

# Parts Manual

Mfg. No: 076331-04  
35,000 Watt LC Standby Generator  
(Briggs & Stratton)

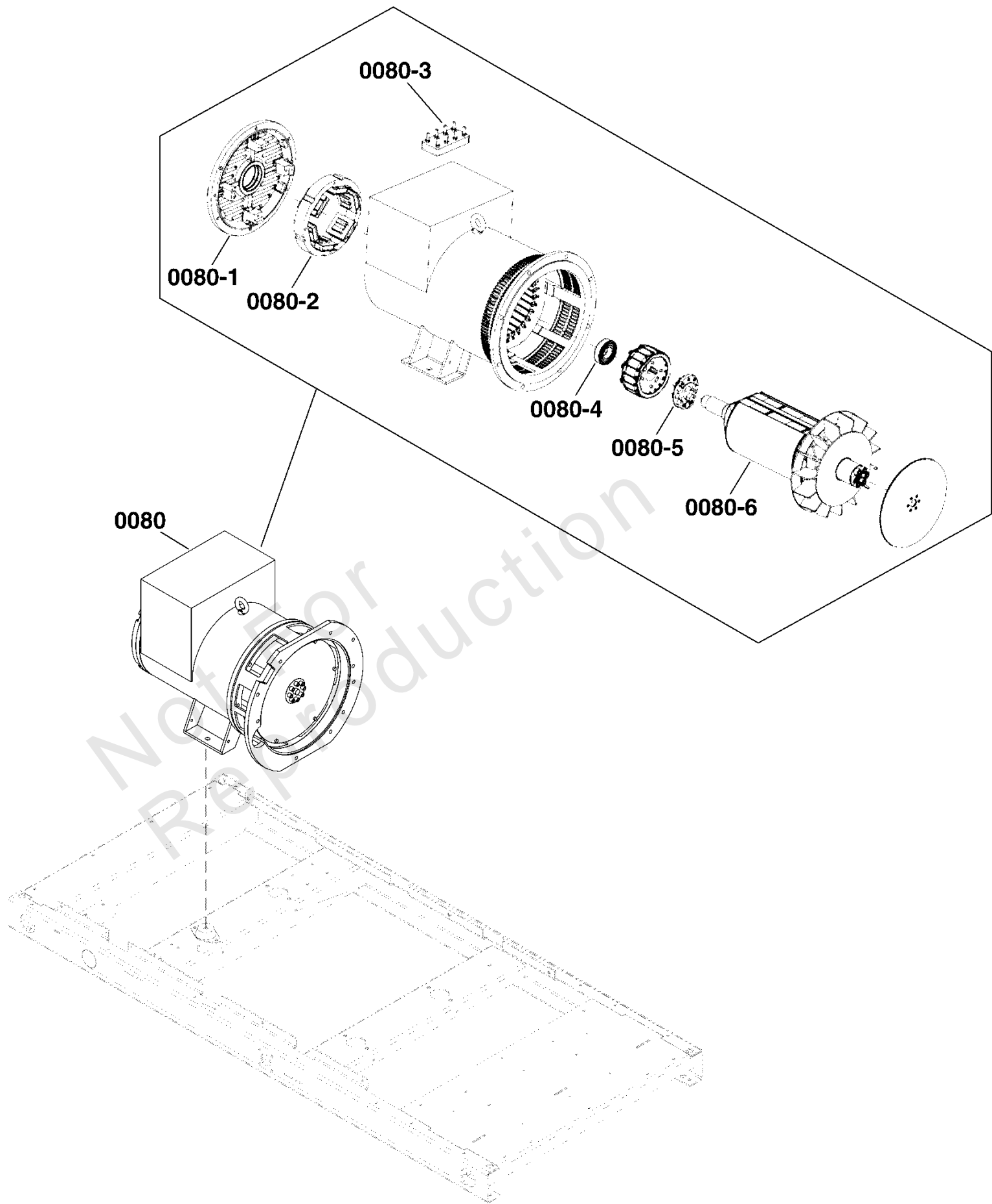


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# Alternator Group

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 076331-04



## Alternator Group

| REF NO | PART NO  | QTY | DESCRIPTION   |
|--------|----------|-----|---|
| 0080   | 317980GS |     | ALTERNATOR<br>-(Reference model list on page to verify parts list applies to your model.) |
| 0080-1 | 706011   |     | COVER   |
| 0080-2 | 706006   |     | EXCITER-STATOR  |
| 0080-3 | 706022   |     | TERMINAL BLOCK  |
| 0080-4 | 313281GS |     | BEARING   |
| 0080-5 | 706004   |     | RECTIFIER ASSEMBLY  |
| 0080-6 | 706017   |     | ROTOR   |

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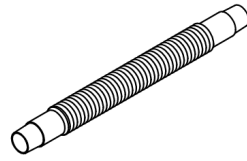
# Circuit Breaker and Accessories Group

Note: Unless noted otherwise, use the standard torque specifications

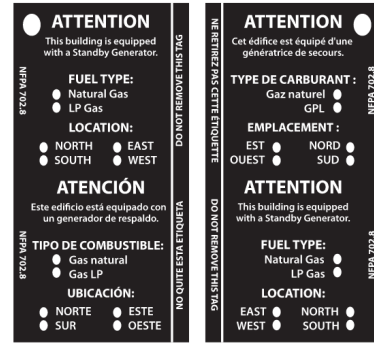
Mfg. No: 076331-04



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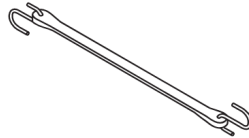
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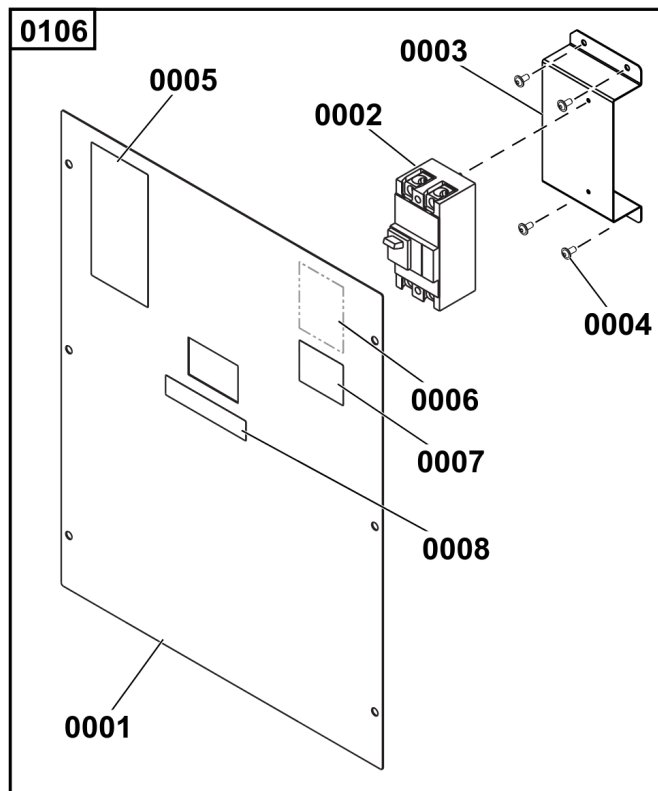
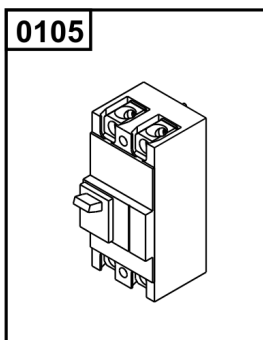
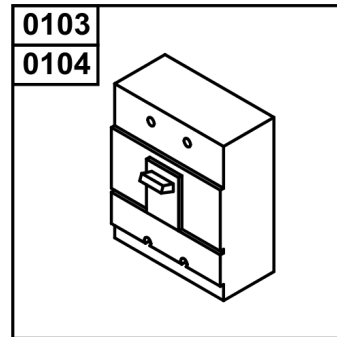
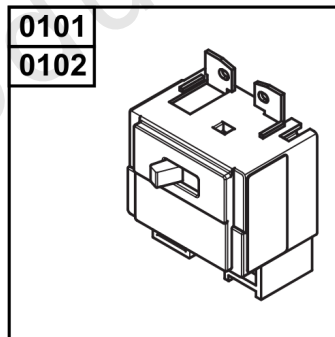
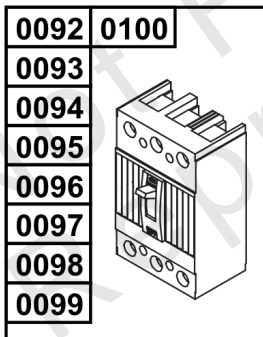
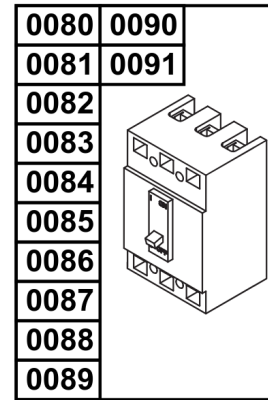
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0050



0060



## Circuit Breaker and Accessories Group

| REF NO | PART NO  | QTY | DESCRIPTION  |
|--------|----------|-----|--|
| 0020   | 207652GS | 1   | SET, Latch Key, Plain  |
| 0030   | 205206GS | 1   | FUEL HOSE, Flexible  |
| 0040   | 195200GS | 1   | HANG TAG, Attn Standby Equipment   |
| 0050   | 319693GS | 1   | PAINT, Touch Up, Cont. Charcoal, Texture   |
| 0060   | 316869GS | 1   | STRAP-BATTERY TIEDOWN  |
| 0080   | 314842GS | 1   | BREAKER-CIRCUIT, 125A, 3 Pole<br>-(Use on 076131-03, 076133-00, 076133-02, 076141-04, 076141-05, 076141-06, 076167-00, 076331-03, 076333-00, 076333-02, 076341-02)                                 |
| 0081   | 318132GS | 1   | BREAKER-CIRCUIT, 60A, 3 Pole<br>-(Use on 076135-00, 076135-02, 076137-00, 076137-02, 076137-03, 076145-02, 076147-00, 076147-01, 076335-00, 076335-02, 076335-03, 076345-02, 076356-03, 076356-04) |
| 0082   | 84007422 | 1   | CIRCUIT BREAKER, 125A, 3 Pole<br>-(Use on 076131-04, 076133-03, 076331-04, 076331-05, 076333-03, 076333-04)  |
| 0083   | 318135GS | 1   | BREAKER-CIRCUIT, 90A, 3 Pole<br>-(Use on 076155-02, 076355-02, 076366-01)  |
| 0084   | 318134GS | 1   | BREAKER-CIRCUIT, 80A, 3 Pole<br>-(Use on 076155-03, 076157-01, 076157-02, 076355-03, 076355-04, 073366-02)   |
| 0085   | 318136GS | 1   | BREAKER-CIRCUIT, 100A, 3 Pole<br>-(Use on 076154-02, 076157-00, 075165-01, 076354-02)  |
| 0086   | 314843GS | 1   | CIRCUIT BREAKER, 100A, 3 Pole<br>-(Use on 076167-01, 076167-02)  |
| 0087   | 318131GS | 1   | BREAKER-CIRCUIT, 50A, 3 Pole<br>-(Use on 076197-00, 076336-00, 076336-01)  |
| 0088   | 318256GS | 1   | CIRCUIT BREAKER, 110A, 3 Pole<br>-(Use on 076143-02, 076343-02)  |
| 0089   | 772327   | 1   | BREAKER-CIRCUIT, 40A, 3 Pole<br>-(Use on 076177-00)  |
| 0090   | 318130GS | 1   | BREAKER-CIRCUIT, 45A, 3 Pole<br>-(Use on 076346-02)  |
| 0091   | 318133GS | 1   | BREAKER-CIRCUIT, 70A, 3 Pole<br>-(Use on 076134-00, 076134-02, 076334-00, 076334-02, 076356-02)  |
| 0092   | 314746GS | 1   | CIRCUIT BREAKER, 225A, 3 Pole<br>-(Use on 076161-03, 076361-01)  |
| 0093   | 314841GS | 1   | BREAKER-CIRCUIT, 150A, 3 Pole<br>-(Use on 076131-00, 076131-02, 076141-03, 076153-03, 076331-00, 076331-02, 076353-03)   |
| 0094   | 314458GS | 1   | CIRCUIT BREAKER, 200A, 3 Pole<br>-(Use on 076151-05, 076151-06, 076163-01, 076163-02, 076351-02, 076363-01)  |
| 0095   | 314840GS | 1   | BREAKER-CIRCUIT, 175A, 3 Pole<br>-(Use on 076152-05, 076153-02, 076351-03, 076352-02, 076353-02)   |
| 0096   | 319607GS | 1   | BREAKER-CIRCUIT, 175A, 2 Pole<br>-(Use on 076330-00, 076330-02, 076340-00, 076340-01, 076340-02)   |
| 0097   | 84007585 | 1   | CIRCUIT BREAKER, 150A, 3 Pole<br>-(Use on 076153-04, 076353-04, 076353-05)   |
| 0098   | 84007587 | 1   | CIRCUIT BREAKER, 175A, 3 Pole<br>-(Use on 076151-07, 076351-04, 076351-05)   |
| 0099   | 84007591 | 1   | CIRCUIT BREAKER, 225A, 3 Pole<br>-(Use on 076161-04, 076361-02)  |
| 0100   | 84007589 | 1   | CIRCUIT BREAKER, 200A, 3 Pole<br>-(Use on 076363-02)   |
| 0101   | 204144GS | 1   | BREAKER, Circuit, 150A<br>-(Use on 076330-03, 076330-04)   |
| 0102   | 209069GS | 1   | BREAKER-CIRCUIT, 200A, 2 Pole<br>-(Use on 076350-02, 076350-03)  |
| 0103   | 315550GS | 1   | BREAKER-CIRCUIT, 300A, 2 Pole<br>-(Use on 076360-01)   |

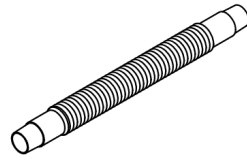
# Circuit Breaker and Accessories Group

Note: Unless noted otherwise, use the standard torque specifications

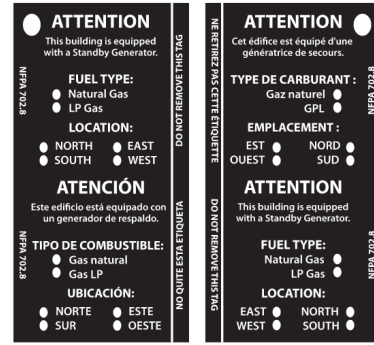
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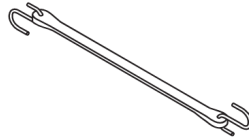
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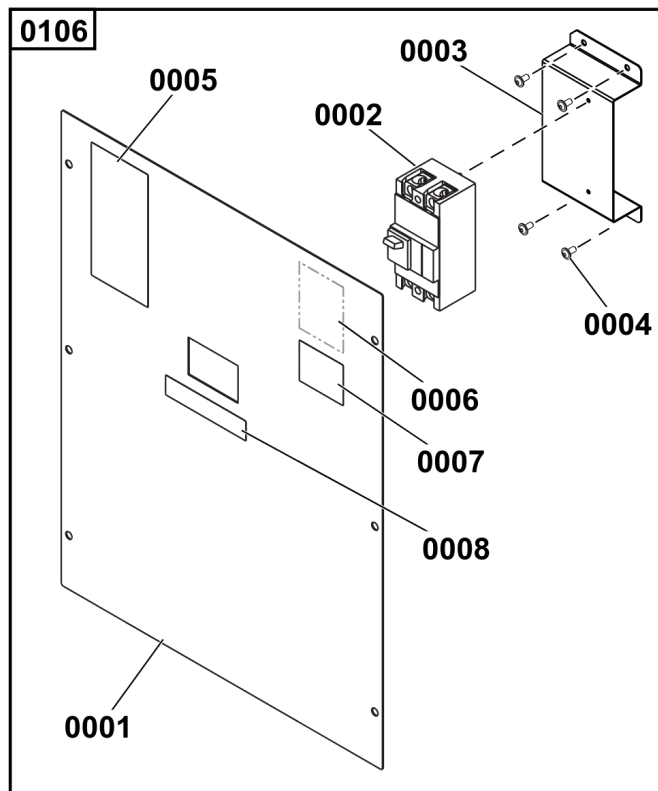
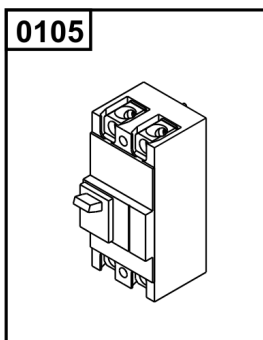
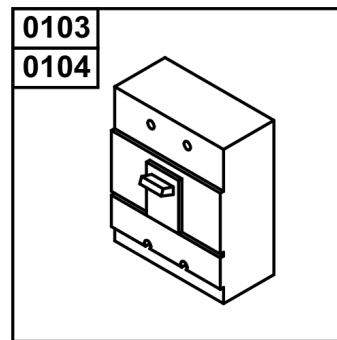
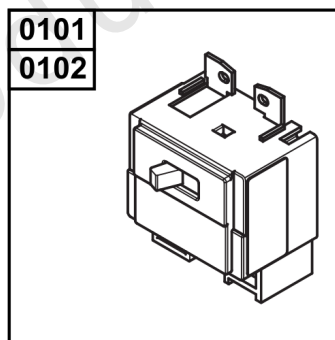
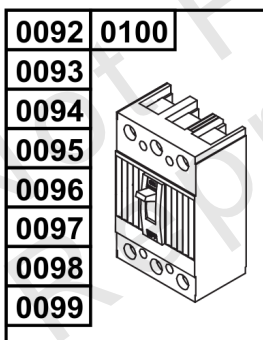
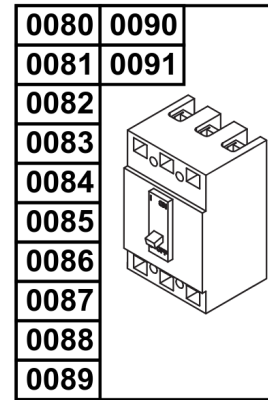
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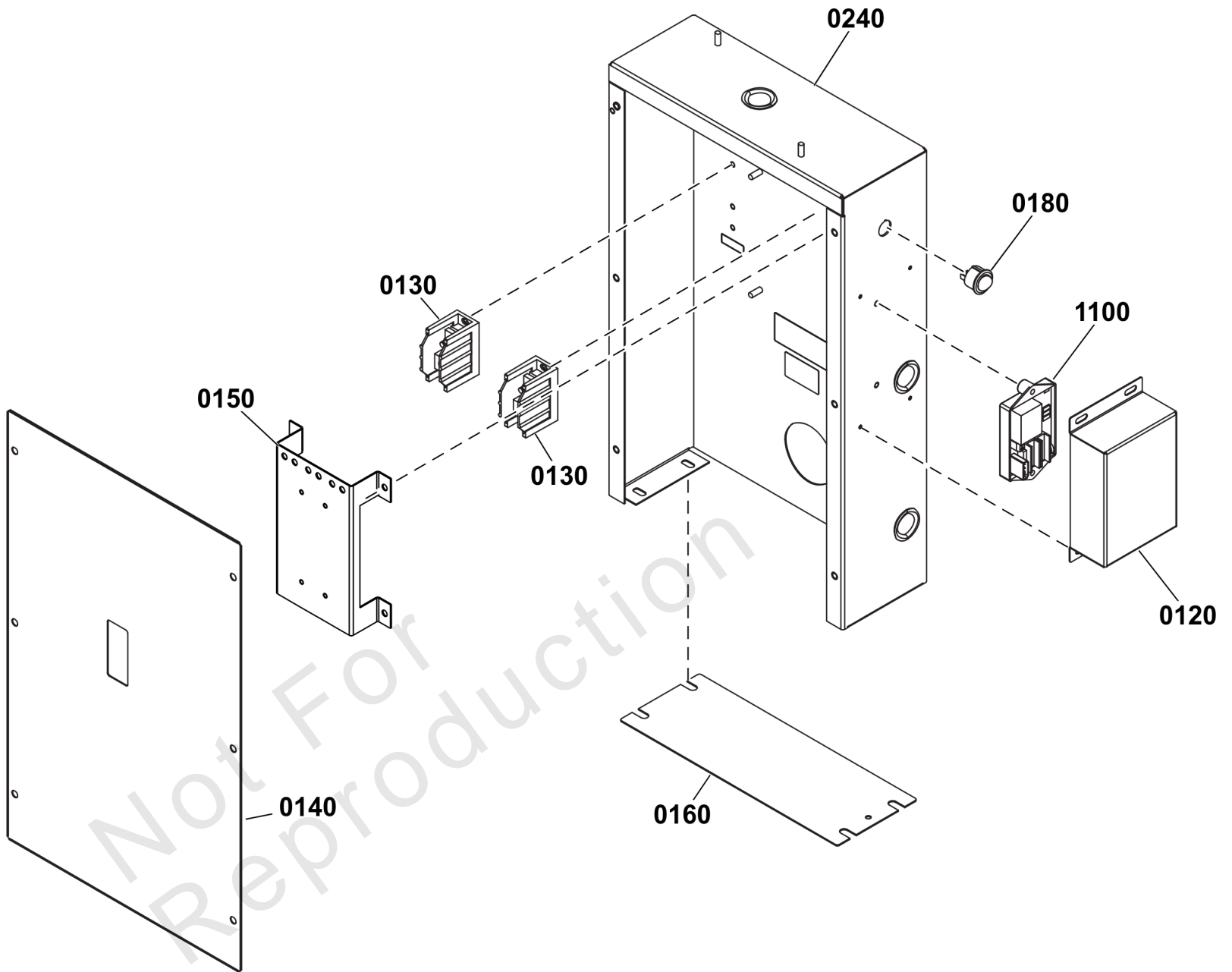
## Circuit Breaker and Accessories Group

| REF NO | PART NO     | QTY | DESCRIPTION  |
|--------|-------------|-----|--|
| 0104   | 772305      | 1   | BREAKER, Circuit, 250A, 2 Pole<br>-(Use on 076360-02)  |
| 0105   | 84011526    | 1   | BREAKER, Circuit, 250A, 2 Pole<br>-(Use on 076360-02)  |
| 0106   | 84011532    | 1   | KIT, Circuit Breaker<br>-(Order when Ref. # 0104 is NLA) (Includes Ref. Nos. 0001, 0002, 0003, 0004, 0005, 0006, 0007, 0008) |
| 0001   | -----       | 1   | COVER  |
| 0002   | 84011526    | 1   | BREAKER, Circuit, 250A, 2 Pole   |
| 0003   | -----       | 1   | BRACKET  |
| 0004   | 5025299X4SM | 4   | SCREW, ALLEN HEAD 1/4-20 X .500 ZINC PHOS  |
| 0005   | -----       | 1   | DECAL-WARNING, OPERATOR MANUAL   |
| 0006   | -----       | 1   | DECAL-WARNING, FUSE  |
| 0007   | -----       | 1   | DECAL, Warning   |
| 0008   | -----       | 1   | DECAL-DISCONNECT   |
| --     | 319677GS    |     | PAINT, Spray, Cont. Charcoal, Texture<br>-(Optional Accessory - Not Included)  |
| --     | 6428        |     | KIT, Communication Cable<br>-(Optional Accessory - Not Included)   |
| --     | 6429        |     | KIT-COMMUNICATION CABLE<br>-(Optional Accessory - Not Included)  |
| --     | 6514        |     | KIT, Maintenance<br>-(Optional Accessory - Not Included)   |

# Control Box Group

Note: Unless noted otherwise, use the standard torque specifications

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## Control Box Group

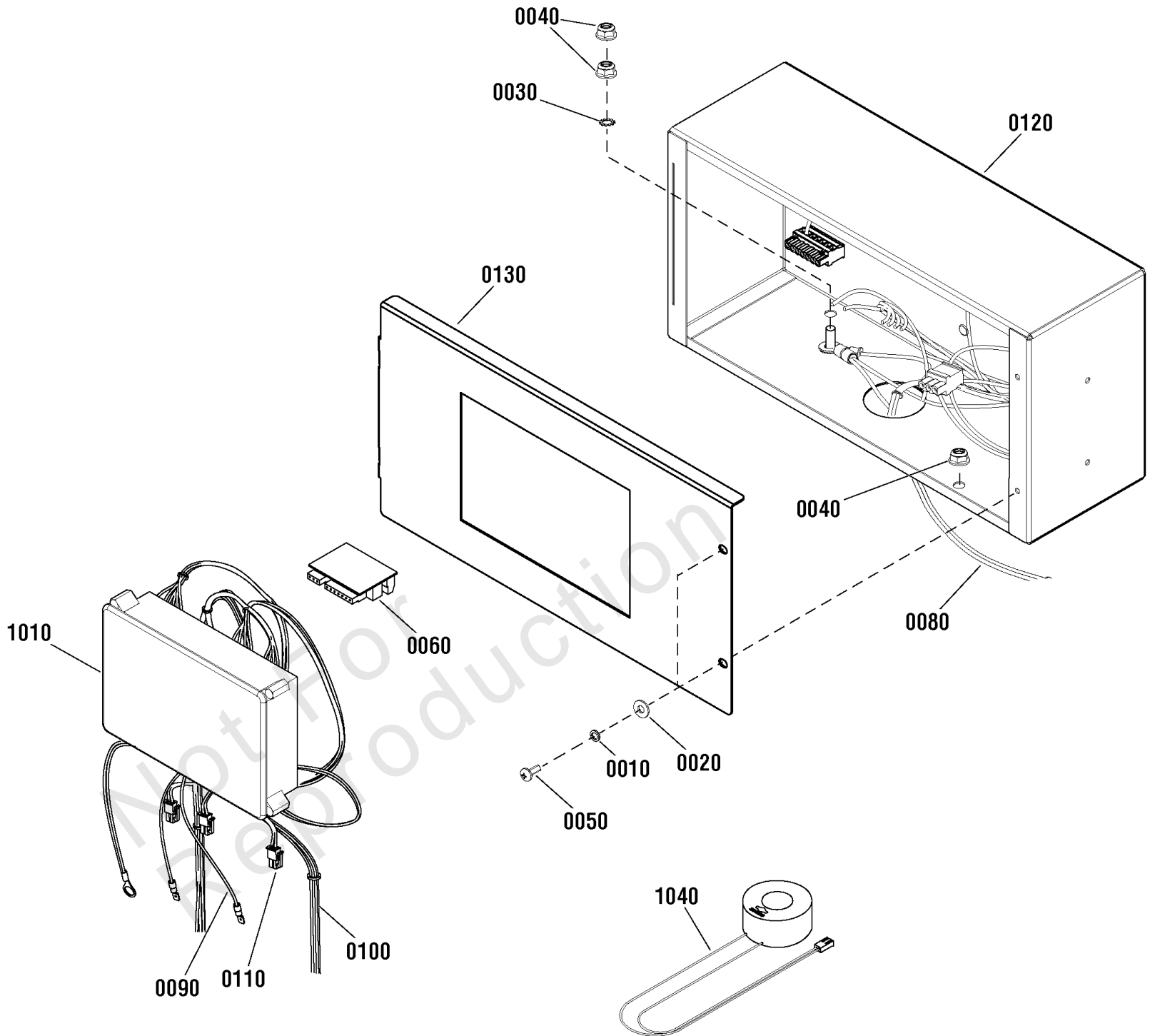
| REF NO | PART NO    | QTY | DESCRIPTION                         |
|--------|------------|-----|-------------------------------------|
| 0120   | BA209747GS | 1   | COVER                               |
| 0130   | 312612GS   | 2   | TERMINAL<br>-(3/8"-16 x 1" stud)    |
| 0140   | BA314457GS | 1   | COVER                               |
| 0150   | ----       | 1   | BRACKET                             |
| 0160   | BA314461GS | 1   | COVER                               |
| 0180   | 315551GS   | 1   | SWITCH, Rocker                      |
| 0240   | 708791     | 1   | BOX-CONTROL PANEL                   |
| 1100   | 209856GS   | 1   | REGULATOR, Voltage                  |
| --     | 770128     |     | CONNECTOR-AVR<br>-(Not Illustrated) |

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# Control Panel Group

Note: Unless noted otherwise, use the standard torque specifications

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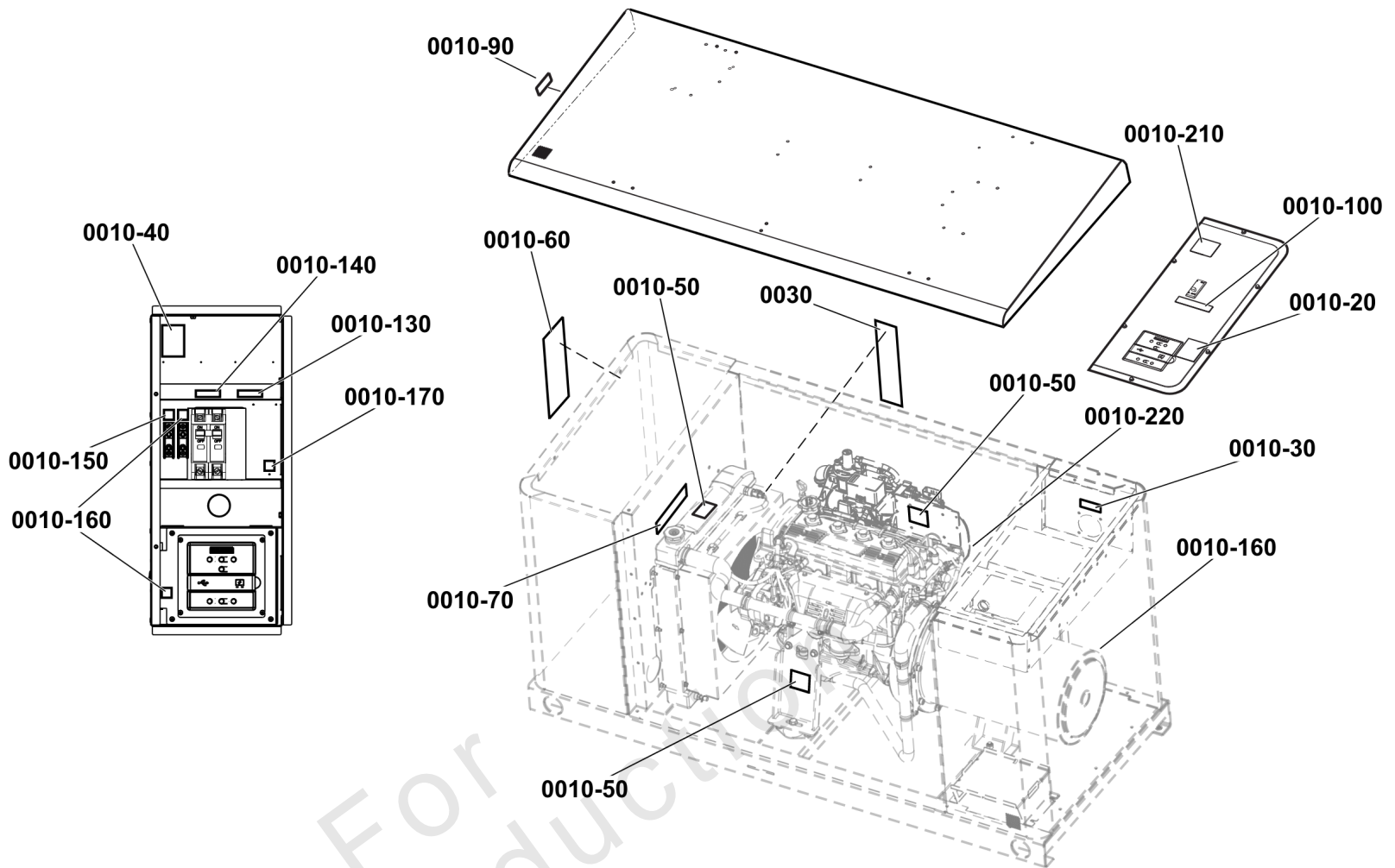
## Control Panel Group

| REF NO | PART NO  | QTY | DESCRIPTION   |
|--------|----------|-----|---|
| 0010   | -----    |     | * WASHER, Split Lock #10<br>-(*See footnote)          |
| 0020   | -----    |     | * WASHER, Flat, #10 - M5<br>-(*See footnote)          |
| 0030   | -----    |     | * WASHER, Shakeproof, M6-1/4<br>-(*See footnote)      |
| 0040   | -----    |     | * NUT, Flange, Nylock, 1/4-20<br>-(*See footnote)     |
| 0050   | -----    |     | * SCREW, Trilobular, #10-32 x 3/4<br>-(*See footnote) |
| 0060   | 708781   |     | CIRCUIT BOARD   |
| 0080   | 708790   |     | HARNESS-WIRE  |
| 0090   | 708787   |     | HARNESS-WIRE  |
| 0100   | 708784   |     | HARNESS-WIRE  |
| 0110   | 708785   |     | HARNESS-WIRE  |
| 0120   | 770303   |     | BOX-CONTROL   |
| 0130   | 770306   |     | COVER-CONTROL BOX<br>-(Intelilite Controller)         |
| 1010   | 317970GS |     | CONTROL PANEL   |
| 1040   | 708786   |     | CURRENT TRANSFORMER, 200/240V<br>-(300A)              |
| 1040   | 708788   |     | CURRENT TRANSFORMER, 416/480/600V<br>-(100A)          |

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**Footnotes:**

\* Items without part numbers are common fasteners. Purchase locally.



**NOTICE AVIS AVISO**

**FUEL REQUIREMENTS**  
Estimated generator fuel supply requirements for both natural gas and LP vapor:

| Model | Natural Gas |                   | LP Vapor |                   |
|-------|-------------|-------------------|----------|-------------------|
|       | BTU/H       | m <sup>3</sup> /h | BTU/H    | m <sup>3</sup> /h |
| 35kW  | 344,452     | 9.8               | 399,116  | 4.5               |
| 48kW  | 470,963     | 13.3              | 505,670  | 5.7               |
| 60kW  | 681,500     | 19.3              | 800,300  | 9.1               |

Fuel inlet pressure requirements at full load are:  
Inches of WC mm of WC  
7-11 178-279

| Model | Natural Gas |                   | LP Vapor |                   |
|-------|-------------|-------------------|----------|-------------------|
|       | BTU/H       | m <sup>3</sup> /h | BTU/H    | m <sup>3</sup> /h |
| 25kW  | 368,100     | 10.42             | 387,000  | 4.38              |
| 30kW  | 414,500     | 11.74             | 436,800  | 4.95              |

Fuel inlet pressure requirements at full load are:  
Inches of WC mm of WC  
5-11 127-279

**EXIGENCES EN MATIERE DE CARBURANT**  
Approvisionnement approximatif en carburant pour le gaz naturel et le propane gazeux:

| Modèle | Gaz naturel |                   | Propane gazeux |                   |
|--------|-------------|-------------------|----------------|-------------------|
|        | BTU/H       | m <sup>3</sup> /h | BTU/H          | m <sup>3</sup> /h |
| 35kW   | 344,452     | 9.8               | 399,116        | 4.5               |
| 48kW   | 470,963     | 13.3              | 505,670        | 5.7               |
| 60kW   | 681,500     | 19.3              | 800,300        | 9.1               |

Les exigences de pression d'admission du carburant à plein rendement sont:  
Pouces CE mm de CE  
7-11 178-279

| Modèle | Gaz naturel |                   | Propane gazeux |                   |
|--------|-------------|-------------------|----------------|-------------------|
|        | BTU/H       | m <sup>3</sup> /h | BTU/H          | m <sup>3</sup> /h |
| 25kW   | 368,100     | 10.42             | 387,000        | 4.38              |
| 30kW   | 414,500     | 11.74             | 436,800        | 4.95              |

Les exigences de pression d'admission du carburant à plein rendement sont:  
Pouces CE mm de CE  
5-11 127-279

**REQUERIMIENTOS DE COMBUSTIBLE**  
Requerimientos estimados de combustible para el generador para gas natural y gas LP:

| Modelo | Gas Natural |                   | Gas LP  |                   |
|--------|-------------|-------------------|---------|-------------------|
|        | BTU/H       | m <sup>3</sup> /h | BTU/H   | m <sup>3</sup> /h |
| 35kW   | 344,452     | 9.8               | 399,116 | 4.5               |
| 48kW   | 470,963     | 13.3              | 505,670 | 5.7               |
| 60kW   | 681,500     | 19.3              | 800,300 | 9.1               |

Los requerimientos de presión de entrada de combustible a carga completa son de:  
pulgadas de columna de agua mm de columna de agua  
7-11 178-279

| Modelo | Gas Natural |                   | Gas LP  |                   |
|--------|-------------|-------------------|---------|-------------------|
|        | BTU/H       | m <sup>3</sup> /h | BTU/H   | m <sup>3</sup> /h |
| 25kW   | 368,100     | 10.42             | 387,000 | 4.38              |
| 30kW   | 414,500     | 11.74             | 436,800 | 4.95              |

Los requerimientos de presión de entrada de combustible a carga completa son de:  
pulgadas de columna de agua mm de columna de agua  
5-11 127-279

**0010**

**WARNING AVERTISSEMENT ADVERTENCIA**

To reduce the risk of fire, replace only with same type and rating of fuse.

**2.5AMP TYPE AGC**

Pour réduire le risque d'incendie, remplacez avec un fusible de même type et classification.

**2.5 A TYPE AGC**

Para reducir el riesgo de incendio, reemplazé solamente con un fusible del mismo tipo y capacidad.

**2.5 AMP TIPO AGC**

**NOTICE AVIS AVISO**

ALL TERMINAL AND BUS LUGS ARE SUITABLE FOR COPPER WIRE 60/75°C RATING

TOUTES LES BORNES ET COSSES DE COLLECTEURS CONVIENTENT AUX FILS DE CUIVRE DE CALIBRE 60/75°C

TODOS LOS CONECTORES DE TERMINAL Y DE BUS SON APROPIADOS PARA CABLE DE COBRE CON CAPACIDAD DE 60/75°C

**0010-40**

**WARNING AVERTISSEMENT ADVERTENCIA**

Engine exhaust contains carbon monoxide, a poisonous gas that could kill you in minutes. You cannot smell it or see it. Install outdoors only. Install carbon monoxide alarms in home. Hot surface could result in serious injury. Do not touch.

Engine exhaust could ignite combustibles resulting in death or serious injury. Exhaust side of weatherproof enclosure shall have 5 ft. (1.5m) min clearance from any structures, shrubs, trees or any vegetation.

This equipment may create sparks that could start fires around dry vegetation. A spark arrester may be required. Contact local fire agencies for regulations relating to fire prevention requirements.

L'échappement du moteur contient du monoxyde de carbone, un gaz toxique pouvant tuer en quelques minutes. Vous ne pouvez ni le sentir ni le voir. Installez à l'extérieur seulement. Installez les alarmes de monoxyde de carbone dans la maison. La surface chaude pourrait entraîner des blessures graves. Ne touchez pas.

L'échappement du moteur peut enflammer les combustibles, ce qui peut provoquer des blessures graves, voire la mort. La sortie pour l'échappement de l'enceinte à l'épreuve des intempéries doit avoir un dégagement d'au moins 1,5 m (5 pi) de toutes structures, buissons, arbres ou autres végétaux. Cet équipement peut produire des étincelles pouvant déclencher des incendies autour de la végétation sèche. Un pare-étincelles pourrait être nécessaire. Contactez les responsables locaux des incendies pour connaître les exigences réglementaires liées à la prévention des incendies.

Los gases de escape del motor contienen monóxido de carbono, un gas venenoso que podría matarlo en minutos. No puede verlo ni olerlo. Instále solamente en exteriores. Instale alarmas de monóxido de carbono en el hogar. La superficie caliente podría causar lesiones serias. No tocar.

Los gases de escape del motor podrían incendiar materiales combustibles, lo que podría causar la muerte o lesiones serias. El lado de escape del gabinete impermeable debe tener un espacio libre de 5 pies (1.5 m) de distancia desde cualquier estructura, arbusto, árbol o cualquier vegetación. Este equipo puede causar chispas que podrían iniciar incendios en vegetación seca. Podría requerirse un supresor de chispas. Póngase en contacto con las agencias locales de combate a incendios para consultar las regulaciones referentes a requisitos de prevención de incendios.

**0010-10**

**RAINPROOF ENCLOSURE** **ÉTANCHE À LA PLUIE ENCEINTE** **GABINETE A PRUEBA DE LLUVIA**

**GENERATOR SERVICE DISCONNECT** **GÉNÉRATRICE ENTRETIEN DÉBRANCHER** **DESCONECTOR DE SERVICIO DEL GENERADOR**

**0010-10**

**WARNING AVERTISSEMENT ADVERTENCIA**

To reduce the risk of fire, replace only with same type and rating of fuse.

**15AMP TYPE ATO**

Pour réduire le risque d'incendie, remplacez avec un fusible de même type et classification.

**15 A TYPE ATO**

Para reducir el riesgo de incendio, reemplazé solamente con un fusible del mismo tipo y capacidad.

**15 AMP TIPO ATO**

**WARNING AVERTISSEMENT ADVERTENCIA**

Hot surface could result in serious injury. Do not touch. La surface chaude pourrait entraîner des blessures graves. Ne touchez pas. La superficie caliente podría causar lesiones serias. No tocar.

**0010-50**

Replace with UL listed fuse of same type and rating 600 volt, 10 amp

Remplacez avec un fusible homologue UL de même type et classification de 600 volts, 10 amp.

Reemplazé con un fusible certificado por UL del mismo tipo y clasificación: 600 voltios, 10 amperios

**0010-110**

**WARNING AVERTISSEMENT ADVERTENCIA**

Cancer and Reproductive Harm www.P65Warnings.ca.gov

Cancer et Troubles de l'Appareil Reproducteur www.P65Warnings.ca.gov

Cáncer y Problemas Reproductivos www.P65Warnings.ca.gov

**0010-20**

**NOTICE AVIS AVISO**

CONDUIT ENTRY AREA

ZONE D'ENTRÉE DU CONDUIT

ÁREA DE ENTRADA DE CONDUIT

**0010-30**

**0010-90**

**0010-100**

**0010-130** **0010-180**

**0010-140**

**0010-150**

**0010-160**

**0010-170**

**0010-190** **0010-200**

**0010-210**

**0010-220**

**0010-230**

**WARNING AVERTISSEMENT ADVERTENCIA**

Hot pressurized coolant could result in severe injury. Do not open when hot. Allow coolant to cool before servicing.

Le liquide de refroidissement pourrait provoquer de sévères blessures. Ne pas ouvrir lorsque le liquide de refroidissement est chaud. Laissez refroidir le liquide de refroidissement avant d'effectuer l'entretien.

El refrigerante caliente a presión podría causar lesiones severas. No abra cuando esté caliente. Permita que el refrigerante se enfríe antes de dar servicio.

**0010-70**

**CAUTION MISE EN GARDE PRECAUCION**

Connect output of generator to suitably rated transfer switch in accordance with the Canadian Electrical Code, Part 1.

Branchez la sortie de la génératrice à un commutateur converteur de classification convenable, selon le Code canadien de l'électricité, partie 1.

Conecte la salida del generador a un interruptor de transferencia de la capacidad adecuada de acuerdo con el Código Eléctrico Canadiense, Parte 1.

**0010-60**

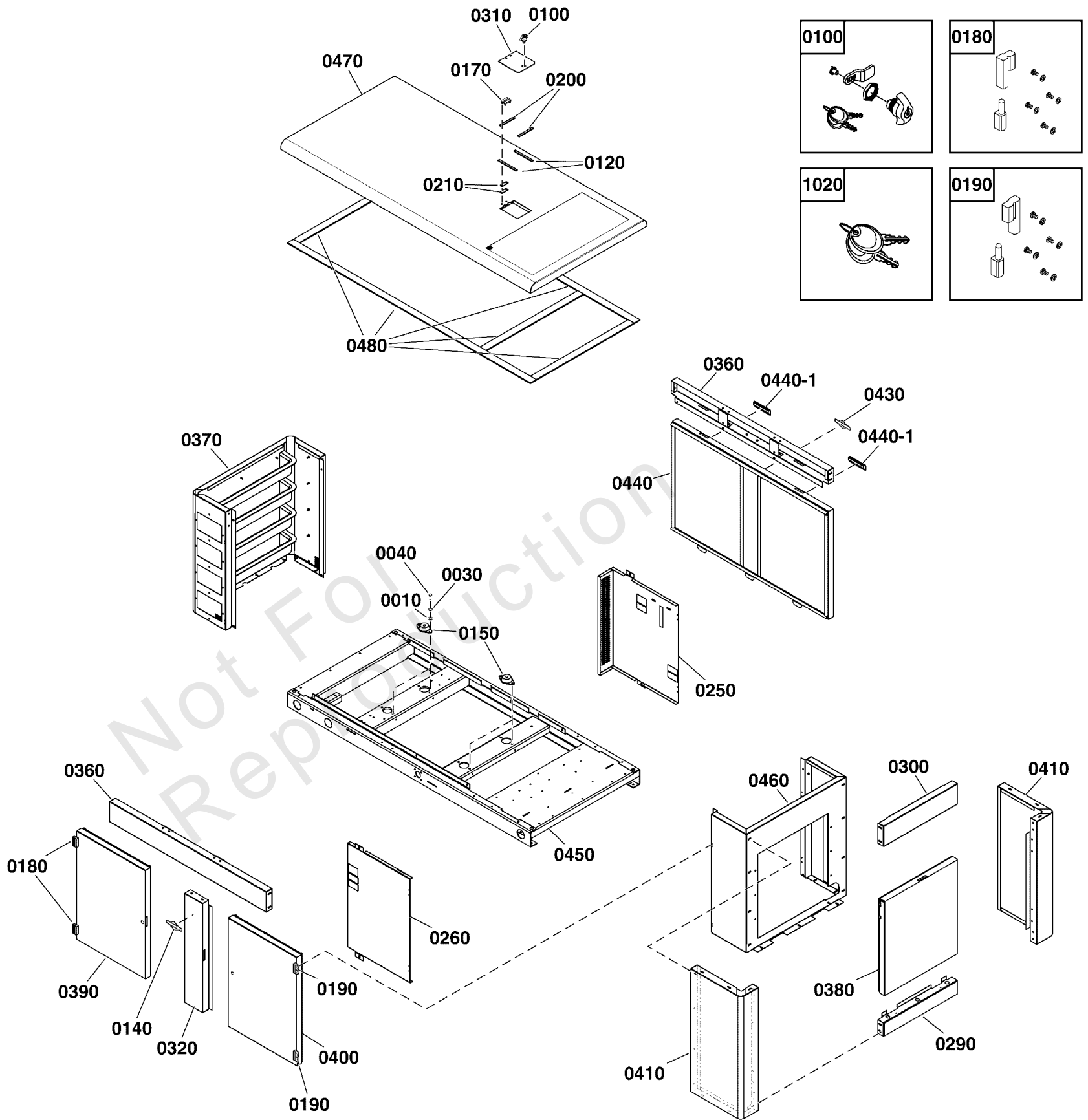
## Decals Group - Circuit Protection

| REF NO   | PART NO  | QTY | DESCRIPTION   |
|----------|----------|-----|---|
| 0010     | 84011107 | 1   | DECAL SHEET, Warnings<br>-(Includes all decals shown on sheet.)   |
| 0010-10  | -----    | 1   | DECAL-WARNING, RISK OF FIRE   |
| 0010-20  | -----    | 1   | DECAL-WARNING, FUSE   |
| 0010-30  | -----    | 1   | DECAL-NOTICE, CONDUIT ENTRY   |
| 0010-40  | -----    | 1   | DECAL-NOTICE, TERMINAL & BUS LUGS   |
| 0010-50  | -----    | 3   | DECAL-WARNING, HOT SURFACE  |
| 0010-60  | -----    | 1   | DECAL-WARNING, EXHAUST  |
| 0010-70  | -----    | 1   | DECAL-WARNING, HOT COOLANT  |
| 0010-90  | -----    | 1   | DECAL-RAINPROOF ENCLOSURE   |
| 0010-100 | -----    | 1   | DECAL-DISCONNECT  |
| 0010-110 | -----    | 1   | DECAL-FUSE REPLACEMENT  |
| 0010-120 | -----    | 1   | DECAL-CIRCUIT BREAKER   |
| 0010-130 | -----    | 1   | DECAL, Terminal Strip, Numbers 8-1  |
| 0010-140 | -----    | 1   | DECAL-L1 / L2   |
| 0010-150 | -----    | 1   | DECAL-NEUTRAL   |
| 0010-160 | -----    | 3   | DECAL-GROUND  |
| 0010-170 | -----    | 1   | DECAL-TERMINAL, 25/26   |
| 0010-180 | -----    | 1   | DECAL-TERMINAL STRIP  |
| 0010-190 | -----    | 1   | DECAL-TERMINAL STRIP  |
| 0010-200 | -----    | 1   | DECAL-TERMINAL STRIP  |
| 0010-210 | -----    | 1   | DECAL, Warning<br>-(The installation of this decal is required for units manufactured after<br>08/30/2018 and sold in the state of California.) |
| 0010-220 | -----    | 1   | DECAL   |
| 0010-230 | -----    | 1   | DECAL   |
| 0030     | 771702   | 1   | DECAL-NOTICE, FUEL REQUIREMENTS   |

# Enclosure Group

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 076331-04





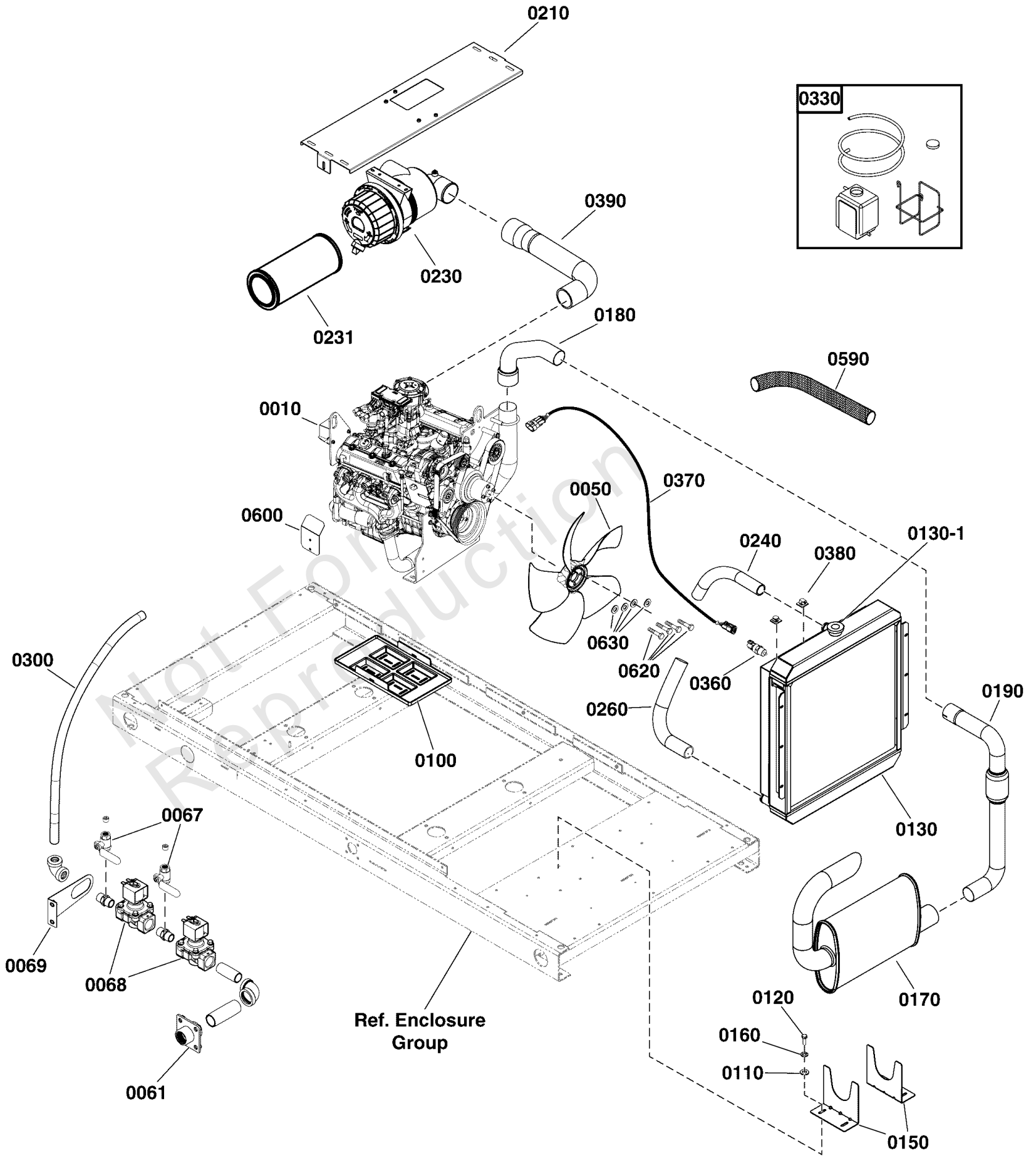
## Enclosure Group

| REF NO | PART NO    | QTY | DESCRIPTION                               |
|--------|------------|-----|---|
| 0010   | 22131GS    | 8   | WASHER, Flat 3/8"                         |
| 0030   | 22237GS    | 8   | WASHER, Locking, 3/8                      |
| 0040   | 23152GS    | 8   | HHCS, 3/8" - 16 x 3/4"                    |
| 0100   | 204700GS   | 1   | KIT, Door Latch                           |
| 0120   | 197316GS   | 2   | SEAL, Foam                                |
| 0140   | 203442GS   | 1   | DECAL<br>-(4.5")                          |
| 0150   | 204653GS   | 4   | MOUNT, Vibration                          |
| 0170   | 205225GS   | 1   | HINGE, Plate Cover                        |
| 0180   | 204920GS   | 2   | KIT, Door Hinge, Right                    |
| 0190   | 204852GS   | 2   | KIT, Door Hinge, Left                     |
| 0200   | 207758GS   | 2   | SEAL, Foam                                |
| 0210   | BA310477GS | 2   | PLATE-COVER                               |
| 0250   | 314301GS   | 1   | PANEL-GUARD<br>-(Includes Warning Decals) |
| 0260   | 314302GS   | 1   | PANEL-GUARD<br>-(Includes Warning Decals) |
| 0290   | 708909     | 1   | RAIL, Support                             |
| 0300   | 708908     | 1   | RAIL-SUPPORT                              |
| 0310   | 708891     | 1   | COVER                                     |
| 0320   | 708916     | 1   | SUPPORT                                   |
| 0360   | 708910     | 2   | RAIL-SUPPORT                              |
| 0370   | 708885     | 1   | BULKHEAD-ALTERNATOR                       |
| 0380   | 708893     | 1   | DOOR                                      |
| 0390   | 708896     | 1   | DOOR, LH                                  |
| 0400   | 708898     | 1   | DOOR, RH                                  |
| 0410   | 708889     | 2   | CORNER                                    |
| 0430   | 770025     | 1   | DECAL<br>-(9")                            |
| 0440   | 770036     | 1   | DOOR<br>-(Includes Ref. No. 0440-1)       |
| 0440-1 | 186049GS   | 2   | HANDLE, Door, Recessed Pull               |
| 0450   | -----      | 1   | BASE                                      |
| 0460   | 770049     | 1   | BULKHEAD-ENGINE                           |
| 0470   | 770050     | 1   | ROOF                                      |
| 0480   | 205368GS   | 5   | SEAL TAPE, Vinyl                          |
| 1020   | 207652GS   | 1   | SET, Latch Key, Plain                     |

# Engine Group

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 076331-04



## Engine Group

| REF NO | PART NO    | QTY | DESCRIPTION                                |
|--------|------------|-----|--|
| 0010   | 80021386   | 1   | ENGINE, 4.3L                               |
| 0050   | 312710GS   | 1   | FAN  |
| 0061   | BC310518GS | 1   | COUPLING                                   |
| 0067   | 312788GS   | 2   | BALL, Valve, 1/8                           |
| 0068   | 706433     | 2   | SOLENOID-GAS FUEL                          |
| 0069   | 84006780   | 1   | BRACKET, Fuel Solenoid                     |
| 0100   | 205623GS   | 1   | TRAY, Battery                              |
| 0110   | -----      | 20  | *WASHER, 1/4, SS<br>-(*See footnote)       |
| 0120   | -----      | 18  | *HHCS, 1/4-20 X 3/4 SS<br>-(*See footnote) |
| 0130   | 312322GS   | 1   | RADIATOR                                   |
| 0130-1 | 314566GS   | 1   | CAP-RADIATOR                               |
| --     | 314551GS   | 1   | VALVE-DRAIN<br>-(Not Illustrated)          |
| 0150   | 707174     | 2   | BRACKET                                    |
| 0160   | 83896GS    | 4   | WSHR, 1/4-M6, SS, LOCK                     |
| 0170   | 707173     | 1   | MUFFLER                                    |
| 0180   | 770047     | 1   | PIPE-EXHAUST                               |
| 0190   | 770048     | 1   | DOWNPIPE-EXHAUST                           |
| 0210   | 708758     | 1   | BRACKET-AIR CLEANER                        |
| 0230   | 709905     | 1   | FILTER-AIR                                 |
| 0231   | 770029     | 1   | FILTER-CARTRIDGE                           |
| 0240   | 313211GS   | 1   | HOSE, Radiator                             |
| 0260   | 770027     | 1   | HOSE                                       |
| 0300   | 208354GS   | 1   | HOSE-FUEL                                  |
| 0330   | 205226GS   | 1   | KIT, Bottle Overflow                       |
| 0350   | 708763     | 1   | HARNES-WIRE<br>-(Not Illustrated)          |
| 0360   | 84011155   | 1   | SENSOR, Low Coolant                        |
| 0370   | 708762     | 1   | HARNES-WIRE, LOW COOLANT SENSOR            |
| 0380   | 197355GS   | 2   | CLIP, Latching Wire                        |
| 0390   | 770028     | 1   | TUBE-INTAKE                                |
| 0540   | 192669GS   | 1   | Clamp, Hose, "J"<br>-(Not Illustrated)     |
| 0555   | 310811GS   | 1   | CABLE-BATTERY, BLACK<br>-(Not Illustrated) |
| 0560   | 310812GS   | 1   | CABLE-BATTERY, POS<br>-(Not Illustrated)   |
| 0590   | 206985GS   | 1   | SLEEVE, Insulation                         |
| 0600   | -----      | 1   | *HEAT SHIELD                               |
| 0620   | 42914GS    | 4   | CAPSCREW, Hex Head, M8- 1 1/4 x 90         |
| 0630   | 22145GS    | 4   | WASHER, Flat, 5/16 - M8                    |

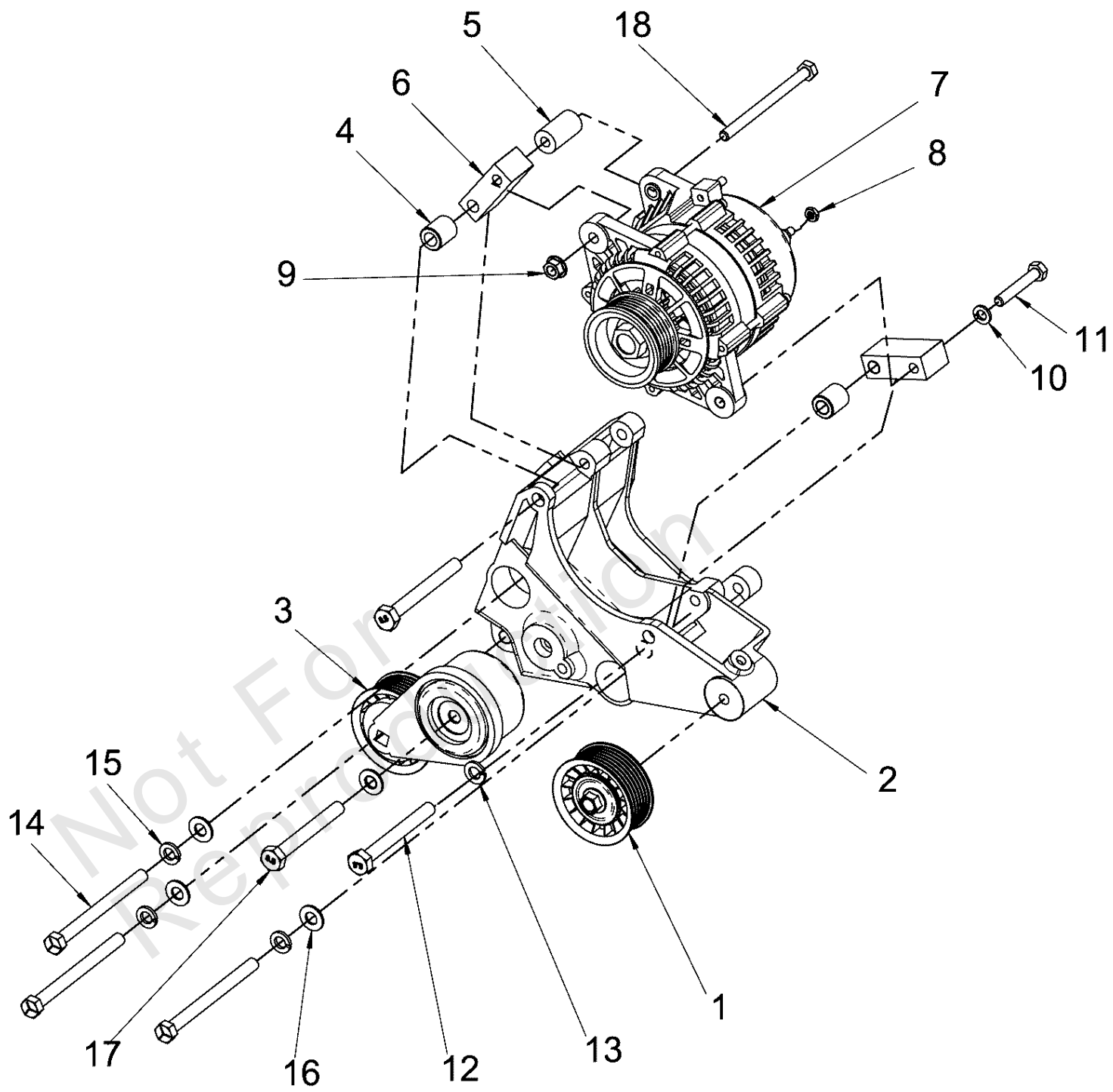
### Footnotes:

\* Items without part numbers are common fasteners and are available at your local hardware store.

# Engine Group - Alternator

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 076331-04



## Engine Group - Alternator

| REF NO | PART NO | QTY | DESCRIPTION                       |
|--------|---------|-----|-----------------------------------|
| 1      | 708971  |     | IDLER PULLEY                      |
| 2      | -----   |     | *BRACKET<br>-(*See footnote)      |
| 3      | 708972  |     | PULLEY                            |
| 4      | -----   |     | * SPACER<br>-(*See footnote)      |
| 5      | -----   |     | * SPACER<br>-(*See footnote)      |
| 6      | -----   |     | * BLOCK MOUNT<br>-(*See footnote) |
| 7      | 708998  |     | ALTERNATOR                        |
| 8      | -----   |     | *NUT<br>-(*See footnote)          |
| 9      | -----   |     | *NUT<br>-(*See footnote)          |
| 10     | -----   |     | *WASHER<br>-(*See footnote)       |
| 11     | -----   |     | *BOLT<br>-(*See footnote)         |
| 12     | -----   |     | *BOLT<br>-(*See footnote)         |
| 13     | -----   |     | *WASHER<br>-(*See footnote)       |
| 14     | -----   |     | *BOLT<br>-(*See footnote)         |
| 15     | -----   |     | *WASHER<br>-(*See footnote)       |
| 16     | -----   |     | *WASHER<br>-(*See footnote)       |
| 17     | -----   |     | *BOLT<br>-(*See footnote)         |
| 18     | -----   |     | *BOLT<br>-(*See footnote)         |

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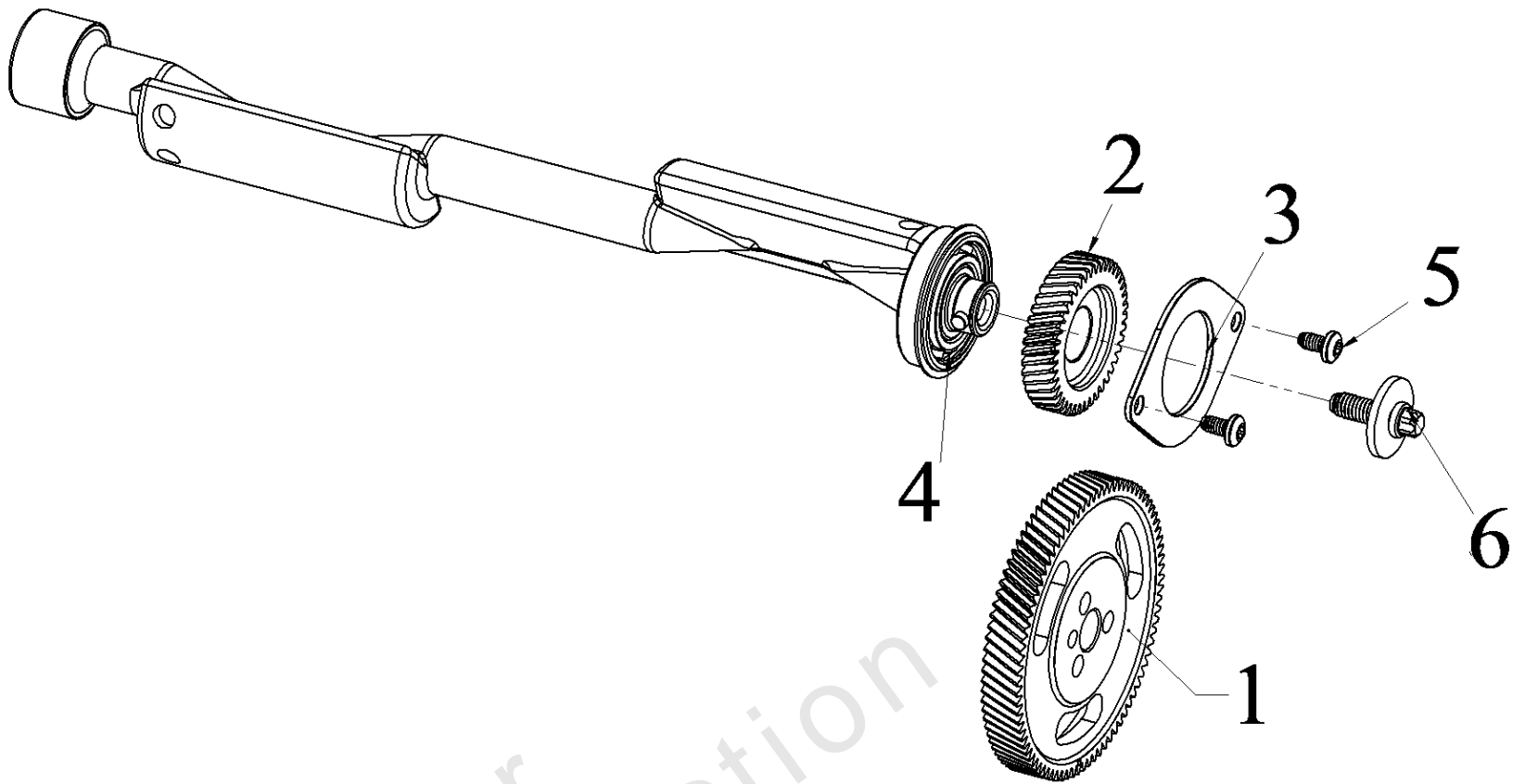
**Footnotes:**

Note:\* Speak to your authorized Briggs & Stratton dealer. For dealers, speak to Briggs & Stratton Technical Support.

# Engine Group - Balancer Shaft

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 076331-04



## Engine Group - Balancer Shaft

| REF NO | PART NO | QTY | DESCRIPTION  |
|--------|---------|-----|--|
| 1      | -----   | 1   | *GEAR, BALANCER SHAFT DRIVE<br>-(*See footnote)    |
| 2      | -----   | 1   | *GEAR, BALANCER SHAFT DRIVE<br>-(*See footnote)    |
| 3      | -----   | 1   | *RETAINER, BALANCER SHAFT<br>-(*See footnote)      |
| 4      | -----   | 1   | *KIT, BALANCE SHAFT<br>-(*See footnote)            |
| 5      | -----   | 2   | *BOLT, BALANCER SHAFT RETAINER<br>-(*See footnote) |
| 6      | -----   | 1   | *BOLT<br>-(*See footnote)                          |

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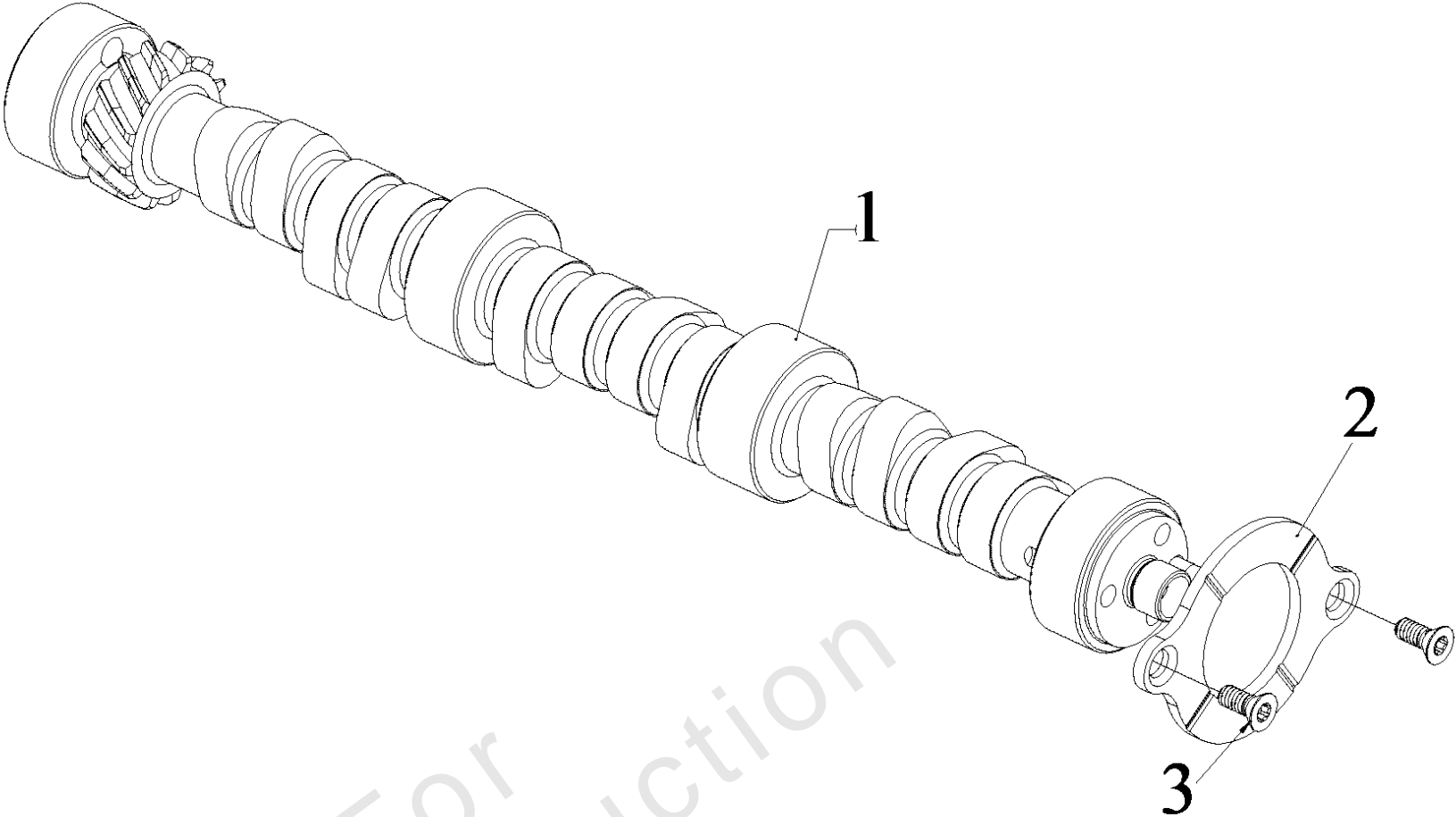
**Footnotes:**

Note:\* Speak to your authorized Briggs & Stratton dealer. For dealers, speak to Briggs & Stratton Technical Support.

**Engine Group - Camshaft**

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 076331-04





## Engine Group - Camshaft

| REF NO | PART NO | QTY | DESCRIPTION                             |
|--------|---------|-----|---|
| 1      | -----   | 1   | *CAMSHAFT<br>-(*See footnote)           |
| 2      | -----   | 1   | *RETAINER, CAMSHAFT<br>-(*See footnote) |
| 3      | -----   | 2   | *BOLT<br>-(*See footnote)               |

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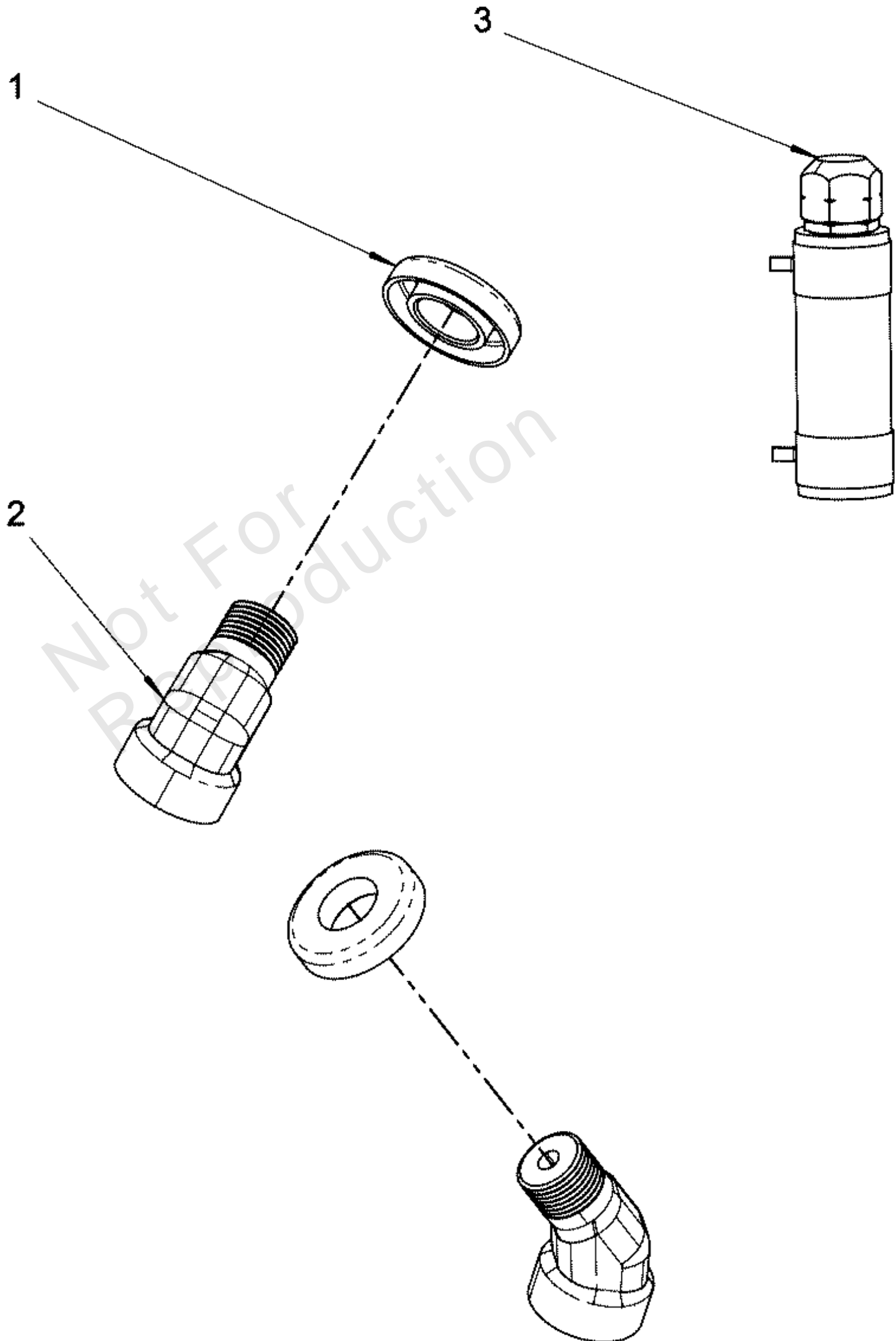
**Footnotes:**

Note:\* Speak to your authorized Briggs & Stratton dealer. For dealers, speak to Briggs & Stratton Technical Support.

# Engine Group - Coolant Fittings

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 076331-04



## Engine Group - Coolant Fittings

| REF NO | PART NO  | QTY | DESCRIPTION                          |
|--------|----------|-----|--------------------------------------|
| 1      | 80024746 | 2   | ADAPTER, FR/PLUG                     |
| 2      | -----    | 2   | *PIPE, STR ELBOW<br>-(*See footnote) |
| 3      | 80024728 | 1   | CAP, W/PMP HOSE                      |
| 4      | 708983   | 1   | CLAMP, HOSE<br>-(Not Illustrated)    |
| --     | 80024764 | 1   | COOLANT FITTING ASSEMBLY             |

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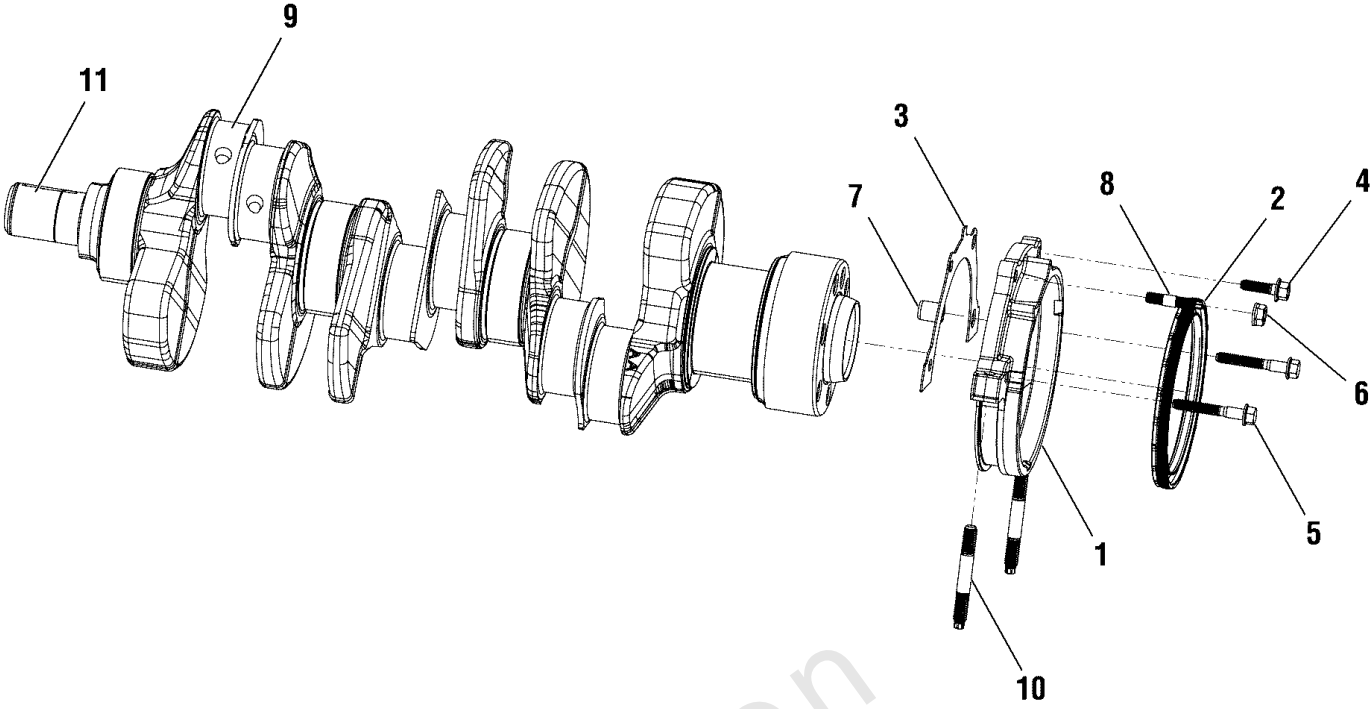
**Footnotes:**

Note:\* Speak to your authorized Briggs & Stratton dealer. For dealers, speak to Briggs & Stratton Technical Support.

**Engine Group - Crankshaft**

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 076331-04



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## Engine Group - Crankshaft

| REF NO | PART NO  | QTY | DESCRIPTION                                       |
|--------|----------|-----|---|
| 1      | -----    | 1   | *HOUSING, CRK/SHF RR OIL SEAL<br>-(*See footnote) |
| 2      | 770914   | 1   | SEAL, CRANKSHAFT                                  |
| 3      | 80024748 | 1   | GASKET, CRK/SHF RR OIL SEAL HOUSING               |
| 4      | -----    | 1   | *BOLT, OIL SEAL HOUSING<br>-(*See footnote)       |
| 5      | -----    | 2   | *BOLT<br>-(*See footnote)                         |
| 6      | -----    | 1   | *NUT<br>-(*See footnote)                          |
| 7      | -----    | 1   | *PIN, LOCATING<br>-(*See footnote)                |
| 8      | -----    | 1   | *STUD, OIL SEAL RETAINER (RR)<br>-(*See footnote) |
| 9      | -----    | 1   | *SET, MAIN BEARING<br>-(*See footnote)            |
| 10     | -----    | 2   | *STUD, OIL SEAL RETAINER (RR)<br>-(*See footnote) |
| 11     | -----    | 1   | *CRANKSHAFT<br>-(*See footnote)                   |

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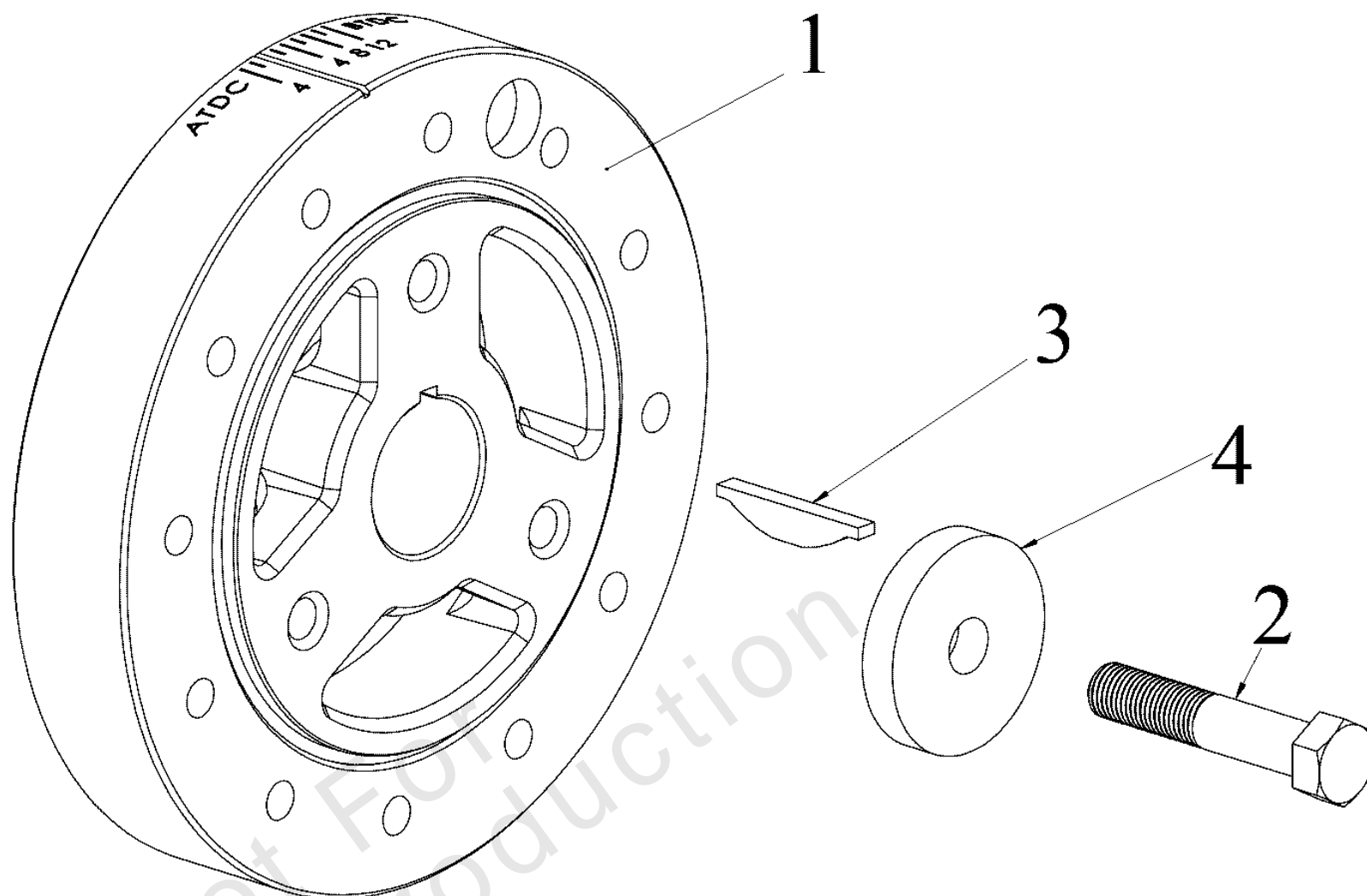
**Footnotes:**

Note:\* Speak to your authorized Briggs & Stratton dealer. For dealers, speak to Briggs & Stratton Technical Support.

# Engine Group - Crankshaft Balancer

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 076331-04



## Engine Group - Crankshaft Balancer

| REF NO | PART NO  | QTY | DESCRIPTION                          |
|--------|----------|-----|--------------------------------------|
| 1      | 80024975 | 1   | DAMPER                               |
| 2      | -----    | 1   | BOLT, DAMPER<br>-(*See footnote)     |
| 3      | -----    | 1   | *KEY, CRANKSHAFT<br>-(*See footnote) |
| 4      | -----    | 1   | WASHER<br>-(*See footnote)           |

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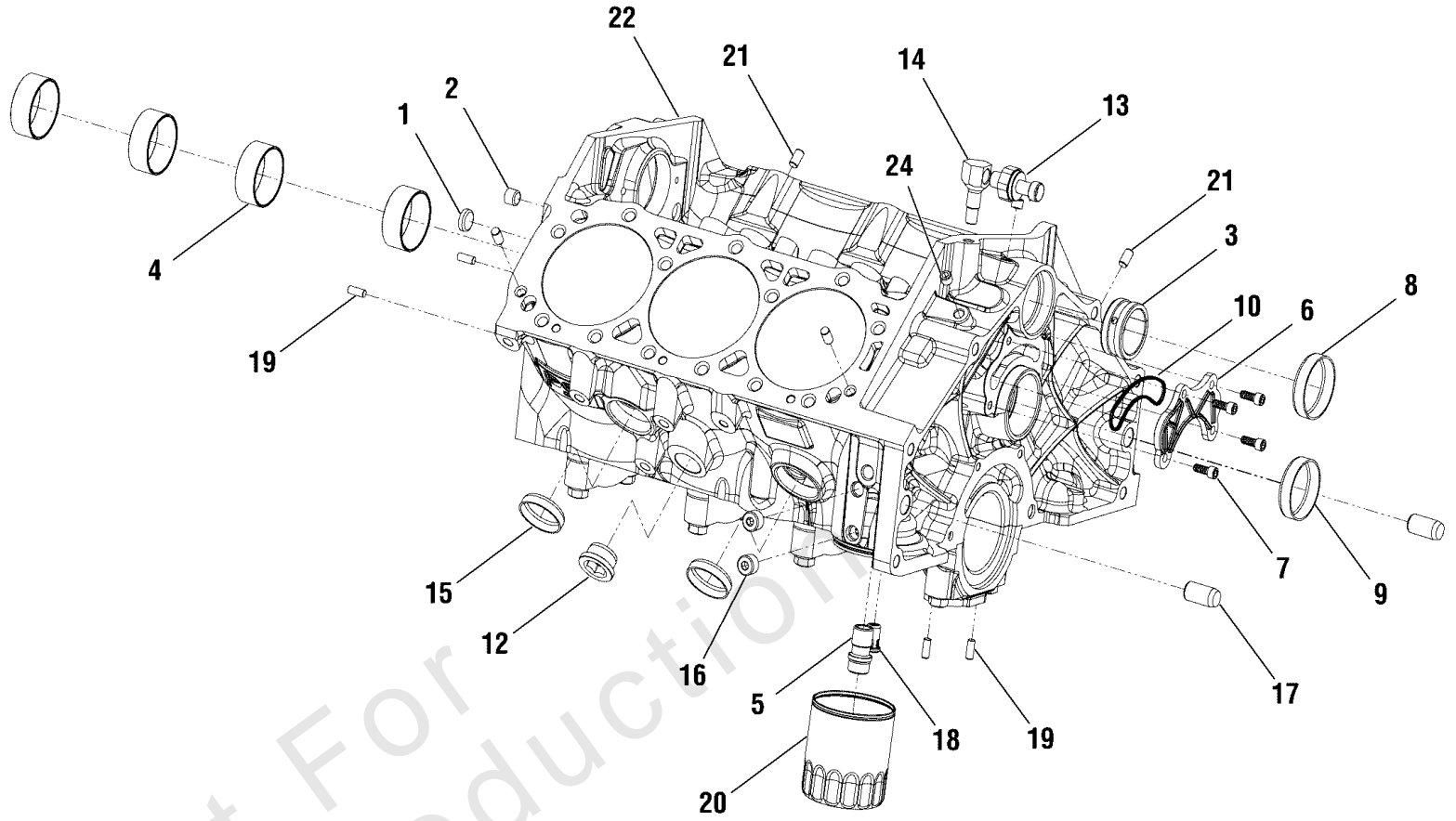
**Footnotes:**

Note:\* Speak to your authorized Briggs & Stratton dealer. For dealers, speak to Briggs & Stratton Technical Support.

# Engine Group - Cylinder Block

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 076331-04





## Engine Group - Cylinder Block

| REF NO | PART NO  | QTY | DESCRIPTION  |
|--------|----------|-----|--|
| 1      | 770900   | 1   | PLUG, CORE   |
| 2      | 770901   | 1   | PLUG, CORE   |
| 3      | -----    | 1   | *BEARING, BALANCER SHAFT<br>-(*See footnote)         |
| 4      | -----    | 1   | * SET, BEARING CAMSHAFT<br>-(*See footnote)          |
| 5      | -----    | 1   | * ADAPTOR, OIL FILTER<br>-(*See footnote)            |
| 6      | -----    | 1   | * COVER, REAR OIL CROSSOVER<br>-(*See footnote)      |
| 7      | -----    | 4   | * BOLT, REAR OIL CROSSOVER COVER<br>-(*See footnote) |
| 8      | 80024678 | 1   | PLUG, REAR BALANCE SHAFT                             |
| 9      | 80024679 | 1   | PLUG, REAR CAM                                       |
| 10     | 80024680 | 1   | O-RING   |
| 11     | -----    | 1   | *BALL, PLUG<br>-(*See footnote)                      |
| 12     | -----    | 2   | *PLUG, COOLANT DRAIN<br>-(*See footnote)             |
| 13     | 708873   | 1   | OIL PRESSURE SENSOR                                  |
| 14     | 80024681 | 1   | FITTING, OIL PRESSURE GAUGE                          |
| 15     | 770863   | 4   | CORE PLUG  |
| 16     | -----    | 2   | *PLUG OIL GALLEY<br>-(*See footnote)                 |
| 17     | -----    | 2   | *PIN, F/W HOUSING<br>-(*See footnote)                |
| 18     | -----    | 1   | *VALVE, OIL FILTER BYPASS<br>-(*See footnote)        |
| 19     | -----    | 4   | *DOWEL PIN<br>-(*See footnote)                       |
| 20     | 80024683 | 1   | FILTER, OIL  |
| 21     | -----    | 4   | *PIN, CYLINDER HEAD<br>-(*See footnote)              |
| 22     | -----    | 1   | *CRANKCASE<br>-(*See footnote)                       |
| 24     | -----    | 2   | *PLUG, OIL GALLEY<br>-(*See footnote)                |

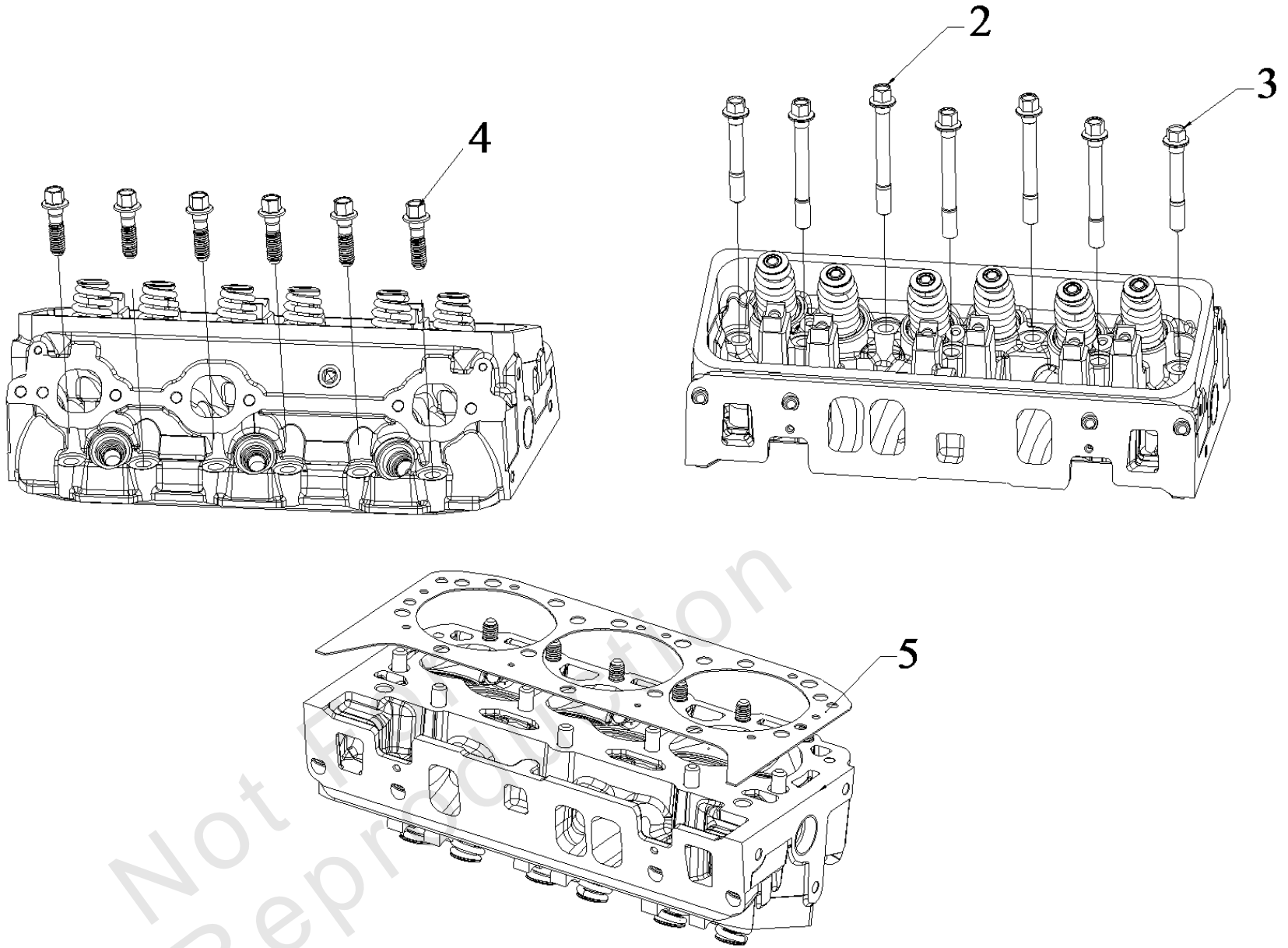
### Footnotes:

Note:\* Speak to your authorized Briggs & Stratton dealer. For dealers, speak to Briggs & Stratton Technical Support.

# Engine Group - Cylinder Gasket & Hardware

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 076331-04



## Engine Group - Cylinder Gasket & Hardware

| REF NO | PART NO | QTY | DESCRIPTION                |
|--------|---------|-----|----------------------------|
| 2      | -----   | 10  | * BOLT<br>-(*See footnote) |
| 3      | -----   | 4   | * BOLT<br>-(*See footnote) |
| 4      | -----   | 12  | * BOLT<br>-(*See footnote) |
| 5      | 770919  | 2   | GASKET, CYLINDER HEAD      |

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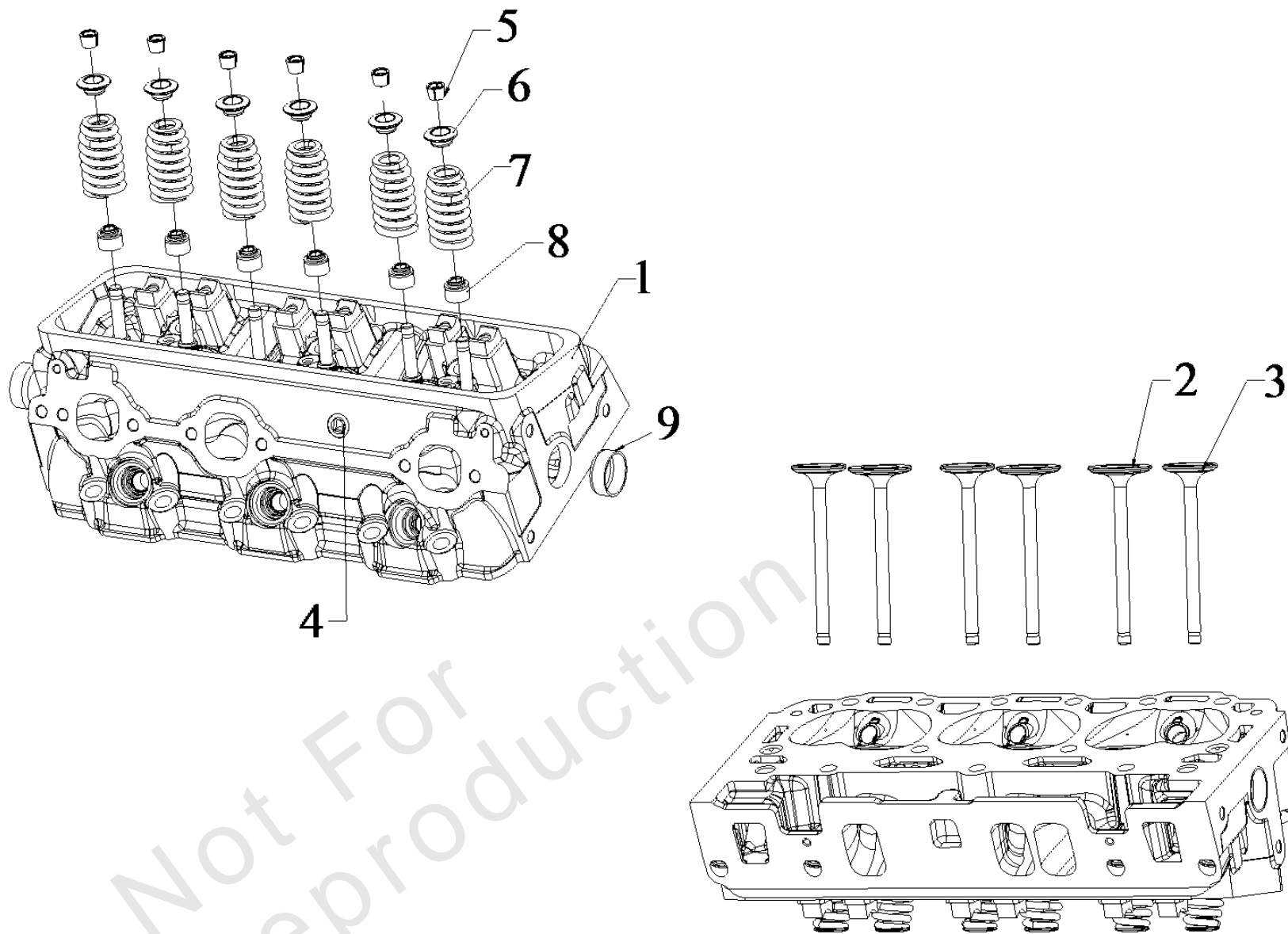
**Footnotes:**

Note:\* Speak to your authorized Briggs & Stratton dealer. For dealers, speak to Briggs & Stratton Technical Support.

# Engine Group - Cylinder Head

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 076331-04



## Engine Group - Cylinder Head

| REF NO | PART NO  | QTY | DESCRIPTION                           |
|--------|----------|-----|---------------------------------------|
| 1      | -----    | 2   | CYLINDER HEAD<br>-(*See footnote)     |
| 2      | -----    | 3   | *VALVE, INTAKE<br>-(*See footnote)    |
| 3      | -----    | 3   | *VALVE, EXHAUST<br>-(*See footnote)   |
| 4      | -----    | 1   | *PLUG<br>-(*See footnote)             |
| 5      | -----    | 6   | KEY<br>-(*See footnote)               |
| 6      | -----    | 6   | RETAINER<br>-(*See footnote)          |
| 7      | -----    | 6   | VALVE SPRING<br>-(*See footnote)      |
| 8      | -----    | 6   | *SEAL, VALVE STEM<br>-(*See footnote) |
| 9      | 80024752 | 2   | PLUG                                  |
| --     | 80024765 | 1   | CYLINDER HEAD ASSEMBLY                |

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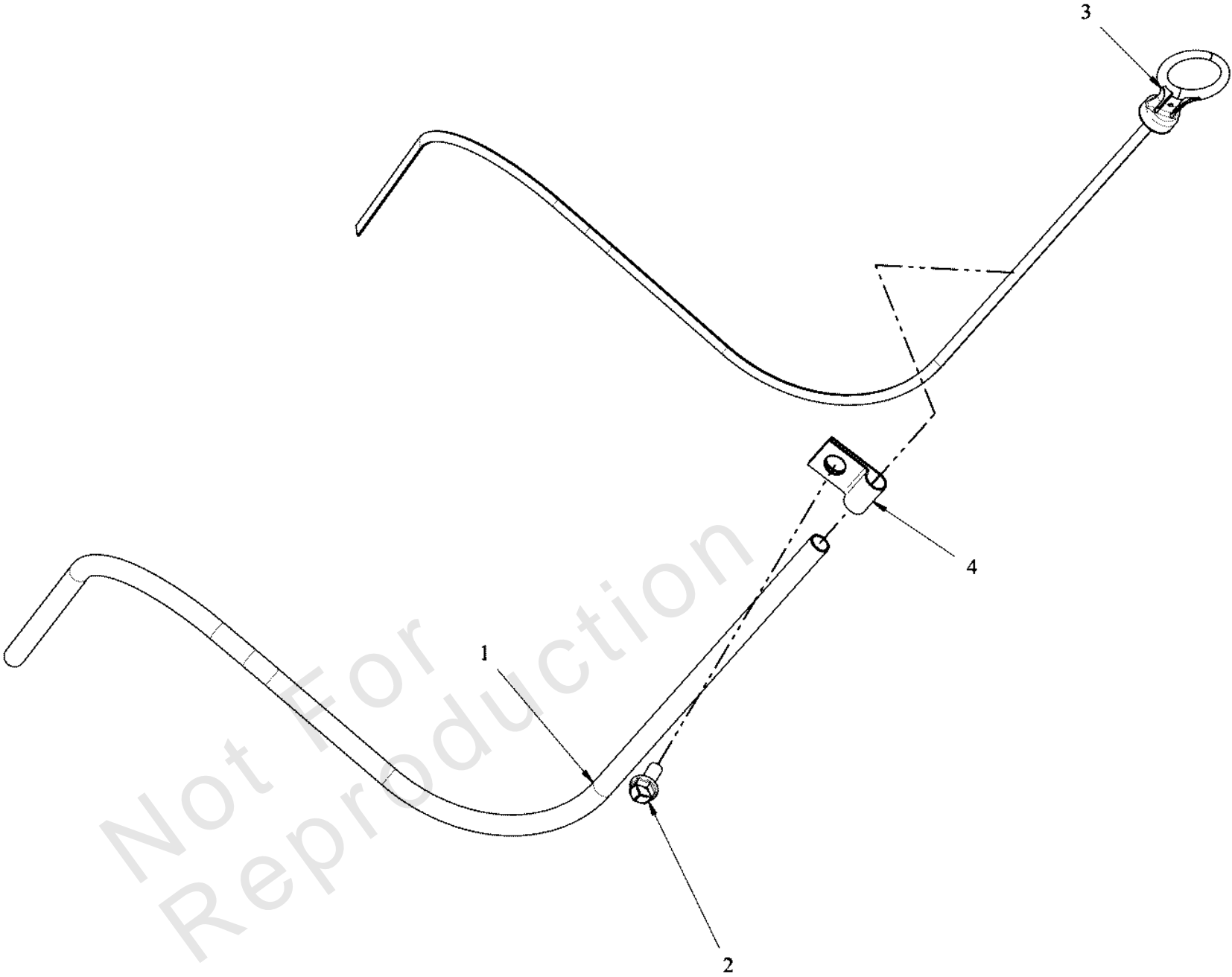
### Footnotes:

Note:\* Speak to your authorized Briggs & Stratton dealer. For dealers, speak to Briggs & Stratton Technical Support.

**Engine Group - Dipstick & Tube**

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 076331-04



## Engine Group - Dipstick & Tube

| REF NO | PART NO  | QTY | DESCRIPTION                          |
|--------|----------|-----|--------------------------------------|
| 1      | -----    | 1   | *TUBE, DIPSTICK<br>-(*See footnote)  |
| 2      | -----    | 1   | *BOLT<br>-(*See footnote)            |
| 3      | -----    | 1   | *DIPSTICK<br>-(*See footnote)        |
| 4      | -----    | 1   | *CLAMP, D/S TUBE<br>-(*See footnote) |
| --     | 80024979 | 1   | DIPSTICK ASSEMBLY                    |

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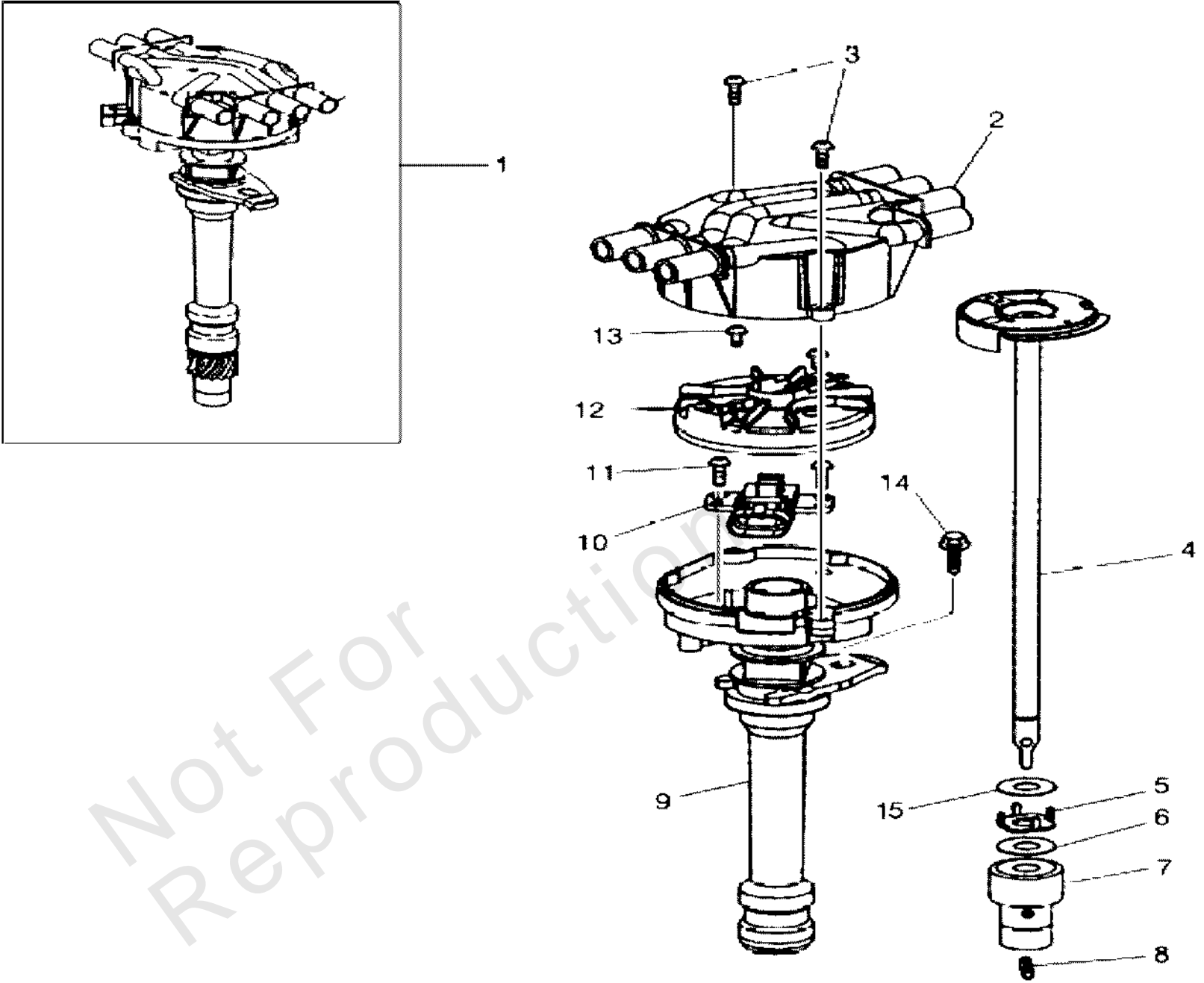
**Footnotes:**

Note:\* Speak to your authorized Briggs & Stratton dealer. For dealers, speak to Briggs & Stratton Technical Support.

# Engine Group - Distributor Parts

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 076331-04





## Engine Group - Distributor Parts

| REF NO | PART NO | QTY | DESCRIPTION                  |
|--------|---------|-----|------------------------------|
| 1      | 770936  | 1   | DISTRIBUTOR                  |
| 2      | 770937  | 1   | CAP, DISTRIBUTOR             |
| 3      | -----   | 2   | BOLT<br>-(*See footnote)     |
| 4      | -----   |     | SHAFT<br>-(*See footnote)    |
| 5      | -----   |     | WASHER<br>-(*See footnote)   |
| 6      | -----   |     | WASHER<br>-(*See footnote)   |
| 7      | -----   | 1   | GEAR KIT<br>-(*See footnote) |
| 8      | -----   | 1   | PIN<br>-(*See footnote)      |
| 9      | -----   |     | HOUSING<br>-(*See footnote)  |
| 10     | 708844  | 1   | SENSOR                       |
| 11     | -----   | 2   | BOLT<br>-(*See footnote)     |
| 12     | 709461  | 1   | ROTOR, DISTRIBUTOR           |
| 13     | -----   | 2   | BOLT<br>-(*See footnote)     |
| 14     | -----   | 2   | BOLT<br>-(*See footnote)     |
| 15     | -----   | 1   | GASKET<br>-(*See footnote)   |

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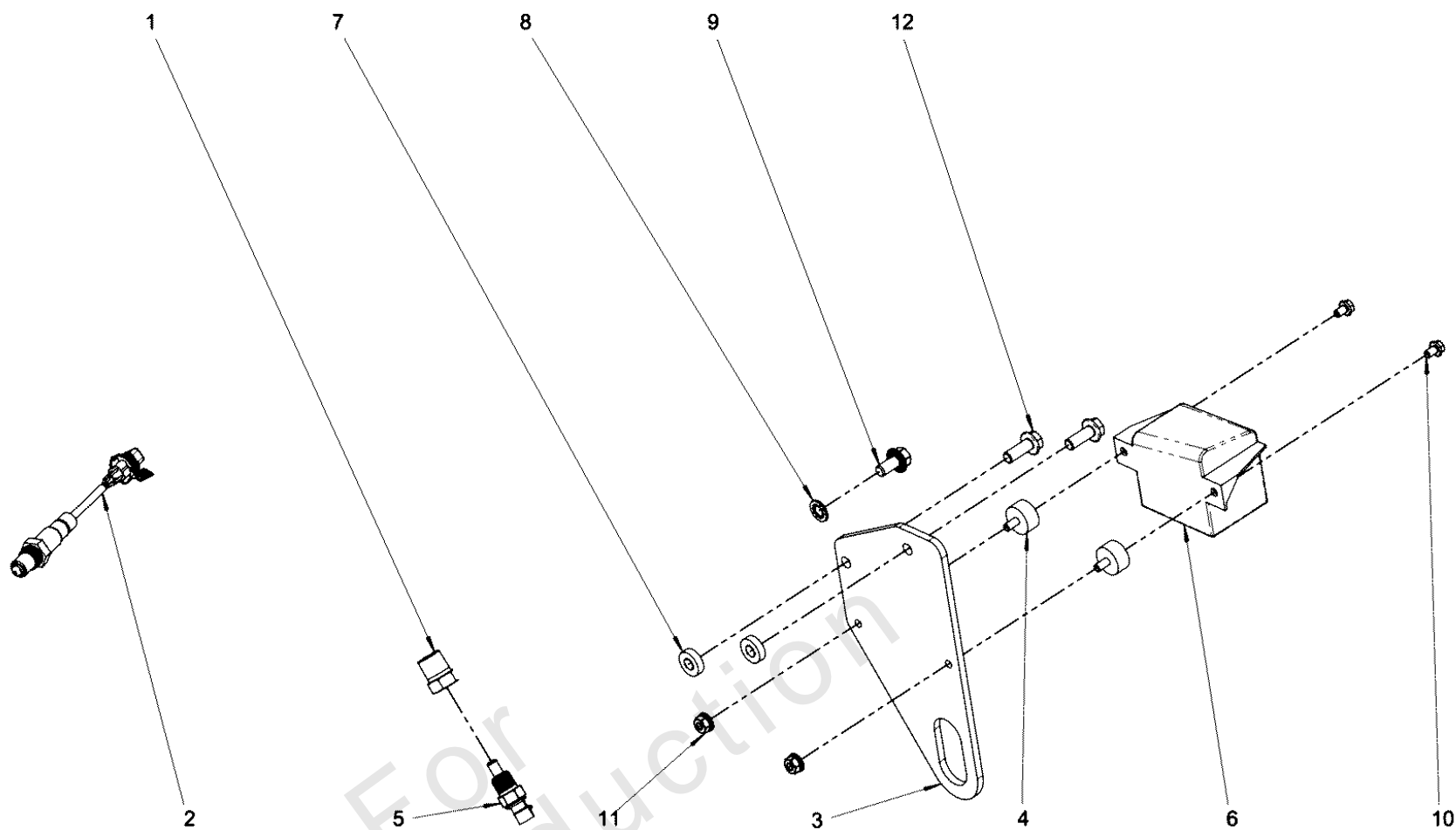
**Footnotes:**

Note:\* Speak to your authorized Briggs & Stratton dealer. For dealers, speak to Briggs & Stratton Technical Support.

# Engine Group - Electrical

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 076331-04



## Engine Group - Electrical

| REF NO | PART NO | QTY | DESCRIPTION                           |
|--------|---------|-----|---------------------------------------|
| 1      | -----   | 1   | *FITTING<br>-(*See footnote)          |
| 2      | 708872  | 1   | SENSOR, O2                            |
| 3      | -----   | 1   | *BRKT, LFTG EYE<br>-(*See footnote)   |
| 4      | -----   | 2   | *ISOLATOR, RUBBER<br>-(*See footnote) |
| 5      | 708995  | 1   | SENSOR, COOLANT                       |
| 6      | 770946  | 1   | HARNESS                               |
| 7      | -----   | 2   | *WASHER<br>-(*See footnote)           |
| 8      | -----   | 1   | *WASHER, STAR<br>-(*See footnote)     |
| 9      | -----   | 1   | *BOLT<br>-(*See footnote)             |
| 10     | -----   | 2   | *BOLT<br>-(*See footnote)             |
| 11     | -----   | 2   | *NUT, FLANGE<br>-(*See footnote)      |
| 12     | -----   | 2   | *BOLT<br>-(*See footnote)             |

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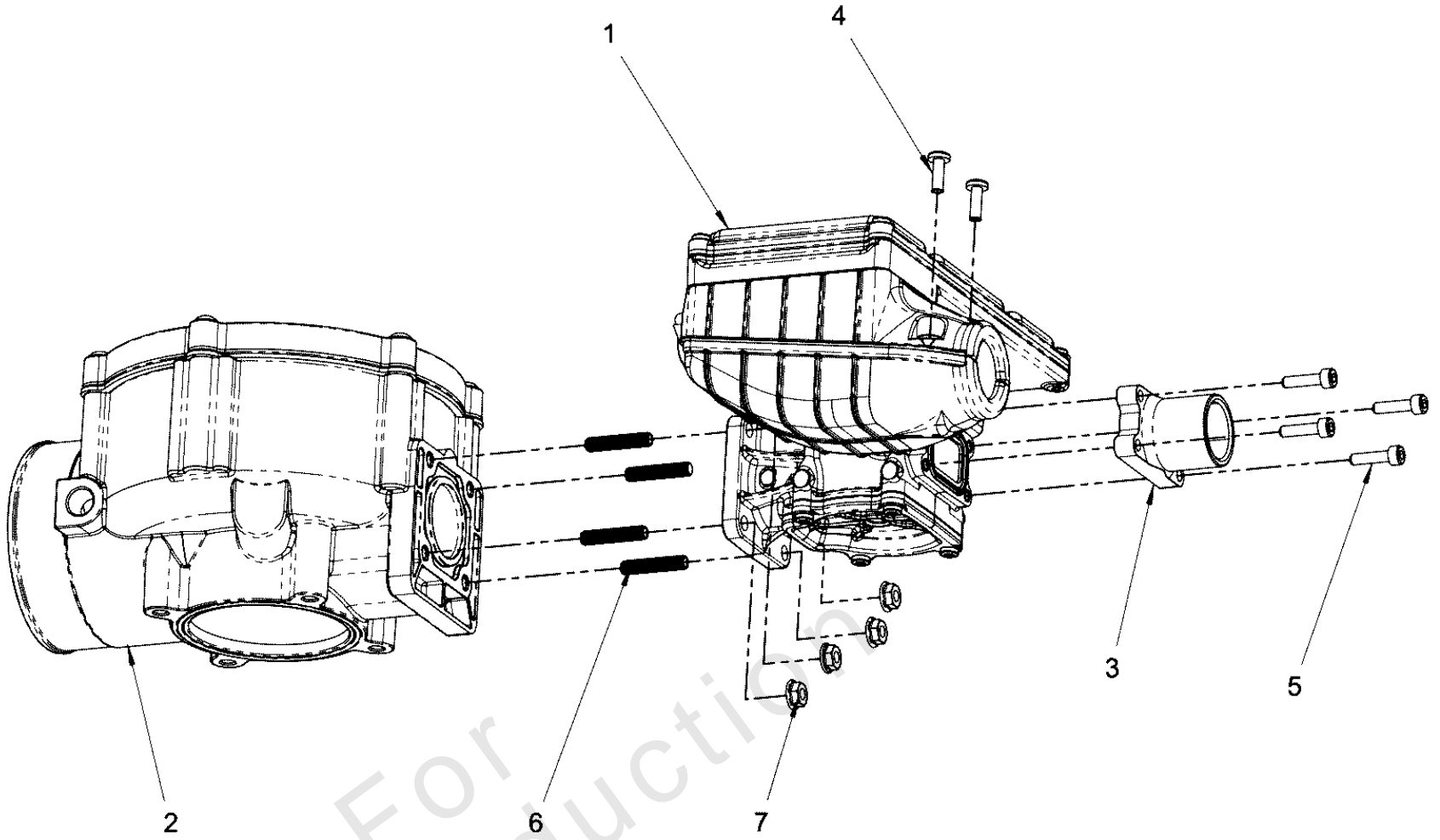
### Footnotes:

Note:\* Speak to your authorized Briggs & Stratton dealer. For dealers, speak to Briggs & Stratton Technical Support.

# Engine Group - EPR & Mixer

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 076331-04



## Engine Group - EPR & Mixer

| REF NO | PART NO  | QTY | DESCRIPTION                |
|--------|----------|-----|----------------------------|
| 1      | 80024747 | 1   | I EPR                      |
| 2      | 770954   | 1   | MIXER                      |
| 3      | 708868   | 1   | ADAPTER, EPR               |
| 4      | -----    | 2   | *SCREW<br>-(*See footnote) |
| 5      | -----    | 4   | *BOLT<br>-(*See footnote)  |
| 6      | -----    | 4   | *STUD<br>-(*See footnote)  |
| 7      | -----    | 4   | *NUT<br>-(*See footnote)   |

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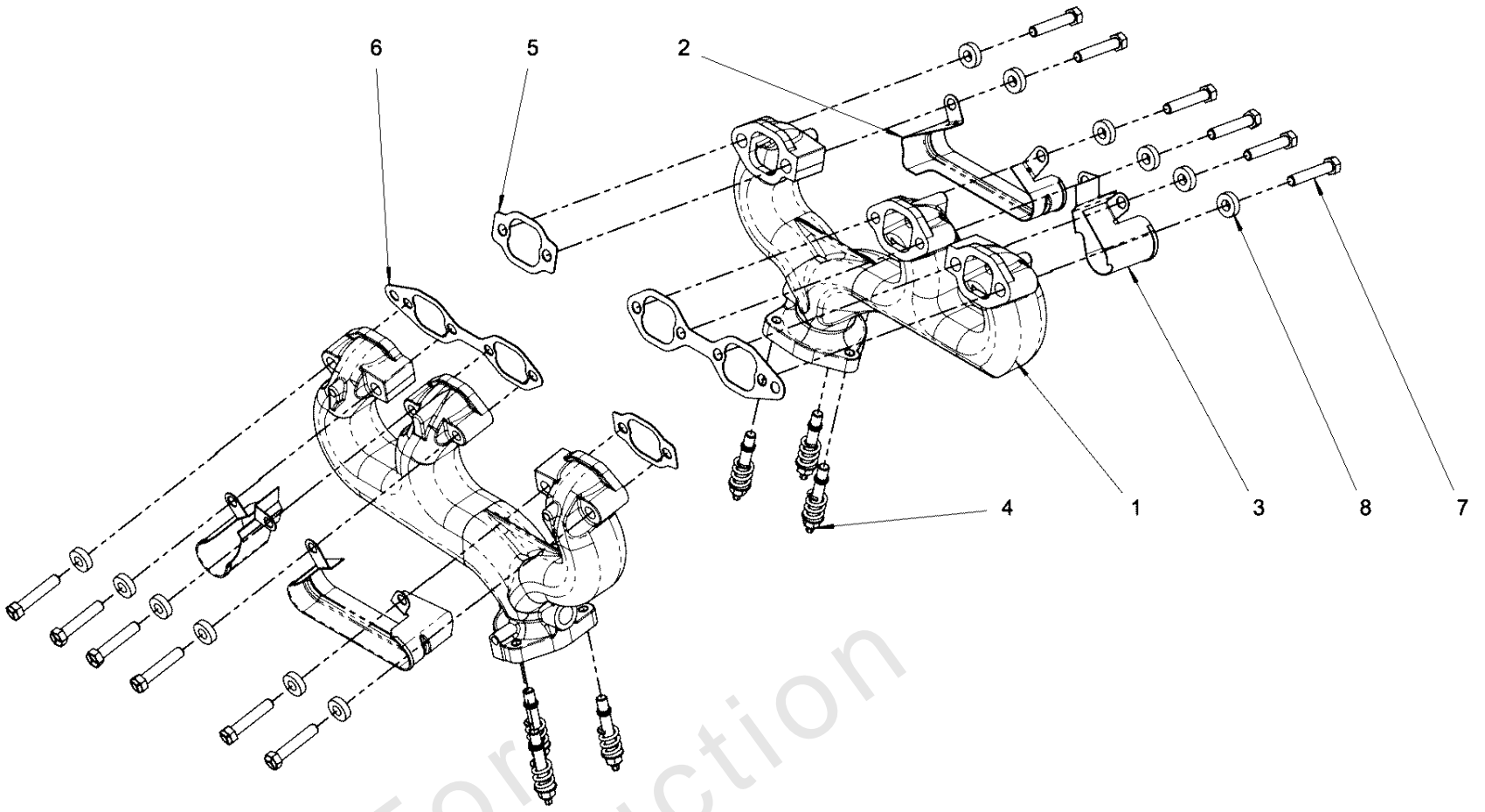
**Footnotes:**

Note:\* Speak to your authorized Briggs & Stratton dealer. For dealers, speak to Briggs & Stratton Technical Support.

# Engine Group - Exhaust Manifold

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 076331-04



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## Engine Group - Exhaust Manifold

| REF NO | PART NO  | QTY | DESCRIPTION                                  |
|--------|----------|-----|--|
| 1      | -----    | 2   | *MANIFOLD, EXHAUST<br>-(*See footnote)       |
| 2      | -----    | 2   | SHIELD, HEAT<br>-(*See footnote)             |
| 3      | -----    | 2   | *SHIELD, SPARK PLUG WIRE<br>-(*See footnote) |
| 4      | -----    | 2   | *KIT, EXHAUST<br>-(*See footnote)            |
| 5      | 80024743 | 2   | GASKET, E/MNFLD                              |
| 6      | 80024744 | 2   | GASKET, EXHAUST MANIFOLD                     |
| 7      | -----    | 12  | *BOLT<br>-(*See footnote)                    |
| 8      | -----    | 12  | *WASHER<br>-(*See footnote)                  |

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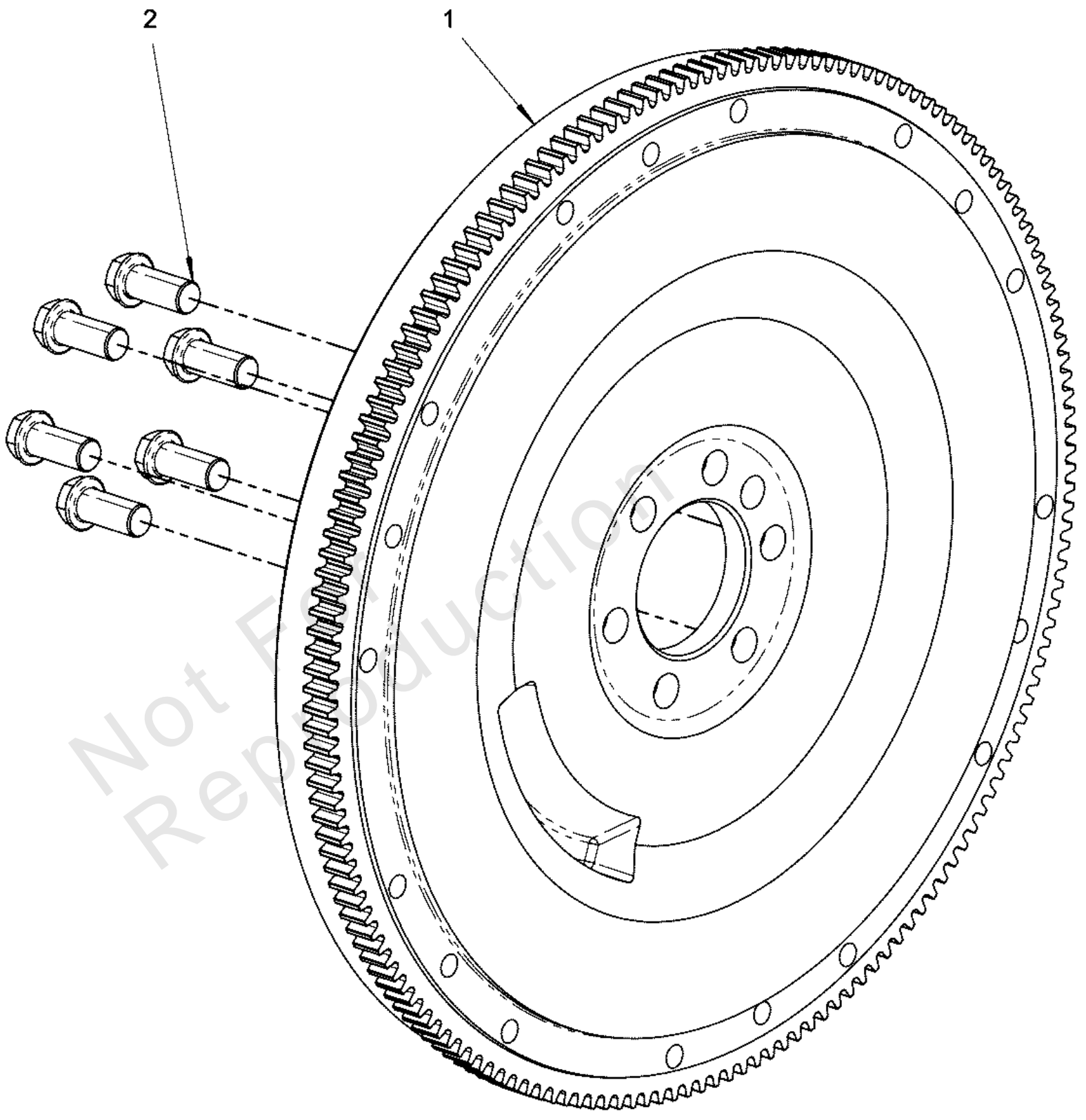
**Footnotes:**

Note:\* Speak to your authorized Briggs & Stratton dealer. For dealers, speak to Briggs & Stratton Technical Support.

# Engine Group - Flywheel

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 076331-04





## Engine Group - Flywheel

| REF NO | PART NO | QTY | DESCRIPTION                         |
|--------|---------|-----|-------------------------------------|
| 1      | -----   | 1   | *FLYWHEEL<br>-(*See footnote)       |
| 2      | -----   | 6   | *BOLT, FLYWHEEL<br>-(*See footnote) |

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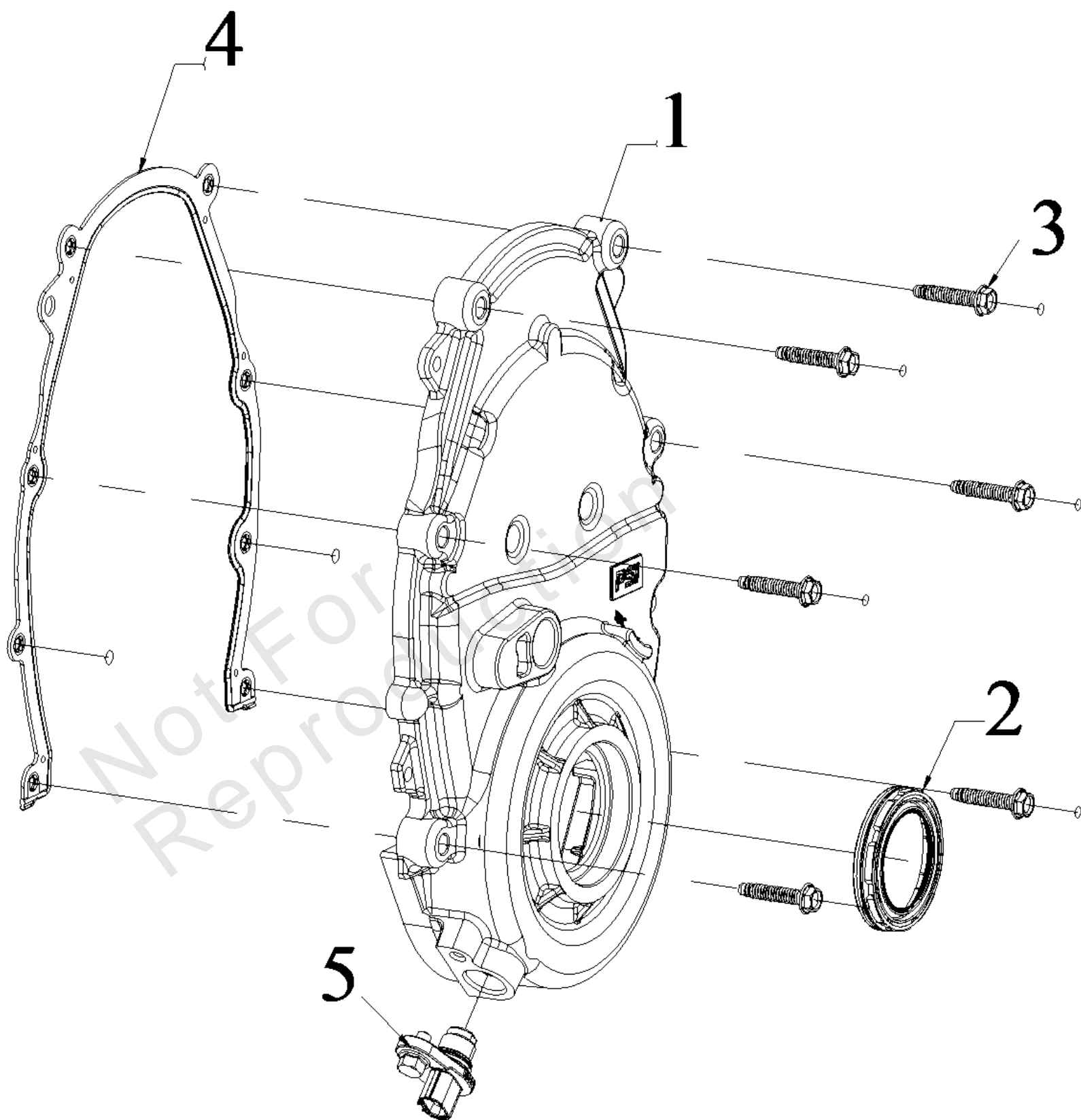
**Footnotes:**

Note:\* Speak to your authorized Briggs & Stratton dealer. For dealers, speak to Briggs & Stratton Technical Support.

# Engine Group - Front Cover

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 076331-04



## Engine Group - Front Cover

| REF NO | PART NO  | QTY | DESCRIPTION                |
|--------|----------|-----|----------------------------|
| 1      | 80024751 | 1   | COVER, FRONT COVER         |
| 2      | 770928   | 1   | SEAL, ENGINE FRONT COVER   |
| 3      | -----    | 6   | *BOLT<br>-(*See footnote)  |
| 4      | 80024978 | 1   | GASKET, ENGINE FRONT COVER |
| 5      | 80024742 | 1   | SENSOR, CRANKSHAFT         |

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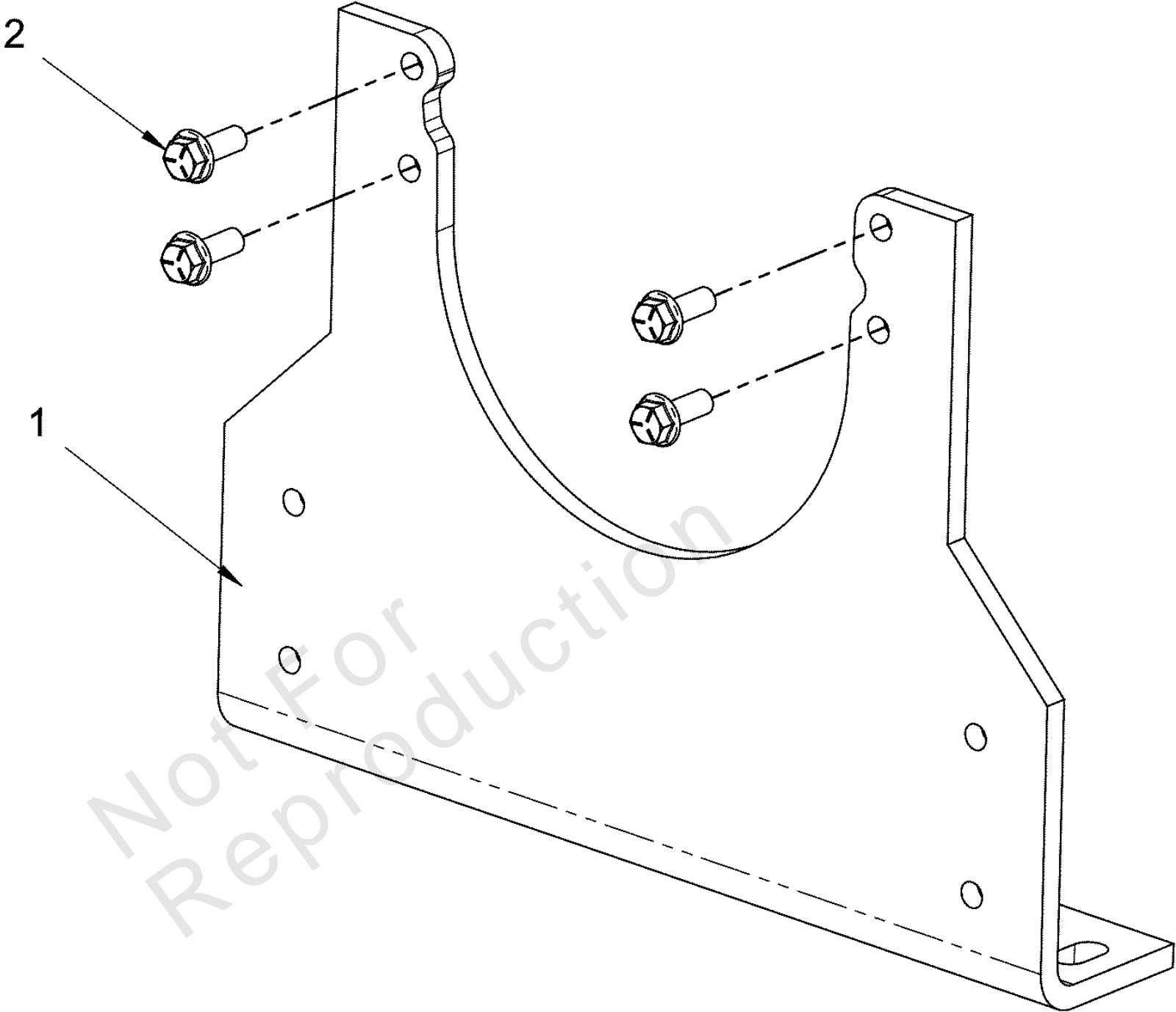
**Footnotes:**

Note:\* Speak to your authorized Briggs & Stratton dealer. For dealers, speak to Briggs & Stratton Technical Support.

**Engine Group - Front Pedestal Mount**

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 076331-04



## Engine Group - Front Pedestal Mount

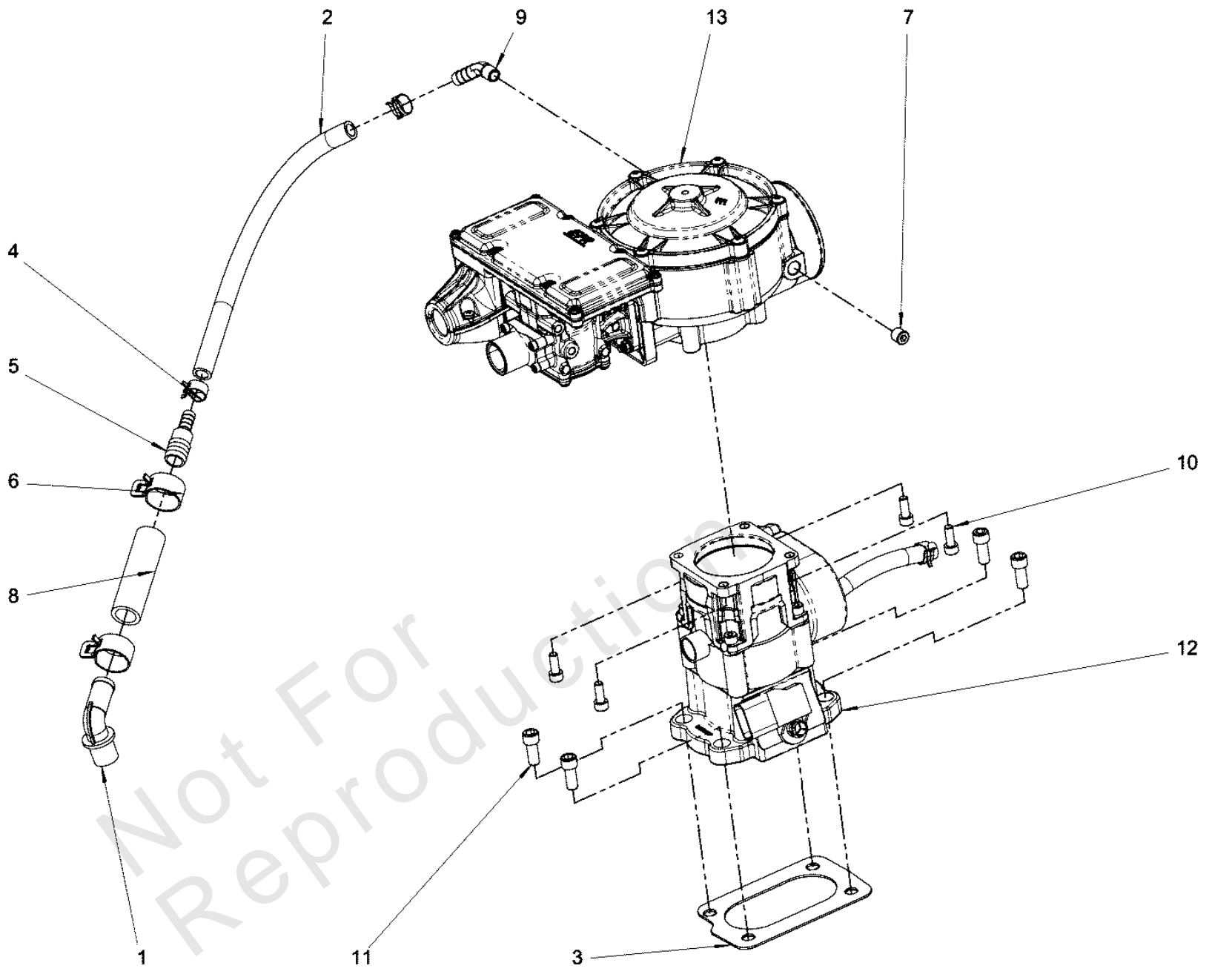
| REF NO | PART NO | QTY | DESCRIPTION                          |
|--------|---------|-----|--------------------------------------|
| 1      | -----   |     | * PEDESTAL MOUNT<br>-(*See footnote) |
| 2      | -----   |     | * BOLT<br>-(*See footnote)           |

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# Engine Group - Fuel

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 076331-04



## Engine Group - Fuel

| REF NO | PART NO  | QTY | DESCRIPTION               |
|--------|----------|-----|---------------------------|
| 1      | 708978   | 1   | ELBOW, PCV                |
| 2      | 708980   | 1   | HOSE, FUEL, 22"           |
| 3      | 770948   | 1   | GASKET, ADAPTER           |
| 4      | 708992   | 2   | SPACER                    |
| 5      | 708861   | 1   | ADAPTER                   |
| 6      | 708983   | 2   | CLAMP, HOSE               |
| 7      | -----    | 1   | *PLUG<br>-(*See footnote) |
| 8      | 708986   | 1   | HOSE, VAPOR, 3"           |
| 9      | 80024745 | 1   | FITTING                   |
| 10     | -----    | 4   | *BOLT<br>-(*See footnote) |
| 11     | -----    | 4   | *BOLT<br>-(*See footnote) |
| 12     | 80024759 | 1   | THROTTLE BODY ASSEMBLY    |
| 13     | 80024760 | 1   | EPR and MIXER ASSEMBLY    |
| --     | 80024761 | 1   | FUEL ASSEMBLY             |

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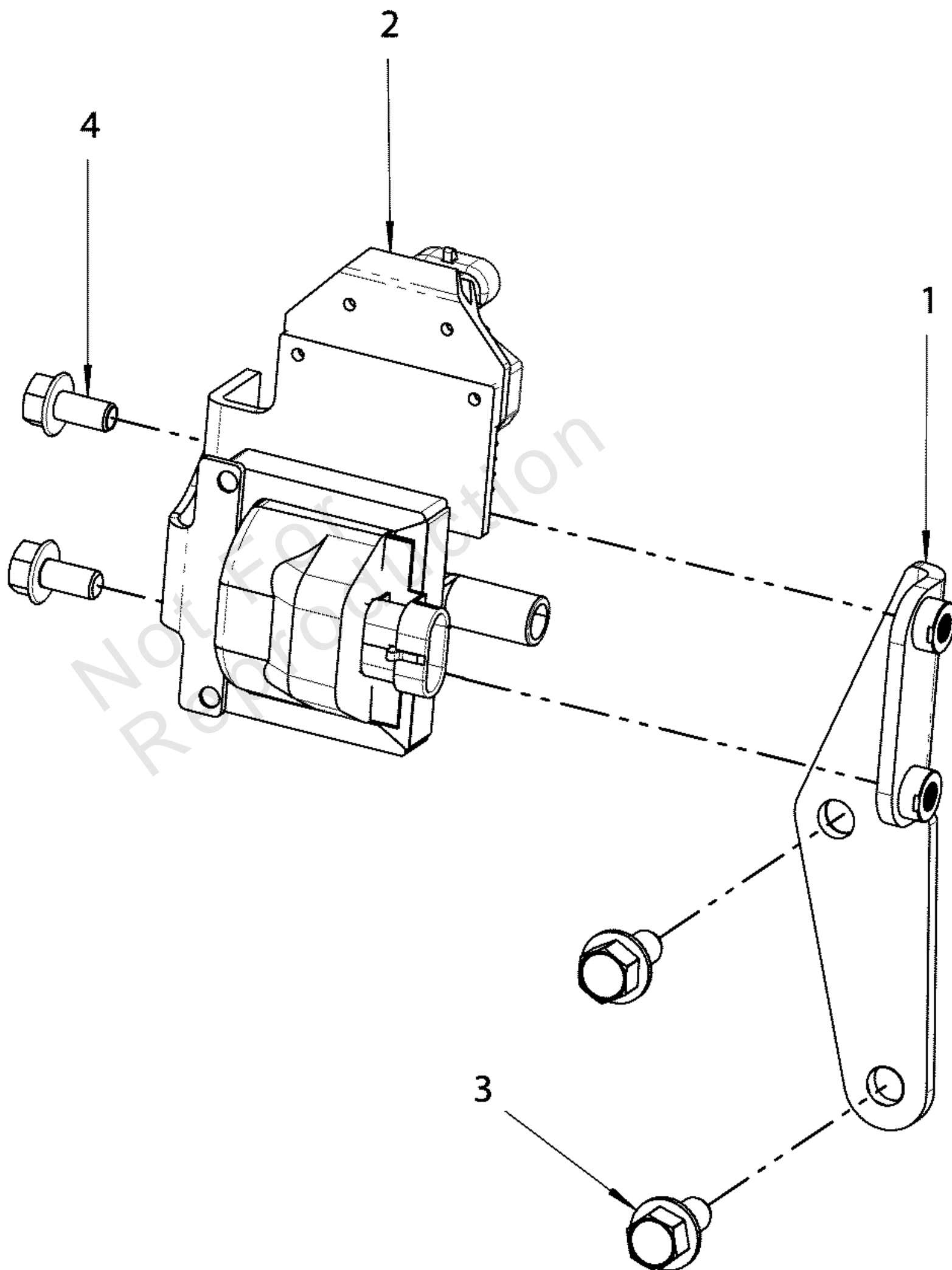
**Footnotes:**

Note:\* Speak to your authorized Briggs & Stratton dealer. For dealers, speak to Briggs & Stratton Technical Support.

# Engine Group - Ignition Coil

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 076331-04





## Engine Group - Ignition Coil

| REF NO | PART NO | QTY | DESCRIPTION                 |
|--------|---------|-----|-----------------------------|
| 1      | -----   | 1   | BRACKET<br>-(*See footnote) |
| 2      | 770940  | 1   | COIL, IGNITION              |
| 3      | -----   | 2   | BOLT<br>-(*See footnote)    |
| 4      | -----   | 2   | SCREW<br>-(*See footnote)   |

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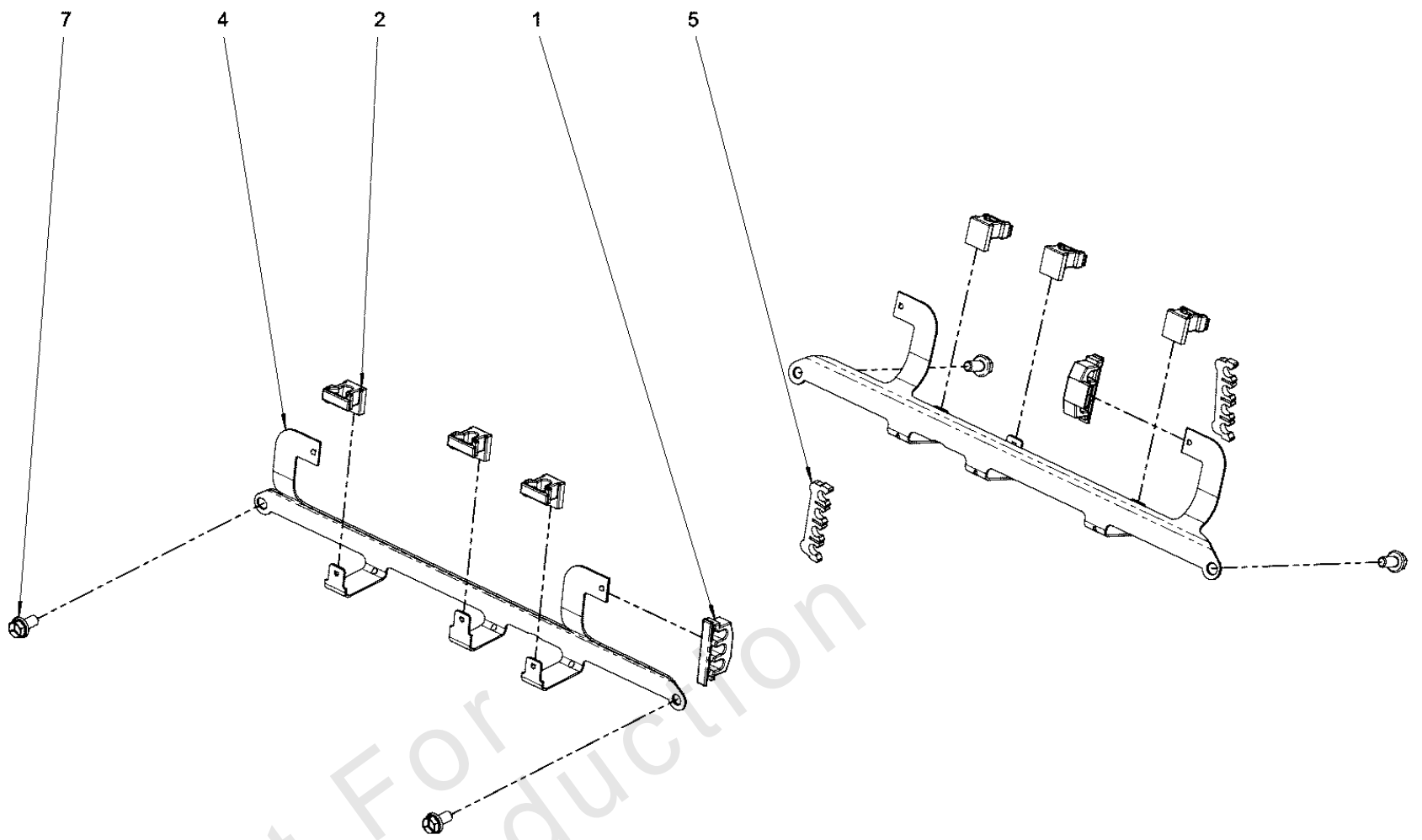
**Footnotes:**

Note:\* Speak to your authorized Briggs & Stratton dealer. For dealers, speak to Briggs & Stratton Technical Support.

# Engine Group - Ignition Wires

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 076331-04



## Engine Group - Ignition Wires

| REF NO | PART NO  | QTY | DESCRIPTION                            |
|--------|----------|-----|--|
| 1      | 80024730 | 2   | RETAINER, WIRE #3                      |
| 2      | 80024734 | 6   | RETAINER, WIRE #1                      |
| 3      | 80024735 | 1   | WIRE, SPARK PLUG<br>-(Not Illustrated) |
| 4      | -----    | 2   | SUPPORT, S/P WIRE<br>-(*See footnote)  |
| 5      | 80024736 | 2   | RETAINER, WIRE #4                      |
| 6      | 80024737 | 1   | LOOM, SPLIT<br>-(Not Illustrated)      |
| 7      | -----    | 4   | BOLT<br>-(*See footnote)               |
| 8      | 770935   | 6   | SPARK PLUG<br>-(Not Illustrated)       |

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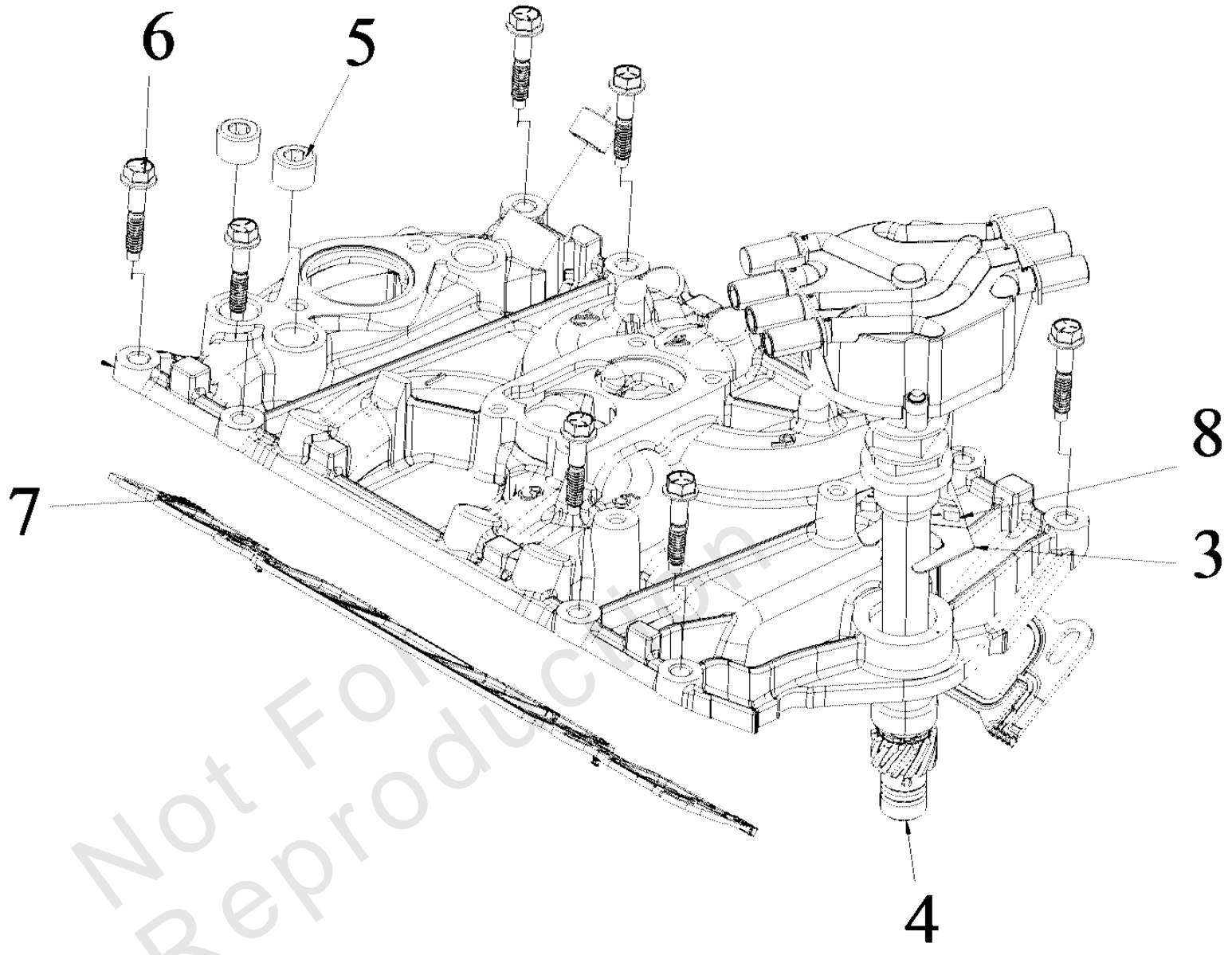
**Footnotes:**

Note:\* Speak to your authorized Briggs & Stratton dealer. For dealers, speak to Briggs & Stratton Technical Support.

**Engine Group - Intake Manifold & Distributor**

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 076331-04



## Engine Group - Intake Manifold & Distributor

| REF NO | PART NO  | QTY | DESCRIPTION                                |
|--------|----------|-----|--|
| 3      | 770920   | 1   | YOLK, DIST ALGMT                           |
| 4      | 770921   | 1   | DISTRIBUTOR                                |
| 5      | -----    | 3   | PLUG, 1/2" NPT<br>-(*See footnote)         |
| 6      | -----    | 8   | *BOLT, INTAKE MANIFOLD<br>-(*See footnote) |
| 7      | 80024753 | 2   | GASKET, INTAKE MANIFOLD                    |
| 8      | 80024754 | 1   | MANIFOLD, INTAKE                           |

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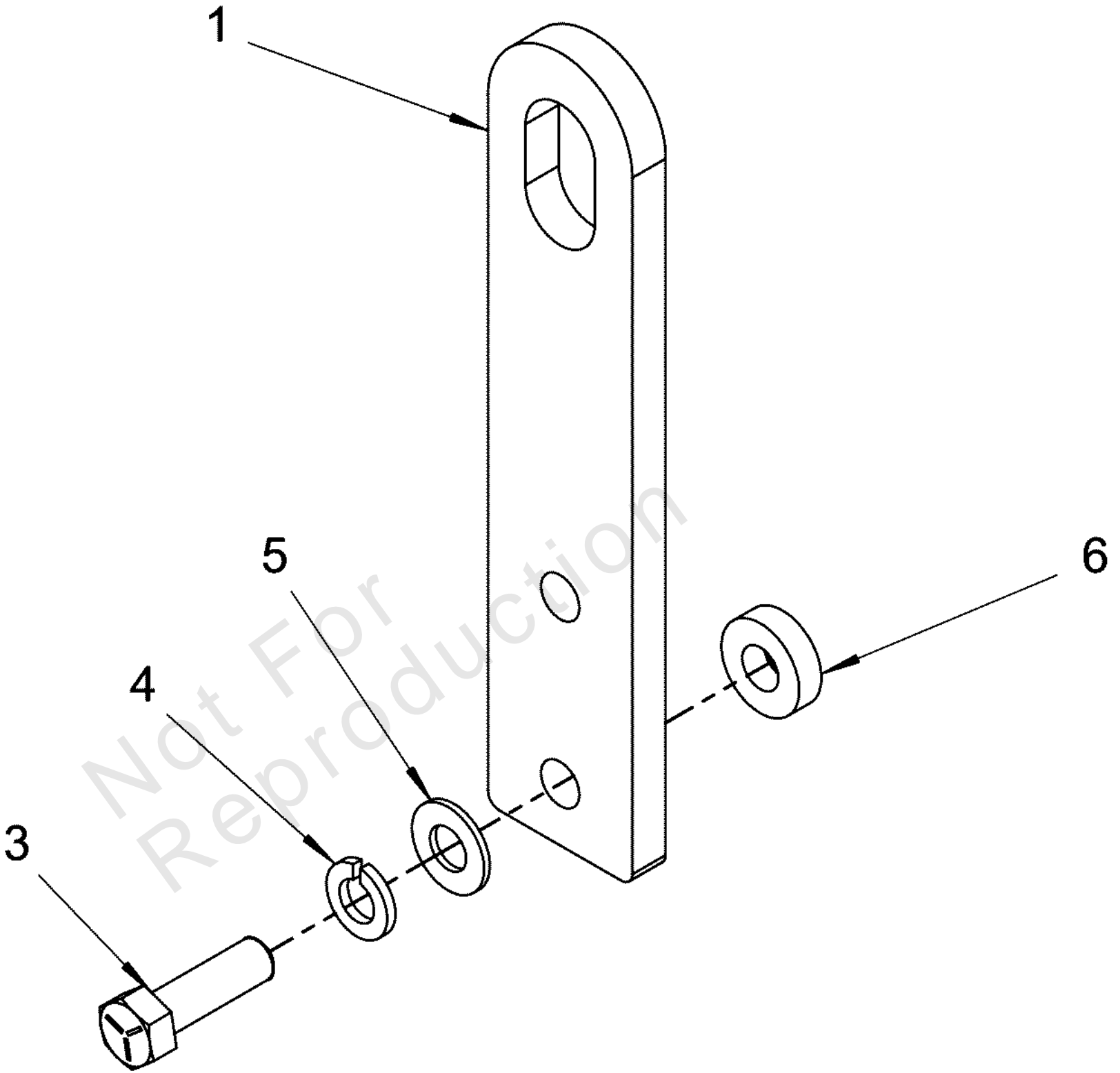
**Footnotes:**

Note:\* Speak to your authorized Briggs & Stratton dealer. For dealers, speak to Briggs & Stratton Technical Support.

**Engine Group - Lift Eye & Belt**

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 076331-04



## Engine Group - Lift Eye & Belt

| REF NO | PART NO | QTY | DESCRIPTION                            |
|--------|---------|-----|--|
| 1      | -----   | 1   | LIFTING EYE<br>-(*See footnote)        |
| 2      | 770038  |     | BELT, ALTERNATOR<br>-(Not Illustrated) |
| 3      | -----   | 1   | BOLT<br>-(*See footnote)               |
| 4      | -----   | 1   | WASHER, LOCK<br>-(*See footnote)       |
| 5      | -----   | 1   | WASHER, FLAT<br>-(*See footnote)       |
| 6      | -----   | 1   | WASHER<br>-(*See footnote)             |

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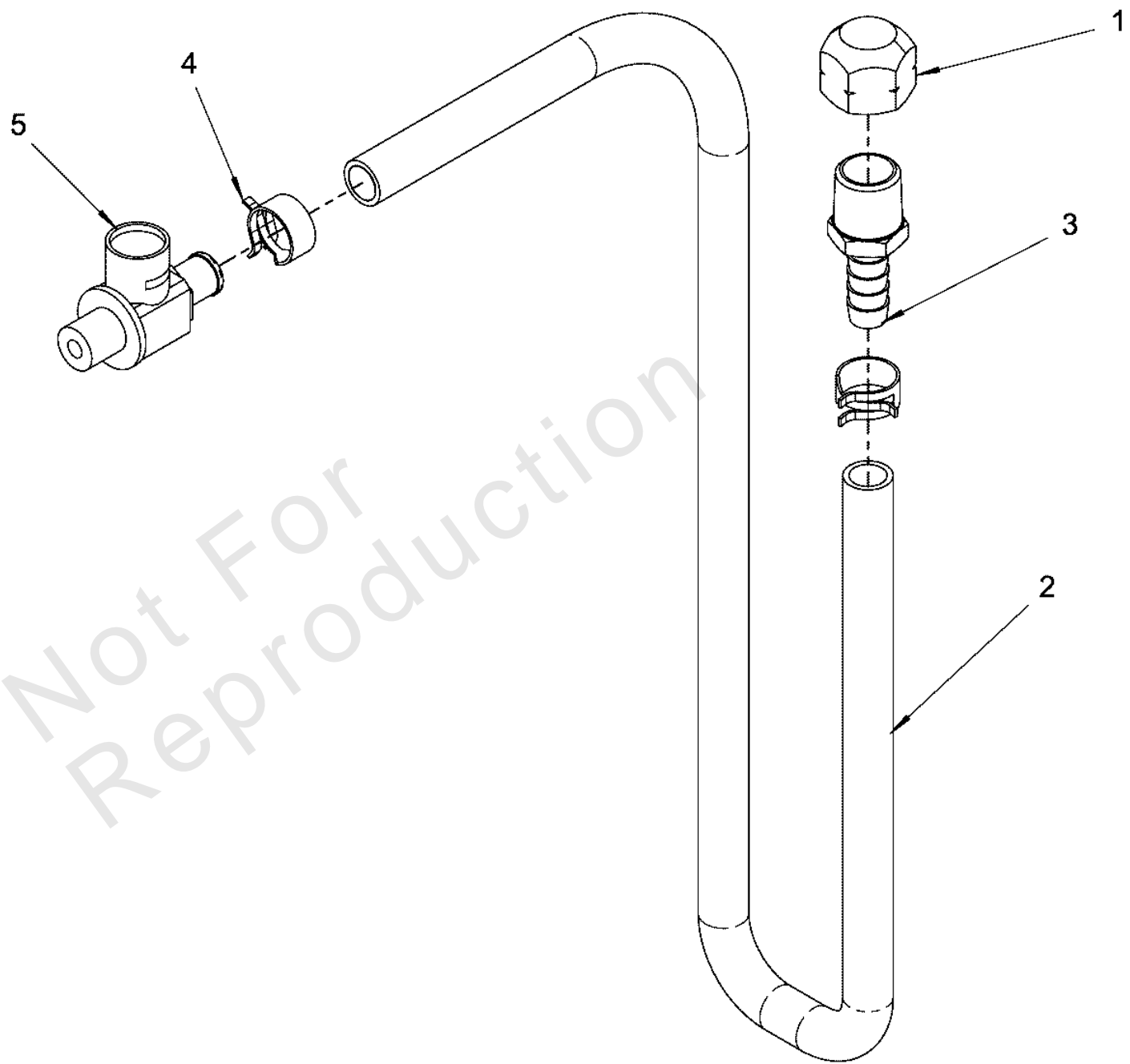
**Footnotes:**

Note:\* Speak to your authorized Briggs & Stratton dealer. For dealers, speak to Briggs & Stratton Technical Support.

# Engine Group - Oil Drain

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 076331-04





## Engine Group - Oil Drain

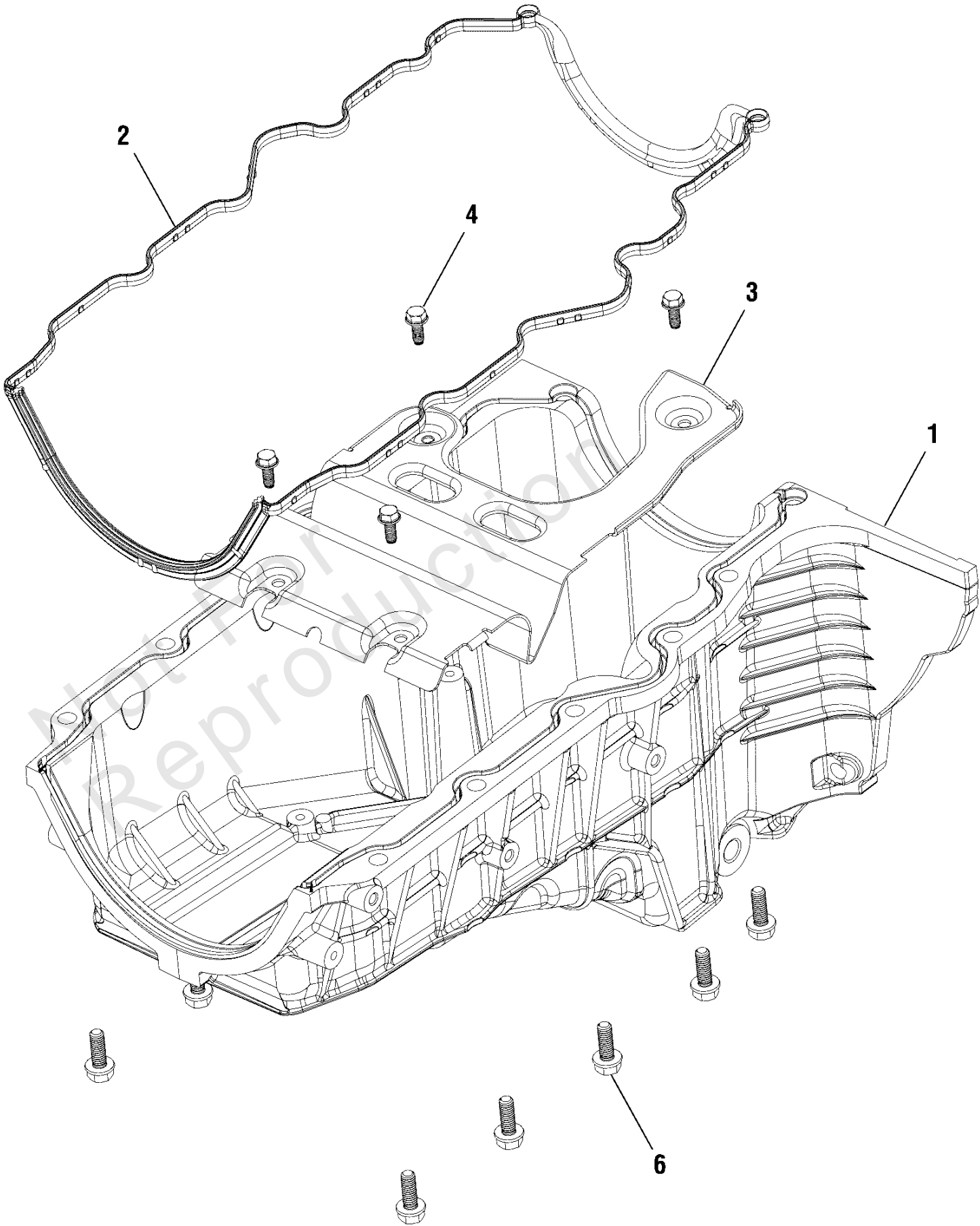
| REF NO | PART NO  | QTY | DESCRIPTION        |
|--------|----------|-----|--------------------|
| 1      | -----    | 1   | CAP                |
| 2      | 708980   | 1   | HOSE, FUEL, 22"    |
| 3      | -----    | 1   | FITTING            |
| 4      | 708982   | 2   | CLAMP              |
| 5      | 708994   | 1   | VALVE, OIL DRAIN   |
| --     | 80024758 | 1   | OIL DRAIN ASSEMBLY |

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**Engine Group - Oil Pan**

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 076331-04



## Engine Group - Oil Pan

| REF NO | PART NO  | QTY | DESCRIPTION                          |
|--------|----------|-----|--------------------------------------|
| 1      | 80024749 | 1   | PAN, OIL                             |
| 2      | 770926   | 1   | SEAL, OIL PAN                        |
| 3      | -----    | 1   | *BAFFLE, OIL PAN<br>-(*See footnote) |
| 4      | -----    | 4   | *BOLT<br>-(*See footnote)            |
| 6      | -----    | 10  | *BOLT<br>-(*See footnote)            |

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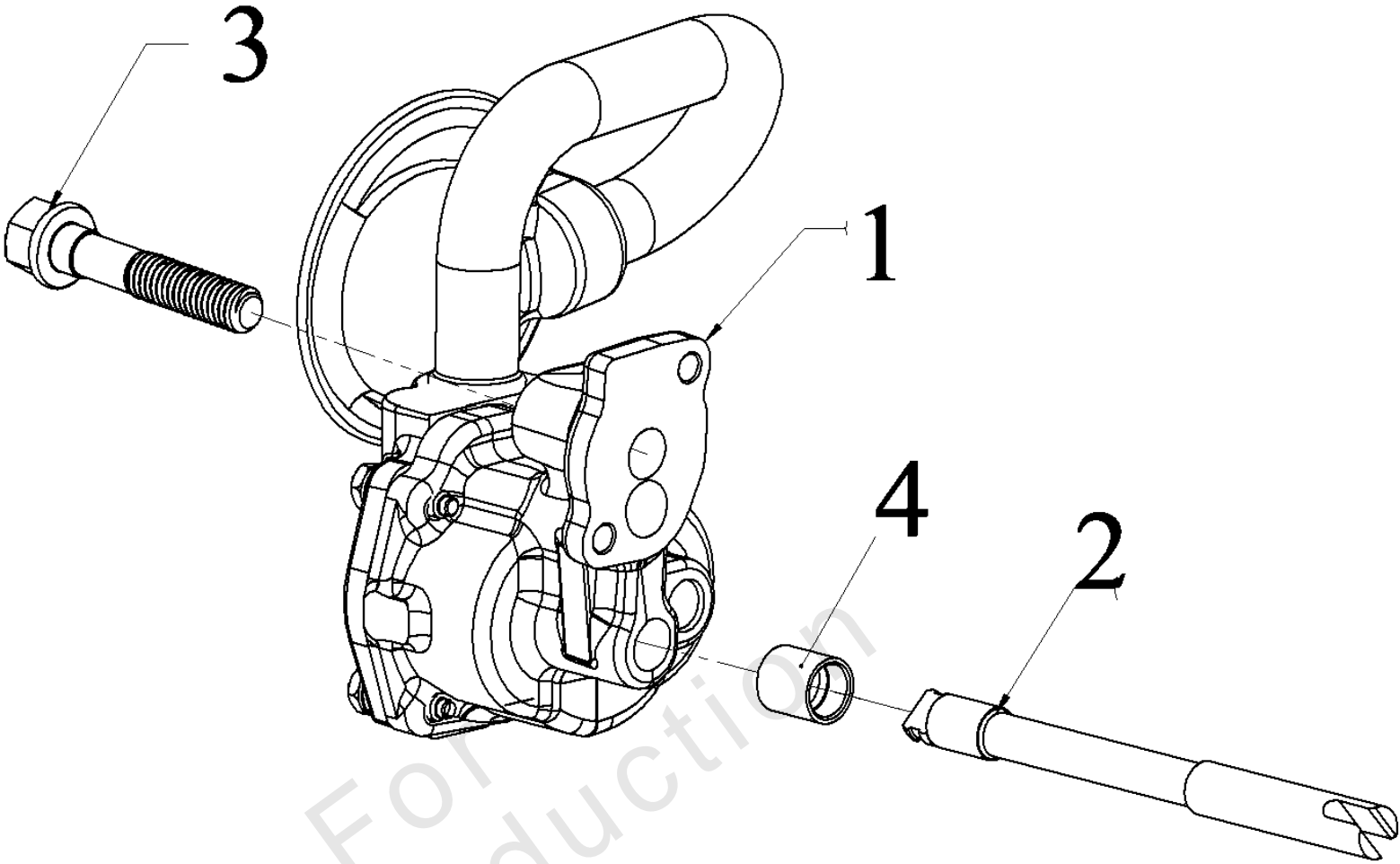
**Footnotes:**

Note:\* Speak to your authorized Briggs & Stratton dealer. For dealers, speak to Briggs & Stratton Technical Support.

**Engine Group - Oil Pump**

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 076331-04



## Engine Group - Oil Pump

| REF NO | PART NO | QTY | DESCRIPTION                                   |
|--------|---------|-----|---|
| 1      | 770924  | 1   | PUMP, OIL                                     |
| 2      | -----   | 1   | *SHAFT, OIL PUMP DRIVE<br>-(*See footnote)    |
| 3      | -----   | 1   | *BOLT, OIL PUMP<br>-(*See footnote)           |
| 4      | -----   | 1   | *RETAINER, OIL PUMP SHAFT<br>-(*See footnote) |

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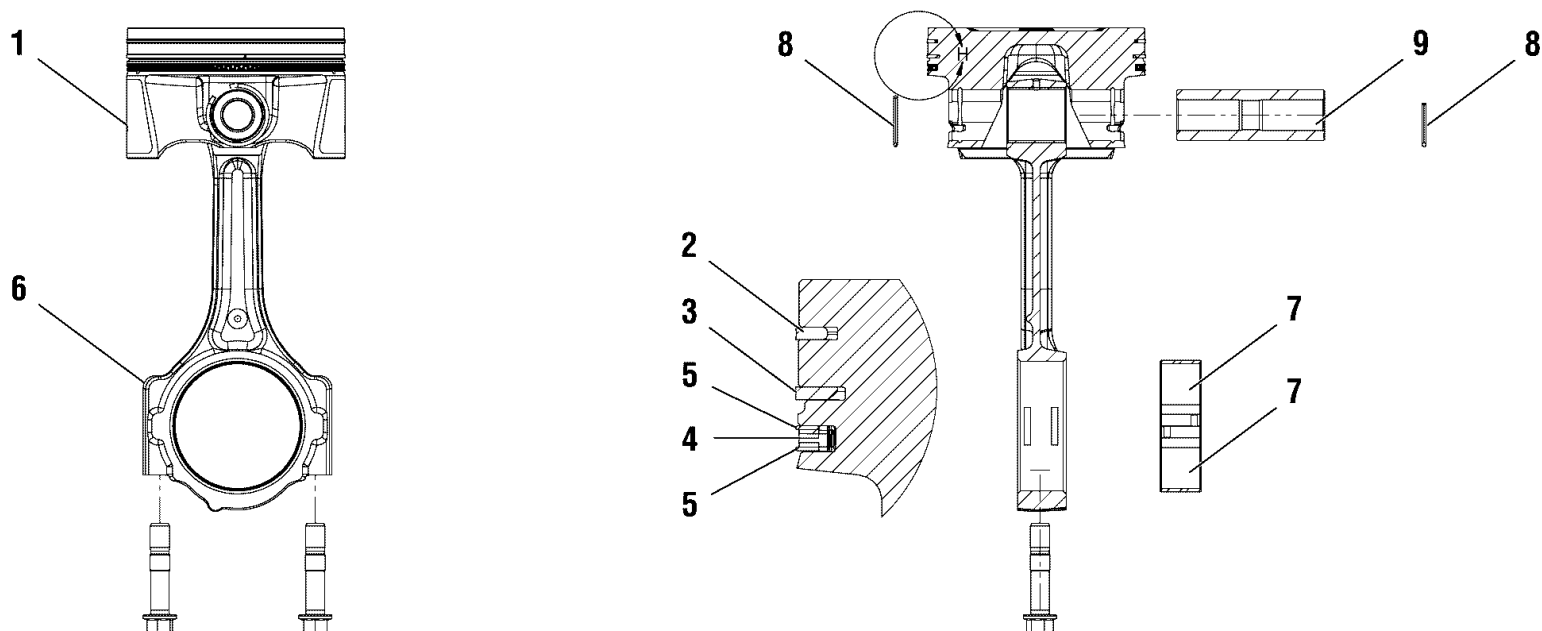
**Footnotes:**

Note:\* Speak to your authorized Briggs & Stratton dealer. For dealers, speak to Briggs & Stratton Technical Support.

# Engine Group - Piston & Connecting Rod

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 076331-04



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## Engine Group - Piston & Connecting Rod

| REF NO | PART NO | QTY | DESCRIPTION                             |
|--------|---------|-----|---|
| 1      | -----   | 6   | *PISTON<br>-(*See footnote)             |
| 2      | -----   | 1   | *SET, PISTON RING<br>-(*See footnote)   |
| 3      | -----   | 1   | *SET, PISTON RING<br>-(*See footnote)   |
| 4      | -----   | 1   | *SET, PISTON RING<br>-(*See footnote)   |
| 5      | -----   | 1   | *SET, PISTON RING<br>-(*See footnote)   |
| 6      | -----   | 6   | *ROD, CONNECTING<br>-(*See footnote)    |
| 7      | -----   | 1   | *BEARING SET, C/ROD<br>-(*See footnote) |
| 8      | -----   | 6   | *CLIP, PISTON<br>-(*See footnote)       |
| 9      | -----   | 6   | *PIN, PISTON<br>-(*See footnote)        |

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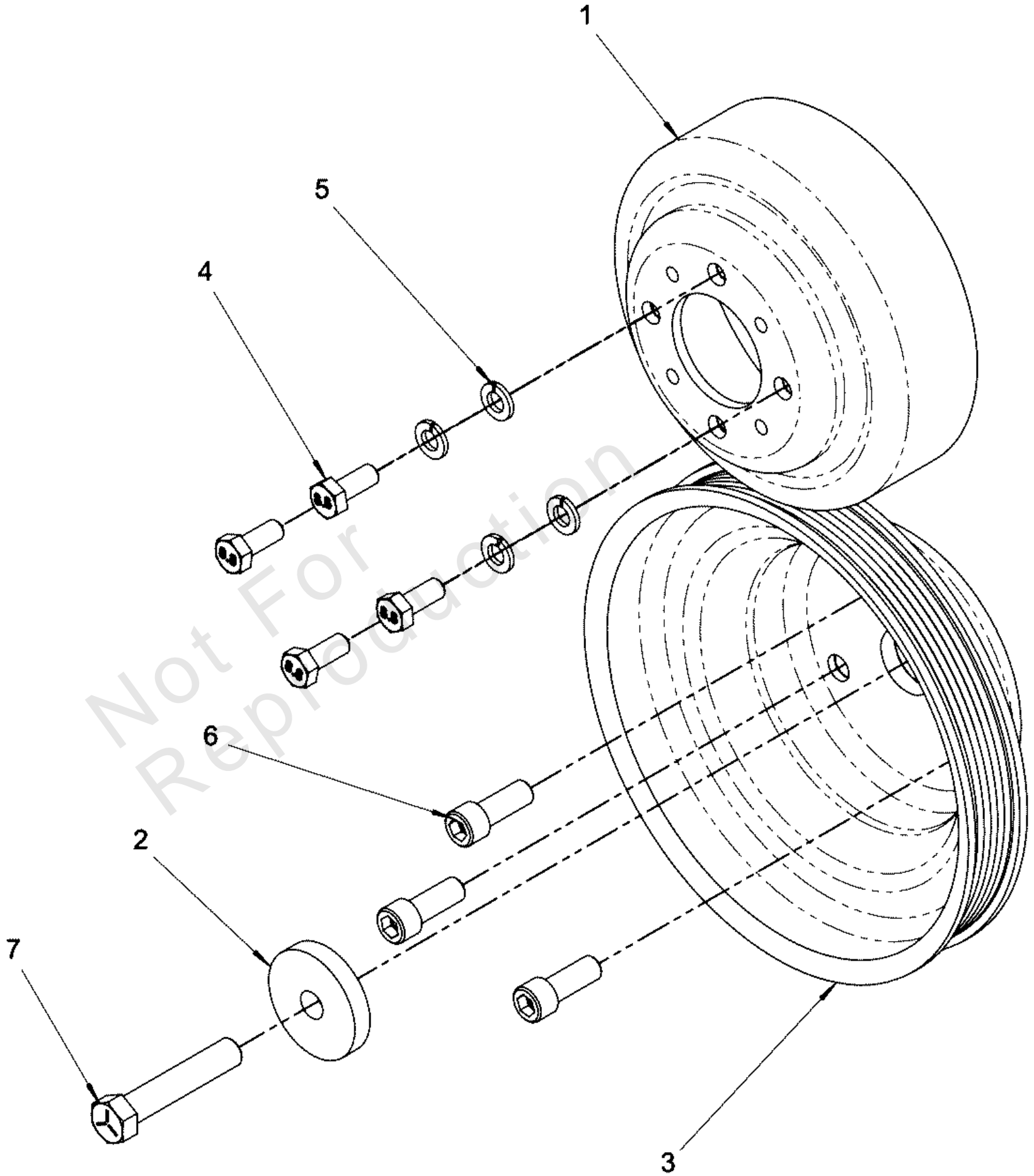
### Footnotes:

Note:\* Speak to your authorized Briggs & Stratton dealer. For dealers, speak to Briggs & Stratton Technical Support.

# Engine Group - Pulleys

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 076331-04





## Engine Group - Pulleys

| REF NO | PART NO | QTY | DESCRIPTION                         |
|--------|---------|-----|-------------------------------------|
| 1      | 708973  | 1   | PULLEY, FAN                         |
| 2      | -----   | 1   | WASHER, C/SHAFT<br>-(*See footnote) |
| 3      | 708974  | 1   | PULLEY, CRANK                       |
| 4      | -----   | 4   | BOLT<br>-(*See footnote)            |
| 5      | -----   | 4   | WASHER, LOCK<br>-(*See footnote)    |
| 6      | -----   | 3   | BOLT<br>-(*See footnote)            |
| 7      | -----   | 1   | BOLT<br>-(*See footnote)            |

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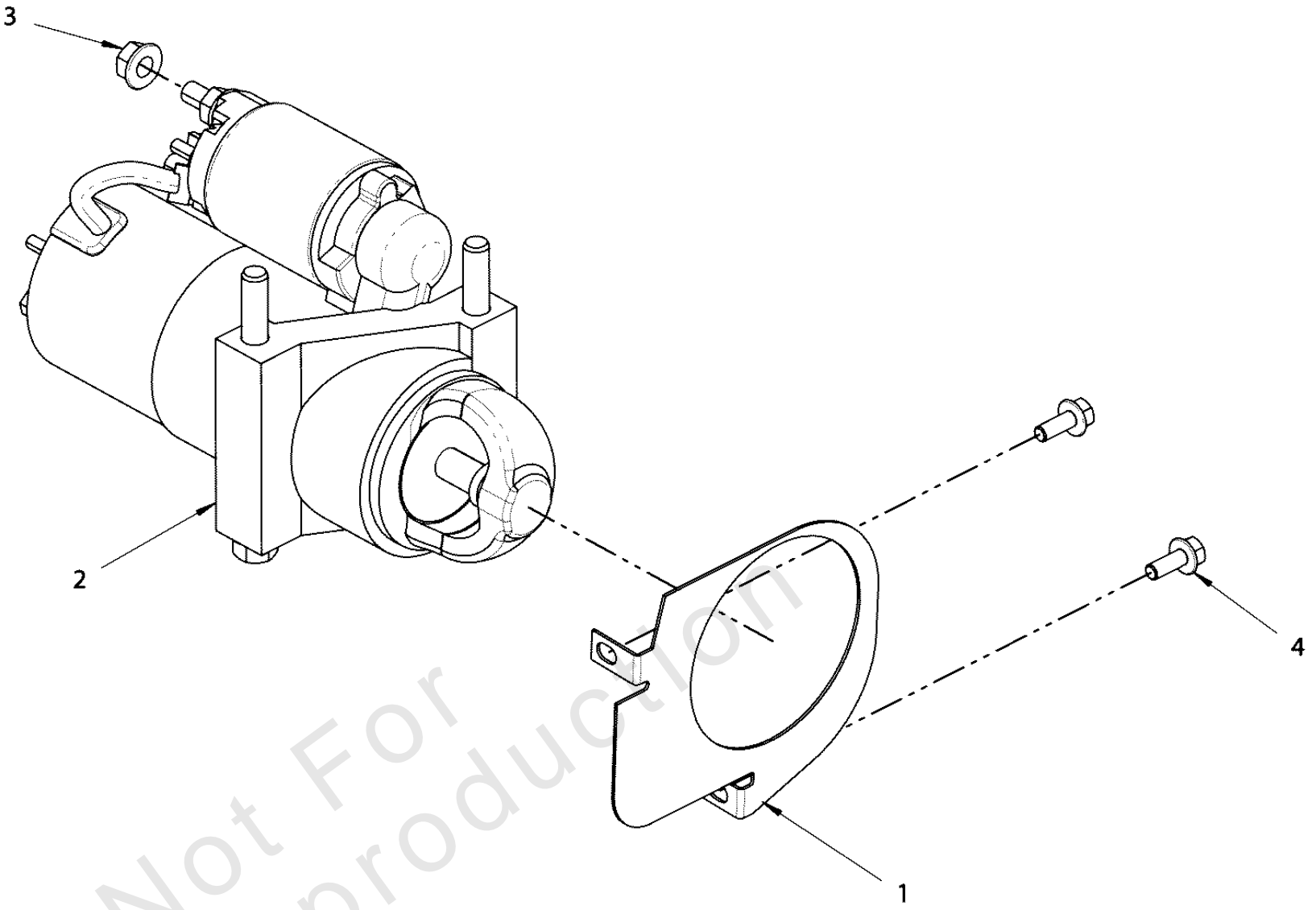
**Footnotes:**

Note:\* Speak to your authorized Briggs & Stratton dealer. For dealers, speak to Briggs & Stratton Technical Support.

# Engine Group - Starter

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 076331-04



## Engine Group - Starter

| REF NO | PART NO | QTY | DESCRIPTION                               |
|--------|---------|-----|---|
| 1      | -----   | 1   | *COVER, STARTER MOUNT<br>-(*See footnote) |
| 2      | 770939  | 1   | STARTER                                   |
| 3      | -----   | 1   | *NUT<br>-(*See footnote)                  |
| 4      | -----   | 2   | *BOLT<br>-(*See footnote)                 |

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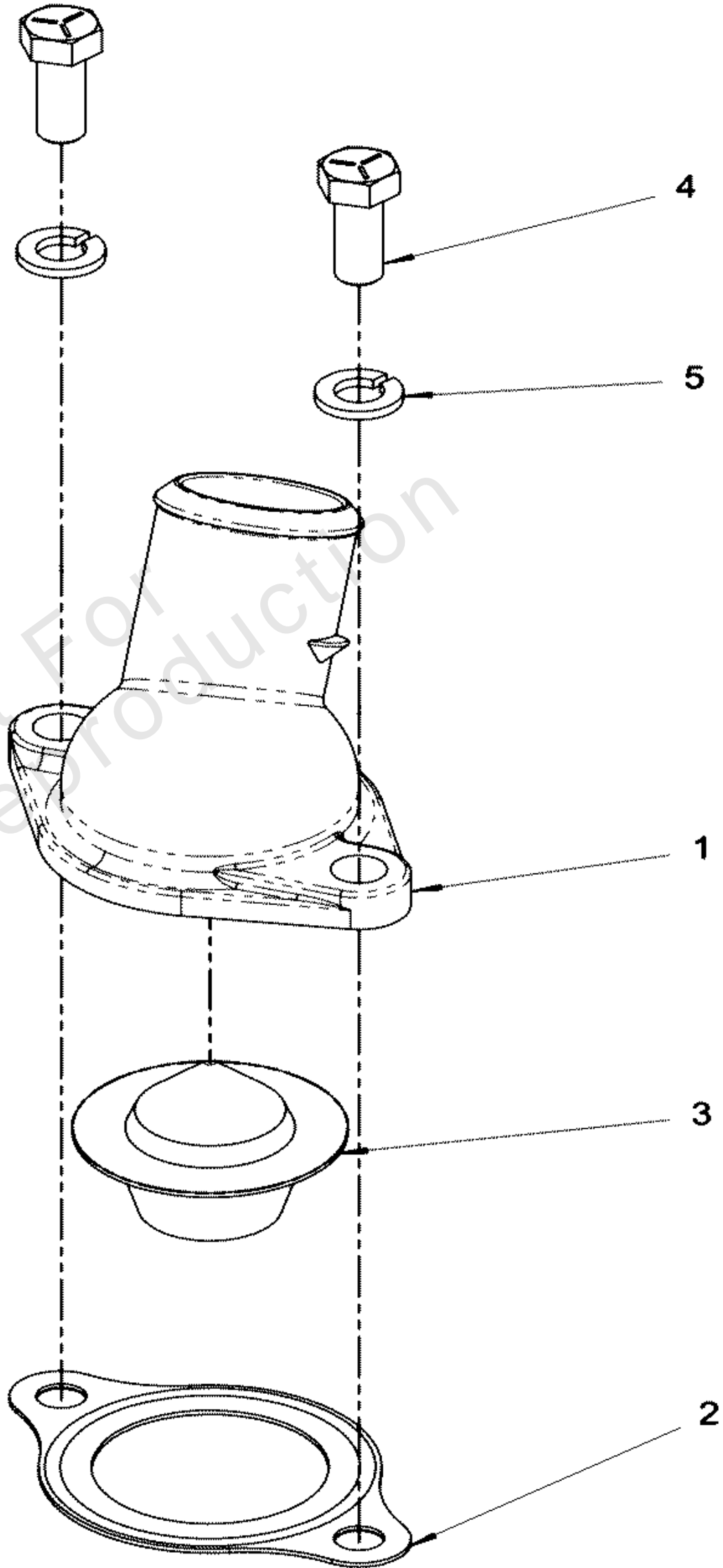
**Footnotes:**

Note:\* Speak to your authorized Briggs & Stratton dealer. For dealers, speak to Briggs & Stratton Technical Support.

**Engine Group - Thermostat**

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 076331-04



## Engine Group - Thermostat

| REF NO | PART NO  | QTY | DESCRIPTION                                       |
|--------|----------|-----|---|
| 1      | 708970   | 1   | COVER, WATER OUTLET                               |
| 2      | 708836   | 1   | GASKET, TSTAT CVR                                 |
| 3      | 708835   | 1   | THERMOSTAT  |
| 4      | -----    | 2   | *BOLT<br>-(*See footnote)                         |
| 5      | -----    | 2   | *WASHER<br>-(*See footnote)                       |
| --     | 80024762 | 1   | THERMOSTAT ASSEMBLY<br>-(Incl. Ref. Nos. 1, 2, 3) |

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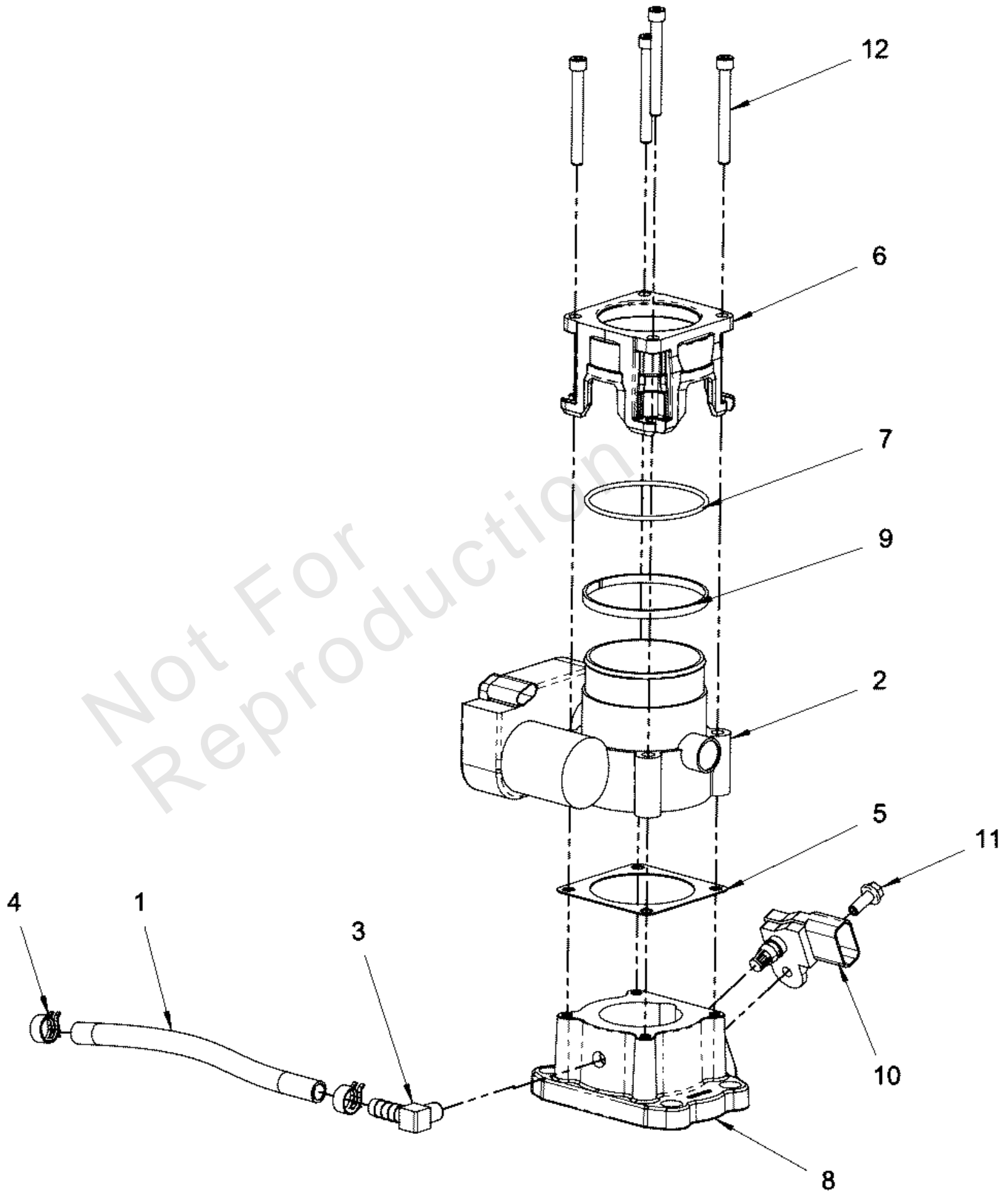
**Footnotes:**

Note:\* Speak to your authorized Briggs & Stratton dealer. For dealers, speak to Briggs & Stratton Technical Support.

# Engine Group - Throttle Body

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 076331-04



## Engine Group - Throttle Body

| REF NO | PART NO  | QTY | DESCRIPTION               |
|--------|----------|-----|---------------------------|
| 1      | 708980   | 1   | HOSE, FUEL, 22"           |
| 2      | 708981   | 1   | BODY, THROTTLE            |
| 3      | 708860   | 1   | FITTING                   |
| 4      | 708982   | 2   | CLAMP                     |
| 5      | 708984   | 1   | GSKT, MFLD/ADPTR          |
| 6      | 708987   | 1   | ADAPTER, MIXER            |
| 7      | 708990   | 1   | O-RING                    |
| 8      | 80024732 | 1   | ADAPTER, INTAKE           |
| 9      | 708992   | 1   | SPACER                    |
| 10     | 708863   | 1   | SENSOR, T MAP             |
| 11     | -----    | 1   | *BOLT<br>-(*See footnote) |
| 12     | -----    | 4   | *BOLT<br>-(*See footnote) |
| 13     | 80024759 |     | THROTTLE BODY ASSEMBLY    |

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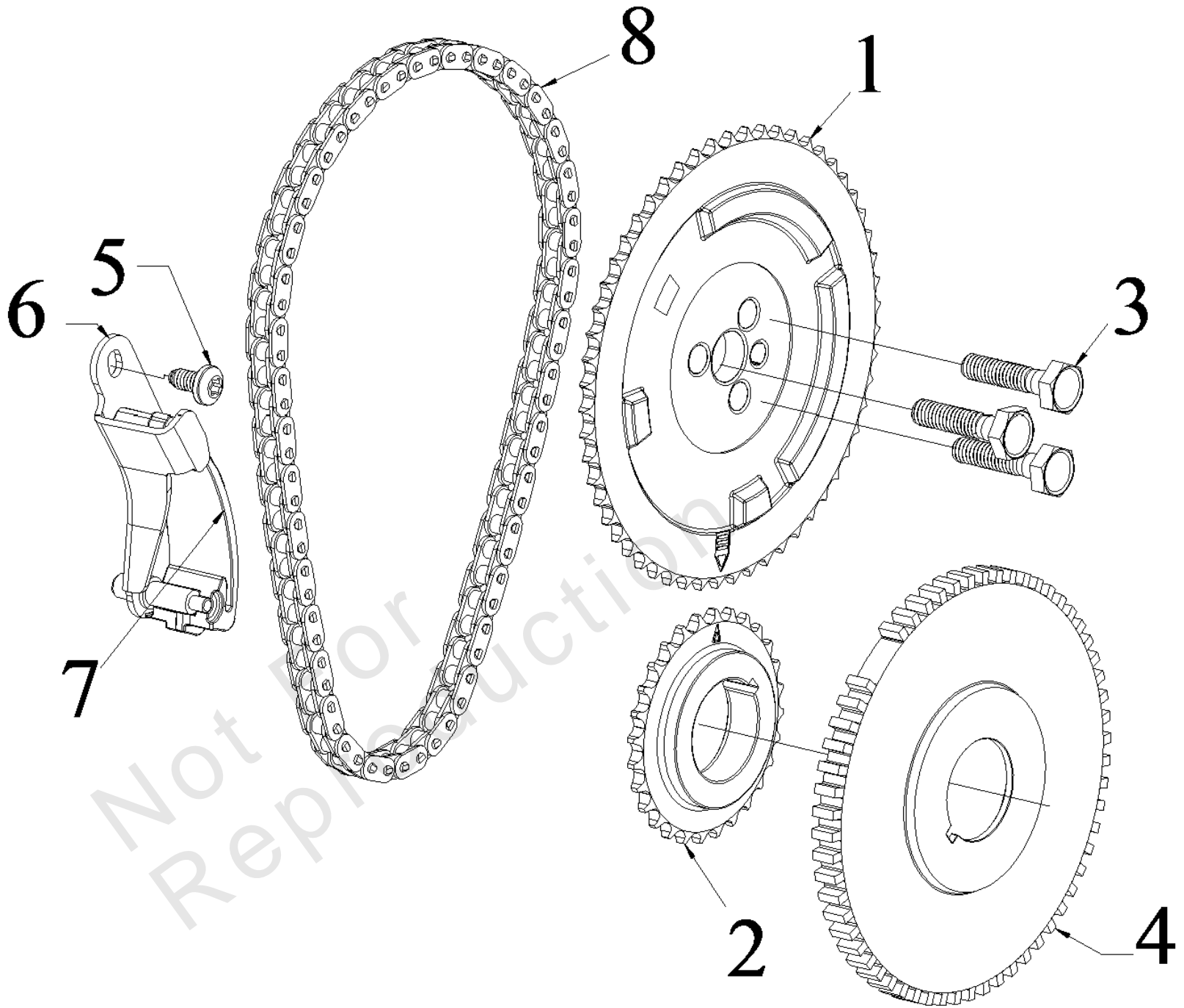
**Footnotes:**

Note:\* Speak to your authorized Briggs & Stratton dealer. For dealers, speak to Briggs & Stratton Technical Support.

# Engine Group - Timing Chain

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 076331-04





## Engine Group - Timing Chain

| REF NO | PART NO | QTY | DESCRIPTION  |
|--------|---------|-----|--|
| 1      | -----   | 1   | *KIT, TIMING CHAIN AND SPROCKETS<br>-(*See footnote) |
| 2      | -----   | 1   | *KIT, TIMING CHAIN AND SPROCKETS<br>-(*See footnote) |
| 3      | -----   | 3   | *BOLT, CAMSHAFT SPROCKET<br>-(*See footnote)         |
| 4      | -----   | 1   | *RING, CRANKSHAFT POSITIONER<br>-(*See footnote)     |
| 5      | -----   | 1   | *BOLT, BALANCER SHAFT RETAINER<br>-(*See footnote)   |
| 6      | -----   | 1   | *GUIDE, TIMING CHAIN<br>-(*See footnote)             |
| 7      | -----   | 1   | *GUIDE, TIMING CHAIN<br>-(*See footnote)             |
| 8      | -----   | 1   | *KIT, TIMING CHAIN AND SPROCKETS<br>-(*See footnote) |

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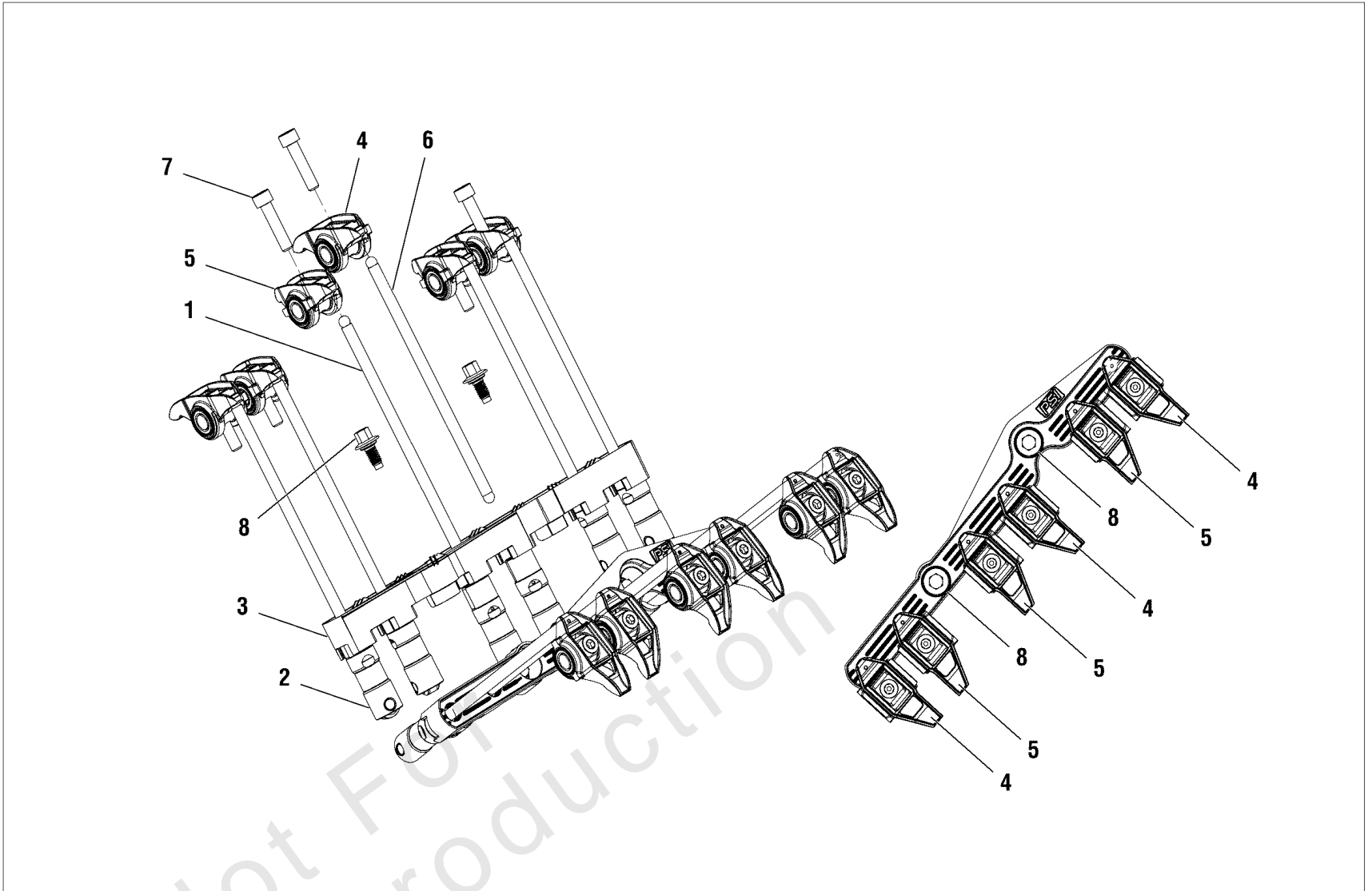
### Footnotes:

Note:\* Speak to your authorized Briggs & Stratton dealer. For dealers, speak to Briggs & Stratton Technical Support.

# Engine Group - Valve Actuation

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 076331-04



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## Engine Group - Valve Actuation

| REF NO | PART NO | QTY | DESCRIPTION                              |
|--------|---------|-----|--|
| 1      | -----   | 6   | *PUSH ROD (INTAKE)<br>-(*See footnote)   |
| 2      | -----   | 12  | *LIFTER<br>-(*See footnote)              |
| 3      | -----   | 2   | *LIFTER, BUCKET<br>-(*See footnote)      |
| 4      | -----   | 6   | *ROCKER ARM ASSEMBLY<br>-(*See footnote) |
| 5      | -----   | 6   | *ROCKER ARM<br>-(*See footnote)          |
| 6      | -----   | 6   | *PUSH ROD (EXHAUST)<br>-(*See footnote)  |
| 7      | -----   | 12  | *BOLT, ROCKER ARM<br>-(*See footnote)    |
| 8      | -----   | 4   | *BOLT, LIFTER BUCKET<br>-(*See footnote) |

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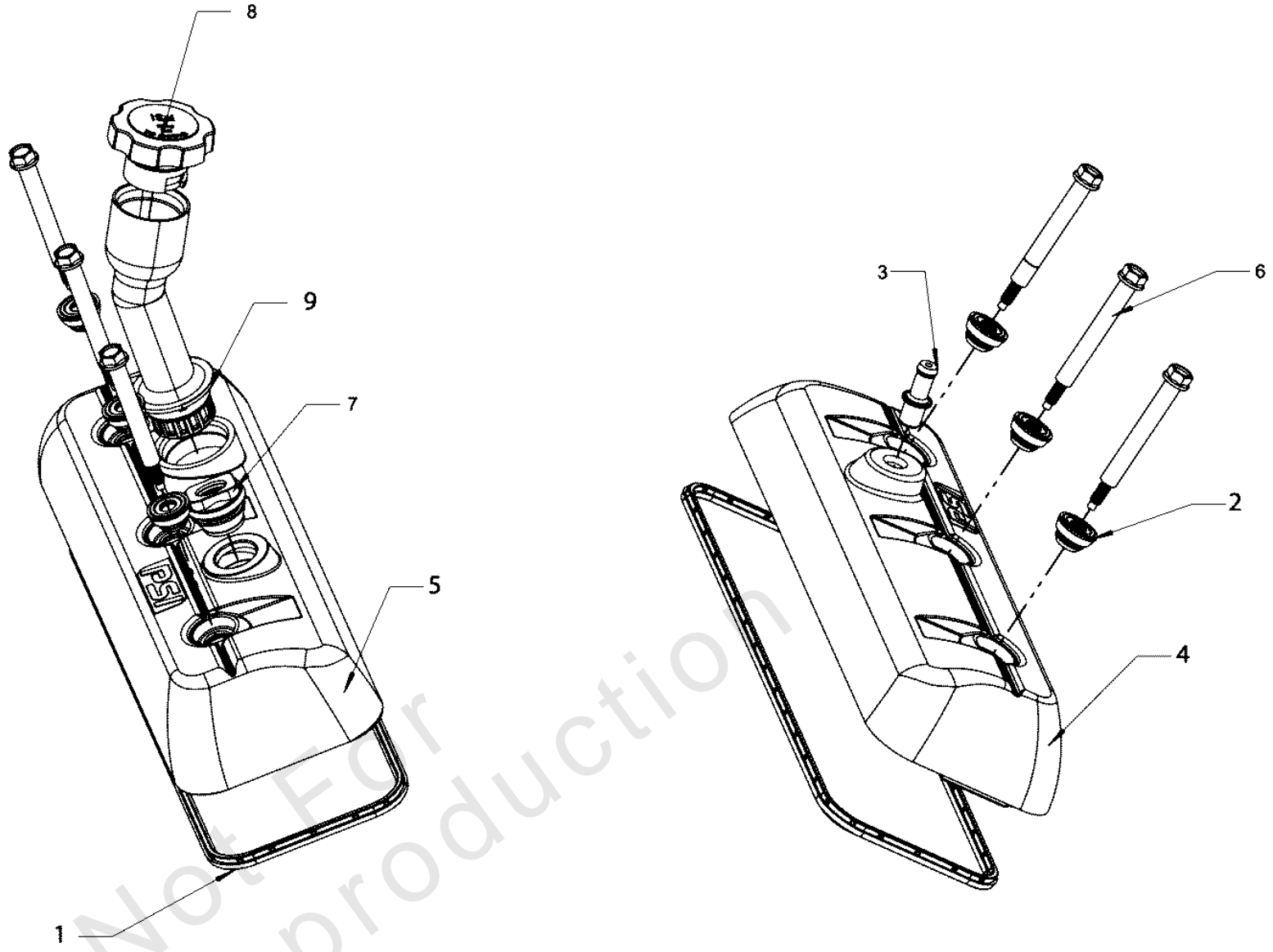
### Footnotes:

Note:\* Speak to your authorized Briggs & Stratton dealer. For dealers, speak to Briggs & Stratton Technical Support.

# Engine Group - Valve Cover

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 076331-04



## Engine Group - Valve Cover

| REF NO | PART NO  | QTY | DESCRIPTION                           |
|--------|----------|-----|---------------------------------------|
| 1      | 770907   | 2   | GASKET, VALVE COVER                   |
| 2      | 80024685 | 6   | GROMMET                               |
| 3      | 770909   | 1   | PCV                                   |
| 4      | 80024687 | 1   | VALVE COVER                           |
| 5      | 80024688 | 1   | VALVE COVER - OIL FILL                |
| 6      | -----    | 6   | BOLT, VALVE COVER<br>-(*See footnote) |
| 7      | 80024689 | 1   | GROMMET                               |
| 8      | 770857   | 1   | OIL CAP                               |
| 9      | 80024691 | 1   | PIPE                                  |

Not For  
Reproduction

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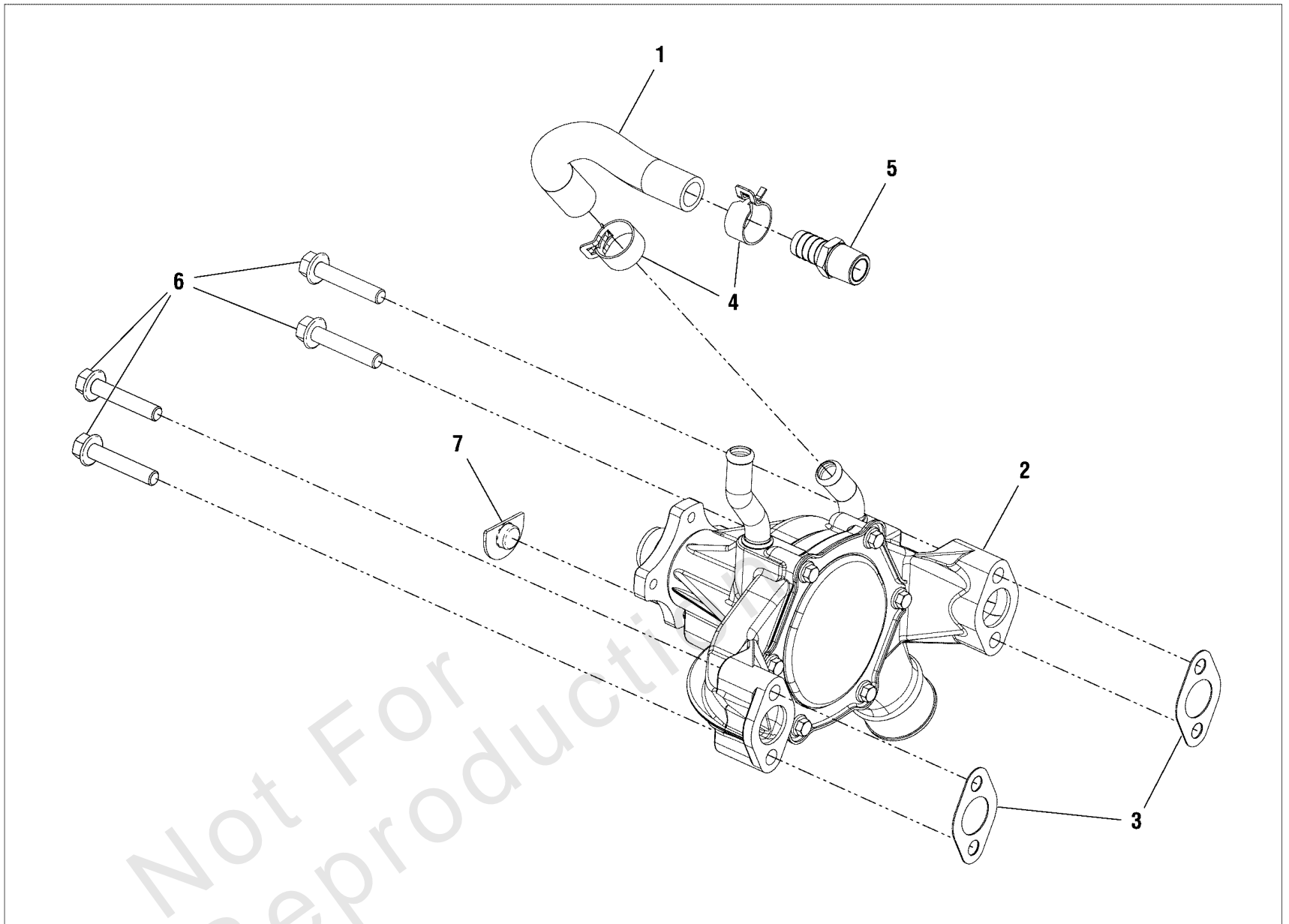
**Footnotes:**

Note:\* Speak to your authorized Briggs & Stratton dealer. For dealers, speak to Briggs & Stratton Technical Support.

# Engine Group - Water Pump

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 076331-04



## Engine Group - Water Pump

| REF NO | PART NO  | QTY | DESCRIPTION                        |
|--------|----------|-----|------------------------------------|
| 1      | 770932   | 1   | HOSE, W/PUMP                       |
| 2      | 770933   | 1   | PUMP, WATER                        |
| 3      | 770934   | 2   | GASKET, WATER PUMP                 |
| 4      | 708983   | 2   | CLAMP, HOSE                        |
| 5      | -----    | 1   | *FITTING, BARB<br>-(*See footnote) |
| 6      | -----    | 4   | *BOLT<br>-(*See footnote)          |
| 7      | -----    | 1   | *SEAL<br>-(*See footnote)          |
| --     | 80024763 | 1   | WATER PUMP ASSEMBLY                |

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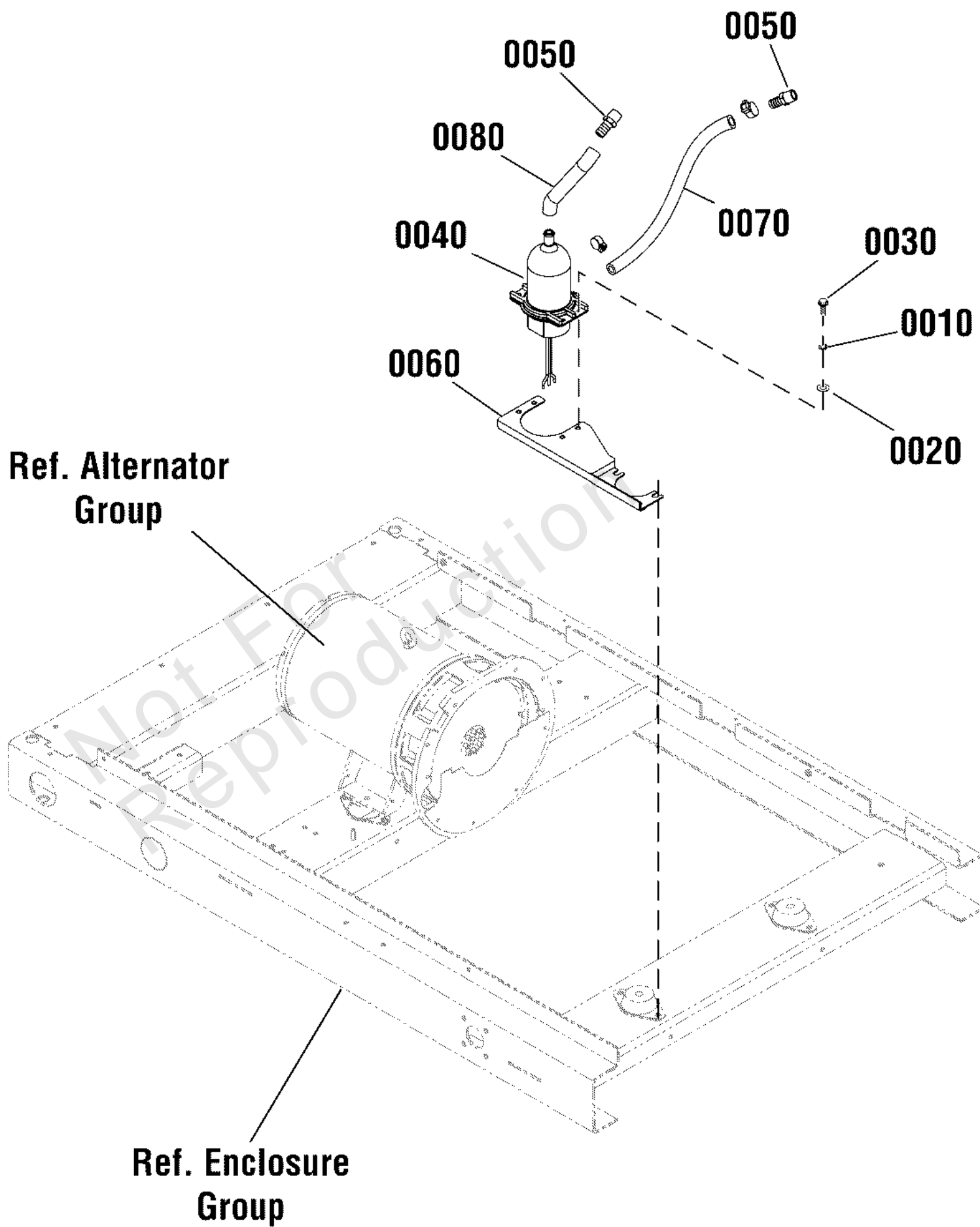
**Footnotes:**

Note:\* Speak to your authorized Briggs & Stratton dealer. For dealers, speak to Briggs & Stratton Technical Support.

# Heater Group

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 076331-04





## Heater Group

| REF NO | PART NO | QTY | DESCRIPTION  |
|--------|---------|-----|--|
| 0010   | -----   | 4   | * WASHER, Lock, 1/4<br>-(*See footnote)                |
| 0020   | -----   | 4   | * WASHER, 1/4<br>-(*See footnote)                      |
| 0030   | -----   | 4   | * CAPSCREW, Hex Head, 1/4-20 x 3/4<br>-(*See footnote) |
| 0040   | 708798  | 1   | HEATER, 120V   |
| 0050   | -----   | 2   | BARB, 5/8", 1/2" MNPT<br>-(Not a serviceable part)     |
| 0060   | 770680  | 1   | BRACKET, Heater  |
| 0070   | 770504  | 1   | HOSE, Heater, 5/8" x 19.5"                             |
| 0080   | 770505  | 1   | HOSE, Heater, 5/8" x 6.5"                              |

Not For  
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**Footnotes:**

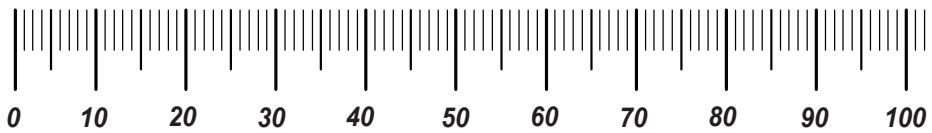
\* Items without part numbers are common fasteners. Purchase locally.

# Hardware Identification & Torque Specifications

| Torque Specification Chart                             |           |      |           |      |            |      |            |      |
|--|-----------|------|-----------|------|------------|------|------------|------|
| FOR STANDARD METRIC MACHINE HARDWARE (Tolerance ± 20%) |           |      |           |      |            |      |            |      |
| Property Class   | 5.6       |      | 8.8       |      | 10.9       |      | 12.9       |      |
|  | Class 5.6 |      | Class 8.8 |      | Class 10.9 |      | Class 12.9 |      |
| Size Of Hardware                                       | in/lbs    | Nm.  | in/lbs    | Nm.  | in/lbs     | Nm.  | in/lbs     | Nm.  |
|  | ft/lbs    |      | ft/lbs    |      | ft/lbs     |      | ft/lbs     |      |
| M3   | 5.88      | .56  | 13.44     | 1.28 | 19.2       | 1.80 | 22.92      | 2.15 |
| M4   | 13.44     | 1.28 | 30.72     | 2.90 | 43.44      | 4.10 | 52.56      | 4.95 |
| M5   | 26.4      | 2.50 | 60.96     | 5.75 | 5.97       | 8.10 | 7.15       | 9.7  |
| M6   | 44.64     | 4.3  | 7.3       | 9.9  | 10.3       | 14   | 12.1       | 16.5 |
| M7   | 5.2       | 7.1  | 12.1      | 16.5 | 16.9       | 23   | 19.9       | 27   |
| M8   | 7.7       | 10.5 | 17.7      | 24   | 25         | 34   | 29         | 40   |
| M10  | 15        | 21   | 35        | 48   | 50         | 67   | 59         | 81   |
| M12  | 26        | 36   | 61        | 83   | 86.2       | 117  | 103        | 140  |
| M14  | 42        | 58   | 101       | 132  | 136        | 185  | 162        | 220  |
| M16  | 64        | 88   | 147       | 200  | 210        | 285  | 250        | 340  |
| M18  | 89        | 121  | 202       | 275  | 287        | 390  | 346        | 470  |
| M20  | 126       | 171  | 290       | 390  | 405        | 550  | 486        | 660  |
| M22  | 169       | 230  | 390       | 530  | 559        | 745  | 656        | 890  |
| M24  | 217       | 295  | 497       | 375  | 708        | 960  | 840        | 1140 |
| M27  | 320       | 435  | 733       | 995  | 1032       | 1400 | 1239       | 1680 |
| M30  | 435       | 590  | 995       | 1350 | 1401       | 1900 | 1681       | 2280 |
| M33  | 590       | 800  | 1349      | 1830 | 1902       | 2580 | 2278       | 3090 |
| M36  | 759       | 1030 | 1740      | 2360 | 2441       | 3310 | 2935       | 3980 |
| M39  | 988       | 1340 | 2249      | 3050 | 3163       | 4290 | 3798       | 5150 |

| Torque Specification Chart                      |             |       |             |       |             |         |
|---|-------------|-------|-------------|-------|-------------|---------|
| FOR STANDARD MACHINE HARDWARE (Tolerance ± 20%) |             |       |             |       |             |         |
| Hardware Grade                                  | No Marks    |       | SAE Grade 5 |       | SAE Grade 8 |         |
|   | SAE Grade 2 |       | SAE Grade 5 |       | SAE Grade 8 |         |
| Size Of Hardware                                | in/lbs      | Nm.   | in/lbs      | Nm.   | in/lbs      | Nm.     |
|   | ft/lbs      |       | ft/lbs      |       | ft/lbs      |         |
| 8-32  | 19          | 2.1   | 30          | 3.4   | 41          | 4.6     |
| 8-36  | 20          | 2.3   | 31          | 3.5   | 43          | 4.9     |
| 10-24   | 27          | 3.1   | 43          | 4.9   | 60          | 6.8     |
| 10-32   | 31          | 3.5   | 49          | 5.5   | 68          | 7.7     |
| 1/4-20  | 66          | 7.6   | 8           | 10.9  | 12          | 16.3    |
| 1/4-28  | 76          | 8.6   | 10          | 13.6  | 14          | 19.0    |
| 5/16-18   | 11          | 15.0  | 17          | 23.1  | 25          | 34.0    |
| 5/16-24   | 12          | 16.3  | 19          | 25.8  | 29          | 34.0    |
| 3/8-16  | 20          | 27.2  | 30          | 40.8  | 45          | 61.2    |
| 3/8-24  | 23          | 31.3  | 35          | 47.6  | 50          | 68.0    |
| 7/16-14   | 30          | 40.8  | 50          | 68.0  | 70          | 95.2    |
| 7/16-20   | 35          | 47.6  | 55          | 74.8  | 80          | 108.8   |
| 1/2-13  | 50          | 68.0  | 75          | 102.0 | 110         | 149.6   |
| 1/2-20  | 55          | 74.8  | 90          | 122.4 | 120         | 163.2   |
| 9/16-12   | 65          | 88.4  | 110         | 149.6 | 150         | 204.0   |
| 9/16-18   | 75          | 102.0 | 120         | 163.2 | 170         | 231.2   |
| 5/8-11  | 90          | 122.4 | 150         | 204.0 | 220         | 299.2   |
| 5/8-18  | 100         | 136   | 180         | 244.8 | 240         | 326.4   |
| 3/4-10  | 160         | 217.6 | 260         | 353.6 | 386         | 525.0   |
| 3/4-16  | 180         | 244.8 | 300         | 408.0 | 420         | 571.2   |
| 7/8-9   | 140         | 190.4 | 400         | 544.0 | 600         | 816.0   |
| 7/8-14  | 155         | 210.8 | 440         | 598.4 | 660         | 897.6   |
| 1-8   | 220         | 299.2 | 580         | 788.8 | 900         | 1,244.0 |
| 1-12  | 240         | 326.4 | 640         | 870.4 | 1,000       | 1,360.0 |

The guides and ruler furnished below are designed to help you select the appropriate hardware.

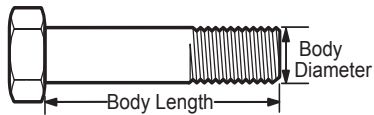


Nut, M8

Thread Diameter (mm)

Inside Diameter (in)      Threads per inch

Nut, 1/2-16

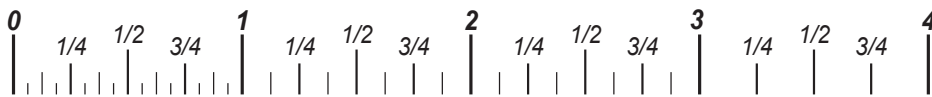


Screw, M8- 1.25 x 25

Thread Diameter (mm)      Distance between threads (mm)      Body Length (mm)

Body Diameter      Threads per inch      Body Length (in)

Screw, 1/2- 16 x 2



## Standard Hardware Sizing

When a washer or nut is identified as 1/2" (M8), this is the *Nominal size*, meaning the *inside diameter* is 1/2 inch (8mm metric thread diameter); if a second number is present it represents the *threads per inch* (distance between threads).

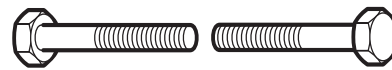
When bolt or capscrew is identified as 1/2 - 16 x 2" (M8 - 1.25 x 50), this means the *Nominal size*, or body diameter is 1/2 inch (8mm metric thread diameter), the second number, 16, represents the *threads per inch*, (*distance between threads*). The final number is the body length of the bolt or screw, 2 inches (50mm).

## NOTES

- These torque values are to be used for all hardware excluding: locknuts, self-tapping screws, thread forming screws, sheet metal screws and socket head setscrews.
- Recommended seating torque values for locknuts:
  - for prevailing torque locknuts - use 65% of grade 5 torques.
  - for flange whizlock nuts and screws - use 135% of grade 5 torques.
- Unless otherwise noted on assembly drawings, all torque values must meet this specification.

## Common Hardware Types

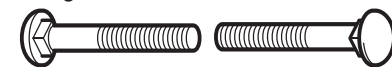
Hex Head Capscrew



Washer



Carriage Bolt



Hex Nut

## Wrench & Fastener Size Guide

|                                  |                                  |                                  |  |                                 |
|----------------------------------|----------------------------------|----------------------------------|--|---------------------------------|
|                                  |                                  |                                  |  |                                 |
| 1/4" Bolt or Nut<br>Wrench—7/16" | 5/16" Bolt or Nut<br>Wrench—1/2" | 3/8" Bolt or Nut<br>Wrench—9/16" | 7/16" Bolt or Nut<br>Wrench (Bolt)—5/8"<br>Wrench (Nut)—11/16" | 1/2" Bolt or Nut<br>Wrench—3/4" |
| M6 Bolt or Nut<br>Wrench—10mm    | M8 Bolt or Nut<br>Wrench—13mm    | M10 Bolt or Nut<br>Wrench—17mm   | M12 Bolt or Nut<br>Wrench—19mm                                 | M14 Bolt or Nut<br>Wrench—22mm  |

