

**PARTS MANUAL**



*Mikasa* **SERIES**  
**MODEL MTX60SF**  
**TAMPING RAMMER**  
**(ROBIN ER120D45010 GASOLINE ENGINE)**

Revision #3 (11/03/21)

**THIS MANUAL MUST ACCOMPANY THE EQUIPMENT AT ALL TIMES.**

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## Robin ER120D45010 Engine Component Drawings

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### NOTICE

Specifications and part numbers are subject to change without notice.

# EXPLANATION OF CODE IN REMARKS COLUMN

The following section explains the different symbols and remarks used in the Parts section of this manual. Use the help numbers found on the back page of the manual if there are any questions.

**NOTICE**

The contents and part numbers listed in the parts section are subject to change **without notice**. Multiquip does not guarantee the availability of the parts listed.

## SAMPLE PARTS LIST

| NO. | PART NO. | PART NAME            | QTY. | REMARKS             |
|-----|----------|----------------------|------|---------------------|
| 1   | 12345    | BOLT .....           | 1    | INCLUDES ITEMS W/%  |
| 2%  |          | WASHER, 1/4 IN. .... |      | NOT SOLD SEPARATELY |
| 2%  | 12347    | WASHER, 3/8 IN. ...  | 1    | MQ-45T ONLY         |
| 3   | 12348    | HOSE .....           | A/R  | MAKE LOCALLY        |
| 4   | 12349    | BEARING .....        | 1    | S/N 2345B AND ABOVE |

## NO. Column

**Unique Symbols** — All items with same unique symbol (@, #, +, %, or >) in the number column belong to the same assembly or kit, which is indicated by a note in the “Remarks” column.

**Duplicate Item Numbers** — Duplicate numbers indicate multiple part numbers, which are in effect for the same general item, such as different size saw blade guards in use or a part that has been updated on newer versions of the same machine.

**NOTICE**

When ordering a part that has more than one item number listed, check the remarks column for help in determining the proper part to order.

## PART NO. Column

**Numbers Used** — Part numbers can be indicated by a number, a blank entry, or TBD.

TBD (To Be Determined) is generally used to show a part that has not been assigned a formal part number at the time of publication.

A blank entry generally indicates that the item is not sold separately or is not sold by Multiquip. Other entries will be clarified in the “Remarks” Column.

## QTY. Column

**Numbers Used** — Item quantity can be indicated by a number, a blank entry, or A/R.

A/R (As Required) is generally used for hoses or other parts that are sold in bulk and cut to length.

A blank entry generally indicates that the item is not sold separately. Other entries will be clarified in the “Remarks” Column.

## REMARKS Column

Some of the most common notes found in the “Remarks” Column are listed below. Other additional notes needed to describe the item can also be shown.

**Assembly/Kit** — All items on the parts list with the same unique symbol will be included when this item is purchased.

Indicated by:

“INCLUDES ITEMS W/(unique symbol)”

**Serial Number Break** — Used to list an effective serial number range where a particular part is used.

Indicated by:

“S/N XXXXX AND BELOW”

“S/N XXXX AND ABOVE”

“S/N XXXX TO S/N XXX”

**Specific Model Number Use** — Indicates that the part is used only with the specific model number or model number variant listed. It can also be used to show a part is NOT used on a specific model or model number variant.

Indicated by:

“XXXXX ONLY”

“NOT USED ON XXXX”

**“Make/Obtain Locally”** — Indicates that the part can be purchased at any hardware shop or made out of available items. Examples include battery cables, shims, and certain washers and nuts.

**“Not Sold Separately”** — Indicates that an item cannot be purchased as a separate item and is either part of an assembly/kit that can be purchased, or is not available for sale through Multiquip.

## SUGGESTED SPARE PARTS

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### MTX60SF TAMPING RAMMER WITH ROBIN ER120D45010 ENGINE

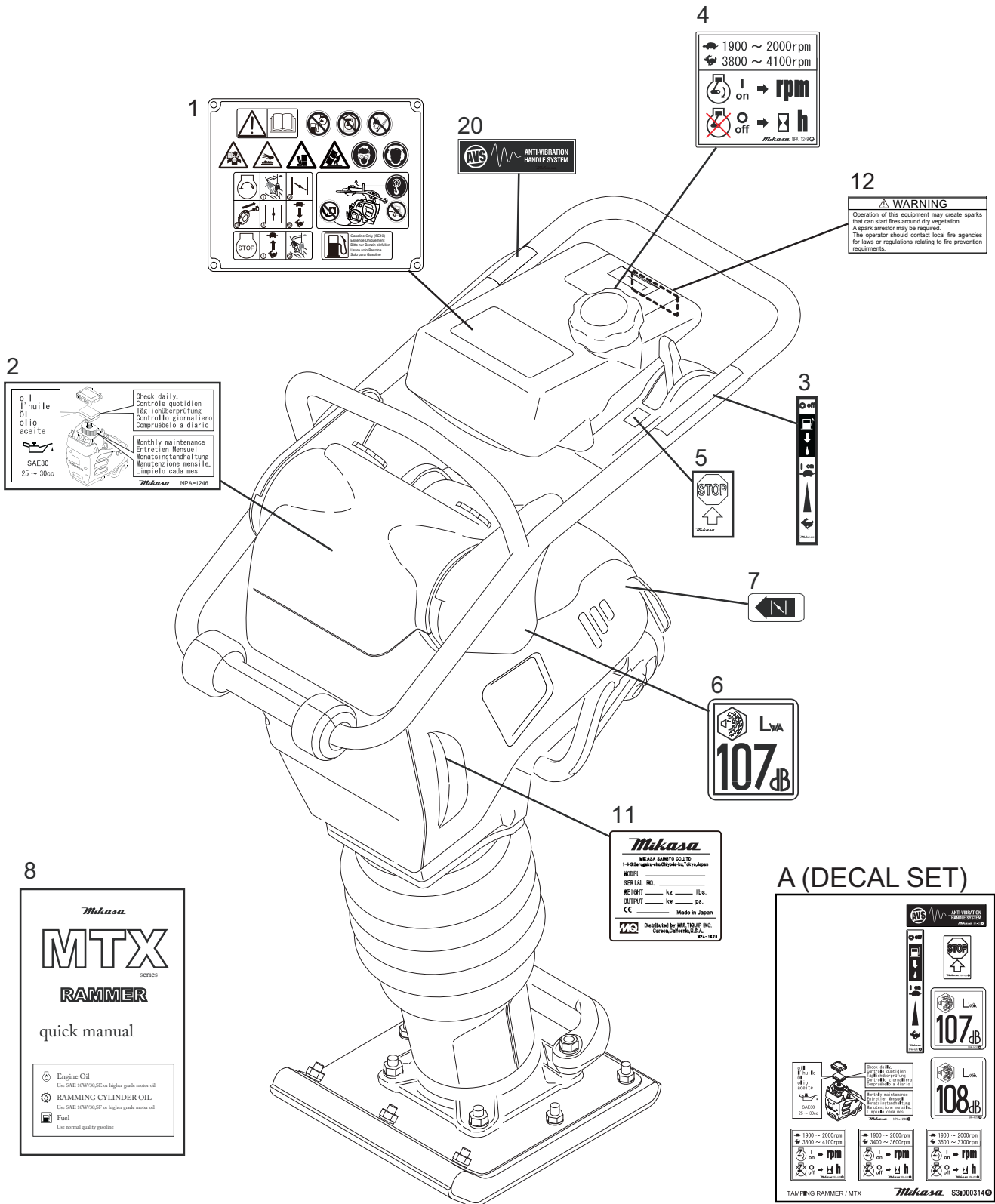
#### 1 to 3 units

| Qty.   | P/N             | Description                    |
|--------|-----------------|--------------------------------|
| 1..... | 956100062.....  | THROTTLE WIRE                  |
| 3..... | 366010070.....  | PRIMARY ELEMENT, AIR CLEANER   |
| 3..... | 366010080.....  | SECONDARY ELEMENT, AIR CLEANER |
| 1..... | 366350460.....  | CAP, FUEL TANK WITH STRAP      |
| 2..... | 26365012A3..... | FILTER, IN-LINE FUEL           |
| 3..... | 0650140860..... | SPARK PLUG                     |
| 1..... | 954406010.....  | STRAINER, #110 FUEL TANK       |
| 1..... | 21E5011008..... | ROPE, RECOIL STARTER           |
| 1..... | 956200110.....  | COMBINATION LEVER              |
| 1..... | 366900170.....  | CUP AND PACKING SET            |
| 1..... | 366348550.....  | CLUTCH ASSY.                   |

#### **NOTICE**

Part numbers on this Suggested Spare Parts list may supersede/replace the part numbers shown in the following parts lists.

# NAMEPLATE AND DECALS



1

2

oil  
l'huile  
öl  
olio  
aceite

Check daily.  
Contrôle quotidien  
Tägliche Überprüfung  
Controllo giornaliero  
Compruébalo a diario

Monthly maintenance  
Eintreten Manual  
Monatsinsstandhaltung  
Manutenzione mensile  
Limpeza e teste

SAE30  
25 ~ 30°C

Mikasa NPA-1246

20

4

1900 ~ 2000rpm  
3800 ~ 4100rpm

rpm  
on → rpm  
off → h

Mikasa 09 1210

12

**WARNING**

Operation of this equipment may create sparks that can start fires around dry vegetation. A spark arrestor may be required. The operator should contact local fire agencies for laws or regulations relating to fire prevention requirements.

3

off  
on  
rpm

5

STOP

7

←

6

LWA  
107dB

11

**Mikasa**

MIKASA KAWAYO OIL LTD  
1-4-1, Koyagishicho, Ohta-ku, Tokyo, Japan

MODEL: \_\_\_\_\_  
SERIAL NO.: \_\_\_\_\_  
WEIGHT: \_\_\_\_\_ kg \_\_\_\_\_ lbs  
OUTPUT: \_\_\_\_\_ kw \_\_\_\_\_ ps  
CC \_\_\_\_\_

Made in Japan

Distributed by: M&S, 1203P INC.  
Cerritos, CA 94519, U.S.A.  
MEX-1129

8

**Mikasa**

**MTX**  
series

**RAMMER**

quick manual

Engine Oil  
Use SAE 10W/30SE or higher grade motor oil

RAMMING CYLINDER OIL  
Use SAE 10W/30SF or higher grade motor oil

Fuel  
Use normal quality gasoline

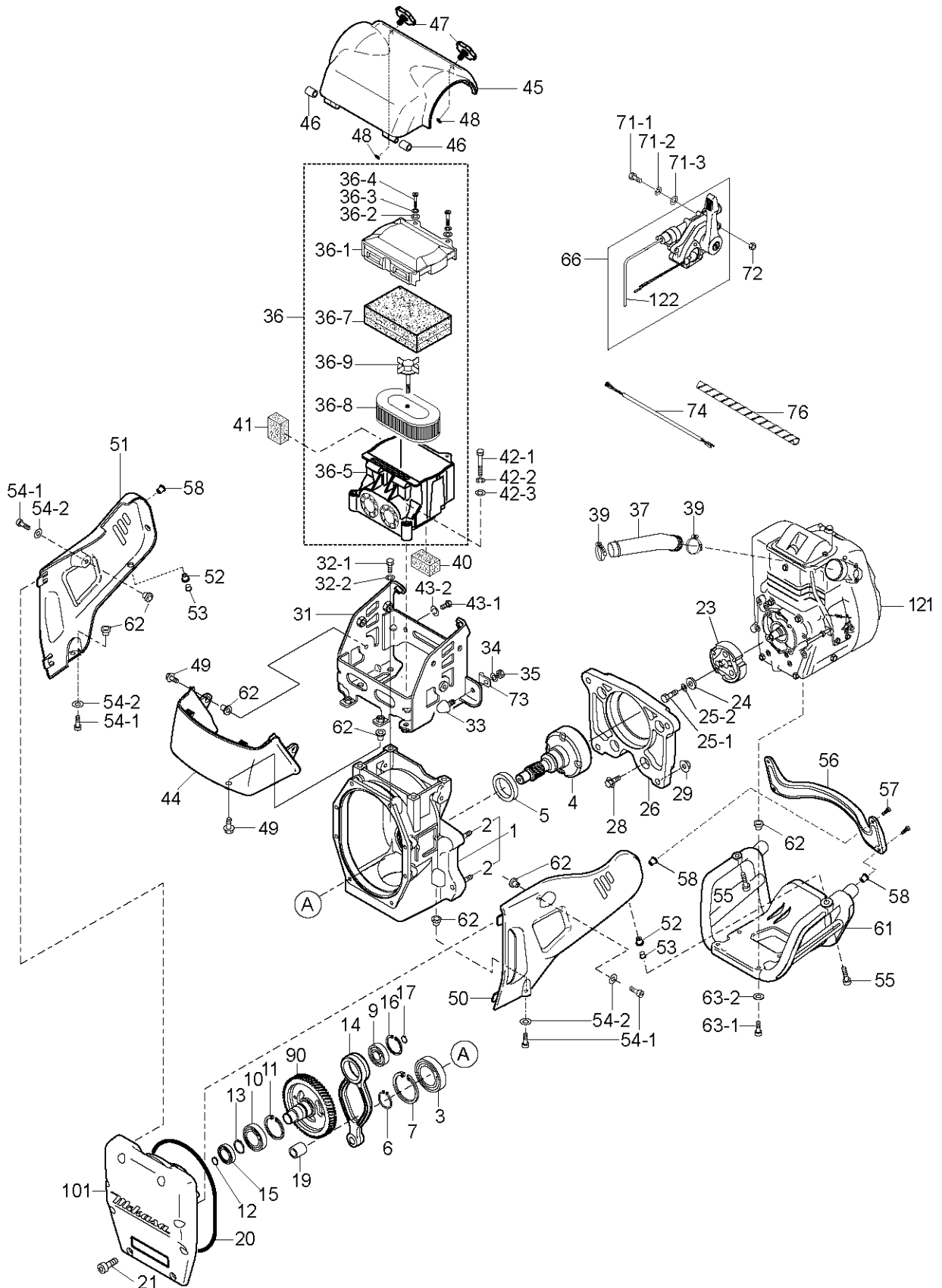
A (DECAL SET)

TAMMING RAMMER / MTX Mikasa S340003140

## NAMEPLATE AND DECALS

| <u>NO.</u> | <u>PART NO.</u> | <u>PART NAME</u>            | <u>QTY.</u> | <u>REMARKS</u>         |
|------------|-----------------|-----------------------------|-------------|------------------------|
| A          | 920900040       | DECAL, SET .....            | 1.....      | INCLUDES ITEMS W/#     |
| 1          | 920215440       | OPERATION DECAL             | 1           |                        |
| 2#         |                 | AIR CLEANER DECAL .....     | 1.....      | NPA-1246               |
| 3#         |                 | LEVER OPERATION DECAL       | 1           |                        |
| 4#         |                 | MAX SPEED DECAL 4100        | 1           |                        |
| 5#         |                 | MACHINE STOP DECAL          | 1           |                        |
| 6#         |                 | EC NOISE REQ. DECAL LWA107  | 1           |                        |
| 7          | 0732004430      | CHOKE OPERATION DECAL ..... | 1.....      | REPLACES P/N 920212840 |
| 8          | 920212540       | QUICK MANUAL                | 1           |                        |
| 11         |                 | SERIAL PLATE NO.....        | 1.....      | CONTACT MQ PARTS DEPT. |
| 12         | 920214100       | E/G FIRE WARNING. DECAL     | 1           |                        |
| 20#        |                 | ANTI-VIB. HANDLE DECAL      | 1           |                        |

# CRANKCASE AND ENGINE ASSY.



## CRANKCASE AND ENGINE ASSY.

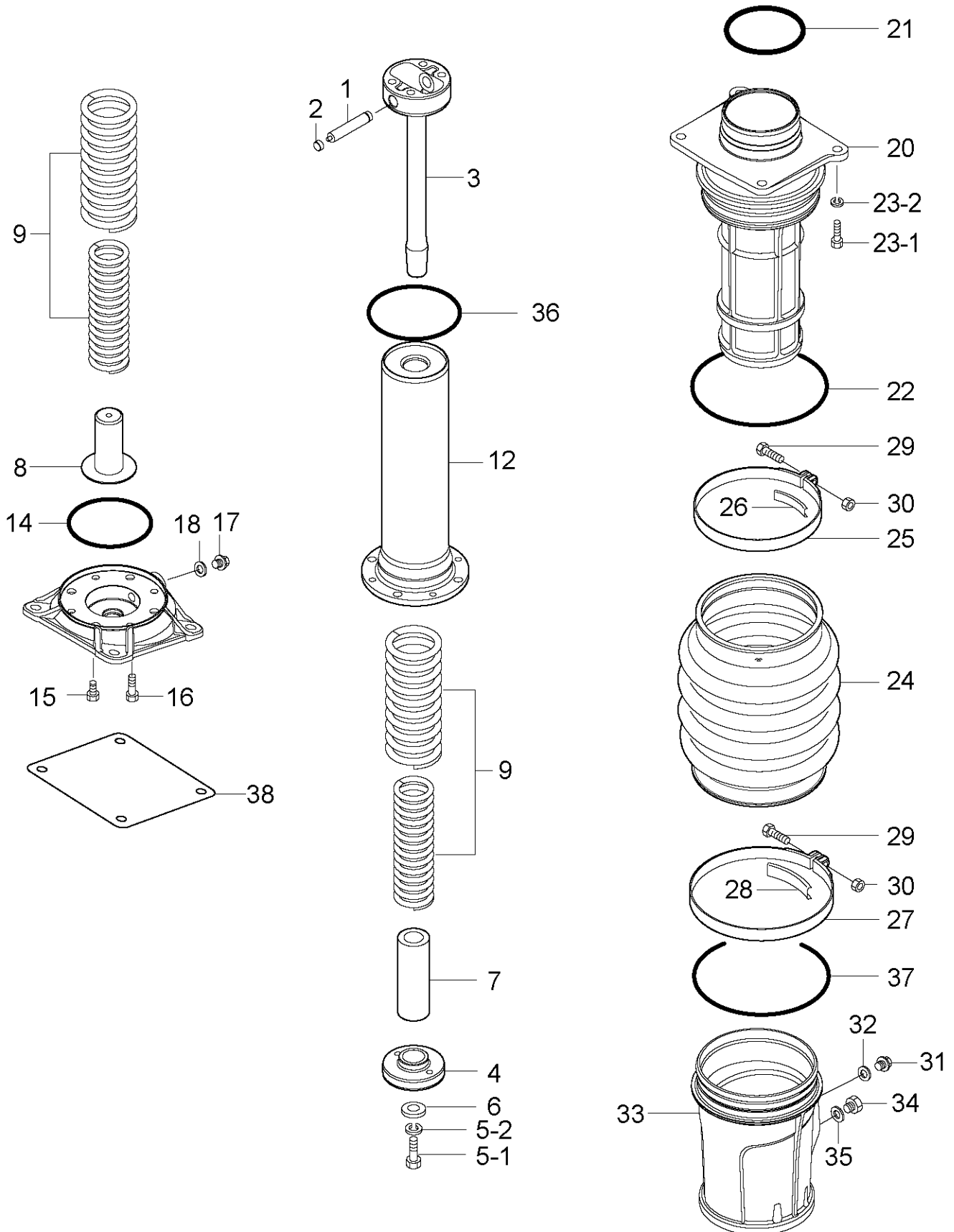
| <u>NO.</u> | <u>PART NO.</u> | <u>PART NAME</u>         | <u>QTY.</u> | <u>REMARKS</u>                               |
|------------|-----------------|--------------------------|-------------|--|
| 1          | 368910010       | CRANKCASE CP.....        | 1.....      | INCLUDES ITEM W/@<br>REPLACES P/N 368119170  |
| 2@         | 009120204       | STUD BOLT 10X50X21T/21S  | 4           |  |
| 3          | 041006007       | BEARING                  | 1           |  |
| 4          | 368347410       | PINION DRUM              | 1           |  |
| 5          | 060404010       | OIL SEAL                 | 1           |  |
| 6          | 080200350       | STOP RING                | 1           |  |
| 7          | 080100620       | STOP RING                | 1           |  |
| 9          | 040006304       | BEARING                  | 1           |  |
| 10         | 040006305       | BEARING                  | 1           |  |
| 11         | 080100620       | STOP RING                | 1           |  |
| 12         | JISB2804C25     | STOP RING.....           | 1.....      | REPLACES P/N 080200250                       |
| 13         | 080200170       | STOP RING                | 1           |  |
| 14         | 368347250       | CONNECTING ROD           | 1           |  |
| 15         | 042506203       | BEARING.....             | 1.....      | REPLACES P/N 040006203                       |
| 16         | 080100520       | STOP RING                | 1           |  |
| 17         | 080200200       | STOP RING                | 1           |  |
| 19         | 047940060       | NEEDLE BEARING           | 1           |  |
| 20         | 050710100       | O-RING                   | 1           |  |
| 21         | 009110025       | SOCKET HEAD BOLT 8X25 ZN | 8           |  |
| 23         | 366348550       | CLUTCH ASSY.             | 1           |  |
| 24         | 952401450       | WASHER 8.5X22X3          | 1           |  |
| 25-1       | 011208025       | BOLT 8X25 T.....         | 1.....      | REPLACES P/N 001220825                       |
| 25-2       | 030208200       | WASHER, LOCK M8          | 1           |  |
| 26         | 368217640       | ENGINE FLANGE            | 1           |  |
| 28         | 001710840       | FLANGE BOLT 8X40 T       | 4           |  |
| 29         | 022611010       | FLANGE NUT M10 H         | 4           |  |
| 31         | 368347490       | SHOCK ABSORBER BRACKET   | 1           |  |
| 32-1       | 012010030       | BOLT 10X30 H.....        | 4.....      | REPLACES P/N 001221030                       |
| 32-2       | 030210250       | WASHER, LOCK M10         | 4           |  |
| 33         | 939010270       | STOPPER RUBBER           | 1           |  |
| 34         | 030208200       | WASHER, LOCK M8          | 1           |  |
| 35         | 020108060       | NUT M8.....              | 1.....      | REPLACES P/N 020308060                       |
| 36         | 366900010       | AIR CLEANER ASSY.....    | 1.....      | INCLUDES ITEMS W/#<br>REPLACES P/N 366118640 |
| 36-1#      | 366010010       | AIR CLEANER COVER        | 1           |  |
| 36-2#      | 366010020       | WASHER, FLAT M6          | 2           |  |
| 36-3#      | 030206150       | WASHER, LOCK M6          | 2           |  |
| 36-4#      | 366010040       | COIN BOLT M6             | 2           |  |
| 36-5#      | 366010050       | AIR CLEANER BASE CP      | 1           |  |
| 36-7#      | 366010070       | PRIMARY ELEMENT CP       | 1           |  |
| 36-8#      | 366010080       | SECONDARY ELEMENT        | 1           |  |
| 36-9#      | 362030040       | GRIP BPLT CP             | 1           |  |
| 37         | 366350540       | INTAKE PIPE              | 1           |  |
| 39         | 954407682       | CYCLONE CLAMP            | 2           |  |
| 40         | 366460160       | UNDER SEALING FORM       | 1           |  |



## CRANKCASE AND ENGINE ASSY. (CONT'D.)

| <u>NO.</u> | <u>PART NO.</u> | <u>PART NAME</u>               | <u>QTY.</u> | <u>REMARKS</u>         |
|------------|-----------------|--------------------------------|-------------|------------------------|
| 41         | 366460150       | SIDE SEALING FORM              | 1           |                        |
| 42-1       | 001220851       | BOLT 8X55 T                    | 2           |                        |
| 42-2       | 030208200       | WASHER, LOCK M8                | 2           |                        |
| 42-3       | 0401450080      | WASHER, FLAT M8.....           | 2.....      | REPLACES P/N 031108160 |
| 43-1       | 011008015       | BOLT 8X15 H.....               | 2.....      | REPLACES P/N 001210815 |
| 43-2       | 030208200       | WASHER, LOCK M8                | 2           |                        |
| 44         | 368217760       | BOTTOM, CLEANER COVER          | 1           |                        |
| 45         | 368217750       | TOP, CLEANER COVER             | 1           |                        |
| 46         | 366460140       | RUBBER BUSH 10X16X17           | 2           |                        |
| 47         | 366345980       | CLEANER COVER KNOB             | 2           |                        |
| 48         | 050200060       | O-RING P6                      | 2           |                        |
| 49         | 009110040       | FLANGE BOLT 8X20               | 4           |                        |
| 50         | 368120510       | LINK GUARD                     | 1           |                        |
| 51         | 368120520       | MUFFLER GUARD                  | 1           |                        |
| 52         | 022910260       | WELL NUT M8                    | 2           |                        |
| 53         | 366460170       | FLANGE COLLAR 8                | 2           |                        |
| 54-1       | 001520820       | SOCKET HEAD BOLT 8X20 ZN.....  | 4.....      | REPLACES P/N 009110024 |
| 54-2       | 033910220       | WASHER 8.4X15.5X1.6            | 4           |                        |
| 55         | 009110038       | SOCKET HEAD BOLT 8X30 ZN       | 2           |                        |
| 56         | 368217770       | EX BAR                         | 1           |                        |
| 57         | 009110039       | SOCKET HEAD BOLT 6X25 ZN       | 4           |                        |
| 58         | 022910250       | WELL NUT M6                    | 4           |                        |
| 61         | 366120430       | ENGINE GUARD                   | 1           |                        |
| 62         | 366461050       | COLLAR/GUARD                   | 12          |                        |
| 63-1       | 009110025       | SOCKET HEAD BOLT 8X25 ZN       | 4           |                        |
| 63-2       | 033910220       | WASHER 8.4X15.5X1.6            | 4           |                        |
| 66         | 956200110       | LEVER ASSY. W/OUT T. WIRE..... | 1.....      | INCLUDES ITEMS W/\$    |
| 71-1       | 011206020       | BOLT 6X20T.....                | 2.....      | REPLACES P/N 001220620 |
| 71-2       | 030206150       | WASHER, LOCK M6                | 2           |                        |
| 71-3       | 952404470       | WASHER, FLAT M6.....           | 2.....      | REPLACES P/N 031106100 |
| 72         | 020106050       | NUT M6.....                    | 2.....      | REPLACES P/N 020306050 |
| 73         | 959006120       | CLIP                           | 1           |                        |
| 74         | 367460120       | WIRE HARNESS                   | 1           |                        |
| 76         | 959021814       | SPIRAL TUBE KEP6/L=200         | 1           |                        |
| 90         | 368347270       | CRANK GEAR                     | 1           |                        |
| 101        | 368010010       | FRONT COVER                    | 1           |                        |
| 121        | 911231205       | ENGINE, ER120D45010.....       | 1.....      | REPLACES P/N 911231202 |
| 122\$      | 956100062       | THROTTLE WIRE                  | 1           |                        |

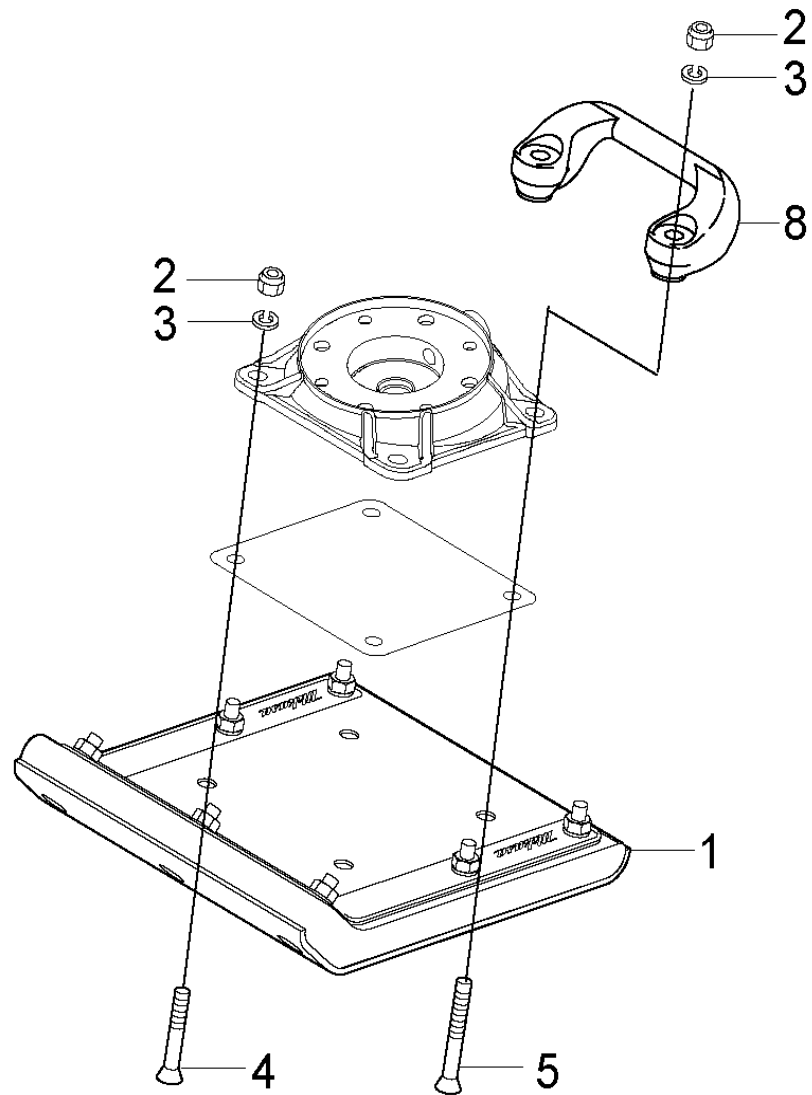
# GUIDE CYLINDER ASSY.



## GUIDE CYLINDER ASSY.

| <u>NO.</u> | <u>PART NO.</u> | <u>PART NAME</u>              | <u>QTY.</u> | <u>REMARKS</u>         |
|------------|-----------------|-------------------------------|-------------|------------------------|
| 1          | 368461210       | PISTON PIN                    | 1           |                        |
| 2          | 368459920       | PISTON PIN PLUG               | 2           |                        |
| 3          | 368347290       | PISTON ROD                    | 1           |                        |
| 4          | 368461160       | PISTON END                    | 1           |                        |
| 5-1        | 001121230       | BOLT 12X30 T                  | 1           |                        |
| 5-2        | 030212300       | WASHER, LOCK M12              | 1           |                        |
| 6          | 952404790       | WASHER                        | 1           |                        |
| 7          | 368461260       | STOPPER, LOWER                | 1           |                        |
| 8          | 368461200       | STOPPER, BOTTOM               | 1           |                        |
| 9          | 368461270       | SPRING, MAIN                  | 2           |                        |
| 12         | 368347281       | SPRING, CYLINDER.....         | 1.....      | REPLACES P/N 368347280 |
| 13         | 368217710       | FOOT PLATE                    | 1           |                        |
| 14         | 050100800       | O-RING                        | 1           |                        |
| 15         | 014210020       | SOCKET HEAD BOLT 10X20 T..... | 4.....      | REPLACES P/N 001521020 |
| 16         | 001520835       | SOCKET HEAD BOLT 8X35 T       | 4           |                        |
| 17         | 953405270       | PLUG                          | 1           |                        |
| 18         | 953405260       | PACKING                       | 1           |                        |
| 20         | 368217720       | CYLINDER GUIDE                | 1           |                        |
| 21         | 050100850       | O-RING                        | 1           |                        |
| 22         | 050101150       | O-RING                        | 1           |                        |
| 23-1       | 012210035       | BOLT 10X35 H.....             | 4.....      | REPLACES P/N 001221035 |
| 23-2       | 030210250       | WASHER, LOCK M8               | 4           |                        |
| 24         | 368346180       | ORANGE BELLOWS                | 1           |                        |
| 25         | 368347520       | CLAMP, BELLOWS                | 1           |                        |
| 26         | 368461400       | BAND GUIDE                    | 1           |                        |
| 27         | 368347530       | CLAMP, BELLOWS                | 1           |                        |
| 28         | 368461410       | BAND GUIDE                    | 1           |                        |
| 29         | 011008040       | BOLT 8X40 T.....              | 2.....      | REPLACES P/N 001220840 |
| 30         | 020108060       | NUT M8.....                   | 2.....      | REPLACES P/N 020308060 |
| 31         | 953405270       | PLUG                          | 1           |                        |
| 32         | 953405260       | PACKING                       | 1           |                        |
| 33         | 368118970       | SLEEVE, PROTECTION            | 1           |                        |
| 34         | 366460300       | OIL GAUGE ASSY.               | 1           |                        |
| 35         | 953404670       | COPPER PACKING                | 1           |                        |
| 36         | 050200800       | O-RING                        | 1           |                        |
| 37         | 050101300       | O-RING                        | 1           |                        |
| 38         | 368347460       | FOOT COVER                    | 1           |                        |

# FOOT ASSY.

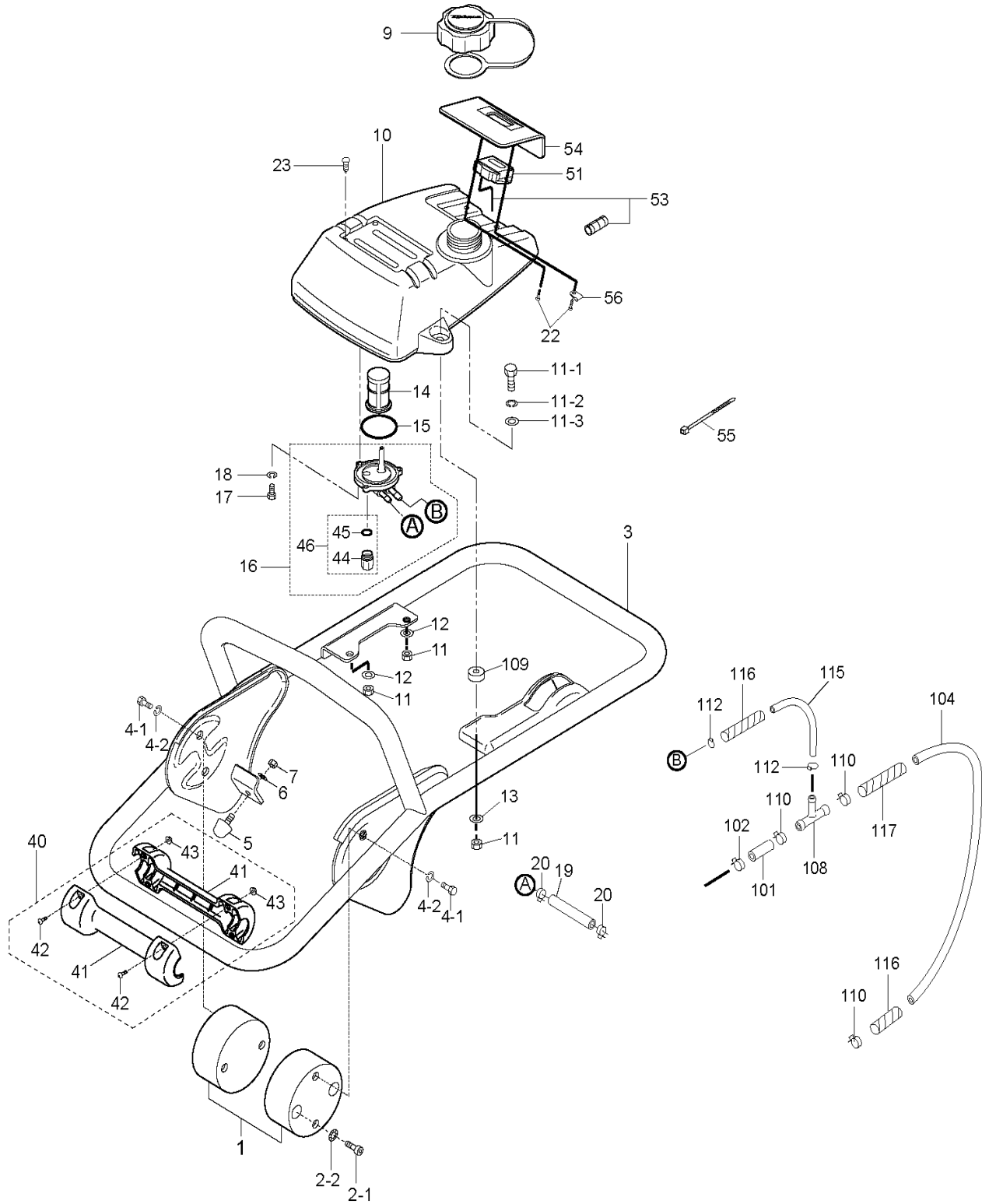


# FOOT ASSY.

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| <u>NO.</u> | <u>PART NO.</u> | <u>PART NAME</u>       | <u>QTY.</u> | <u>REMARKS</u>         |
|------------|-----------------|------------------------|-------------|------------------------|
| 1          | 362910150       | FOOT ASSY.             | 1           |                        |
| 2          | 021112140       | NYLON NUT M12 .....    | 4.....      | REPLACES P/N 022711214 |
| 3          | 030212300       | WASHER, LOCK M12       | 4           |                        |
| 4          | 009110034       | SQUARE NECK BOLT 12X65 | 2           |                        |
| 5          | 009110035       | SQUARE NECK BOLT 12X95 | 2           |                        |
| 8          | 363343390       | HANDLEBAR GRIP (FOOT)  | 1           |                        |

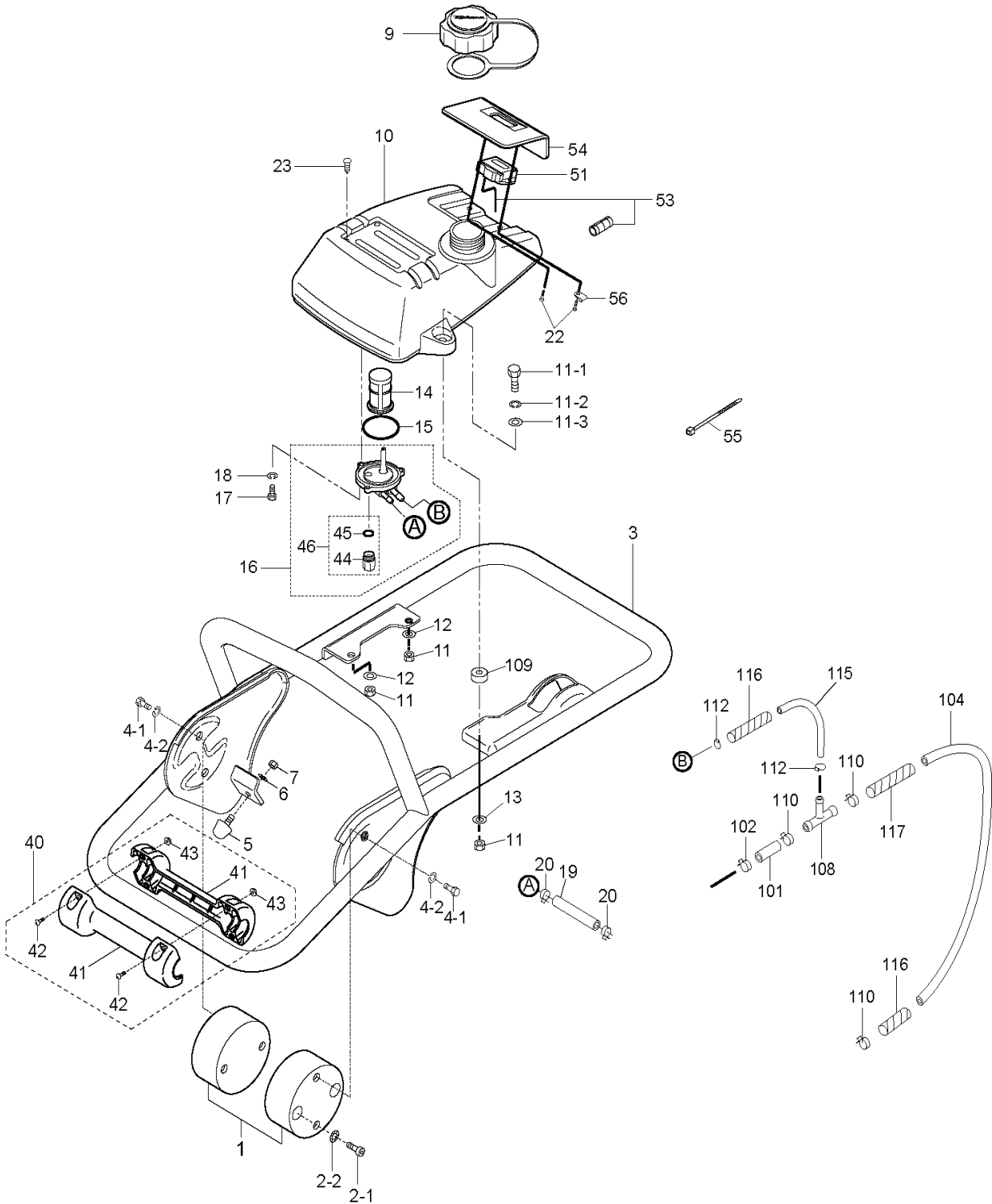
# FUEL TANK AND HANDLE ASSY.



## FUEL TANK AND HANDLE ASSY.

| <u>NO.</u> | <u>PART NO.</u> | <u>PART NAME</u>              | <u>QTY.</u> | <u>REMARKS</u>         |
|------------|-----------------|-------------------------------|-------------|------------------------|
| 1          | 368347630       | SHOCK ABSORBER W/PIN          | 2           |                        |
| 2-1        | 014210020       | SOCKET HEAD BOLT 10X20 T..... | 4.....      | REPLACES P/N 001521020 |
| 2-2        | 033121009       | TOOTHED LOCK WASHER B M10     | 4           |                        |
| 3          | 368119572       | HANDLE .....                  | 1.....      | REPLACES P/N 368119570 |
| 4-1        | 001211020       | BOLT 10X20 H                  | 4           |                        |
| 4-2        | 030210250       | WASHER, LOCK M10              | 4           |                        |
| 5          | 939010270       | STOPPER, RUBBER               | 1           |                        |
| 6          | 030208200       | WASHER, LOCK M8               | 1           |                        |
| 7          | 020108060       | NUT M8.....                   | 1.....      | REPLACES P/N 020308060 |
| 9          | 366350470       | CAP ASSY., FUEL TANK          | 1           |                        |
| 10         | 366910042       | FUEL TANK.....                | 1.....      | REPLACES P/N 366120250 |
| 11         | 022710809       | NYLON NUT M8                  | 3           |                        |
| 11-1       | 011008035       | BOLT 8X35 H3.....             | 3.....      | REPLACES P/N 001200835 |
| 11-2       | 030208200       | WASHER, LOCK M8               | 3           |                        |
| 11-3       | 0401450080      | WASHER, FLAT M8.....          | 3.....      | REPLACES P/N 031108160 |
| 12         | 952401450       | WASHER, 8.5X22X3              | 2           |                        |
| 13         | 0401450080      | WASHER, FLAT M8.....          | 1.....      | REPLACES P/N 031108160 |
| 14         | 954406010       | STRAINER #110                 | 1           |                        |
| 15         | 050250420       | PACKING, FUEL TANK            | 1           |                        |
| 16         | 366350580       | HOLDER, FILTER.....           | 1.....      | INCLUDES ITEMS W/\$    |
| 17         | 001200515       | BOLT 5X15 H                   | 3           |                        |
| 18         | 030205130       | WASHER, LOCK M5               | 3           |                        |
| 19         | 366900110       | FUEL HOSE, L=90 .....         | 1.....      | REPLACES P/N 959328406 |
| 20         | 0561080020      | HOSE, CLAMP                   | 2           |                        |
| 22         | 009110037       | TAPPING SCREW 5X20            | 2           |                        |
| 23         | 094010053       | PANHEAD SCREW 4X8             | 4           |                        |
| 40         | 366910030       | ROLLER ASSY., W/SCREW.....    | 1.....      | INCLUDES ITEMS W/#     |
| 41#        | 366217170       | ROLLER                        | 2           |                        |
| 42#        | 0017105020      | SCREW 5X20 .....              | 4.....      | REPLACES P/N 091005020 |
| 43#        | 022610505       | FLANGE NUT M5 H               | 4           |                        |
| 44\$@      | 366464260       | CUP, HOLDER FILTER            | 1           |                        |
| 45\$@      | 366464270       | PACKING, HOLDER FILTER        | 1           |                        |
| 46\$       | 366900170       | CUP AND PACKING SET .....     | 1.....      | INCLUDES ITEMS W/@     |
| 51         | 955010311       | TP22 TACHO/HOUR METER .....   | 1.....      | REPLACES P/N 980010330 |
| 53         | 955010305       | CURL CORD.....                | 1.....      | REPLACES P/N 980010400 |
| 54         | 366345620       | FINISHER, METER               | 1           |                        |
| 55         | 454010020       | CLAMP                         | 5           |                        |
| 56         | 954010270       | CLIP                          | 1           |                        |

# FUEL TANK AND HANDLE ASSY. (CONT'D.)

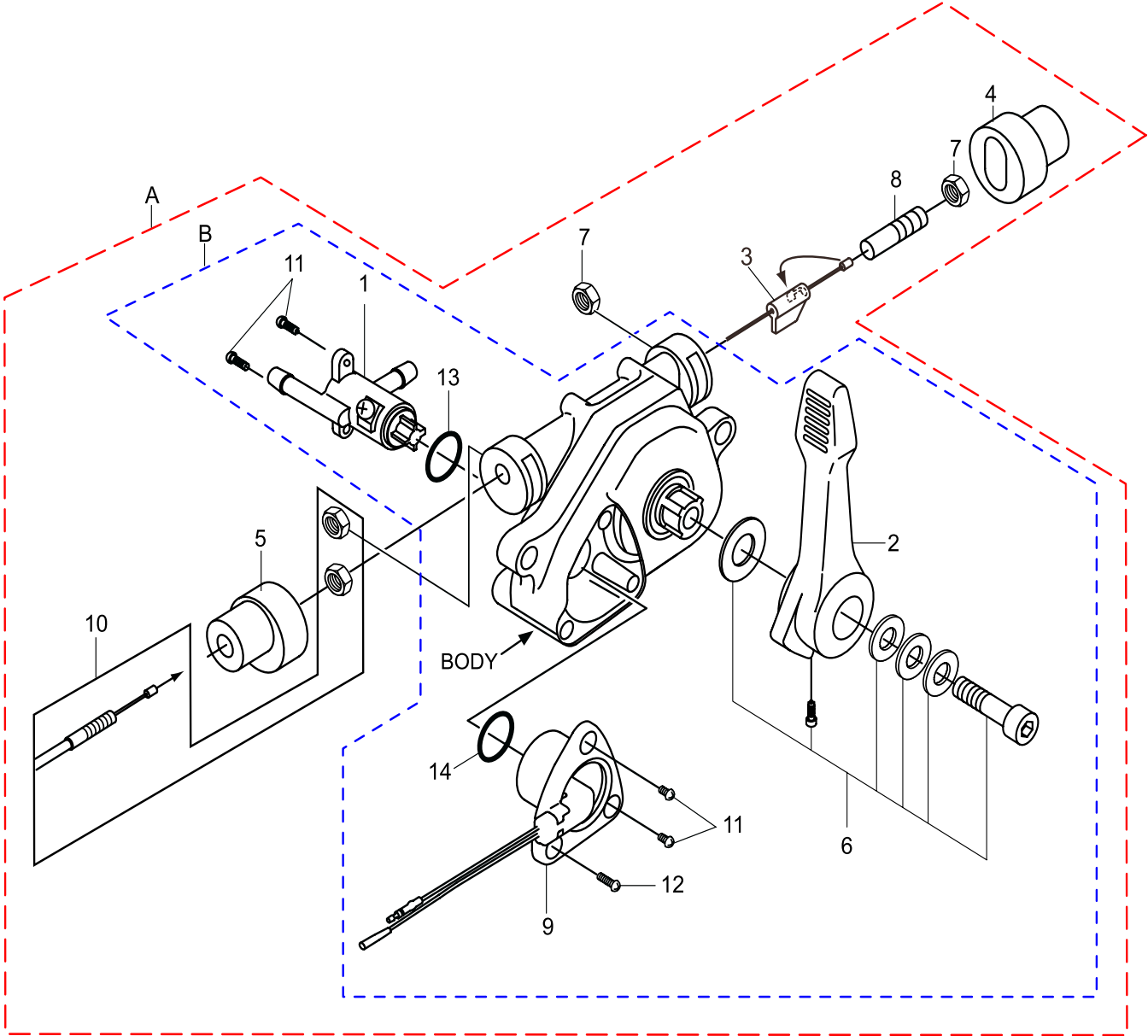


## FUEL TANK AND HANDLE ASSY. (CONT'D.)

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| <u>NO.</u> | <u>PART NO.</u> | <u>PART NAME</u>      | <u>QTY.</u> | <u>REMARKS</u>         |
|------------|-----------------|-----------------------|-------------|------------------------|
| 101        | 959028621       | FUEL HOSE 9.5X50/EVP  | 1           |                        |
| 102        | H950024085008   | HOSE BAND.....        | 1.....      | REPLACES P/N 954407060 |
| 104        | 959028622       | FUEL HOSE 9.5X270/EVP | 1           |                        |
| 108        | 954002941       | JOINT, HOSE           | 1           |                        |
| 109        | 952408480       | WASHER 9X28X9         | 3           |                        |
| 110        | H950024085008   | HOSE BAND.....        | 3.....      | REPLACES P/N 954407060 |
| 112        | 954408170       | HOSE CLIP             | 2           |                        |
| 115        | 959028321       | FUEL HOSE 6X180/EVP   | 1           |                        |
| 116        | 959021825       | SPIRAL TUBE, L=60     | 2           |                        |
| 117        | 959021821       | SPIRAL TUBE, L=120    | 1           |                        |

# COMBINATION LEVER ASSY.

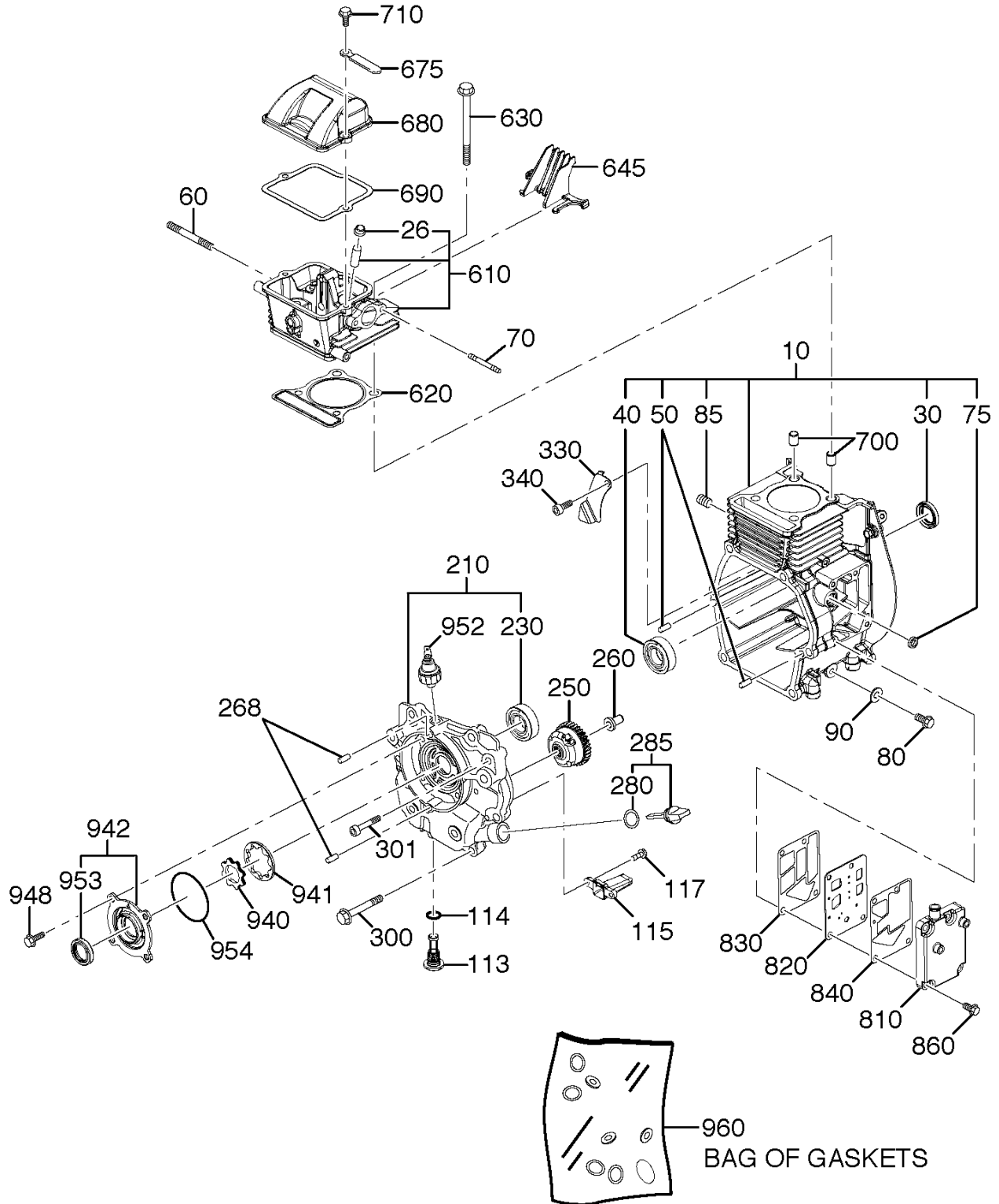


## COMBINATION LEVER ASSY.

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| <u>NO.</u> | <u>PART NO.</u> | <u>PART NAME</u>                     | <u>QTY.</u> | <u>REMARKS</u>      |
|------------|-----------------|--------------------------------------|-------------|---------------------|
| A          | 366900032       | COMB. LEVER W/ THROTTLE WIRE.....    | 1.....      | INCLUDES ITEMS W/@  |
| B          | 956200110       | COMB. LEVER W/OUT THROTTLE WIRE..... | 1.....      | INCLUDES ITEMS W/ # |
| 1@#        | 366349430       | FUEL COCK                            | 1           |                     |
| 2@#        | 366010310       | LEVER                                | 1           |                     |
| 3@         | 366010190       | SLIDER                               | 1           |                     |
| 4@         | 366010200       | END CAP                              | 1           |                     |
| 5@         | 366010210       | WIRE CAP                             | 1           |                     |
| 6@#        | 366010220       | BOLT AND WASHER SET                  | 1           |                     |
| 7@         | 020408050       | NUT M8, H=5                          | 2           |                     |
| 8@         | 959407650       | SOCKET HEAD SCREW/TH.WIRE            | 1           |                     |
| 9@#        | 366010320       | STOP SWITCH                          | 1           |                     |
| 10@        | 956100062       | THROTTLE WIRE                        | 1           |                     |
| 11@#       | 094010051       | TAPPING SCREW B1 4X12                | 4           |                     |
| 12@#       | 094010052       | TAPPING SCREW B1 4X30                | 1           |                     |
| 13@#       | 050200150       | O-RING, P15                          | 1           |                     |
| 14@#       | 050200110       | O-RING, P11                          | 1           |                     |

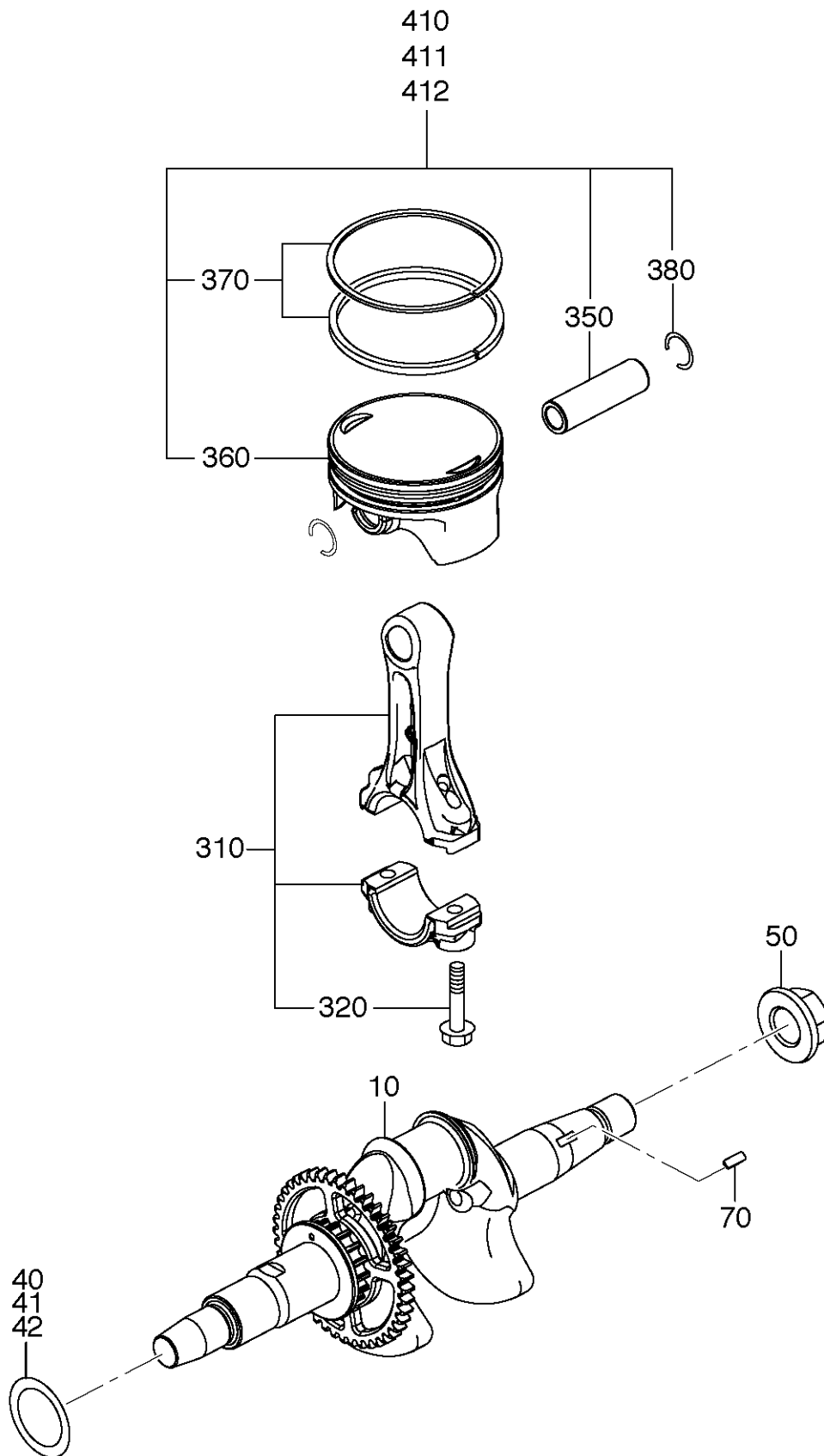
# ROBIN ER120D45010 ENGINE — CRANKCASE ASSY.



## ROBIN ER120D45010 ENGINE — CRANKCASE ASSY.

| <u>NO.</u> | <u>PART NO.</u> | <u>PART NAME</u>            | <u>QTY.</u> | <u>REMARKS</u>      |
|------------|-----------------|-----------------------------|-------------|---------------------|
| 10         | 21E10101M1      | CRANKCASE CP.....           | 1           | INCLUDES ITEMS W/#  |
| 26@        | 2771601001      | STEM SEAL                   | 1           |                     |
| 30#        | 0440200070      | OIL SEAL                    | 1           |                     |
| 40#        | X600200200      | BALL BEARING                | 1           |                     |
| 50#        | 0310060020      | DOWEL PIN                   | 2           |                     |
| 60         | X105080550      | STUD                        | 2           |                     |
| 70         | 0105060280      | STUD                        | 2           |                     |
| 75#        | X440080010      | OIL SEAL                    | 1           |                     |
| 80         | 0110080150      | FLANGE BOLT                 | 1           |                     |
| 85#        | X403140010      | PLUG                        | 1           |                     |
| 90         | X211080050      | GASKET (ALUMINUM)           | 1           |                     |
| 113        | 21E65001H2      | PLUG                        | 1           |                     |
| 114        | 0240110020      | O-RING                      | 1           |                     |
| 115        | 21E64201J3      | SUCTION PIPE                | 1           |                     |
| 117        | X110050030      | FLANGE BOLT                 | 2           |                     |
| 210        | 21E11101J1      | MAIN BEARING COVER CP ..... | 1           | INCLUDES ITEMS W/\$ |
| 230\$      | X600220030      | BALL BEARING                | 1           |                     |
| 250        | 21E45001J1      | GOVERNOR GEAR CP            | 1           |                     |
| 260        | 21E41901H3      | GOVERNOR SLEEVE             | 1           |                     |
| 268        | 0310060020      | DOWEL PIN                   | 1           |                     |
| 280        | 0213160020      | GASKET                      | 1           |                     |
| 285        | 21E63601H1      | OIL GAUGE CP                | 1           |                     |
| 300        | 0110080160      | FLANGE BOLT                 | 6           |                     |
| 301        | X119060110      | BOLT (SOCKET HEAD)          | 1           |                     |
| 330        | 21E17001J3      | OIL SHELTER PLATE           | 1           |                     |
| 340        | X119050060      | BOLT AND WASHER ASSY.       | 1           |                     |
| 610        | 21E13002K0      | CYLINDER HEAD ASSY.....     | 1           | INCLUDES ITEMS W/@  |
| 620        | 21E1500123      | GASKET (HEAD)               | 1           |                     |
| 630        | X110080460      | FLANGE BOLT                 | 4           |                     |
| 645        | 21E18001H3      | GUIDE (S.PLUG)              | 1           |                     |
| 675        | 2267510103      | CLAMP                       | 1           |                     |
| 680        | 21E15501H3      | ROCKER COVER                | 1           |                     |
| 690        | 21E1600111      | GASKET CP (R. COVER)        | 1           |                     |
| 700        | 2771501103      | PIPE KNOCK                  | 2           |                     |
| 710        | X110060610      | FLANGE BOLT                 | 2           |                     |
| 810        | 21E14301H3      | BREATHER COVER              | 1           |                     |
| 820        | 21E14401J1      | BREATHER PLATE CP           | 1           |                     |
| 830        | 21E16002J3      | GASKET (B. PLATE)           | 1           |                     |
| 840        | 21E16003H3      | GASKET (B. COVER)           | 1           |                     |
| 860        | 21E76301H1      | FLANGE BOLT                 | 4           |                     |
| 940        | 0110060230      | INNER ROTOR                 | 1           |                     |
| 941        | 21E63901H3      | OUTER ROTOR                 | 1           |                     |
| 942        | 21E63902H3      | OIL PUMP COVER CP .....     | 1           | INCLUDES ITEMS W/%  |
| 948        | 21E64001L1      | FLANGE BOLT                 | 4           |                     |
| 952        | 0110060440      | SWITCH OIL PRESSURE         | 1           |                     |
| 953        | 0440200070      | OIL SEAL                    | 1           |                     |
| 954        | 0240590020      | O-RING                      | 1           |                     |
| 960        | 21E9900127      | GASKET SET                  | 1           |                     |

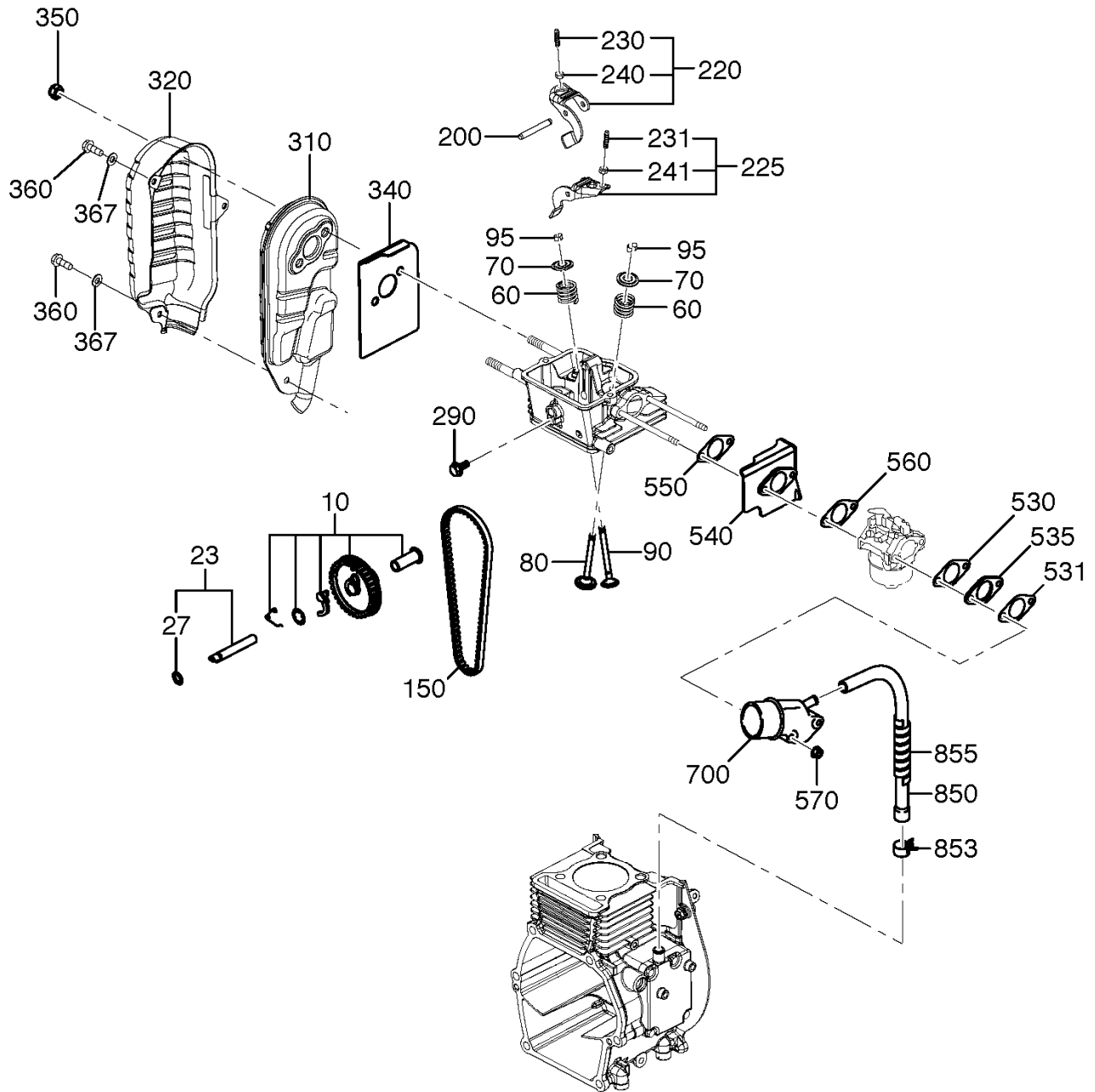
# ROBIN ER120D45010 ENG. — CRANKSHAFT, PISTON ASSY.



## ROBIN ER120D45010 ENG. — CRANKSHAFT, PISTON ASSY.

| <u>NO.</u> | <u>PART NO.</u> | <u>PART NAME</u>           | <u>QTY.</u> | <u>REMARKS</u>      |
|------------|-----------------|----------------------------|-------------|---------------------|
| 10         | 21E20202M1      | CRANKSHAFT CP              | 1           |                     |
| 40         | X230220100      | SPACER                     | 1           |                     |
| 41         | X230220110      | SPACER                     | 1           |                     |
| 42         | X230220120      | SPACER                     | 1           |                     |
| 50         | 0180140020      | FLANGE NUT                 | 1           |                     |
| 70         | 0053203101      | WOODRUFF KEY               | 1           |                     |
| 310        | 21E22501K0      | CONNECTING ROD ASSY.....   | 1.....      | INCLUDES ITEMS W/#  |
| 320#       | 20F2300103      | CONNECTING ROD BOLT        | 2           |                     |
| 350%\$@    | 21E23301H3      | PISTON PIN                 | 1           |                     |
| 360%       | 21E23401H3      | PISTON STD                 | 1           |                     |
| 360\$      | 21E23402H3      | PISTON O.S. 0.25           | 1           |                     |
| 360@       | 21E23403H3      | PISTON O.S. 0.50           | 1           |                     |
| 370%       | 21E23501H7      | PISTON RING SET, STD       | 1           |                     |
| 370\$      | 21E23502H7      | PISTON RING SET, 0.25 O.S. | 1           |                     |
| 370@       | 21E23503H7      | PISTON RING SET, 0.50 O.S. | 1           |                     |
| 380%\$@    | 21E2500103      | CLIP                       | 2           |                     |
| 410        | 21E27001H7      | PISTON KIT STD.....        | 1.....      | INCLUDES ITEMS W/%  |
| 411        | 21E27002H7      | PISTON KIT O.S. 0.25.....  | 1.....      | INCLUDES ITEMS W/\$ |
| 412        | 21E27003H7      | PISTON KIT O.S. 0.50.....  | 1.....      | INCLUDES ITEMS W/@  |

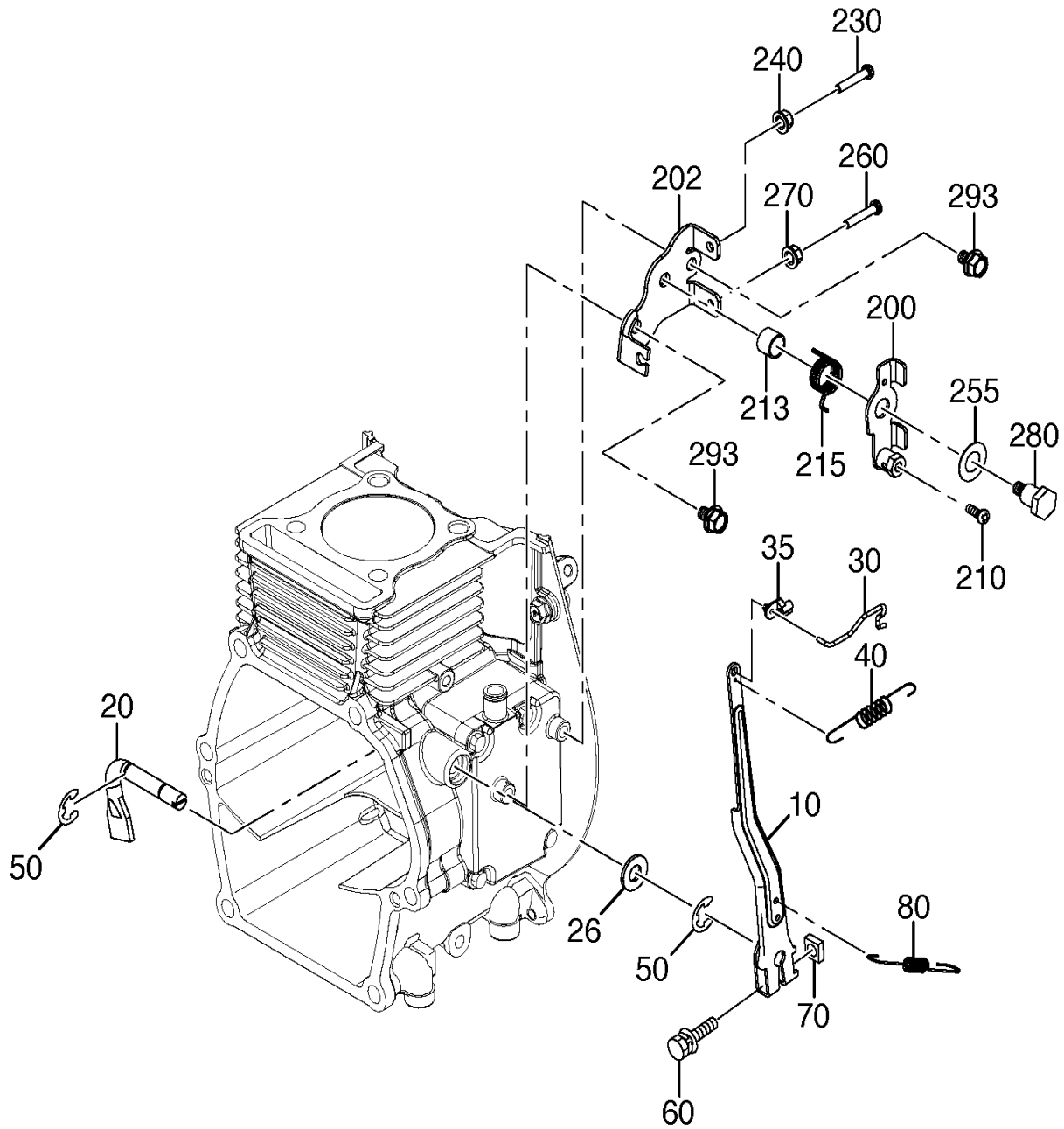
# ROBIN ER120D45010 ENGINE — INTAKE, EXHAUST ASSY.



## ROBIN ER120D45010 ENGINE — INTAKE, EXHAUST ASSY.

| <u>NO.</u> | <u>PART NO.</u> | <u>PART NAME</u>             | <u>QTY.</u> | <u>REMARKS</u>          |
|------------|-----------------|------------------------------|-------------|-------------------------|
| 10         | 21E31601S1      | CAM PULLEY CP                | 1           |                         |
| 23         | 21E35101J1      | PIN (CAM PULLEY) CP.....     | 1.....      | INCLUDES ITEMS W/#      |
| 27#        | 0240060030      | O-RING                       | 1           |                         |
| 60         | 2793360103      | VALVE SPRING                 | 2           |                         |
| 70         | 2693370103      | SPRING RETAINER              | 2           |                         |
| 80         | 27633401H3      | INTAKE VALVE                 | 1           |                         |
| 90         | 27633501H3      | EXHAUST VALVE                | 1           |                         |
| 95         | 13210KA031      | COLLET VALVE                 | 4           |                         |
| 150        | 21E3560103      | TIMING BELT                  | 1           |                         |
| 200        | 2773500403      | PIN (ROCKER)                 | 1           |                         |
| 220        | 21E36101J0      | ROCKER ARM INTAKE ASSY.....  | 1.....      | INCLUDES ITEMS W/\$     |
| 225        | 21E36102J0      | ROCKER ARM EXHAUST ASSY..... | 1.....      | INCLUDES ITEMS W/@      |
| 230\$      | 0149050020      | ADJUST SCREW                 | 1           |                         |
| 231@       | 0149050020      | ADJUST SCREW                 | 1           |                         |
| 240\$      | 0170050030      | NUT                          | 1           |                         |
| 241@       | 0170050030      | NUT                          | 1           |                         |
| 290        | 957010600800    | BOLT, FLANGE.....            | 1.....      | REPLACES P/N 0110060010 |
| 310        | 21E30101K2      | MUFFLER UN                   | 1           |                         |
| 320        | 21E34201M2      | MUFFLER COVER                | 1           |                         |
| 340        | X130060330      | GASKET MUFFLER               | 1           |                         |
| 350        | 0200060120      | SELF LOCK NUT                | 2           |                         |
| 360        | 21E35201H3      | BOLT AND WASHER ASSY.        | 2           |                         |
| 367        | 0176080020      | WASHER                       | 2           |                         |
| 530        | 21E3500403      | GASKET, INTAKE (CARB.)       | 1           |                         |
| 531        | 21E3500403      | GASKET, INTAKE (CARB.)       | 1           |                         |
| 535        | 21E37001H3      | PLATE, INTAKE                | 1           |                         |
| 540        | 21E32903K3      | INSULATOR                    | 1           |                         |
| 550        | 2843590303      | GASKET (INSULATOR)           | 1           |                         |
| 560        | 21E3500303      | GASKET (CARB)                | 1           |                         |
| 570        | 0176060030      | SELF LOCK NUT                | 2           |                         |
| 700        | 21E33002H3      | INTAKE PIPE (F)              | 1           |                         |
| 850        | 21E16103J3      | RUBBER PIPE                  | 1           |                         |
| 853        | 0561130010      | HOSE CLAMP                   | 1           |                         |
| 855        | 21E19001H3      | SPIRAL TUBE                  | 1           |                         |

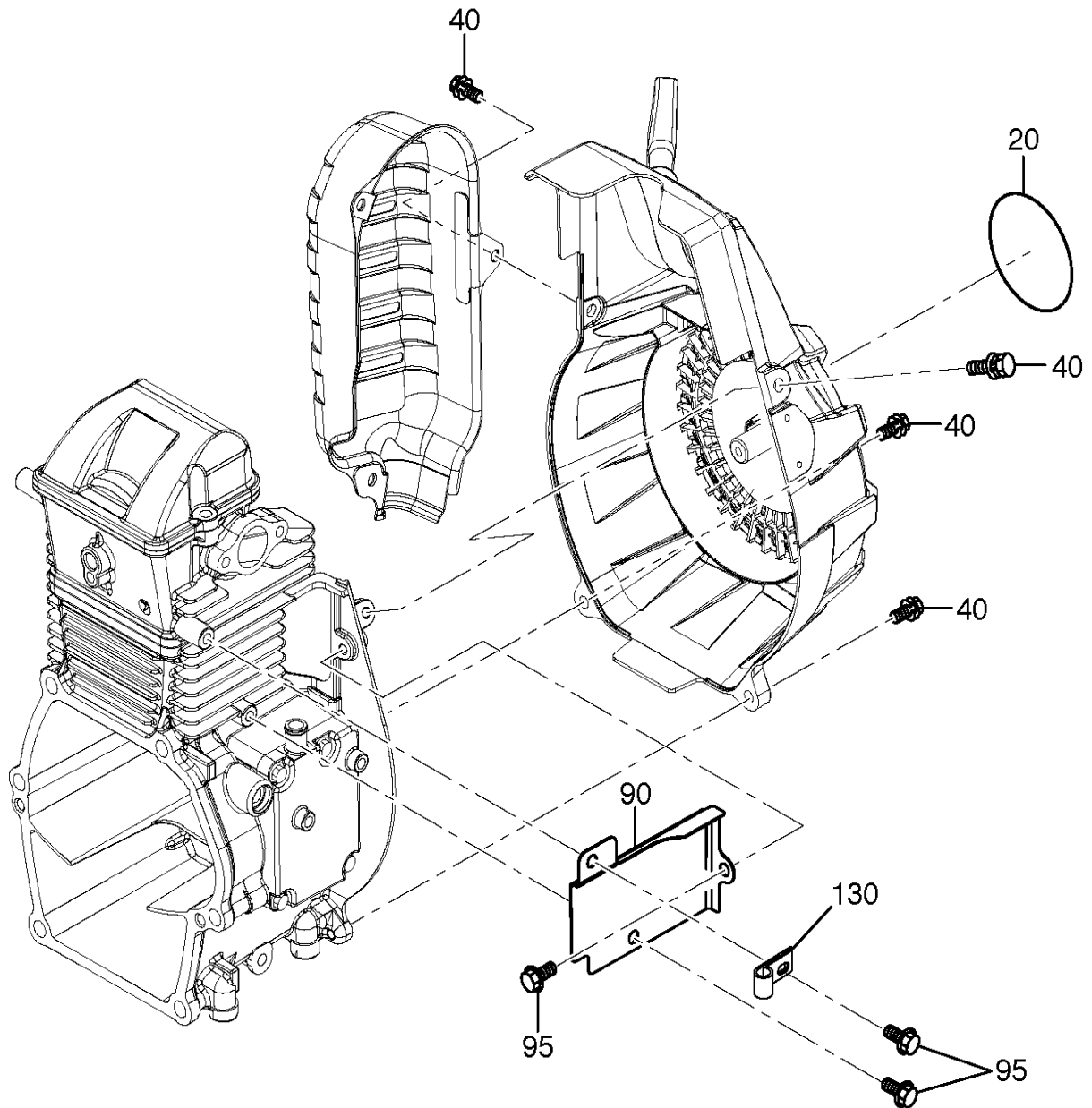
# ROBIN ER120D45010 ENGINE — GOVERNOR, OPERATION ASSY.



# ROBIN ER120D45010 ENGINE — GOVERNOR, OPERATION ASSY.

| <u>NO.</u> | <u>PART NO.</u> | <u>PART NAME</u>        | <u>QTY.</u> | <u>REMARKS</u>          |
|------------|-----------------|-------------------------|-------------|-------------------------|
| 10         | 21E42301H3      | GOVERNOR LEVER          | 1           |                         |
| 20         | 21E42201J3      | GOVERNOR SHAFT          | 1           |                         |
| 26         | 0031008000      | WASHER .....            | 1           | REPLACES P/N 0031108000 |
| 30         | 21E42701J1      | GOVERNOR ROD CP         | 1           |                         |
| 35         | 2844560103      | LINKAGE BUSHING         | 1           |                         |
| 40         | 21E4280113      | ROD SPRING              | 1           |                         |
| 50         | 0031306000      | CLIP                    | 2           |                         |
| 60         | 0011406300      | BOLT AND WASHER ASSY.   | 1           |                         |
| 70         | 0186060020      | NUT                     | 1           |                         |
| 80         | 21E4250113      | GOVERNOR SPRING         | 1           |                         |
| 200        | 21E43301J0      | SPEED CONT. LEVER ASSY. | 1           |                         |
| 202        | 21E46002J1      | BASE PLATE CP           | 1           |                         |
| 210        | 0043504080      | SCREW, PANHEAD .....    | 1           | REPLACES P/N 0043104080 |
| 213        | 0230100040      | SPACER                  | 1           |                         |
| 215        | 2264500313      | RETURN SPRING           | 1           |                         |
| 230        | X115050030      | SCREW                   | 1           |                         |
| 240        | 0021705000      | NUT                     | 1           |                         |
| 255        | 0217100020      | FRICTION WASHER         | 1           |                         |
| 260        | X115050030      | SCREW                   | 1           |                         |
| 270        | 0021705000      | NUT                     | 1           |                         |
| 280        | 2264310301      | LINK PIVOT CP           | 1           |                         |
| 293        | 957010600800    | FLANGE BOLT .....       | 2           | REPLACES P/N 0110060010 |

# ROBIN ER120D45010 ENGINE — COOLING ASSY.

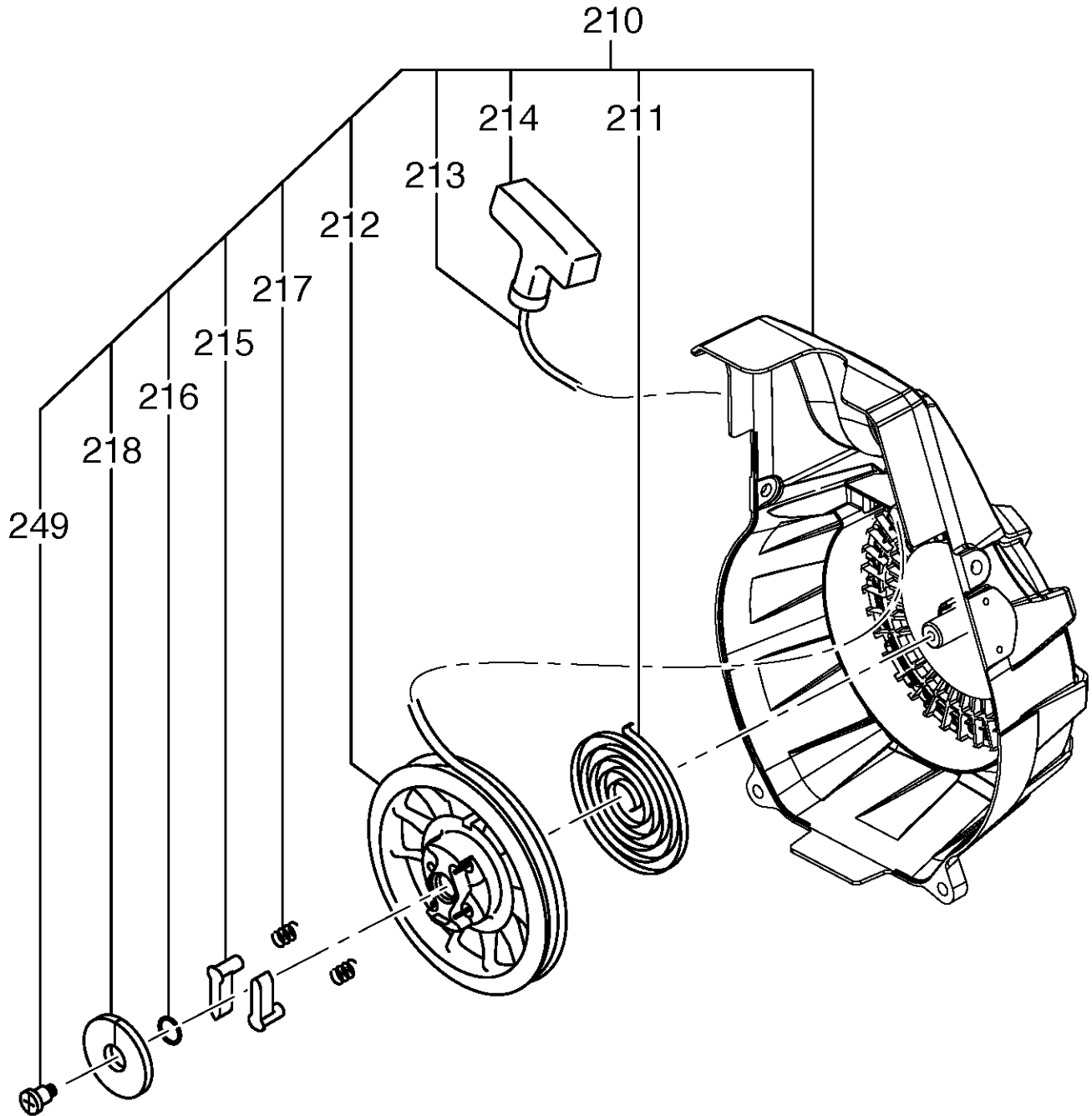


## **ROBIN ER120D45010 ENGINE — COOLING ASSY.**

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| <u>NO.</u> | <u>PART NO.</u> | <u>PART NAME</u>      | <u>QTY.</u> | <u>REMARKS</u>          |
|------------|-----------------|-----------------------|-------------|-------------------------|
| 20         | 920100240       | DECAL, M-MARK         | 1           |                         |
| 40         | X130060340      | BOLT AND WASHER ASSY. | 4           |                         |
| 90         | 21E52601H3      | CYLINDER BAFFLE       | 1           |                         |
| 95         | 957010600800    | FLANGE BOLT.....      | 3.....      | REPLACES P/N 0110060010 |
| 130        | 2067550101      | CLAMP CP              | 1           |                         |

# ROBIN ER120D45010 ENGINE — STARTING ASSY.

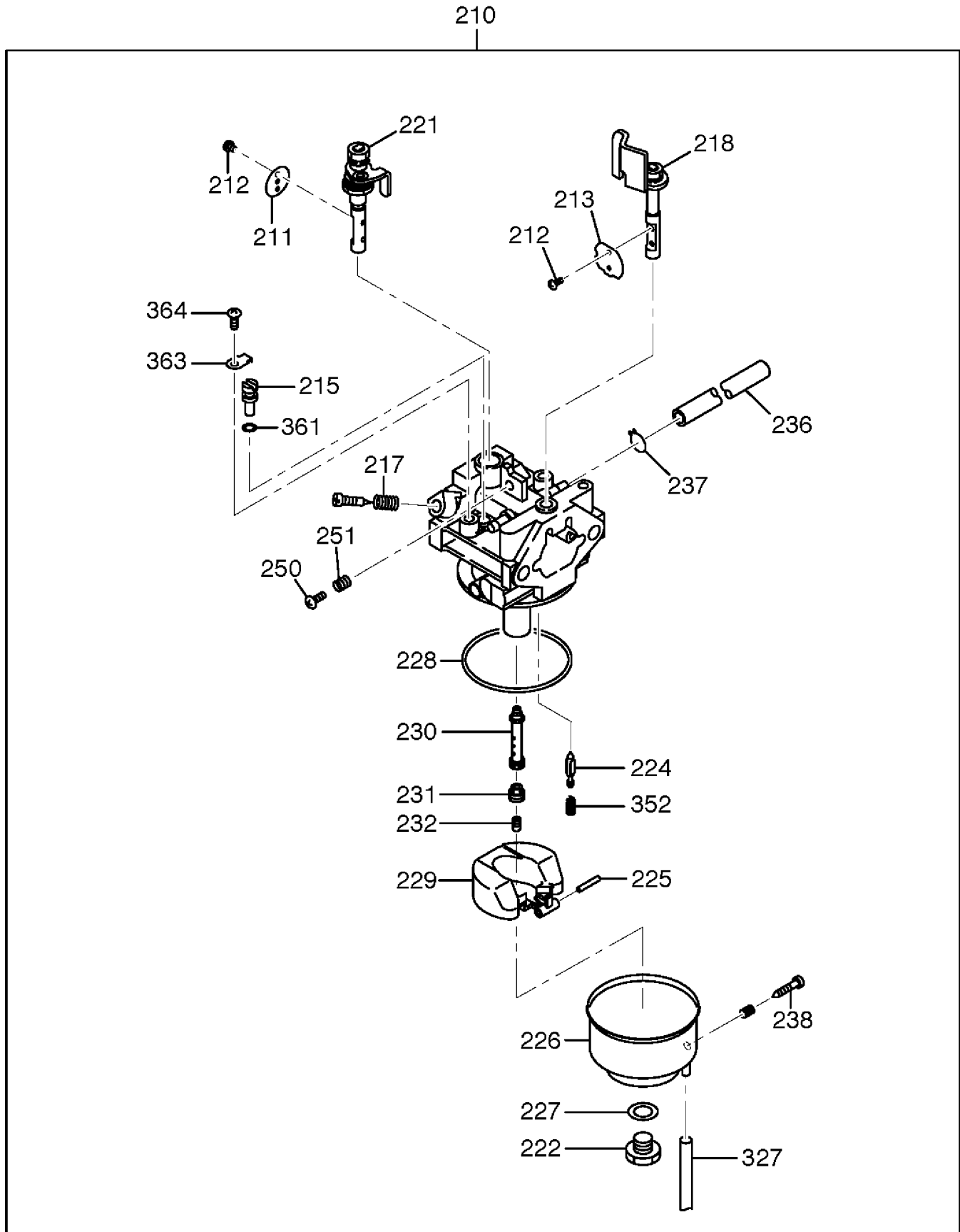


## **ROBIN ER120D45010 ENGINE — STARTING ASSY.**

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| <b>NO.</b> | <b>PART NO.</b> | <b>PART NAME</b>          | <b>QTY.</b> | <b>REMARKS</b>     |
|------------|-----------------|---------------------------|-------------|--------------------|
| 210        | 21E50201M0      | RECOIL STARTER ASSY. .... | 1.....      | INCLUDES ITEMS W/# |
| 211#       | 2745011508      | SPIRAL SPRING             | 1           |                    |
| 212#       | 21ES022018      | REEL                      | 1           |                    |
| 213#       | 21E5011008      | STARTER ROPE              | 1           |                    |
| 214#       | 20F5010018      | STARTER KNOB              | 1           |                    |
| 215#       | 20F5022508      | RATCHET                   | 2           |                    |
| 216#       | 2745013108      | FRICTION SPRING           | 1           |                    |
| 217#       | 2275013508      | RETURN SPRING             | 2           |                    |
| 218#       | 21E5026008      | RATCHET GUIDE             | 1           |                    |
| 249#       | 20B5010108      | SET SCREW                 | 1           |                    |

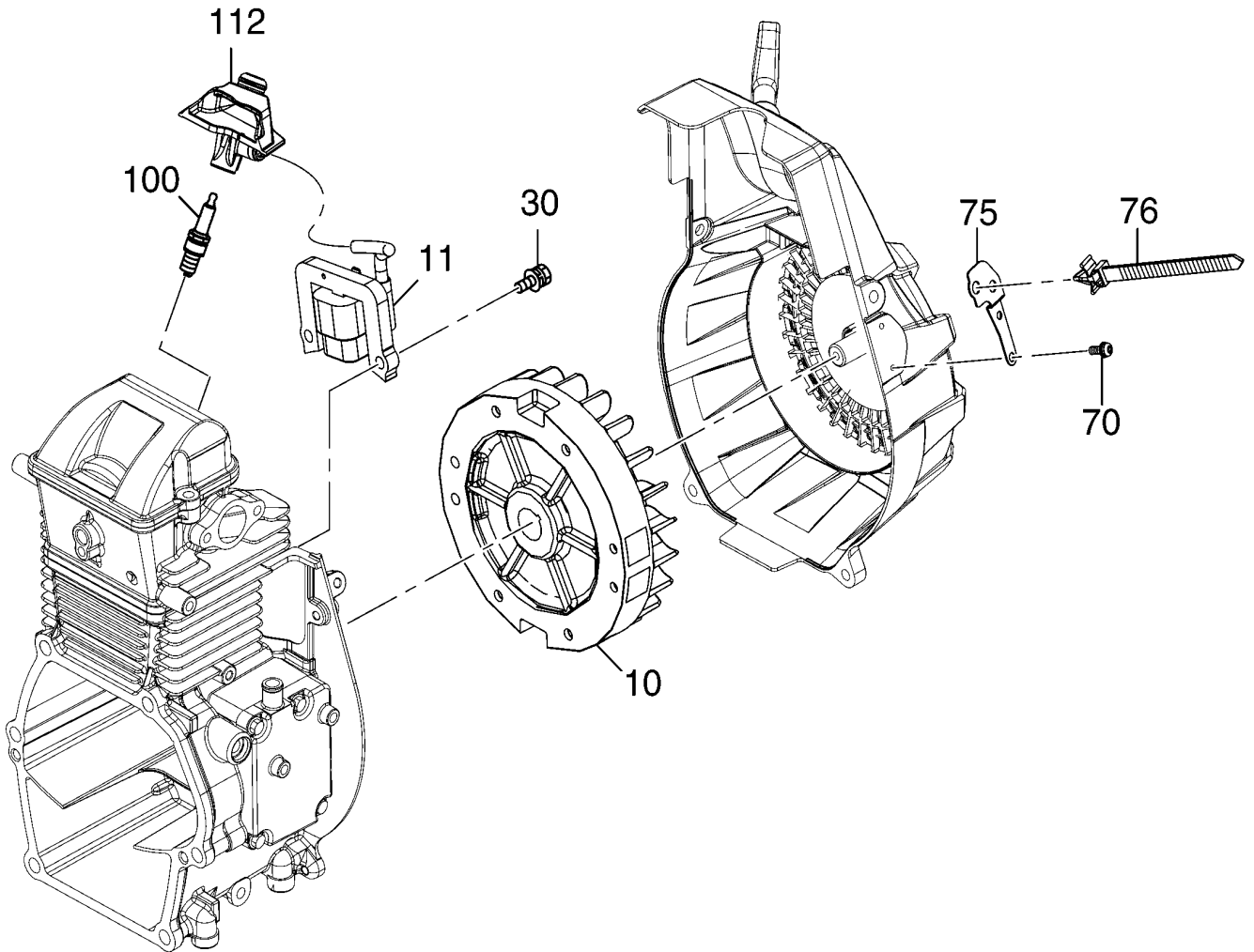
# ROBIN ER120D45010 ENGINE — CARBURETOR ASSY.



## ROBIN ER120D45010 ENGINE — CARBURETOR ASSY.

| NO.  | PART NO.   | PART NAME              | QTY.   | REMARKS            |
|------|------------|------------------------|--------|--------------------|
| 210  | 21E62302H0 | CARBURETOR ASSY.....   | 1..... | INCLUDES ITEMS W/# |
| 211# | 2526253508 | THROTTLE VALVE         | 1      |                    |
| 212# | 2376245108 | SCREW                  | 4      |                    |
| 213# | 2366252808 | CHOKE VALVE            | 1      |                    |
| 215# | 21E6242008 | PILOT JET              | 1      |                    |
| 217# | 2096244508 | SPRING                 | 1      |                    |
| 218# | 2936252008 | CHOKE SHAFT            | 1      |                    |
| 221# | 1616253008 | SHAFT ASSY. (THROTTLE) | 1      |                    |
| 222# | 2376245008 | BOLT                   | 1      |                    |
| 224# | 1616235208 | NEEDLE                 | 1      |                    |
| 225# | 2146251508 | PIN                    | 1      |                    |
| 226# | 2846250608 | FLOAT BODY             | 1      |                    |
| 227# | 2366245008 | PACKING                | 1      |                    |
| 228# | 2366254008 | PACKING                | 1      |                    |
| 229# | 2366250508 | FLOAT                  | 1      |                    |
| 230# | 21E6244008 | MAIN NOZZLE            | 1      |                    |
| 231# | 2356242508 | GUIDE HOLDER           | 1      |                    |
| 232# | 2526240708 | MAIN JET               | 1      |                    |
| 236# | 2526235308 | HOSE                   | 1      |                    |
| 237# | 2346245408 | CLIP                   | 1      |                    |
| 238# | 2246245008 | SCREW                  | 1      |                    |
| 250# | 2466243508 | ADJUST SCREW           | 1      |                    |
| 251# | 2306244608 | SPRING                 | 1      |                    |
| 327# | 2846254108 | HOSE                   | 1      |                    |
| 352# | 2366244508 | SPRING                 | 1      |                    |
| 361# | 1066238408 | O-RING                 | 1      |                    |
| 363# | 2936235008 | PLATE                  | 1      |                    |
| 364# | 2796235108 | SCREW                  | 1      |                    |

# ROBIN ER120D45010 ENGINE — ELECTRIC DEVICE ASSY.



## **ROBIN ER120D45010 ENGINE — ELECTRIC DEVICE ASSY.**

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| <u>NO.</u> | <u>PART NO.</u> | <u>PART NAME</u>       | <u>QTY.</u> | <u>REMARKS</u> |
|------------|-----------------|------------------------|-------------|----------------|
| 10         | 21E79230J1      | FLY WHEEL CP           | 1           |                |
| 11         | 21E79430J1      | IGNITION COIL CP       | 1           |                |
| 30         | 20F1406250      | BOLT AND WASHER ASSY.  | 2           |                |
| 70         | X131040130      | SCREW AND WASHER ASSY. | 2           |                |
| 75         | 21E76501H3      | PLATE                  | 1           |                |
| 76         | 0563000100      | WIRE BAND              | 1           |                |
| 100        | 0650140860      | SPARK PLUG             | 1           |                |
| 112        | 21E75001J3      | SPARK PLUG RUBBER CAP  | 1           |                |