

ECHO



www.bearcatproducts.com

4 INCH CHIPPER

CH4400 - 400cc SUBARU

PARTS MANUAL



PN: 76872-00
Rev. 010113

Companion to 76871-00

VIN RANGE: 5VJAA0017DW000001 - CURRENT

Before You Begin

DEAR ECHO BEAR CAT CUSTOMER

Thank you for purchasing a ECHO Bear Cat product. The ECHO Bear Cat line is designed, tested, and manufactured to give years of dependable performance. To keep your machine operating at peak efficiency, it is necessary to adjust it correctly and make regular inspections. The following pages will assist you in the operation and maintenance of your machine. Please read and understand this manual before operating your machine.

If you have any questions or comments about this manual, please call us toll-free at 1-800-247-7335.

If you have any questions or problems with your machine, please call or write your local authorized ECHO Bear Cat Dealer.

This document is based on information available at the time of its publication. ECHO Bear Cat is continually making improvements and developing new equipment. In doing so, we reserve the right to make changes or add improvements to our product without obligation for equipment previously sold.

PLEASE SEND US YOUR WARRANTY CARD

A warranty card is included in your owner's kit packaged with your machine. Please take the time to fill in the information requested on the card. When you send your completed card to us, we will register your machine and start your coverage under our limited warranty.

FOR MACHINE SERVICE OR PARTS:

For service assistance, contact your nearest authorized ECHO Bear Cat dealer or the factory. For parts, contact your authorized dealer. The parts manual for your machine is available at <http://bearcatproducts.com/main/support/index.html>. Your dealer will need to know the identification number of your machine to provide the most efficient service. See below for information on how to identify and record the identification number for your machine.

FOR ENGINE SERVICE OR PARTS:

For engine service or parts, contact your nearest authorized engine dealer. ECHO Bear Cat does not handle any parts, repairs or warranties for engines.

ORDERING PARTS

Only genuine ECHO Bear Cat replacement parts should be used to repair the machine. Replacement parts manufactured by others could present safety hazards, even though they may fit on this machine. Replacement parts are available from your ECHO Bear Cat dealer.

Provide the following when ordering parts:

The SERIAL NUMBER OR VIN of your machine.

The PART NUMBER of the part.

The PART DESCRIPTION.

The QUANTITY needed.

IDENTIFICATION NUMBER LOCATION

Your machine will have either a serial number or vehicle identification number (VIN). VINs are located on the left side of the trailer frame near the hitch. They are 17-digit numbers of the format: 5VJAA001XXWXXXXXX. Serial numbers are located on the machine body. They are 6-digit numbers.

Record your identification number in the space provided and on the warranty registration card.

SERIAL NUMBER OR VIN

HOW TO CONTACT ECHO BEAR CAT

ADDRESS	PHONE	E-MAIL	HOURS
237 NW 12th Street P.O. Box 849 West Fargo, ND 58078	800.247.7335 701.282.5520 FAX: 701.282.9522	sales@bearcatproducts.com service@bearcatproducts.com	Monday - Friday, 8 am to 5 pm Central Time

Is my machine CE Compliant?



The CE marking (also known as the “CE mark”) is a mandatory compliance mark on products sold internationally where CE standards are enforced and in the European Economic Area (EEA). The CE marking certifies that a product has met European Union (EU) consumer safety, health or environmental requirements. By affixing the CE marking to our products, Echo Bear Cat declares that it meets EU safety, health and environmental requirements.



Echo Bear Cat products that are CE compliant will be clearly marked with an identifying “CE” decal. These products feature safety and other engineering features that non-CE compliant products do not have. Non-CE compliant Echo Bear Cat products are primarily sold in countries and regions that do not require or enforce mandatory CE certification. However, this is not true for all countries and regions. If you are unsure of CE requirements for the country or region in which you live, please contact your nearest Echo Bear Cat dealer or distributor.

Other CE Model Identifying Decals



Echo Bear Cat products that are CE compliant will also be labeled with a decibal level warning decal. This decal notes the decibal level of noise created while the machine is operating under normal conditions.



Machine Mass: XXX kg (XXX lb)
Nominal Power: XX kW (XXX cc)
@ XXXX RPM

CE compliant Echo Bear Cat products will also have a CE compliance information decal detailing weight and power specifications for the specific model on which it is found.

CE Compliant Decal Location

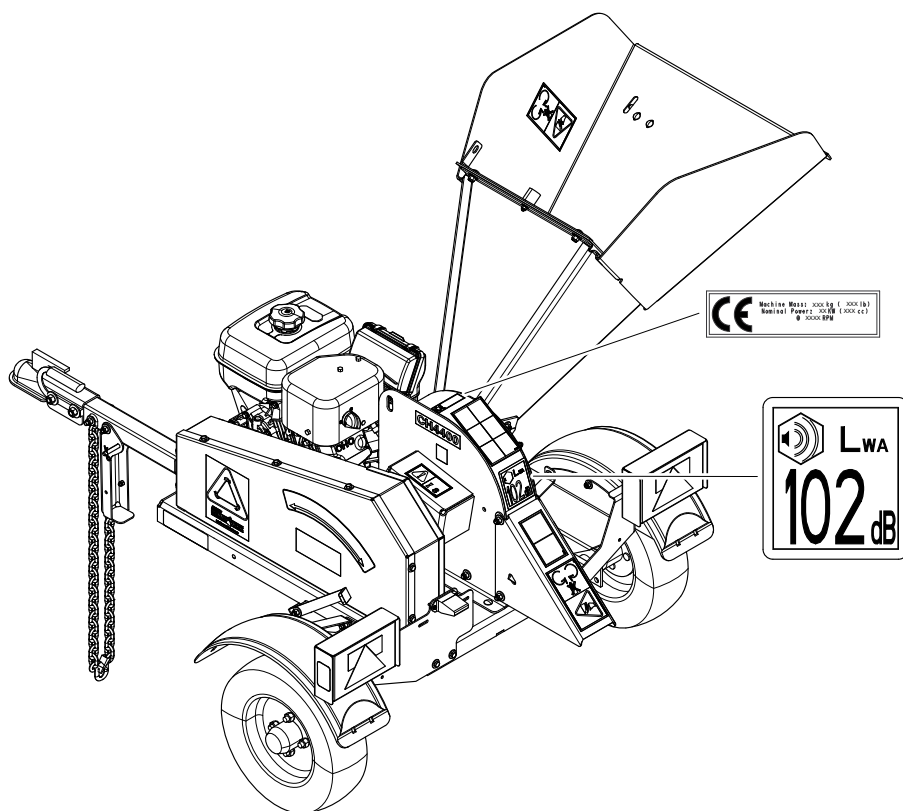
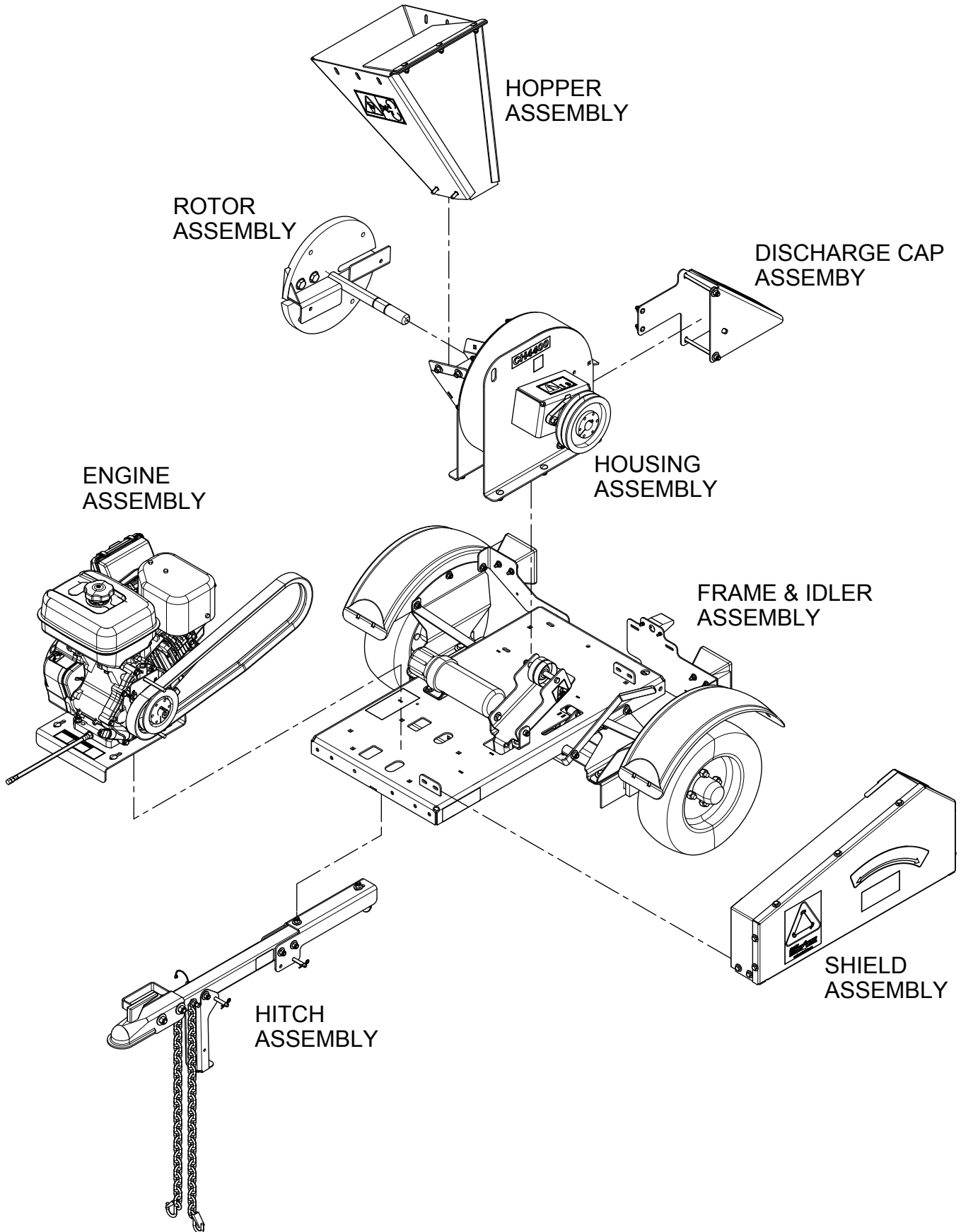
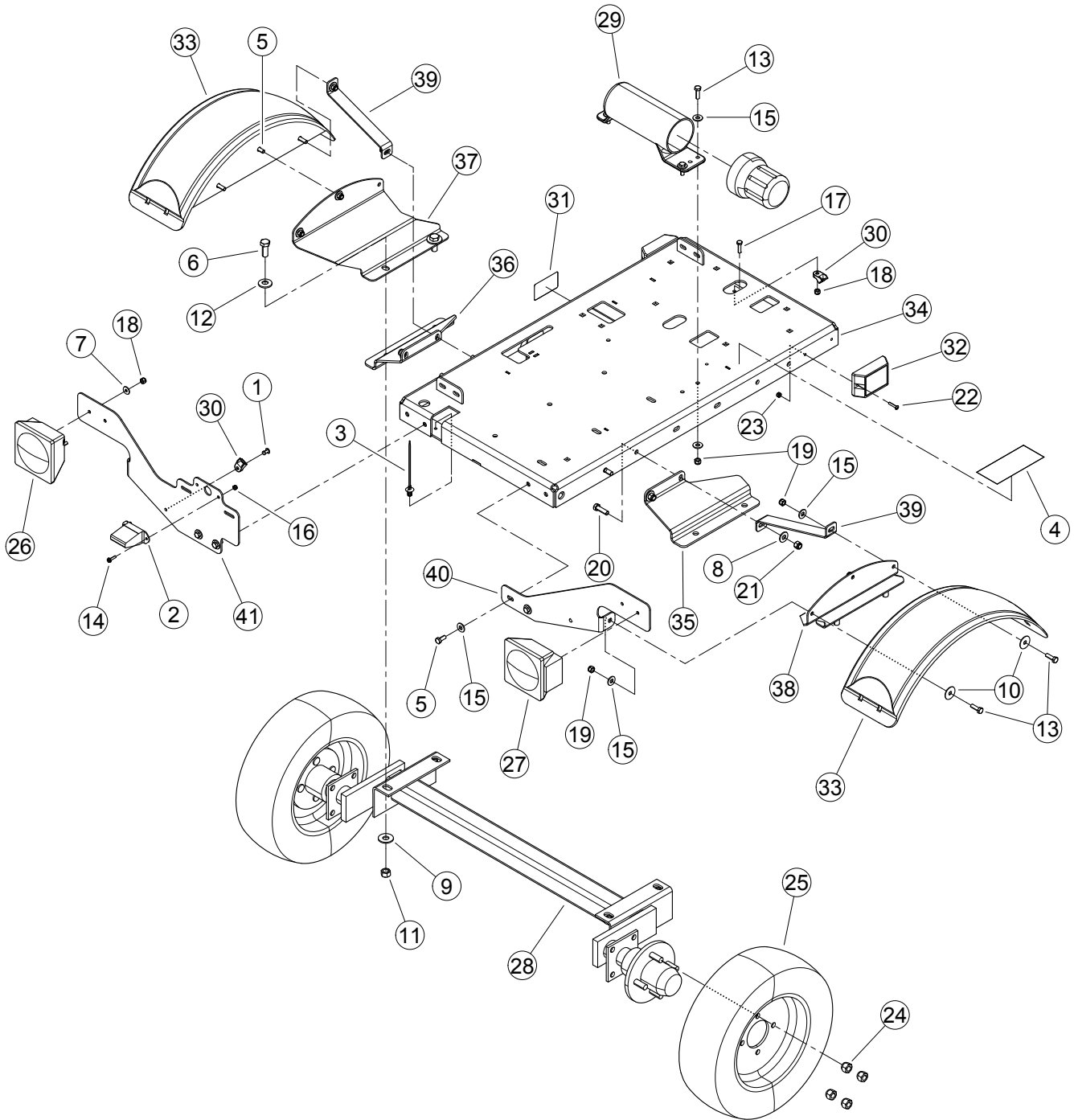


TABLE OF CONTENTS

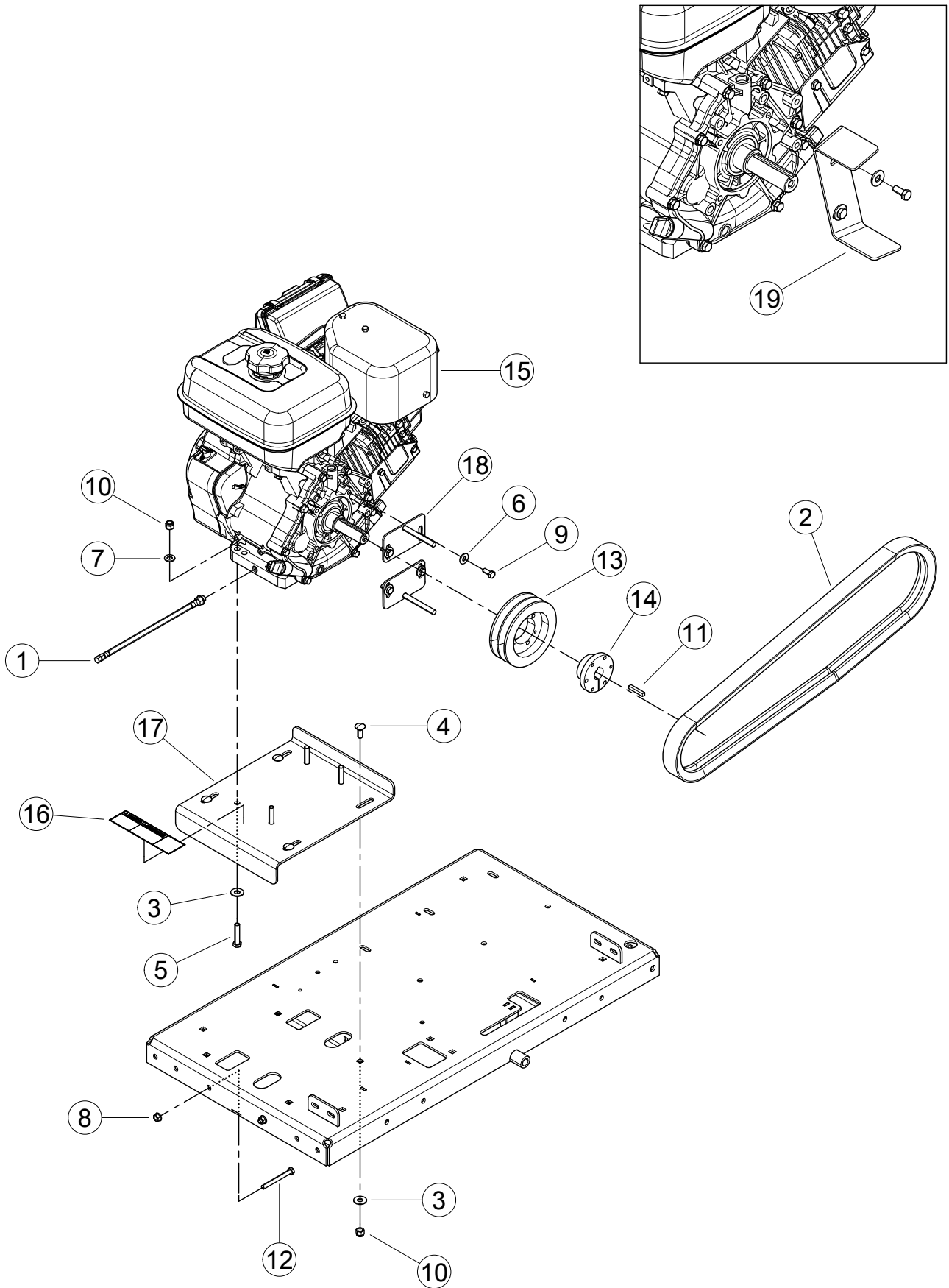
DESCRIPTION	PAGE
EXPLODED VIEW	1
FRAME	2
<i>NON-CE COMPLIANT</i>	
FRAME	4
<i>CE COMPLIANT</i>	
ENGINE	6
IDLER	8
SHIELDS	10
ROTOR	11
HOUSING	12
CHUTE	14
<i>NON-CE COMPLIANT</i>	
CHUTE	15
<i>CE COMPLIANT</i>	
HITCH	16
<i>NON-CE COMPLIANT</i>	
HITCH	18
<i>CE COMPLIANT</i>	
DISCHARGE CAP	20
OPTIONAL DISCHARGE TUBE	21
SERVICE PARTS & ACCESSORIES	22



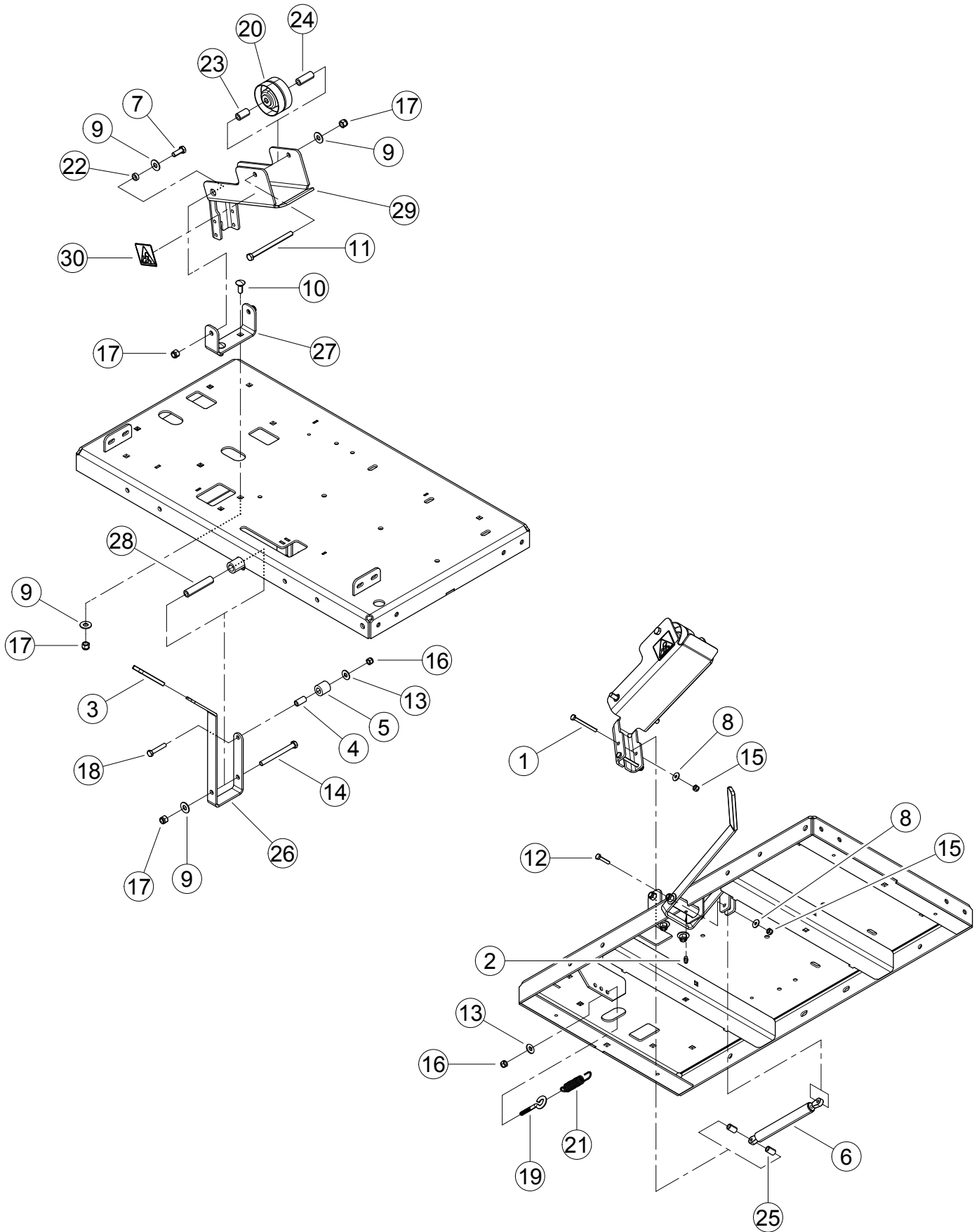


ITEM	PART NUMBER	DESCRIPTION
1	0111-0058-00	RIVET, 1/4 X 3/4 ST POP
2	14368-00	LIGHT, LICENSE PLATE
3	14775-00	TIE, DOME FIR TREE
4	14942-00	DECAL, MUTILINGUAL MANUAL
5	15003	BOLT, 5/16 X 3/4 HEX HD GR5 ZP
6	15013	BOLT, 1/2 X 1-1/4 HHCS GR5 NC ZP
7	15030	WASHER, 1/4 FLAT ZP
8	15031	WASHER, 3/8 FLAT ZP
9	15034	WASHER, 1/2 FLAT ZP
10	15040	WASHER, 5/16 FENDER ZP
11	15049	NUT, 1/2 CENTERLOCK GRB ZP
12	15097	WASHER 1/2 SAE FLAT ZP
13	15219	BOLT, 5/16 X 1 HHCS GR5 NC ZP
14	15225	SCREW, #10 X 3/4 HEX TAP SC
15	15250	WASHER, 5/16 FLAT ZP
16	15255	NUT, 8-32 NYLOCK
17	15284	BOLT, 1/4 X 1 HEX GR8 ZP
18	15355	NUT, 1/4 NE NYLOCK ZP
19	15356	NUT, 5/16 NE NYLOCK ZP
20	15364	BOLT, 3/8 X 1-1/4 HEX HD GR5 ZP
21	15388	NUT, 3/8 NE NYLOCK ZP
22	15393	MACH. SCREW, 10-24 X 1 RND HD PHL ZP
23	15397	NUT, 10/24 NYLOCK TYPE NM ZP
24	15527	NUT, 1/2-20 WHEEL
25	16008	ASSEMBLY, TIRE + WHEEL 4.80-8
26	16903	LIGHT, LH TAIL
27	16904	LIGHT, RH TAIL
28	16917	AXLE, 1000LB TORSION
29	18008-00	CONTAINER, MANUAL
30	18549-00	CLAMP, CABLE MOUNT
31	32157-00	DECAL, 4.80-8 LOAD RATING
32	32347-00	LIGHT, AMBER SIDE MARKER
33	76624-00	FENDER, BLACK PLASTIC DRILLED
34	76912-12	WELDMENT, CHIPPER TRAILER
35	76915-12	SUPPORT, AXLE FENDER-RH
36	76916-12	SUPPORT, AXLE FENDER-LH
37	76917-12	SHEET, MOUNT FENDER-LH
38	76918-12	SHEET, MOUNT FENDER-RH
39	76921-12	BRACKET, FENDER SUPPORT
40	77487-12	BRACKET, LIGHT RH
41	77488-12	BRACKET, LIGHT LH
	17320	STRAP, 11 IN. BLACK TIE (NOT SHOWN)
	32326-00	HARNESS, CHIPPER TRAILER (NOT SHOWN)
	71707	CONDUIT, 1/4 X 158 WIRE (NOT SHOWN)
	72679	CONDUIT, 1/4 X 16 WIRE (NOT SHOWN)

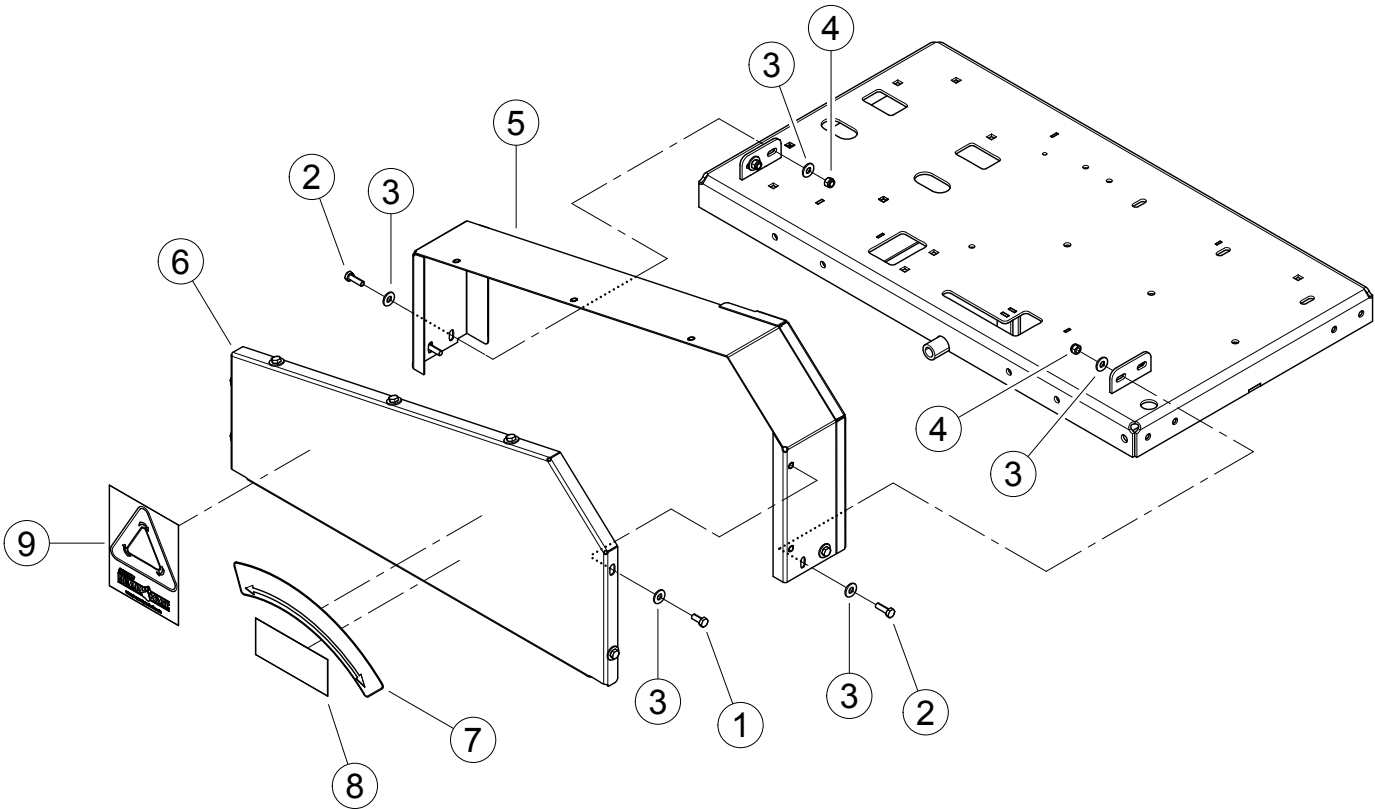
ITEM	PART NUMBER	DESCRIPTION
1	0111-0058-00	RIVET, 1/4 X 3/4 ST POP
2	0934-0004-00	GROMMET, 1/4 X 5/8 RUBBER
3	14367-00	PLUG, 12 VOLT LIGHT
4	14368-00	LIGHT, LICENSE PLATE
5	14374-00	REFLECTOR, WIDE ANGLE RED
6	14566-00	LIGHT, TAIL RH
7	14580-00	LIGHT, TAIL LH
8	14775-00	TIE, DOME FIR TREE
9	14942-00	DECAL, MULTILINGUAL MANUAL
10	15003	BOLT, 5/16 X 3/4 HEX HD GR5 ZP
11	15013	BOLT, 1/2 X 1-1/4 HHCS GR5 NC ZP
12	15031	WASHER, 3/8 FLAT ZP
13	15034	WASHER, 1/2 FLAT ZP
14	15040	WASHER, 5/16 FENDER ZP
15	15049	NUT, 1/2 CENTERLOCK GRB ZP
16	15097	WASHER 1/2 SAE FLAT ZP
17	15219	BOLT, 5/16 X 1 HHCS GR5 NC ZP
18	15225	SCREW, #10 X 3/4 HEX TAP SC
19	15250	WASHER, 5/16 FLAT ZP
20	15255	NUT, 8-32 NYLOCK
21	15356	NUT, 5/16 NE NYLOCK ZP
22	15364	BOLT, 3/8 X 1-1/4 HEX HD GR5 ZP
23	15367	BOLT, 5/16 X 3/4 CRG GR5 NC ZP
24	15388	NUT, 3/8 NE NYLOCK ZP
25	15527	NUT, 1/2-20 WHEEL
26	15557	BOLT, 10-24 X 3/4 HHCS GR8 PLAIN
27	15830-00	NUT, #10-24 K-LOCK ZP
28	16008	ASSEMBLY, TIRE + WHEEL 4.80-8
29	16917	AXLE, 1000LB TORSION
30	18008-00	CONTAINER, MANUAL
31	18549-00	CLAMP, CABLE MOUNT
32	18671-00	HARNESS, TRAILER LIGHTING
33	75343-12	BRACKET, LIGHT
34	76624-00	FENDER, BLACK PLASTIC DRILLED
35	76912-12	WELDMENT, CHIPPER TRAILER
36	76915-12	SUPPORT, AXLE FENDER-RH
37	76916-12	SUPPORT, AXLE FENDER-LH
38	76917-12	SHEET, MOUNT FENDER-LH
39	76918-12	SHEET, MOUNT FENDER-RH
40	76921-12	BRACKET, FENDER SUPPORT
41	76931-12	BRACKET, LIGHT-RH
42	76932-12	BRACKET, LIGHT-LH
	17320	STRAP, 11 IN. BLACK TIE (NOT SHOWN)



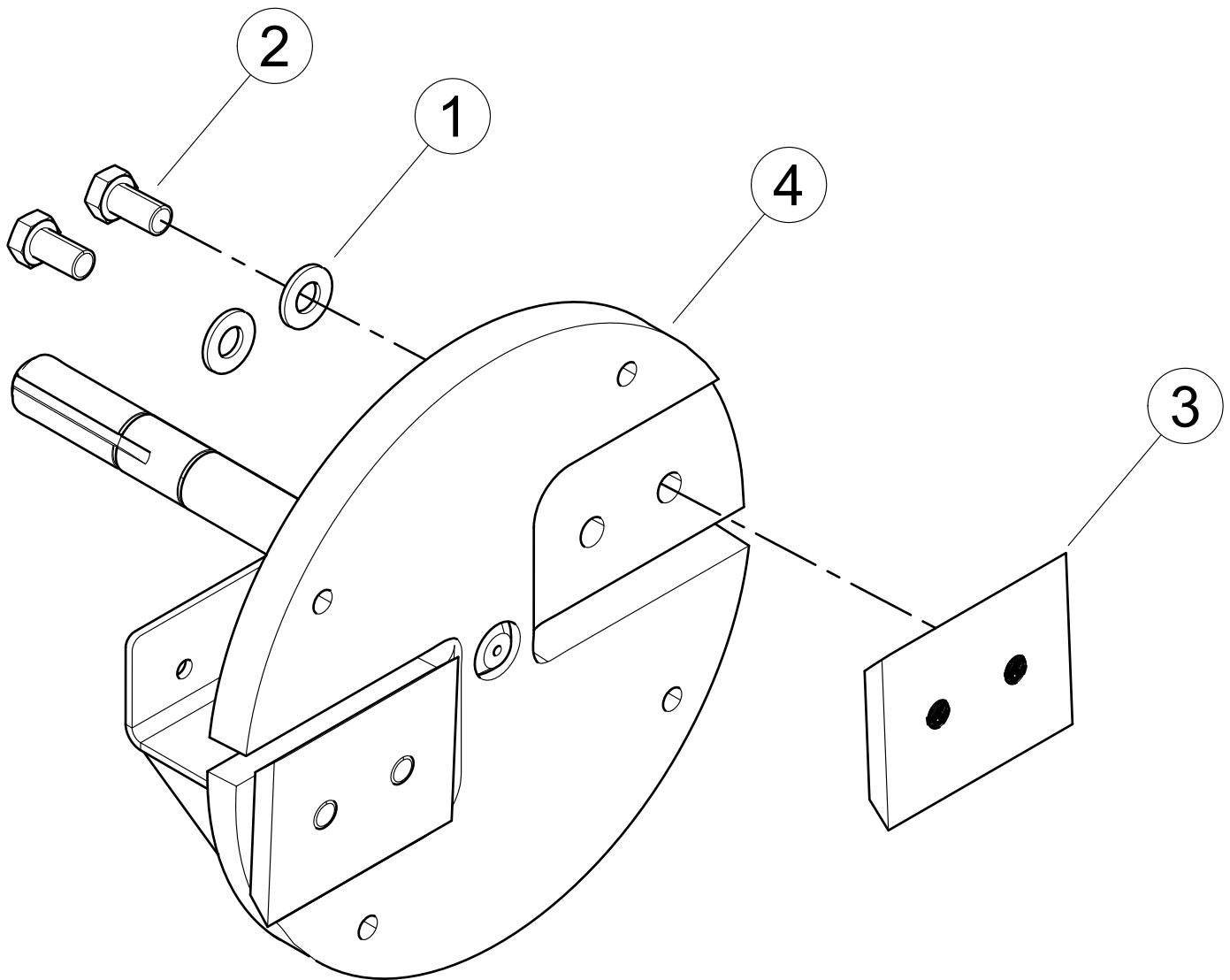
ITEM	PART NUMBER	DESCRIPTION
1	14373-00	HOSE ASSY, CRANKCASE DRAIN
2	14770-00	BELT, 2RB61 ARAMID
3	15031	WASHER, 3/8 FLAT ZP
4	15057	BOLT, 3/8 X 1 CRG GR5 NC ZP
5	15141	BOLT, 3/8 X 1-3/4 HCS GR5 ZP
6	15250	WASHER, 5/16 FLAT ZP
7	15260	WASHER, 3/8 SAE FLAT ZP
8	15351	NUT, 5/16 SERR FLANGE NC ZP
9	15381	BOLT, 5/16-24 X 3/4 HHCS GR5 ZP
10	15388	NUT, 3/8 NE NYLOCK ZP
11	15418	KEY, 1/4 SQUARE X 1-1/2 LONG PLAIN
12	15715-00	BOLT, 5/16 NC X 3 FULL THD (CH4400)
	15140	BOLT, 5/16 NC X 2 FULL THD (CH4400XE)
13	16326	SHEAVE, 2B5.2 SDS
14	16458	BUSHING, SDS 1"
15		ENGINE, SUBARU EX40 404CC (FOR SERVICE SEE ENGINE OWNER'S MANUAL OR YOUR NEAREST AUTHORIZED SUBARU ENGINE DEALER)
16	32330-00	DECAL, CHECK WHEELS
17	76913-12	PLATE, ENGINE
18	77652-12	WELDMENT, BELT GUIDE
19		ONE PIECE BELT GUIDE (VIN 5VJAA001XDW003870 AND BELOW), SUPERSEDED AND REPLACED BY KIT #77654-00



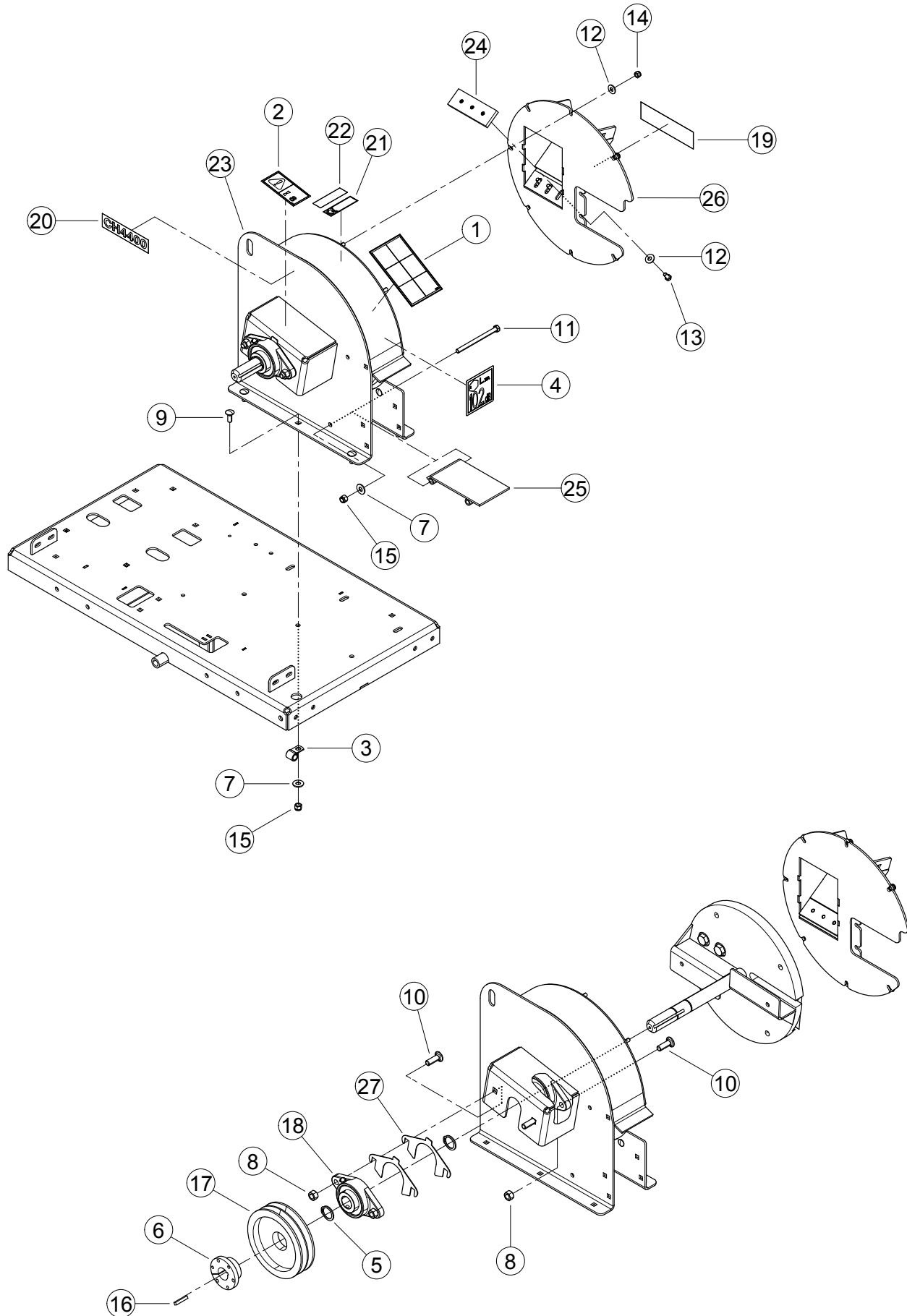
ITEM	PART NUMBER	DESCRIPTION
1	0103-0714-00	BOLT, 1/4 X 2-3/4 HEX HD GR5 ZP
2	12275	FITTING, 1/4 SELF-TAP GREASE
3	14076-00	GRIP, CLUTCH HANDLE
4	14635-00	SPACER, 0.5 X 1.00
5	14636-00	ROLLER, 0.5 X 1.00 X 1.00 NYLON
6	14776-00	DAMPER, IDLER
7	15006	BOLT, 3/8 X 1 HEX HD GR5 ZP
8	15030	WASHER, 1/4 FLAT ZP
9	15031	WASHER, 3/8 FLAT ZP
10	15057	BOLT, 3/8 X 1 CRG GR5 NC ZP
11	15205	BOLT, 3/8 X 5 HEX HD GR5 ZP
12	15214	BOLT, 1/4 X 1-1/4 HCS GR5 ZP
13	15250	WASHER, 5/16 FLAT ZP
14	15272	BOLT, 3/8 X 4 HHCS GR5 NC ZP
15	15355	NUT, 1/4 NE NYLOCK ZP
16	15356	NUT, 5/16 NE NYLOCK ZP
17	15388	NUT, 3/8 NE NYLOCK ZP
18	15403	BOLT, 5/16-18 X 1-3/4 HCS GR5 ZP
19	15429	I-BOLT, 5/16-18 X 2 LONG ZP
20	16319	PULLEY, 3-1/4 FLAT IDLER
21	17692	SPRING, 3/4" OD EXTENSION
22	69239	SPACER, IDLER PIVOT
23	70046	SPACER, IDLER
24	70694	SPACER .63 X 1.63
25	73064	SPACER, .50 X .775
26	74491-35	LEVER, CHIPPER ENGAGEMENT
27	74493-12	ANCHOR, IDLER
28	74579-00	SPACER, .63 X 3.060
29	76930-00	ASSEMBLY, IDLER BRACKET, SERVICE PART (INCLUDES ITEM 30)
30	12174	DECAL, SHIELD DANGER ISO



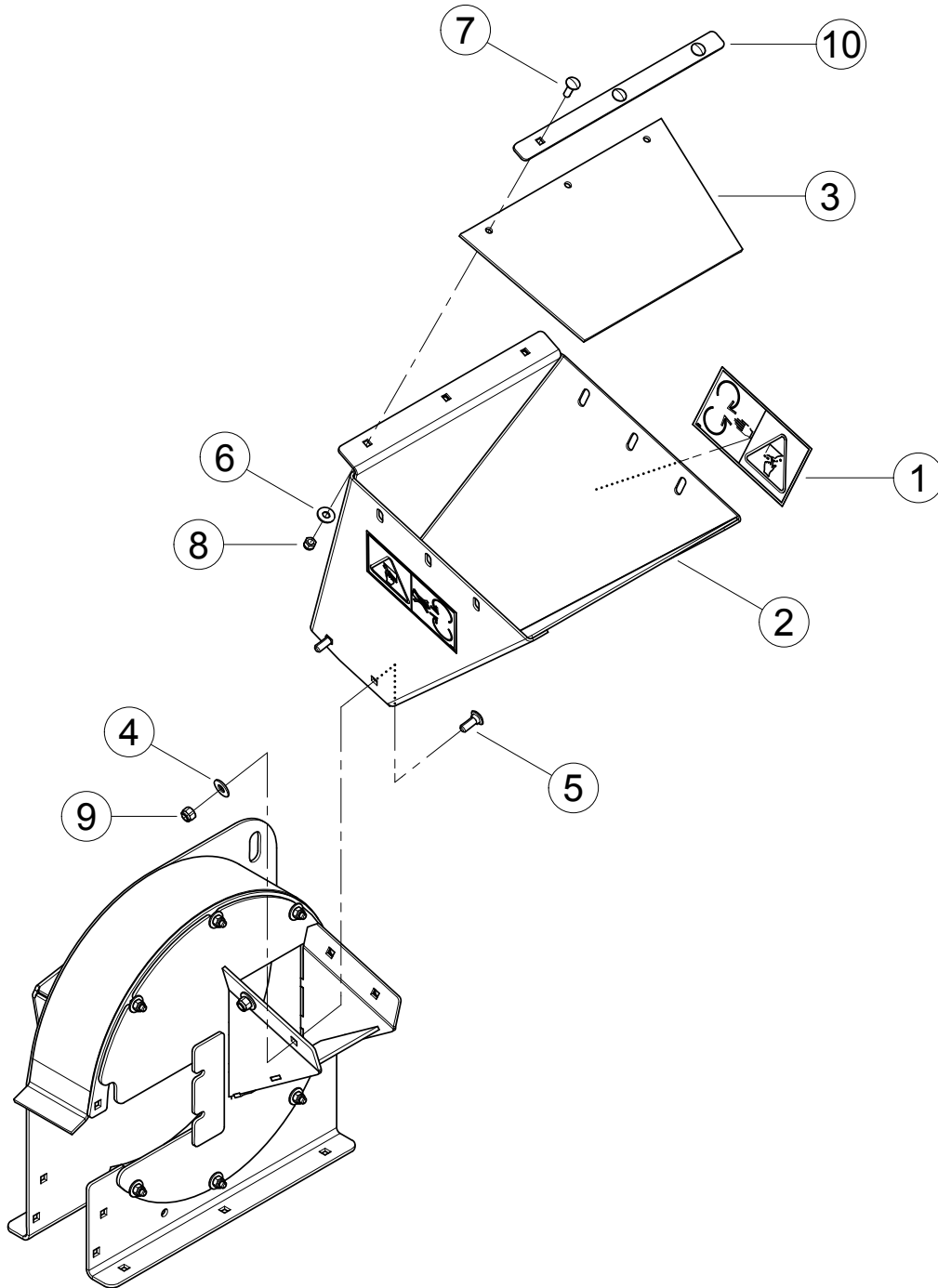
ITEM	PART NUMBER	DESCRIPTION
1	15003	BOLT, 5/16 X 3/4 HEX HD GR5 ZP
2	15219	BOLT, 5/16 X 1 HHCS GR5 NC ZP
3	15250	WASHER, 5/16 FLAT ZP
4	15356	NUT, 5/16 NE NYLOCK ZP
5	76826-12	WELDMENT, SHIELD
6	76929-00	SHIELD, CH4400 BELT
7	14772-00	DECAL, START/ENGAGE
8	14942-00	DECAL, MULTILINGUAL MANUAL
9	31540-00	LOGO, CHIP IT (WHITE)



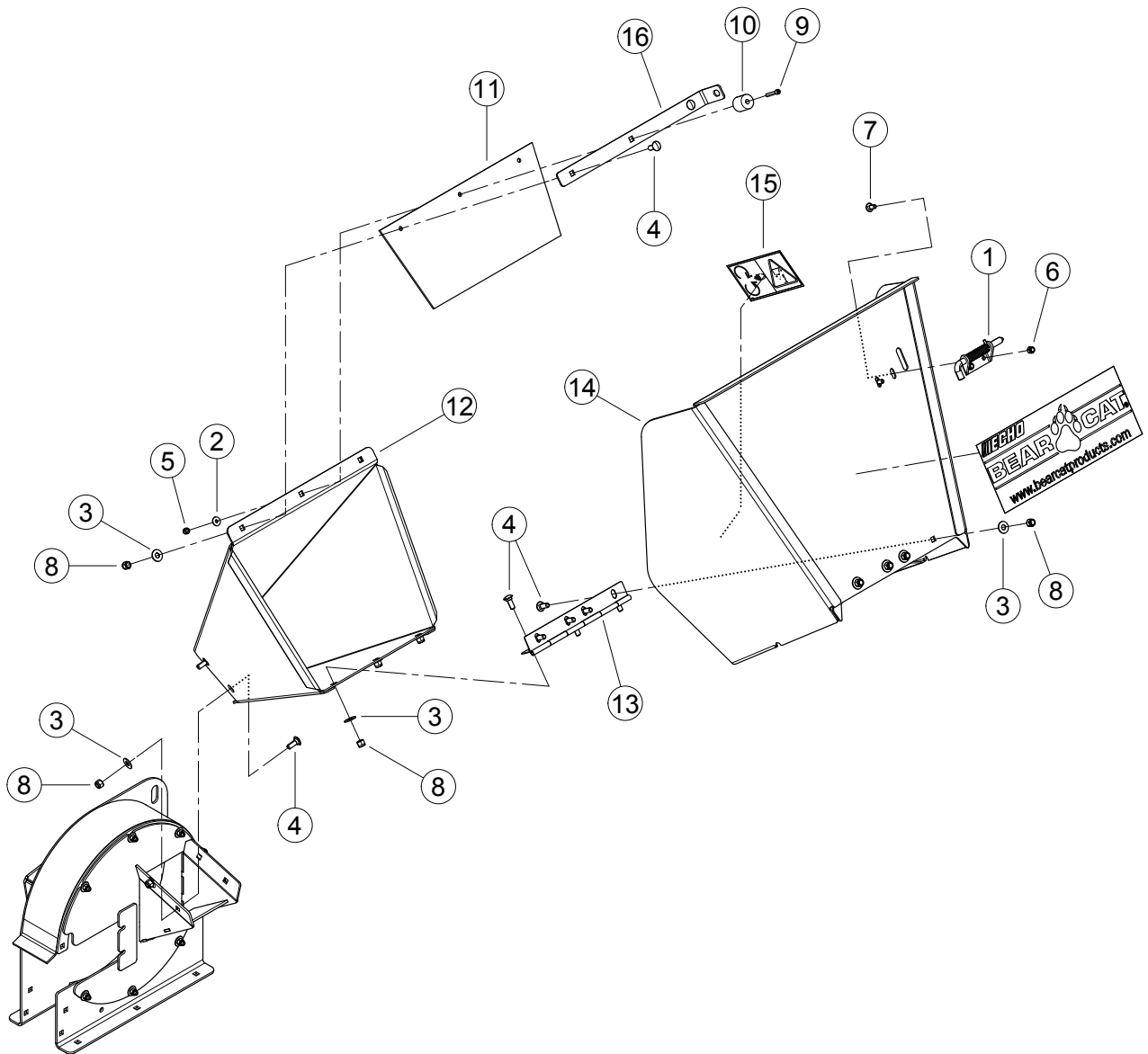
ITEM	PART NUMBER	DESCRIPTION
1	15770-00	WASHER, 5/8 SAE HARDENED
2	15833-00	BOLT, M16 X 2.0 X 30 HEX HD W/PATCH
3		BLADE, BIG CHIPPER (FOR SERVICE ORDER CHIPPER BLADE KIT, 76295-00)
	76295-00	KIT, CHIPPER BLADE
4	76274-00	WELDMENT, 4-1/2 CHIPPER DISK



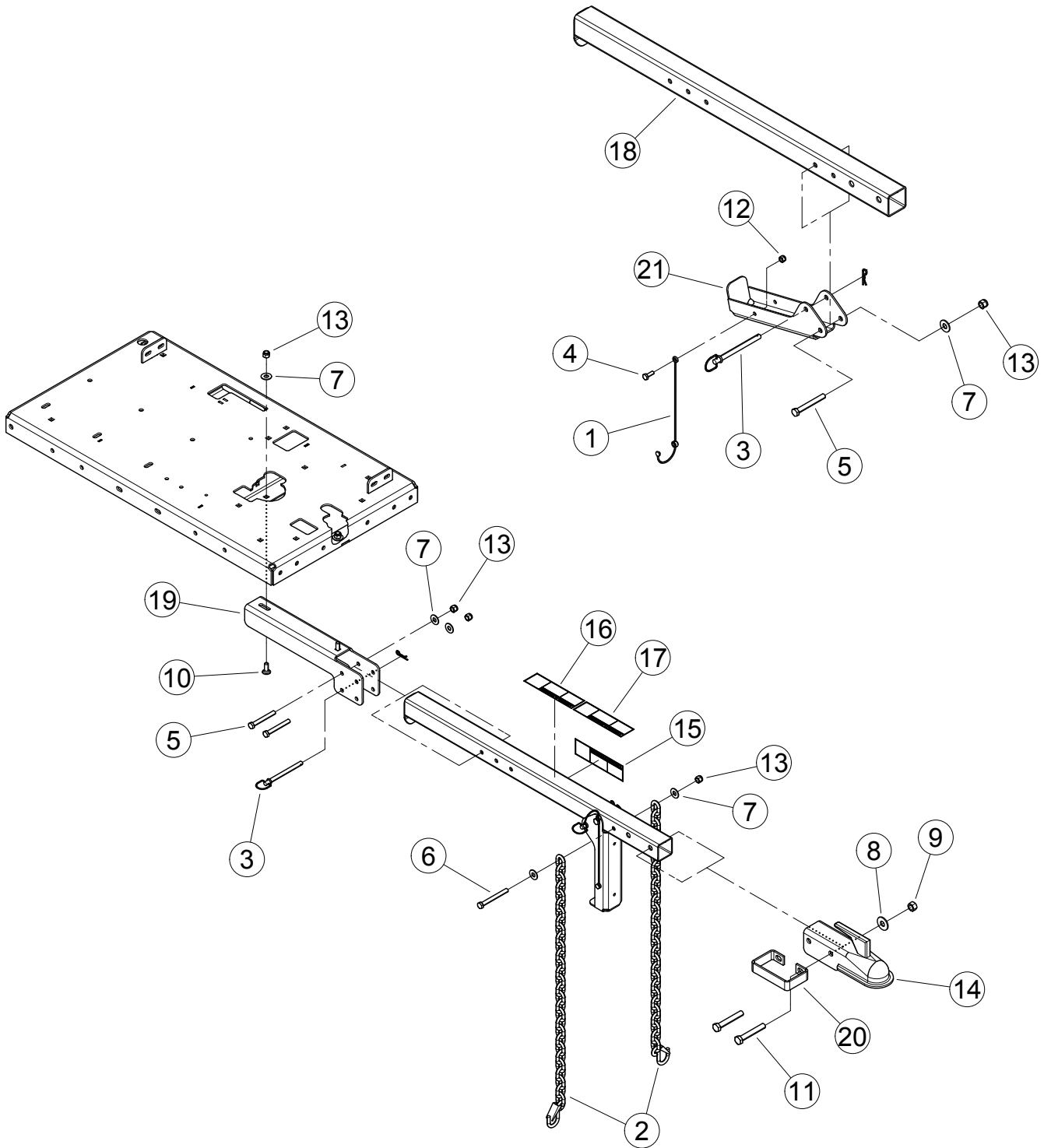
ITEM	PART NUMBER	DESCRIPTION
1	12172	DECAL, OPERATING INSTRUCTIONS ISO
2	12250	DECAL, MAINTENANCE ISO
3	14048-00	CLAMP, 9/16" COATED
4	14186-00	DECAL, 107 DB (CE COMPLIANT ONLY)
5	14768-00	SNAP RING, 1-1/4 EXT. HEAVY DUTY
6	14769-00	BUSHING, SDS 1-1/4"
7	15031	WASHER, 3/8 FLAT ZP
8	15049	NUT, 1/2 CENTERLOCK GRB ZP
9	15057	BOLT, 3/8 X 1 CRG GR5 NC ZP
10	15157	BOLT, 1/2 X 1-1/2 CRG GR5 ZP
11	15205	BOLT, 3/8 X 5 HEX HD GR5 ZP
12	15250	WASHER, 5/16 FLAT ZP
13	15300	BOLT, 5/16 X 5/8 HEX HD GR5 ZP
14	15356	NUT, 5/16 NE NYLOCK ZP
15	15388	NUT, 3/8 NE NYLOCK ZP
16	15418	KEY, 1/4 SQUARE X 1-1/2 LONG PLAIN
17	16001	SHEAVE, 2B 6.6 SDS
18	16682	BEARING, 1-1/4" DIA 2 BOLT FLANGE
19	17913	DECAL, ECHO BEARCAT 6.82 X 1.90
20	31466-00	DECAL, MODEL CH4400
21	31499-00	DECAL, INFORMATION (CE COMPLIANT ONLY)
22	31890-00	DECAL, ATLANTIC BRIDGE LTD INFO (CE COMPLIANT ONLY)
23	74488-35	WELDMENT, CHIPPER HOUSING
24	74529-00	ANVIL, CHIPPER
25	74571-12	WELDMENT, CHIP DEFLECTOR
26	75363-35	WELDMENT, DISK COVER
27	75550-00	SHIM, BEARING



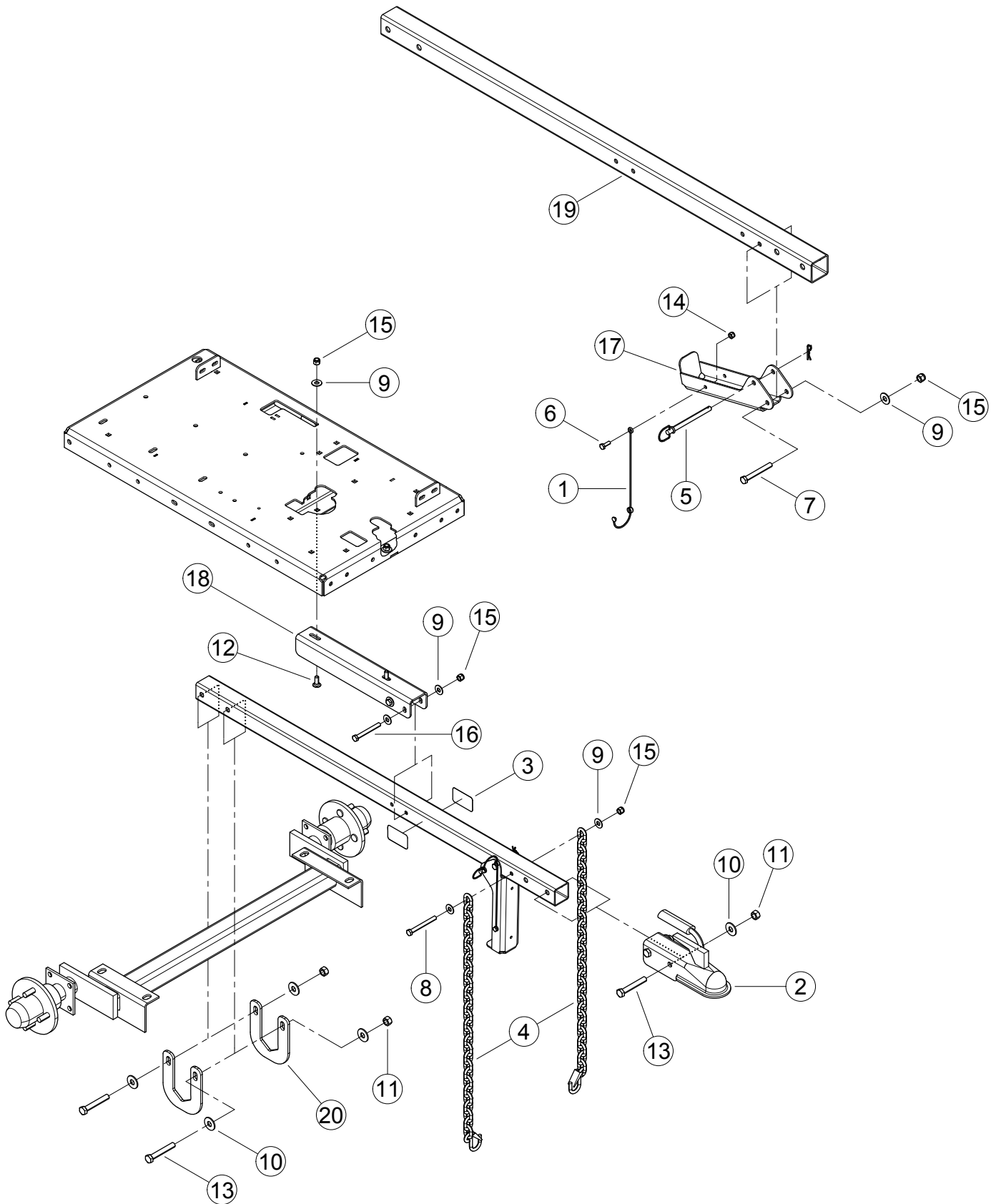
ITEM	PART NUMBER	DESCRIPTION
1	12175	DECAL, BLADE DANGER ISO
2	73919-00	ASSEMBLY, HOPPER (INCLUDES ITEM 1)
3	14771-00	FLAP, CHIPPER CHUTE
4	15031	WASHER, 3/8 FLAT ZP
5	15057	BOLT, 3/8 X 1 CRG GR5 NC ZP
6	15250	WASHER, 5/16 FLAT ZP
7	15301	BOLT, 5/16 X 1 CRG GR5 ZP
8	15356	NUT, 5/16 NE NYLOCK ZP
9	15388	NUT, 3/8 NE NYLOCK ZP
10	74608-12	STRIP, FLAP RETAINER



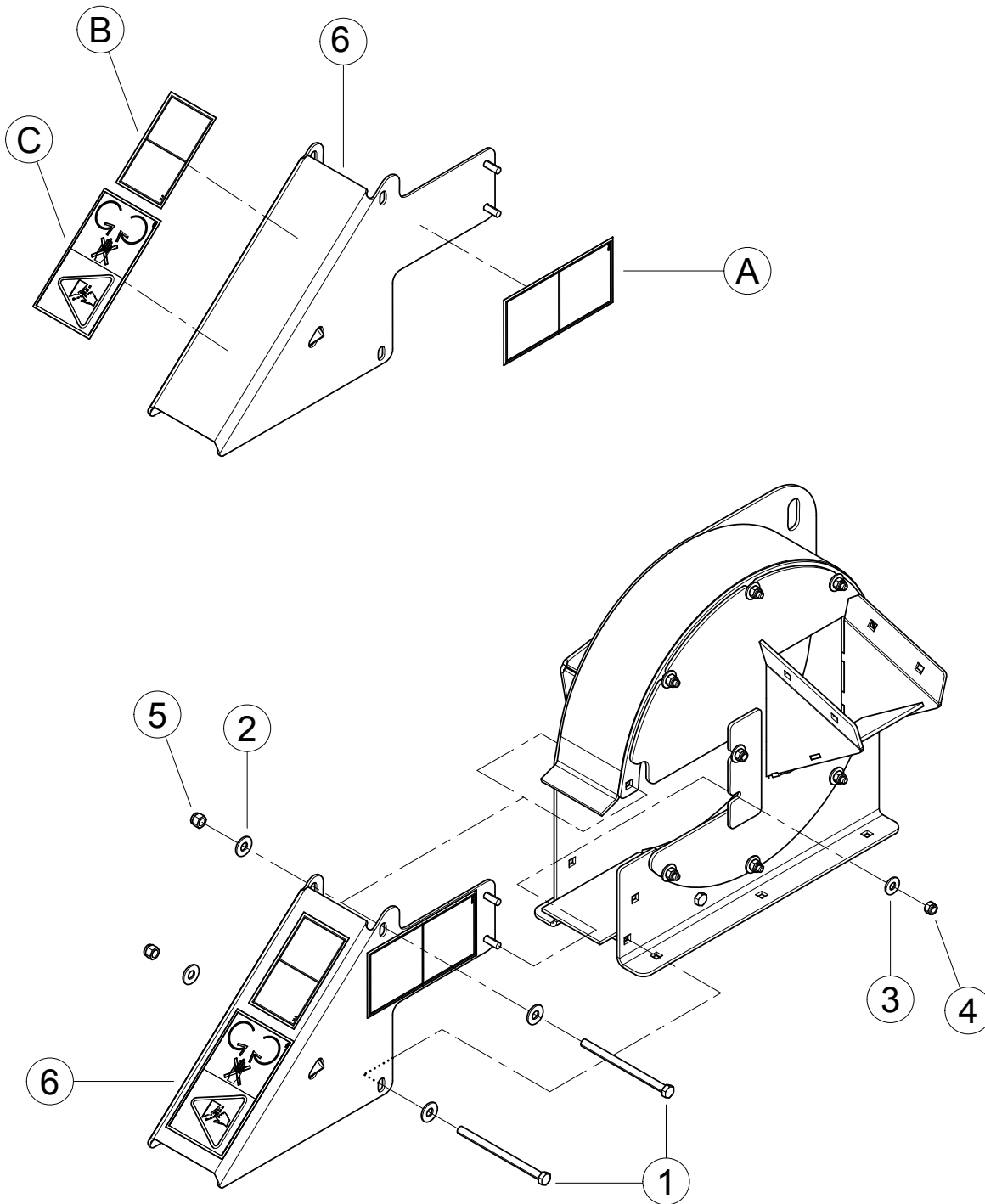
ITEM	PART NUMBER	DESCRIPTION
1	14971-00	LATCH, RH HINGE
2	15030	WASHER, 1/4 FLAT ZP
3	15031	WASHER, 3/8 FLAT ZP
4	15057	BOLT, 3/8 X 1 CRG GR5 NC ZP
5	15355	NUT, 1/4 NE NYLOCK ZP
6	15356	NUT, 5/16 NE NYLOCK ZP
7	15367	BOLT, 5/16 X 3/4 CRG GR5 NC ZP
8	15388	NUT, 3/8 NE NYLOCK ZP
9	15532	SCREW, 1/4 X 1-1/2 SKT HD CAP
10	18420-00	BUMPER, RECESSED RUBBER
11	18670-00	FLAP, CHIPPER CHUTE
12	75346-35	WELDMENT, HOPPER
13	75352-12	HINGE, CHUTE EXTENSION
14	75353-00	ASSEMBLY, 4-1/2" EXTENSION TRAY, SERVICE PART (INCLUDES ITEM 15)
15	12175	DECAL, BLADE DANGER ISO
16	75358-12	STRIP, FLAP RETAINER



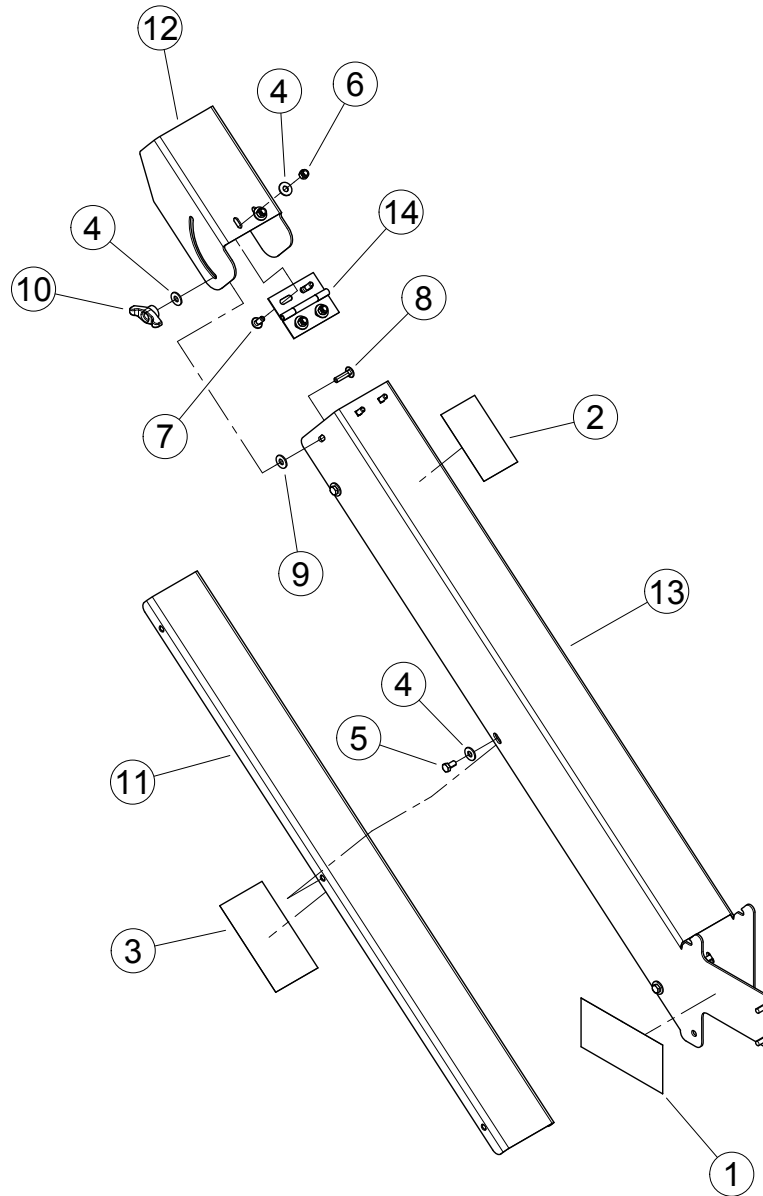
ITEM	PART NUMBER	DESCRIPTION
1	12530	LANYARD, NYLON
2	14381-00	CHAIN, SAFETY 5000 LB W/LATCH
3	14823-00	PIN, 3/8 HITCH
4	15001	BOLT, 1/4 X 3/4 HEX HD GR5ZP
5	15009	BOLT, 3/8 X 3 HEX HD GR5 ZP
6	15010	BOLT, 3/8 X 3-1/2 HEX HD GR5 ZP
7	15031	WASHER, 3/8 FLAT ZP
8	15034	WASHER, 1/2 FLAT ZP
9	15049	NUT, 1/2 CENTERLOCK GRB ZP
10	15057	BOLT, 3/8 X 1 CRG GR5 NC ZP
11	15173	BOLT, 1/2 X 3-1/4 HEX HD GR5 ZP
12	15355	NUT, 1/4 NE NYLOCK ZP
13	15388	NUT, 3/8 NE NYLOCK ZP
14	17988	TRAILER HITCH COUPLER
15	32327-00	DECAL, SAFETY CHAINS
16	32328-00	DECAL, TRAILER ELECTRICAL
17	32332-00	DECAL, SAFE COUPLING
18	74528-12	WELDMENT, HITCH POLE
19	74570-12	CHANNEL, HITCH POLE
20	74610-12	HANDLE, COUPLER
21	74690-12	STAND, JACK



ITEM	PART NUMBER	DESCRIPTION
1	12530	LANYARD, NYLON
2	12536	COUPLER, 50 MM BALL
3	14375-00	REFLECTOR, WIDE ANGLE AMBER
4	14381-00	CHAIN, SAFETY 5000 LB W/LATCH
5	14823-00	PIN, 3/8 HITCH
6	15001	BOLT, 1/4 X 3/4 HEX HD GR5 ZP
7	15009	BOLT, 3/8 X 3 HEX HD GR5 ZP
8	15010	BOLT, 3/8 X 3-1/2 HEX HD GR5 ZP
9	15031	WASHER, 3/8 FLAT ZP
10	15034	WASHER, 1/2 FLAT ZP
11	15049	NUT, 1/2 CENTERLOCK GRB ZP
12	15057	BOLT, 3/8 X 1 CRG GR5 NC ZP
13	15173	BOLT 1/2 X 3-1/4 HCS GR5 ZP
14	15355	NUT, 1/4 NE NYLOCK ZP
15	15388	NUT, 3/8 NE NYLOCK ZP
16	15501	BOLT, 3/8 X 3-1/4 HEX HD GR5 ZP
17	74690-12	STAND, JACK
18	75333-12	CHANNEL, HITCH POLE
19	75345-12	TUBE, HITCH
20	76958-12	PLATE, HITCH

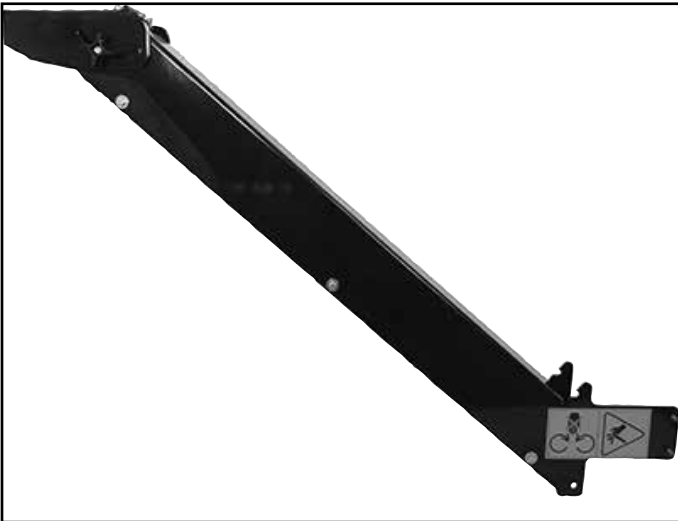


ITEM	PART NUMBER	DESCRIPTION
1	0103-0848-00	BOLT, 3/8 X 5-1/2 HEX HD GR5 ZP
2	15031	WASHER, 3/8 FLAT ZP
3	15250	WASHER, 5/16 FLAT ZP
4	15356	NUT, 5/16 NE NYLOCK ZP
5	15388	NUT, 3/8 NE NYLOCK ZP
6	74670-00	ASSEMBLY, DISCHARGE CAP (INCLUDES ITEMS A-C)
A	12169	DECAL, KNIFE ACCESS ISO
B	12173	DECAL, DISCHARGE ISO
C	12175	DECAL, BLADE DANGER ISO

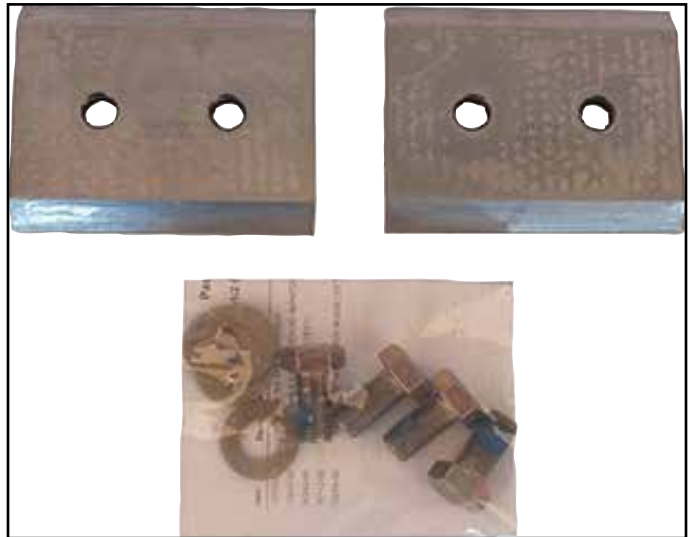


ITEM	PART NUMBER	DESCRIPTION	QTY
1	12169	DECAL, KNIFE ACCESS ISO	1
2	12173	DECAL, DISCHARGE ISO	1
3	12175	DECAL, BLADE DANGER ISO	1
4	15250	WASHER, 5/16" FLAT ZP	11
5	15300	BOLT, 5/16 X 5/8 GR5 HEX CPS ZP	6
6	15321	KNOB, SPOUT 5/16-18	4
7	15356	NUT, 5/16" NE NYLOCK ZP	4
8	15367	BOLT, 5/16X3/4 GR5 NC ZP CRG	1
9	15398	BOLT, 5/16 X 1-1/4" GR5 ZP CRG	1
10	15409	WASHER, 5/16"ID 7/8"OD NYLON FLAT	1
11	74566-12	WELDMENT, TOP DISCHARGE CHUTE	1
12	74569-12	CAP, DISCHARGE	1
13	74609-12	WELDMENT, CHIPPER DISCHARGE	1
14	74642-12	HINGE, DISCHARGE CAP	1

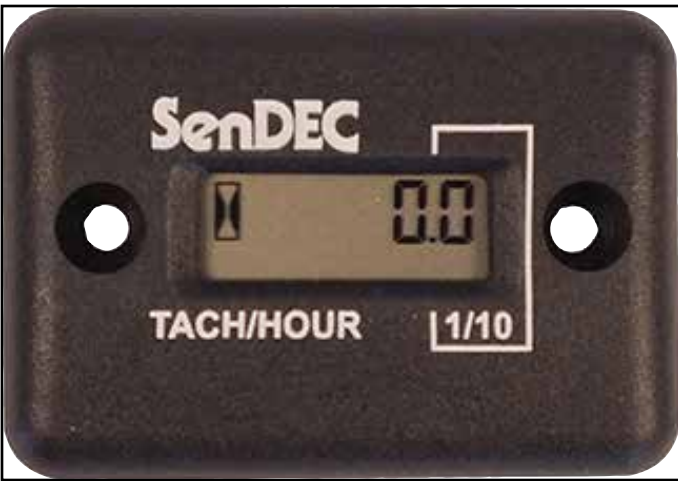
PART NUMBER	DESCRIPTION
76295-00	KIT, CHIPPER BLADE
74634-00	OPTIONAL DISCHARGE
31605-00	TACH/HOUR METER KIT



OPTIONAL DISCHARGE, 74634-00



CHIPPER BLADE KIT, 76295-00



TACH/HOUR METER KIT, 31605-00



ECHO BEAR CAT

www.bearcatproducts.com

237 NW 12th Street, West Fargo, ND 58078-0849

Phone: 701.282.5520 • Toll Free: 800.247.7335 • Fax: 701.282.9522

E-mail: service@bearcatproducts.com • sales@bearcatproducts.com