



XEBP7918-04

October 2009

325C 325C L Track-Type Excavators

Powered by 3126 Engine

SERIAL NUMBER

BKH1 To Last Built(Vehicle)

BKT1 To Last Built(Vehicle)

BLA1 To Last Built(Vehicle)

BLX1 To Last Built(Vehicle)

5GG00194 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
L.H. Left Hand

} Refers to the side of 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

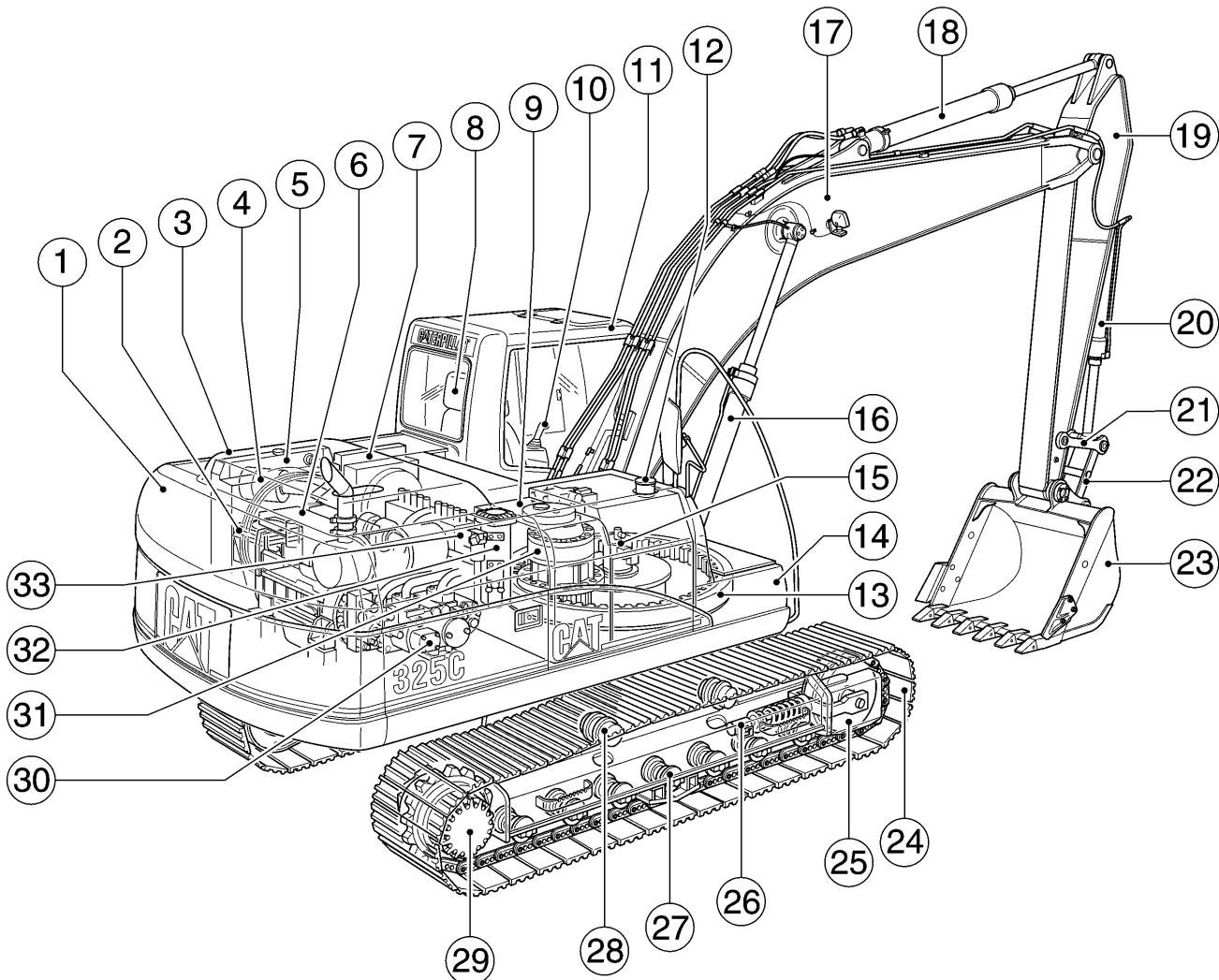
| | |
|------------|--------------------|
| RD :Red | BR :Brown |
| WH :White | GN :Green |
| OR :Orange | BU :Blue |
| YL :Yellow | T :Tan |
| PK :Pink | DK/BU :Dark Blue |
| BK :Black | DK/GN :Dark Green |
| GY :Gray | LT/BU :Light Blue |
| PU :Purple | LT/GN :Light Green |

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..... | 274 | ⑫ Fuel Tank..... | 121 | ⑬ Bucket | 744 |
| ② Battery | 124 | ⑯ Swing Bearing | 280 | ⑭ Track | 314 |
| ③ Engine Hood | 248 | ⑭ Storage Box | 269 | ⑮ Idler | 298 |
| ④ Air Cleaner | 92 | ⑮ Swivel | 506 | ⑯ Track Adjuster | 302 |
| ⑤ Radiator & Aftercooler | 72 | ⑯ Boom Cylinder..... | 358 | ⑰ Track Roller | 308 |
| ⑥ Engine | 11 | ⑰ Boom | 710 | ⑱ Carrier Roller | 308 |
| ⑦ Oil Cooler..... | 76 | ⑲ Stick Cylinder | 360 | ⑲ Final Drive | 242 |
| ⑧ Operator Seat..... | 667 | ⑲ Stick | 716 | ⑳ Pump | 331 |
| ⑨ Hydraulic Tank | 320 | ㉑ Bucket Cylinder | 362 | ㉒ Swing Drive | 489 |
| ⑩ Control Lever | 508 | ㉑ Link | 734 | ㉓ Capsule Filter | 348 |
| ⑪ Cab | 596 | ㉒ Rod | 734 | ㉔ Control Valve | 524 |

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. |
|----------------------------------|----------|--------------|-------------|
| Belt | | | |
| Alternator & Air Conditioner | 183-4494 | 1 | 53 |
| Filter | | | |
| Air Conditioner Filter | 185-8154 | 1 | 678 |
| Air Filter | | | |
| Primary Filter Assembly | 6I-2503 | 1 | 93 |
| Secondary Filter Assembly | 6I-2504 | 1 | 93 |
| Cab Air Filter | 4I-1278 | 1 | 685 |
| Engine Oil Filter | 1R-0739 | 1 | 65 |
| Fuel Filter | 1R-0762 | 1 | 116 |
| Hydraulic Oil Drain Filter | 093-7521 | 1 | 346 |
| Hydraulic Oil Pilot Filter | 5I-8670 | 1 | 347 |
| Hydraulic Oil Tank Return Filter | 126-2081 | 1 | 350 |
| Water Separator Element | 1R-0770 | 1 | 119 |

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 |
|-----------------------|---|------|
| 191-5537 | ADDITIONAL GEAR TRAIN FOR AUXILIARY PUMP | 345 |
| 193-6784 | AIR PREFILTER | 94 |
| 183-1037 | ALARM, TRAVEL | 228 |
| BOOM | | |
| 176-2776 | M-BOOM, MASS 5.6M | 703 |
| 176-2774 | R-BOOM, REACH 6.2M | 702 |
| 193-6823 | R-BOOM, REACH 6.2M (Heavy Duty) | 702 |
| BUCKET | | |
| EXCAVATION (X) | | |
| 123-5473 | C Family 1370MM Wide-1.1Cu.M.-Adapter Size J350 | 736 |
| 123-5474 | C Family 1470MM Wide-1.2Cu.M.-Adapter Size J350 | 736 |
| 193-4943 | D Family 1430MM Wide-1.4Cu.M.-Adapter Size J400 | 738 |
| 193-4842 | D Family 1500MM Wide-1.5Cu.M.-Adapter Size J400 | 739 |
| MASS EXCAVATION (MX) | | |
| 123-5615 | C Family 1440MM Wide-1.3Cu.M.-Adapter Size J350 | 737 |
| 127-6884 | C Family 1450MM Wide-1.3Cu.M.-Adapter Size J400 | 737 |
| 123-5616 | C Family 1590MM Wide-1.5Cu.M.-Adapter Size J350 | 738 |
| 202-5119 | D Family 1520MM Wide-1.6Cu.M.-Adapter Size J400 | 739 |
| BUCKET LINKAGE | | |
| 163-7741 | C FAMILY | 709 |
| 176-2793 | D FAMILY | 709 |
| CAB | | |
| 161-3739 | SKYLIGHT HATCH CAB | 596 |
| 164-0555 | WITH ELECTRIC OPENABLE FRONT WINDSHIELD | 597 |
| COUNTERWEIGHT | | |
| 193-9601 | EXTRA COUNTERWEIGHT (BKH1-Up, BKT1-Up) | 275 |
| 177-6328 | WITHOUT LIFTING EYE | 276 |
| FILM | | |
| 193-6740 | HAMMER (BLA1-Up) | 776 |
| 193-6741 | HAMMER (BLX1-Up) | 777 |
| GUARD | | |
| 176-2796 | BOTTOM, HEAVY DUTY (BKH1-Up, BKT1-Up) | 263 |
| 126-2122 | BUCKET CYLINDER | 373 |
| 164-0534 | CAB, FRONT (Full Net) | 652 |
| 164-0535 | CAB, FRONT (Half Net) | 654 |

LIST OF ATTACHMENTS

| Consists of: | | Page |
|---|---|--------|
| 178-5549 | FOGS | 648 |
| 171-7485 | Cab Front | 650 |
| 164-0497 | Cab Top | 649 |
| 180-7783 | SIDE RUBBER BUMPER (BKH1-00344, BKT1-00330) | 292 |
| 231-6979 | SIDE RUBBER BUMPER (BKH00345-Up, BKT00331-Up) | 292.01 |
| TRACK GUIDE | | |
| 195-5374 | Full Length (BKH1-Up) | 306 |
| 184-5686 | Full Length (BKT1-Up) | 307 |
| 195-5375 | Track End Guide (BKH1-Up, BLA1-Up) | 304 |
| 195-5376 | Track End Guide (BKT1-Up, BLX1-Up) | 305 |
| 177-2835 | HAND CONTROL PATTERN CHANGER (4 WAYS) | 439 |
| 178-5599 | HEATER & DEFROSTER | 691 |
| HYDRAULIC SYSTEMS, AUXILIARY | | |
| BOOM LINE GROUPS | | |
| M-Boom (5.6M) | | |
| 193-6622 | Drain Lines | 420 |
| 193-6620 | High Pressure Lines | 386 |
| 193-6621 | Medium Pressure Lines | 406 |
| R-Boom (6.2M), R-Boom (6.2M) (Heavy Duty) | | |
| 179-5165 | Drain Lines | 418 |
| 179-5163 | High Pressure Lines | 384 |
| 179-5164 | Medium Pressure Lines | 404 |
| STICK LINE GROUPS | | |
| M2.5D Stick | | |
| 193-6647 | Drain Lines | 426 |
| 193-6645 | High Pressure Lines | 402 |
| 193-6646 | Medium Pressure Lines | 416 |
| M3.2C Stick, R3.2C Stick, R3.2C Stick (Heavy Duty) | | |
| 179-5171 | Drain Lines | 422 |
| 179-5168 | High Pressure Lines | 394 |
| 179-5170 | Medium Pressure Lines | 408 |
| R2.0D Stick | | |
| 193-6637 | Drain Lines | 425 |
| 202-6941 | High Pressure Lines | 400 |
| 193-6636 | Medium Pressure Lines | 414 |
| R2.7C Stick, R2.7C Stick (Heavy Duty) | | |
| 193-6632 | Drain Lines | 424 |
| 193-6630 | High Pressure Lines | 398 |
| 193-6631 | Medium Pressure Lines | 412 |

LIST OF ATTACHMENTS

| Consists of: | | Page |
|---------------------------------|---|--------|
| R3.0C Stick | | |
| 193-6627 | Drain Lines | 423 |
| 193-6625 | High Pressure Lines | 396 |
| 193-6626 | Medium Pressure Lines | 410 |
| TOOL CONTROL | | |
| 179-5160 | Auxiliary Pump | 439 |
| Combined Function | | |
| 179-5156 | 2 Pump | 437 |
| 179-5159 | 2 Pump (Medium Pressure) | 438 |
| Single Function | | |
| 179-5157 | 1 Pump | 436 |
| 179-5158 | 2 Pump | 436 |
| 187-6777 | HYDRAULIC TANK | 321 |
| 196-1421 | LARGE BOX COVER | 635 |
| LIGHT | | |
| WORKING, CAB MOUNT (Time Delay) | | |
| 204-1810 | With Falling Object | 231.01 |
| 163-6631 | Without Falling Object | 230 |
| OPTIONAL SEAT | | |
| 164-0502 | KAB 527P SEAT (With Seat Heater) | 669 |
| 164-0477 | HEADREST (For KAB 528P Seat) | 673 |
| RADIO | | |
| 163-6633 | AM/FM | 646 |
| 163-6636 | AM/FM (With Cassette) | 647 |
| 161-3750 | RAIN PROTECTOR, CAB FRONT | 655 |
| SIDE CUTTER | | |
| 7Y-0366 | C, D FAMILY | 750 |
| 9W-8565 | C, D FAMILY (Blade) | 751 |
| 9W-8566 | C, D FAMILY (Combination) | 751 |
| STARTING, COLD WEATHER | | |
| 204-3832 | FILM (32WR Hydraulic Oil Package) | 782 |
| 209-2833 | STARTING AID | 210 |

LIST OF ATTACHMENTS

| Consists of: | | Page |
|--------------------------------|--|--------|
| STICK | | |
| FOR THE MASS (5.6M) BOOM ONLY | | |
| 176-2784 | M2.5D Stick | 708 |
| 193-6643 | M2.5D Stick (Auxiliary) | 708.01 |
| 176-2786 | M3.2C Stick | 708 |
| 193-6638 | M3.2C Stick (Auxiliary) | 708.01 |
| FOR THE REACH (6.2M) BOOM ONLY | | |
| 176-2783 | R2.0D Stick | 707 |
| 193-6633 | R2.0D Stick (Auxiliary) | 707 |
| 176-2781 | R2.7C Stick | 706 |
| 202-7033 | R2.7C Stick (Auxiliary) | 706.01 |
| 193-6735 | R2.7C Stick (Heavy Duty) | 706 |
| 197-2335 | R2.7C Stick (Heavy Duty) (Auxiliary) | 706.01 |
| 176-2785 | R3.0C Stick | 705 |
| 202-7032 | R3.0C Stick (Auxiliary) | 705 |
| 176-2780 | R3.2C Stick | 704 |
| 202-7030 | R3.2C Stick (Auxiliary) | 704.01 |
| 193-6738 | R3.2C Stick (Heavy Duty) | 704 |
| 197-2332 | R3.2C Stick (Heavy Duty) (Auxiliary) | 704.01 |
| 161-3751 | SUN VISOR | 656 |
| TIP | | |
| ADAPTER SIZE J350 | | |
| 8E-3757 | Abrasion, Heavy Duty | 754 |
| 8J-4955 | Long | 752 |
| 8E-3752 | Long, Heavy Duty | 752 |
| 3G-3236 | Penetration | 754 |
| 9W-6472 | Sharp-Center | 755 |
| 9W-6473 | Sharp-Corner | 755 |
| 8J-4954 | Short | 753 |
| 8J-4953 | Wide | 753 |
| ADAPTER SIZE J400 | | |
| 8E-0837 | Abrasion, Heavy Duty | 759 |
| 127-0716 | Long | 757 |
| 6Y-5472 | Long, Heavy Duty | 757 |
| 8E-0838 | Penetration | 759 |
| 8E-0840 | Sharp-Center | 760 |
| 8E-0839 | Sharp-Corner | 760 |
| 127-0715 | Short | 758 |
| 8E-0836 | Wide | 758 |
| TOOL | | |
| 176-2676 | TOOL KIT | 761 |
| 7I-0776 | TOOL KIT (Delux) | 761 |

LIST OF ATTACHMENTS

| Consists of: | | Page |
|-----------------------|---|------|
| TRACK | | |
| TRIPLE GROUSER | | |
| 188-3240 | 600MM (BKT1-Up, BLX1-Up) | 315 |
| 199-3226 | 700MM (BKH1-Up, BLA1-Up) | 315 |
| 199-2785 | 700MM (BKT1-Up, BLX1-Up) | 316 |
| 199-2783 | 800MM (BKH1-Up, BLA1-Up) | 316 |
| 178-5602 | WIPER, LOWER WINDSHIELD | 639 |
| 163-6629 | 12V-7A POWER SUPPLY SOCKET | 191 |

INDEX

| Name | Page | Name | Page |
|--|------|--|------|
| A | | | |
| ADJUSTER GP - BUCKET | 748 | CARRIER GP - SEAL | 23 |
| ADJUSTMENT GP - HYDRAULIC TRACK | 302 | COMPRESSOR GP - REFRIGERANT | 701 |
| AIR CLEANER AR | 94 | CONDENSER & MTG GP - REFRIGERANT | 700 |
| AIR CLEANER GP | 92 | CONSOLE GP | 663 |
| | 95 | CONSOLE GP - OPERATOR | 662 |
| AIR CONDITIONER & MOUNTING GP | 676 | CONTROL & MTG GP - ELECTRONIC | 200 |
| AIR CONDITIONER GP | 675 | CONTROL AR - AUXILIARY | 436 |
| | 678 | CONTROL GP - ELECTRONIC | 199 |
| ALARM GP | 182 | CONTROL GP - HYDRAULIC | 516 |
| ALARM GP - TRAVEL | 228 | CONTROL GP - PILOT OPERATED HYD | 510 |
| ALTERNATOR GP - CHARGING | 214 | | 514 |
| ARM AS - WIPER | 632 | COOLER & MOUNTING GP | 76 |
| B | | | |
| BATTERY & WIRING GP | 124 | COOLER GP - ENGINE OIL | 87 |
| BATTERY & WIRING GP - COLD WEATH | 132 | COOLER GP - OIL | 78 |
| BLOCK GP - HYDRAULIC | 352 | COUNTERWEIGHT GP | 274 |
| BLOWER GP | 682 | COUPLING GP - FLEXIBLE | 333 |
| BOOM AR | 703 | COUPLING GP - PUMP | 332 |
| BOOM AR - 1 PIECE LONG | 702 | COVER GP | 255 |
| BOOM GP | 710 | | 614 |
| BOX & MTG GP - STORAGE | 269 | | 634 |
| BOX GP - STORAGE | 270 | COVER GP - AIR INLET | 100 |
| BREATHER GP | 60 | COVER GP - CYLINDER BLOCK | 24 |
| BUCKET & ADJUSTER GP | 740 | COVER GP - FRONT HOUSING | 48 |
| BUCKET AR | 736 | COVER GP - STORAGE BOX | 272 |
| BUCKET AS - EXCAVATION | 744 | COVER GP - VALVE MECHANISM | 43 |
| | 746 | CRANKSHAFT GP | 26 |
| BUCKET AS - MASS EXCAVATION | 745 | CYLINDER & LINES GP - BOOM | 354 |
| | 747 | CYLINDER & LINES GP - BUCKET | 356 |
| BUMPER GP - SIDE | 292 | CYLINDER & LINES GP - STICK | 355 |
| C | | | |
| CAB GP | 596 | CYLINDER & SEAL GP - BOOM | 358 |
| CAB GP (BASIC) | 598 | CYLINDER & SEAL GP - BUCKET | 362 |
| CAB GP - EXTERIOR | 612 | CYLINDER & SEAL GP - STICK | 360 |
| CAB GP - INTERIOR | 604 | CYLINDER BLOCK AS | 20 |
| CABLE AS | 141 | CYLINDER BLOCK GP | 18 |
| CAMSHAFT GP | 30 | CYLINDER GP - BUCKET | 366 |
| D | | | |
| DAMPER & PULLEY GP | 32 | | |
| DOOR GP - CAB | 615 | | |
| DOOR GP - HOOD | 256 | | |

INDEX

| Name | Page | Name | Page |
|---------------------------------------|--------|-------------------------------|------|
| DRIVE AS - WINDSHIELD - AUTO..... | 626 | GUARD GP - SWIVEL..... | 266 |
| DRIVE GP - FAN..... | 54 | GUARD GP - TRACK GUIDE..... | 303 |
| DRIVE GP - PUMP | 345 | GUARD GP - TRAVEL MOTOR | 312 |
| DRIVE GP - SWING | 489 | | |
| DUCT AS..... | 686 | | |
| DUCT GP - AIR | 684 | | |
| E | | | |
| ELBOW GP - AIR INLET..... | 101 | HANDHOLD GP | 267 |
| ELECTRONICS GP..... | 198 | HARNESS AS..... | 134 |
| ENGINE AR - COMPLETE | 12 | | 148 |
| ENGINE AR - CORE..... | 16 | | |
| F | | | |
| FAN GP - SUCTION | 86 | HARNESS AS - CONSOLE | 164 |
| FASTENER GP - FRONT HOUSING..... | 50 | HARNESS AS - WIRING..... | 183 |
| FASTENER GP - LIFTING | 29 | | |
| FASTENER GP - SWING & FINAL DR..... | 246 | | |
| FENDER & COVER GP..... | 273 | | |
| FILM GP | 776 | | |
| FILTER GP..... | 119 | HATCH AS | 621 |
| FILTER GP - ENGINE OIL..... | 64 | HATCH GP | 620 |
| FILTER GP - FUEL | 116 | HEAD GP - PUMP CONTROL | 338 |
| | 118.01 | HEADREST AS | 673 |
| FILTER GP - HYDRAULIC | 346 | HEATER & MTG GP - CAB | 692 |
| FINAL DRIVE GP..... | 242 | HEATER AR - CAB | 691 |
| FLYWHEEL GP..... | 56 | HEATER GP - AIR INLET | 216 |
| FRAME AS - UNDERCARRIAGE | 294 | HEATER GP - CAB | 694 |
| FRAME GP - UPPER..... | 288 | HOOD & GUARD GP..... | 248 |
| FUMES DISPOSAL GP | 61 | HOOD GP..... | 258 |
| G | | | |
| GAUGE GP - OIL LEVEL (DIPSTICK) | 67 | HOOD GP - ENGINE | 254 |
| GEAR & BEARING GP - SWING | 280 | HORN GP - ELECTRIC | 657 |
| GEAR GP - FRONT | 52 | HOUSING GP - FLYWHEEL | 57 |
| GUARD AR - BOTTOM | 263 | HOUSING GP - FRONT | 47 |
| GUARD AR - OVERHEAD | 648 | | |
| GUARD GP - BOTTOM | 264 | | |
| GUARD GP - BUCKET CYLINDER | 373 | | |
| GUARD GP - FRONT WINDOW..... | 650 | | |
| GUARD GP - OVERHEAD..... | 649 | | |
| I | | | |
| IDLER GP - FRONT | 298 | | |
| K | | | |
| KNOB AS | 512 | | |
| L | | | |
| LAMP GP - FLOOD..... | 236 | | |

INDEX

| Name | Page | Name | Page |
|--------------------------------------|------|---------------------------------------|--------|
| LEVER GP | 660 | MONITOR GP - OPERATOR | 638 |
| LIFTER GP - VALVE | 46 | MOTOR & MTG GP - SWING | 492 |
| LIFTING GP - ENGINE | 28 | MOTOR & MTG GP - TRAVEL | 496 |
| LIGHTING GP - BOOM | 232 | MOTOR AS - WINDOW WIPER | 633 |
| LIGHTING GP - CAB | 230 | MOTOR GP - FAN DRIVE | 502 |
| LIGHTING GP - CHASSIS | 229 | MOTOR GP - SWING | 493 |
| LINES GP - AIR | 98 | MOTOR GP - TRAVEL | 498 |
| LINES GP - AIR CONDITIONER | 688 | MOUNTING GP - ENGINE | 59 |
| LINES GP - AUXILIARY HYDRAULIC | 384 | MOUNTING GP - ENGINE OIL FILTER | 71 |
| LINES GP - BOOM | 374 | MOUNTING GP - GREASE GUN | 262 |
| LINES GP - BOOM CYLINDER | 368 | MOUNTING GP - VALVE | 520 |
| LINES GP - BUCKET CYLINDER | 371 | MUFFLER GP | 105 |
| LINES GP - COOLING | 84 | | |
| LINES GP - DRAIN | 106 | | |
| | 418 | | |
| | 484 | | |
| LINES GP - ENGINE OIL | 62 | PAN GP - OIL | 58 |
| LINES GP - FRONT | 466 | PANEL GP - CIRCUIT BREAKER | 144 |
| LINES GP - FUEL | 112 | PISTON & ROD GP | 31 |
| LINES GP - GREASE | 732 | PLATE & FILM GP | 764 |
| LINES GP - HEATER | 698 | PLATFORM GP - OPERATOR | 659 |
| LINES GP - MOTOR | 434 | PLUG GP | 538 |
| LINES GP - OIL DRAIN | 70 | | 552 |
| LINES GP - PILOT | 440 | | 595 |
| LINES GP - PUMP | 432 | PLUG GP - ENGINE | 21 |
| LINES GP - RETURN & FILTER | 486 | PULLEY GP | 53 |
| LINES GP - STICK | 378 | PUMP & MOUNTING GP | 107 |
| LINES GP - STICK CYLINDER | 370 | | 331 |
| LINES GP - SWING MOTOR | 488 | PUMP & MTG GP - UNIT INJ HYD | 107.01 |
| LINES GP - TRAVEL MOTOR | 428 | PUMP GP | 118 |
| LINES GP - TURBOCHARGER OIL | 66 | PUMP GP - ENGINE OIL | 68 |
| LINES GP - WATER | 90 | PUMP GP - FUEL PRIMING | 120 |
| LINK AS | 665 | PUMP GP - FUEL TRANSFER | 117 |
| LINK AS - TRACK | 317 | PUMP GP - GEAR | 342 |
| LINKAGE AR - BUCKET | 709 | PUMP GP - MAIN HYDRAULIC | 334 |
| LINKAGE GP - BUCKET | 734 | PUMP GP - UNIT INJECTION | 110 |
| LITERATURE GP | 674 | PUMP GP - UNIT INJECTOR HYD | 108 |
| | | PUMP GP - WATER | 88 |

M

| | |
|-----------------------------------|-----|
| MANIFOLD GP - EXHAUST | 102 |
| MIRROR GP - REAR VIEW | 658 |
| MONITOR & MTG GP - OPERATOR | 637 |

R

| | |
|---------------------------------|-----|
| RADIATOR & AFTERCOOLER GP | 72 |
| RADIATOR GP | 74 |
| RADIO GP - AM/FM | 646 |

INDEX

| Name | Page | Name | Page | | |
|---|--------|-----------------------------------|------|--|--|
| ROLLER AR - TRACK & CARRIER..... | 308 | STICK GP - HOE | 716 | | |
| ROLLER GP - TRACK CARRIER..... | 310 | | 718 | | |
| ROLLER GP - TRACK - DOUBLE FLANGE | 311.01 | | 720 | | |
| ROLLER GP - TRACK - SINGLE FLANGE | 311 | | 722 | | |
| ROTATING GP - PUMP | 504 | | 724 | | |
| ROTOR GP - SWIVEL | 507 | | 726 | | |
| S | | | | | |
| SCREEN GP | 330 | | 728 | | |
| SEAL GP - CRANKSHAFT | 27 | | 730 | | |
| SEAL GP - FUEL INJECTOR | 111 | SUPPORT GP - SEAT..... | 666 | | |
| SEAT BELT GP..... | 672 | SUSPENSION GP - SEAT | 670 | | |
| SEAT GP | 667 | SWITCH AS..... | 240 | | |
| SENSOR GP - ENGINE | 220 | SWITCH AS - DISCONNECT | 152 | | |
| SENSOR GP - PRESSURE..... | 221 | SWITCH AS - MAGNETIC | 154 | | |
| SENSOR GP - SPEED | 226 | SWITCH AS - ROLLER | 240 | | |
| SENSOR GP - TEMPERATURE | 225 | SWITCH AS - ROTARY..... | 179 | | |
| SIDECUTTER GP..... | 750 | SWITCH GP - START | 178 | | |
| SIDECUTTER GP - BLADE | 751 | SWIVEL GP | 506 | | |
| SIDECUTTER GP - COMBINATION | 751 | T | | | |
| SPRING GP - RECOIL | 301 | TANK & FILTER GP - HYDRAULIC..... | 322 | | |
| SPROCKET GP - NONSEGMENTED | 241 | TANK & MTG GP - FUEL..... | 121 | | |
| STARTING AR - COLD WEATHER..... | 210 | TANK & MTG GP - HYDRAULIC..... | 320 | | |
| STARTING MOTOR GP - ELECTRIC | 202 | TANK AS - WINDOW WASHER..... | 644 | | |
| | 211 | TANK GP - FUEL | 122 | | |
| STICK AR | 704.01 | TIMER AS | 157 | | |
| | 706.01 | | 239 | | |
| | 708.01 | TIP GP | 755 | | |
| STICK AR - HOE | 704 | | 760 | | |
| | 705 | TIP GP - ABRASION..... | 754 | | |
| | 707 | | 759 | | |
| STICK GP..... | 717 | TIP GP - LONG | 752 | | |
| | 719 | | 757 | | |
| | 721 | TIP GP - PENETRATION | 754 | | |
| | 723 | | 759 | | |
| | 725 | TIP GP - SHORT | 753 | | |
| | 727 | | 758 | | |
| | 729 | TIP GP - WIDE | 753 | | |
| | 731 | | 758 | | |

INDEX

| Name | Page | Name | Page |
|--|--------|------|------|
| TOOL AR..... | 761 | | |
| TOOL GP | 762 | | |
| TRACK GP | 314 | | |
| TURBOCHARGER GP | 103 | | |
| V | | | |
| VALVE & MOUNTING GP | 521 | | |
| VALVE AR - 4 WAY..... | 439 | | |
| VALVE AS - BALL..... | 594 | | |
| VALVE GP | 545 | | |
| VALVE GP - CHECK..... | 576 | | |
| VALVE GP - CONTROL..... | 526 | | |
| | 548 | | |
| | 558 | | |
| VALVE GP - CUSHION CROSSOVER RLF..... | 562 | | |
| VALVE GP - FLOW CONTROL & RELIEF | 553 | | |
| VALVE GP - MAIN CONTROL..... | 523.02 | | |
| VALVE GP - PILOT | 508 | | |
| | 580 | | |
| VALVE GP - PILOT RELIEF | 541 | | |
| | 556 | | |
| VALVE GP - PRESS REDUCING SOL | 572 | | |
| VALVE GP - PRESSURE CONTROL..... | 109 | | |
| VALVE GP - PRESSURE REDUCING | 571 | | |
| VALVE GP - RELIEF | 540 | | |
| | 543 | | |
| | 546 | | |
| | 554 | | |
| | 561 | | |
| | 565 | | |
| VALVE GP - SELECTOR | 579 | | |
| VALVE GP - SHUTTLE | 592 | | |
| VALVE GP - SOLENOID..... | 573 | | |
| VALVE GP - TRACTION CONTROL..... | 564 | | |
| VALVE MECHANISM GP..... | 44 | | |
| VISOR GP - PROTECTION - RAIN..... | 655 | | |
| VISOR GP - SUN..... | 656 | | |
| W | | | |
| WASHER GP - WINDOW..... | 642 | | |
| WINDOW AS | 630.01 | | |
| WINDOW GP | 622 | | |
| | 627 | | |
| WINDOW GP - DOOR | 618 | | |
| WIPER & WASHER GP - WINDOW..... | 640 | | |
| WIPER AR - WINDOW..... | 639 | | |
| WIPER GP - WINDOW..... | 631 | | |
| WIRING GP..... | 191 | | |
| | 193 | | |
| | 197.01 | | |
| WIRING GP - CAB | 180 | | |
| WIRING GP - CONSOLE..... | 158 | | |
| WIRING GP - ENGINE..... | 218 | | |
| WIRING GP - HEATER | 217 | | |
| WIRING GP - LOWER WIPER | 190 | | |

ENGINE ARRANGEMENT

Consists of :

| | Page |
|------------------------------------|------|
| 1 135-5803 FAN GP-SUCTION | 86 |
| 1 159-3458 ENGINE AR-COMPLETE..... | 12 |
| 1 183-8151 MUFFLER GP..... | 105 |

H74241E 01

178-6642 ENGINE AR

S/N BKH 1-00344, BKT 1-00330, BLA 1-00212, BLX 1-00306

Consists of :

| | Page |
|------------------------------------|---------|
| 1 135-5803 FAN GP-SUCTION | 86 . 01 |
| 1 234-2918 ENGINE AR-COMPLETE..... | 15 . 01 |
| 1 183-8151 MUFFLER GP..... | 105 |

H85979E 02

178-6642 ENGINE AR

S/N BKH 00345-Up, BKT 00331-Up, BLA 00213-Up, BLX 00307-Up

ENGINE ARRANGEMENT

Consists of :

| | Page |
|--|------|
| ENGINE ARRANGEMENT | |
| 1 159-3459 ENGINE AR-CORE..... | 16 |
| BASIC ENGINE | |
| 1 194-1682 COVER GP-CYLINDER BLOCK | 24 |
| 1 162-8068 PLUG GP-ENGINE | 22 |
| 1 154-7192 FASTENER GP-FRONT HOUSING | 51 |
| 1 116-4556 FASTENER GP-FRONT HOUSING | 50 |
| 1 159-0303 PLUG GP-ENGINE | 21 |
| 1 135-5035 COVER GP-VALVE MECHANISM | 43 |
| 1 142-8100 LIFTING GP-ENGINE | 28 |
| 1 113-6170 FASTENER GP-LIFTING | 29 |
| 1 177-5196 DAMPER & PULLEY GP | 32 |
| 1 178-2492 PULLEY GP..... | 53 |
| 1 118-1727 COVER GP-FRONT HOUSING | 48 |
| 1 7W-8813 HOUSING GP-FLYWHEEL..... | 57 |
| 1 177-4813 FLYWHEEL GP..... | 56 |
| 1 132-3844 CARRIER GP-SEAL..... | 23 |
| 1 136-8888 COVER GP-FRONT HOUSING | 49 |
| 1 176-9429 PAN GP-OIL..... | 58 |
| 1 183-5780 DRIVE GP-FAN..... | 54 |
| 1 115-4203 SEAL GP-CRANKSHAFT | 27 |

H80136E 06

159-3458 ENGINE AR-COMPLETE (1/3)
 S/N BKH 1-00344, BKT 1-00330, BLA 1-00212, BLX 1-00306
 Part of 178-6642-Page11

ENGINE ARRANGEMENT

Consists of :

| | Page |
|--|------|
| LUBRICATION SYSTEM | |
| 1 177-4814 GAUGE GP-OIL LEVEL (DIPSTICK) | 67 |
| 1 7C-2475 LINES GP-ENGINE OIL..... | 62 |
| 1 194-1685 FILTER GP-ENGINE OIL | 64 |
| 1 194-1684 FUMES DISPOSAL GP | 61 |
| 1 159-0285 LINES GP-TURBOCHARGER OIL | 66 |
| COOLING SYSTEM | |
| 1 177-9823 PUMP GP-WATER..... | 88 |
| 1 192-9972 LINES GP-WATER..... | 90 |
| AIR INLET AND EXHAUST SYSTEM | |
| 1 153-1794 COVER GP-AIR INLET | 100 |
| 1 127-3466 MANIFOLD GP-EXHAUST | 102 |
| 1 194-1683 ELBOW GP-AIR INLET..... | 101 |
| FUEL SYSTEM | |
| 1 183-2860 LINES GP-FUEL | 112 |

H80137E 06

159-3458 ENGINE AR-COMPLETE (2/3)
 S/N BKH 1-00344, BKT 1-00330, BLA 1-00212, BLX 1-00306
 Part of 178-6642-Page11

ENGINE ARRANGEMENT

Consists of :

| | | Page | |
|--------------------------------|----------|----------------------------------|-----|
| ELECTRICAL AND STARTING SYSTEM | | | |
| 1 | 159-1822 | SENSOR GP-ENGINE..... | 220 |
| 1 | 177-6972 | ALTERNATOR GP-CHARGING | 214 |
| 1 | 118-7284 | HEATER GP-AIR INLET..... | 216 |
| 1 | 183-1195 | CONTROL & MTG GP-ELECTRONIC..... | 201 |
| 1 | 201-4204 | STARTING MOTOR GP-ELECTRIC | 202 |
| 1 | 190-6186 | SENSOR GP-SPEED | 226 |
| 1 | 190-5038 | WIRING GP-ENGINE..... | 218 |
| 1 | 194-1686 | WIRING GP-HEATER | 217 |
| OPERATOR STATION | | | |
| 1 | 212-8518 | COMPRESSOR GP-REFRIGERANT | 701 |

H80138E 06

159-3458 ENGINE AR-COMPLETE (3/3)
S/N BKH 1-00344, BKT 1-00330, BLA 1-00212, BLX 1-00306
Part of 178-6642-Page11

MEMORANDA

ENGINE ARRANGEMENT

Consists of :

Page

ENGINE ARRANGEMENT

| 1 | 233-6947 ENGINE AR-CORE..... | 17. 01 |
|---------------------|--|--------|
| BASIC ENGINE | | |
| 1 | 194-1682 COVER GP-CYLINDER BLOCK | 24 |
| 1 | 162-8068 PLUG GP-ENGINE | 22 |
| 1 | 154-7192 FASTENER GP-FRONT HOUSING | 51 |
| 1 | 116-4556 FASTENER GP-FRONT HOUSING | 50 |
| 1 | 159-0303 PLUG GP-ENGINE | 21 |
| 1 | 135-5035 COVER GP-VALVE MECHANISM | 43 |
| 1 | 142-8100 LIFTING GP-ENGINE | 28 |
| 1 | 113-6170 FASTENER GP-LIFTING | 29 |
| 1 | 177-5196 DAMPER & PULLEY GP | 32 |
| 1 | 178-2492 PULLEY GP..... | 53 |
| 1 | 118-1727 COVER GP-FRONT HOUSING | 48 |
| 1 | 7W-8813 HOUSING GP-FLYWHEEL | 57 |
| 1 | 177-4813 FLYWHEEL GP..... | 56 |
| 1 | 4W-3462 CARRIER GP-SEAL..... | 23 |
| 1 | 136-8888 COVER GP-FRONT HOUSING | 49 |
| 1 | 176-9429 PAN GP-OIL..... | 58 |
| 1 | 183-5780 DRIVE GP-FAN | 54 |
| 1 | 115-4203 SEAL GP-CRANKSHAFT | 27 |
| 1 | 237-5182 PLUG GP-ENGINE | 22. 01 |

H85844 E 01

234-2918 ENGINE AR-COMPLETE (1/3)
 S/N BKH 00345-Up, BKT 00331-Up, BLA 00213-Up, BLX 00307-Up
 Part of 178-6642-Page11