
312C Track-Type Excavator

Powered by 3064 Engine

SERIAL NUMBER

CAE1201 To Last Built(Vehicle)

6LK26372 To Last Installed(Engine)

HOW TO USE THE PARTS MANUAL

Caterpillar Parts Manuals include illustrations of the groups or assemblies which make up the machine. These illustrations show the standard components plus many of the attachments available for the machine.

The alphabetical index located in the front part of the book should be used to determine the page number on which specific illustrations are shown. Reference to those pages will identify each of the individual serviceable parts.

Captions

The caption under each illustration identifies the part number and name of the group or assembly shown. If more than one illustration is included for any group, the caption identifies the specific machine serial numbers to which each illustration applies. In some cases it is not possible to determine the specific machine serial numbers to which different illustrations are applicable. In those cases the caption identifies the illustration as "First Type", "Second Type", etc. Reference to the actual group or assembly is necessary in those cases to determine which illustration should be used.

Captions provide additional information such as page numbers where illustrations of sub assemblies are shown, information regarding quantities used and other information intended to assist the user in determining parts needs.

This information indicates the effective serial number or effective date on which changes became effective.

Example :

D95.05- : Applicable on and after May 1995

↑
—— D indicates the nineteen hundreds.

T00.05- : Applicable on and after May 2000

↑
—— T indicates the two thousands.

Indented Part Names

Within each illustration is a parts list identifying each serviceable part in the illustration. When a part name is indented in this list, it means that serviceable item is a part of the serviceable item under which it is indented.

Abbreviations and Symbols

R.H. Right Hand } Refers to the side of
L.H. Left Hand } the machine as viewed
} from the operator's
} compartment.

L Length
T Thickness
Z Number of Gear Teeth
O.D. Outside Diameter
I.D. Inside Diameter
O.S. Over Size
U.S. Under Size
N/S Not Serviced
AS Assembly
NOM Nominal

Abbreviations of Wire Colors

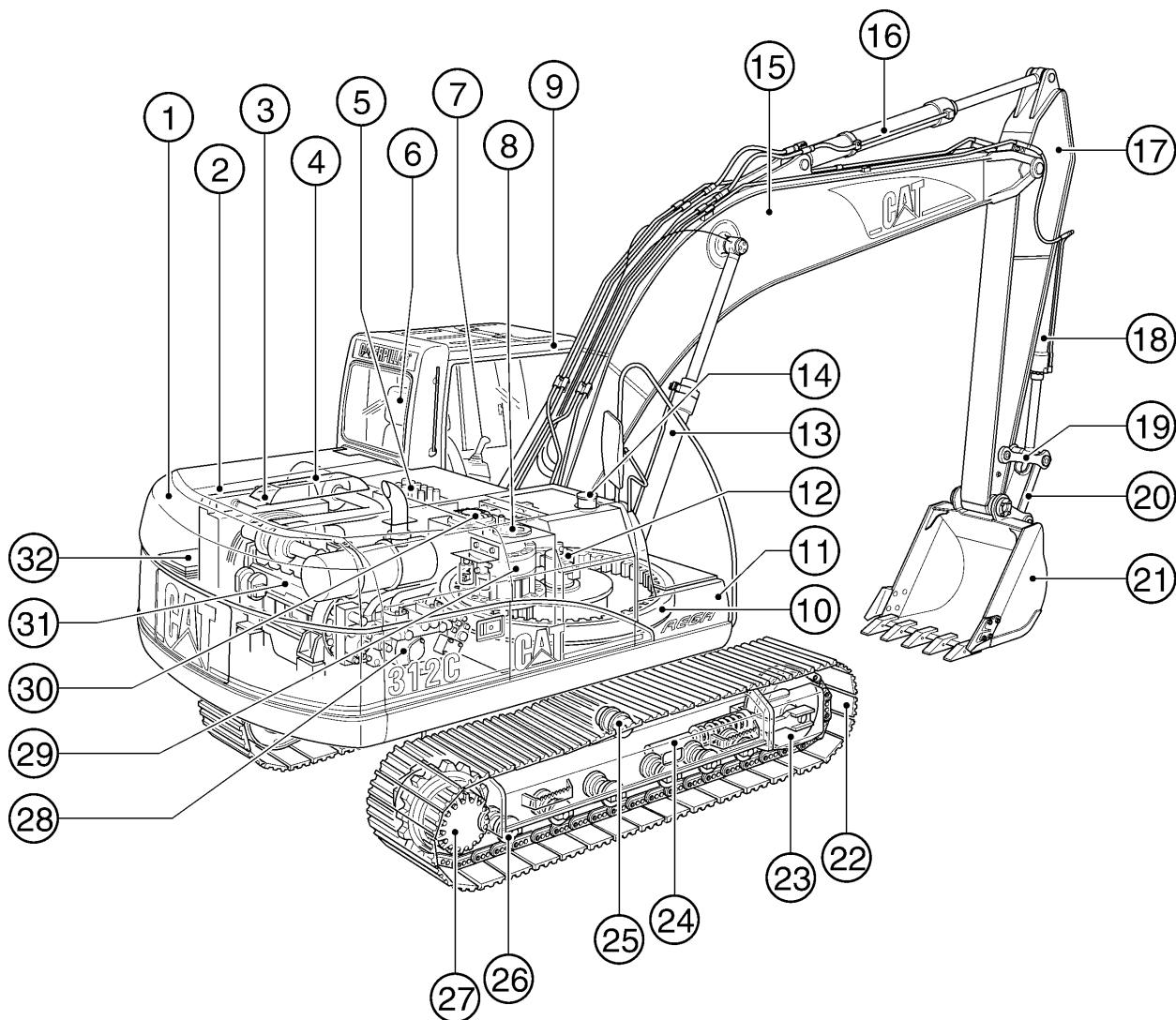
| | |
|------------|--------------------|
| RD :Red | BR :Brown |
| WH :White | GN :Green |
| OR :Orange | BU :Blue |
| YL :Yellow | T :Tan |
| PK :Pink | DK/BU :Dark Blue |
| BK :Black | DK/GN :Dark Green |
| GY :Gray | LT/BU :Light Blue |
| PU :Purple | LT/GN :Light Green |

Note

Continuing improvement and advancement of product design may cause changes to your machine which may not be included in this publication. Each publication is reviewed and revised, as required, to update and include these changes in later editions.

Whenever a question arises regarding your Caterpillar product, or this publication, please consult your Caterpillar dealer for the latest available information.

MODEL VIEW



| | PAGE | | PAGE | | PAGE |
|-------------------------------|------|-------------------------|------|------------------------|-------|
| ① Counterweight | 232 | ⑫ Swivel | 432 | ⑳ Idler | 247 |
| ② Engine Cover | 204 | ⑬ Boom Cylinder | 298 | ㉑ Track Adjuster | 251 |
| ③ Radiator & Oil Cooler | 38 | ⑭ Fuel Tank | 67 | ㉒ Carrier Roller | 252 |
| ④ Air Cleaner | 51 | ⑮ Boom | 638 | ㉓ Track Roller | 252 |
| ⑤ Control Valve | 450 | ⑯ Stick Cylinder | 299 | ㉔ Final Drive | 196 |
| ⑥ Operator Seat | 594 | ⑰ Stick | 644 | ㉕ Pump | 273 |
| ⑦ Control Lever | 434 | ⑱ Bucket Cylinder | 300 | ㉖ Swing Drive | 424 |
| ⑧ Hydraulic Tank | 262 | ⑲ Link | 661 | ㉗ Return Filter | 288 |
| ⑨ Cab | 513 | ㉔ Rod | 661 | ㉘ Engine | 11.01 |
| ⑩ Swing Bearing | 238 | ㉕ Bucket | 679 | ㉙ Battery | 86 |
| ⑪ Storage Box | 227 | ㉖ Track | 258 | | |

REPLACEMENT ITEMS

The following chart provides a convenient listing of those items which require occasional replacement during normal operation or maintenance.

| DESCRIPTION | PART NO. | QTY. USED | PAGE NO. |
|-------------------------------|----------|--------------|-------------|
| Filter | | | |
| Air Conditioner Filter | 305-0367 | 1 | 609 |
| Air Filter | | | |
| Primary Filter Assembly | 131-8902 | 1 | 52 |
| Cab Air Filter | 293-1184 | 1 | 611 |
| Engine Oil Filter | 1R-0739 | 1 | 35 |
| Fuel Filter | 1R-0751 | 1 | 73 |
| Hydraulic Oil Drain Filter | 093-7521 | 1 | 286 |
| Hydraulic Oil Pilot Filter | 215-4909 | 1 | 287.01 |
| | 51-8670 | 1 | 287.02 |
| Hydraulic Tank Return Filter | 126-2081 | 1 | 289 |
| | 179-9806 | 1 | 291 |
| V-Belt | | | |
| Alternator & Fan V-Belt Set | 217-5420 | 1 | 31 |
| Refrigerant Compressor V-Belt | 255-3014 | 1 | 625 |

LIST OF ATTACHMENTS

The following chart provides a convenient listing of attachments with their reference page numbers as a quick reference for parts ordering.

| Consists of: | | Page |
|---------------------|---|-------------|
| | AIR CLEANER | |
| 118-9881 | WITH DOUBLE ELEMENT | 53 |
| 183-1536 | AIR PREFILTER | 55 |
| 170-6821 | ALARM, TRAVEL | 176 |
| | BLADE | |
| 151-1493 | 2500MM WIDE | 634 |
| 198-2120 | 2500MM WIDE (With Auxiliary Pump Control) | 633 |
| 183-1476 | 2600MM WIDE | 635 |
| 151-1494 | 2700MM WIDE | 636 |
| 198-2121 | 2700MM WIDE (With Auxiliary Pump Control) | 633 |
| | BOOM | |
| 151-1487 | R-BOOM, REACH 4.65M | 628 |
| 171-0020 | BOOM LOWERING CONTROL | 359 |
| 283-8801 | Product Link Japan | 168.01 |
| | BUCKET | |
| | EXCAVATION (X) | |
| 150-2239 | 600MM Wide-0.32Cu.M.-Adapter Size J250 (CAE01201-T04.11) | 669 |
| 250-6367 | 564MM Wide-0.32Cu.M.-Adapter Size J250 (CAE T04.12-Up) | 669.01 |
| 150-2240 | 700MM Wide-0.38Cu.M.-Adapter Size J250 (CAE01201-T04.11) | 669 |
| 250-6370 | 664MM Wide-0.38Cu.M.-Adapter Size J250 (CAE T04.12-Up) | 669.01 |
| 150-2241 | 895MM Wide-0.45Cu.M.-Adapter Size J250 (CAE01201-T04.11) | 670 |
| 250-6373 | 794MM Wide-0.45Cu.M.-Adapter Size J250 (CAE T04.12-Up) | 670.01 |
| 168-2878 | 895MM Wide-0.45Cu.M. (ESCO) (CAE01201-T04.11) | 672 |
| 250-6385 | 780MM Wide-0.45Cu.M. (ESCO) (CAE T04.12-Up) | 672.01 |
| 150-2242 | 990MM Wide-0.52Cu.M.-Adapter Size J250 (CAE01201-T04.11) | 670 |
| 250-6376 | 884MM Wide-0.52Cu.M.-Adapter Size J250 (CAE T04.12-Up) | 670.01 |
| 159-5676 | 990MM Wide-0.52Cu.M. (ESCO) (CAE01201-T04.11) | 673 |
| 250-6388 | 875MM Wide-0.52Cu.M. (ESCO) (CAE T04.12-Up) | 673 |
| 150-2243 | 1000MM Wide-0.57Cu.M.-Adapter Size J250 (CAE01201-T04.11) | 671 |
| 250-6379 | 964MM Wide-0.57Cu.M.-Adapter Size J250 (CAE T04.12-Up) | 671.01 |
| 150-2244 | 1090MM Wide-0.63Cu.M.-Adapter Size J250 (CAE01201-T04.11) | 671 |
| 250-6382 | 1054MM Wide-0.63Cu.M.-Adapter Size J250 (CAE T04.12-Up) | 671.01 |
| | For Demolition | |
| 168-2884 | 990MM Wide-0.52Cu.M.-Adapter Size J250 (CAE01201-T04.11) | 672 |
| 250-6391 | 884MM Wide-0.52Cu.M.-Adapter Size J250 (CAE T04.12-Up) | 672.01 |

LIST OF ATTACHMENTS

| Consists of: | | Page |
|--------------|---|--------|
| | BUCKET LINKAGE | |
| 151-1491 | CASTING TYPE (CAE01201-02264) | 631 |
| 251-2864 | CASTING TYPE (CAE02265-Up) | 631.01 |
| 194-8960 | FABRICATION TYPE (CAE01201-02264) | 632 |
| 251-2866 | FABRICATION TYPE (CAE02265-Up) | 632.01 |
| 211-6353 | FABRICATION TYPE (Heavy Duty) (CAE01201-02264) | 632 |
| 251-2922 | FABRICATION TYPE (Heavy Duty) (CAE02265-Up) | 631.02 |
| 192-8381 | BUMPER, SIDE | 244 |
| | CAB | |
| 171-7345 | METAL ROOF HATCH CAB | 514 |
| 161-3739 | SKYLIGHT HATCH CAB | 513 |
| 164-0555 | WITH ELECTRIC OPENABLE FRONT WINDSHIELD | 515 |
| 170-2595 | COUNTERWEIGHT (WITH LIFTING EYE) | 233 |
| 194-8945 | DEMOLITION | 11 |
| 183-1535 | FIXED TYPE OIL COOLER | 49 |
| | GUARD | |
| 170-2607 | BOTTOM, HEAVY DUTY | 222 |
| 194-8257 | BUCKET CYLINDER | 321 |
| 215-9876 | BUCKET CYLINDER (For Demolition) (CAE01201-02264) | 321.01 |
| 229-1067 | BUCKET CYLINDER (For Demolition) (CAE02265-Up) | 321.02 |
| 164-0534 | CAB FRONT (Full Net) | 578 |
| 164-0535 | CAB FRONT (Half Net) | 580 |
| 178-5549 | FOGS | 574 |
| 171-7485 | Cab Front | 576 |
| 164-0497 | Cab Top | 575 |
| 137-2813 | SWIVEL | 224 |
| 120-7199 | TRACK GUIDE | 255 |
| 171-0019 | HAND CONTROL PATTERN CHANGER (4 Ways) | 358 |
| 196-1609 | HEATER & DEFROSTER | 617 |
| | HYDRAULIC SYSTEMS, AUXILIARY | |
| | BOOM LINE GROUPS | |
| | R-Boom (4.65M) | |
| 179-5081 | Drain Lines | 344 |
| 179-5075 | High Pressure Lines | 328 |
| 179-5079 | Medium Pressure Lines | 338 |
| 198-0506 | Quick Coupler Lines | 628 |
| 216-6534 | QUICK COUPLER LINES (On Upper Frame And Control) | 358 |

LIST OF ATTACHMENTS

| Consists of: | | Page |
|---------------------|--|-------------|
| | STICK LINE GROUPS | |
| | R2.5 Stick | |
| 179-5082 | Drain Lines | 347 |
| 179-5077 | High Pressure Lines | 329 |
| 179-5080 | Medium Pressure Lines | 342 |
| 215-5931 | Quick Coupler Lines | 630 |
| | R3.0 Stick | |
| 187-9964 | Drain Lines | 346 |
| 187-9966 | High Pressure Lines | 329 |
| 187-9962 | Medium Pressure Lines | 340 |
| | TOOL CONTROL | |
| 165-0965 | Auxiliary Pump | 357 |
| | Combined Function | |
| 179-5071 | 2 Pump | 355 |
| 165-0976 | 2 Pump (For Demolition) | 357 |
| 165-0964 | 2 Pump (Medium Pressure) | 356 |
| | Double Function | |
| 200-6637 | 1 Pump (Joystick Control) | 357.01 |
| 165-0967 | 1 Pump (Pedal Control) | 357.01 |
| | Single Function | |
| 165-0962 | 1 Pump | 354 |
| 165-0963 | 2 Pump | 354 |
| 196-0926 | HYDRAULIC TANK (CAE01201-02264) | 263 |
| 196-1420 | LARGE BOX COVER | 560 |
| | LIGHT | |
| 197-4423 | R-BOOM, RIGHT SIDE | 184 |
| | WORKING, CAB MOUNTED (Time Delay) | |
| 204-1810 | For Use With Cab Guard | 180 |
| 163-6631 | Without Cab Guard | 178 |
| | OPTIONAL SEAT | |
| 164-0502 | KAB 527P SEAT | 596 |
| 171-7352 | KAB T1P SEAT | 598 |
| 178-5624 | KAB T8P SEAT | 597 |
| 164-0477 | HEADREST (For KAB 528P, KAB T8P Seat) | 604 |
| | RADIO | |
| 163-6634 | AM | 571 |
| 163-6633 | AM/FM | 572 |
| 163-6636 | AM/FM (With Cassette) | 573 |

LIST OF ATTACHMENTS

| | Consists of: | Page |
|----------|--|--------|
| 161-3750 | RAIN PROTECTOR, CAB FRONT | 581 |
| 4I-7343 | SIDECUTTER | 685 |
| | STARTING, COLD WEATHER | |
| 183-1500 | FILM (32WR Hydraulic Oil Package) | 707 |
| 198-2321 | STARTING AID | 92 |
| | STICK | |
| | FOR THE REACH (4.65M) BOOM ONLY | |
| 151-1489 | R2.5 Stick | 629 |
| 194-8988 | R2.5 Stick (Heavy Duty) (CAE01201-02264) | 631 |
| 229-1056 | R2.5 Stick (Heavy Duty) (CAE02265-Up) | 631.01 |
| 151-1488 | R3.0 Stick | 629 |
| 206-3231 | STICK LOWERING CONTROL | 359 |
| 161-3751 | SUN VISOR | 582 |
| | TIP | |
| | ADAPTER SIZE J250 | |
| 8E-3755 | Abrasion, Heavy Duty | 688 |
| 9J-3169 | Long | 686 |
| 8E-3750 | Long, Heavy Duty | 688 |
| 100-6462 | Penetration | 689 |
| 100-6464 | Sharp-Center | 689 |
| 100-6463 | Sharp-Corner | 690 |
| 9J-3178 | Short | 687 |
| 101-2927 | Wide | 686 |
| 169-7722 | TOOL KIT | 692 |
| | TRACK | |
| | RUBBER BELT | |
| 176-4869 | 500MM | 260 |
| | TRIPLE GROUSER | |
| 176-4864 | 600MM | 258 |
| 176-4865 | 700MM | 259 |
| 176-1903 | WIPER, LOWER WINDSHIELD | 565 |
| 170-6819 | 12V-7A POWER SUPPLY SOCKET | 155 |

INDEX

| Name | Page | Name | Page |
|--|------|--|--------|
| A | | | |
| ACCUMULATOR GP | 294 | CAMSHAFT GP | 22 |
| ADJUSTER GP - BUCKET | 684 | CARTRIDGE AS - TURBOCHARGER | 65 |
| ADJUSTMENT GP - HYDRAULIC TRACK | 251 | COMPRESSOR GP - REFRIGERANT | 624 |
| AIR CLEANER AR | 55 | CONDENSER & MTG GP - REFRIGERANT | 626 |
| AIR CLEANER GP | 51 | CONSOLE GP | 590 |
| | 56 | | 592.01 |
| AIR CONDITIONER & MOUNTING GP | 606 | CONSOLE GP - OPERATOR | 589 |
| AIR CONDITIONER GP | 605 | CONTROL & MTG GP - ELECTRONIC | 168 |
| | 608 | CONTROL AR | 168.01 |
| ALARM GP | 142 | CONTROL AR - AUXILIARY | 354 |
| ALARM GP - TRAVEL | 176 | CONTROL AR - QUICK COUPLER | 358 |
| ALTERNATOR GP - CHARGING | 174 | CONTROL GP - BLADE | 442 |
| ARM AS - WIPER | 557 | CONTROL GP - ELECTRIC HAND | 194.01 |
| | | CONTROL GP - ELECTRONIC | 170 |
| | | CONTROL GP - GOVERNOR | 84 |
| | | CONTROL GP - HYDRAULIC | 443 |
| | | CONTROL GP - PILOT OPERATED HYD | 436 |
| | | | 440 |
| B | | | |
| BATTERY & WIRING AR - COLD WEATH | 92 | COOLER AR | 49 |
| BATTERY & WIRING GP | 86 | COOLER GP - ENGINE OIL | 46 |
| BATTERY & WIRING GP - COLD WEATH | 93 | COUNTERWEIGHT GP | 232 |
| BLADE & MOUNTING GP | 651 | COUPLING GP - PUMP | 275 |
| BLADE AR | 633 | COVER GP | 219 |
| BLADE GP | 654 | | 559 |
| BLOCK GP - HYDRAULIC | 292 | COVER GP - STORAGE BOX | 230 |
| BOOM AR | 628 | COVER GP - VALVE MECHANISM | 20 |
| BOOM AR - 1 PIECE LONG | 628 | CRANKSHAFT GP | 21 |
| BOOM GP | 638 | CYLINDER & LINES GP - BLADE | 297 |
| BOX & MTG GP - STORAGE | 227 | CYLINDER & LINES GP - BOOM | 295 |
| BOX GP - STORAGE | 228 | CYLINDER & LINES GP - BUCKET | 296 |
| BREATHER GP | 33 | CYLINDER & LINES GP - STICK | 296 |
| BUCKET & ADJUSTER GP | 674 | CYLINDER & SEAL GP - BLADE | 301 |
| BUCKET AR | 669 | CYLINDER & SEAL GP - BOOM | 298 |
| BUCKET AS | 679 | CYLINDER & SEAL GP - BUCKET | 300 |
| BUMPER SET | 244 | CYLINDER & SEAL GP - STICK | 299 |
| | | CYLINDER BLOCK GP | 18 |
| | | CYLINDER GP - BLADE | 307 |
| | | CYLINDER GP - BOOM | 303 |
| | | CYLINDER GP - BUCKET | 306 |
| | | CYLINDER GP - STICK | 304 |
| | | CYLINDER HEAD GP | 15 |
| C | | | |
| CAB GP | 513 | | |
| CAB GP (BASIC) | 516 | | |
| CAB GP - EXTERIOR | 536 | | |
| CAB GP - INTERIOR | 524 | | |
| CABLE AS | 100 | | |

INDEX

| Name | Page | Name | Page |
|--------------------------------------|-------|------------------------------|--------|
| D | | H | |
| DOOR GP - CAB | 539 | HANDHOLD GP | 225 |
| DOOR GP - HOOD | 217 | HARNES AS | 94 |
| DRIVE AS - WINDSHIELD - AUTO | 550 | | 102 |
| DRIVE GP - SWING | 424 | | 112 |
| DUCT AS | 612 | | 161.05 |
| DUCT GP - AIR | 610 | | 186 |
| E | | | 190 |
| ELECTRONICS GP | 169 | HARNES AS - CONSOLE | 129 |
| ENGINE AR | 11.01 | HARNES AS - WIRING | 128.02 |
| F | | | 143 |
| FAN GP - SUCTION | 50 | | 152 |
| FASTENER GP - SWING & FINAL DR | 202 | | 156 |
| FENDER & COVER GP | 231 | | 163 |
| FILM GP | 701 | HATCH AS | 544 |
| FILTER GP - ENGINE OIL | 34 | HATCH GP | 543 |
| FILTER GP - FUEL | 72 | | 545 |
| FILTER GP - HYDRAULIC | 286 | HEAD GP - PUMP CONTROL | 284 |
| FINAL DRIVE GP | 196 | HEADREST AS | 604 |
| FLYWHEEL GP | 27 | HEATER & MTG GP - CAB | 618 |
| FRAME AS - UNDERCARRIAGE | 245 | HEATER AR - CAB | 617 |
| FRAME GP - UPPER | 242 | HEATER GP - CAB | 620 |
| G | | HOOD & GUARD GP | 204 |
| GEAR & BEARING GP - SWING | 238 | HOOD GP | 216 |
| GEAR GP - FRONT | 24 | HOOD GP - ENGINE | 215 |
| GUARD AR - OVERHEAD | 574 | HORN GP - ELECTRIC | 583 |
| GUARD GP - BLADE CYLINDER | 320 | HOUSING GP - FILTER | 293 |
| GUARD GP - BOTTOM | 221 | HOUSING GP - FLYWHEEL | 26 |
| GUARD GP - BUCKET CYLINDER | 321 | HOUSING GP - FRONT | 25 |
| GUARD GP - FRONT WINDOW | 576 | I | |
| GUARD GP - OVERHEAD | 575 | IDLER GP - FRONT | 247 |
| GUARD GP - SNOW | 226 | K | |
| GUARD GP - SWIVEL | 224 | KNOB AS | 438 |
| GUARD GP - TRACK GUIDE | 255 | | |
| GUARD GP - TRAVEL MOTOR | 256 | | |

INDEX

| Name | Page | Name | Page |
|--------------------------------------|--------|------------------------------------|--------|
| L | | | |
| LAMP GP - FLOOD | 187 | LINKAGE GP - BUCKET | 660 |
| LEVER GP | 587 | LITERATURE GP | 605 |
| LIGHTING GP - BOOM | 182 | M | |
| LIGHTING GP - CAB | 178 | MANIFOLD GP - EXHAUST | 63 |
| LIGHTING GP - CHASSIS | 177 | MANIFOLD GP - INLET | 62 |
| LINES AR - AUXILIARY HYDRAULIC | 328 | MIRROR GP - REAR VIEW | 584 |
| LINES GP - AIR | 59 | MONITOR & MTG GP - OPERATOR | 563 |
| LINES GP - AIR CONDITIONER | 614 | MONITOR GP - OPERATOR | 564 |
| LINES GP - AUXILIARY HYDRAULIC | 330 | MOTOR GP - TRAVEL | 431.01 |
| | 334 | MOTOR AS - WINDOW WIPER | 558 |
| | 414 | MOTOR GP - SWING | 430 |
| LINES GP - BLADE CYL & VALVE | 410 | MOUNTING GP | 170.02 |
| LINES GP - BLADE CYLINDER | 317 | MOUNTING GP - ALTERNATOR | 29 |
| LINES GP - BOOM | 322 | MOUNTING GP - ENGINE | 30 |
| LINES GP - BOOM CYLINDER | 310 | MOUNTING GP - GREASE GUN | 220 |
| LINES GP - BUCKET CYLINDER | 316 | MOUNTING GP - STARTING MOTOR | 171 |
| LINES GP - DRAIN | 61 | MOUNTING GP - VALVE | 447 |
| | 344 | MUFFLER GP | 58 |
| | 414 | N | |
| LINES GP - ENGINE OIL | 32 | NOZZLE GP - UNIT INJECTOR | 82 |
| LINES GP - FRONT | 386 | P | |
| LINES GP - FUEL | 70 | PAN GP - OIL | 28 |
| | 74 | PANEL GP - CIRCUIT BREAKER | 104 |
| LINES GP - GREASE | 657 | PISTON & ROD GP | 23 |
| LINES GP - HEATER | 622 | PLATE & FILM GP | 694 |
| LINES GP - OIL DRAIN | 37 | PLATFORM GP - OPERATOR | 585 |
| LINES GP - PILOT | 360 | PULLEY GP | 31 |
| LINES GP - PUMP | 352 | PUMP & MOUNTING GP | 273 |
| LINES GP - QUICK COUPLER | 332 | PUMP AS - WATER | 47 |
| | 349 | PUMP GP - FUEL INJECTION | 76 |
| | 416 | PUMP GP - MAIN HYDRAULIC | 276 |
| LINES GP - RETURN & FILTER | 416 | R | |
| LINES GP - STICK | 325 | RADIATOR & HYD OIL COOLER GP | 38 |
| LINES GP - STICK CYLINDER | 314 | RADIO GP - AM | 571 |
| LINES GP - SWING MOTOR | 422 | RADIO GP - AM/FM | 572 |
| LINES GP - TRAVEL MOTOR | 350 | ROLLER AR - TRACK & CARRIER | 252 |
| LINES GP - TURBOCHARGER OIL | 36 | | |
| LINES GP - WATER | 48 | | |
| LINK AS | 592 | | |
| LINK AS - TRACK | 261 | | |
| LINKAGE AR - BUCKET | 631 | | |
| LINKAGE AR - FRONT | 631.02 | | |

INDEX

| Name | Page | Name | Page |
|--|--------|---------------------------------------|------|
| ROLLER GP - TRACK CARRIER..... | 254 | TIMER AS..... | 124 |
| ROLLER GP - TRACK - SINGLE FLANGE..... | 253 | | 192 |
| S | | | |
| SCREEN GP..... | 272 | TIP GP..... | 689 |
| SEAT BELT GP..... | 602 | TIP GP - ABRASION..... | 688 |
| SEAT GP..... | 594 | TIP GP - LONG..... | 686 |
| SEPARATOR - WATER..... | 71.01 | | 688 |
| SIDECUTTER GP..... | 685 | TIP GP - PENETRATION..... | 689 |
| SPECIAL AR..... | 11 | TIP GP - SHORT..... | 687 |
| SPRING GP - RECOIL..... | 250 | TIP GP - WIDE..... | 686 |
| SPROCKET GP - NONSEGMENTED..... | 195 | TOOL AR..... | 692 |
| STARTING MOTOR GP - ELECTRIC..... | 172 | TOOL GP..... | 693 |
| STICK AR - COUPLER..... | 630 | TRACK GP..... | 258 |
| STICK AR - HOE..... | 629 | TURBOCHARGER GP..... | 64 |
| | 631 | V | |
| STICK GP..... | 645 | VALVE & MOUNTING GP..... | 448 |
| | 649 | VALVE AR..... | 358 |
| STICK GP - COUPLER..... | 650 | VALVE AR - BOOM LOWERING CONTROL..... | 359 |
| STICK GP - HOE..... | 644 | VALVE AR - STICK LOWERING CONT..... | 359 |
| | 647 | VALVE AS - BALL..... | 512 |
| SUPPORT GP - SEAT..... | 593 | VALVE GP - CHECK..... | 489 |
| SUSPENSION GP - SEAT..... | 599 | VALVE GP - CONTROL..... | 460 |
| SWITCH AS..... | 123.01 | | 471 |
| | 191 | VALVE GP - MAIN CONTROL..... | 450 |
| | 193 | VALVE GP - PILOT..... | 434 |
| SWITCH AS - DISCONNECT..... | 120 | | 494 |
| SWITCH AS - MAGNETIC..... | 121 | VALVE GP - PRESS REDUCING SOL..... | 485 |
| SWITCH AS - ROLLER..... | 191 | VALVE GP - PRESSURE REDUCING..... | 484 |
| SWITCH AS - ROTARY..... | 138 | VALVE GP - RELIEF..... | 470 |
| SWITCH GP - START..... | 137 | | 473 |
| SWIVEL GP..... | 432 | | 483 |
| T | | | |
| TANK & FILTER GP - HYDRAULIC..... | 264 | VALVE GP - SELECTOR..... | 492 |
| TANK & MTG GP - FUEL..... | 67 | VALVE GP - SHUTTLE..... | 510 |
| TANK & MTG GP - HYDRAULIC..... | 262 | VALVE GP - SOLENOID..... | 486 |
| TANK AS - WINDOW WASHER..... | 570 | | 491 |
| TANK GP - FUEL..... | 68 | VALVE MECHANISM GP..... | 16 |
| | | VISOR GP - PROTECTION - RAIN..... | 581 |
| | | VISOR GP - SUN..... | 582 |

INDEX

| Name | Page | Name | Page |
|----------------------------------|------|------|------|
| W | | | |
| WASHER GP - WINDOW | 568 | | |
| WINDOW AS | 555 | | |
| WINDOW GP | 546 | | |
| | 551 | | |
| WINDOW GP - DOOR | 542 | | |
| WIPER & WASHER GP - WINDOW | 566 | | |
| WIPER AR - WINDOW | 565 | | |
| WIPER GP - WINDOW | 556 | | |
| WIRING GP | 151 | | |
| | 155 | | |
| | 157 | | |
| | 194 | | |
| WIRING GP - CAB | 140 | | |
| WIRING GP - CONSOLE | 125 | | |
| WIRING GP - LOWER WIPER | 154 | | |
| WIRING GP - QUICK COUPLER | 128 | | |
| | 162 | | |

MACHINE ARRANGEMENT

Consists of :

| | | | Page |
|---|----------|-----------------------------|------|
| 1 | 120-7199 | GUARD GP-TRACK GUIDE..... | 255 |
| 1 | 137-2813 | GUARD GP-SWIVEL..... | 224 |
| 1 | 170-2607 | GUARD GP-BOTTOM | 222 |
| 1 | 185-9123 | GUARD GP-TRAVEL MOTOR | 257 |
| 1 | 192-8381 | BUMPER SET | 244 |
| 1 | 193-9455 | COUNTERWEIGHT GP..... | 234 |
| 1 | 194-8941 | FILM GP..... | 706 |

H91641E 02

194-8945 SPECIAL AR
An Attachment

ENGINE ARRANGEMENT

Consists of :

| | | Page |
|---|-------------------------|------|
| 1 | 201-3870 ENGINE AR..... | 12 |
| 1 | 205-6810 PULLEY GP..... | 31 |

H84326E 01

217-5535 ENGINE AR

MEMORANDA

ENGINE ARRANGEMENT

Consists of :

| | | | Page |
|---------------------------|----------|--------------------------------|------|
| BASIC ENGINE | | | |
| 1 | 212-8523 | PAN GP-OIL..... | 28 |
| 1 | 196-7979 | CAMSHAFT GP..... | 22 |
| 1 | 205-6811 | CRANKSHAFT GP..... | 21 |
| 1 | 205-6839 | CYLINDER BLOCK GP..... | 18 |
| 1 | 205-6837 | CYLINDER HEAD GP..... | 15 |
| 1 | 205-6838 | VALVE MECHANISM GP..... | 16 |
| 1 | 196-8072 | COVER GP-VALVE MECHANISM..... | 20 |
| 1 | 205-6782 | FLYWHEEL GP..... | 27 |
| 1 | 212-8459 | HOUSING GP-FLYWHEEL..... | 26 |
| 1 | 178-6519 | GEAR GP-FRONT..... | 24 |
| 1 | 205-6840 | HOUSING GP-FRONT..... | 25 |
| 1 | 212-8461 | PISTON & ROD GP..... | 23 |
| 1 | 178-6531 | MOUNTING GP-ALTERNATOR..... | 29 |
| LUBRICATION SYSTEM | | | |
| 1 | 212-8466 | FILTER GP-ENGINE OIL..... | 34 |
| 1 | 196-7990 | LINES GP-ENGINE OIL..... | 32 |
| 1 | 217-5491 | BREATHER GP..... | 33 |
| 1 | 196-7991 | LINES GP-TURBOCHARGER OIL..... | 36 |
| COOLING SYSTEM | | | |
| 1 | 178-6633 | PUMP AS-WATER..... | 47 |

H93798E 08

ENGINE ARRANGEMENT

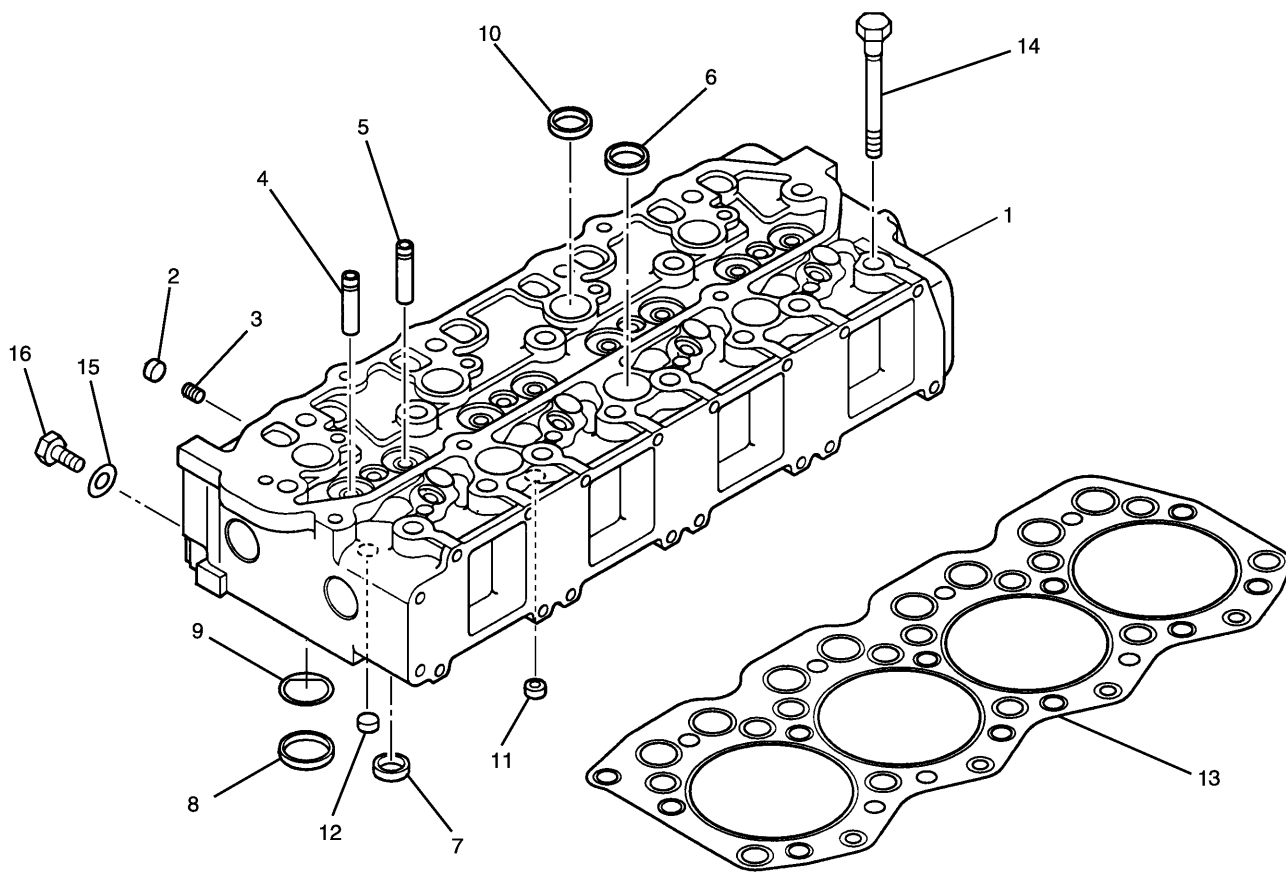
Consists of :

| | | | Page |
|--|----------|----------------------------------|--------|
| COOLING SYSTEM | | | |
| 1 | 196-7995 | LINES GP-WATER..... | 48 |
| 1 | 51-8132 | COOLER GP-ENGINE OIL..... | 46 |
| 1 | 196-7994 | FAN GP-SUCTION | 50 |
| AIR INLET AND EXHAUST SYSTEM | | | |
| 1 | 212-8462 | MANIFOLD GP-INLET..... | 62 |
| 1 | 212-8464 | LINES GP-AIR | 59 |
| 1 | 212-8463 | MANIFOLD GP-EXHAUST | 63 |
| 1 | 196-7988 | TURBOCHARGER GP..... | 64 |
| 1 | 212-8465 | MUFFLER GP..... | 58 |
| FUEL SYSTEM | | | |
| 1 | 212-8471 | FILTER GP-FUEL..... | 72 |
| 1 | 212-8468 | LINES GP-FUEL..... | 74 |
| 1 | 212-8469 | PUMP GP-FUEL INJECTION | 76 |
| 4 | 212-8470 | NOZZLE GP-UNIT INJECTOR | 82 |
| ELECTRICAL AND STARTING SYSTEM | | | |
| 1 | 125-2963 | MOUNTING GP-STARTING MOTOR..... | 171 |
| 1 | 272-4774 | STARTING MOTOR GP-ELECTRIC | 173.01 |
| 1 | 212-8622 | ALTERNATOR GP-CHARGING | 174 |
| THE FOLLOWING REPAIR KIT IS AVAILABLE: | | | |
| 1 | 239-6684 | CAP KIT | |

H93799E 08

MEMORANDA

BASIC ENGINE



| NOTE | No. | PART No. | QTY | PART NAME | NOTE | No. | PART No. | QTY | PART NAME |
|------|-----|----------|-----|------------------|------|-----|----------|-----|-----------|
| | 1 | 212-8472 | 1 | HEAD AS | | | | | |
| | 2 | 099-4388 | 4 | CAP | | | | | |
| | 3 | 51-7505 | 4 | PLUG | | | | | |
| | 4 | 183-8172 | 4 | GUIDE (INTAKE) | | | | | |
| | 5 | 183-8173 | 4 | GUIDE (EXHAUST) | | | | | |
| | 6 | 51-4915 | 10 | CAP | | | | | |
| | 7 | 51-8012 | 4 | INSERT (EXHAUST) | | | | | |
| | 8 | 212-8474 | 4 | INSERT (INTAKE) | | | | | |
| | 9 | 212-8473 | 4 | PLATE | | | | | |
| | 10 | 212-8475 | 4 | CAP | | | | | |
| | 11 | 212-8476 | 3 | CAP | | | | | |
| | 12 | 51-7583 | 2 | CAP | | | | | |
| | 13 | 222-8330 | 1 | GASKET | | | | | |
| | 14 | 51-7718 | 17 | BOLT (L=125mm) | | | | | |
| | 15 | 095-2038 | 1 | WASHER | | | | | |
| | 16 | 51-5591 | 1 | PLUG | | | | | |

H82693E 01

205-6837 CYLINDER HEAD GP
Part of 201-3870-Page12