat	pt Declaração de Conformidade à CE
cs ES Prohlášení o shodě	hr EC Deklaracija o sukladnosti	ro Declarație de conformitate C.E.
da EC Overensstemmelseserklæring	it Dichiaraione di conformità CE	ru Заявление о соотвествии стандартам и нормам ЕС
de EG-Konformitätserklärung	lt EB atitikties deklaracija	si ES izjava o skladnosti
es Declaración de Conformidad de la CE	lv EK Atbilstības deklarācija	sk Vyhľásenie o zhode
et EÜ vastavustunnistus	nl E.G. Conformiteitverklaring	sv EG-försäkran om överensstämmelse
fi EC-vaatimustenmukaisuusvakuutus	no CE konformitetserklæring	tr EC Uygunluk Deklarasyonu
fr Déclaration de conformité CE		

en Category Aerator	el Κατηγορία αεριστής	pl Kategoria aerator
bg Категория аератор	hu Kategória Áram	pt Categoría aerador
cs Kategorie perlátor	hr Kategorija aerator	ro Categorie aerator
da Kategori belifter	it Categoría aeratore	ru Категория аэратор
de Kategorie Belüfter	lt Kategorija aeratorius	sl Kategorija aerator
es Categoría aireador	lv Kategorija aerators	sk Kategória perlátor
et Kategooria õhusti	nl Categorie beluchter	sv Kategori luftare
fi Kategoria ilmastin	no Kategori aerator	tr Kategori havalandırıcı
fr Catégorie aérateur		

en This is to certify that the products listed in this document meet the requirements of the European Community Law, and can carry the CE mark. These models comply with the following Directives and related Standards.	pl Deklaracja zgodności UE
bg Декларацията се издава в удостоверение на това, че изброените продукти съответстват на стандартите на правните норми на Европейския съюз и могат да носят знака CE. Моделите изпълняват директивите и техните стандарти, както следва.	pt Declaração de Conformidade à CE
cs Tímto stvrzuje, že výrobky uvedené v tomto dokumentu splňují požadavky zákonů Evropského společenství a mohou být označeny značkou CE. Tyto modely splňují následující směrnice a související normy.	ro Declarație de conformitate C.E.
da Det bekræftes hermed, at de produkter, der er nævnt i dette dokument, opfylder bestemmelserne i EU-lovgivningen og kan bære CE-mærket.	ru Заявление о соотвествии стандартам и нормам ЕС
de Hiermit wird bescheinigt, dass die in diesem Dokument aufgeführten Produkte mit den gesetzlichen Bestimmungen der Europäischen Gemeinschaft übereinstimmen und das CE-Zeichen tragen können. Diese Modelle erfüllen die folgenden Richtlinien sowie weitere anzuwendende Normen.	si ES izjava o skladnosti
es La presente certifica que los productos enumerados en este documento cumplen con los requerimientos de la Legislación de la Comunidad Europea, y que pueden portar la marca CE. Estos modelos cumplen con las siguientes Directrices y Estándares relacionados:	sk Vyhľásenie o zhode
et Kinnitame, et eespool nimetatud tooted vastavad Europa Ühenduse seadusandluse nõuetele ja kannavad CE-märgistust. Eespool nimetatud mudelid vastavad järgmiste direktiividele ja seotud standardidele:	sv EG-försäkran om överensstämmelse
fi Vakuutamme, että tähässä asiakirjassa luetellut tuotteet täyttävät Euroopan Unionin lainsäädännön asettamat vaatimukset ja voi saada CE-merkinnän.	tr EC Uygunluk Deklarasyonu
fr Nous déclarons par la présente que les produits mentionnés dans le document sont conformes à la législation de la Communauté européenne et peuvent porter le marquage CE. Ces modèles sont conformes aux directives suivantes et aux normes connexes :	
el Με την παρούσα δήλωση πιστοποιείται ότι τα προϊόντα που αναφέρονται στην παρούσα πληρούν τις απαιτήσεις της Ευρωπαϊκής Κοινότητς Νομοθεσίας και μπορούν να φέρουν τη σήμανση CE. Τα ποντέλα αυτά συμμορφώνονται με τις ακόλουθες Οδηγίες και τα σχετικά Πρότυπα.	
hu Ez annak tanúsítására szolgál, hogy e dokumentumban felsorolt termékek megfelelnek az Európai közösségi jog követelményeinek és viselheti a CE jelzést.	
hr Ovo je potvrda da proizvodi koji su navedeni u ovom dokumentu odgovaraju zakonima europske zajednice i da nose CE oznaku.	
it Si certifica che i prodotti elencati nel presente documento soddisfano i requisiti della legislazione della Comunità Europea e possono recare il marchio CE.	
lt Ar šio tiek apstiprināts, ka šajā dokumentā uzskaitītās izstrādājumi atbilst Eiropas Kopienas Likuma prasībām un var tikt markēti ar emblēmu CE.	
lv Šie modeli atbilst sekojošajām Direktīvām un attiecīgajām Normām.	
nl Hiermee wordt gecertificeerd dat de producten die in deze lijst staan opgesomd, voldoen aan de wettelijke voorschriften van de Europese Gemeenschap en mogen worden voorzien van de CE markering. Deze modellen voldoen aan de volgende richtlijnen en bijbehorende normen:	
no Dette sertifiserer at produktene som er nevnt i dette dokumentet oppfyller kravene som stilles av EU, og at de dermed kan CE-merkes.	
pl Niniejszym zaświadczenie się, że produkty wymienione w niniejszym dokumencie spełniają wymogi Prawa Współnoty Europejskiej i mogą nosić oznakowanie CE. Modele te spełniają wymogi następujących dyrektyw i powiązanych norm.	
pt O presente documento certifica que os produtos listados neste documento atendem aos requisitos das Leis da Comunidade Européia e podem levar a marca CE.	
ro Prin prezenta se atestă faptul că produsele menționate în acest document îndeplinește cerințele de Drept Comunitar European și pot purta sigla C.E. Aceste modele sunt în conformitate cu următoarele directive și standarde asociate.	
ru Настоящим удостоверяется, что перечисленные в этом документе изделия соотвествуют требованиям законов Европейского Союза и могут быть обозначены знаком CE. Эти модели отвечают требованиям следующих директив и соотвествующих стандартов.	
sl To služi kot potrditev, da izdelki, ki so navedeni v tem dokumentu, ustrezajo zahtevam zakonodaje Evropske skupnosti in so lahko opredeljeni z oznako CE.	
sk Týmto vyhľásujeme, že výrobky uvedené v tomto dokumente, splňajú požiadavky zákonov ES a môžu byť označené značkou CE. Tieto modely vyhovujú nasledujúcim smernicam príslušným normám.	
sv Härmed försäkras att produkterna som finns listade i detta dokument uppfyller kraven i Europeiska gemenskapens lagstiftning och kan förses med CE-märket.	
tr Bu belgede belirtilen ürünlerin Avrupa Birliği Yasası gereksinimlerini karşılayarak CE işaretini taşıyabilmelerini onaylamak içindir. Bu modeller aşağıdaki Direktif ve ilgili Standartlarla uyumludur	



AE401 Owner's Manual

en Directive:	2006/42/EC	hu Irányelv:	2006/42/EC	pt Diretiva:	2006/42/EC
bg Директива:	2006/42/EC	el Официал:	2006/42/EC	ru Директива:	2006/42/EC
cs Směrnice č. 2006/42/EU		hr Direktiva:	2006/42/EC	ro Directiva:	2006/42/EC
da Direktiv:	2006/42/EU	it Direttiva:	2006/42/EU	sl Direktiva:	2006/42/EU
de Richtlinie:	2006/42/EG	lt Direktyva:	2006/42/EG	sk Smernica:	2006/42/EG
es Directriz:	2006/42/EC	lv Direktīva:	2006/42/EC	sv Direktiv:	2006/42/EC
et Direktiiviiga:	2006/42/EÜ	nl Richtlijn:	2006/42/EÜ	tr Direktif:	2006/42/EÜ
fi Direktiivi:	2006/42/EC	no Direktiv:	2006/42/EC		
fr Directives :	2006/42/CE	pl Dyrektywy:	2006/42/CE		

en Model	Guaranteed Sound Power Level	Measured Sound Power Level	Sound Pressure Level at Operator's Ear (1)	Engine Net Power	Hand/Arm Vibration (2)	Mass
bg Model	Гарантирано ниво на звука	Измерено ниво на звука	Напългане на звука, измерено на нивото на ухото на оператора (1)	Мощност на двигателя	Вибрация на дланта и на ръката (2)	Маса
cs Model	Garantovaná hladina akustického výkonu	Změřená hladina akustického výkonu	Hladina akustického tlaku naměřená uucha obsluhující osoby (1)	Užitečný výkon motoru	Vibrace rukou/rad (2)	Váha
da Model	Garanteret støjniveau	Målt støjniveau	Lydtryksniveau ved brugerens øre (1)	Maskine Netto kraft	Vibration af hånd/arm (2)	Vægt
de Modell	Garantiert Schallleistungsspegl	Gemessener Schallleistungsspegl	Schalldruckpegel am Ohr der Bedienungsperson (1)	Motortennettkraft	Vibrationen an Hand/Arm (2)	Masse
es Modelo	Nivel garantizado de potencia acústica	Nivel medido de potencia acústica	Nivel de presión acústica en el oído del operador (1)	Potencia neta del motor	Vibración mano / brazo (2)	Masa
et Model	Garanteeritud helivõimsuse tase	Mõõdetud helivõimsuse tase	Helirõhu tase kasutaja kõrvale juures (1)	Masin puhas töötav	Võkumine käsi / käsilvars (2)	Massi
fi Malli	Taattu äänitehotaso	Mitattu äänitehotaso	Äänepaine taso käytäjän korvan tasolla (1)	Mootorin nettotonku	Käden/käsilvarren tärinä (2)	Paino
fr Modèle	Niveau de bruit garanti	Niveau de bruit mesuré	Niveau sonore au niveau de l'oreille de l'opérateur (1)	Puissance nette du moteur	Vibrations au niveau de la main/du bras (2)	Masse
el Μοντέλο	Εγγυημένη στόθιμη ηχητικότης	Μετρηθείσα στόθιμη ηχητικότης	Στόθιμη ηχητική πίεση στο αυτί του χειριστή (1)	Καθαρή ισχύς κινητήρα	Χειροβροχή ομήρη δύνη (2)	Μόζα
hu Model	Garantált hangteljesítmény szint	Mérhető hangteljesítmény szint	Hangnyomás szint a gépkezelő fülénél (1)	Motor hasznos teljesítménye	Kéz/kar vibráció (2)	Tömeg
hr Model	Zajamčena razina snage zvuka	Izmjerena razina snage zvuka	Razina zvučnog tlaka na uhu rukovatelja (1)	Neto snaga motora	Vibracije šake/ruke (2)	Masa
it Modello	Livello acustico garantito	Livello acustico misurato	Livello di pressione acustica all'orecchio dell'operatore (1)	Potenza netta motore	Vibrazioni a mani/braccia (2)	Massa
lt Modelis	Garantuotas triukšmo lygis	Pamatuotas triukšmo lygis	Garsas spaudimo lygis į rankas ir ne naudotojui (1)	Variklio bendras galingumas	Rankenos vibracija (2)	Masė
lv Modelis	Garantētais skājas jaudas līmenis	Izmērtais skājas jaudas līmenis	Skājas spiediena līmenis pie operatora auss (1)	Dzinēja neto jauda	Rokas/pleca vibrācija (2)	Masa
nl Model	Gegarandeerd geluidsniveau	Gemeten geluidsniveau	Geluidsniveau bij het oor van de gebruiker (1)	Netto motorvermogen	Trilling van hand/arm (2)	Mass
no Modell	Garantert lydstryknivå	Målt lydstryknivå	Lydtrykk-nivå ved operatørens øre (1)	Motoren netto krefter	Hånd/arm-vibrasjon (2)	Masse
pl Model	Garantowany poziom mocu akustycznego	Zmierzony poziom mocy akustycznej	Poziom ciśnienia akustycznego w uchu operatora (1)	Moc netto silnika	Drgania ręki/ramienia (2)	Masa
pt Modelo	Nível de potência de som garantido	Nível de potência de som medido	Níveis de pressão do som no ouvido do operador (1)	Potência útil do motor	Vibração na mão/braço (2)	Massa
ro Model	Nivel de zgomot garantat	Nivel de zgomot măsurat	Nivel de presiune acustică la urechea operatorului (1)	Putere netă motor	Vibratje mână/brat (2)	Masă
ru Модель	Гарантированный уровень звуковой мощности	Измеренный уровень звуковой мощности	Уровень звукового давления на месте оператора (1)	Полезная мощность двигателя	Интенсивность вибрации на ладонях/руках (2)	Вес
sl Model	Zajamčena ravnen zvočne moči	Izmjerena ravnen zvočne moči	Raven zvočnega tlaka pri ušesu uporabnika (1)	Izhodna moč motorja	Tresljaji na rokah (2)	Masa
sk Model	Zaručená hladina akustického výkonu	Nameraná hladina akustického výkonu	Hladina akustického tlaku pôsobiaceho na ucho obsluhy (1)	čistý výkon motora	Ruka/Rameno Vibrácia (2)	Masa
sv Modell	Garanterad ljudeffektnivå	Uppmätt ljudeffektnivå	Ljudtrycksnivå vid operatören öra (1)	Motoreffekt netto	Hand-/ armvibrationer (2)	Massa
tr Model	Garantili Ses Güçü Seviyesi	Ölçülen Ses Güçü Seviyesi	Operatörün Kulağındaki Ses Basıncı Seviyesi (1)	Makine Net Güç	El/Kol Titreşimi (2)	Ağırlık
AE401	100 dB(A)	99 dB(A)	79 dB(A)	2.98 kW	2.97 m/s ²	110 kg
AE401V	100 dB(A)	99 dB(A)	79 dB(A)	4.1kW	2.97 m/s ²	110 kg

(1) ISO 5395-1:2013 F.7 (EN 4871:1996)

(2) ISO 5395-1:2013 G.8 (EN 12096:1997, D.1)



AE401 Owner's Manual

en	Manufacturing Place / Keeper of Documentation	el	Tόπος κατασκευής / Υπεύθυνος τήρησης αρχείων	pl	Miejsce produkcji / Osoba odpowiedzialna za przechowywanie dokumentów
bg	Mясто на производство / Архивар	hu	Gyártás helye / A dokumentáció őrzője	pt	Local de Fabrico / Responsável pela Documentação
cs	Misto výroby / Držiteľ dokumentace	hr	Mjesto proizvodnje / Čuvat dokumentacije	ro	Loc de fabricație / Păstrător documentație
da	Fremstillingsted / Indehaver af dokumentationen	it	Sede di produzione / Archiviatore di documentazione	ru	Место производства / Владелец документации
de	Herstellungsstadt / Verantwortlicher für die Dokumentation	lv	Pagāmīšanas vieta / Dokumentācijas glābātājs	sl	Kraj izdelave / Hranitelj dokumentacije
es	Lugar de manufactura / Guardián de documentación	nl	Productieplaats / Documentatiebeheerder	sk	Miesto výroby / Dokumentácia majiteľa
et	Valmistamiskohu / Dokumentatsiooni hoidja	no	Produksjonssted / Dokumentasjonsholder	sv	Tillverkningsplats / Dokumentförvaring
fi	Valmistuspaikka / Asiakirjojen haltija			tr	Üretim Yeri / Doküman Sorumlusu
fr	Lieu de fabrication / Personne chargée de conserver la documentation				

1803 S.W. Jefferson
Lees Summit, MO 64063-
0308 USA

10/05/2015

Jeroen Engelen
Schepersweg 4a 6049CV
Herten, NL

Ted Melin
Engineering Manager

Part No. 360194
Revision: F100515A