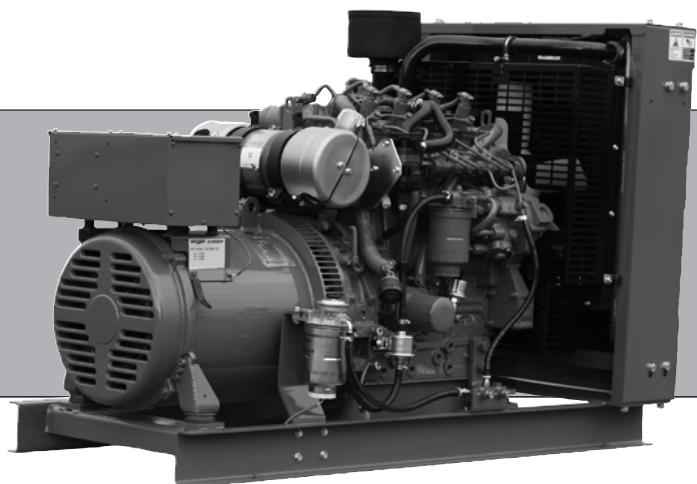




PARTS MANUAL

P844-4

For Model: NL844T4E



www.northern-lights.com



— CALIFORNIA —
Proposition 65 Warning:

Diesel engine exhaust and some of its constituents are known to the State of California to cause cancer, birth defects, and other reproductive harm.

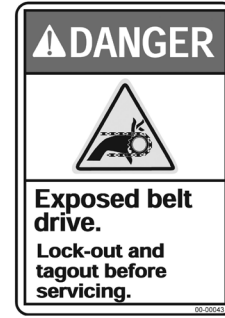


As of 2011, U.S. EPA regulations require the application of a permanently applied label near the fuel tank fill port for diesel driven equipment. This label is to state:

ULTRA LOW SULFUR FUEL ONLY

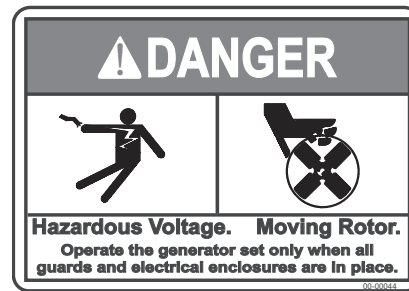
Northern Lights is providing this label for application to the fuel inlet of the fuel supply tank for each engine or generator set. This is to be applied by the installer of the engine or gen set, or by the manufacturer of the equipment that the engine or gen set is installed in. The location of the label must be in clear site of personnel that refill the supply tank.

Safety Labels



00-00041 & 00-00043

Located on Radiator Enclosure Side Panels



00-00044

Located on Generator J-Box Top Panel

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PART NO.: P844-4 6/20



PARTS CATALOG

for Model
NL844T4E

Please read thoroughly before attempting to use this manual:

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Proprietary Information

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Model Designation

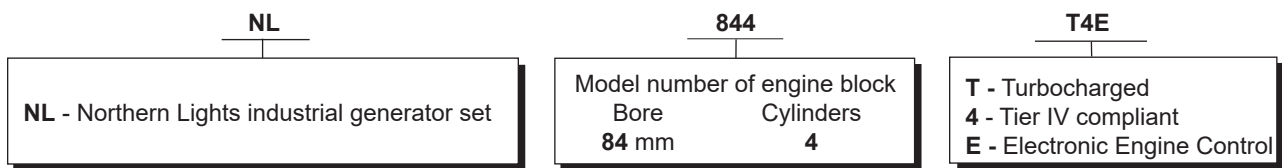
MODELS INCLUDED

This manual covers the operating instructions for:

NL844T4E

Model Numbers

Model numbers give the unit's application, block model, aspiration, and RPM:

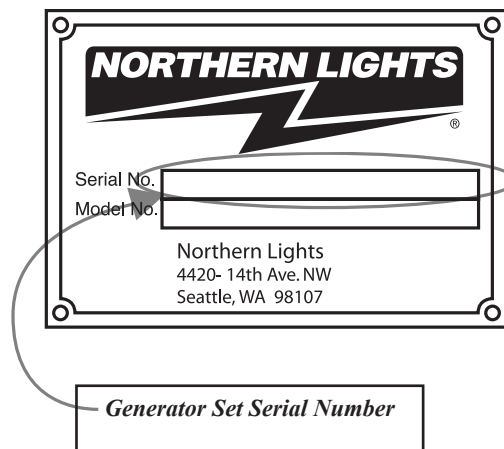


NL844T4E = Northern Lights industrial diesel generator set with an 844 Turbocharged Engine, Tier IV compliant with Electronic Engine Control

Serial Numbers

NORTHERN LIGHTS

Your set has three serial numbers: ① an engine number stamped on the block, ② a generator plate, and ③ a generator set plate. Use the serial number on the **generator set plate** when ordering parts or in correspondence. The generator set plate is found on the service side of the generator and resembles the drawing below.



Reading a Parts Page

IMPORTANT:

Before selecting parts, be sure that you are choosing parts from the correct page. Check the model designation at the page top. Do not use this illustration for parts purchasing.

| KEY | PART NUMBER | QTY. | DESCRIPTION | SERIALNUMBER |
|-----|-------------|------|---------------------|--------------|
| 0 | 185046210 | 1 | Alternator Assembly | - |
| 1 | 185446219 | 1 | Flywheel, complete | - |
| 2 | 185446217 | 1 | Plate, complete | - |
| 3 | 185716200 | 1 | Plate | - |
| 4 | 185446218 | 1 | Stator, complete | - |
| 5 | 040126210 | 2 | Bearing | - |
| 6 | 020210010 | 1 | Nut | - |
| 7 | 027100010 | 1 | Spring washer | - |
| 8 | 026100010 | 1 | Washer | - |
| 9 | 185446220 | 1 | Clamp | - |
| 10 | 015140408 | 1 | Screw | - |
| 11 | 015140425 | 2 | Screw | - |
| 12 | 199236510 | 1 | Collar | - |

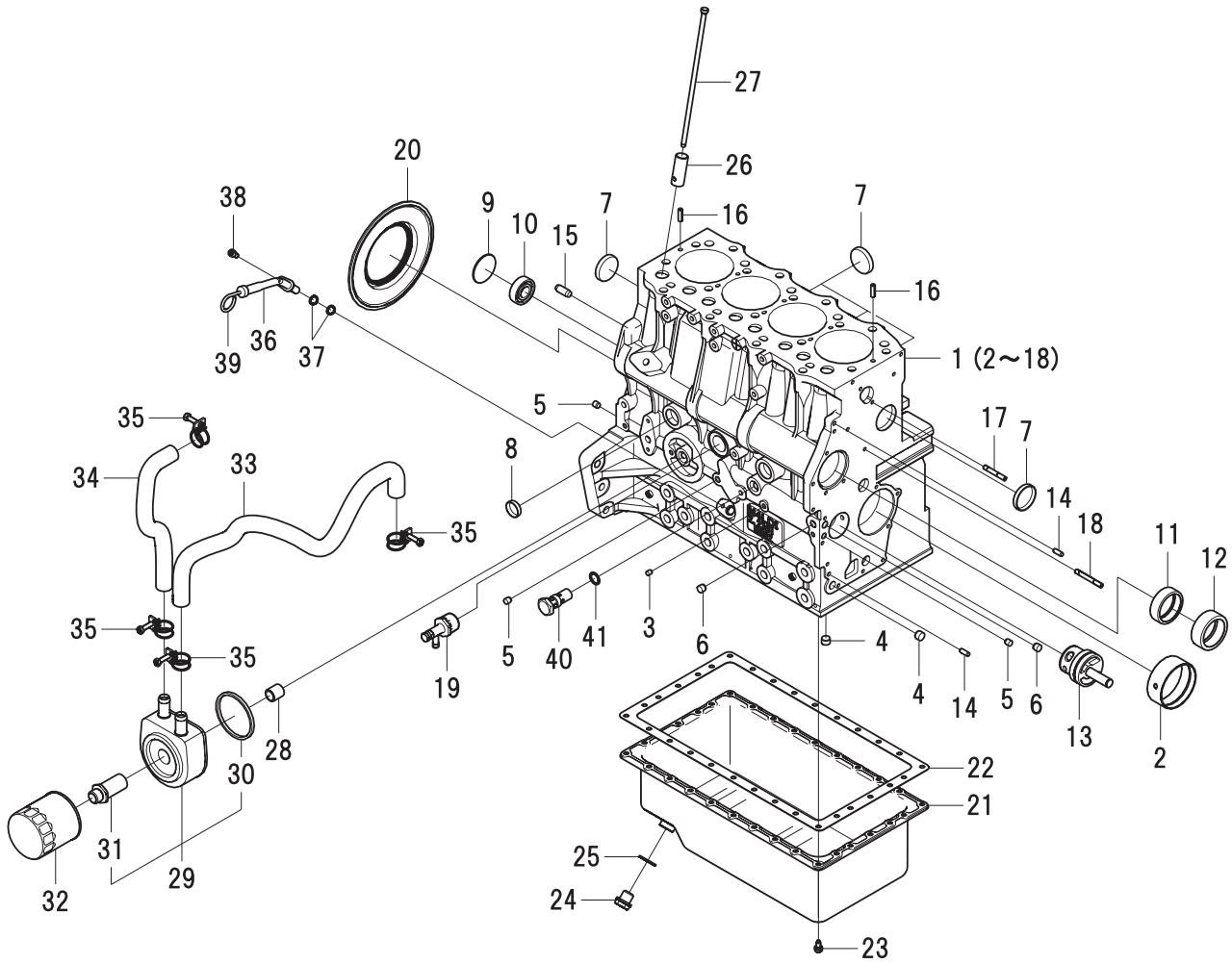
13 — P843-2 11/05 — 14
11 — 5-2 — 12

REFERENCES:

- | | |
|--|--|
| <ol style="list-style-type: none"> 1. Grouping section title. 2. Model designation of equipment that uses parts listed on this page. 3. Title and description of assembly. 4. Drawing numbers that correspond to key column numbers for parts identification. 5. Key column for locating parts shown on drawing. 6. Part number. | <ol style="list-style-type: none"> 7. Quantity of parts used. 8. Description of each component part. 9. Serial number of unit the part fits. 10. Assembly or kit designated by Key 0 or ••/•. 11. Grouping index number. 12. Page number within the grouping index. 13. Manual title. 14. Page publication date. |
|--|--|

NOTE: ⇨ Arrows always point toward the front of the engine.

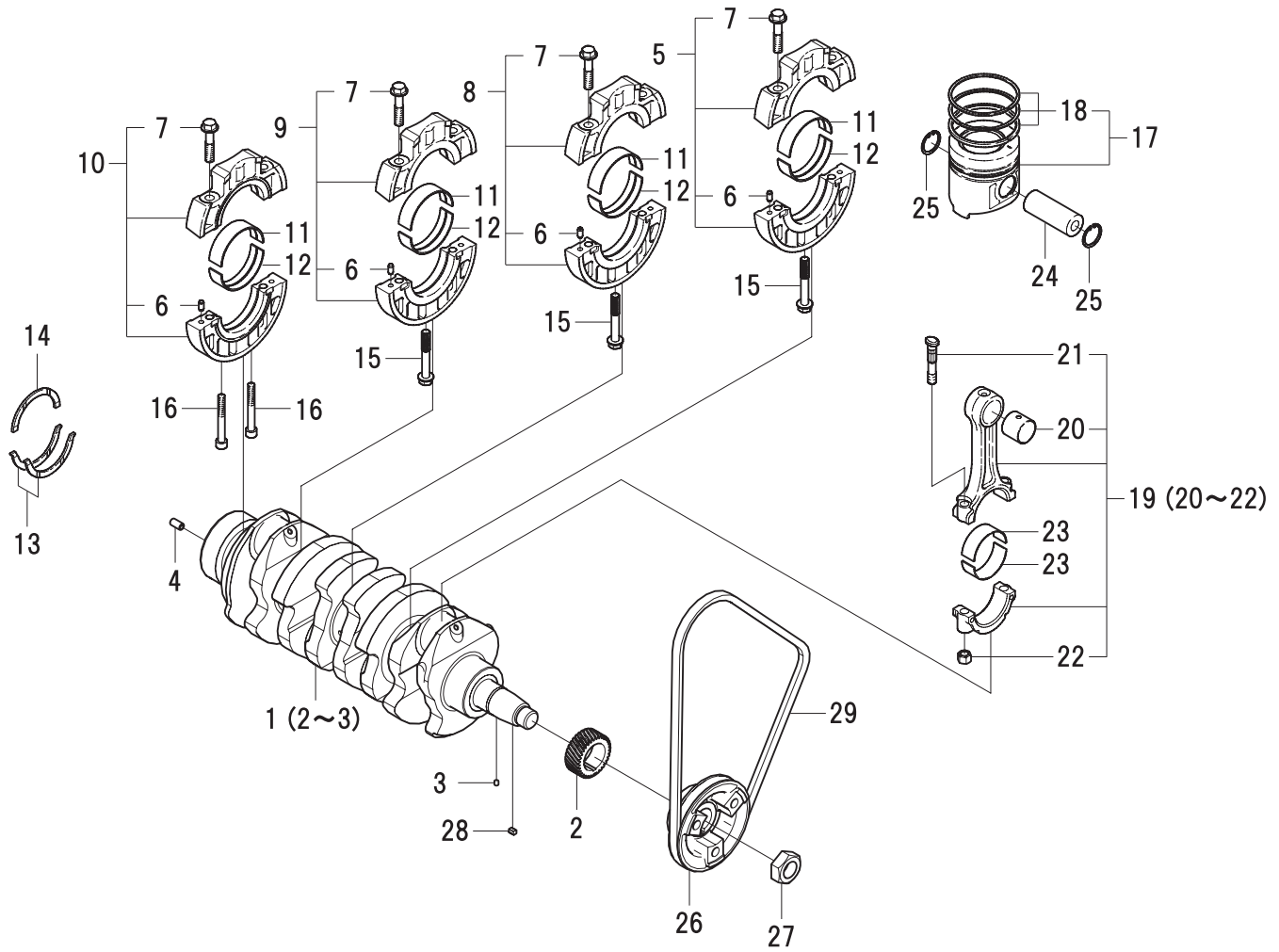
Cylinder Block and Oil Pan



Cylinder Block and Oil Pan

| KEY | PART NUMBER | QTY | DESCRIPTION | SERIAL NUMBER |
|-----|-------------|-----|--------------------------|---------------|
| 1 | 110102150 | 1 | Cylinder Block | - |
| 2 | 198517222 | 1 | Bushing: Std | - |
| 3 | 198466030 | 4 | Blank Plug | - |
| 4 | 198466920 | 2 | Blank Plug | - |
| 5 | 198466010 | 3 | Plug | - |
| 6 | 198466020 | 2 | Plug | - |
| 7 | 064209055 | 5 | Sealing Cap | - |
| 8 | 064210025 | 2 | Sealing Cap | - |
| 9 | 064100045 | 1 | Expansion Plug | - |
| 10 | 040106203 | 1 | Ball Bearing | - |
| 11 | 042309017 | 1 | Needle Bearing | - |
| 12 | 042309018 | 1 | Needle Bearing | - |
| 13 | 165296260 | 1 | Idler Gear Assembly | - |
| 14 | 030500616 | 2 | Dowel Pin | - |
| 15 | 030501025 | 2 | Dowel Pin | - |
| 16 | 030309005 | 2 | Spring Pin | - |
| 17 | 012110635 | 1 | Stud Bolt | - |
| 18 | 012110645 | 1 | Stud Bolt | - |
| 19 | 198736270 | 1 | Drain Cock | - |
| 20 | 050209083 | 1 | Rear Main Seal | - |
| 21 | 110701500 | 1 | Oil Pan | - |
| 22 | 110996860 | 1 | Oil Pan Gasket | - |
| 23 | 010109235 | 30 | Bolt | - |
| 24 | 010109238 | 1 | Plug M16 X 1.5 | - |
| 25 | 025100016 | 1 | Seal Washer | - |
| 26 | 120116160 | 8 | Tappet | - |
| 27 | 120456311 | 8 | Push Rod | - |
| 28 | 140546020 | 1 | Oil Filter Nipple | - |
| 29 | 140656150 | 1 | Oil Cooler | - |
| 30 | 140996390 | 1 | Gasket | - |
| 31 | 140546140 | 1 | Oil Filter Adapter Joint | - |
| 32 | 24-02002 | 1 | Oil Filter | - |
| 33 | 068209260 | 1 | Hose | - |
| 34 | 068209264 | 1 | Oil Cooler Hose | - |
| 35 | 067100023 | 4 | Hose Band | - |
| 36 | 110756070 | 1 | Dipstick Tube | - |
| 37 | 052109113 | 2 | O-Ring | - |
| 38 | 010700610 | 1 | Bolt | - |
| 39 | 198416320 | 1 | Dipstick | - |
| 40 | 140036220 | 1 | Relief Valve Assembly | - |
| 41 | 052109078 | 1 | O-Ring | - |

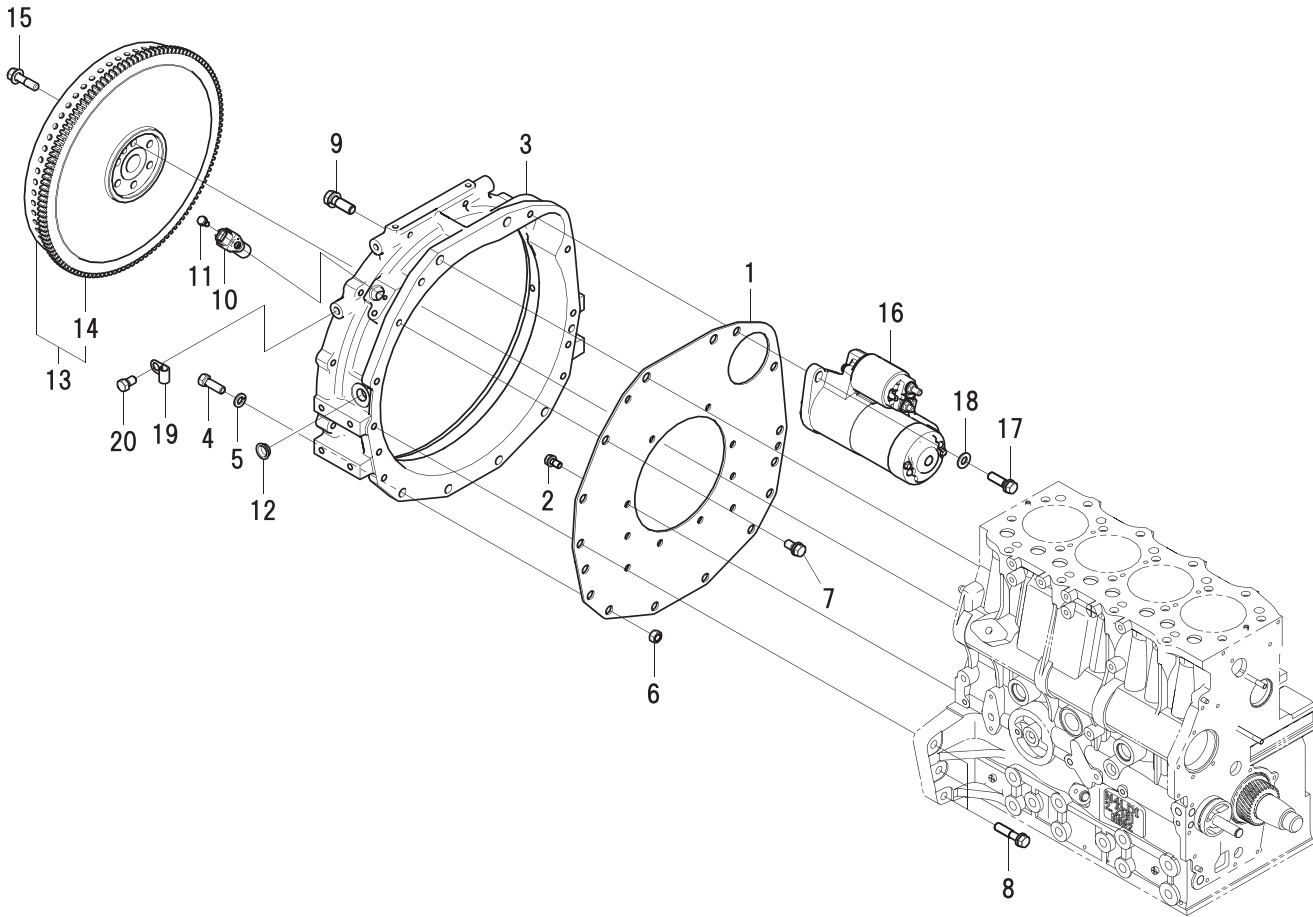
Crankshaft and Piston



Crankshaft and Piston

| KEY | PART NUMBER | QTY | DESCRIPTION | SERIAL NUMBER |
|-----|-------------|-----|--------------------------|---------------|
| 1 | 115256751 | 1 | Crankshaft | - |
| 2 | 115276270 | 1 | Crankshaft Gear | - |
| 3 | 030509020 | 1 | Dowel Pin | - |
| 4 | 030300816 | 1 | Spring Pin | - |
| 5 | 110156360 | 1 | Holder Assembly Bearing | - |
| 6 | 030500612 | 8 | Dowel Pin | - |
| 7 | 010109406 | 8 | Bolt | - |
| 8 | 110156370 | 1 | Bearing Holder Assembly | - |
| 9 | 110156380 | 1 | Bearing Holder Assembly | - |
| 10 | 110156390 | 1 | Bearing Holder Assembly | - |
| 11 | 198517232 | 4 | Bearing, Main Upper Half | - |
| 12 | 198517242 | 4 | Bearing, Main Lower Half | - |
| 13 | 199266200 | 2 | Thrust Washer | - |
| 14 | 199266210 | 1 | Thrust Washer | - |
| 15 | 010109667 | 3 | Bolt | - |
| 16 | 010700860 | 2 | Bolt | - |
| 17 | 115017810 | 4 | Piston Kit | - |
| 18 | 115104130 | 1 | Piston Ring Kit | - |
| 19 | 115026370 | 4 | Connecting Rod Assembly | - |
| 20 | 198517645 | 4 | Bush | - |
| 21 | 115176140 | 2 | Connecting Rod Bolt | - |
| 22 | 020109120 | 2 | Nut | - |
| 23 | 198517650 | 8 | Metal Pin | - |
| 24 | 115326220 | 4 | Piston Pin | - |
| 25 | 036500028 | 8 | Snap Ring | - |
| 26 | 115396870 | 1 | Crankshaft Pulley | - |
| 27 | 020109086 | 1 | Nut | - |
| 28 | 034100508 | 1 | Key | - |
| 29 | 080109156 | 1 | V-Belt | - |

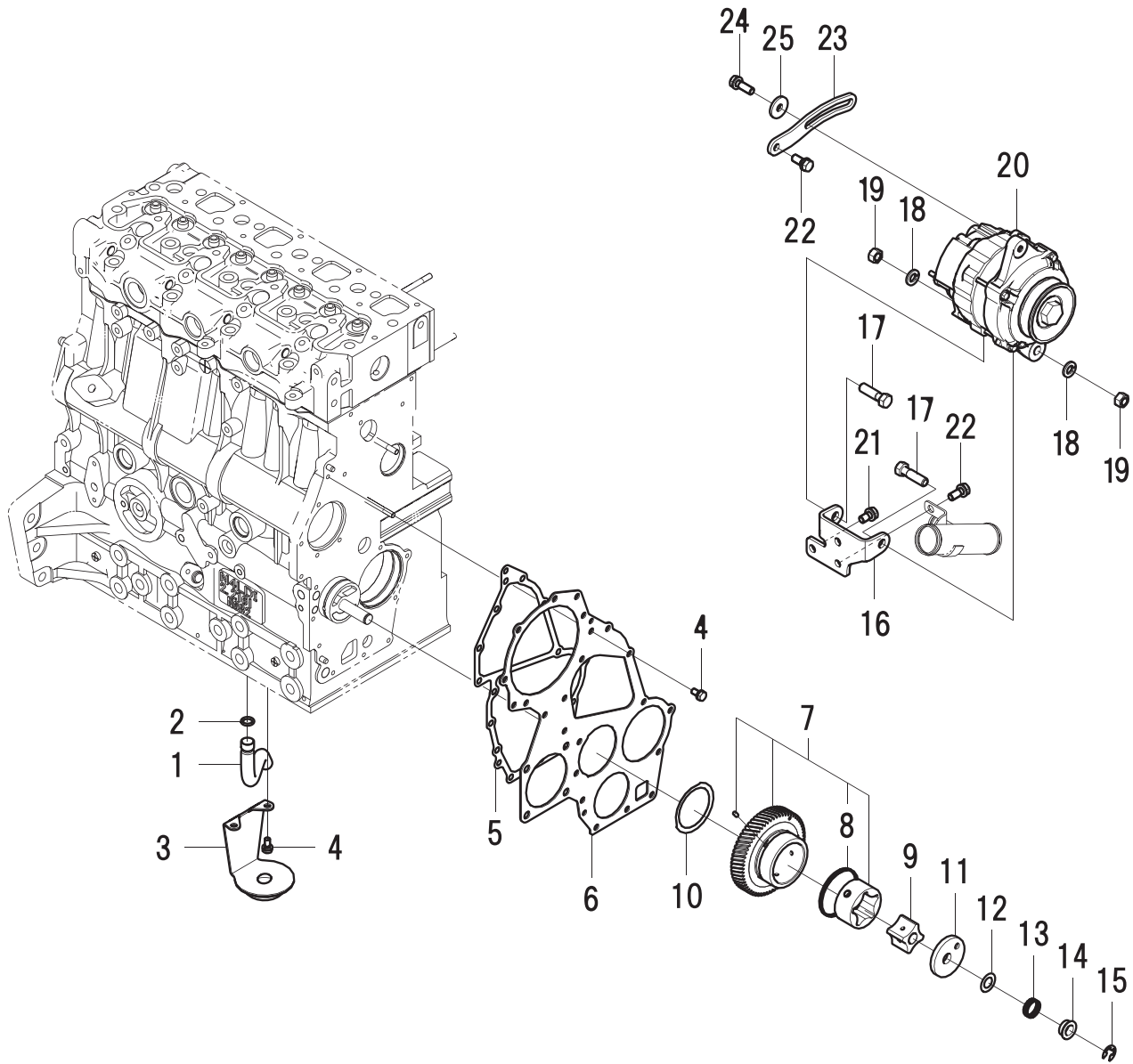
Flywheel, Rear Plate and Starter



Flywheel, Rear Plate and Starter

| KEY | PART NUMBER | QTY | DESCRIPTION | SERIAL NUMBER |
|-----|-------------|-----|----------------|---------------|
| 1 | 110367610 | 1 | Plate | - |
| 2 | 011510816 | 10 | Bolt | - |
| 3 | 110447980 | 1 | Flywheel Cover | - |
| 4 | 010311030 | 4 | Bolt | - |
| 5 | 15-00802 | 4 | Spring Washer | - |
| 6 | 020500010 | 4 | Nut | - |
| 7 | 011511020 | 2 | Bolt | - |
| 8 | 011511045 | 6 | Bolt | - |
| 9 | 011511235 | 2 | Bolt | - |
| 10 | 185746180 | 1 | Speed Sensor | - |
| 11 | 011310612 | 1 | Bolt | - |
| 12 | 398460090 | 1 | Blank Plug | - |
| 13 | U15351270 | 1 | Flywheel | - |
| 14 | 1153761601 | 1 | Ring Gear | - |
| 15 | 010109341 | 6 | Bolt | - |
| 16 | 185086551 | 1 | Starter | - |
| 17 | 011511035 | 2 | Bolt | - |
| 18 | 026100010 | 2 | Flat Washer | - |
| 19 | 399111970 | 1 | Clamp | - |
| 20 | 010311016 | 1 | Bolt | - |

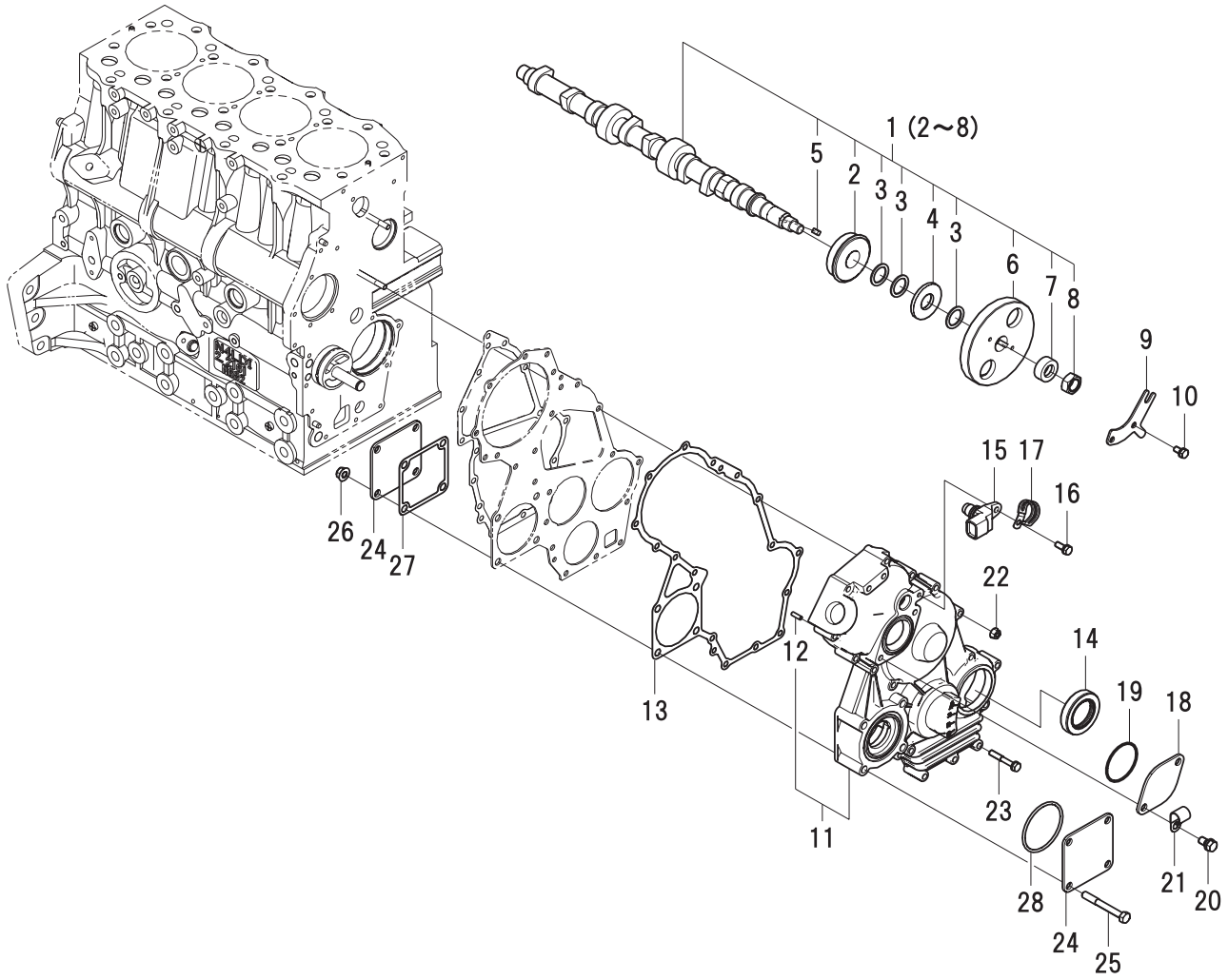
Oil Pump



Oil Pump

| KEY | PART NUMBER | QTY | DESCRIPTION | SERIAL NUMBER |
|-----|-------------|-----|------------------------|---------------|
| 1 | 140987090 | 1 | Pipe | - |
| 2 | 052109076 | 1 | O-Ring | - |
| 3 | 140406730 | 1 | Suction Filter | - |
| 4 | 011310612 | 11 | Bolt | - |
| 5 | 165996750 | 1 | Front Plate Gasket | - |
| 6 | 165166880 | 1 | Front Plate | - |
| 7 | 165026400 | 1 | Idler Assembly Rotor | - |
| 8 | 198217760 | 1 | Spring | - |
| 9 | 140166380 | 1 | Oil Pump Rotor | - |
| 10 | 199266270 | 1 | Thrust Washer | - |
| 11 | 140116220 | 4 | Oil Pump Cover | - |
| 12 | 199286340 | 1 | Shim Set | - |
| 13 | 198216720 | 1 | Spring | - |
| 14 | 199236540 | 1 | Collar | - |
| 15 | 036800010 | 1 | Snap Ring | - |
| 16 | 185976510 | 1 | Stay | - |
| 17 | 010311035 | 2 | Bolt | - |
| 18 | 15-00802 | 2 | Spring Washer | - |
| 19 | 020900010 | 2 | Nut | - |
| 20 | 85046320 | 1 | Alternator Assembly | - |
| 21 | 011510816 | 2 | Bolt | - |
| 22 | 011510820 | 2 | Bolt | - |
| 23 | 185727000 | 1 | Tensioning Arm | - |
| 24 | 011510825 | 1 | Bolt | - |
| 25 | 026109017 | 1 | Washer | - |
| -- | 145337030 | 1 | Fan Pulley (Not Shown) | - |

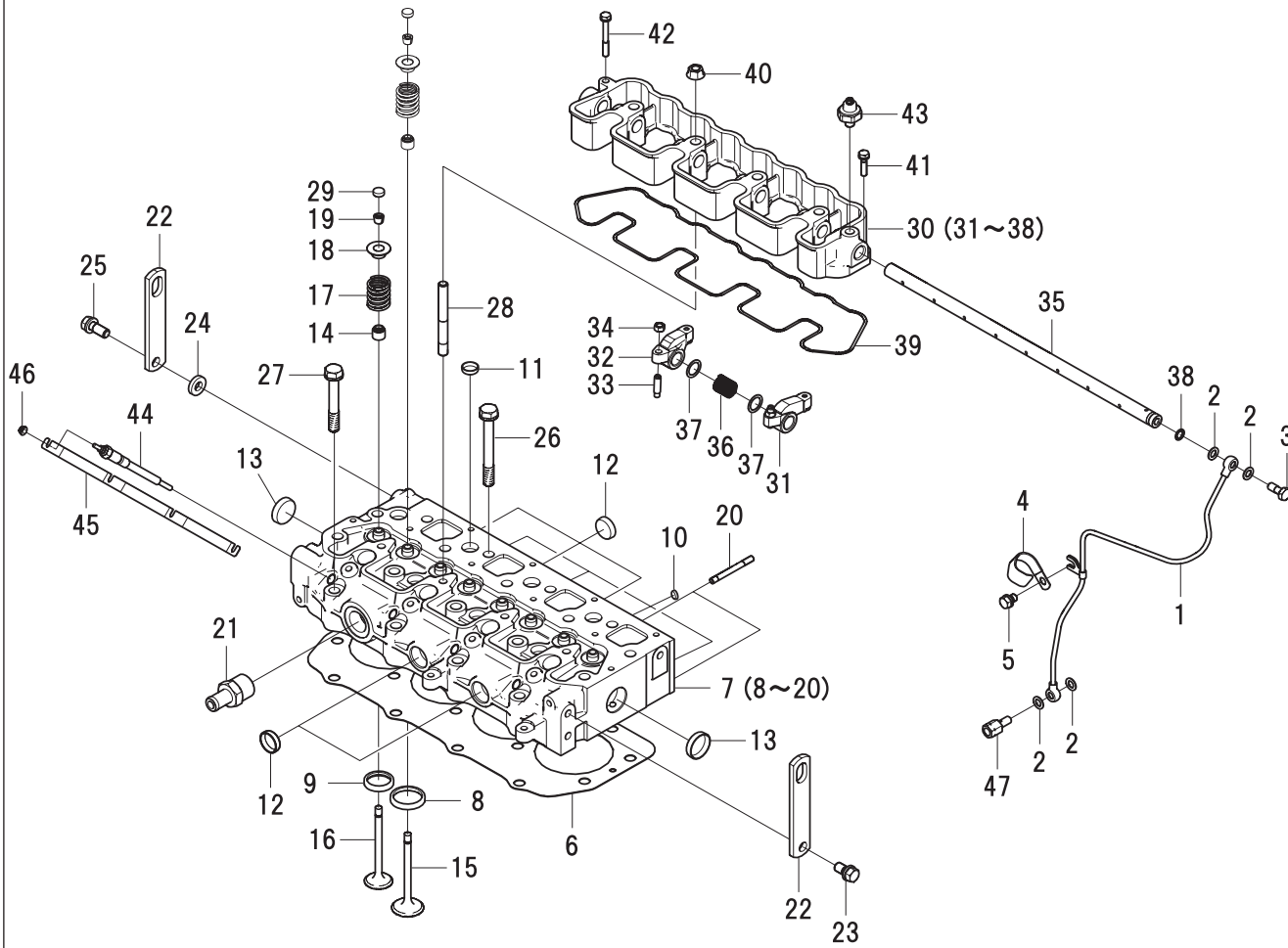
Timing Gear Case and Camshaft



Timing Gear Case and Camshaft

| KEY | PART NUMBER | QTY | DESCRIPTION | SERIAL NUMBER |
|-----|-------------|-----|------------------------|---------------|
| 1 | 120027150 | 1 | Camshaft Assembly | - |
| 2 | 040109057 | 1 | Bearing | - |
| 3 | 199216230 | 3 | Spacer | - |
| 4 | 120736081 | 1 | Camshaft Gear | - |
| 5 | 034100508 | 1 | Key | - |
| 6 | 120276230 | 1 | Camshaft Gear | - |
| 7 | 199216360 | 1 | Spacer | - |
| 8 | 020800016 | 1 | Nut | - |
| 9 | 199566750 | 1 | Plate | - |
| 10 | 011310612 | 2 | Bolt | - |
| 11 | 165107240 | 1 | Gear Case | - |
| 12 | 030300410 | 1 | Spring Pin | - |
| 13 | 165996740 | 1 | Gear Case Gasket | - |
| 14 | 198636160 | 1 | Oil Seal | - |
| 15 | 185746170 | 1 | Sensor | - |
| 16 | 011310616 | 1 | Bolt | - |
| 17 | 399113630 | 1 | Clamp | - |
| 18 | 165206740 | 1 | Cover | - |
| 19 | 052400480 | 1 | O-Ring | - |
| 20 | 011510816 | 2 | Bolt | - |
| 21 | 399111040 | 1 | Clamp | - |
| 22 | 023100006 | 2 | Nut | - |
| 23 | 011310640 | 14 | Bolt | - |
| 24 | 165206150 | 2 | Cover | - |
| 25 | 010310865 | 4 | Bolt | - |
| 26 | 023100008 | 4 | Nut | - |
| 27 | 165996610 | 1 | Gear Case Cover Gasket | - |
| 28 | 052109111 | 1 | O-Ring | - |

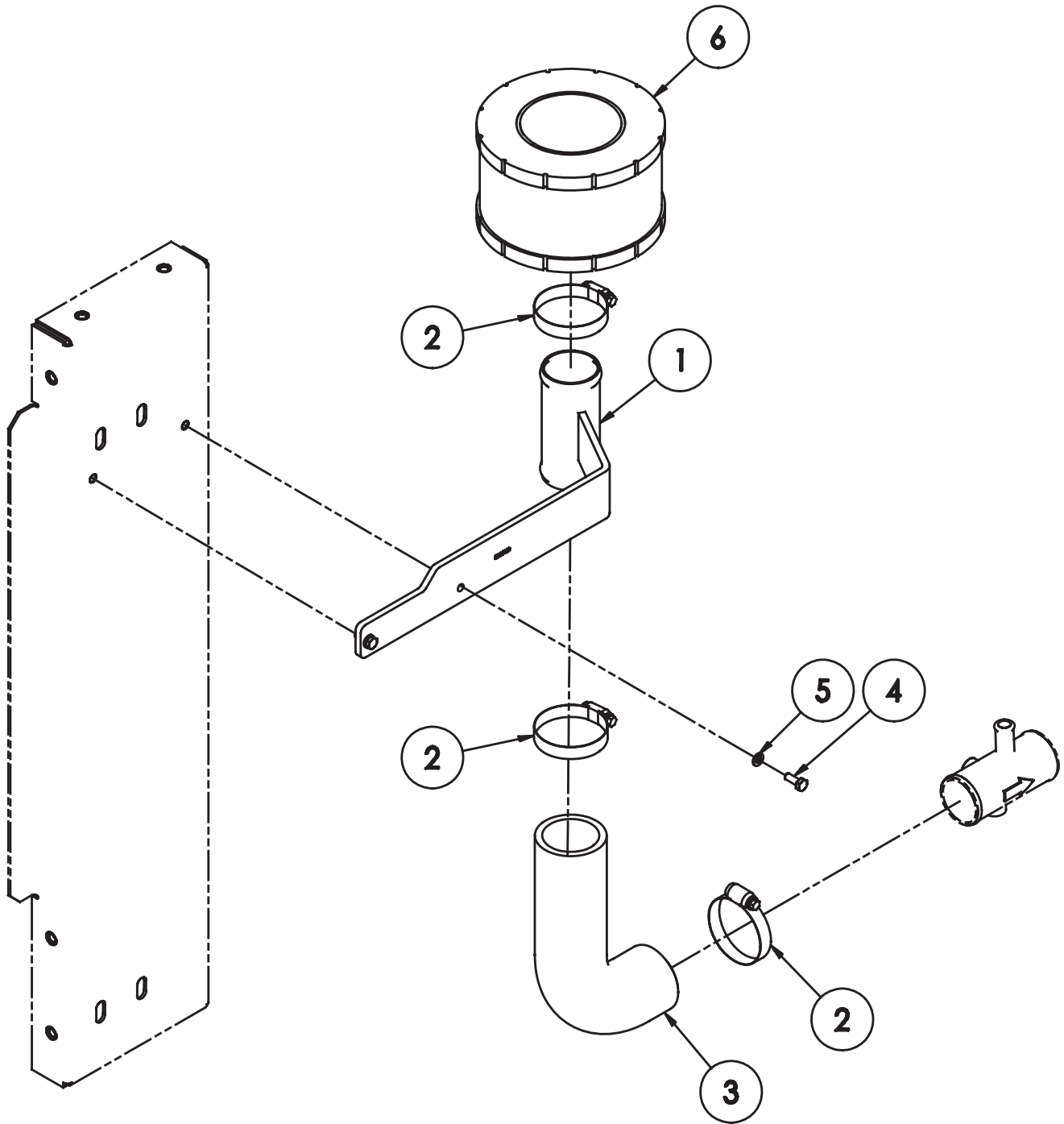
Cylinder Head and Rocker Arm



Cylinder Head and Rocker Arm

| KEY | PART NUMBER | QTY | DESCRIPTION | SERIAL NUMBER |
|-----|-------------|-----|------------------------|---------------|
| 1 | 40607720 | 1 | Pipe | - |
| 2 | 140996260 | 4 | Sealing Washer | - |
| 3 | 198486780 | 1 | Banjo Bolt | - |
| 4 | 399113620 | 1 | Clamp | - |
| 5 | 011510812 | 1 | Bolt | - |
| 6 | 111147751 | 1 | Cylinder Head Gasket | - |
| | 111147761 | 1 | Cylinder Head Gasket | - |
| | 111147771 | 1 | Cylinder Head Gasket | - |
| 7 | 111012020 | 1 | Cylinder Head Assembly | - |
| 8 | 110136485 | 4 | Valve Seat, Intake | - |
| 9 | 110136495 | 4 | Valve Seat, Exhaust | - |
| 10 | 064210010 | 4 | Expansion Plug, 10 mm | - |
| 11 | 064210018 | 7 | Expansion Plug, 18 mm | - |
| 12 | 064210025 | 5 | Expansion Plug, 25 mm | - |
| 13 | 064210030 | 2 | Expansion Plug, 30 mm | - |
| 14 | U20406140 | 8 | Valve Guide Seal | - |
| 15 | 20166400 | 4 | Valve. Intake | - |
| 16 | 120176420 | 4 | Valve. Exhaust | - |
| 17 | 198216700 | 8 | Spring | - |
| 18 | 120186080 | 8 | Retainer | - |
| 19 | 120226070 | 16 | Cotter | - |
| 20 | 012110655 | 2 | Stud Bolt | - |
| 21 | 198481320 | 1 | Hose Connector | - |
| 22 | 195816100 | 2 | Lifting Eye | - |
| 23 | 011511020 | 1 | Bolt | - |
| 24 | 026109037 | 1 | Washer | - |
| 25 | 011511025 | 1 | Bolt | - |
| 26 | 111136500 | 14 | Bolt. Cylinder Head | - |
| 27 | 111136511 | 4 | Bolt. Cylinder Head | - |
| 28 | 012109044 | 4 | Stud Bolt | - |
| 29 | 120216041 | 8 | Valve Cap | - |
| 30 | 120037280 | 1 | Rocker Arm Assembly | - |
| 31 | 120356131 | 4 | Rocker Arm, Intake | - |
| 32 | 120356141 | 4 | Rocker Arm, Exhaust | - |
| 33 | 199486220 | 8 | Screw | - |
| 34 | 020109076 | 8 | Nut | - |
| 35 | 120316201 | 1 | Rocker Arm Shaft | - |
| 36 | 198217170 | 3 | Spring | - |
| 37 | 199280300 | 6 | Shim | - |
| 38 | 052109076 | 1 | O-Ring | - |
| 39 | 120996250 | 1 | Rocker Arm Gasket Box | - |
| 40 | 023100010 | 4 | Nut | - |
| 41 | 011310625 | 1 | Bolt | - |
| 42 | 011310650 | 1 | Bolt | - |
| 43 | 185246060 | 1 | Oil Pressure Switch | - |
| 44 | 185366280 | 4 | Glow Plug | - |
| 45 | 185376180 | 1 | Connector | - |
| 46 | 023100004 | 4 | Nut | - |
| 47 | 198487590 | 1 | Banjo Bolt | - |

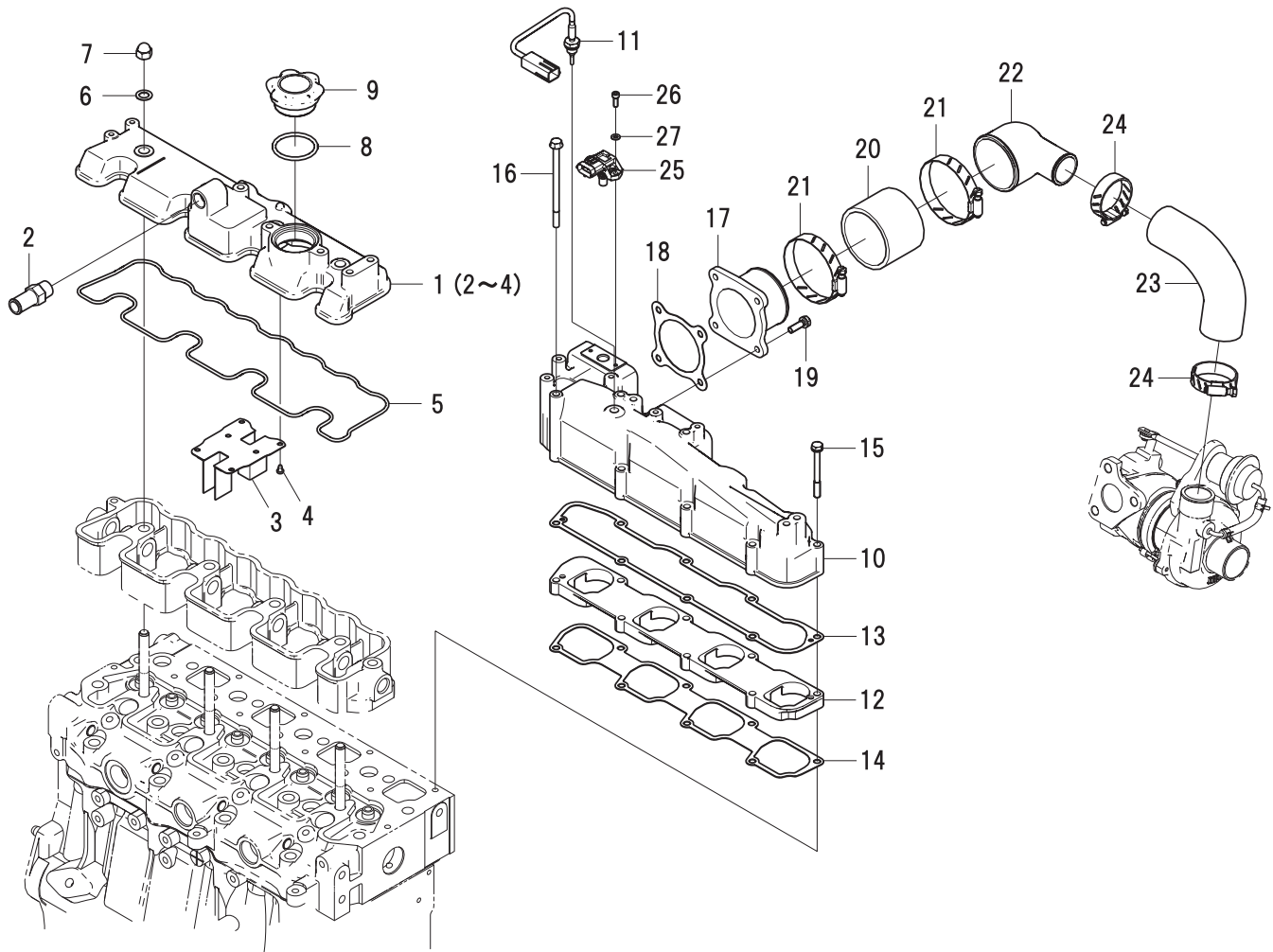
Air Filter and Intake Kit



Air Filter and Intake Kit

| KEY | PART NUMBER | QTY | DESCRIPTION | SERIAL NUMBER |
|-----|-------------|-----|------------------------------------|---------------|
| 1 | 27-28403 | 1 | Air Intake Tube | - |
| 2 | 19-00036 | 3 | Hose Clamp | - |
| 3 | 18-28406 | 1 | Air Intake Hose | - |
| 4 | 12-00030 | 2 | Capscrew, Hex Head M6 x 1.0 x 16mm | - |
| 5 | 15-01132 | 2 | Lock Washer, Helical M6 | - |
| 6 | 24-28401 | 1 | Air Filter | - |

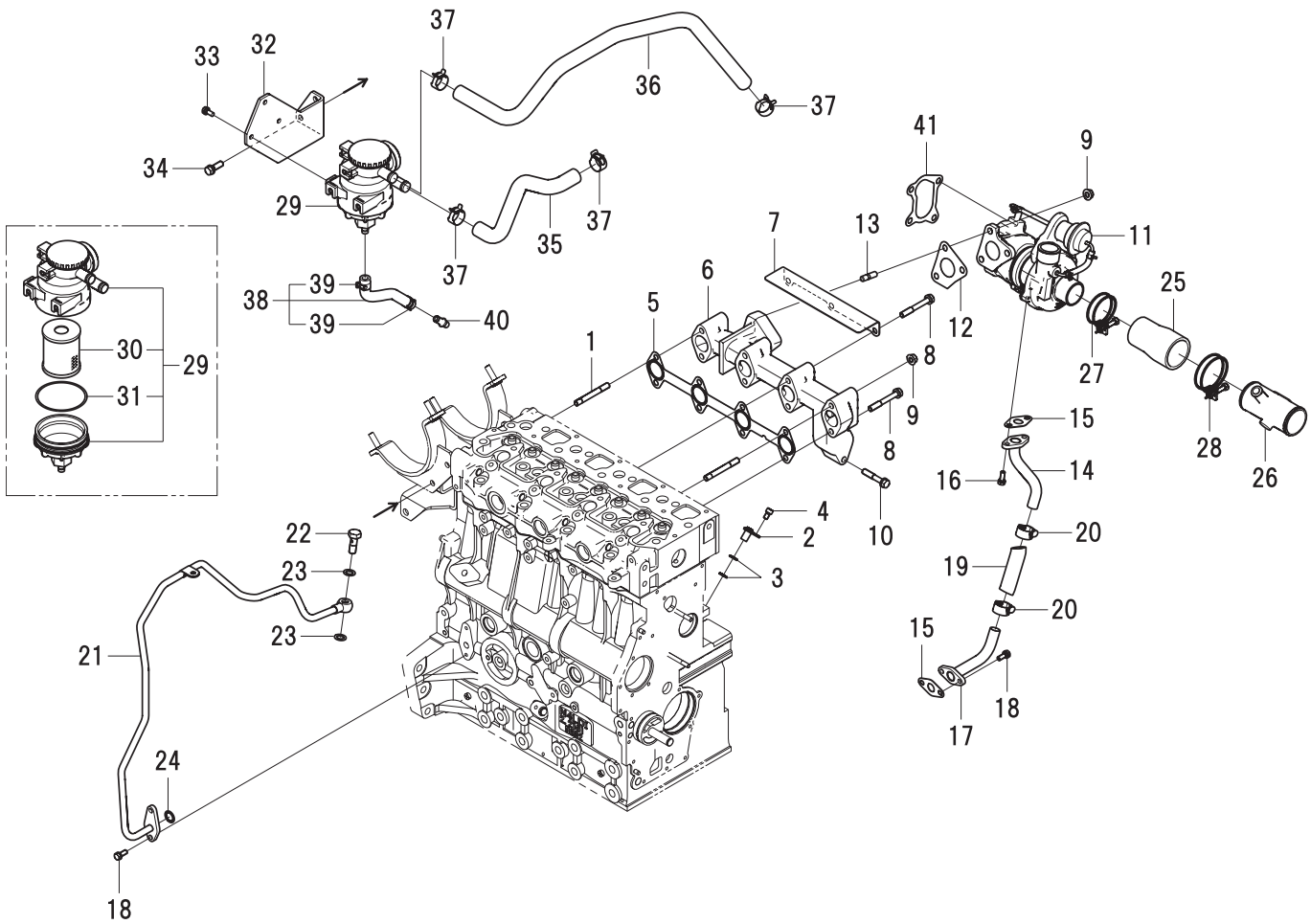
Head Cover



Head Cover

| KEY | PART NUMBER | QTY | DESCRIPTION | SERIAL NUMBER |
|-----|-------------|-----|-------------------------|---------------|
| 1 | 111027630 | 1 | Cylinder Head Cover | - |
| 2 | 198481340 | 1 | Hose Connector | - |
| 3 | 110666280 | 1 | Stopper | - |
| 4 | 015600406 | 6 | Screw | - |
| 5 | 111996520 | 1 | Rocker Box Cover Gasket | - |
| 6 | 140996270 | 4 | Sealing Washer, M10 | - |
| 7 | 024600010 | 4 | Cap Nut | - |
| 8 | 052100400 | 1 | O-Ring | - |
| 9 | 198436010 | 1 | Oil Fill Cap | - |
| 10 | 135556310 | 1 | Intake Manifold | - |
| 11 | 185746190 | 1 | Sensor | - |
| 12 | 135596930 | 1 | Intake Spacer | - |
| 13 | 135997180 | 1 | Gasket | - |
| 14 | 135997170 | 1 | Gasket | - |
| 15 | 011310660 | 5 | Bolt | - |
| 16 | 010109689 | 3 | Flange Bolt | - |
| 17 | 135566970 | 1 | Air Intake Adapter | - |
| 18 | 135997270 | 1 | Intake Adapter Gasket | - |
| 19 | 011310620 | 4 | Bolt | - |
| 20 | 135591300 | 1 | Air Intake Hose | - |
| 21 | 19-00040 | 2 | Hose Clamp | - |
| 22 | 135566980 | 1 | Air Intake Adapter | - |
| 23 | 135591360 | 1 | Air Intake Hose | - |
| 24 | 19-00036 | 2 | Hose Clamp | - |
| 25 | 185746160 | 1 | Boost Pressure Sensor | - |
| 26 | 010700412 | 2 | Bolt | - |
| 27 | 026100004 | 2 | Washer | - |

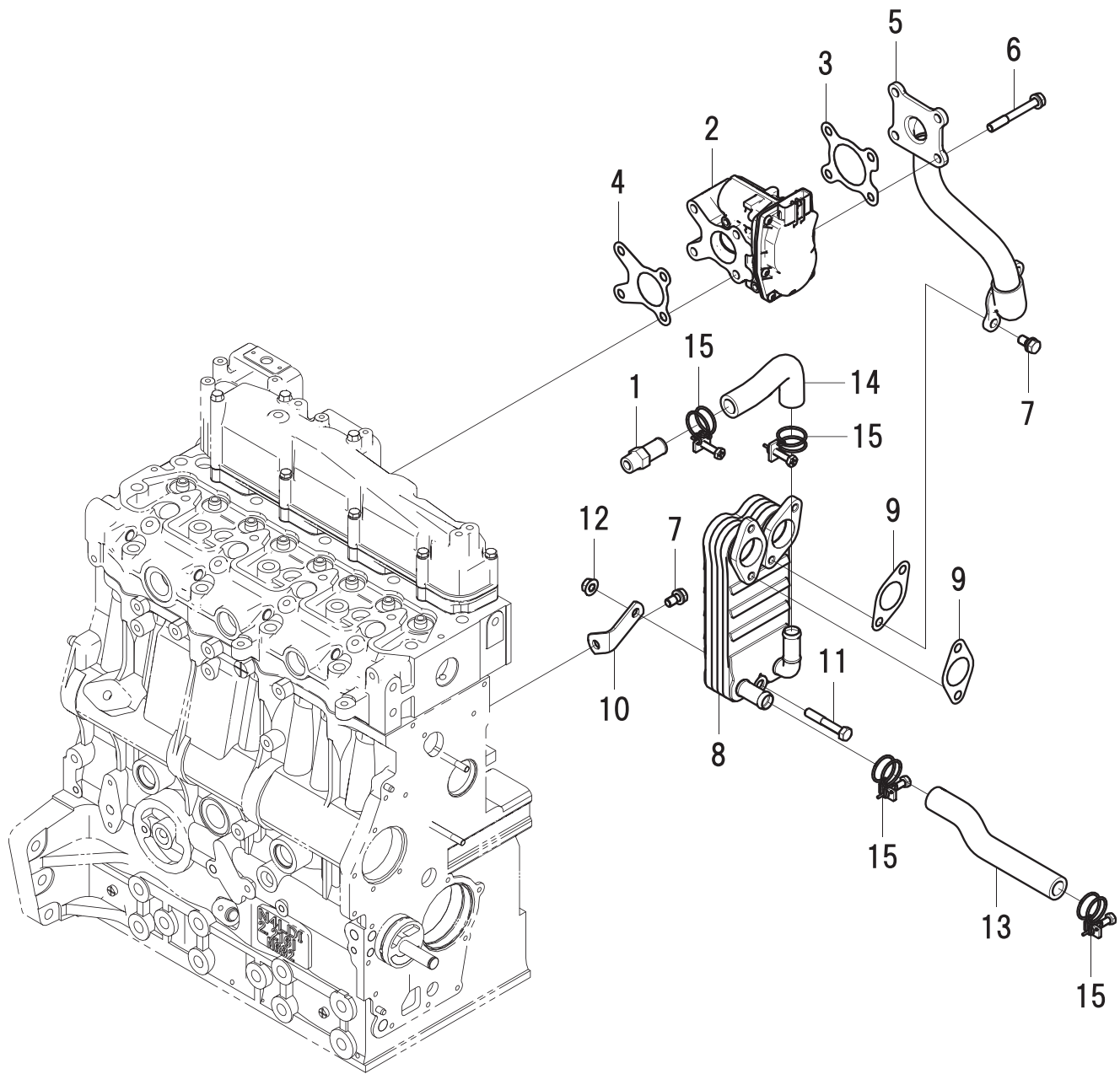
Exhaust Manifold, Turbocharger and OMS



Exhaust Manifold, Turbocharger and OMS

| KEY | PART NUMBER | QTY | DESCRIPTION | SERIAL NUMBER |
|-----|-------------|-----|------------------------|---------------|
| 1 | 012110860 | 2 | Stud Bolt | - |
| 2 | 198436290 | 1 | Plug | - |
| 3 | 052109113 | 2 | O-Ring | - |
| 4 | 010700610 | 1 | Bolt | - |
| 5 | 135997200 | 1 | Gasket | - |
| 6 | U35611040 | 1 | Exhaust Manifold | - |
| 7 | 135506181 | 1 | Heat Insulator Plate | - |
| 8 | 011510860 | 6 | Bolt | - |
| 9 | 023100008 | 5 | Nut | - |
| 10 | 011510845 | 2 | Bolt | - |
| 11 | 135756300 | 1 | Turbocharger | - |
| 12 | 135997240 | 1 | Turbocharger Gasket | - |
| 13 | 012109235 | 3 | Stud Bolt | - |
| 14 | 140607870 | 1 | Oil Pipe | - |
| 15 | 140996280 | 2 | Oil Tube Gasket | - |
| 16 | 011140616 | 2 | Bolt | - |
| 17 | 140607700 | 1 | Oil Pipe | - |
| 18 | 011310616 | 4 | Bolt | - |
| 19 | 068209710 | 1 | Hose | - |
| 20 | 198576200 | 2 | Hose Clamp | - |
| 21 | 140607861 | 1 | Oil Pipe | - |
| 22 | 198487840 | 1 | Eye Bolt | - |
| 23 | 054109025 | 2 | Oil Tube Gasket | - |
| 24 | 052109078 | 1 | O-Ring | - |
| 25 | 135591220 | 1 | Intake Hose | - |
| 26 | 135566761 | 1 | Air Intake Pipe | - |
| 27 | 067100048 | 1 | Hose Clamp | - |
| 28 | 067100056 | 1 | Hose Clamp | - |
| 29 | 110056060 | 1 | Oil Mist Separator | - |
| 30 | 110536010 | 1 | Element and O-Ring Kit | - |
| 31 | 052109136 | 1 | O-Ring | - |
| 32 | 137966950 | 1 | Bracket | - |
| 33 | 011310614 | 3 | Bolt | - |
| 34 | 011510825 | 2 | Bolt | - |
| 35 | 068209711 | 1 | Hose | - |
| 36 | 068209712 | 1 | Hose | - |
| 37 | 398756370 | 4 | Hose Clamp | - |
| 38 | 130806250 | 1 | Hose Assembly | - |
| 39 | 067200150 | 2 | Hose Clamp | - |
| 40 | 340674010 | 1 | Adaptor | - |
| 41 | 135997230 | 1 | Turbocharger Gasket | - |

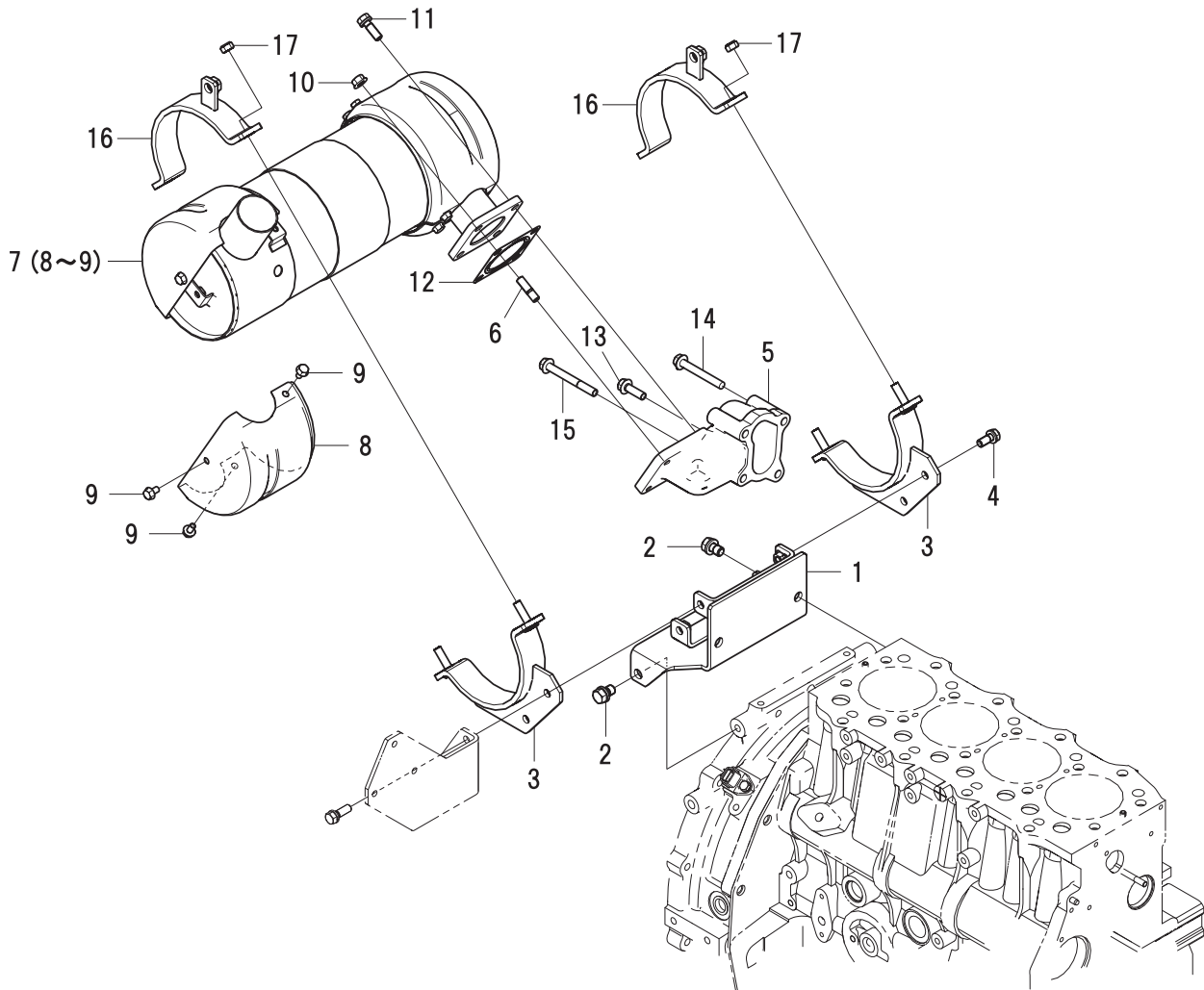
Exhaust Gas Recirculation



Exhaust Gas Recirculation

| KEY | PART NUMBER | QTY | DESCRIPTION | SERIAL NUMBER |
|-----|-------------|-----|----------------------------------|---------------|
| 1 | 198481280 | 1 | Hose Connector | - |
| 2 | 120806040 | 1 | Exhaust Gas Recirculation Valve | - |
| 3 | 135997260 | 1 | Gasket | - |
| 4 | 135997250 | 1 | Gasket | - |
| 5 | 135956050 | 1 | Pipe | - |
| 6 | 011510865 | 4 | Bolt | - |
| 7 | 011510816 | 3 | Bolt | - |
| 8 | 145806020 | 1 | Exhaust Gas Recirculation Cooler | - |
| 9 | 135997220 | 2 | Gasket | - |
| 10 | 145977510 | 1 | Bracket | - |
| 11 | 010310850 | 1 | Bolt | - |
| 12 | 023100008 | 1 | Nut | - |
| 13 | 145537740 | 1 | Hose | - |
| 14 | 145537700 | 1 | Hose | - |
| 15 | 067100025 | 4 | Hose Clamp | - |

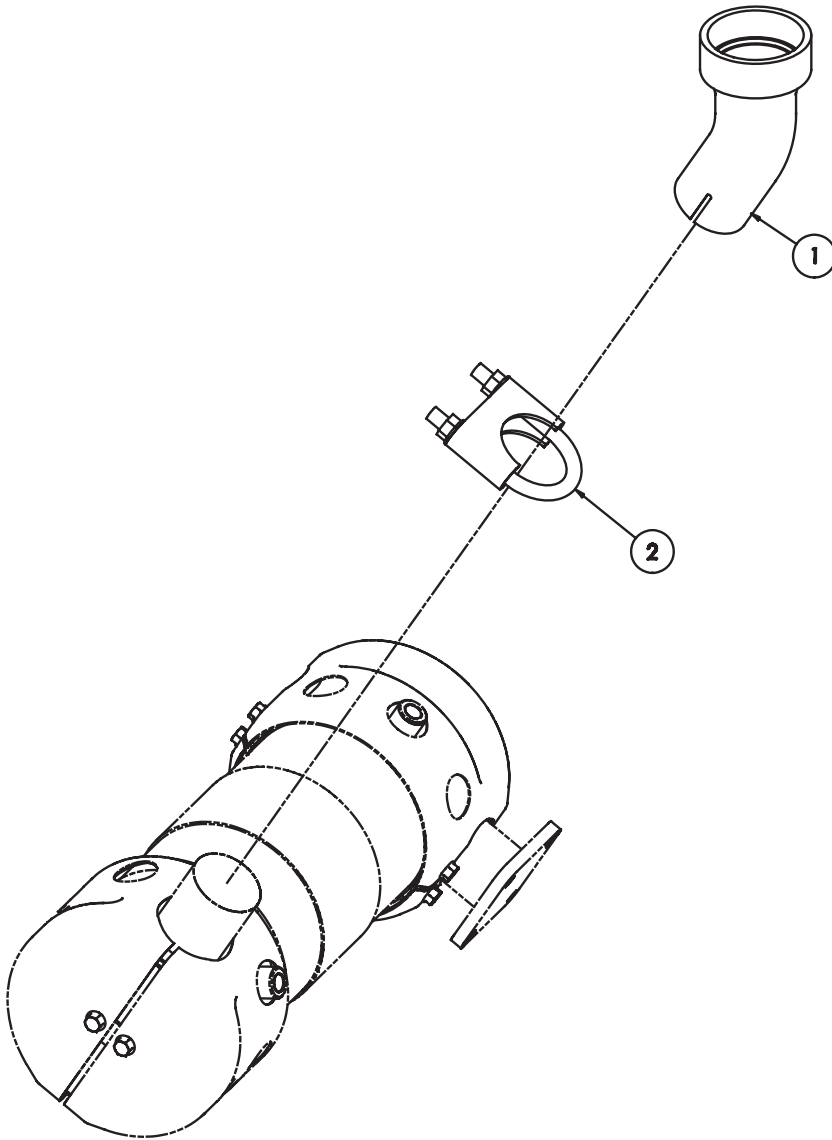
Diesel Oxidation Catalyst



Diesel Oxidation Catalyst

| KEY | PART NUMBER | QTY | DESCRIPTION | SERIAL NUMBER |
|-----|-------------|-----|------------------------------------|---------------|
| 1 | 135916130 | 1 | Bracket | - |
| 2 | 011511016 | 4 | Bolt | - |
| 3 | 135916120 | 2 | Bracket | - |
| 4 | 011510820 | 2 | Bolt | - |
| 5 | U35611061 | 1 | Elbow.exhaust | - |
| 6 | 13-00709 | 2 | Stud Bolt | - |
| 7 | 135936360 | 1 | Diesel Oxidation Catalyst Assembly | - |
| 8 | 135516110 | 4 | Diesel Oxidation Catalyst Cover | - |
| 9 | 010810610 | 12 | Bolt | - |
| 10 | 023110008 | 2 | Nut | - |
| 11 | 011510825 | 2 | Bolt | - |
| 12 | 135997210 | 1 | Gasket | - |
| 13 | 010810825 | 1 | Bolt | - |
| 14 | 010810860 | 2 | Bolt | - |
| 15 | 010810870 | 1 | Bolt | - |
| 16 | 135916090 | 2 | Bracket | - |
| 17 | 022300008 | 4 | Nut | - |

Exhaust Outlet Kit

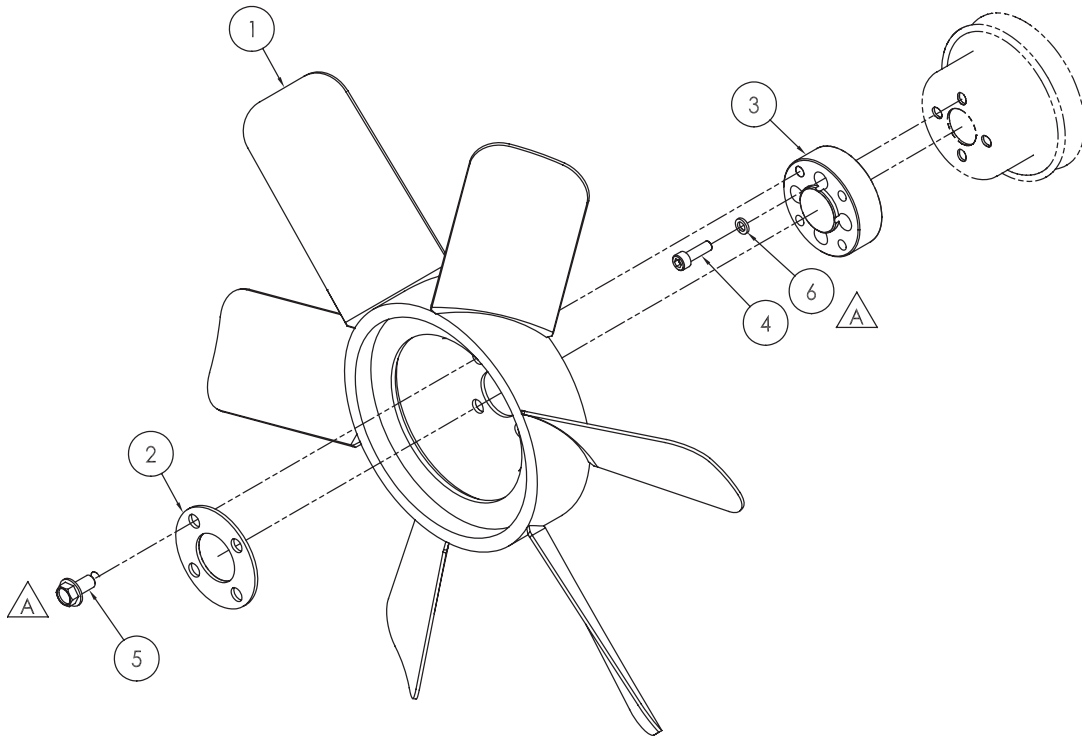


| KEY | PART NUMBER | QTY | DESCRIPTION | SERIAL NUMBER |
|-----|-------------|-----|---|---------------|
| 1 | 27-38402 | 1 | Dry Exhaust Adapter 2" NPT Female | - |
| 2 | 19-14802 | 1 | U-Bolt Clamp 2" ID x 3/8-16 with Saddle & Flange Nuts Zinc Plated | - |

Notes

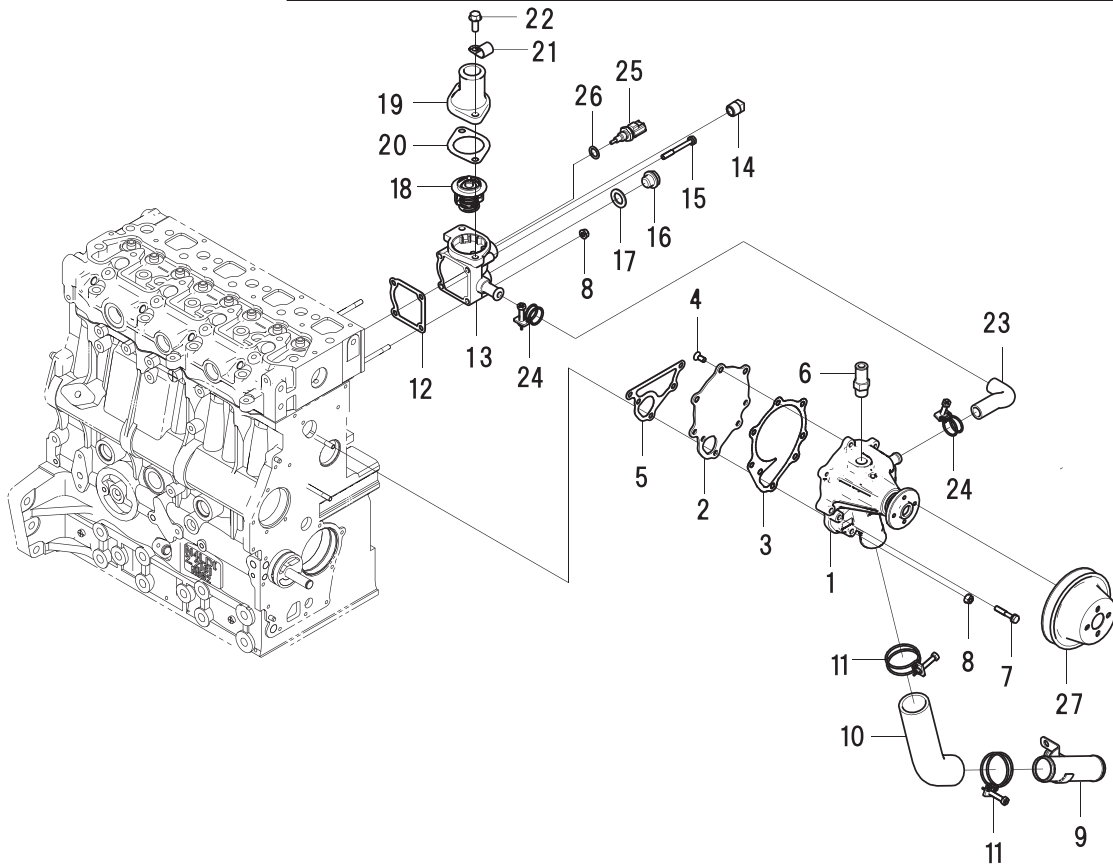
GROUP 3 - COOLING SYSTEM & EXHAUST

Blower Fan and Mounting Parts



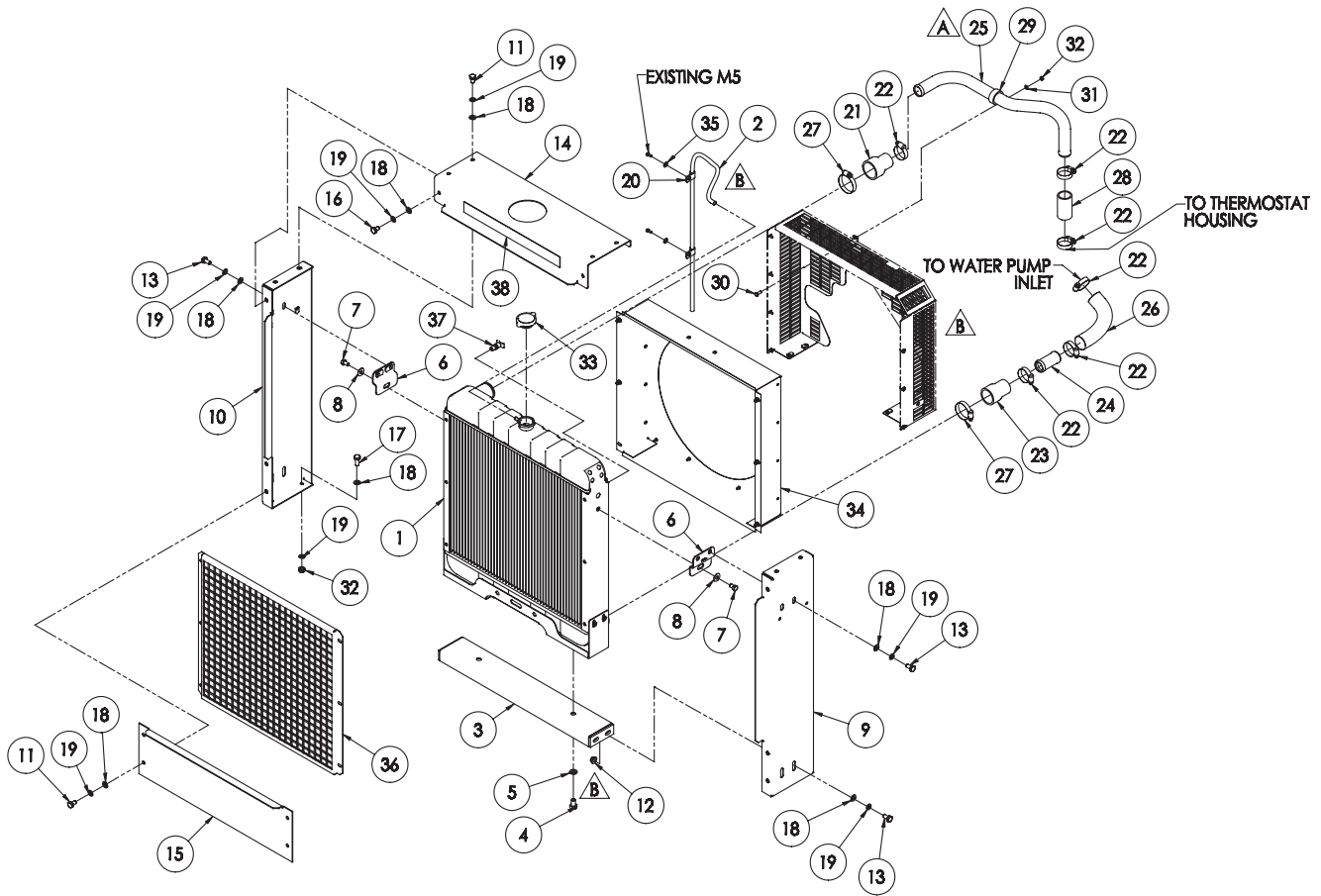
| KEY | PART NUMBER | QTY | DESCRIPTION | SERIAL NUMBER |
|-----|-------------|-----|--|---------------|
| 1 | 32A4800400 | 1 | Fan (Blower) | - |
| 2 | 32A4805100 | 1 | Plate | - |
| 3 | 31-18401 | 1 | Spacer | - |
| 4 | 12-00064 | 4 | Capscrew, Hex Head M6 x 1.0 x 20mm Grade 12.9 | - |
| 5 | 01435-00816 | 4 | Capscrew, Hex Head Flanged M8 x 1.25 x 16mm Grade 10.9 | - |
| 6 | 15-01136 | 4 | Lock Washer, Hi-Collar M6 | - |

Water Pump and Thermostat Case



| KEY | PART NUMBER | QTY | DESCRIPTION | SERIAL NUMBER |
|-----|-------------|-----|-------------------|---------------|
| 1 | 145017730 | 1 | Coolant Pump | - |
| 2 | 145146320 | 1 | Backing Plate | - |
| 4 | 015300614 | 3 | Screw | - |
| 3 | 145996670 | 1 | Gasket | - |
| 6 | 198481280 | 1 | Hose Connector | - |
| 5 | 145996990 | 1 | Gasket | - |
| 7 | 011310635 | 4 | Bolt | - |
| 8 | 023100006 | 3 | Nut | - |
| 9 | 145986451 | 1 | Pipe | - |
| 10 | 145537750 | 1 | Hose | - |
| 11 | 19-00020 | 2 | Hose Clamp | - |
| 12 | 145996710 | 1 | Gasket | - |
| 13 | 145217380 | 1 | Thermostat Casing | - |
| 14 | 064500030 | 1 | Plug | - |
| 15 | 011310655 | 2 | Bolt | - |
| 16 | 010109576 | 1 | Bolt | - |
| 17 | 025100016 | 1 | Sealing Washer | - |
| 18 | 145206220 | 1 | Thermostat | - |
| 19 | 145226330 | 1 | Thermostat Cover | - |
| 20 | 145996051 | 1 | Gasket | - |
| 21 | 399111040 | 1 | Clamp | - |
| 22 | 010810820 | 2 | Bolt | - |
| 23 | 145536051 | 1 | Hose | - |
| 24 | 19-00006 | 1 | Hose Clamp | - |
| 25 | 385720530 | 1 | Sensor | - |
| 26 | 140996410 | 1 | Gasket | - |
| 27 | 145337030 | 1 | Fan Pulley | - |

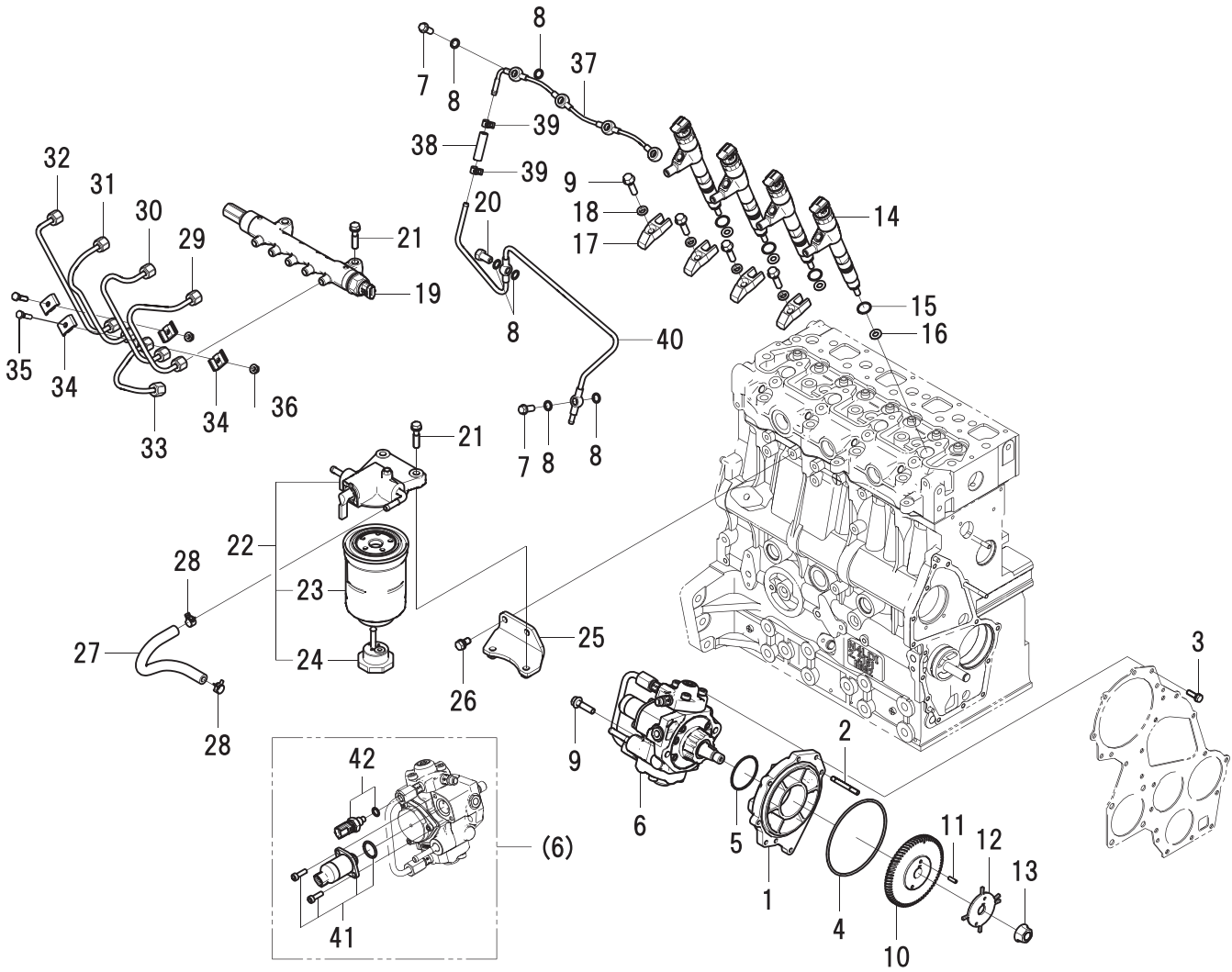
Radiator Kit and Modular Guard



Radiator Kit and Modular Guard

| KEY | PART NUMBER | QTY | DESCRIPTION | SERIAL NUMBER |
|-----|-------------|-----|--|---------------|
| 1 | 79000478 | 1 | Radiator S4S | - |
| 2 | 41-01013 | 1 | Hose, Polyvinyl 5/16" id X 7/16" od 40PSI -10 / +165 Degree F 70 Durometer (Bulk) | - |
| 3 | 39-11203 | 1 | Cross Member,Radiator Support | - |
| 4 | 12-00511 | 2 | Capscrew,Hex Head 1/2-13 X 3/4" | - |
| 5 | 15-00502 | 2 | Lock Washer,helical 1/2" | - |
| 6 | 23-11203 | 2 | Bracket,radiator Upper Support | - |
| 7 | 12-00308 | 2 | Capscrew,Hex Head 3/8-16 X 5/8" Grade 5 | - |
| 8 | 15-00301 | 2 | Flat Washer 3/8" USS Zinc Plated ANSI Type A (Wide) | - |
| 9 | 39-11201 | 1 | Side Panel L.H. Radiator Guard | - |
| 10 | 39-11202 | 1 | Side Panel R.H. Radiator Guard | - |
| 11 | 12-04400 | 8 | Capscrew,Hex Head M10x1.5 X 16mm | - |
| 12 | 14-00808 | 4 | Lock Nut,flanged M10x1.5 Zinc Cromate Property Class 10 (Spiralock) | - |
| 13 | 12-00805 | 8 | Capscrew,Hex Head M10x1.5 X 20mm Grade 8.8 Din Code 933-ZP | - |
| 14 | 39-11204 | 1 | Top Panel,Radiator Guard | - |
| 15 | 39-11206 | 1 | Lower Valence | - |
| 16 | 12-00822 | 2 | Capscrew,Hex Head M10x1.5 X 14mm | - |
| 17 | 12-00831 | 4 | Capscrew,Hex Head M10x1.5 X 25mm | - |
| 18 | 15-00805 | 22 | Flat Washer M10 Din Code 125-A | - |
| 19 | 15-00802 | 18 | Lock Washer,helical M10 Din Code 127-B | - |
| 20 | 19-43201 | 2 | Adelle Clamp 1/2" ID X 3/8" Stud | - |
| 21 | 18-18404 | 1 | Reducing Hose 1-3/8" ID X 2" ID X 3" Silicone (Black) | - |
| 22 | 19-01028 | 6 | Hose Clamp #28 Extended Band S/s (316) 1-5/16" Min X 2-1/4" Max | - |
| 23 | 18-18406 | 1 | Reducing Hose 1-3/8" id X 1-3/4" id X 3" Silicone (Black) | - |
| 24 | 27-18404 | 1 | Tube 1-3/8" od X 3" loa (Hose Barb On Both Ends) | - |
| 25 | 27-18409 | 1 | Tube,radiator Inlet 1-3/8" HB | - |
| 26 | 18-18412 | 1 | Hose 1-3/8" id 90 Degree Silicone * (Modified) | - |
| 27 | 19-01032 | 1 | Hose Clamp #32 Extended Band S/s (316) 1-9/16" Min X 2-1/2" Max | - |
| 28 | 41-01081 | 3 | Hose 1-3/8" ID 3-Ply Silicone Sae J20r1 Class A -65/+350F | - |
| 29 | 19-70022 | 1 | Cushion Clamp #22 S/s / Epdm (1-3/8" id X 1/2" w X 17/64" Stud) | - |
| 30 | 12-01131 | 1 | Capscrew,Hex Head M6x1.0 X 20mm Grade 8.8 Din Code 931-ZP | - |
| 31 | 15-01134 | 1 | Flat Washer M6 S/S (316) Din Code 125-A4 | - |
| 32 | 14-04803 | 1 | Hex Nut,Nylock M6x1.0 Class 8 Din Code 985 | - |
| 33 | 69300001 | 1 | Filler Cap 13 PSI (S4S Radiators 79000478 & 20-11203) | - |
| 34 | 89100276 | 1 | Fan Shroud (S4S Radiators 79000478 & 20-11203) | - |
| 35 | 15-00121 | 2 | Flat Washer 1/4" SAE 0.281" ID X 0.625" OD X 0.050" | - |
| 36 | 79700064 | 1 | Stone Guard (S4S Radiators 79000478 & 20-11203) | - |
| 37 | 21-10002 | 1 | Drain Cock,brass 1/4NPT (Counterclockwise-to-open) | - |
| 38 | 00-70079 | 1 | Label,"Northern Lights" 1-1/2" X 16" | - |
| 39 | 14-00811 | 4 | Hex Nut M10x1.5 (17mm Hex) Din Code 934-ZP | - |

Injector, HP Pump and Fuel Filter

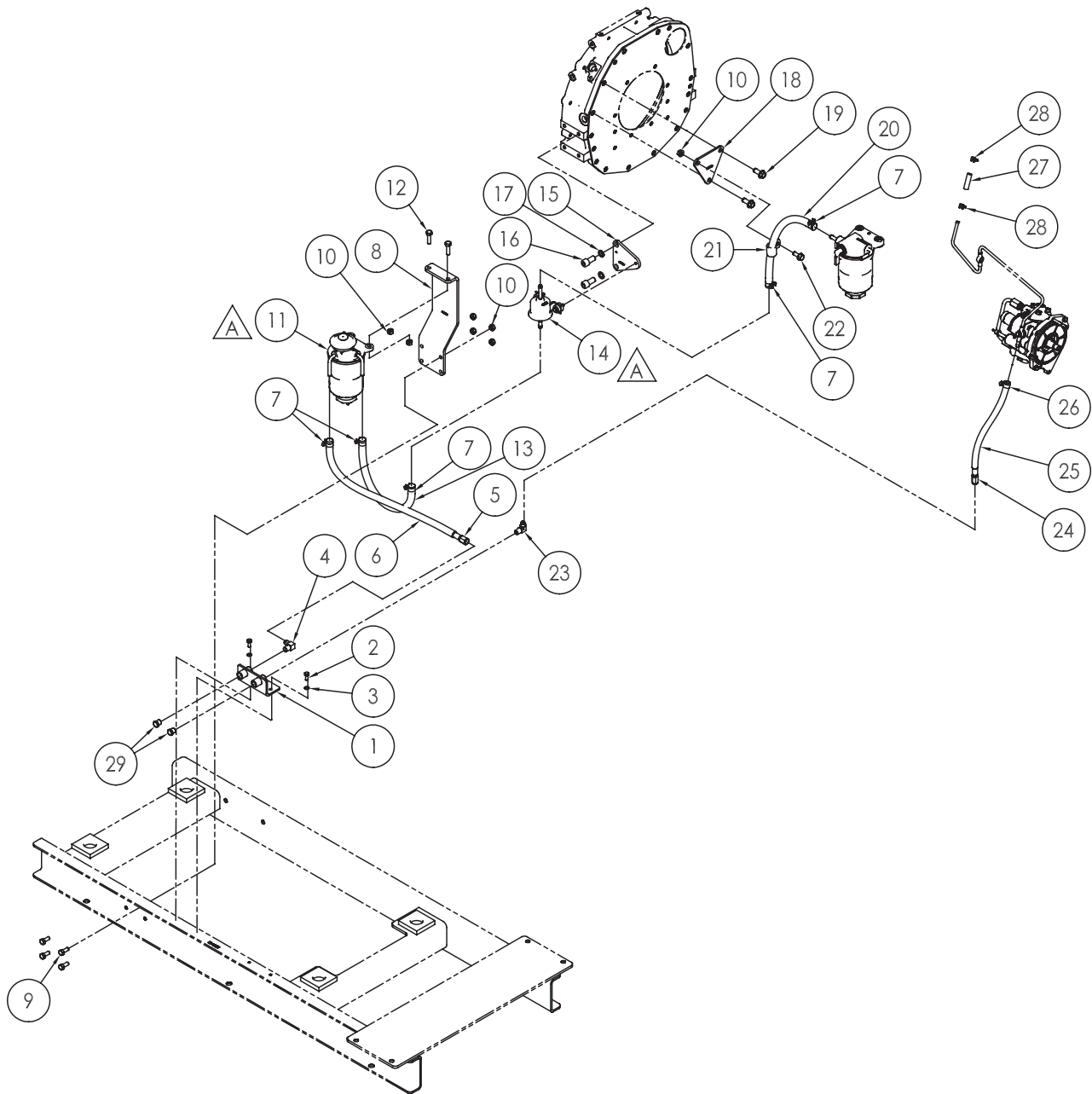


Injector, HP Pump and Fuel Filter

| KEY | PART NUMBER | QTY | DESCRIPTION | SERIAL NUMBER |
|-----|-------------|-----|---|---------------|
| 1 | 131716220 | 1 | Flange | - |
| 2 | 012110645 | 1 | Stud | - |
| 3 | 011310620 | 2 | Bolt | - |
| 4 | 052301150 | 1 | O-ring | - |
| 5 | 052400500 | 1 | O-ring | - |
| 6 | 131011150 | 1 | High Pressure Pump | - |
| 7 | 198481160 | 5 | Eye Bolt | - |
| 8 | 131426400 | 12 | Gasket | - |
| 9 | 010810830 | 6 | Bolt | - |
| 10 | 131736170 | 1 | Gear | - |
| 11 | 030300410 | 2 | Spring Pin | - |
| 12 | 125276080 | 1 | Timing Wheel | - |
| 13 | 023109011 | 1 | Nut | - |
| 14 | 131406570 | 4 | Injector Assy | - |
| 15 | 052400180 | 4 | O-ring | - |
| 16 | 131996130 | 4 | Gasket | - |
| 17 | 131566080 | 4 | Injector Clamp | - |
| 18 | 131576010 | 4 | Washer | - |
| 19 | 131656010 | 1 | Rail Assembly | - |
| 20 | 198481150 | 1 | Eye Bolt | - |
| 21 | 011510835 | 4 | Bolt | - |
| 22 | 130306470 | 1 | Fuel Filter Assembly (Includes keys #23-24) | - |
| 23 | 24-58402 | 1 | Element Assembly | - |
| 24 | 130446176 | 1 | Cap | - |
| 25 | 130976980 | 1 | Bracket | - |
| 26 | 011510816 | 2 | Bolt | - |
| 27 | 068209679 | 1 | Fuel Hose | - |
| 28 | 067200120 | 2 | Hose Clip | - |
| 29 | 131501080 | 1 | Injection Line #1 | - |
| 30 | 131501090 | 1 | Injection Line #2 | - |
| 31 | 131501100 | 1 | Injection Line #3 | - |
| 32 | 131501110 | 1 | Injection Line #4 | - |
| 33 | 131501070 | 1 | Injection Line, Pump to Rail | - |
| 34 | 199106021 | 4 | Clamp | - |
| 35 | 010110625 | 2 | Bolt | - |
| 36 | 023100006 | 2 | Nut | - |
| 37 | 131607220 | 1 | Return Line | - |
| 38 | 068209668 | 1 | Hose | - |
| 39 | 067200100 | 2 | Hose Clamp | - |
| 40 | 131607270 | 1 | Return Line | - |
| 41 | 131296979 | 1 | Suction Control Valve Kit | - |
| 42 | 185446333 | 1 | Fuel Temp Sensor Kit | - |

SAE 30R6/30R7 Push-On Fuel Lines and Primary Filter

with 12V Electric Pump

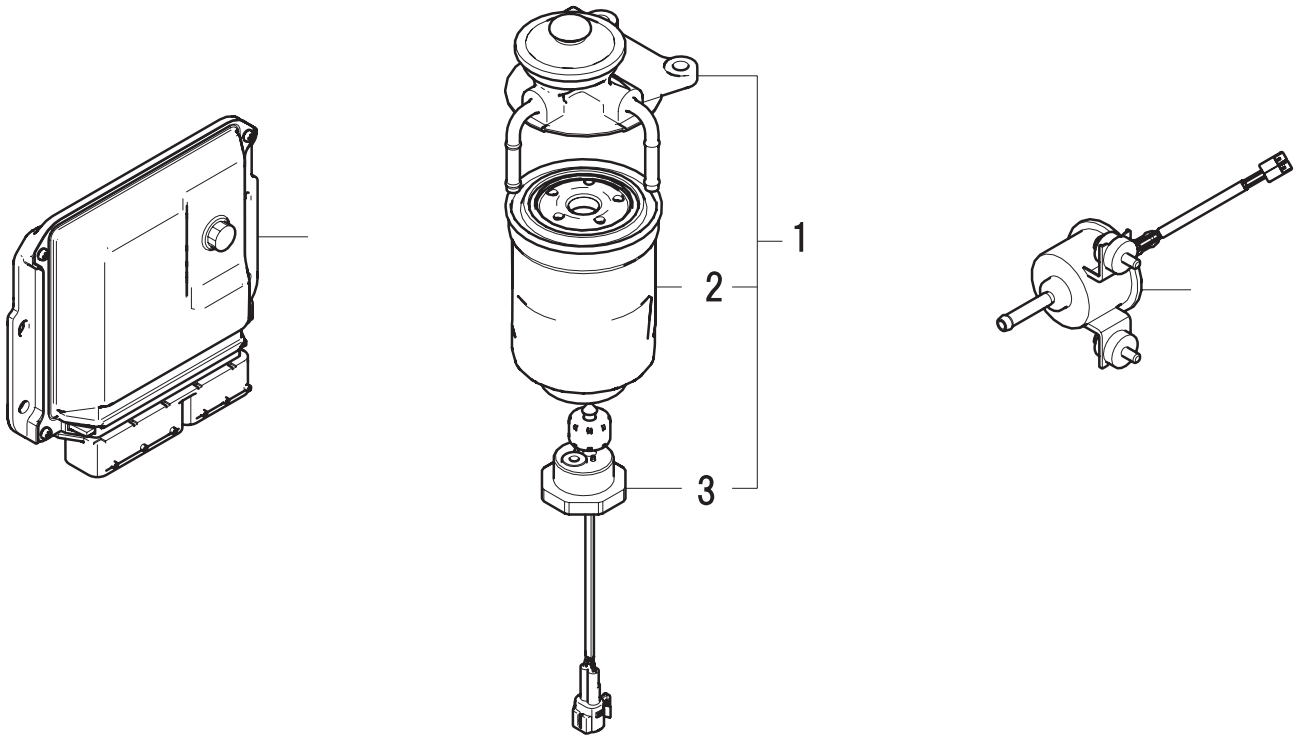


SAE 30R6/30R7 Push-On Fuel Lines and Primary Filter

with 12V Electric Pump

| KEY | PART NUMBER | QTY | DESCRIPTION | SERIAL NUMBER |
|-----|-------------|-----|---|---------------|
| 1 | 10-51099 | 1 | Manifold,Fuel Line Connection 1/4NPT | - |
| 2 | 12-01102 | 2 | Capscrew, Hex Head M6x1.0 X 16mm S/S (316) DIN Code 933-A4 | - |
| 3 | 15-00610 | 1 | Lock Washer,Helical M6 S/S(316) DIN Code 127B-A4 | - |
| 4 | 21-52245 | 1 | Male Elbow 90, Brass 1/4NPT X 5/16-45T | - |
| 5 | 21-71056 | 1 | Female Swivel, Brass 5/16HB X 5/16-45R Push-on (Universal Seat) | - |
| 6 | 18-51903 | 1 | Hose 5/16"ID X 20" Push-on | - |
| 7 | 19-50115 | 5 | Hose Clamp #15 Mini S/s (304) 14.5mm to 16mm | - |
| 8 | 23-58404 | 1 | Bracket,Primary Fuel Filter / Water Separator Mtg. | - |
| 9 | 01435-00820 | 4 | Capscrew, Hex Head Flanged M8x1.25 X 20mm Grade 10.9 Jis B1189 | - |
| 10 | 01584-00806 | 7 | Hex Nut,fFlanged M8x1.25 Jis B1190 (12mm Hex) | - |
| 11 | 24-58405 | 1 | Fuel Filter / Water Separator Assy - 5/16"HB Connections With Adapter Head,element & Drain Valve / Level Sensor | - |
| 12 | 01435-00825 | 2 | Capscrew, Hex Head Flanged M8x1.25 X 25mm Grade 10.9 Jis B1189 | - |
| 13 | 18-52102 | 1 | Hose 5/16" X 13" Push-on | - |
| 14 | 26-78401 | 1 | Fuel Pump 12v Standard Ground | - |
| 15 | 23-58407 | 1 | Bracket, Fuel Transfer Pump Mtg | - |
| 16 | 12-29913 | 2 | Capscret,Sket Head M12x1.75 X 30mm S/S (304) Din Code 912-A2 | - |
| 17 | 15-09013 | 2 | Lock Washer, Hi-collar S/S M12 Din Code 7980-A2 | - |
| 18 | 23-58408 | 1 | Bracket, Fuel Hose Support | - |
| 19 | 01435-01025 | 2 | Capscrew, Hex Head Flanged M10x1.5 X 25mm Grade 10.9 Jis B1189 | - |
| 20 | 18-52110 | 1 | Hose 5/16" X 14" Push-on | - |
| 21 | 19-72254 | 1 | Adelle Clamp 5/8"ID X 3/8" Stud | - |
| 22 | 01435-00820 | 1 | Capscrew, Hex Head Flanged M8x1.25 X 20mm Grade 10.9 Jis B1189 | - |
| 23 | 21-71044 | 1 | Male Elbow 90, Brass1/4NPT X 1/4-45T | - |
| 24 | 21-71045 | 1 | Female Swivel, Brass 1/4-45T X 1/4HB (Push-on) | - |
| 25 | 18-51902 | 1 | Hose 1/4"ID X 15" Push-on | - |
| 26 | 19-50113 | 1 | Hose Clamp #13 Mini S/S (304) 12.5mm To 14mm | - |
| 27 | 41-01011 | 2 | Hose 1/4"ID 250 PSI -40 to +200 F Msha Push-on | - |
| 28 | 067200100 | 2 | Hose Clamp, Spring Type | - |
| 29 | 21-31624 | 2 | Plug, Hex Head, Brass 1/4 NPT | - |

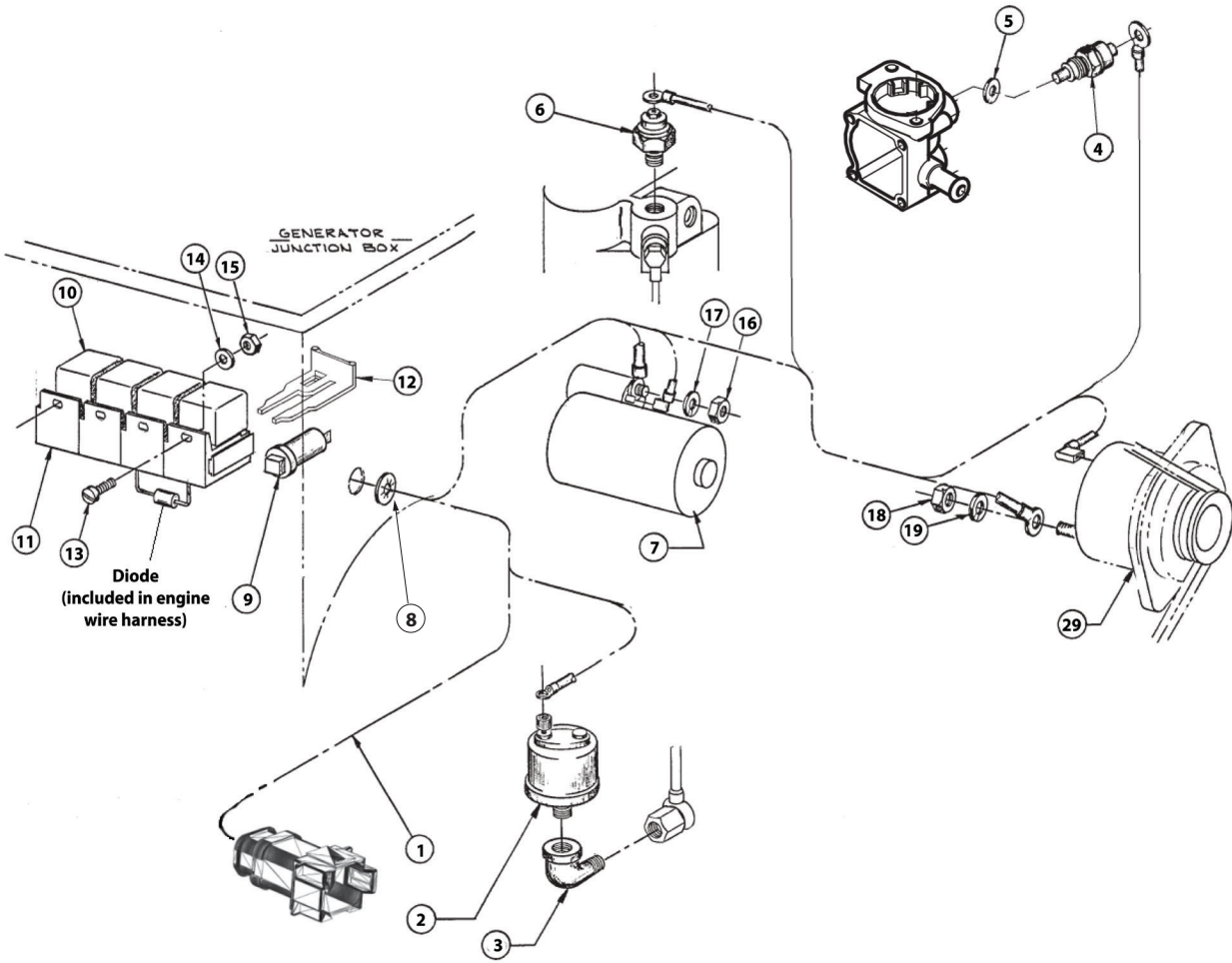
Accessory Parts



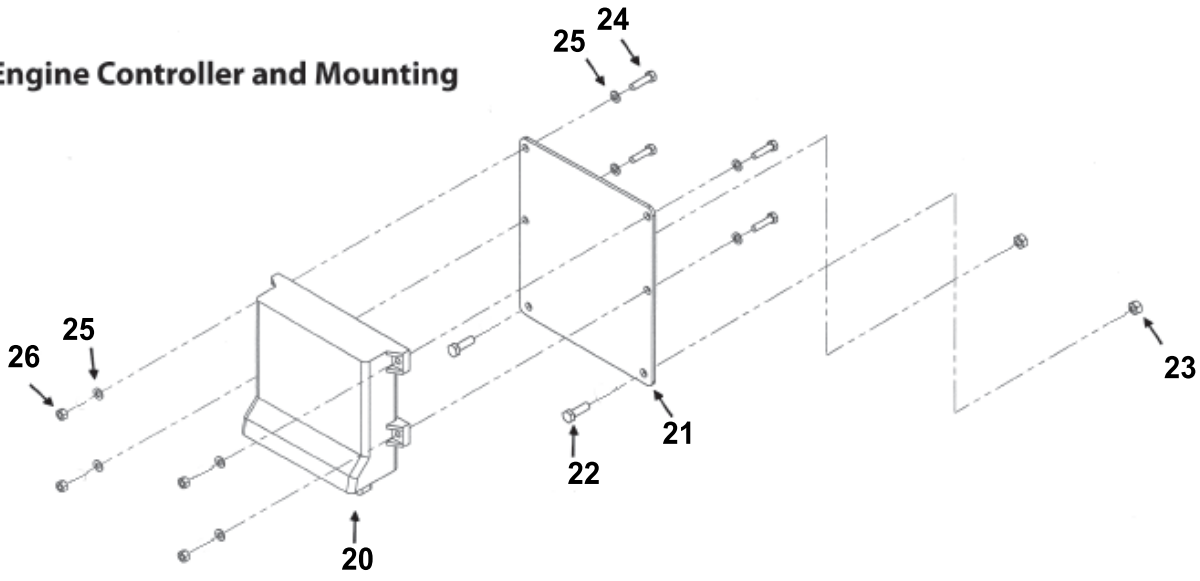
| KEY | PART NUMBER | QTY | DESCRIPTION | SERIAL NUMBER |
|-----|-------------|-----|---|---------------|
| 1 | 24-58405 | 1 | Fuel Filter Assembly (Includes keys #2-3) | - |
| 2 | 24-58401 | 1 | Element, Fuel Filter | - |
| 3 | 24-48401 | 1 | Drain Value & Level Sensor | - |

Notes

Engine Electrical - 12 Volt Standard Ground



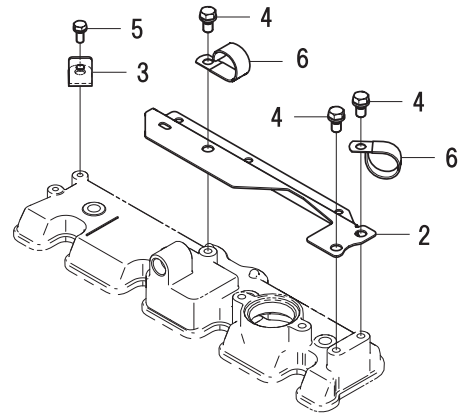
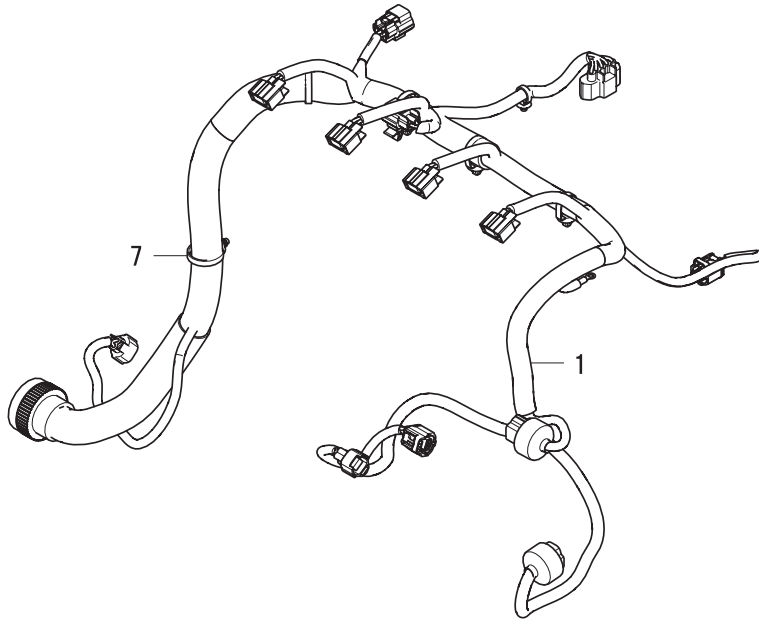
Engine Controller and Mounting



Engine Electrical - 12 Volt Standard Ground

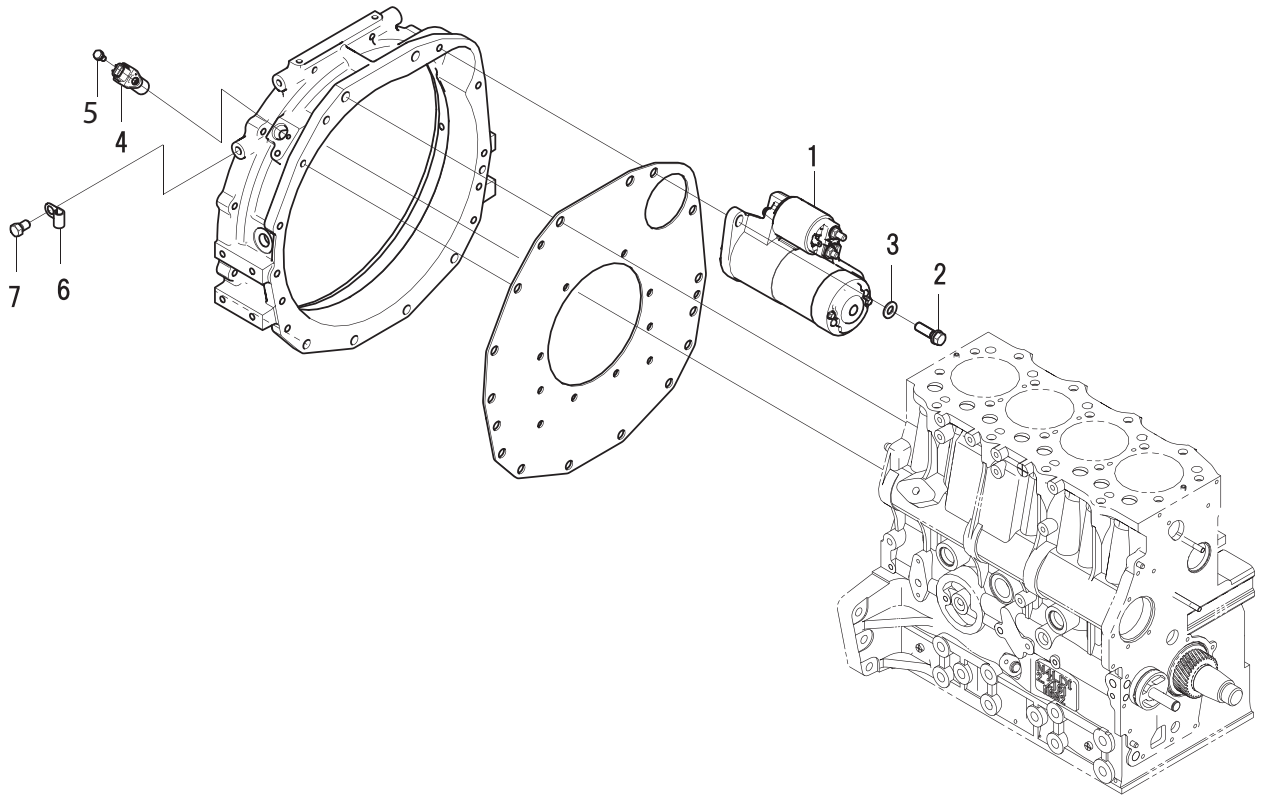
| KEY | PART NUMBER | QTY | DESCRIPTION | SERIAL NUMBER |
|-----|-------------|-----|---|---------------|
| 1 | 22-48413 | 1 | Engine Wire Harness (includes diode 22-40299) | - |
| | 185606931 | 1 | Wire Harness, ECU (See installation and parts detail) | - |
| 2 | 22-41016 | 1 | Oil Pressure Sender 0-80 PSI, Single Station 1/8 NPT | - |
| 3 | 21-04801 | 1 | Street Elbow 90°, 1/8 NPT Steel | - |
| 4 | 385720530 | 1 | Temperature Sensor M16 x 1.5 | - |
| 5 | 140996410 | 1 | Gasket | - |
| 6 | 185246060 | 1 | Oil Pressure Switch | - |
| 7 | 185086551 | 1 | Starter 12 Volt (see installation detail) | - |
| 8 | NG-79-R | 2 | Grommet | - |
| 9 | 22-40018 | 1 | Circuit Breaker 10 Amp - Screw Mount | - |
| 10 | 22-42047 | 3 | Relay, 12 Volt SPDT | - |
| 11 | 22-40391 | 3 | Relay Base | - |
| 12 | 22-40393 | 3 | Terminal Retainer | - |
| 13 | 12-00094 | 2 | Machine Screw #10-32 x 3/8" Stainless Steel | - |
| 14 | 15-00032 | 2 | Flat Washer #10 | - |
| 15 | 14-00001 | 2 | Hex Nut, #10-32 | - |
| 16 | 14-00711 | 1 | Hex Nut, M8 x 1.25 | - |
| 17 | 15-00702 | 1 | Lock Washer M8 | - |
| 18 | 14-04401 | 1 | Hex Nut, M5 x 0.8 | - |
| 19 | 15-04400 | 1 | Lock Washer M5 | - |
| 20 | 185186181 | 1 | Engine Control Unit | - |
| 21 | 23-98402 | 1 | Bracket, Engine Control Unit Mounting | - |
| 22 | 01435-01020 | 2 | Capscrew, Hex Head Flanged M10 x 1.5 x 20mm | - |
| 23 | 01584-01008 | 2 | Hex Flange Nut M10 x 1.5 | - |
| 24 | 12-01131 | 4 | Capscrew, Hex Head M6 x 1.0 x 20mm | - |
| 25 | 15-00008 | 2 | Flat Washer M6 | - |
| 26 | 14-04803 | 4 | Nylock Nut M6 x 1.0 | - |
| 27 | 185746180 | 1 | Speed Sensor | - |
| 28 | 011310612 | 1 | Capscrew, M6 x 1.0 x 12mm | - |
| 29 | 185046320 | 1 | Alternator 12 Volt 40 Amp (See installation detail) | - |

Engine Control Unit Harness



| KEY | PART NUMBER | QTY | DESCRIPTION | SERIAL NUMBER |
|-----|-------------|-----|---------------------------|---------------|
| 1 | 185977891 | 1 | Harness Bracket | - |
| 2 | 399113620 | 2 | Clamp | - |
| 3 | 185977760 | 1 | Cable Tie Bracket | - |
| 4 | 011510816 | 3 | Bolt | - |
| 5 | 011310614 | 1 | Bolt | - |
| 6 | 185606931 | 1 | ECU Wire Harness Assembly | - |
| 7 | 398756420 | 1 | Band | - |

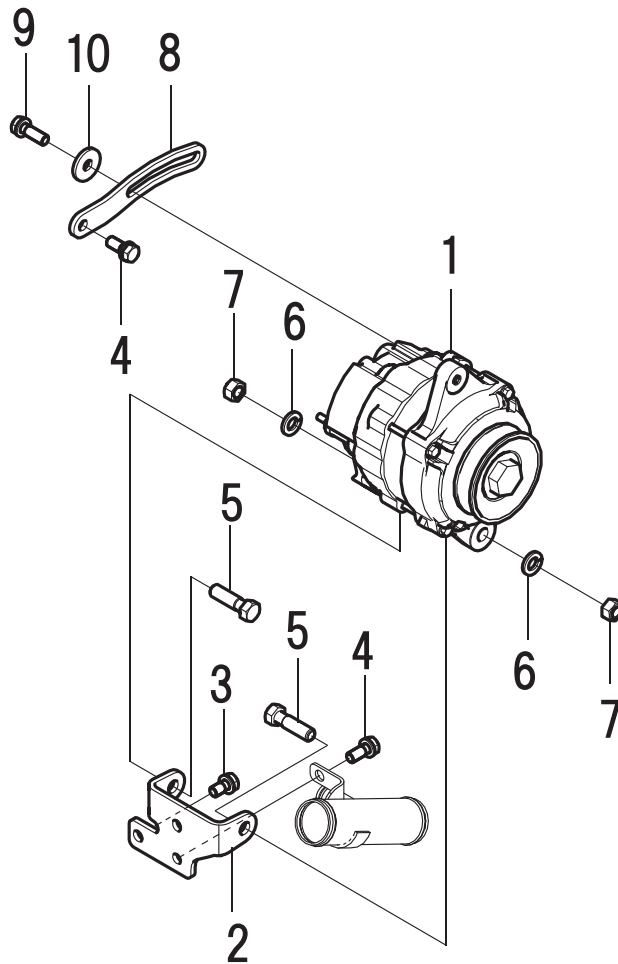
Starter & Speed Sensor



| KEY | PART NUMBER | QTY | DESCRIPTION | SERIAL NUMBER |
|-----|-------------|-----|--------------|---------------|
| 1 | 185086551 | 1 | Starter 12V | - |
| 2 | 011511035 | 2 | Bolt | - |
| 3 | 026100010 | 2 | Washer | - |
| 4 | 185746180 | 1 | Speed Sensor | - |
| 5 | 011310612 | 1 | Bolt | - |
| 6 | 399111970 | 1 | Clamp | - |
| 7 | 010311016 | 1 | Bolt | - |

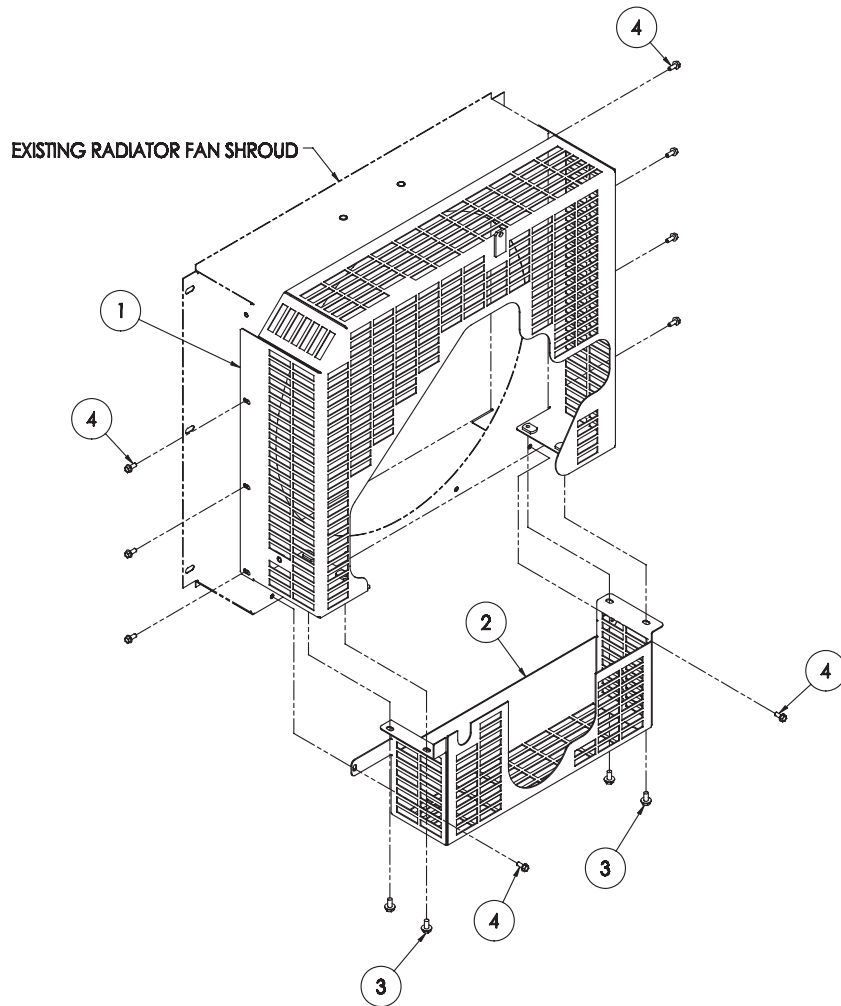
GROUP 5 - ELECTRICAL SYSTEM

Alternator



| KEY | PART NUMBER | QTY | DESCRIPTION | SERIAL NUMBER |
|-----|-------------|-----|--------------------|---------------|
| 1 | 185046320 | 1 | Alternator 12V | - |
| 2 | 185976510 | 1 | Alternator Bracket | - |
| 3 | 011510816 | 2 | Bolt | - |
| 4 | 011510820 | 2 | Bolt | - |
| 5 | 010311035 | 2 | Bolt | - |
| 6 | 15-00802 | 2 | Spring Washer | - |
| 7 | 020900010 | 2 | Nut | - |
| 8 | 185727000 | 1 | Tensioning Arm | - |
| 9 | 011510825 | 1 | Bolt | - |
| 10 | 026109017 | 1 | Washer | - |

Belt & Fan Guard



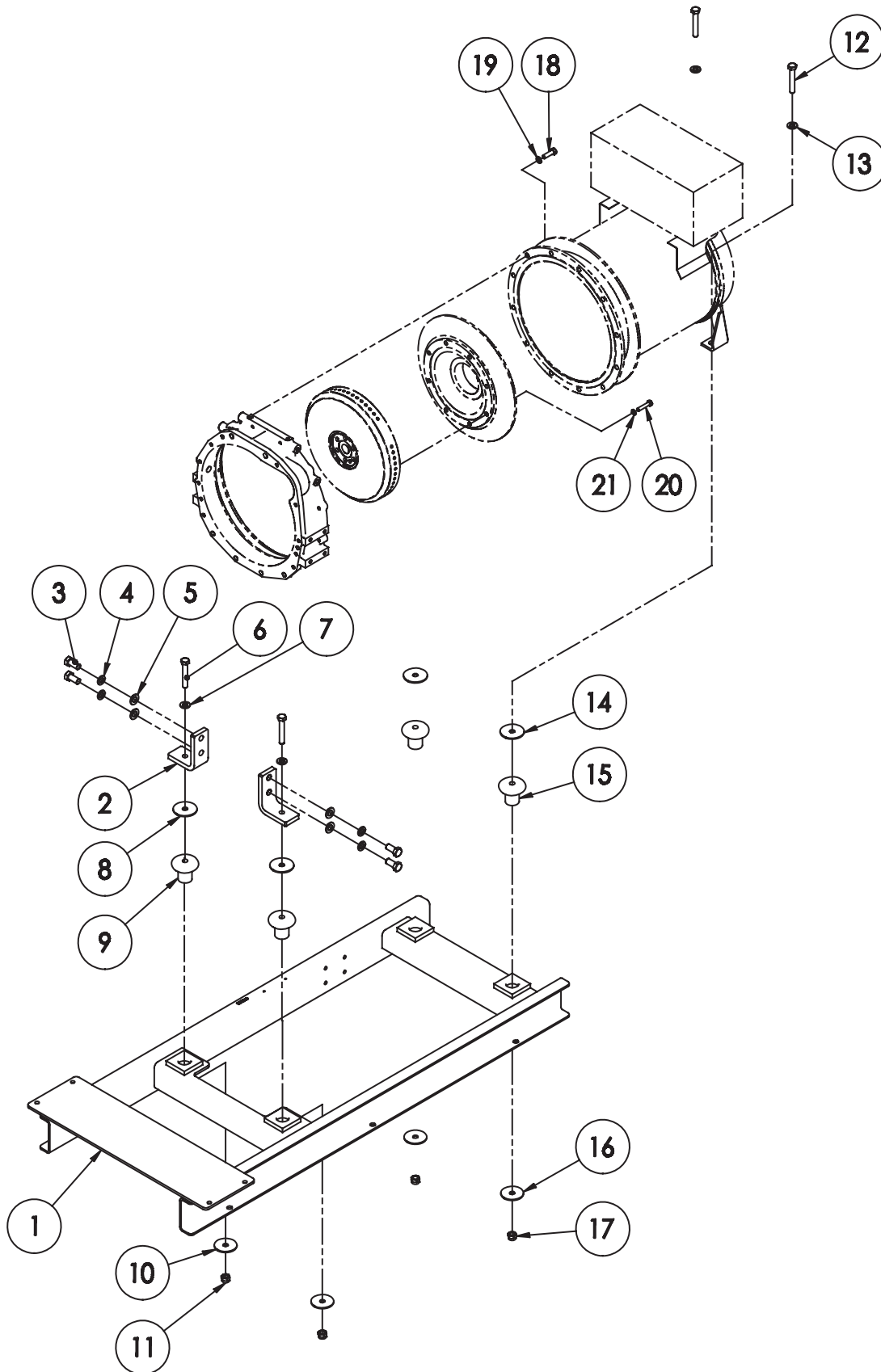
| KEY | PART NUMBER | QTY | DESCRIPTION | SERIAL NUMBER |
|-----|-------------|-----|---|---------------|
| 1 | 39-18407 | 1 | Belt Guard, Upper | - |
| 2 | 39-18406 | 1 | Belt Guard, Lower | - |
| 3 | 01435-00610 | 4 | Capscrew, Hex Head Flanged M6 x 1.0 x 10mm Grade 10.9 | - |
| 4 | 12-84404 | 9 | Capscrew, Hex Head Flanged M5 x 1.0 x 10mm | - |

GROUP 6 - GASKET SETS

| Gasket Kit | | | | |
|-------------------|-------------|-----|-------------------------|---------------|
| KEY | PART NUMBER | QTY | DESCRIPTION | SERIAL NUMBER |
| • | 195907590 | | Gasket Kit | - |
| 1 | 025100012 | 2 | Seal Washer | - |
| 2 | 025100016 | 1 | Seal Washer | - |
| 3 | 052100280 | 1 | O-ring | - |
| 4 | 052100420 | 1 | O-ring | - |
| 5 | 052109076 | 2 | O-ring | - |
| 6 | 052109078 | 2 | O-ring | - |
| 7 | 050209083 | 1 | Oil Seal | - |
| 8 | 052109111 | 1 | O-ring | - |
| 9 | 052109113 | 4 | O-ring | - |
| 10 | 052109136 | 1 | O-ring | - |
| 11 | 052301150 | 1 | O-ring | - |
| 12 | 052400180 | 4 | O-ring | - |
| 13 | 052400480 | 1 | O-ring | - |
| 14 | 052400500 | 1 | O-ring | - |
| 15 | 054109025 | 2 | Gasket | - |
| 16 | 111147751 | 1 | Cylinder Head Gasket | - |
| 17 | 111147761 | 1 | Cylinder Head Gasket | - |
| 18 | 111147771 | 1 | Cylinder Head Gasket | - |
| 19 | 111996520 | 1 | Head Cover Gasket | - |
| 20 | 110996860 | 1 | Gasket | - |
| 21 | 120406050 | 4 | Valve Guide Seal | - |
| 22 | 120406070 | 4 | Valve Guide Seal | - |
| 23 | 120996250 | 1 | Rocker Arm Gasket | - |
| 24 | 131426400 | 12 | Gasket | - |
| 25 | 131996130 | 4 | Gasket | - |
| 26 | 135997170 | 1 | Gasket | - |
| 27 | 135997180 | 1 | Gasket | - |
| 28 | 135997200 | 1 | Gasket | - |
| 29 | 135997210 | 1 | Gasket | - |
| 30 | 135997220 | 2 | EGR Cooler Gasket | - |
| 31 | 135997230 | 1 | Gasket | - |
| 32 | 135997240 | 1 | Gasket | - |
| 33 | 135997250 | 1 | EGR Gasket | - |
| 34 | 135997260 | 1 | EGR Gasket | - |
| 35 | 135997270 | 1 | Intake Throttle Gasket | - |
| 36 | 140996260 | 4 | Gasket | - |
| 37 | 140996270 | 4 | Gasket | - |
| 38 | 140996280 | 2 | Gasket | - |
| 39 | 140996390 | 1 | Gasket | - |
| 40 | 140996410 | 5 | Gasket | - |
| 41 | 145996051 | 1 | Thermostat Cover Gasket | - |
| 42 | 145996681 | 1 | Set Plate Gasket | - |
| 43 | 145996710 | 1 | Gasket | - |
| 44 | 145996990 | 1 | Water Pump Gasket | - |
| 45 | 165996610 | 1 | Gasket | - |
| 46 | 165996740 | 1 | Gear Case Gasket | - |
| 47 | 165996750 | 1 | Front Plate Gasket | - |
| 48 | 198636160 | 1 | Oil Seal | - |
| 49 | 199286340 | 1 | Shim Set | - |
| 50 | 199286150 | 1 | Shim: 0.1 | - |
| 51 | 199286160 | 1 | Shim: 0.15 | - |
| 52 | 199286170 | 1 | Shim: 0.2 | - |
| 53 | 199286180 | 1 | Shim: 0.5 | - |

Notes

Base Frame Kit, Centerbonded Mounting



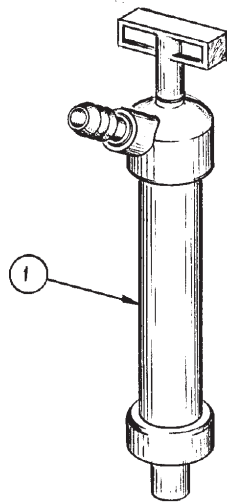
Base Frame Kit, Centerbonded Mounting

| KEY | PART NUMBER | QTY | DESCRIPTION | SERIAL NUMBER |
|-----|-------------|-----|---|---------------|
| 1 | 39-88431 | 1 | Base Frame,steel,centerbonded Mtg NL844T4E / PX-325K2 | - |
| 2 | 23-88104 | 2 | Bracket,front Engine Mtg | - |
| 3 | 12-01103 | 4 | Capscrew, Hex Head M14x1.5 X 40mm | - |
| 4 | 15-01402 | 4 | Lock Washer,helical M14 | - |
| 5 | 15-01401 | 4 | Flat Washer M14 Code 125-A | - |
| 6 | 12-00967 | 2 | Capscrew, Hex Head M12x1.75 X 80mm | - |
| 7 | 01643-31232 | 2 | Flat Washer M12 X 25mm OD X 3.2mm Hardened | - |
| 8 | 15-00016 | 2 | Head Washer 2.38" X 0.53" X 0.125" | - |
| 9 | 33-82254 | 2 | Mount,Centerbonded 300 lb 42-48 Durometer | - |
| 10 | 15-00026 | 2 | Tail Washer 2.25" X 0.52" X 0.125" | - |
| 11 | 14-00830 | 2 | Hex Nut,Nylock M12x1.75 Class 8 Din Code 985 | - |
| 12 | 12-00964 | 2 | Capscrew, Hex Head M12x1.75 X 75mm | - |
| 13 | 01643-31232 | 2 | Flat Washer M12 X 25mm OD X 3.2mm Hardened | - |
| 14 | 15-00016 | 2 | Head Washer 2.38" X 0.53" X 0.125" | - |
| 15 | 33-82254 | 2 | Mount,Centerbonded 300 Lb 42-48 Durometer | - |
| 16 | 15-00026 | 2 | Tail Washer 2.25" X 0.52" X 0.125" | - |
| 17 | 14-00830 | 2 | Hex Nut,Nylock M12x1.75 Class 8 Din Code 985 | - |
| 18 | 12-00313 | 12 | Capscrew, Hex Head 3/8-16 X 1-1/4" Grade 5 | - |
| 19 | 15-00302 | 12 | Lock Washer,Helical 3/8" | - |
| 20 | 12-00214 | 8 | Capscrew, Hex Head 5/16-18 X 1-1/2" Grade 5 | - |
| 21 | 15-00202 | 8 | Lock Washer,Helical 5/16" | - |

GROUP 8 – ACCESSORIES AND OPTIONAL EQUIPMENT

Oil Drain Kit

Marine Application

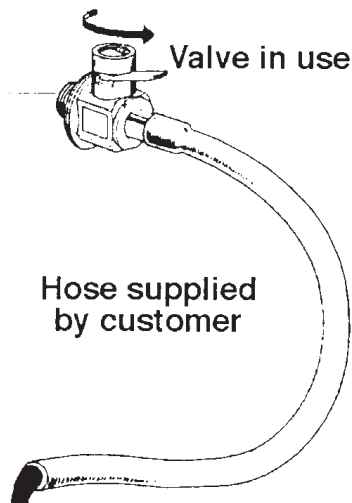


A-5024/ B-3990

| KEY | PART NUMBER | QTY | DESCRIPTION | SERIAL NUMBER |
|-----|-------------|-----|---|---------------|
| •• | 36-70010 | | Oil Drain Pump Kit (with hose & connectors) | - |
| 1 | 36-72002 | 1 | Hand Pump | - |

Oil Drain

Industrial Application



A-6480

| KEY | PART NUMBER | QTY | DESCRIPTION | SERIAL NUMBER |
|-----|-------------|-----|-------------|---------------|
| 1 | 36-77400 | 1 | Drain Valve | - |



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