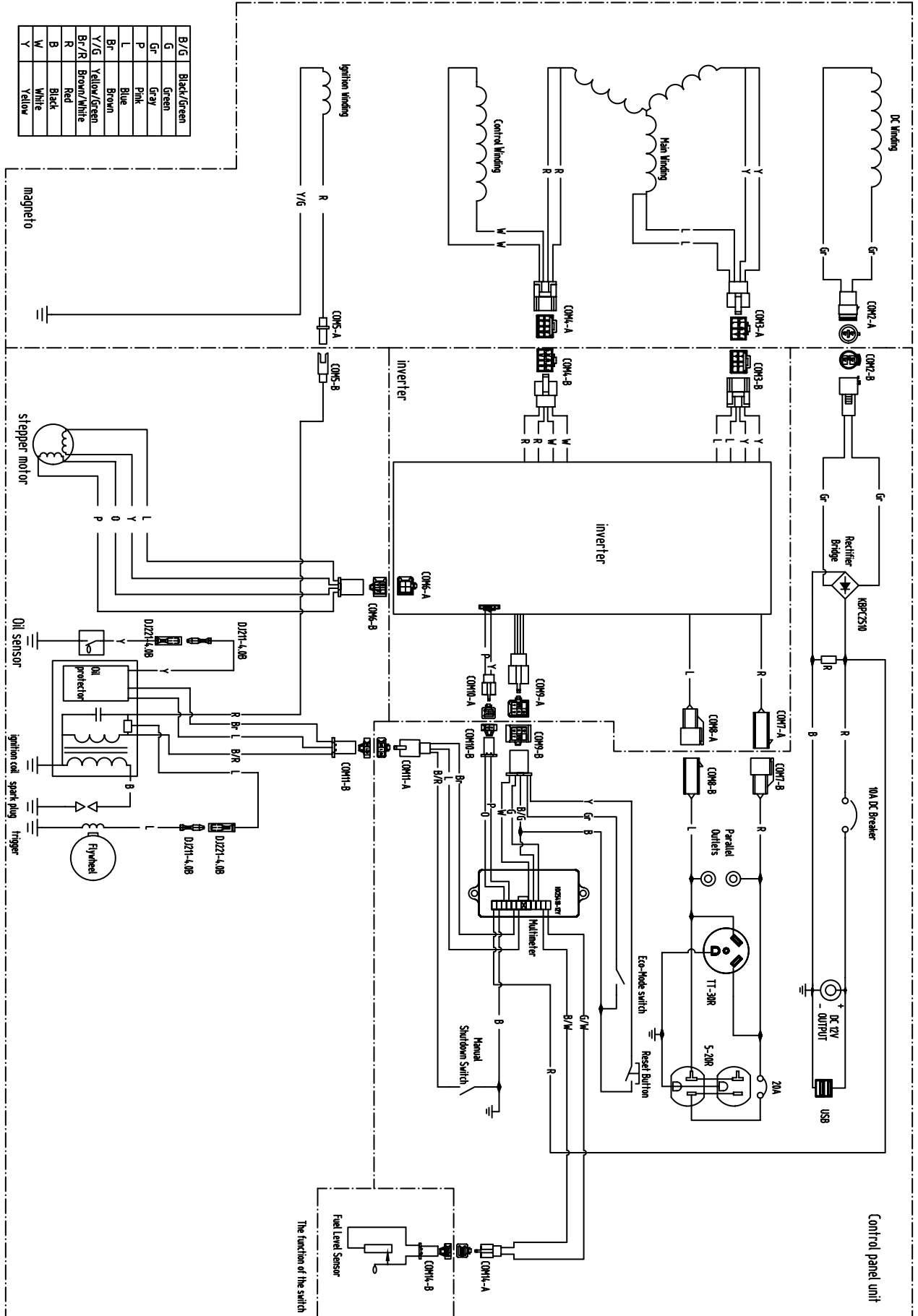


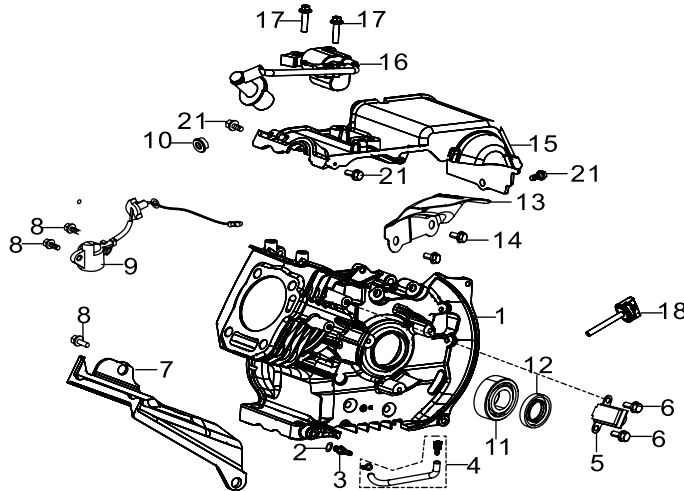
# WIRING DIAGRAM



## EXPLODED VIEW & PARTS LIST

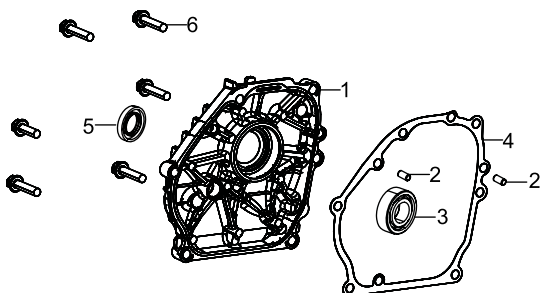
**NOTE:** Replacement parts can be purchased from wenproducts.com, or by calling our customer service at **1-847-429-9263**, M-F 8-5 CST. Parts and accessories that wear down over the course of normal use are not covered by the three-year warranty. Not all parts may be available for purchase.

### FIG. 1 - CRANKCASE ASSEMBLY



No.	Part No.	Description	Qty.	No.	Part No.	Description	Qty.
1-1	56380i-0101	Crankcase Subassembly	1	1-11	56380i-0111	Deep-Groove Ball Bearing, 6305	1
1-2	56380i-0102	Flat Washer, 10mm	1	1-12	56310i-0306	Oil Seal	1
1-3	56380i-0103	Connector, Oil Drain Hose	1	1-13	56450i-0113	Rear Shroud	1
1-4	56380i-0104	Oil Drain Hose	1	1-14	56310i-1201	Bolt, M6x16	2
1-5	56380i-0105	Trigger	1	1-15	56380i-0115	Protective Cover	1
1-6	56310i-1106	Bolt, M5x16	2	1-16	56380i-0116	Ignition Cil	1
1-7	56380i-0107	Crankcase Side Shield	1	1-17	56380i-0117	Bolt, M6x28	2
1-8	56310i-1201	Bolt, M6x16	3	1-18	56380i-0118	Oil Dipstick	1
1-9	56310i-0211	Engine Oil Sensor	1	1-21	56310i-1201	Bolt, M6x16	3
1-10	56310i-0210	Flanged Hex Nut, M10	1				

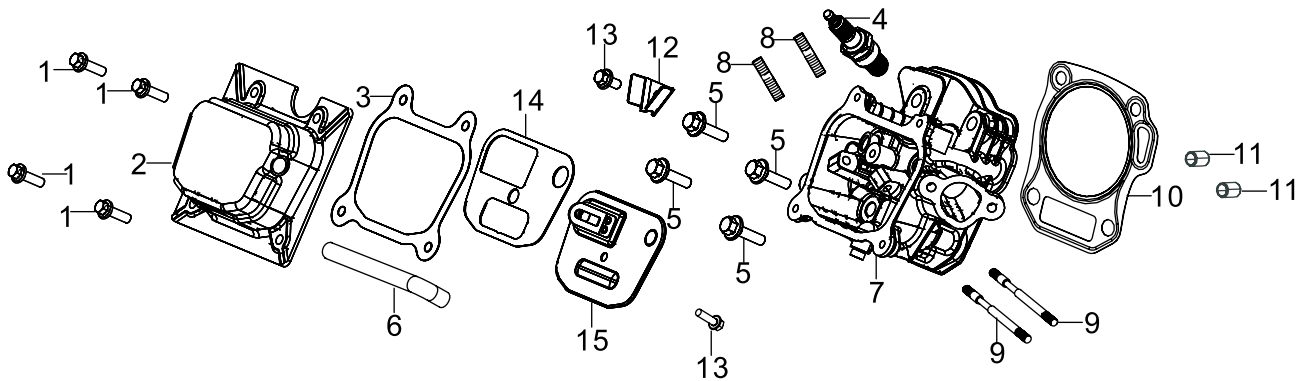
### FIG. 2. CRANKCASE COVER ASSEMBLY



No.	Part No.	Description	Qty.
2-1	56380i-0201	Cover, Crankcase	1
2-2	56200-0803	Pin	2
2-3	56380i-0203	Deep-Groove Ball Bearing, 6205	1
2-4	56380i-0204	Gasket, Crankcase	1
2-5	56310i-0306	Oil Seal	1
2-6	56310i-0307	Bolt, M8x32	6

# EXPLODED VIEW & PARTS LIST

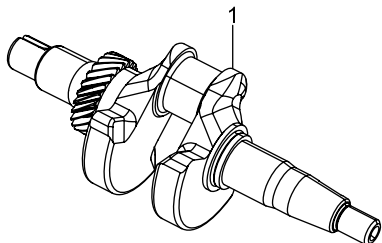
## FIG. 3. CYLINDER HEAD ASSEMBLY



No.	Part No.	Description	Qty.
3-1	56200-1202	Bolt M6x20	4
3-2	56380i-0302	Cover Subassembly, Cylinder Head	1
3-3	56380i-0303	Cylinder Head Cover Gasket	1
3-4	56310i-0104	Plug, Spark	1
3-5	56310i-0106	Cylinder Head Bolt M8x60	4
3-6	56380i-0306	Tube, Breather	1
3-7	DF450i-0307	Head Subassembly, Cylinder	1

No.	Part No.	Description	Qty.
3-8	56310i-0109	Stud Bolt M8	2
3-9	56380i-0309	Stud Bolt M6	2
3-10	56380i-0310	Gasket, Cylinder Head	1
3-11	56380i-0311	Position Pin	2
3-12	56380i-0312	Cylinder Head Cover Pin Limit Plate	1
3-13	56380i-0313	Bolt M6x12	2
3-14	56380i-0314	Gasket, Breathe Groove	1
3-15	56380i-0315	Stop Engine Piece Subassembly	1

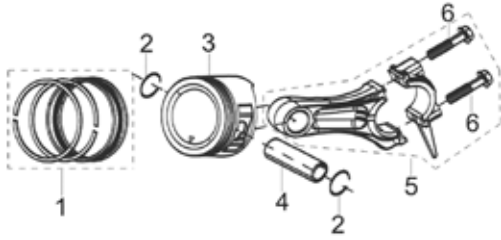
## FIG. 4. CRANKSHAFT ASSEMBLY



No.	Part No.	Description	Qty.
4-1	56380i-0401	Crankshaft Assembly	1

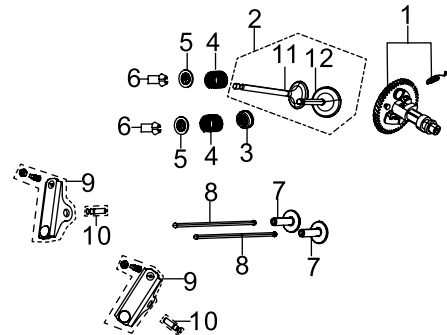
# EXPLODED VIEW & PARTS LIST

**FIG. 5. PISTON RING SET & CONNECTING ROD**



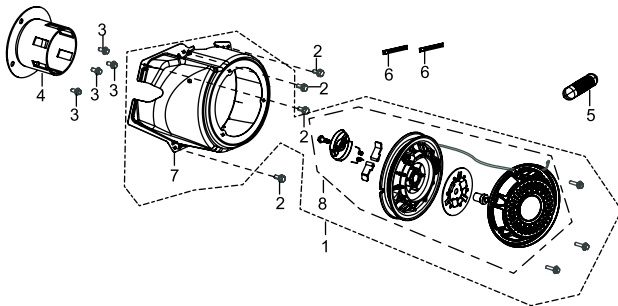
No.	Part No.	Description	Qty.
5-1	56310i-0501	Piston Ring Assembly	1
5-2	56310i-0505	Piston Pin Clip	2
5-3	56380i-0503	Piston	1
5-4	56310i-0504	Piston Pin	1
5-5	56380i-0505	Connecting Rod	1

**FIG. 6. VALVE TRAIN & CAMSHAFT SUBASSEMBLY**



No.	Part No.	Description	Qty.
6-1	56380i-0601	Camshaft Assembly	1
6-2	DF450i-0602	Valve Set	1
6-3	DF450i-0603	Seal Guide	1
6-4	56310i-0604	Valve Spring	2
6-5	56380i-0605	Valve Spring Seat	2
6-6	56310i-0606	Valve Lock Clamp	4
6-7	56310i-0607	Valve Tappet	2
6-8	56380i-0608	Valve Lifter Subassembly	2
6-9	56380i-0609	Valve Rocker Arm	2
6-10	56380i-0610	Rocker Shaft	2

**FIG. 7. RECOIL STARTER**

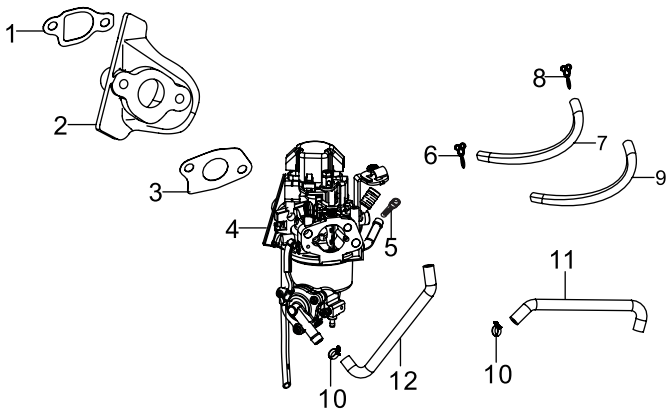


No.	Part No.	Description	Qty.
7-1	56380i-0701	Recoil Starter and Shroud Assembly	1
7-2	56380i-0313	Bolt, M6x12	4
7-3	56380i-0313	Bolt, M6x12	4
7-4	56400iX-0704	Starter Pulley	1
7-5	56200-0420	Recoil Starter Handle	1
7-6	56400iX-0702	Clamp	2
7-7	56380i-0707	Shroud	1
7-8	56380i-0708	Recoil Starter Assembly	1



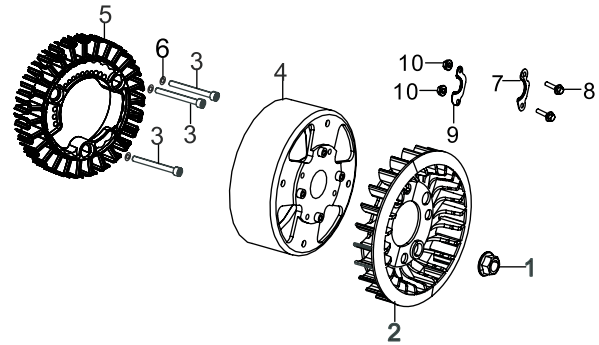
## EXPLODED VIEW & PARTS LIST

### FIG. 8. CARBURETOR ASSEMBLY



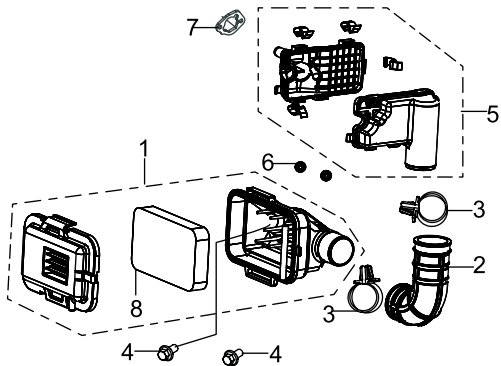
No.	Part No.	Description	Qty.
8-1	56380i-0801	Carburetor Insulator Gasket	1
8-2	56380i-0802	Carburetor Insulator Plate	1
8-3	56380i-0803	Carburetor Gasket	1
8-4	DF400i-0804	Carburetor	1
8-5	56200-1305	Fuel Strainer	1
8-6	56380i-0805	Clamp	1
8-7	56380i-0806	Fuel Tube	1
8-8	56200-0103	Clamp	1
8-9	56400iX-0809	Rubber Jacket	1
8-10	DF400i-0806	Clamp	2
8-11	DF400i-0807	Pressure Hose 1	1
8-12	DF400i-0808	Pressure Hose 2	1
N.P.	DF400i-HA36	High-Altitude Kit, 3000 - 6000 ft	1
N.P.	DF400i-HA68	High-Altitude Kit, 6000 - 8000 ft	1

### FIG. 9. FLYWHEEL, IMPELLER, STARTER PULLEY, IGNITION COIL



No.	Part No.	Description	Qty.
9-1	56310i-1101	Flywheel Nut, M14-1.5	1
9-2	56380i-0902	Impeller	1
9-3	56310i-1103	Socket Head Cap Screw, M6x60	3
9-4	56450i-0904	Rotor	1
9-5	56380i-0905	Stator	1
9-6	56380i-0906	Flat Washer, 6mm	3
9-7	56380i-0907	Wiring Clamp	1
9-8	56310i-0207	Bolt, M5x20	2
9-9	56400iX-0909	Tension Disc	1
9-10	56400iX-0910	Flanged Hex Nut, M5	2

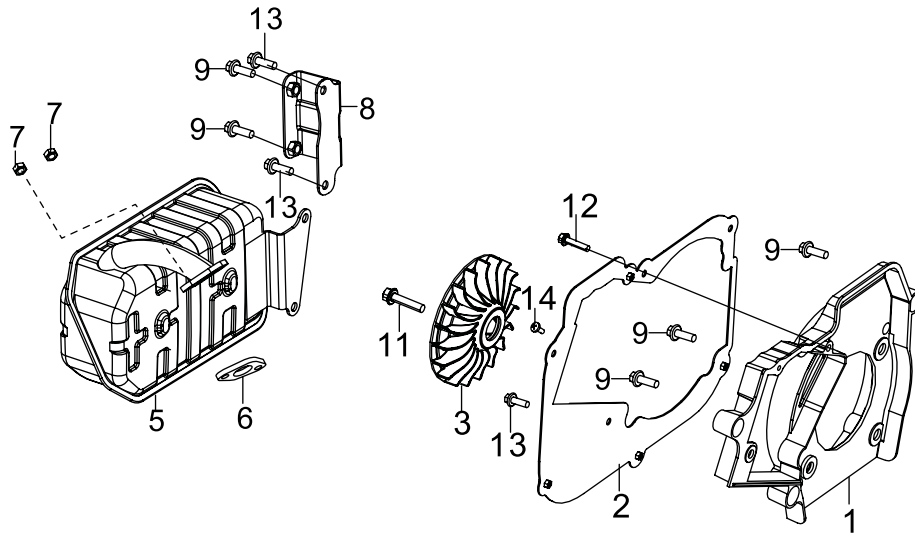
### FIG. 10. AIR FILTER



No.	Part No.	Description	Qty.
10-1	56380i-1001B	Air Filter Assembly	1
10-2	56380i-1002	Intake Tube	1
10-3	56380i-1003	Intake Tube Clamp	2
10-4	56310i-1420	Bolt, M6x25	2
10-5	56380i-1005	Secondary Air Filter	1
10-6	56200-0506	Flanged Hex Nut, M6	2
10-7	56310i-0901	Air Filter Gasket	1

## EXPLODED VIEW & PARTS LIST

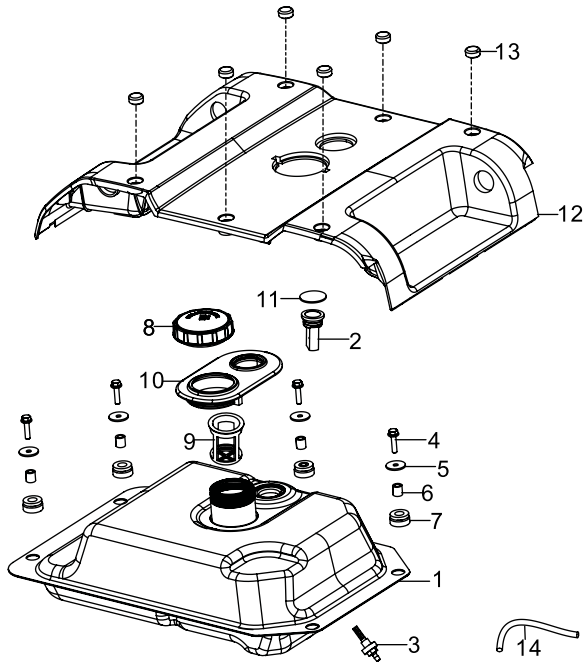
**FIG. 11. MUFFLER ASSEMBLY**



No.	Part No.	Description	Qty.
11-1	56380i-1101	Shroud	1
11-2	56380i-1102B	Muffler Cover Support	1
11-3	56380i-1103	Impeller	1
11-5	56380i-1105	Muffler Assembly	1
11-6	56380i-1106	Muffler Gasket	1
11-7	56310i-1010	Nut, M8	2
11-8	56380i-1108	Muffler Bracket	1
11-9	56310i-1009	Bolt, M8x16	5
11-11	56310i-1004	Bolt, M8x20	1
11-12	56380i-1112	Bolt, M6x35	1
11-13	56200-0508	Bolt, M6x12	3
11-14	56380i-1114	Bolt, PT4x13	1
N.P.	56380i-1115	Spark Arrestor	1

## EXPLODED VIEW & PARTS LIST

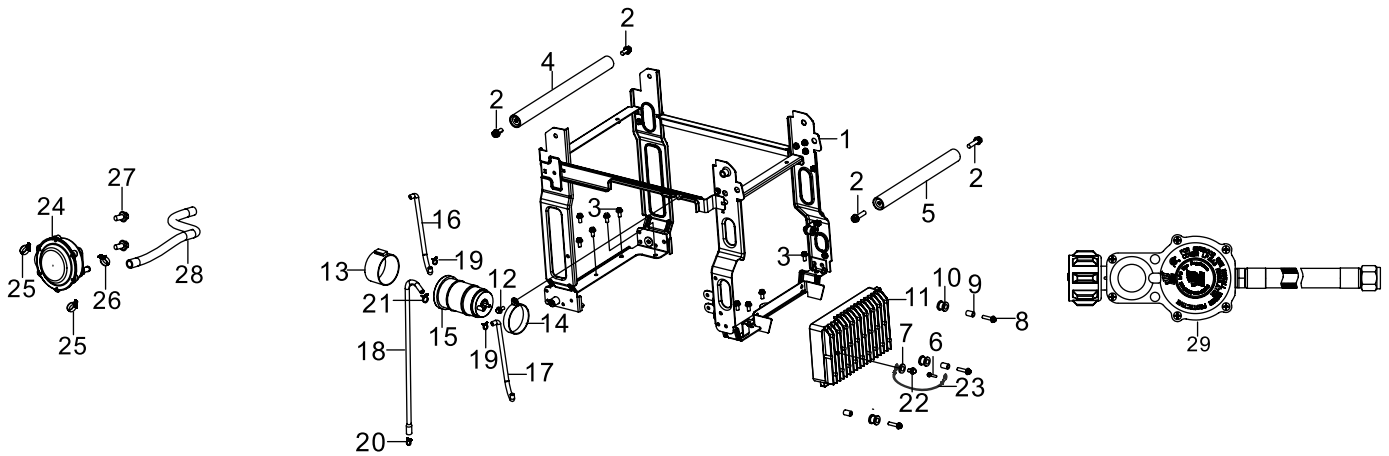
**FIG. 12. FUEL TANK ASSEMBLY**



No.	Part No.	Description	Qty.
12-1	56380i-1201	Fuel Tank	1
12-2	56380i-1202	Leveler Assy, Oil	1
12-3	56380i-1203	Outlet Subassembly, Fuel Tank Oil	1
12-4	56200-1202	Bolt M6x20	4
12-5	56380i-1205	Flat Washer, Grade A	4
12-6	56380i-1206	Bush	4
12-7	56380i-1207	Sleeve, Fuel Tank Rubber	4
12-8	56380i-1208	Cover, Fuel Tank	1
12-9	56380i-1209	Strainer, Fuel	1
12-10	56380i-1210	Sleeve, Filling Oil Hole Rubber	1
12-11	56200-0413	Opening, Oil Leveler View	1
12-12	56380i-1212	Cover, Upper	1
12-13	56380i-1213	Plug, End	1
12-14	56400iX-1214	Jacket Rubber	1

# EXPLODED VIEW & PARTS LIST

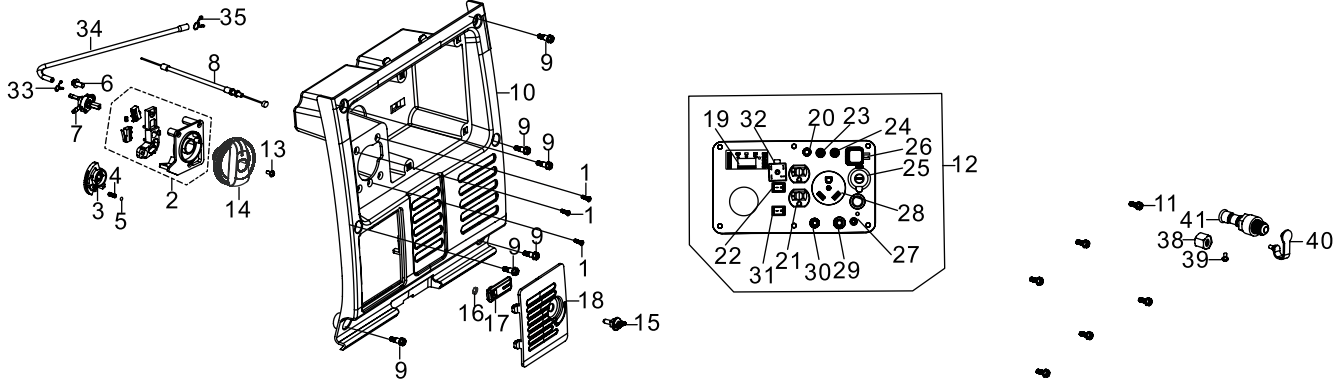
**FIG. 13. FRAME**



No.	Part No.	Description	Qty.	No.	Part No.	Description	Qty.
13-1	56380i-1301	Engine Frame Assembly	1	13-15	56380i-1315	Carbon Tank	1
13-2	56450i-1302	Socket Button Head Screw, M8x30	4	13-16	56380i-1316	Primary Carbon Tank Hose	1
13-3	56380i-0313	Bolt, M6x12	9	13-17	56380i-1317B	Air Filter Hose	1
13-4	56380i-1324	Handle	1	13-18	56380i-1318	Secondary Carbon Tank Hose	1
13-5	56380i-1323	Front Handle	1	13-19	56380i-1319	Clamp	2
13-6	56400iX-1331	Bolt, M6x10	1	13-20	56380i-1320	Clamp	1
13-7	56400iX-1332	Flat Washer, 5mm	1	13-21	56380i-1320	Clamp	1
13-8	56310i-1420	Bolt, M6x25	3	13-22	56380i-1326	Screw, M4x8	1
13-9	56310i-1419	Bushing	3	13-23	56380i-1327	Grounding Wire	1
13-10	56310i-1421	Rubber Jacket	3	13-24	DF400i-1328	LPG Regulator	1
13-11	56450i-1311	Inverter	1	13-25	DF400i-0806	Clamp	2
13-12	56310i-1201	Bolt, M6x16	1	13-26	DF400i-1329	Hose Clamp	1
13-13	56380i-1313	Rubber Sleeve	1	13-27	56380i-0313	Bolt, M6x12	2
13-14	56380i-1314	Carbon Tank Mounting Bracket	1	13-28	DF400i-1330	LPG Hose	1
				13-29	DF400i-1332	Primary LPG Regulator	1

# EXPLODED VIEW & PARTS LIST

## FIG. 14. CONTROL PANEL

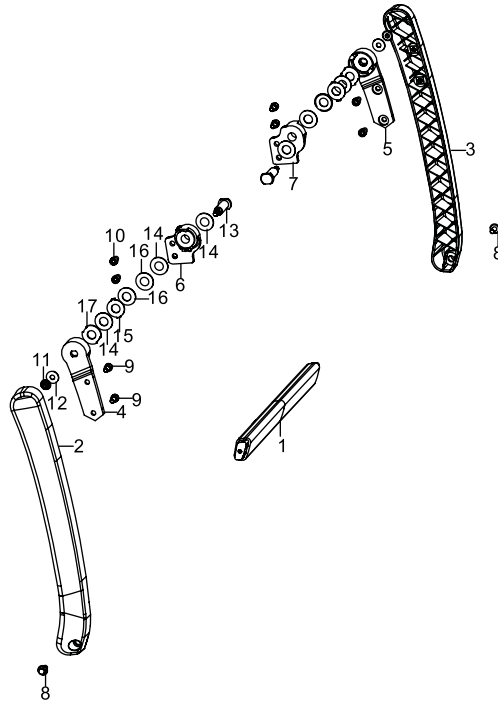


No.	Part No.	Description	Qty.
14-1	56200-0615	Self-Tapping Screw, ST4.2x16	3
14-2	56380i-1402	Switch Subassembly	1
14-3	56200-0621B	Cover Plate	1
14-4	56200-0624B	Adjustment Spring	1
14-5	56200-0623	Steel Ball	1
14-6	56200-0502	Bolt, M6x14	1
14-7	56200-0628	Fuel Cock Assembly	1
14-8	56310i-1628	Choke Handle Subassembly	1
14-9	56380i-1409	Bolt, M5x16	6
14-10	DF400i-1425	Panel Seat	1
14-11	56200-0302	Screw, M5x12	6
14-12	DF450i-1412ASM	Control Panel Subassembly	1
14-13	56200-0514	Screw, M4x16	1
14-14	DF400i-1428	Knob	1
14-15	56200-0425C	Bolt, M5x16	1
14-16	56200-0427B	Lock Nut, M5	1
14-17	56380i-1417	Latch	1
14-18	56380i-1418	Battery Compartment Cover	1
14-19	56380i-1419	Multimeter	1

No.	Part No.	Description	Qty.
14-20	56380i-1420	Reset Button	1
14-21	56380i-1421	NEMA 5-20R Duplex Outlet	1
14-22	56380i-1422	Switch Subassembly	1
14-23	56380i-1424	Parallel Port, Positive	1
14-24	56380i-1423	Parallel Port, Negative	1
14-25	56380i-1425	12V DC Outlet	1
14-26	56380i-1426	USB Outlet	1
14-27	56380i-1427	Grounding Nut	1
14-28	56380i-1428	NEMA TT-30R Outlet	1
14-29	56380i-1429	DC Breaker, 10A	1
14-30	56380i-1430	AC Breaker, 20A	1
14-31	56380i-1431	Shutdown Switch	1
14-32	56380i-1432	Rectifier Bridge	1
14-33	56200-0103	Clamp	1
14-34	56380i-1434	Fuel Tube	1
14-35	56380i-1435	Clamp	1
14-38	DF400i-1439	Nut, M14-1.5	1
14-39	56310i-1415	Screw, M4x8	1
14-40	DF400i-1437	LPG Inlet Plug	1
14-41	DF400i-1436	LPG Inlet	1

# EXPLODED VIEW & PARTS LIST

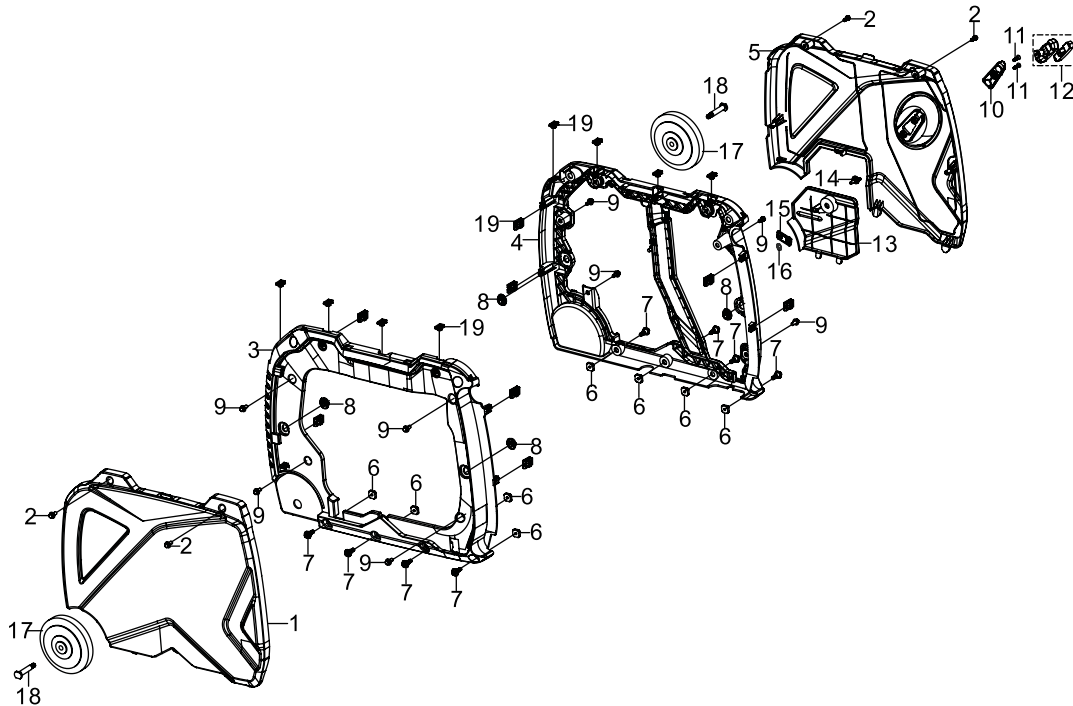
## FIG. 15. HANDLE ASSEMBLY



No.	Part No.	Description	Qty.	No.	Part No.	Description	Qty.
15-1	56380i-1501	Handle Tube	1	15-8	56200-0517	Bolt, M6x12	2
15-2	56380i-1502	Left Rotation Arm	1	15-9	56380i-1509	Bolt, M6x10	4
15-3	56380i-1503	Right Rotation Arm	1	15-10	56310i-0209	Bolt, M6x16	4
15-4	56380i-1504	Left Handle Connector	1	15-11	56310i-1807	Nylon Nut, M6	2
15-5	56380i-1505	Right Handle Connector	1	15-12	56380i-1512	Flat Washer, 6mm	2
15-6	56380i-1506	Left Handle Connector Seat	1	15-13	56380i-1513	Connector Fastener	2
15-7	56380i-1507	Right Handle Connector Seat	1	15-14	56380i-1514	Flat Washer, 13mm	6
				15-15	56380i-1515	Lock Washer	2
				15-16	56380i-1516	Washer, 12mm	4
				15-17	56380i-1517	Flat Washer	2

# EXPLODED VIEW & PARTS LIST

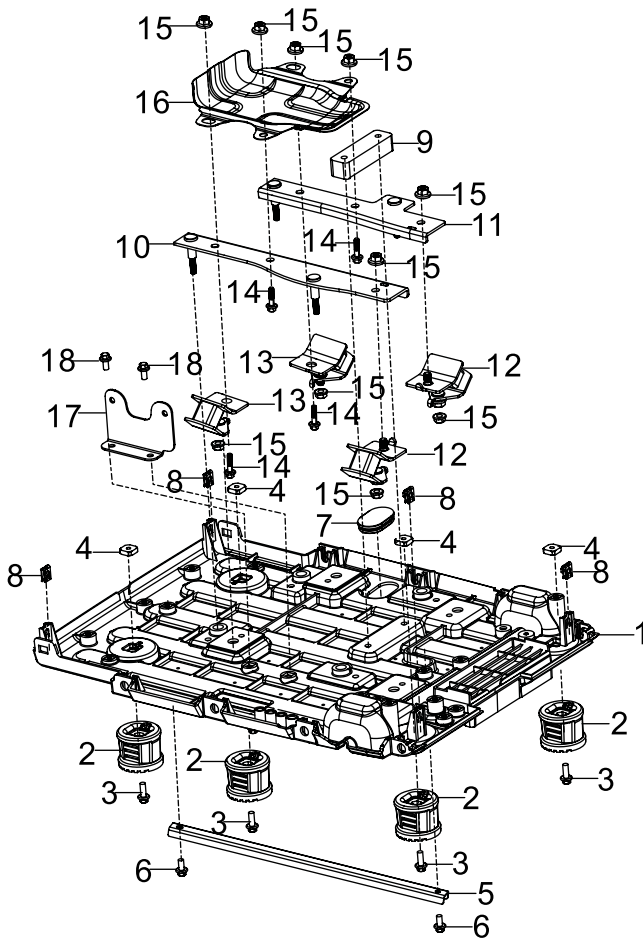
## FIG. 16. SHELL, OUTER COVERS



No.	Part No.	Description	Qty.	No.	Part No.	Description	Qty.
16-1	56380i-1601	Left Cover	1	16-11	56200-0302	Screw, M5x12	2
16-2	56200-0406	Bolt, M5x12	4	16-12	56200-0420	Recoil Starter Handle	1
16-3	56380i-1603	Left Shell	1	16-13	56380i-1613	Right Maintenance Door	1
16-4	56380i-1604	Right Shell	1	16-14	56400iX-1614	Access Door Knob	1
16-5	56380i-1605	Right Cover	1	16-15	56380i-1417	Latch	2
16-6	56200-0408	Nut, M6	8	16-16	56200-0427B	Spring Clamp	1
16-7	56380i-1607	Bolt, M6x20	8	16-17	56380i-1617	Wheel	2
16-8	56200-0515	Fuel Tank Rubber Sleeve	4	16-18	56380i-1618	Wheel Axle	2
16-9	56380i-0313	Bolt, M6x12	8	16-19	56380i-1619	Nut, M5	16
16-10	56380i-1610	Recoil Starter Guide Subassembly	1				

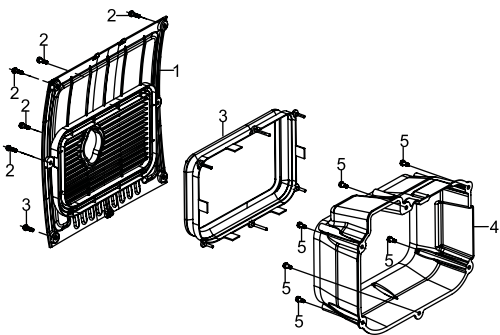
## EXPLODED VIEW & PARTS LIST

**FIG. 17. BASE PLATE**



No.	Part No.	Description	Qty.
17-1	56380i-1701	Baseplate	1
17-2	56380i-1702	Engine Frame Damper Seat	4
17-3	56310i-1201	Bolt, M6x16	4
17-4	56200-0408	Nut, M6	4
17-5	56380i-1705	Reinforcement Plate	1
17-6	56380i-0313	Bolt, M6x12	2
17-7	56310i-1407	Cover Plug	1
17-8	56380i-1619	Nut, M5	4
17-9	56380i-1709	Cushion	1
17-10	56380i-1710	Left Support	1
17-11	56380i-1711	Right Support	1
17-12	56310i-1409	Left Engine Frame Damper	2
17-13	56310i-1411	Right Engine Frame Damper	2
17-14	56310i-1412	Bolt, M8x40	4
17-15	56310i-1404	Nut, M8	10
17-16	56380i-1716	Crankcase Airflow Manifold	1
17-17	56380i-1717	Air Filter Support	1
17-18	56380i-0313	Bolt, M6x12	2

**FIG. 18. MUFFLER COVER**



No.	Part No.	Description	Qty.
18-1	56380i-1801	Outer Muffler Cover	1
18-2	56200-0406	Bolt, M5x12	6
18-3	56380i-1803	Heat Insulator	1
18-4	56380i-1804	Inner Muffler Cover	1
18-5	56200-0406	Bolt, M5x12	6

**NOTE:** Replacement parts can be purchased from [wenproducts.com](http://wenproducts.com), or by calling our customer service at **1-847-429-9263**, M-F 8-5 CST. Parts and accessories that wear down over the course of normal use are not covered by the three-year warranty. Not all parts may be available for purchase.



# **WARRANTY STATEMENT**

WEN Products is committed to building tools that are dependable for years. Our warranties are consistent with this commitment and our dedication to quality.

## **LIMITED WARRANTY OF WEN PRODUCTS FOR HOME USE**

GREAT LAKES TECHNOLOGIES, LLC (“Seller”) warrants to the original purchaser only, that this WEN consumer product will be free from defects in material or workmanship during personal use for a period of three (3) years from date of purchase or 500 hours of use; whichever comes first. Ninety days for all WEN products if the tool is used for professional or commercial use. Purchaser has 30 days from the date of purchase to report missing or damaged parts. Parts and labor are covered for one (1) year under this limited warranty; parts only are covered for three (3) years under this limited warranty.

**SELLER’S SOLE OBLIGATION AND YOUR EXCLUSIVE REMEDY** under this Limited Warranty and, to the extent permitted by law, any warranty or condition implied by law, shall be the replacement of parts, without charge, which are defective in material or workmanship and which have not been subjected to misuse, alteration, careless handling, misrepair, abuse, neglect, normal wear and tear, improper maintenance, improper storage, incorrect lubricants / fuels, or other conditions adversely affecting the Product or the component of the Product, whether by accident or intentionally, by persons other than Seller. To make a claim under this Limited Warranty, you must make sure to keep a copy of your proof of purchase that clearly defines the Date of Purchase (month and year) and the Place of Purchase. Place of Purchase must be a direct vendor of Great Lakes Technologies, LLC. Purchasing through third party vendors, including but not limited to garage sales, pawn shops, resale shops, or any other secondhand merchant, voids the warranty included with this product. Contact [techsupport@wenproducts.com](mailto:techsupport@wenproducts.com) or 1-847-429-9263 with the following information to make arrangements: your shipping address, phone number, serial number, required part numbers, and proof of purchase. Damaged or defective parts and products may need to be sent to WEN before the replacements can be shipped out.

Upon the confirmation of a WEN representative, your product may qualify for repairs and service work. When returning a product for warranty service, the shipping charges must be prepaid by the purchaser. The product must be shipped in its original container (or an equivalent), properly packed to withstand the hazards of shipment. The product must be fully insured with a copy of the proof of purchase enclosed. There must also be a description of the problem in order to help our repairs department diagnose and fix the issue. Repairs will be made and the product will be returned and shipped back to the purchaser at no charge for addresses within the contiguous United States.

HIS LIMITED WARRANTY DOES NOT APPLY TO ITEMS THAT WEAR OUT FROM REGULAR USAGE OVER TIME, INCLUDING FILTERS, SPARK PLUGS, VOLTAGE REGULATORS, BRUSHES, GASKETS, O-RINGS, WHEEL KITS, BATTERIES, RECOIL STARTERS, HIGH PRESSURE HOSES, SPRAY GUNS, ETC. ANY IMPLIED WARRANTIES SHALL BE LIMITED IN DURATION TO THREE (3) YEARS FROM DATE OF PURCHASE. SOME STATES IN THE U.S. AND SOME CANADIAN PROVINCES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATION MAY NOT APPLY TO YOU.

IN NO EVENT SHALL SELLER BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES (INCLUDING BUT NOT LIMITED TO LIABILITY FOR LOSS OF PROFITS) ARISING FROM THE SALE OR USE OF THIS PRODUCT. SOME STATES IN THE U.S. AND SOME CANADIAN PROVINCES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU.

THIS LIMITED WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS, AND YOU MAY ALSO HAVE OTHER RIGHTS WHICH VARY FROM STATE TO STATE IN THE U.S., PROVINCE TO PROVINCE IN CANADA AND FROM COUNTRY TO COUNTRY.

THIS LIMITED WARRANTY APPLIES ONLY TO ITEMS SOLD WITHIN THE UNITED STATES OF AMERICA, CANADA AND THE COMMONWEALTH OF PUERTO RICO. FOR WARRANTY COVERAGE WITHIN OTHER COUNTRIES, CONTACT THE WEN CUSTOMER SUPPORT LINE. FOR WARRANTY PARTS OR PRODUCTS REPAIRED UNDER WARRANTY SHIPPING TO ADDRESSES OUTSIDE OF THE CONTIGUOUS UNITED STATES, ADDITIONAL SHIPPING CHARGES MAY APPLY.