

Parts & Service Manual

E1-12K802/R1-12K01 312-8 8-SPEED

B1-16O802/R1-16O801 316-8 8-SPEED

 **Wheel Horse**

WHEEL HORSE 300/400 SERIES PARTS & SERVICE MANUAL

INTRODUCTION PAGE

1. How to use this parts manual

- 1.1. The 300/400 Series parts manual is divided into major sections arranged in the sequence outlined on the following page. Major sections are subdivided into smaller groups of parts, each with its own illustration and illustration reference numbers.
- 1.2. Illustrated items are numerically keyed to the parts listing on the facing page. Illustrations are repeated when the parts list is too long for one page. Figure numbers are located at the bottom of each illustration and also at the beginning of each description column. Item numbers are numerically keyed to their respective illustrations.
- 1.3. When an (X) appears in the quantity (Qty) column use only if applicable, or as required to meet tolerances.

2. To locate parts

When function, use or location is known:

Refer to the List of Illustrations to locate the proper illustration.

3. Service aids

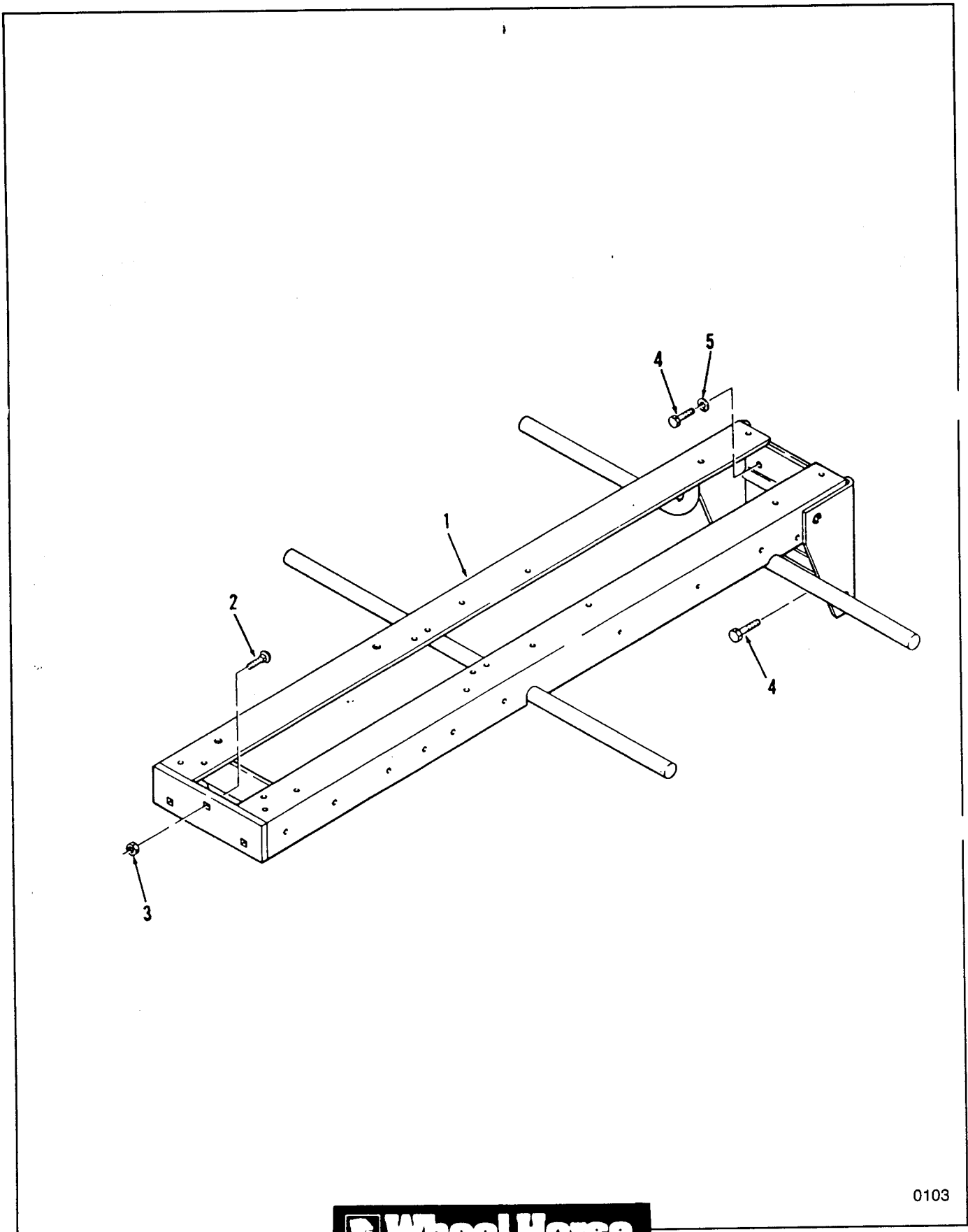
Special notes recorded on illustrations:

Refer to available owner & repair manuals and service bulletins for detailed information.

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SECTION 1 — FRAME



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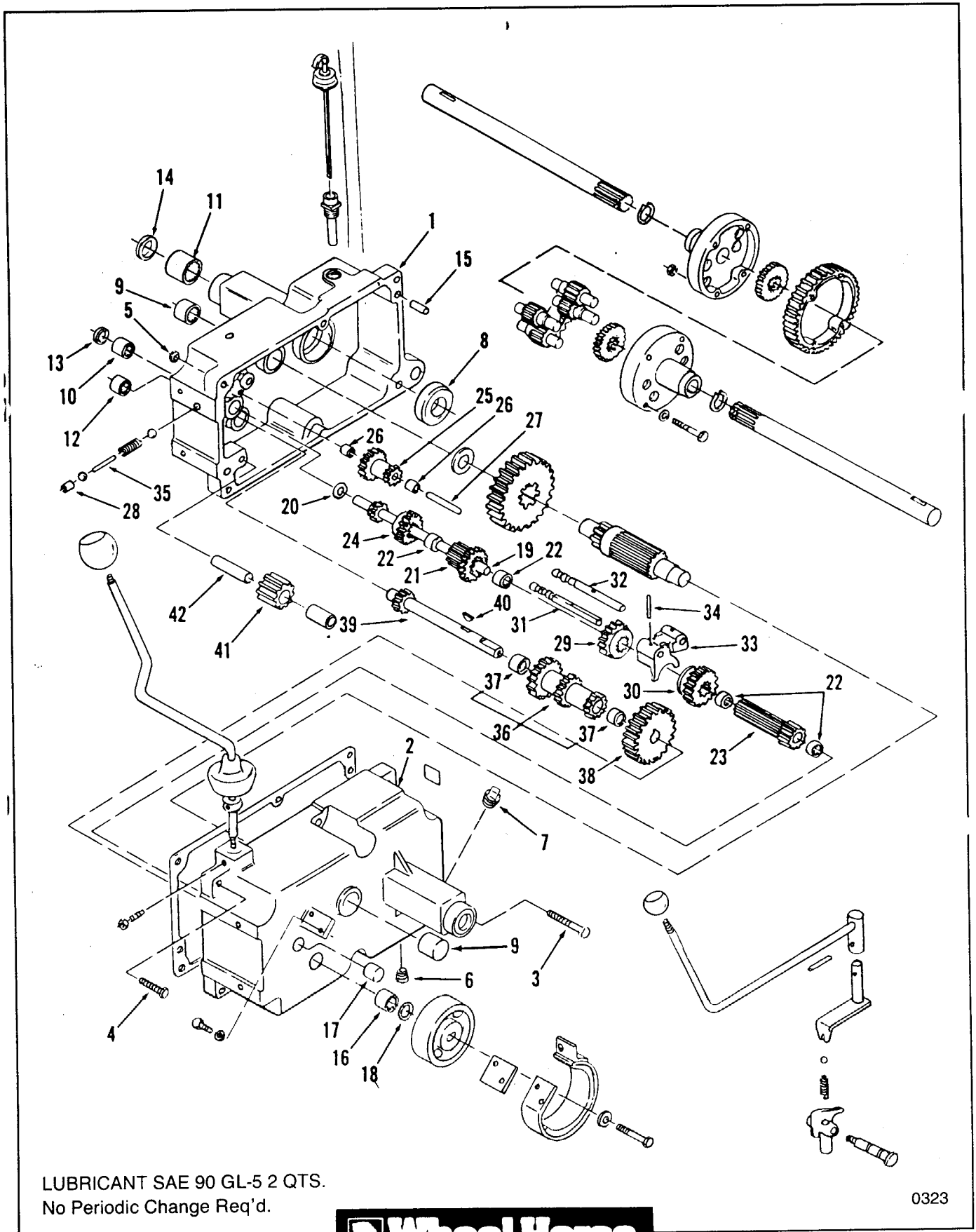


Figure 1-1 Frame

SECTION 1 - FRAME

| ITEM | PART NUMBER | DESCRIPTION | Quantity |
|-----------------------------|-------------|------------------------------------|----------|
| Figure 1-1 FRAME | | | |
| 1 | 110648 | Frame | 1 |
| 2 | 900064 | Carriage Bolt 3/8-16 x 1 1/4 | 3 |
| 3 | 915663 | Nut 3/8-16 E.S. | 3 |
| 4 | 908032 | Bolt 3/8-16 x 3/4 | 4 |
| 5 | 920083 | Lockwasher 3/8 | 4 |

SECTION 2 - 8-SPEED TRANSMISSION



LUBRICANT SAE 90 GL-5 2 QTS.
No Periodic Change Req'd.

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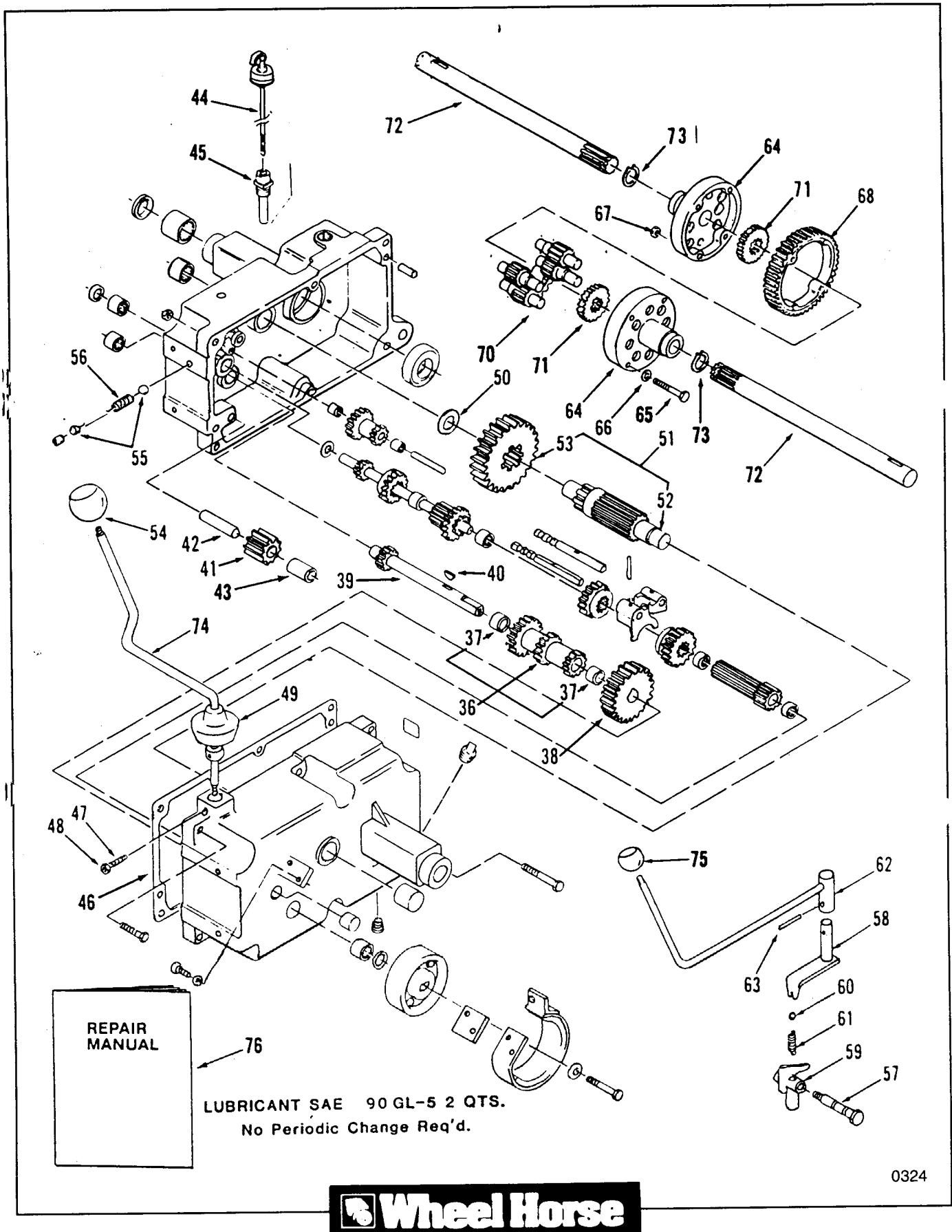


Figure 2-1 Mechanical Transmission - 8 - Speed

SECTION 2 - 8-SPEED TRANSMISSION

| ITEM | PART NUMBER | DESCRIPTION | Quantity |
|--|-------------|---|----------|
| Figure 2 - 1 | | | |
| MECHANICAL TRANSMISSION - 8-SPEED | | | |
| | 110996 | Assembly 8-Speed Transmission | 1 |
| 1 | 111204 | Case-Trans. RH | 1 |
| | 114678 | Case-Trans. RH Note: this case half has recess in axle housing for oil seal | 1 |
| 2 | 111203 | Case-Trans. LH | 1 |
| | 114679 | Case-Trans. RH Note: this case half has recess in axle housing for oil seal | 1 |
| 3 | 908044 | Bolt 3/8-16 x 4 | 1 |
| 4 | 908039 | Bolt 3/8-16 x 2 1/4 | 5 |
| 5 | 915663 | Nut 3/8-16 E.S | 6 |
| 6 | 943460 | Allen Hd. Pipe Plug 1/4 | 1 |
| 7 | 943420 | Sq. Hd. Pipe Plug 3/8 | 1 |
| 8 | 111199 | Ball Brg. 40 mm I.D. | 2 |
| 9 | 1532 | Needle Bearing 1 I.D. | 2 |
| 10 | 1542 | Needle Bearing 5/8 I.D. | 1 |
| 11 | 1528 | Needle Bearing 1 I.D. | 2 |
| 12 | 1529 | Needle Bearing 3/4 I.D. | 1 |
| 13 | 100442 | Seal-Input Shaft 5/8 I.D. | 1 |
| 14 | 100863 | Seal-Axle 1 I.D. x 1-1/2 O.D. | 2 |
| | 114677 | Seal-Axle 1 I.D. x 1-1/4 O.D. | 2 |
| 15 | 3915 | Locating Pin | 2 |
| 16 | 1523 | Needle Bearing 3/4 I.D. | 1 |
| 17 | 1531 | Needle Bearing 5/8 I.D. | 1 |
| 18 | 100441 | Seal-Brake shaft 3/4 I.D. | 1 |
| 19 | 7201 | Input Shaft | 1 |
| 20 | 7418 | Thrust Washer | 1 |
| 21 | 7204 | Gear | 1 |
| 22 | 1518 | Needle Bearing 5/8 I.D. | 4 |
| 23 | 5175 | Gear | 1 |
| 24 | 7205 | Sliding Gear | 1 |
| 5 | 7206 | Reduction Gear | 1 |
| 26 | 7207 | Needle Bearing 3/8 I.D. | 2 |
| 27 | 7208 | Shaft-Reduction Gear | 1 |
| 28 | 1243 | Plug Cup | 1 |
| 29 | 5173 | Gear 2nd and 3rd | 1 |
| 30 | 5174 | Gear 1st and Reverse | 1 |
| 31 | 5615 | Shift Rail-Front | 1 |
| 32 | 5616 | Shift Rail-Rear | 1 |
| 33 | 3503 | Shift Fork | 2 |
| 34 | 933156 | Spirol Pin 1/8 x 1 | 2 |
| 35 | 5614 | Shift Pin | 1 |

SECTION 2 - 8 SPEED TRANSMISSION



0324



Figure 2-2 Mechanical Transmission - 8 - Speed

SECTION 2 - 8-SPEED TRANSMISSION

| ITEM | PART NUMBER | DESCRIPTION | Quantity |
|--|-------------|---|----------|
| Figure 2-2 | | | |
| MECHANICAL TRANSMISSION - 8-SPEED (CONTINUED) | | | |
| 36 | 7269 | Cluster Gear With Bushings | 1 |
| 37 | 1504 | Bronze Bushing | 2 |
| 38 | 3527 | Reduction Gear | 1 |
| 39 | 9840 | Cluster Shaft | 1 |
| 40 | 937089 | Woodruff Key 3/16 x 3/4 | 1 |
| 41 | 4204 | Gear-Reverse Idler | 1 |
| 42 | 3909 | Pin-Reverse Idler | 1 |
| 43 | 1516 | Bushing-Reverse Idler | 1 |
| 44 | 106447 | Dipstick Assembly | 1 |
| 45 | 106448 | Nipple-Transmission Fill | 1 |
| 46 | 3912 | Transmission Case Gasket | 1 |
| 47 | 1239 | Special Set Screw | 1 |
| 48 | 915111 | Nut 1/4-20 | 1 |
| 49 | 3577 | Dust Cover | 1 |
| 50 | 9547 | Thrust Washer | 1 |
| 51 | 102974 | Gear Assembly | 1 |
| 52 | 101625 | Gear 11 Tooth | 1 |
| 53 | 101626 | Gear 44 Tooth | 1 |
| 54 | 108758 | Gear Shift Knob | 2 |
| 55 | 3517 | Detent Ball 1/4 Diameter | 2 |
| 56 | 106030 | Detent Spring | 1 |
| 57 | 7213 | Detent Bolt | 1 |
| 58 | 7214 | Shift Shaft Hi-Low Range | 1 |
| 59 | 116636 | Shift Fork Hi-Low Range | 1 |
| 60 | 3517 | Detent Ball 1/4 Diameter | 1 |
| 61 | 106030 | Detent Spring | 1 |
| 62 | 110727 | Shift Lever Hi-Low Range | 1 |
| 63 | 933184 | Spirol Pin 3/16 x 3/4 | 1 |
| 64 | 111197 | Diff. End Cap | 2 |
| 5 | 908138 | Bolt 3/8-16 x 3 1/4 (Grade 5) | 4 |
| 66 | 107374 | Special Washer-Case Hardened | 4 |
| 67 | 108881 | Nut 3/8-16 High-Tensile | 4 |
| 68 | 105063 | Differential Ring Gear 43Tooth | 1 |
| 70 | 101623 | Differential Pinion Gear 11 Tooth | 4 |
| 71 | 3908 | Differential Axle Gear | 2 |
| 72 | 5961 | Rear Axle (1" dia.) | 2 |
| 73 | 7939 | Special Snap Ring 300-series Only | 2 |
| 74 | 110725 | Gear Shift Lever | 1 |
| 75 | 1001 | Hi-Lo Range Shift Knob | 1 |
| 76 | A-1392 | Repair Manual | X |

SECTION 3 - FRONT AXLE AND STEERING

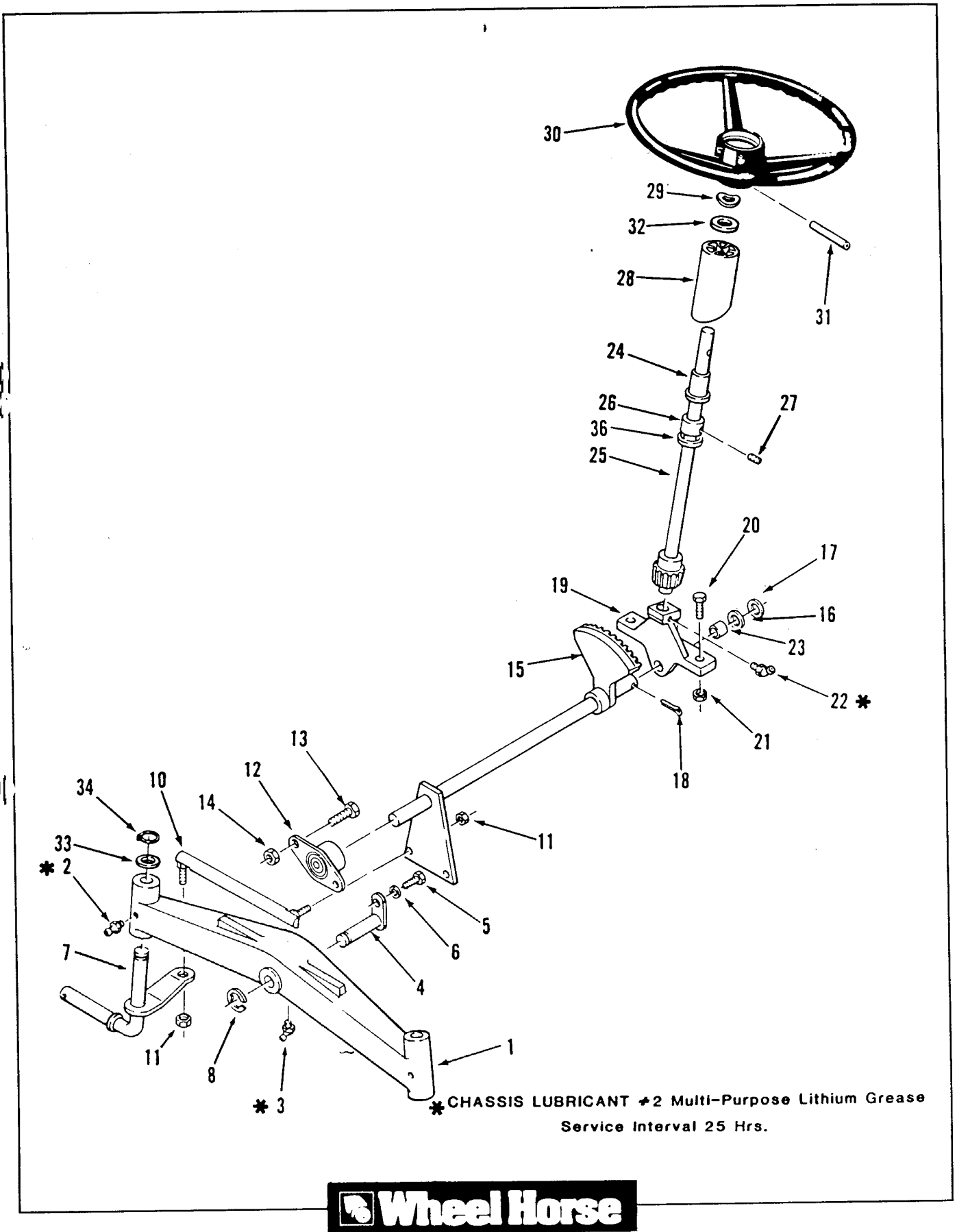
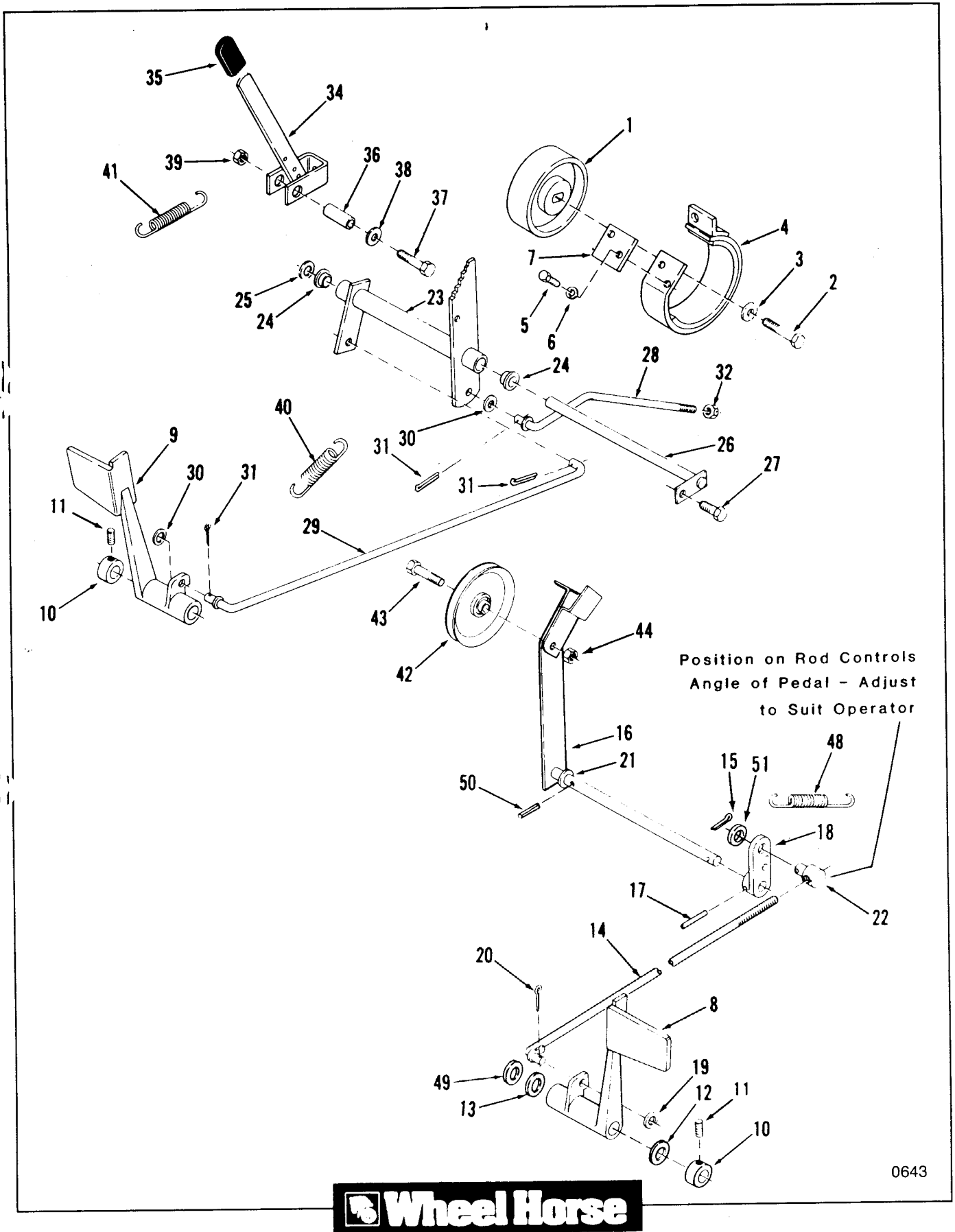


Figure 3 - 1 Front Axle and Steering

SECTION 3 - FRONT AXLE AND STEERING

| ITEM | PART NUMBER | DESCRIPTION | Quantity |
|--------------------------------|-------------|------------------------------------|----------|
| Figure 3-1 | | | |
| FRONT AXLE AND STEERING | | | |
| 1 | 5638 | Front Axle | 1 |
| 2 | 1030 | Grease Fitting Straight | 2 |
| 3 | 1481 | Grease Fitting 45° | 1 |
| 4 | 6216 | Pin and Plate | 1 |
| 5 | 908015 | Bolt 5/16-18 x 1/2 | 1 |
| 6 | 920082 | Lockwasher 5/16 | 1 |
| 7 | 113380 | Front Spindle RH | 1 |
| | 113379 | Front Spindle LH | 1 |
| 8 | 5618 | E-Ring | 1 |
| 10 | 102592 | Tie Rod RH | 1 |
| | 102593 | Tie Rod LH | 1 |
| 11 | 915693 | Nut 3/8-24 E.S. | 1 |
| 12 | 6472 | Flanged Bearing | 1 |
| 13 | 908034 | R.H. 3/8-16 x 1 | 2 |
| 14 | 915663 | Nut 3/8-16 E.S. | 2 |
| 15 | 114198 | Lower Steering Shaft | 1 |
| 16 | 5210 | Shim Washer 3/4 x .015 | X |
| 17 | 1278 | Shim Washer 3/4 x .050 | X |
| 18 | 932035 | Cotter Pin 3/16 x 1-1/4 | 1 |
| 19 | 109733 | Steering Support | 1 |
| 20 | 908037 | Bolt 3/8-16 x 1 3/4 | 2 |
| 21 | 915663 | Nut 3/8-16 E.S. | 2 |
| 22 | 1481 | Grease Fitting 45 Degree | 1 |
| 23 | 6397 | Bearing-Lower Steering Shaft | 1 |
| 24 | 109189 | Bearing-Upper Steering Shaft | 1 |
| 25 | 106177 | Upper Steering Shaft | 1 |
| 26 | 1085 | Collar | 1 |
| 27 | 909848 | Eslok Set Screw 1/4-20 x 1/4 | 1 |
| 28 | 113443 | Steering Tube | 1 |
| 29 | 7896 | Bowed Washer | 1 |
| 30 | 113989 | Steering Wheel 15" 316-8 | 1 |
| | 113987 | Steering Wheel 13" 312-8 | 1 |
| 31 | 933221 | Spirol Pin 1/4 x 2 | 1 |
| 32 | 109262 | Special Washer | X |
| 33 | 1278 | Washer | 2 |
| | 5210 | Shim Washer | 2 |
| 34 | 104822 | Retaining Ring | 2 |
| 36 | 111646 | Grip Ring | 1 |

SECTION 4 - CLUTCH, BRAKE AND MOTION CONTROL LINKAGE



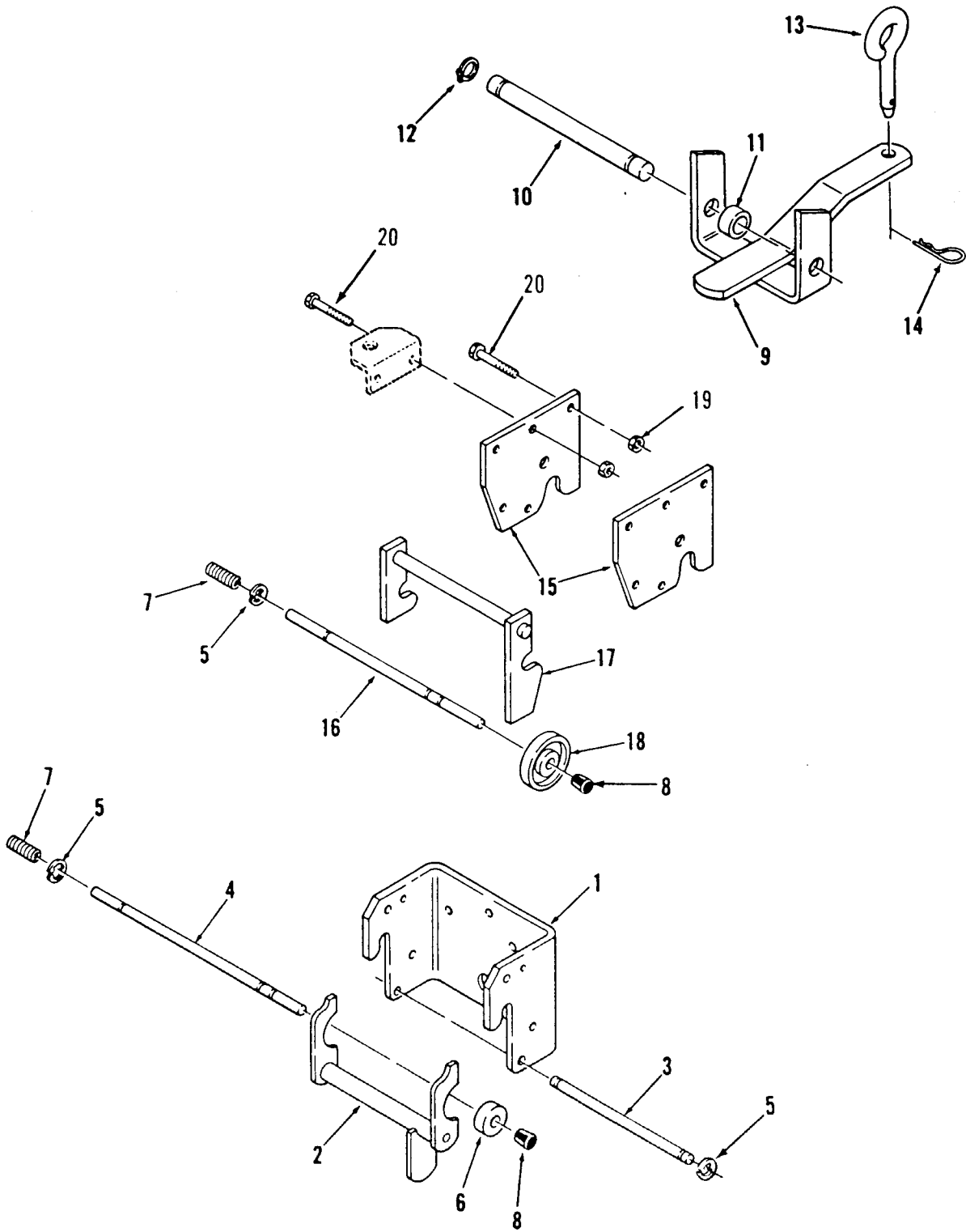
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Figure 4-1 Clutch, Brake and Speed Control Linkage

SECTION 4 - CLUTCH, BRAKE AND MOTION CONTROL LINKAGE

| ITEM | PART NUMBER | DESCRIPTION | Quantity |
|---|-------------|---|----------|
| Figure 4-1 CLUTCH, BRAKE AND SPEED CONTROL LINKAGE | | | |
| 1 | 106719 | Brake Drum | 1 |
| 2 | 110234 | Nylok Bolt 3/8-16 x 3/4 | 1 |
| 3 | 2844 | Special Washer | 1 |
| 4 | 9593 | Brake Band | 1 |
| 5 | 908002 | Bolt 1/4-20 x 5/8 | 2 |
| 6 | 920081 | Lockwasher 1/4 | 2 |
| 7 | 9598 | Back-Up Plate | 1 |
| 8 | 114814 | Pedal-Clutch | 1 |
| 9 | 114813 | Pedal-Brake | 1 |
| | 1030 | Grease Fitting-Brake Clutch Pedal | 2 |
| 10 | 1085 | Collar | 1 |
| 11 | 909848 | Eslok Set Screw 1/4-20 x 1/4 | 1 |
| 12 | 7896 | Bowed Washer | 1 |
| 13 | 1278 | Shim Washer. 3/4 x .050 | X |
| 14 | 103347 | Clutch Rod | 1 |
| 15 | 932008 | Cotter Pin 3/32 x 3/4 | 1 |
| 16 | 110507 | Clutch Idler Arm | 1 |
| 17 | 933190 | Spirol Pin 3/16 x 1-1/4 | 1 |
| 18 | 105896 | Clutch Rod Arm | 1 |
| 19 | 920248 | Nylon Washer 3/8 | 3 |
| 20 | 932016 | Cotter Pin 1/8 x 3/4 | 2 |
| 21 | 3765 | Shim Washer 1/2 x .030 | X |
| 22 | 101161 | Trunnion-Clutch Rod | 1 |
| 23 | 103543 | Bell Crank-Brake Linkage | 1 |
| 24 | 7879 | Bushing | 2 |
| 25 | 920011 | Washer 1/2 SAE | 1 |
| 26 | 106417 | Rod-Bell Crank Pivot | 1 |
| 27 | 926694 | S.T. Bolt 5/16-18 x 5/8 | 1 |
| 28 | 105900 | Brake Rod-Rear | 1 |
| 29 | 105886 | Brake Rod-Front | 1 |
| 30 | 920248 | Nylon Washer | 2 |
| 31 | 932016 | Cotter Pin | 3 |
| 32 | 915663 | E.S. Nut 3/8-16 | 1 |
| 34 | 106451 | Parking Brake Lever | 1 |
| 35 | 6820 | Grip | 1 |
| 36 | 102025 | Spacer | 1 |
| 37 | 908037 | Bolt 3/8-16 x 1-3/4 | 1 |
| 38 | 920009 | Washer 3/8 SAE | 1 |
| 39 | 102809 | Special Nut | 1 |
| 40 | 107677 | Spring-Brake Return | 1 |
| 41 | 103628 | Spring-Parking Brake Return | 1 |
| 42 | 7451 | Idler Pulley | 1 |
| 43 | 106193 | Special Bolt 3/8-16 x 1-1/2 | 1 |
| 44 | 915113 | Eslok Nut 3/8-16 | 1 |
| 48 | 108035 | Spring-Clutch Return | 1 |
| 49 | 920225 | Special Washer | 1 |
| 50 | 933267 | Spirol Pin 5/32 x 1-1/4 | 1 |
| 51 | 920009 | Washer 3/8 SAE | 1 |

SECTION 5 - HITCHES AND LIFT LINKAGE



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Figure 5 - 1 Hitches

SECTION 5 - HITCHES AND LIFT LINKAGE

| ITEM | PART NUMBER | DESCRIPTION | Quantity |
|-------------------------------|-------------|----------------------------|----------|
| Figure 5-1 HITCHES | | | |
| 1 | 101711 | Front Hitch Housing | 1 |
| 2 | 105859 | Latch-Front Hitch | 1 |
| 3 | 101750 | Rod | 1 |
| 4 | 101751 | Rod-Front Hitch Lock | 1 |
| 5 | 105797 | E-Ring | 8 |
| 6 | 101707 | Lock | 1 |
| 7 | 8616 | Spring | 2 |
| 8 | 105316 | Cap-Lock Rod | 2 |
| 9 | 1644 | Drawbar Hitch | 1 |
| 10 | 105269 | Shaft-Drawbar Hitch | 1 |
| 11 | 979120 | Spacer | 2 |
| 12 | 5618 | E-Ring | 2 |
| 13 | 106634 | Hitch Pin | 1 |
| 14 | 933505 | Hairpin Cotter | 1 |
| 15 | 102644 | Mid Hitch Plate | 2 |
| 16 | 102672 | Rod-Mid Hitch Lock | 1 |
| 17 | 102639 | Latch-Mid Hitch | 1 |
| 18 | 101017 | Lock | 1 |
| 19 | 915113 | Eslok Nut 3/8-16 | 5 |
| 20 | 908035 | Bolt 3/8-16 x 1-1/4 | 5 |

SECTION 5 - HITCHES AND LIFT LINKAGE

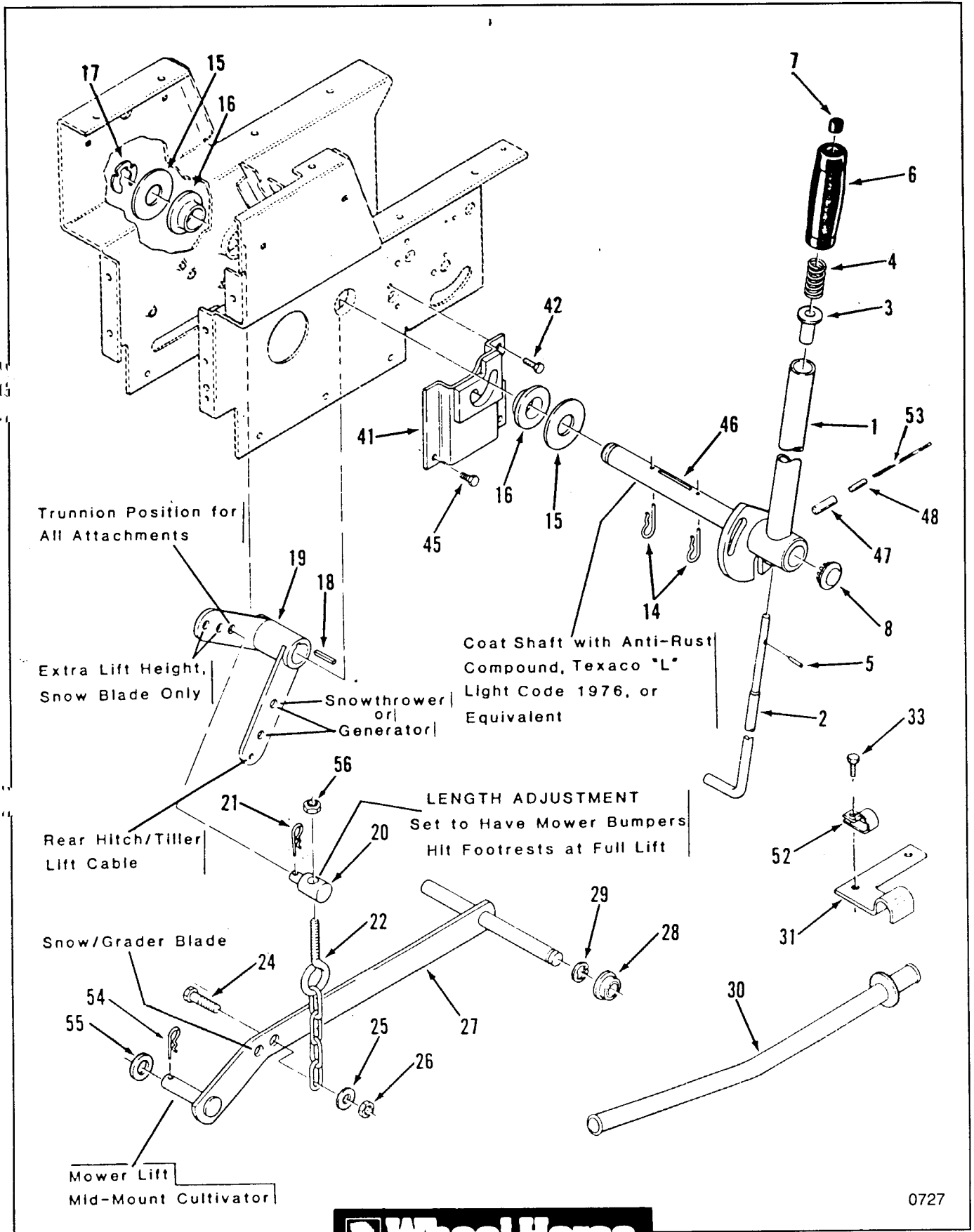
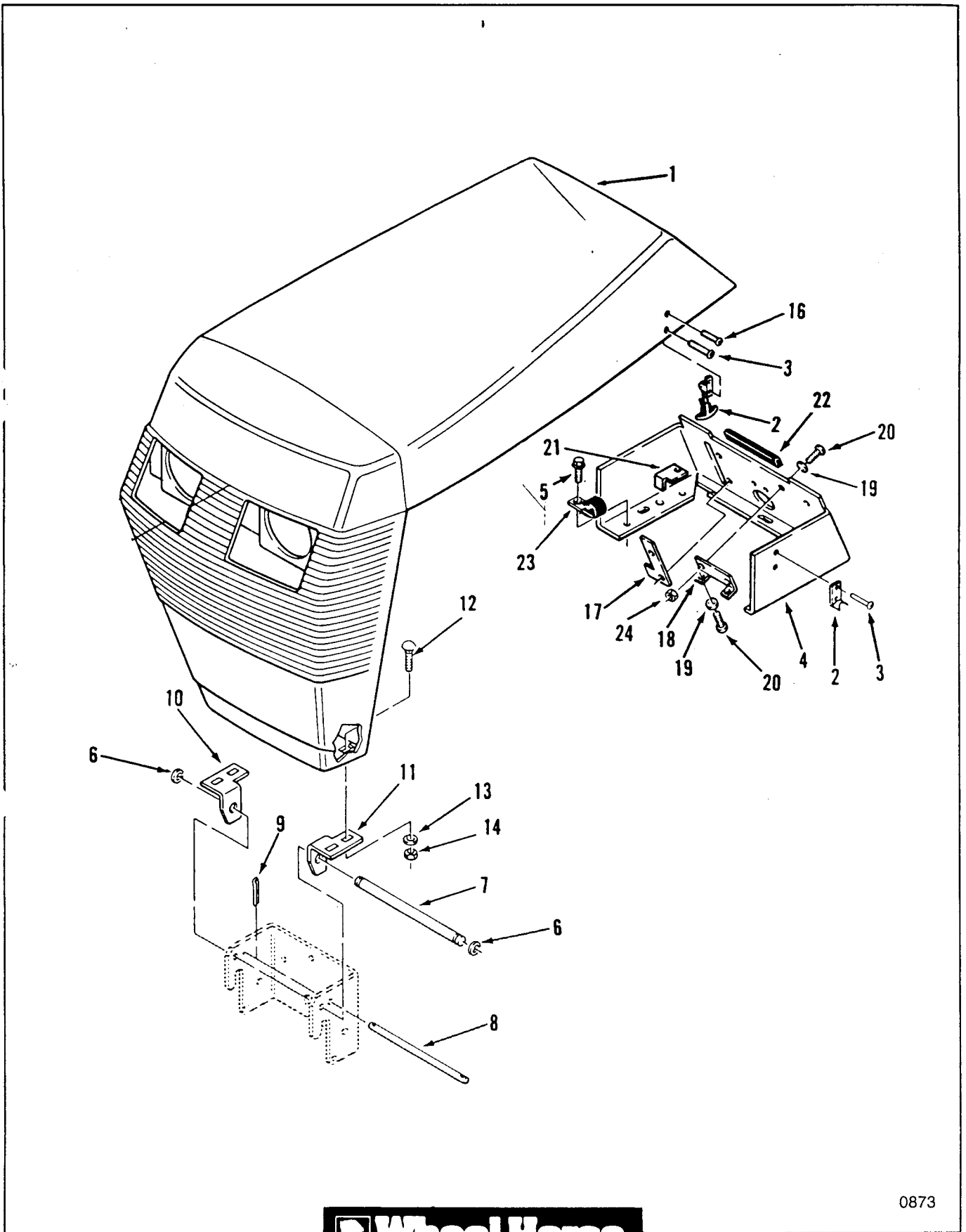


Figure 5 - 2 Manual Lift Linkage

SECTION 5 - HITCHES AND LIFT LINKAGE

| ITEM | PART NUMBER | DESCRIPTION | Quantity |
|----------------------------|-------------|--|----------|
| Figure 5-2 | | | |
| MANUAL LIFT LINKAGE | | | |
| 1 | 108563 | Lift Lever (Includes Items 46, 47, 48) | 1 |
| 2 | 106257 | Latch Rod | 1 |
| 3 | 8130 | Spring Retainer | 1 |
| 4 | 3624 | Spring | 1 |
| 5 | 933148 | Spirol Pin 1/8 x 1/2 | 1 |
| 6 | 6542 | Grip-Lift Lever | 1 |
| 7 | 105316 | Rod Cap | 1 |
| 8 | 4944 | Plug Button | 1 |
| 14 | 933507 | Hairpin Cotter | 2 |
| 15 | 920017 | Washer 1 in. SAE | 3 |
| 16 | 106269 | Bushing | 2 |
| 17 | 106414 | Retainer | 1 |
| 18 | 1121 | Key 1/4 Sq. x 1-3/16 | 1 |
| 19 | 106218 | Bellcrank | 1 |
| 20 | 6739 | Trunnion | 1 |
| 21 | 933504 | Hairpin Cotter | 1 |
| 22 | 106522 | Lift Chain | 1 |
| 24 | 908020 | Bolt 5/16-18 x 1 1/4 | 1 |
| 25 | 920008 | Washer 5/16 | 1 |
| 26 | 915662 | Nut 5/16-18 E.S. | 1 |
| 27 | 113445 | Lift Bar | 1 |
| 28 | 6229 | Bearing | 1 |
| 29 | 5701 | E-Ring | 1 |
| 30 | 105845 | Tube-Rear Lift Cable | 1 |
| 31 | 108903 | Clamp-Tube | 1 |
| 33 | 908034 | Eslok Bolt 3/8-16 x 1 | 2 |
| 41 | 106411 | Latch Bracket | 1 |
| 42 | 926694 | S.T. Bolt 5/16-18 x 5/8 | 1 |
| 45 | 926696 | S.T. Bolt 5/16-18 x 7/8 | 1 |
| 46 | 108565 | Shaft | 1 |
| 47 | 933268 | Spirol Pin | 1 |
| 48 | 933230 | Roll Pin | 1 |
| 52 | 8830 | Clamp | 1 |
| 53 | 111154 | Lock Wire | 1 |
| 54 | 933505 | Hairpin Cotter | 1 |
| 55 | 920011 | Washer 1/2 SAE | 1 |
| 56 | 915663 | E.S. Nut 3/8-16 | 1 |

SECTION 6 - SHEET METAL AND COVERS



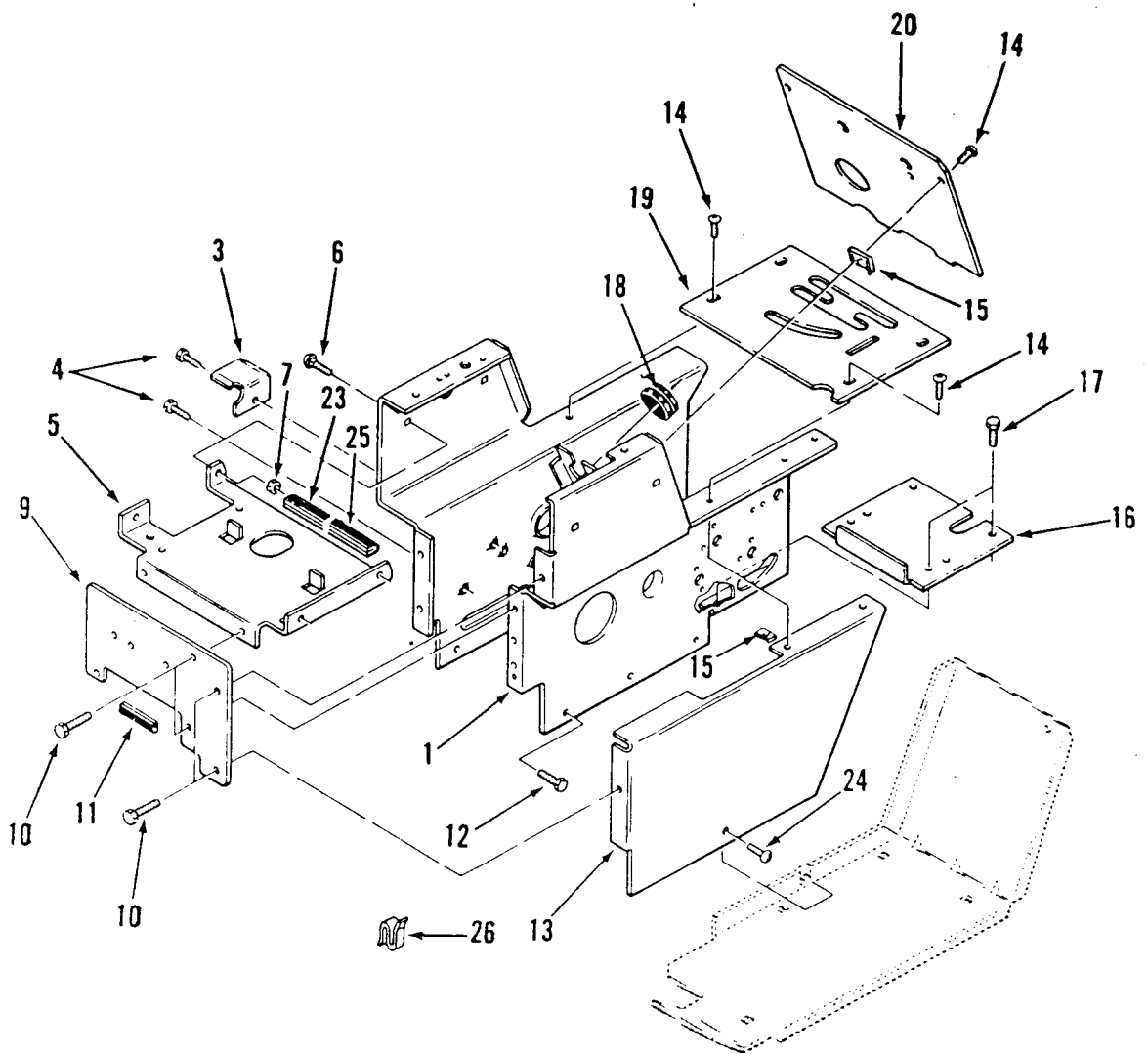
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Figure 6 - 1 Sheet Metal and Covers

SECTION 6 - SHEET METAL AND COVERS

| ITEM | PART NUMBER | DESCRIPTION | Quantity |
|--|-------------|---|----------|
| Figure 6-1 SHEET METAL AND COVERS | | | |
| 1 | 112358 | Hood | 1 |
| 2 | 106825 | Hood Latch (includes 109236 Handle Ass'y & 109237 Latch Keeper) | 2 |
| 3 | 923785 | Pop Rivet 1/8 x .294 | 4 |
| 4 | 111271 | Console | 1 |
| 5 | 926694 | Washer Hd. S.T. Bolt 5/16-18 x 5/8 | 3 |
| 6 | 105797 | E-ring | 2 |
| 7 | 101710 | Pivot Rod | 1 |
| 8 | 101850 | Hood Stop Rod | 1 |
| 9 | 932000 | Cotter Pin 1/16 x 1/2 | 2 |
| 10 | 109145 | Bracket RH | 1 |
| 11 | 109146 | Bracket LH | 1 |
| 12 | 900015 | Carriage Bolt 1/4-20 x 3/4 | 4 |
| 13 | 920007 | Washer 1/4 SAE | 4 |
| 14 | 915661 | Nut 1/4-20 E.S. | 4 |
| 16 | 923784 | Pop Rivet 1/8 x .232 | 2 |
| 17 | 111182 | Throttle Stop | 1 |
| 18 | 112506 | Bracket | 1 |
| 19 | 920150 | Internal Tooth Lockwasher nr. 6 | 4 |
| 20 | 9107622 | Screw nr. 6-32 x 3/8 Black | 4 |
| 21 | 112415 | PTO Stop | 1 |
| 22 | 111757 | Console Edging | 1 |
| 23 | 111392 | J-Clip | 1 |
| 24 | 915960 | Nut. nr. 6-32 | 4 |

SECTION 6 - SHEET METAL AND COVERS



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Figure 6-2 Sheet Metal and Covers

SECTION 6 - SHEET METAL AND COVERS

| ITEM | PART NUMBER | DESCRIPTION | Quantity |
|-------------------------------|-------------|-----------------------------------|----------|
| Figure 6-2 | | | |
| SHEET METAL AND COVERS | | | |
| 1 | 109765 | Hoodstand | 1 |
| 3 | 106261 | Belt Bracket | 1 |
| 4 | 926694 | S.T. Bolt 5/16-18 x 5/8 | 1 |
| 5 | 110094 | Battery Support Bracket | 1 |
| 6 | 900035 | Carriage Bolt 5/16-18 x 1/2 | 4 |
| 7 | 915112 | Eslok Nut 5/16-18 | 4 |
| 9 | 106342 | Front Plate | 1 |
| 10 | 926694 | S.T. Bolt 5/16-18 x 5/8 | 6 |
| 11 | 106772 | Edge Trim | 1 |
| 12 | 926694 | S.T. Bolt 5/16-18 x 5/8 | 4 |
| | 926696 | S.T. Bolt 5/16-18 x 7/8 | 2 |
| 13 | 109323 | Side Cover LH | 1 |
| 14 | 9108372 | Screw 1/4-20 x 5/8 Black | 6 |
| 15 | 107069 | Speed Nut | 6 |
| 16 | 106250 | Dust Cover | 1 |
| 17 | 926694 | S.T. Bolt 5/16-18 x 5/8 | 4 |
| 18 | 104248 | Grommet | 1 |
| 19 | 111387 | Shift Cover Plate | 1 |
| 20 | 111033 | Hoodstand Plate | 1 |
| 23 | 110142 | Edge Trim | 1 |
| 24 | 910837 | Screw 1/4-20 x 5/8 | 1 |
| 25 | 106772 | Edge Trim | 1 |
| 26 | 3023 | Clip | 1 |

SECTION 6 - SHEET METAL AND COVERS

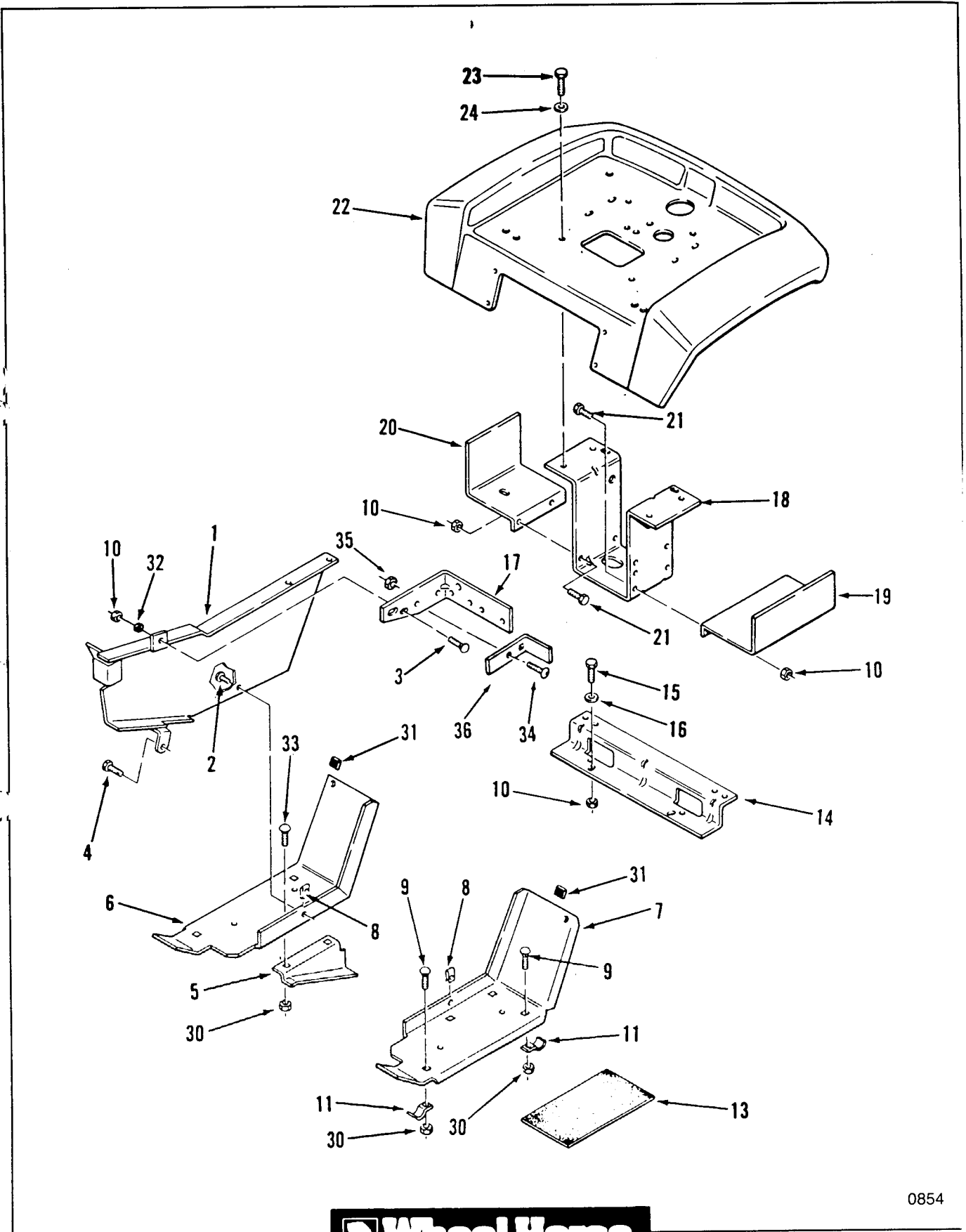
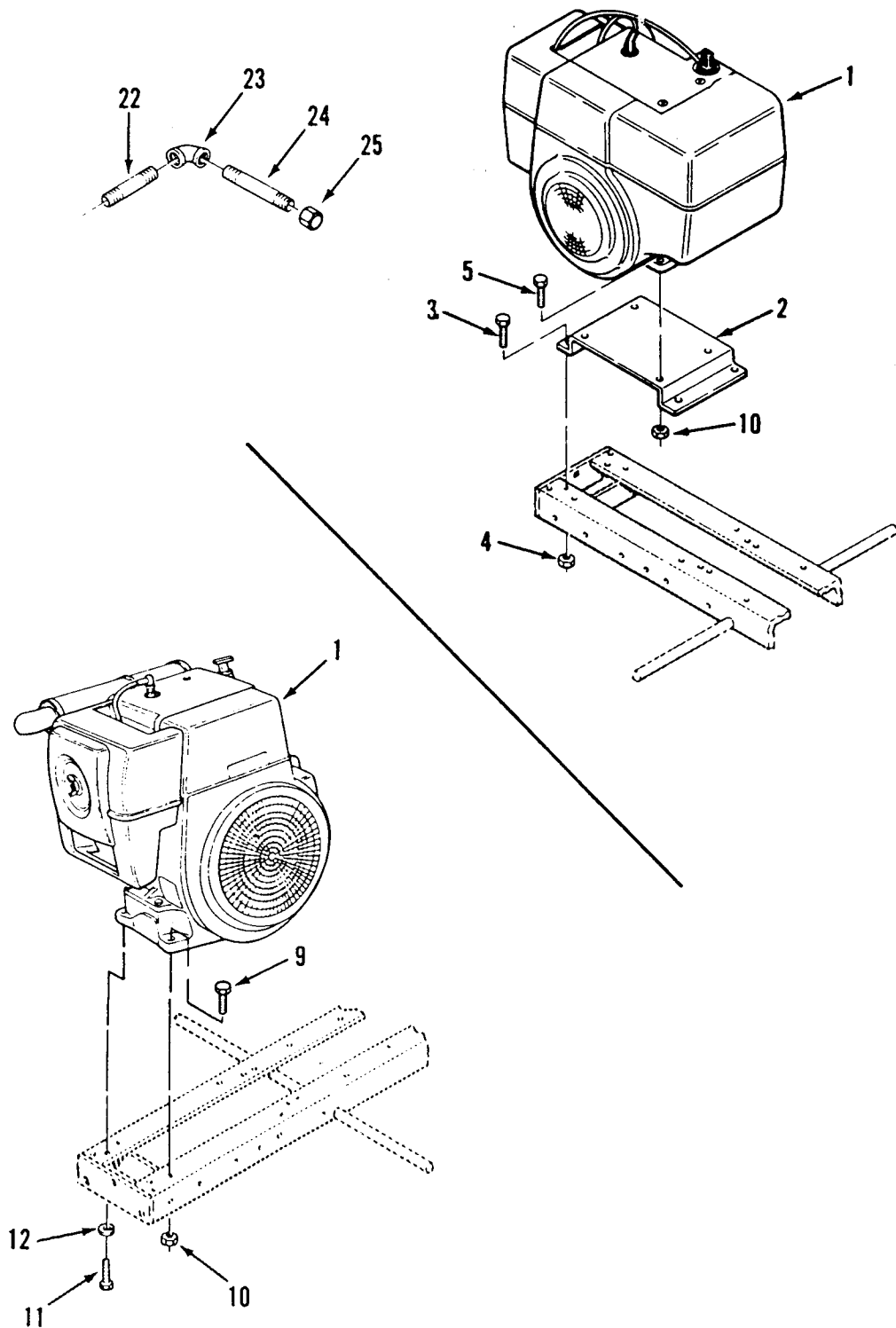


Figure 6 - 3 Sheet Metal and Covers

SECTION 6 - SHEET METAL AND COVERS

| ITEM | PART NUMBER | DESCRIPTION | Quantity |
|-------------------------------|-------------|--|----------|
| Figure 6-3 | | | |
| SHEET METAL AND COVERS | | | |
| 1 | 107619 | Belt Guard 316-8 | 1 |
| | 107975 | Belt Guard 312-8 | 1 |
| 2 | 910837 | Screw 1/4-20 x 5/8 | 2 |
| 3 | 900037 | Carriage Bolt 5/16-18 x 3/4 | 1 |
| 4 | 926694 | S.T. Bolt 5/16-18 x 5/8 | 1 |
| 5 | 106352 | Lower Belt Guard | 1 |
| 6 | 106222 | Foot Rest RH | 1 |
| 7 | 106223 | Foot Rest LH | 1 |
| 8 | 107069 | Speed Nut | 2 |
| 9 | 900037 | Carriage Bolt 5/16-18 x 5/8 | 6 |
| 10 | 915662 | Nut 5/16-18 E.S. | 1 |
| 11 | 7456 | Clamp | 1 |
| 13 | 110636 | Footrest Pad | 2 |
| 14 | 107951 | Fender Bracket-Front | 1 |
| 15 | 908019 | Bolt 5/16-18 x 1 | 2 |
| 16 | 920008 | Washer 5/16 SAE | 2 |
| 17 | 108823 | Support Bracket-Belt Guard - 312-8 Only | 1 |
| | 109554 | Support Bracket-Belt Guard - 316-8 Only | 1 |
| 18 | 108897 | Fender Support Bracket | 1 |
| 19 | 108464 | Fuel Tank Support LH | 1 |
| 20 | 106236 | Fuel Tank Support RH | 1 |
| 21 | 908017 | Bolt 5/16-18 x 3/4 | 4 |
| 22 | 110960 | Fender | 1 |
| 23 | 926694 | S.T. Bolt 5/16-18 x 5/8 | 4 |
| 24 | 920008 | Washer 5/16 SAE | 4 |
| 30 | 915662 | Eslok Nut 5/16-18 | 6 |
| 31 | 518211 | Bumper | 2 |
| 32 | 108457 | Push Nut | 1 |
| 33 | 900214 | Carriage Bolt 5/16-18 x 3/4 | 2 |
| 34 | 913112 | Machine Screw nr. 10-24 x 5/8 - 312-8 Only | 2 |
| 35 | 915740 | E.S. Nut nr. 10-24 - 312-8 Only | 2 |
| 36 | 111535 | Fuse Holder - 312-8 Only | 1 |

SECTION 7 - ENGINES



REFER TO KOHLER MANUALS FOR ADDITIONAL SERVICE & ADJUSTMENT PROCEDURES

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Figure 7 - 1 Engines

SECTION 7 - ENGINES

| ITEM | PART NUMBER | DESCRIPTION | Quantity |
|------|-------------|---|----------|
| | | Figure 7-1 | |
| | | ENGINES | |
| 1 | 113489 | Engine 16HP - Onan P-216-316-8 Only | X |
| | 114160 | Engine 12HP - Kohler M-12-S 312-8 Only | X |
| 2 | 113875 | Engine Plate 316-8 Only | 1 |
| 3 | 908036 | Bolt 3/8-16 x 1 1/2 - 316-8 Only | 4 |
| | 920009 | Washer 3/8 SAE | X |
| 4 | 915113 | Nut 3/8-16 316-8 | 4 |
| 5 | 908035 | Bolt 3/8-16 x 1 1/4 316-8 Only | 4 |
| 9 | 908036 | Bolt 3/8-16 x 1 1/2 312-8 Only | 2 |
| 10 | 915663 | Nut 3/8-16 E.S. 312-8 Only | 2 |
| 11 | 908034 | Bolt 3/8-16 x 1 312-8 Only | 2 |
| 12 | 920083 | Lockwasher 3/8 | 1 |
| | 114893 | Relay Mounting Plate 316-8 Only (Not Illustrated) | 1 |
| | 908034 | Bolt 3/8-16 x 1 - 316-8 Only (Not Illustrated) | 1 |
| | 915663 | Nut 3/8-16 E.S. 316-8 Only (Not Illustrated) | 1 |
| 22 | 114636 | Pipe 3/8 x 3 316-8 | 1 |
| 23 | 114764 | Elbow 90 degrees 316-8 | 1 |
| 24 | 114763 | Pipe 3/8 x 4 316-8 | 1 |
| 25 | 5224 | Cap 316-8 | 1 |
| | 111357 | d-Clip 316-8 (not illustrated) | 1 |
| | 920082 | Lockwasher 5/6 316-8 (not illustrated) | 4 |

SECTION 7 - KOHLER ENGINE AIR INTAKE

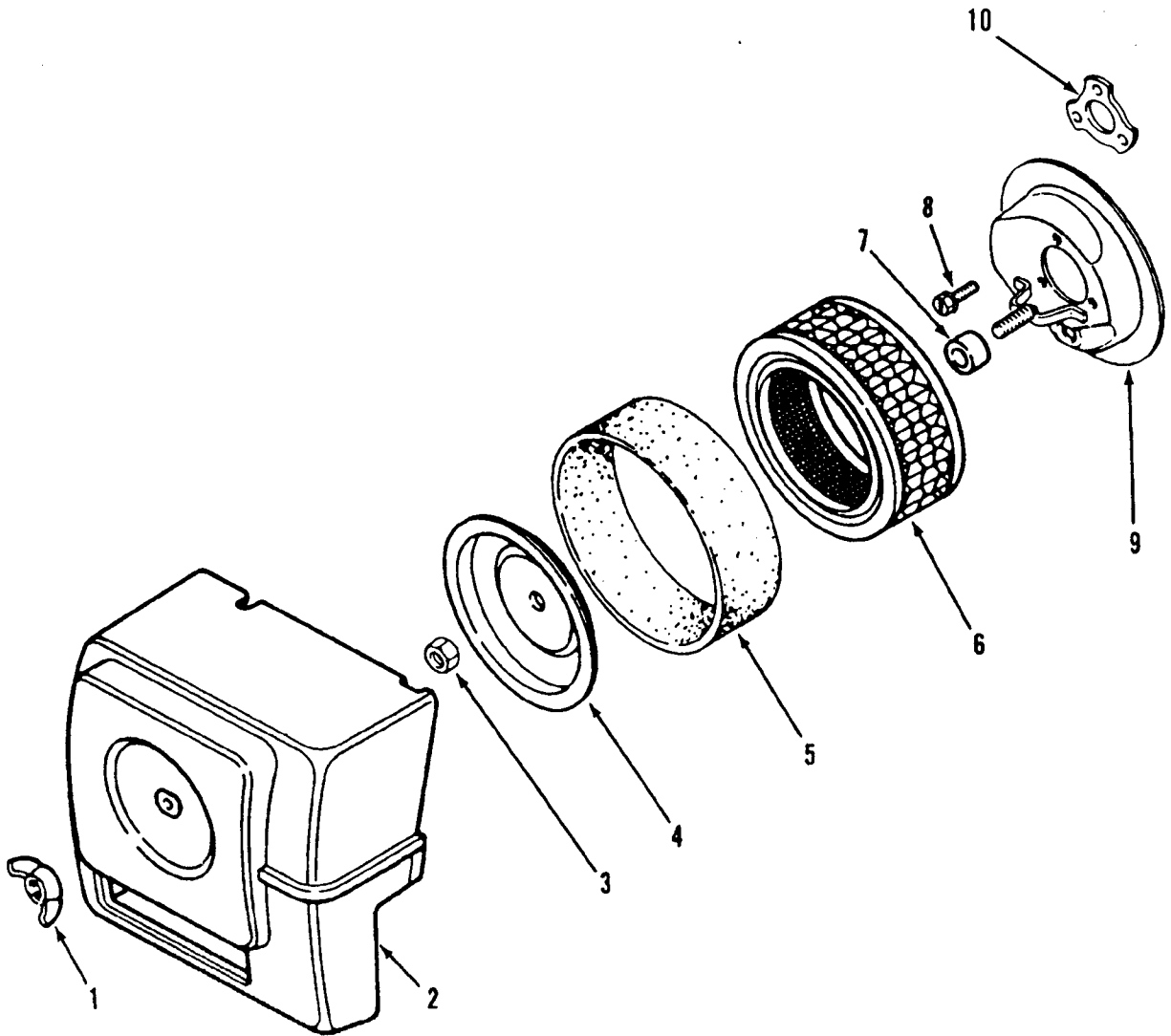


Figure 7-2 Kohler Air Intake

SECTION 7 - KOHLER ENGINE AIR INTAKE

| WHEEL HORSE ITEM | PART NO. | VENDOR PART NUMBER | DESCRIPTION | Quantity |
|---|----------|-----------------------|---|----------|
| Figure 7-2 KOHLER AIR INTAKE | | | | |
| 1 | KH10576 | X-176-7 | Wing Nut 1/4-20 | 1 |
| 2 | KH10299 | 47 096 10 | Air Cleaner Cover | 1 |
| 3 | KH10189 | 47 100 04 | Jam Nut | 1 |
| 4 | KH10412 | 52 082 04 | Air Cleaner Element Cover | 1 |
| 5 | KH10235 | 45 083 01 | Precleaner Element | 1 |
| 6 | KH10236 | 45 083 02 | Element | 1 |
| 7 | KH10034 | 231032 | Seal | 1 |
| 8 | KH10609 | X-67-65 | Std. Washer Hd. Screw 10/32 x 11/32 | 3 |
| 9 | KH10297 | 47 094 20 | Air Cleaner Base | 1 |
| 10 | KH10271 | 47 041 05 | Air Horn Gasket | 1 |

SECTION 7 - KOHLER ENGINE CARBURETORS

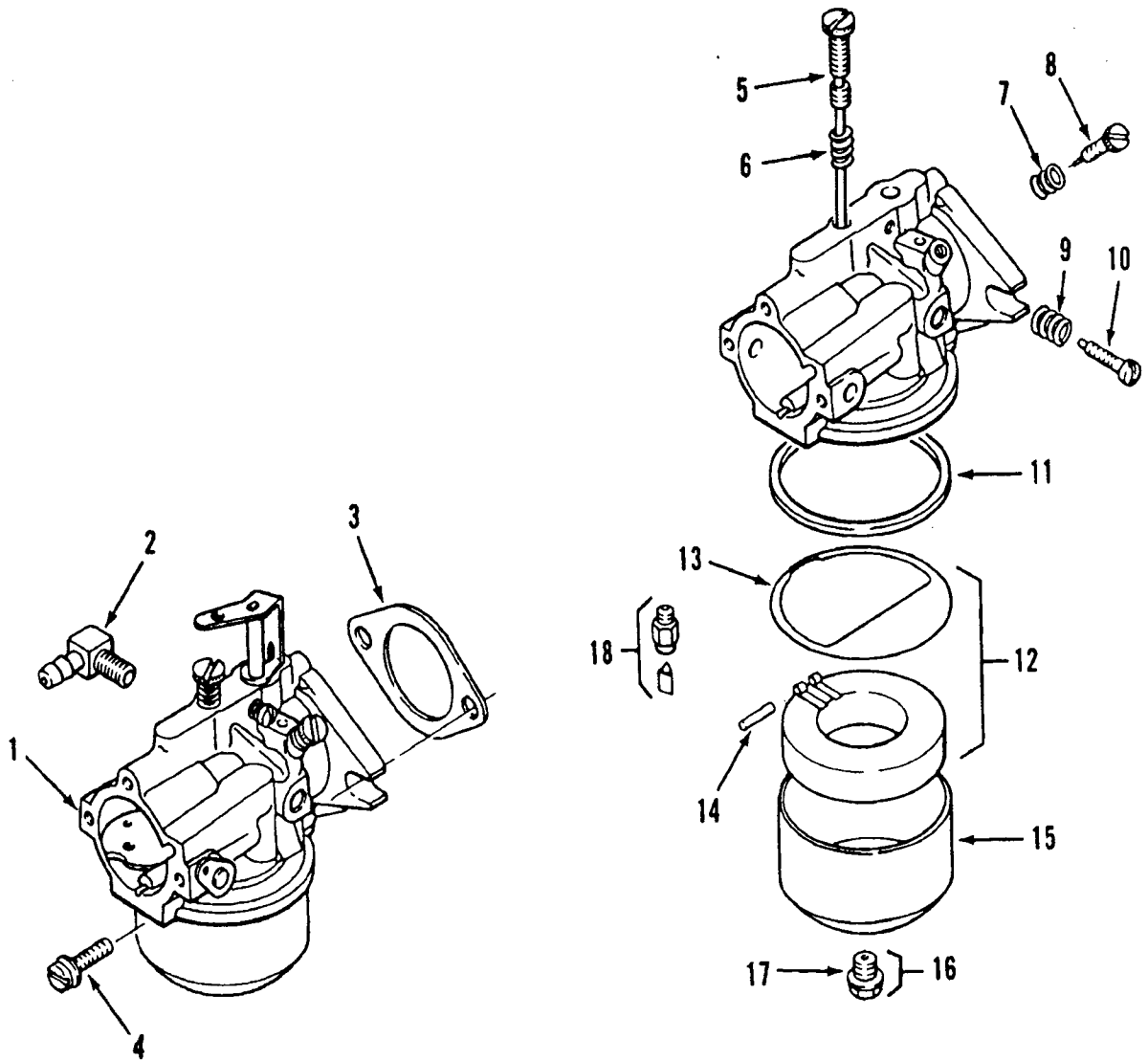


Figure 7-3 Carburetors

SECTION 7 - KOHLER ENGINE CARBURETORS

| WHEEL HORSE ITEM | PART NO. | VENDOR PART NUMBER | DESCRIPTION | Quantity |
|---|-----------------|-----------------------|---|----------|
| Figure 7-3 KOHLEER CARBURETORS | | | | |
| 1 | KH10276 | 47 053 62 | Carburetor Assembly (Includes 5 thru 8), 312 | 1 |
| 2 | KH10123 | 25 155 0290 | 90 Degree Hose Connector | 1 |
| 3 | KH10274 | 47 049 01 | Carburetor Gasket | 1 |
| 4 | KH10625 | X-770-1 | Slotted Hd. Screw 5/16-18 x 1 | 2 |
| 5 | KH10068 | 235415 | Main Fuel Adj. Needle 312 | 1 |
| 6 | KH10005 | 200383 | Main Fuel Spring | 1 |
| 7 | KH10004 | 200380 | Idle Fuel Spring | 1 |
| 8 | KH10050 | 235006 | Idle Fuel Adj. Needle, 312 | 1 |
| 9 | KH10039 | 232555 | Idle Speed Spring | 1 |
| 10 | KH10040 | 232556 | Idle Speed Adj. Screw | 1 |
| *11 | KH10002 | 200375 | Bowl Gasket | 1 |
| 12 | KH10141 | 25 757 03 | Float Kit (Includes Item 13) | 1 |
| *13 | KH10092 | 25 041 02 | Bowl Baffle Gasket | 1 |
| *14 | KH10003 | 200376 | Float Hinge Pin | 1 |
| 15 | KH10069 | 235448 | Fuel Bowl | 1 |
| 16 | KH10300 | 47 100 06 | Fuel Bowl Retainer Screw (Includes Item 17) | 1 |
| *17 | KH10001 | 200372 | Bowl Retainer Screw Gasket | 1 |
| *18 | ----- | ----- | Needle and Seat - Available Only In Carburetor Repair Kit | |
| | Not Illustrated | | | |
| | KH10139 | 25 757 01 | Carburetor Repair Kit | X |
| | KH10358 | 25 757 05 | Choke & Throttle Repair Kit | X |

* Included in Carburetor Repair Kit

SECTION 7 - KOHLER ENGINE Baffles & Shrouds

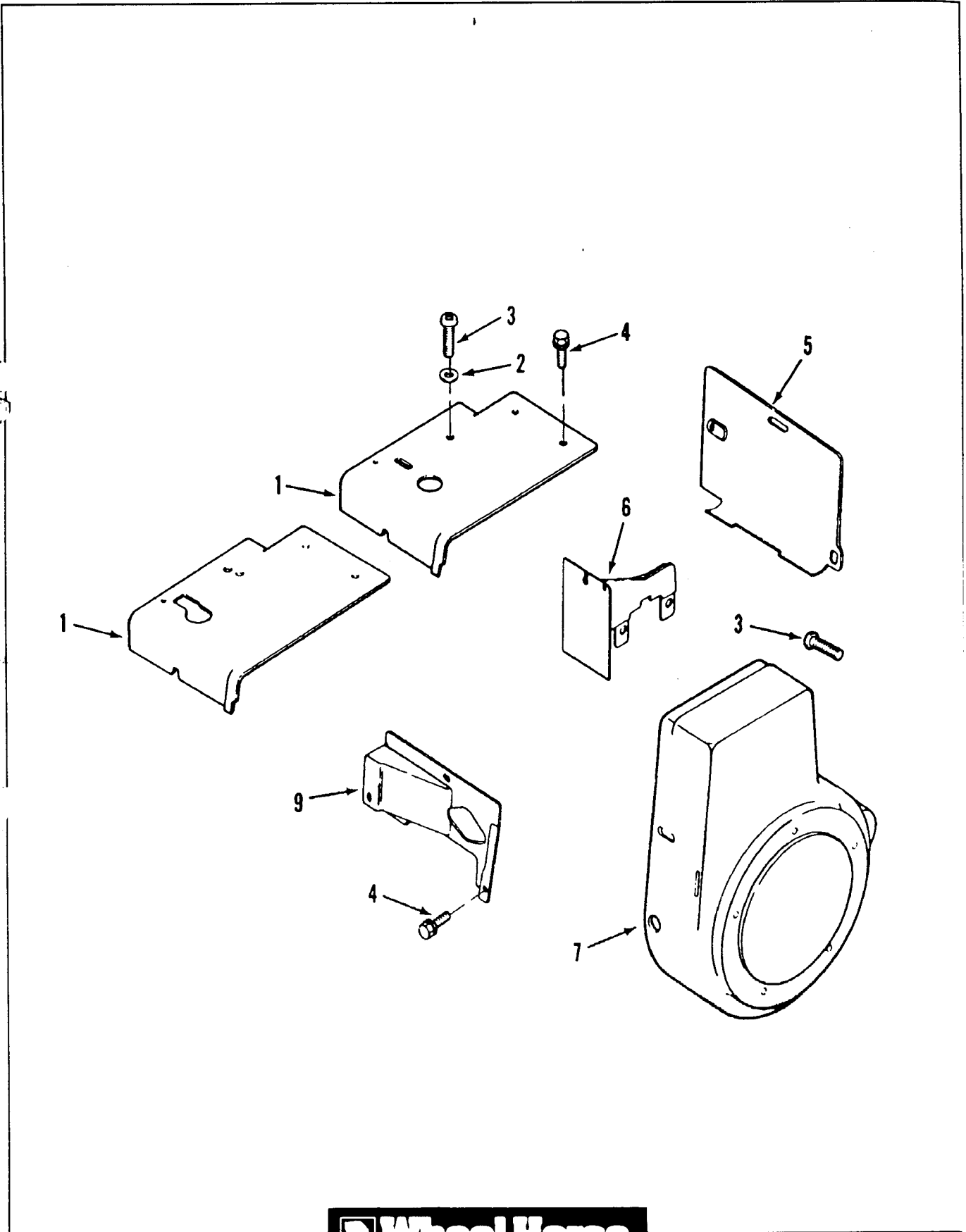


Figure 7-4 Baffles & Shrouds

SECTION 7 - KOHLER ENGINE BAFFLES & SHROUDS

| WHEEL HORSE ITEM | PART NO. | VENDOR PART NUMBER | DESCRIPTION | Quantity |
|--|----------|-----------------------|--|----------|
| Figure 7-4 KOHLER BAFFLES & SHROUDS | | | | |
| 1 | KH10231 | 45 063 08 | Head Baffle 312 | 1 |
| 2 | KH10567 | X-25-53 | Plain Washer 1/4 | 1 |
| 3 | KH10289 | 47 086 08 | Pozidriv T.H. Screw 1/4-20 x 5/8 | 3 |
| 4 | KH10413 | 52 086 11 | Hex. Washer Hd. Screw | 6 |
| 5 | KH10172 | 47 063 10 | Cylinder Baffle | 1 |
| 6 | KH10280 | 47 063 07 | Inner Baffle | 1 |
| 7 | KH10265 | 47 027 42 | Blower Housing | 1 |
| 9 | KH10279 | 47 063 06 | Side Air Baffle | 1 |

SECTION 7 - KOHLER ENGINE BREATHER & VENT

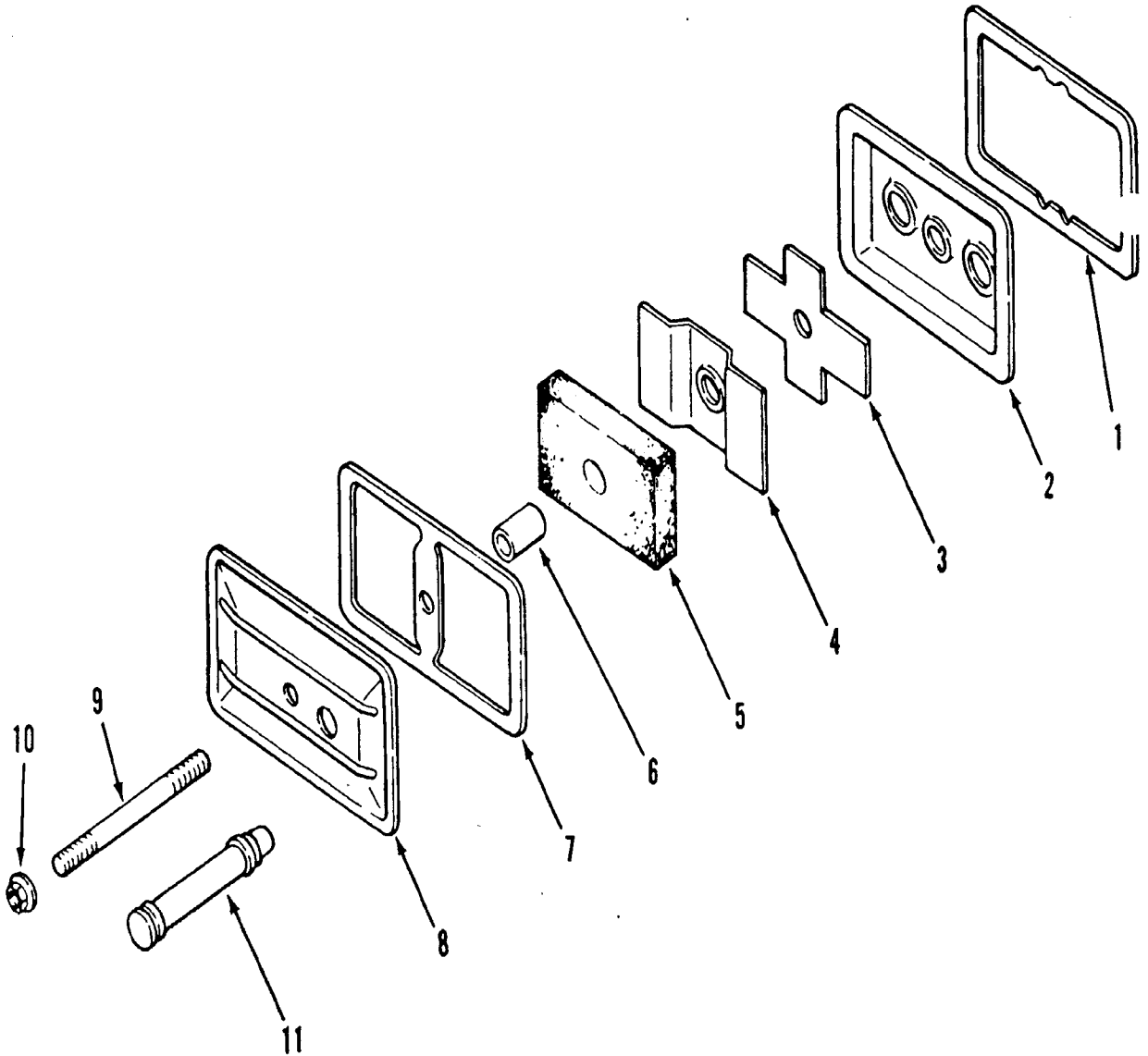
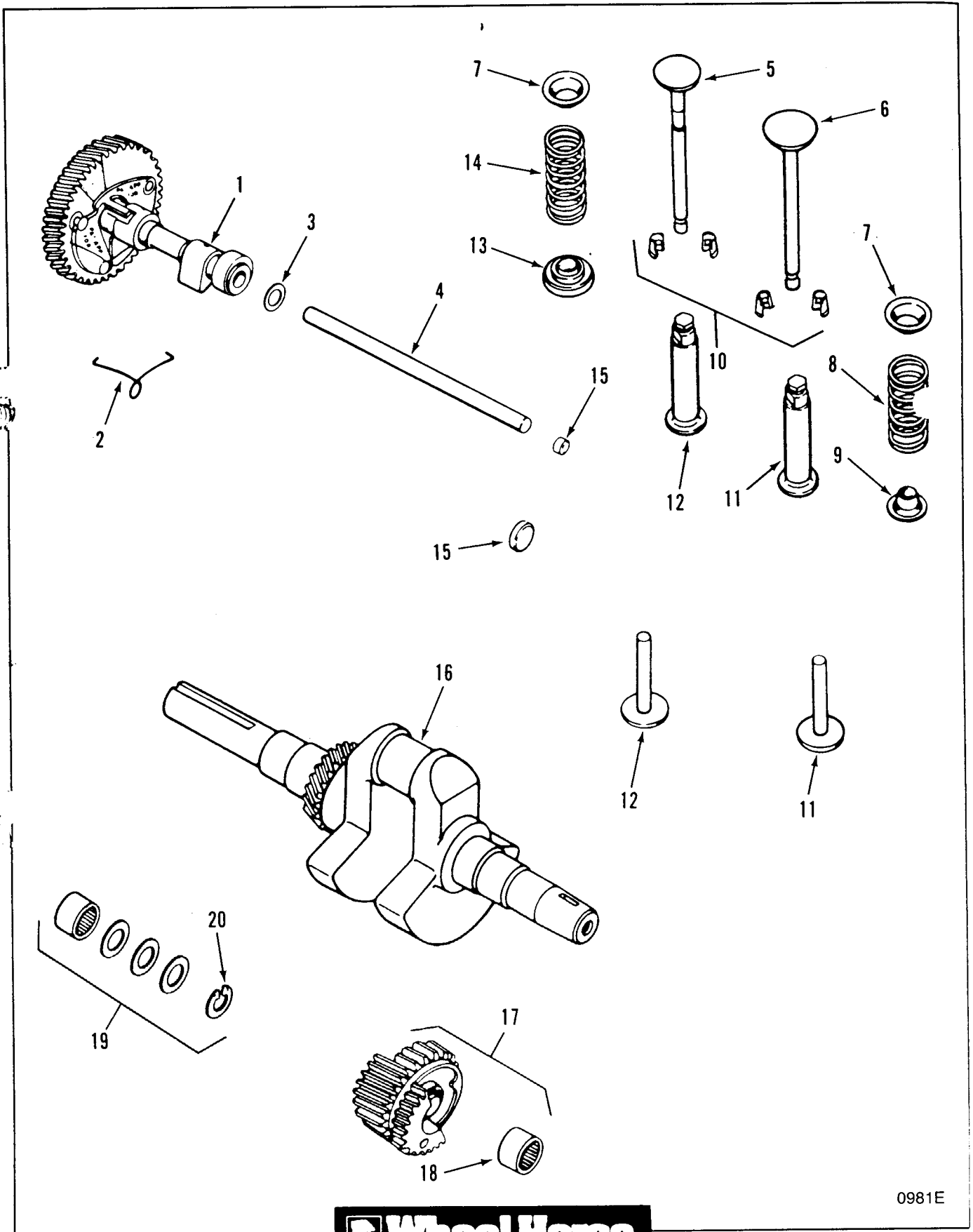


Figure 7-5 Breather & Vent

SECTION 7 - KOHLER ENGINE BREATHER & VENT

| WHEEL HORSE ITEM | PART NO. | VENDOR PART NUMBER | DESCRIPTION | Quantity |
|--|----------|-----------------------|---------------------------------------|----------|
| Figure 7-5 KOHLER BREATHER & VENT | | | | |
| 1 | KH10058 | 235048 | Breather Plate Gasket | 1 |
| 2 | KH10072 | 235631 | Breather Plate | 1 |
| 3 | KH10057 | 235047 | Breather Reed | 1 |
| 4 | KH10143 | 270146 | Breather Baffle | 1 |
| 5 | KH10275 | 47 050 01 | Breather Filter | 1 |
| 6 | KH10034 | 231032 | Breather Seal | 1 |
| 7 | KH10149 | 275144 | Valve Cover Gasket | 1 |
| 8 | KH10298 | 47 096 01 | Valve Cover | 1 |
| 9 | KH10150 | 27d5220 | Valve Cover Stud 1/4-20 x 3-1/4 | 1 |
| 10 | KH10629 | X-799-1 | Palnut 1/4-20 | 1 |
| 11 | KH10309 | 47 326 03 | Breather Hose 3-11/32 | 1 |



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Figure 7-6 Camshaft, Crankshaft & Valves

SECTION 7 - KOHLER ENGINE CAMSHAFT, CRANKSHAFT & VALVES

| ITEM | WHEEL HORSE PART NO. | VENDOR PART NUMBER | DESCRIPTION | Quantity |
|--|----------------------|--------------------|--|----------|
| Figure 7-6 KOHLER CAMSHAFT, CRANKSHAFT & VALVES | | | | |
| 1 | KH10359 | 47 010 11 | Camshaft Assy (Includes Item 2) | 1 |
| 2 | KH10292 | 47 089 01 | Actuating Spring | 1 |
| 3 | KH10147 | 275066 | Camshaft Spacer .005 | X |
| | KH10148 | 275067 | Camshaft Spacer .010 | X |
| 4 | KH10310 | 47 380 09 | Camshaft Pin | 1 |
| 5 | KH10074 | 235838 | Exhaust Valve, 312 | 1 |
| 6 | KH10052 | 235008 | Intake Valve, 312 | 1 |
| 7 | KH10054 | 235011 | Upper Spring Retainer | 2 |
| 8 | KH10053 | 235010 | Intake Valve Spring 312 | 1 |
| 9 | KH10018 | 230011 | Spring Retainer, 312 | 1 |
| 10 | KH10221 | 41 755 10 | Retainer Kit | 1 |
| 11 | KH10539 | D-235327 | Intake Valve Tappet | 1 |
| 12 | KH10539 | D-235327 | Exhaust Valve Tappet | 1 |
| 13 | KH10496 | 52 413 01 | Valve Rotator | 2 |
| 14 | KH10062 | 235168 | Exhaust Valve Spring 312, | 1 |
| 15 | KH10617 | X-702-3 | Cup Plug 1/2 O.D. | 1 |
| 16 | KH10655 | 47 142 16 | Crankshaft Kit 3-25/32 x 1-1/8 (Includes Flywheel Hdwr.) 312 | 1 |
| 17 | KH10228 | 45 043 03 | Gear Assembly (Includes Item 18) 312, | 2 |
| 18 | KH10267 | 47 030 01 | Needle Bearing 312, | 2 |
| 19 | KH10322 | 47 755 01 | Spacer Kit (Includes Item 20) 312, | 2 |
| 20 | KH10574 | X-269-34 | Retainer 312, | 1 |

SECTION 7 - KOHLER ENGINE CRANKCASE & CYLINDER HEAD

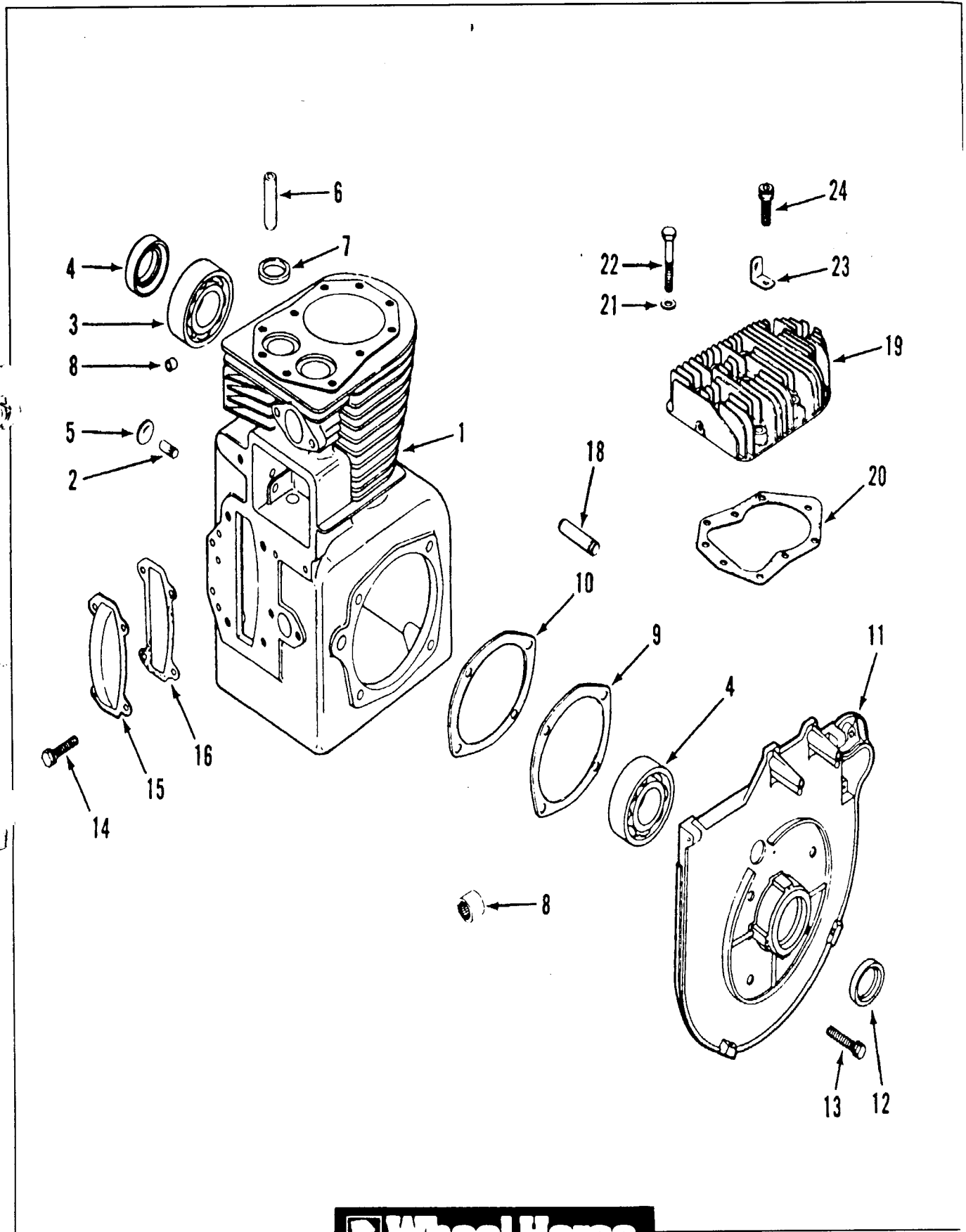
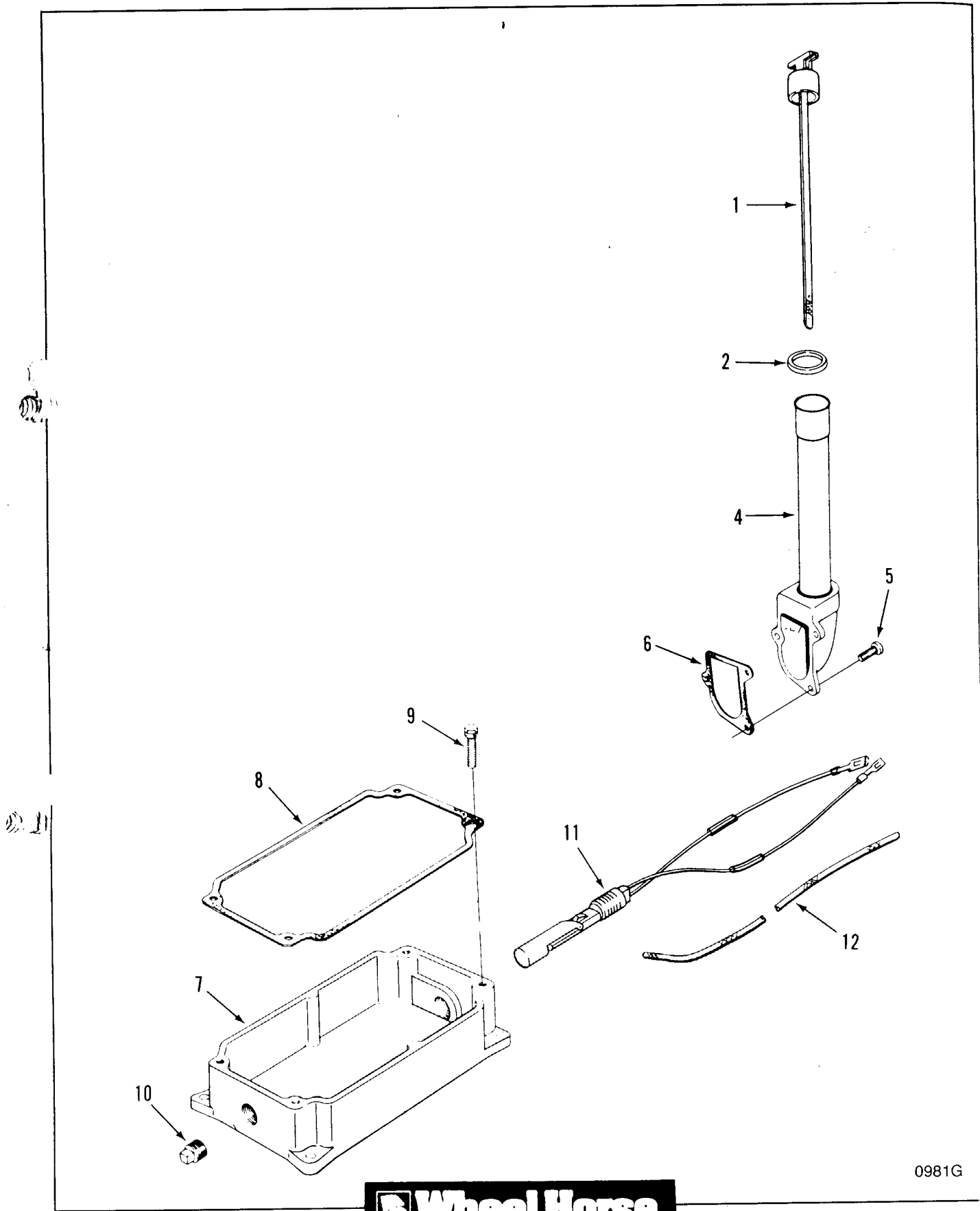


Figure 7-7 Crankcase & Cylinder Head

SECTION 7 - KOHLER ENGINE CRANKCASE & CYLINDER HEAD

| WHEEL HORSE ITEM | PART NO. | VENDOR PART NUMBER | DESCRIPTION | Quantity |
|---|----------|-----------------------|---|----------|
| Figure 7-7 | | | | |
| KOHLER CRANKCASE & CYLINDER HEAD | | | | |
| 1 | KH10317 | 47 522 95 | Cylinder Block - Service With Short Block (Includes Crankshaft) 312 | X |
| | KH10327 | 47 782 33 | Miniblock (Less Crankshaft) 312 | X |
| 2 | KH10061 | 235125-S | Governor Gear Shaft | 1 |
| 3 | KH10067 | 235376 | Ball Bearing | 2 |
| 4 | KH10269 | 47 032 07 | Rear Oil Seal | 1 |
| 5 | KH10562 | X-230-11 | Expansion Plug | 1 |
| 6 | KH10015 | 230007-S | Valve Guide | 2 |
| 7 | KH10028 | 230170 | Exhaust Valve Insert, 312 | 1 |
| 8 | KH10049 | 234866 | Governor Cross Shaft Bearing | 1 |
| 9 | KH10272 | 47 041 09 | Bearing Plate Gasket | 1 |
| 10 | KH10311 | 47 422 05 | Shim Gasket | 1 |
| 11 | KH10306 | 47 146 07 | Bearing Plate | 1 |
| 12 | KH10268 | 47 032 06 | Front Oil Seal | 1 |
| 13 | KH10549 | X-159-2 | H.C. Sems Screw 3/8-16 x 1 | 4 |
| 14 | KH10545 | X-132-6 | H.C. Sems Screw 1/4-20 x 1/2 | 4 |
| 15 | KH10661 | 23d5026 | Camshaft Cover | 1 |
| 16 | KH10055 | 235025 | Camshaft Cover Gasket | 1 |
| 18 | KH10081 | 236559 | Balance Gear Shaft 312, | 1 |
| 19 | KH10261 | 47 015 06 | Cylinder Head | 1 |
| 20 | KH10273 | 47 041 10 | Head Gasket | 1 |
| 21 | KH10145 | 270889 | Plain Washer 8/86 | 9 |
| 22 | KH10144 | 270158 | H.C. Screw 3/8-16 x 1-1/2 | 8 |
| 23 | KH10312 | 47 445 02 | Lifting Strap | 1 |
| 24 | KH10290 | 47 086 17 | Hex. Hd. Screw 3/8-16 x | 1 |

SECTION 7 - KOHLER ENGINE OIL PAN & DIPSTICK



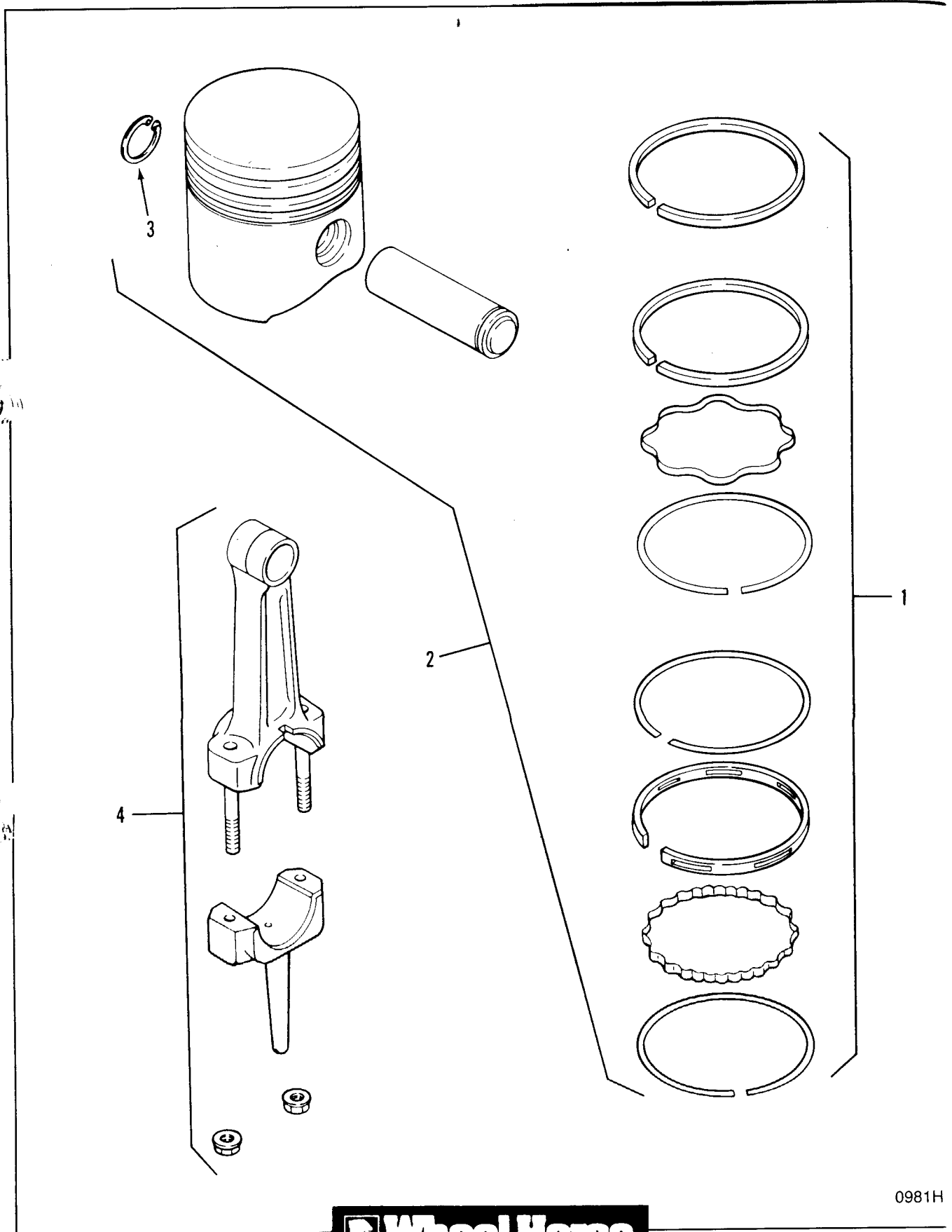
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Figure 7-8 Oil Pan & Dipstick

SECTION 7 - KOHLER ENGINE OIL PAN & DIPSTICK

| WHEEL HORSE ITEM PART NO. | VENDOR PART NUMBER | DESCRIPTION | Quantity |
|---|-----------------------|--|----------|
| Figure 7-8 KOHLER OIL PAN & DIPSTICK | | | |
| 1 | KH10270 | 47 038 27 Dipstick 15-3/8 | 1 |
| 2 | KH10201 | 41 152 01 O-ring | 1 |
| 4 | KH10266 | 47 029 06 Oil Fill Adapter | 1 |
| 5 | KH10541 | X-131-2 F.H. Sems Screw # 10-24 x 1/2 | 3 |
| 6 | KH10088 | 237064 Adapter Gasket | 1 |
| 7 | KH10248 | 45 199 05 Oil Pan | 1 |
| 8 | KH10059 | 235057 Oil Pan Gasket | 1 |
| 9 | KH10550 | X-159-3 H.C. Sems Screw 3/8-16 x 1 1/4 | 4 |
| 10 | KH10620 | X-75-10 Sq. Hd. Plug 3/8 NPTF | 4 |
| 11 | KH10138 | 25 704 01 Float Switch Kit (Includes Items 12 & Decal) | 1 |
| 12 | KH10134 | 25 431 02 Sleeving | 1 |
| Not Illustrated | | | |
| | KH10119 | 25 113 05 Float Switch Decal | 1 |
| | KH10345 | 48 155 01 Female Connector (5-Contact) | 1 |
| | KH10325 | 47 755 27 Gasket Set w/Seals | X |
| | KH10258 | 47 004 02 Gasket Set w/o Seals | X |



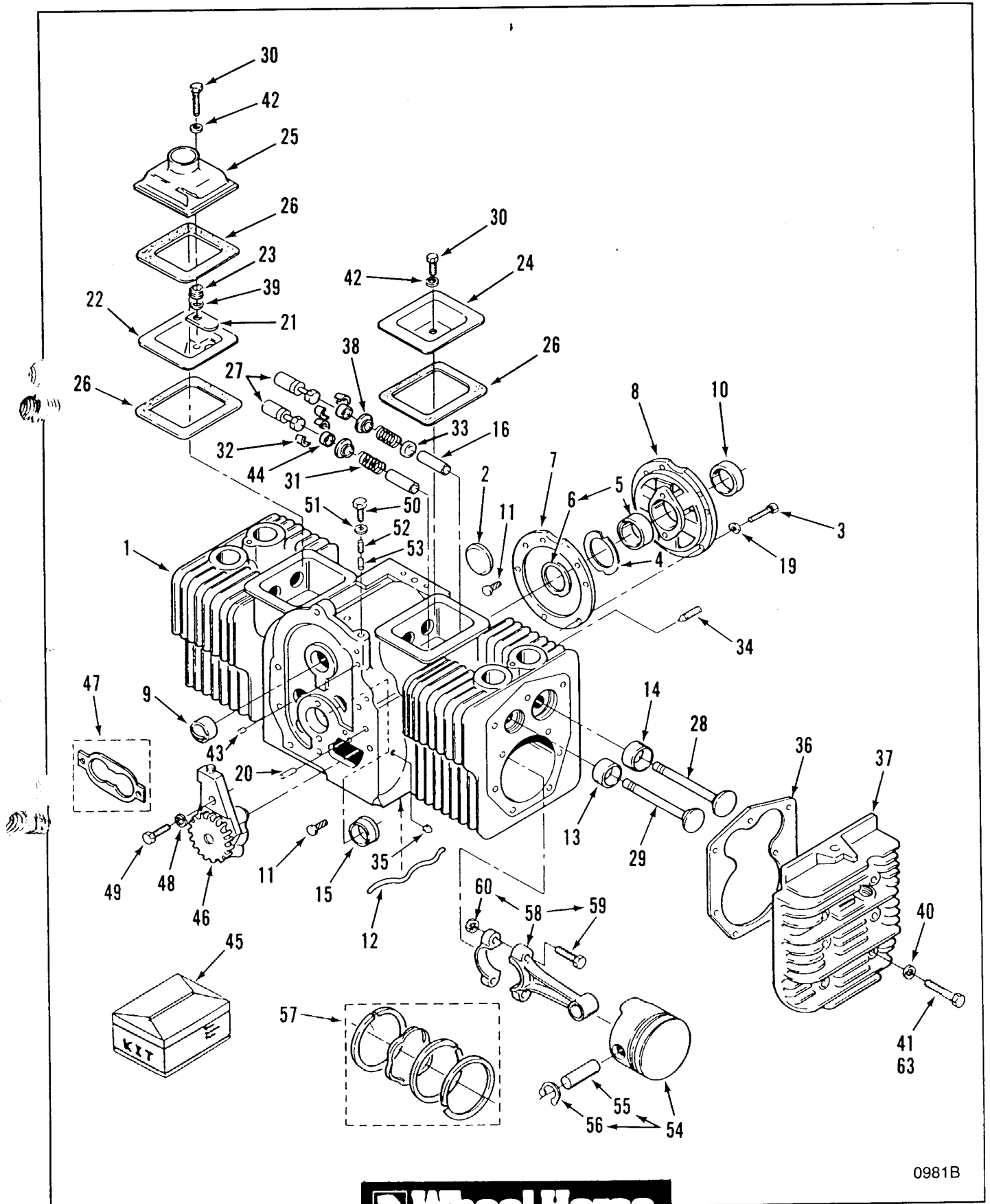
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Figure 7-9 Piston & Rings

SECTION 7 - KOHLER ENGINE PISTON & RINGS

| WHEEL HORSE ITEM | PART NO. | VENDOR PART NUMBER | DESCRIPTION | Quantity |
|-------------------------------------|----------|-----------------------|----------------------------------|----------|
| Figure 7-9 KOHLER PISTON & RINGS | | | | |
| 1 | KH10075 | 235889 | Ring Set Std. & .003 312 | 1 |
| | KH10076 | 235890 | Ring Set .010 312 | 1 |
| | KH10077 | 235891 | Ring Set .020 312 | 1 |
| | KH10078 | 235892 | Ring Set .030 312 | 1 |
| 2 | KH10334 | 47 874 06 | Piston w/Ring Set Std. 312 | 1 |
| | KH10335 | 47 874 07 | Piston w/Ring Set .003 312 | 1 |
| | KH10336 | 47 874 08 | Piston w/Ring Set .010 312 | 1 |
| | KH10337 | 47 874 09 | Piston w/Ring Set .020 312 | 1 |
| | KH10338 | 47 874 10 | Piston w/Ring Set .030 312 | 1 |
| 3 | KH10262 | 47 018 01 | Piston Pin Retainer | 2 |
| 4 | KH10283 | 47 067 09 | Connecting Rod Std. 312 | |
| | KH10284 | 47 067 10 | Connecting Rod .010 312 | |

SECTION 7 - ONAN ENGINE CYLINDER BLOCK



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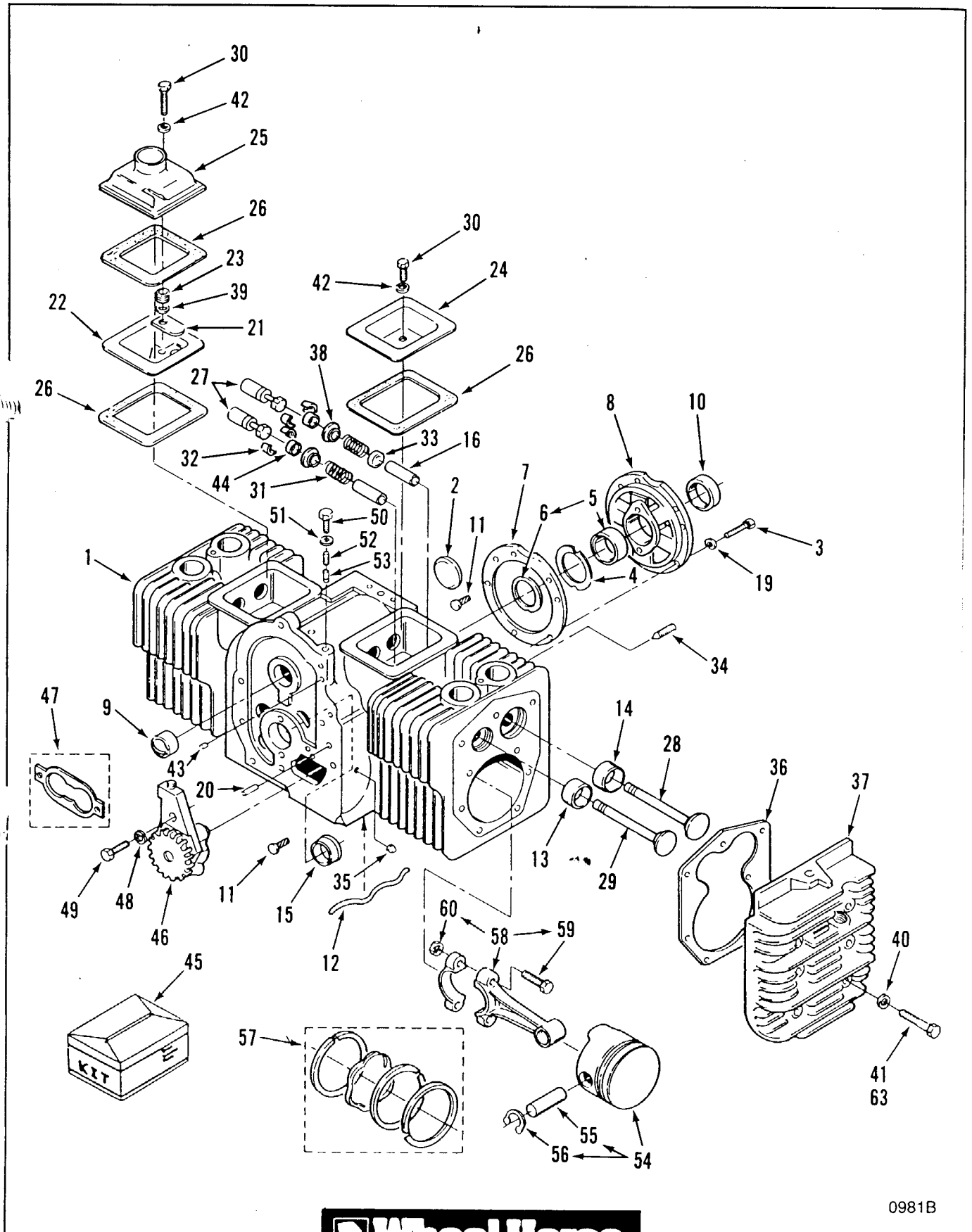


Figure 7-10 Engine Cylinder Block

SECTION 7 - ONAN ENGINE CYLINDER BLOCK

| WHEEL HORSE ITEM | PART NO. | VENDOR PART NUMBER | DESCRIPTION | Quantity |
|-----------------------------------|----------|-----------------------|--|----------|
| Figure 7-10 | | | | |
| ONAN ENGINE CYLINDER BLOCK | | | | |
| 1 | NN10072 | 110-3419-01 | Short Block | 1 |
| 2 | NN10338 | 517-0048-01 | Plug | 1 |
| 3 | NN10442 | 800-0051 | Bolt 3/8-16 x 1-1/4 | 5 |
| 4 | NN10023 | 104-0776 | Shim 0.005" | X |
| 5 | NN10009 | 101-0450 | Crankshaft Rear Brg - Standard | 1 |
| | NN10010 | 101-0450-02 | Crankshaft Rear Brg - .002" Under | 1 |
| | NN10011 | 101-0450-10 | Crankshaft Rear Brg - .010" Under | 1 |
| | NN10012 | 101-0450-20 | Crankshaft Rear Brg - .020" Under | 1 |
| | NN10013 | 101-0450-30 | Crankshaft Rear Brg - .030" Under | 1 |
| 6 | NN10022 | 104-0575 | Thrust Washer | 2 |
| 7 | NN10002 | 101-0415 | Gasket | 1 |
| 9 | NN10008 | 101-0439-01 | Bearing Plate | 1 |
| 9 | NN10001 | 101-0405 | Camshaft Brg | 2 |
| 10 | NN10321 | 509-0041 | Oil Seal | 1 |
| 11 | NN10334 | 516-0072 | Stop Pin | 4 |
| 12 | NN10139 | 120-0735 | Oil Tube | 1 |
| 13 | NN10054 | 110-1824 | Exhaust Seat Insert - Standard | 2 |
| | NN10055 | 110-1824-02 | Exhaust Seat Insert - .002" Oversize | 2 |
| | NN10056 | 110-1824-05 | Exhaust Seat Insert - .005" Oversize | 2 |
| | NN10057 | 110-1824-10 | Exhaust Seat Insert - .010" Oversize | 2 |
| | NN10085 | 110-1824-25 | Exhaust Seat Insert - .025" Oversize | 2 |
| 14 | NN10035 | 110-0197 | Intake Seat Insert - Standard | 2 |
| | NN10036 | 110-0197-02 | Intake Seat Insert - .002" Oversize | 2 |
| | NN10037 | 110-0197-05 | Intake Seat Insert - .005" Oversize | 2 |
| | NN10038 | 110-0197-10 | Intake Seat Insert - .010" Oversize | 2 |
| | NN10039 | 110-0197-25 | Intake Seat Insert - .025" Oversize | 2 |
| 15 | NN10003 | 101-0432 | Front Crankshaft Brg - Standard | 1 |
| | NN10004 | 101-0432-02 | Front Crankshaft Brg - .002" Under | 1 |
| | NN10005 | 101-0432-10 | Front Crankshaft Brg - .010" Under | 1 |
| | NN10006 | 101-0432-20 | Front Crankshaft Brg - .020" Under | 1 |
| | NN10007 | 101-0432-30 | Front Crankshaft Brg - .030" Under | 1 |
| 16 | NN10084 | 110-3527 | Exhaust Valve Guide | 2 |
| | NN10083 | 110-3526 | Intake Valve Guide | 2 |
| 19 | NN10421 | 850-0050 | Spring Washer 3/8 | 5 |
| 20 | NN10336 | 516-0141 | Pin | 2 |
| 21 | NN10154 | 123-1175 | Valve Reed | 1 |
| 22 | NN10152 | 123-1173 | Baffle | 1 |
| 23 | NN10153 | 123-1174 | Spring | 1 |
| 24 | NN10059 | 110-1879-01 | RH Valve Cover | 1 |
| 25 | NN10066 | 110-2274-01 | LH Valve Cover | 1 |
| 26 | NN10060 | 110-1921 | Gasket | 3 |
| 27 | NN10129 | 115-0006 | Tappet - Standard | 4 |
| | NN10130 | 115-0006-02 | Tappet .002" Oversize | 4 |
| | NN10131 | 115-0006-05 | Tappet .004" Oversize | 4 |
| 28 | NN10075 | 110-3479 | Intake Valve | 2 |
| 29 | NN10076 | 110-3480 | Exhaust Valve | 2 |
| 30 | NN10370 | 800-0010 | Bolt 1/4-20 x 1-3/4 | 2 |
| 31 | NN10077 | 110-3485 | Valve Spring | 4 |
| 32 | NN10082 | 110-3511 | Spring Lock | 8 |
| 33 | NN10326 | 509-0210 | Intake Valve Seal | 2 |

SECTION 7 - ONAN ENGINE CYLINDER BLOCK



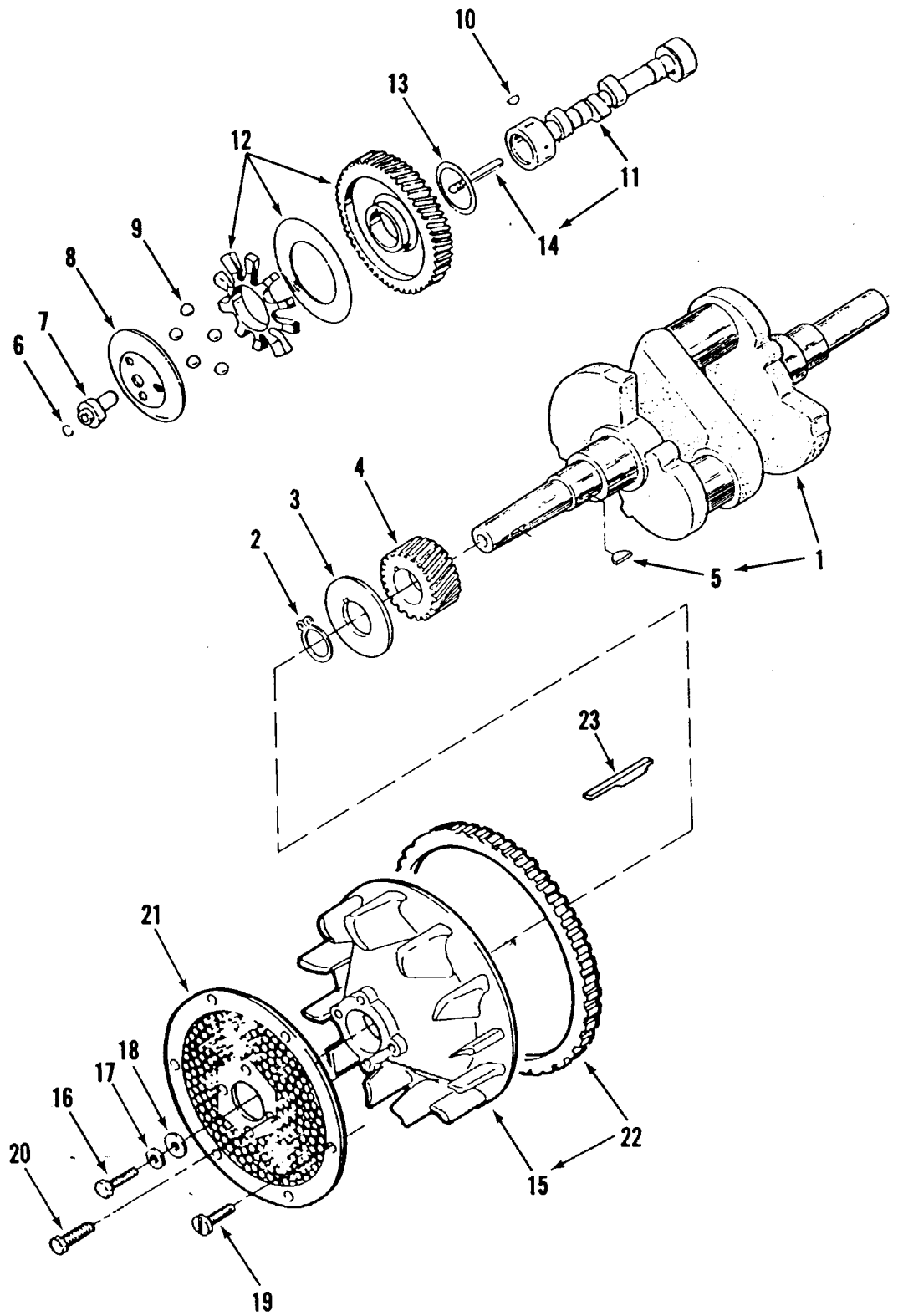
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Figure 7-10 Engine Cylinder Block

SECTION 7 - ONAN ENGINE CYLINDER BLOCK

| WHEEL HORSE ITEM | PART NO. | VENDOR PART NUMBER | DESCRIPTION | Quantity |
|--|----------|-----------------------|--|----------|
| Figure 7-10 ONAN ENGINE CYLINDER BLOCK (CONT'D) | | | | |
| 34 | NN10385 | 803-0071 | Screw 3/8-16 x 5/8 | 2 |
| 35 | NN10307 | 505-0057 | Pipe Plug | 1 |
| 36 | NN10070 | 110-3181 | Cylinder Head Gasket | 2 |
| 37 | NN10080 | 110-3509 | Right Cylinder Head | 1 |
| | NN10079 | 110-3508 | Left Cylinder Head | 1 |
| 38 | NN10078 | 110-3487 | Retaining Washer | 4 |
| 39 | NN10356 | 526-0018 | Flat Washer 1/4 | 1 |
| 40 | NN10363 | 526-0122 | Flat Washer 1/4 | 18 |
| 41 | NN10381 | 800-0471 | Special Bolt 2" long | 10 |
| 42 | NN10359 | 526-0063 | Flat Copper Washer 1/4 | 1 |
| 13 | NN10339 | 517-0067 | Plug | 4 |
| 44 | NN10081 | 110-3510 | Valve Cap | 1 |
| 45 | NN10257 | 168-0182 | Complete Engine Gasket Kit | 1 |
| | NN10258 | 168-0183 | Valve Grind/Carbon Removal | 1 |
| 46 | NN10136 | 120-0491 | Oil Pump-Complete | 1 |
| 47 | NN10134 | 120-0161 | Oil Pump-Gasket Kit | 1 |
| 48 | NN10419 | 850-0040 | Spring Washer | 2 |
| 49 | NN10369 | 800-0007 | Bolt 1/4-20 x 1 | 2 |
| 50 | NN10383 | 801-0049 | Bolt 3/8-24 x 7/8 | 1 |
| 51 | NN10361 | 526-0066 | Flat Copper Washer 3/8 | 1 |
| 52 | NN10133 | 120-0140 | Spring | 1 |
| 53 | NN10135 | 120-0398 | Plunger | 1 |
| 54 | NN10088 | 112-0186 | Piston Pin & Retaining Rings - STD | 2 |
| | NN10089 | 112-0186-05 | Piston Pin & Retaining Rings - .005" | 2 |
| | NN10090 | 112-0186-10 | Piston Pin & Retaining Rings - .010" | 2 |
| | NN10091 | 112-0186-20 | Piston Pin & Retaining Rings - .020" | 2 |
| | NN10092 | 112-0186-30 | Piston Pin & Retaining Rings - .030" | 2 |
| | NN10093 | 112-0186-40 | Piston Pin & Retaining Rings - .040" | 2 |
| 55 | NN10100 | 112-0229 | Piston Pin | 4 |
| 56 | NN10345 | 518-0311 | Retaining Ring | 2 |
| 57 | NN10101 | 113-0189 | Piston Ring Set-Standard | 2 |
| | NN10102 | 113-0189-05 | Piston Ring Set .005" Oversize | 2 |
| | NN10103 | 113-0189-10 | Piston Ring Set .010" Oversize | 2 |
| | NN10104 | 113-0189-20 | Piston Ring Set .020" Oversize | 2 |
| | NN10105 | 113-0189-30 | Piston Ring Set .030" Oversize | 2 |
| | NN10106 | 113-0189-40 | Piston Ring Set .040" Oversize | 2 |
| 58 | NN10125 | 114-0300 | Rod w/Bolts & Nuts - STD | 2 |
| | NN10126 | 114-0300-10 | Rod w/Bolts & Nuts - .010" | 2 |
| | NN10127 | 114-0300-20 | Rod w/Bolts & Nuts - .020" | 2 |
| | NN10128 | 114-0300-30 | Rod w/Bolts & Nuts - .030" | 2 |
| 59 | NN10120 | 114-0240 | Special Rod Bolt | 4 |
| 60 | NN10428 | 870-0302 | Crown Lock Nut | 4 |
| 63 | NN10382 | 800-0572 | Special Bolt 2.375" Long | 8 |

SECTION 7 - ONAN CRANKSHAFT, CAMSHAFT & FLYWHEEL



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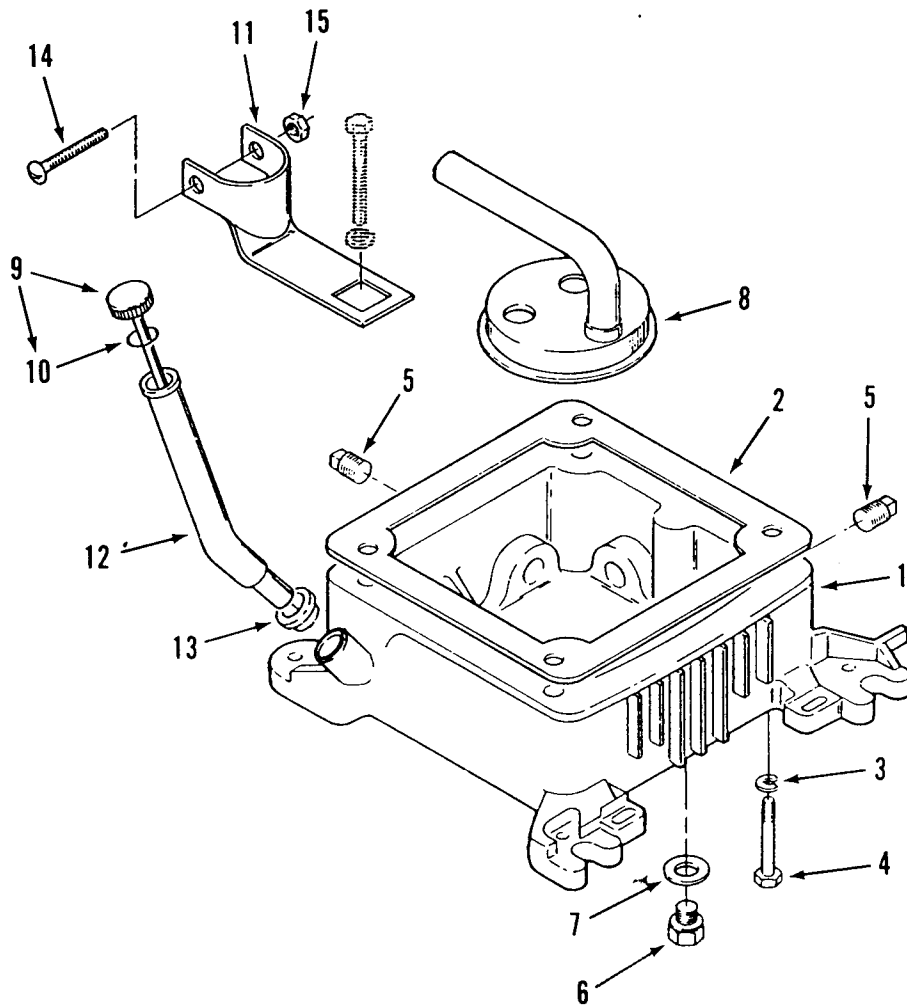


Figure 7-11 Onan Crankshaft, Camshaft & Flywheel

SECTION 7 - ONAN CRANKSHAFT, CAMSHAFT & FLYWHEEL

| WHEEL HORSE ITEM | PART NO. | VENDOR PART NUMBER | DESCRIPTION | Quantity |
|--|----------|-----------------------|---|----------|
| Figure 7-11 | | | | |
| ONAN CRANKSHAFT, CAMSHAFT, FLYWHEEL | | | | |
| 1 | NN10025 | 104-1328 | Crankshaft | 1 |
| 2 | NN10343 | 518-0014 | Retaining Ring | 1 |
| 3 | NN10439 | 104-0043 | Special Washer | 1 |
| 4 | NN10438 | 104-0032 | Crankshaft Gear | 1 |
| 5 | NN10330 | 515-0001 | Gear Key | 1 |
| 6 | NN10215 | 150-0078 | Retaining Ring | 1 |
| 7 | NN10221 | 150-1519 | Governor Cup Hub | 1 |
| 8 | NN10222 | 150-1520 | Governor Cup | 1 |
| 9 | NN10328 | 510-0015 | Governor Ball | 1 |
| 10 | NN10330 | 515-0001 | Woodruff Key | 1 |
| 11 | NN10032 | 105-0637 | Camshaft (Includes item 13) | 1 |
| | NN10029 | 105-0332 | Camshaft Gear (Includes Gear, Spacer and Plate) | 1 |
| 13 | NN10030 | 105-0541 | Special Thrust Washer | 1 |
| 14 | NN10214 | 150-0075 | Center Pin | 1 |
| 15 | NN10171 | 134-4633 | Flywheel (Includes Ring Gear) | 1 |
| 16 | NN10021 | 104-0170 | Special Hex Hd Cap Screw | 1 |
| 17 | NN10422 | 850-0055 | Spring Lockwasher 7/16 | 1 |
| 18 | NN10335 | 526-0017 | Flat Washer 7/16 | 1 |
| 19 | NN10409 | 815-0687 | Flange Lock Hd. Screw # 10-24 x 3/8 | 6 |
| 20 | NN10416 | 821-0014 | Hex Hd Locking Cap Screw 5/16-18 x 1/2 | 4 |
| 21 | NN10168 | 134-4553-01 | Air Inlet Screen | 1 |
| 22 | NN10024 | 104-0779 | Ring Gear | 1 |
| 23 | NN10332 | 515-0284 | Flywheel Key | 1 |

SECTION 7 - ONAN OIL BASE FILL TUBE AND BRACKET



The logo for Wheel Horse, featuring a stylized horse head icon to the left of the brand name "Wheel Horse" in a bold, sans-serif font.

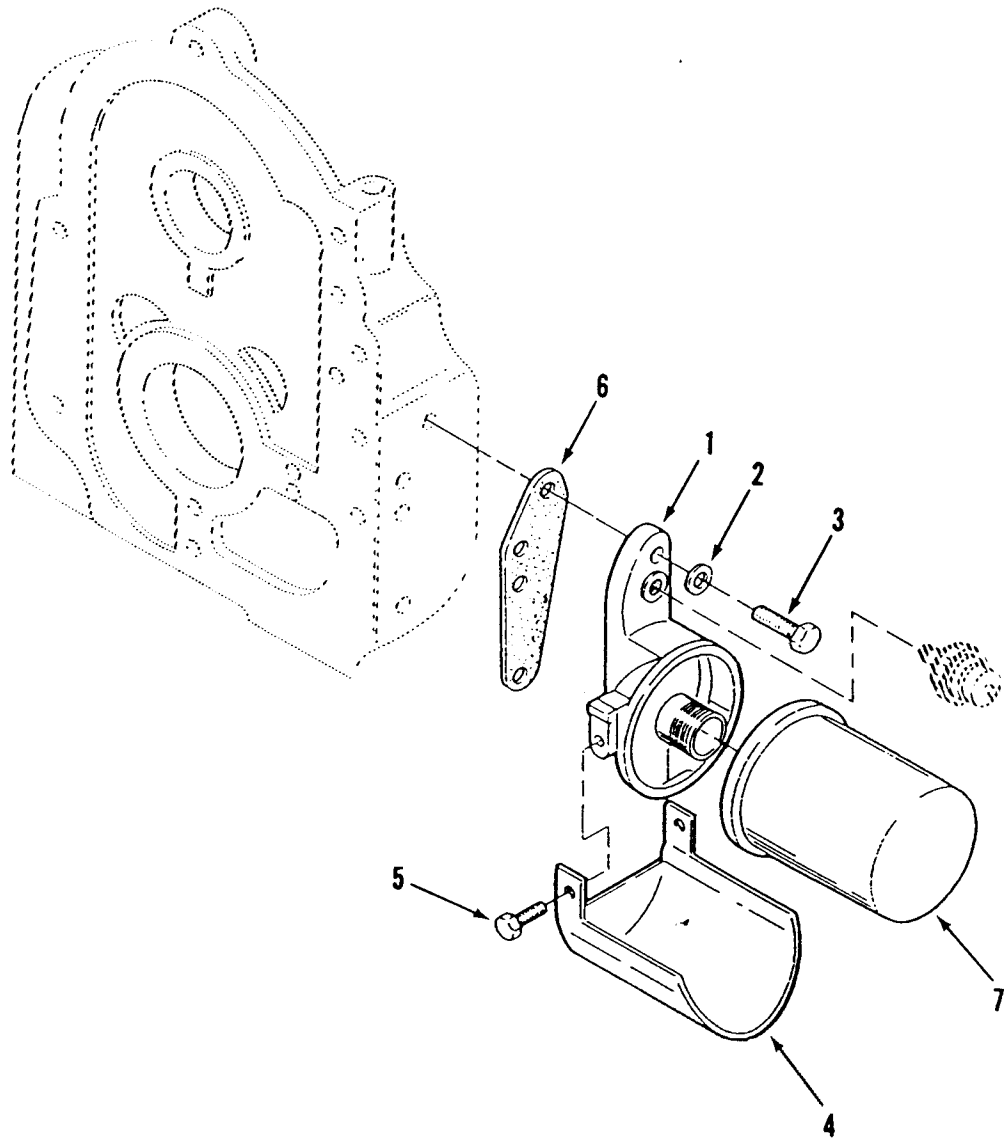
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Figure 7-12 Onan Oil Base Fill Tube and Bracket

SECTION 7 - ONAN OIL BASE FILL TUBE AND BRACKET

| WHEEL HORSE ITEM | PART NO. | VENDOR PART NUMBER | DESCRIPTION | Quantity |
|--|----------|-----------------------|--|----------|
| Figure 7-12 | | | | |
| ONAN OIL BASE FILL TUBE AND BRACKET | | | | |
| 1 | NN10018 | 102-1325 | Oil Base (Includes All Plugs and Plug Gasket) | 1 |
| 2 | NN10016 | 102-1200 | Oil Base Gasket | 1 |
| 3 | NN10421 | 850-0050 | Spring Lockwasher 3/8 | 4 |
| 4 | NN10379 | 800-0061 | Cap Screw 3/8-16 x 3-3/4 | 4 |
| 5 | NN10308 | 505-0110 | Sq. Hd. Plug 3/8 | 2 |
| 6 | NN10015 | 102-0938 | Special Hex Hd. Plug | 1 |
| 7 | NN10014 | 102-0743 | Hex Hd. Plug Gasket | 1 |
| 8 | NN10138 | 120-0713 | Oil Pump Intake Cup | 1 |
| 9 | NN10159 | 123-1637 | Oil Fill Cap and Indicator (Includes "O" Ring) | 1 |
| 10 | NN10323 | 509-0142 | Oil Fill Cap Oil Ring | 1 |
| 11 | NN10162 | 123-1742-01 | Fill Tube Bracket | 1 |
| 12 | NN10161 | 123-1685-02 | Oil Fill Tube-Chrome 15-3/4" Lg | 1 |
| 13 | NN10325 | 509-0209 | Oil Fill Tube Seal | 1 |
| 14 | NN10407 | 815-0576 | Pan Hd. Screw # 10 x 1-1/4 | 1 |
| 15 | NN10431 | 870-0410 | Speed Nut | 1 |

SECTION 7 - ONAN OIL FILTER



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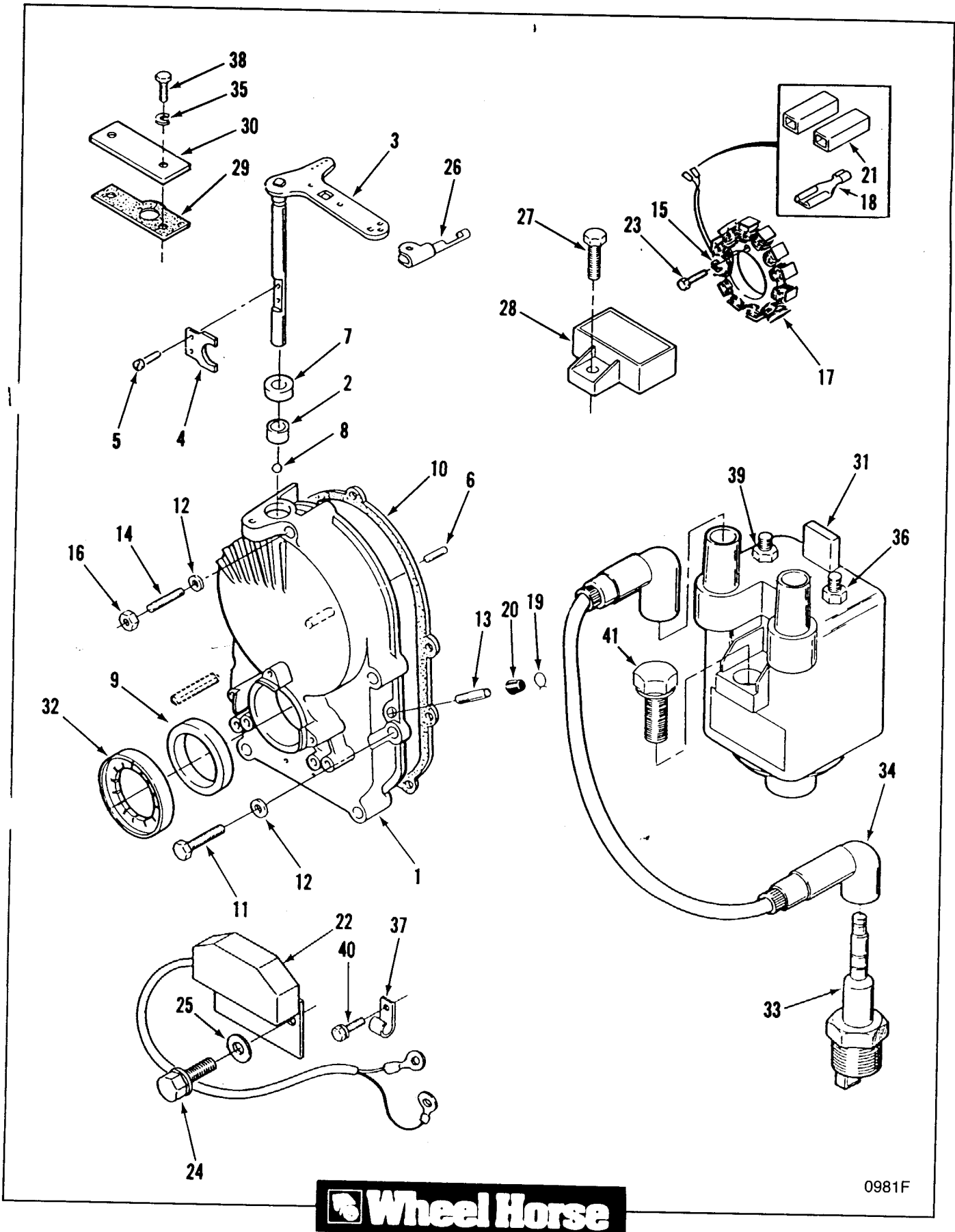


Figure 7-13 Onan Oil Filter

SECTION 7 - ONAN OIL FILTER

| WHEEL HORSE ITEM | PART NO. | VENDOR PART NUMBER | DESCRIPTION | Quantity |
|--|---------------------------|-----------------------|---------------------------------------|----------|
| Figure 7-13 ONAN OIL FILTER | | | | |
| 1 | NN10141 | 122-0320 | Oil Filter Adapter | 1 |
| 2 | NN10360 | 526-0065 | Flat Copper Washer 5/16 | 2 |
| 3 | NN10373 | 800-0028 | Hex Hd. Cap Screw 5/16-18 x 1 | 2 |
| 4 | NN10146 | 122-0360-02 | Oil Filter Drain | 1 |
| 5 | NN10391 | 815-0194 | Hex Hd. Cap Screw # 10-32 x 3/8 | 2 |
| 6 | NN10463 | 122-0375 | Oil Filter Adapter Gasket | 1 |
| 7 | NN10147 | 122-0645 | Oil Filter | 1 |
| | Not Illustrated 114498 | | Oil Filter Wrench | 1 |

SECTION 7 - ONAN GEARCASE AND IGNITION CONTROLS



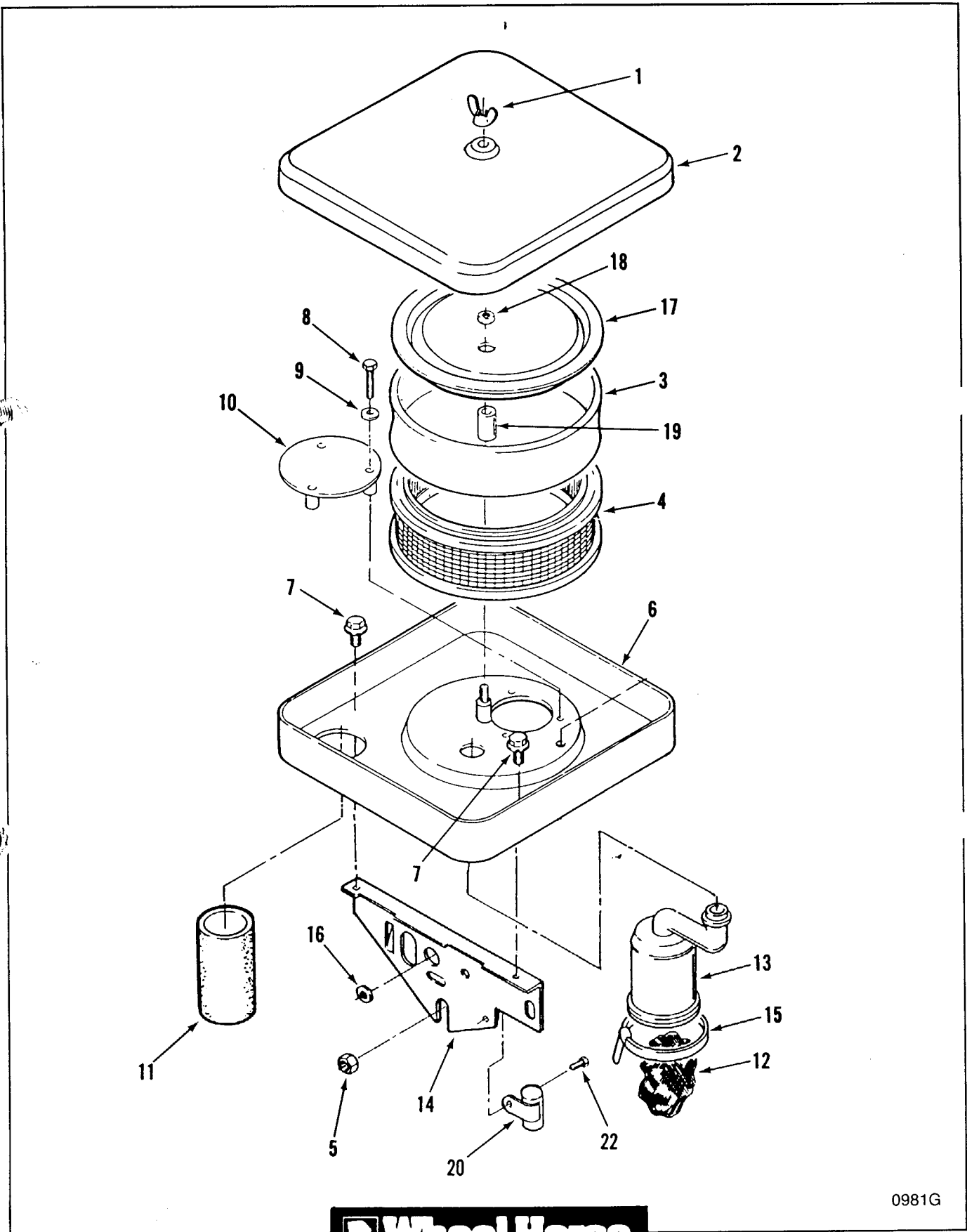
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Figure 7-14 Onan Gearcase and Ignition Controls

SECTION 7 - ONAN GEARCASE AND IGNITION CONTROLS

| WHEEL HORSE ITEM | PART NO. | VENDOR PART NUMBER | DESCRIPTION | Quantity |
|--|----------|-----------------------|---|----------|
| Figure 7-14 | | | | |
| ONAN GEARCASE AND IGNITION CONTROLS | | | | |
| 1 | NN10020 | 103-0791 | Gearcase Kit (Includes Items 2 thru 9, 13, 19 & 20) | 1 |
| 2 | NN10329 | 510-0105 | Governor Shaft Bearing | 1 |
| 3 | NN10220 | 150-1470-01 | Governor Shaft and Arm-Chromed | 1 |
| 4 | NN10216 | 150-1187 | Governor Shaft Yoke | 1 |
| 5 | NN10388 | 815-0046 | Pan Hd. Mach. Screw # 8-32 x 3/8 | 1 |
| 6 | NN10335 | 516-0130 | Governor Cup Stop Dowl Pin | 1 |
| 7 | NN10310 | 509-0008 | Governor Shaft Oil Seal | 1 |
| 8 | NN10327 | 510-0014 | Governor Shaft Ball Bearing | 1 |
| 9 | NN10320 | 509-0040 | Crankshaft Oil Seal | 1 |
| 10 | NN10019 | 103-0408 | Gearcase Mounting Gasket | 1 |
| 11 | NN10374 | 114-0022 | Hex Hd. Cap Screw 5/16-18 x 1-3/4 | 4 |
| 12 | NN10360 | 526-0065 | Flat Copper Washer 5/16 | 1 |
| 13 | NN10210 | 149-1299 | Vacuum Port Tube | 1 |
| 14 | NN10352 | 520-0933 | Gear Cover Stud | 1 |
| 15 | NN10418 | 850-0030 | Lockwasher # 10 | 3 |
| 16 | NN10426 | 862-0015 | Nut 5/6-18 | 1 |
| 17 | NN10259 | 191-1256 | Stator w/Terminals | 1 |
| 18 | NN10290 | 332-2423 | Stator Leads Terminal | 3 |
| 19 | NN10301 | 503-0301 | Vacuum Port Clamp | 1 |
| 20 | NN10211 | 149-1321 | Vacuum Port Cap | 1 |
| 21 | NN10280 | 323-1257 | Terminal Connector Body Kit (Includes Terminals) | 1 |
| 22 | NN10444 | 166-0785 | Ignition Control | 1 |
| 23 | NN10389 | 815-0172 | Self-Lock Hex Hd. Mach. Screw # 10-32x1 | 3 |
| 24 | NN10394 | 815-0340 | Hex Washer Hd. Screw # 10-32 x 3/8 | 2 |
| 25 | NN10424 | 854-0010 | Lockwasher IT # 10 | 2 |
| 26 | NN10346 | 518-0406 | Retaining Clip | 1 |
| 27 | NN10414 | 821-0008 | Hex Washer Hd. Cap Screw 1/4-20 x 5/16 | 1 |
| 28 | NN10261 | 191-1748 | Voltage Regulator-20 amp | 1 |
| 29 | NN10243 | 160-1150 | Plate Gasket | 1 |
| 30 | NN10244 | 160-1345-01 | Ignition Plunger Cover | 1 |
| 31 | NN10245 | 166-0761 | Battery Ignition Coil w/Nuts | 1 |
| 32 | NN10247 | 166-0767 | Ignition Rotor | 1 |
| 33 | NN10252 | 167-0263 | Spark Plug | 2 |
| 34 | NN10253 | 167-1615-01 | Spark Plug Cable-9" Long | 1 |
| | NN10254 | 167-1615-04 | Spark Plug Cable-18.5" Long | 1 |
| 35 | NN10419 | 850-0040 | Lockwasher 1/4 | 2 |
| 36 | NN10248 | 166-0770 | Hex Flange Nut | 1 |
| 37 | NN10348 | 518-0515 | Wire Clip | 1 |
| 38 | NN10368 | 800-0004 | Hex Hd. Cap Screw 1/4-20 x 5/8 | 1 |
| 39 | NN10249 | 166-0771 | Hex Flange Nut | 1 |
| 40 | NN10396 | 815-0389 | Hex Washer Hd. Screw 1/4-20 x 1 | 1 |
| 41 | NN10408 | 815-0650 | Hex Washer Hd. Screw 1/4-20 x 1 | 2 |

SECTION 7 - ONAN AIR CLEANER



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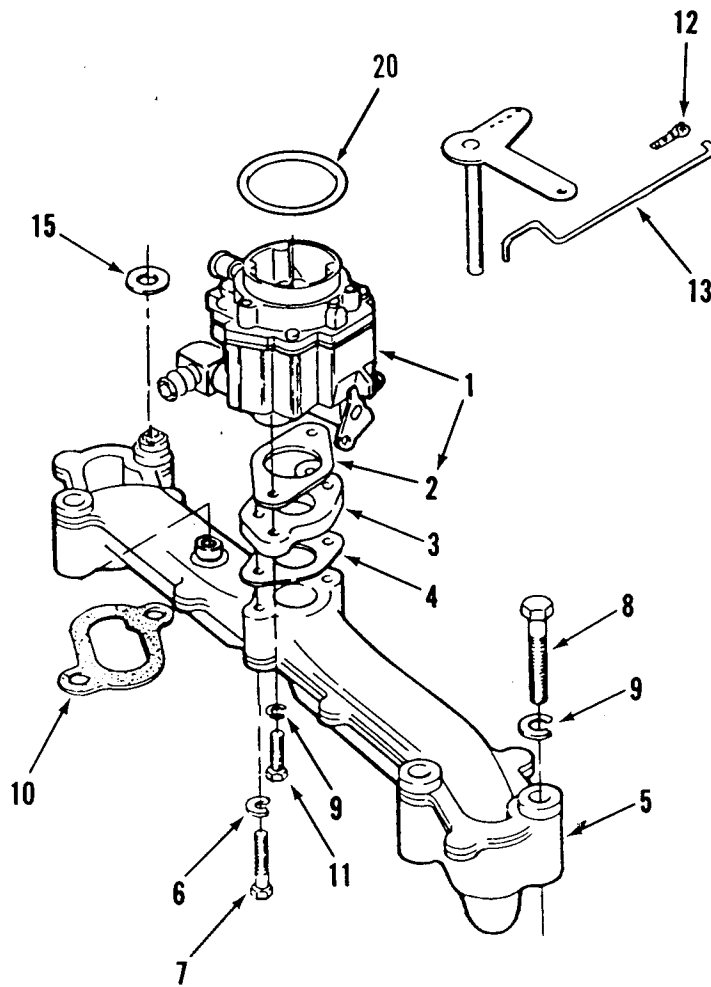


Figure 7-15 Onan Air Cleaner

SECTION 7 - ONAN AIR CLEANER

| WHEEL HORSE ITEM | PART NO. | VENDOR PART NUMBER | DESCRIPTION | Quantity |
|-------------------------|----------|-----------------------|--|----------|
| Figure 7-15 | | | | |
| ONAN AIR CLEANER | | | | |
| 1 | NN10427 | 865-0020 | Wing Nut 1/4-20 | 1 |
| 2 | NN10185 | 140-2005-01 | Air Cleaner Cover | 1 |
| 3 | NN10176 | 140-1496 | Air Cleaner Foam Element | 1 |
| 4 | NN10175 | 140-1228 | Air Cleaner Element | 1 |
| 5 | NN10430 | 870-0399 | Hex Washer Hd. Flange Nut 5/16-18 | 1 |
| 6 | NN10184 | 140-2004-01 | Air Cleaner Housing | 1 |
| 7 | NN10406 | 815-0575 | Hex Washer Hd. ST Screw 1/4-20 x 3/8 | 2 |
| 8 | NN10398 | 815-0470 | Hex. Hd. Mach. Screw # 10-32 x 1-1/2 | 3 |
| 9 | NN10365 | 526-0234 | Flat Washer # 10 | 3 |
| 10 | NN10193 | 145-0521 | Air Deflector Plate | 1 |
| 11 | NN10187 | 140-2025 | Air Intake Tube | 1 |
| 12 | NN10156 | 123-1417 | Breather Tube Filter | 1 |
| 13 | NN10157 | 123-1429 | Crankcase Breather | 1 |
| 14 | NN10186 | 140-2017-01 | Air Cleaner Support | 1 |
| 15 | NN10304 | 503-1138 | Breather Tube Clamp | 1 |
| 16 | NN10309 | 508-0021 | Rubber Grommet - 3/4" Hole | 1 |
| 17 | NN10177 | 140-1692 | Element Cover | 1 |
| 18 | NN10429 | 870-0365 | Hex Nut 1/4-20 | 1 |
| 19 | NN10272 | 301-0458 | Air Cleaner Stud Spacer | 1 |
| 20 | NN10276 | 312-0256 | Capacitor (300 VD) | 1 |
| 21 | NN10390 | 815-0178 | Hex Washer Hd. Screw # 10-32 x 5/8 | 1 |

SECTION 7 - ONAN INTAKE MANIFOLD



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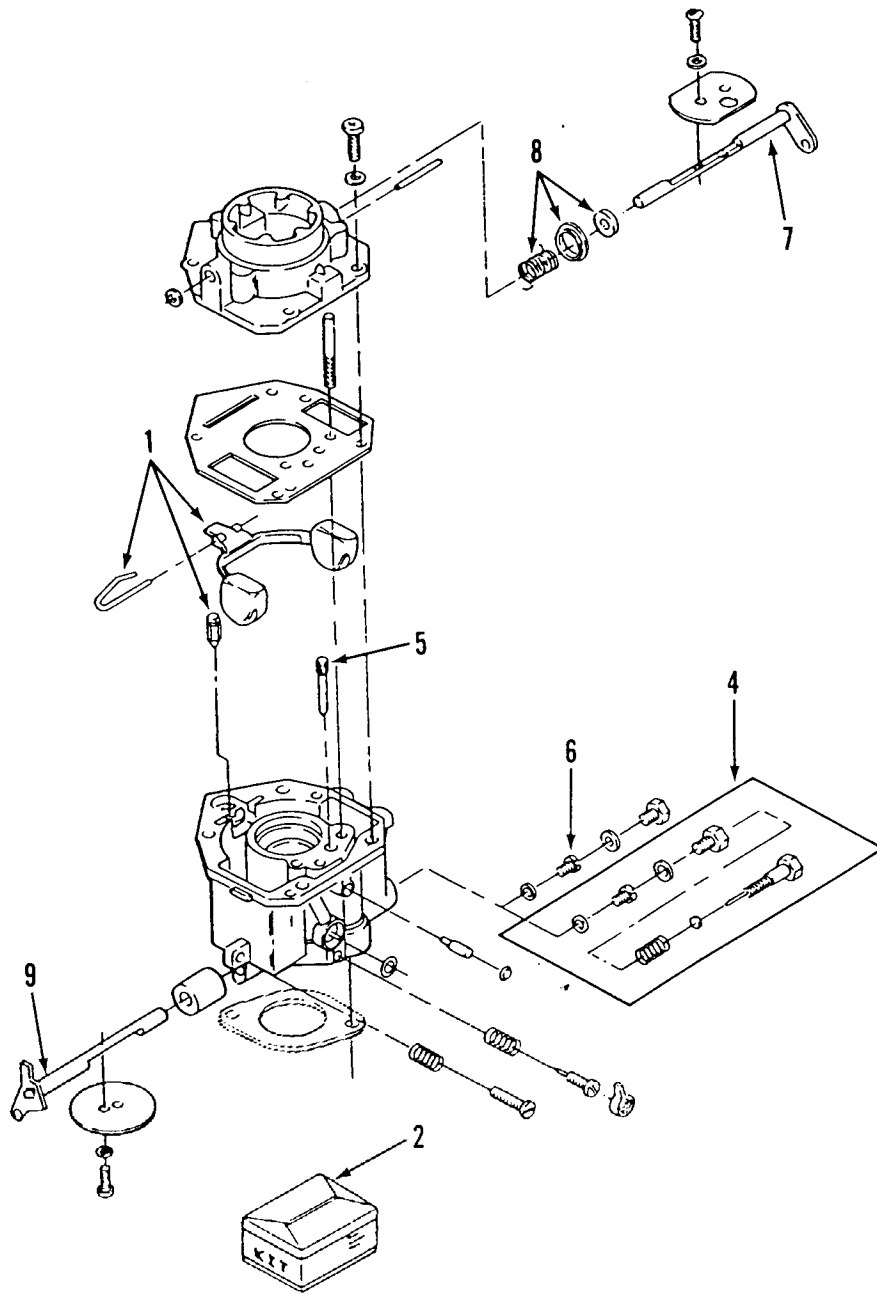


Figure 7-16 Onan Intake Manifold

SECTION 7 - ONAN INTAKE MANIFOLD

| WHEEL HORSE ITEM | PART NO. | VENDOR PART NUMBER | DESCRIPTION | Quantity |
|-----------------------------|----------|-----------------------|---|----------|
| Figure 7-16 | | | | |
| ONAN INTAKE MANIFOLD | | | | |
| 1 | NN10203 | 146-0428 | Carburetor (Includes Mounting Gasket, Elbow and "O" Ring) see section 7-17 for complete carburetor breakdown | 1 |
| 2 | NN10235 | 154-0733 | Carb to Adapter Gasket | 1 |
| 3 | NN10239 | 154-1977-01 | Carburetor Adapter | 1 |
| 4 | NN10192 | 145-0438 | Adapter to Manifold Gasket | 1 |
| 5 | NN10242 | 154-2339 | Intake Manifold | 1 |
| 6 | NN10419 | 850-0040 | Spring Lockwasher 1/4 | 2 |
| 7 | NN10372 | 800-0023 | Hex Hd. Cap Screw 1/4-20 x 1-3/8 | 2 |
| 8 | NN10375 | 800-0033 | Hex. Hd. Cap Screw | 4 |
| 9 | NN10420 | 850-0045 | Spring Lockwasher 5/16 | 6 |
| 10 | NN10236 | 154-1446 | Manifold to Block Gasket | 2 |
| 11 | NN10373 | 800-0028 | Hex Hd. Cap Screw 5/16-18 x 1 | 2 |
| 12 | NN10342 | 518-0004 | Retaining Clip Rod to Carb | 1 |
| 13 | NN10227 | 150-1924 | Governor Control Rod | 1 |
| 15 | NN10362 | 526-0113 | Flat Washer 5/16 | 1 |

SECTION 7 - ONAN CARBURETOR COMPONENTS



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Figure 7-17 Onan Carburetor Components

SECTION 7 - ONAN CARBURETOR COMPONENTS

| WHEEL HORSE ITEM | PART NO. | VENDOR PART NUMBER | DESCRIPTION | Quantity |
|-----------------------------------|----------|-----------------------|--|----------|
| Figure 7-17 | | | | |
| ONAN CARBURETOR COMPONENTS | | | | |
| 1 | NN10209 | 146-0437 | Float Kit (Includes Float, Pin and Valve) | X |
| 2 | NN10206 | 146-0432 | Repair Kit (Includes Screw and Plug Package, Gasket Package, Float Valve, Idle Adjustment Needle and Spring, Mounting Gaskets, Idle Limit Cap) | X |
| 4 | NN10197 | 146-0327 | Variable Jet Kit-Optional (High Altitude Application Includes Power Jet and Gasket, Retainer, Power Needle Spring, Power Needle and Power Plug Gasket) | X |
| 5 | NN10201 | 146-0425 | Idle Jet | 1 |
| 6 | NN10199 | 146-0396 | Power Jet | 1 |
| 7 | NN10207 | 146-0433 | Choke Shaft Kit (Includes Choke Valve, Valve Set Screw and Air Filter) | 1 |
| 8 | NN10208 | 146-0435 | Choke Lever Kit (Includes Choke Lever Ring, Choke Spring and Choke Collar) | 1 |
| 9 | NN10200 | 146-0324 | Throttle Shaft Kit (Includes Valve Set Screw, Air Filter and Throttle Valve) | 1 |

SECTION 8 - KOHLER ENGINE STARTER

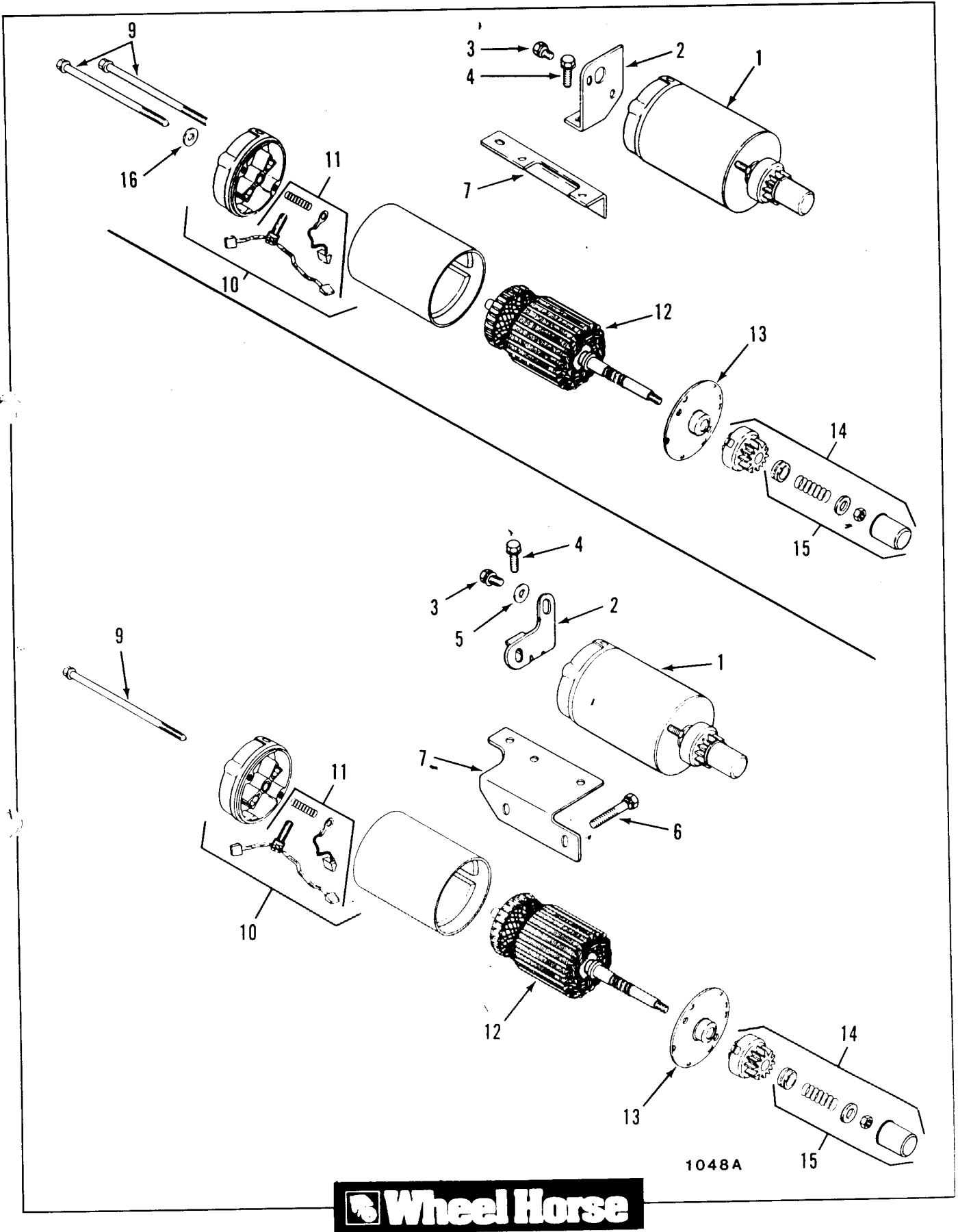


Figure 8-1 Starter

SECTION 8 - KOHLER ENGINE STARTER

| WHEEL HORSE ITEM | PART NO. | VENDOR PART NUMBER | DESCRIPTION | Quantity |
|--------------------------------------|----------|-----------------------|--|----------|
| Figure 8-1 KOHLER STARTER | | | | |
| 1 | KH10187 | 41 098 04 | Starter Assembly (Includes Items 9 thru 15) | 1 |
| 2 | KH10244 | 45 126 17 | Starter Tail Brace | 1 |
| 3 | KH10607 | X-67-62 | Hex Washer Hd. Screw 1/4-20 x 3/4 | 1 |
| 4 | KH10610 | X-67-83 | Hex Washer Hd. Screw 1/4-20 x 3/8 | 1 |
| 6 | KH10549 | X-159-2 | H.C. Sems Screw 3/8-16 x 1 | 2 |
| 7 | KH10304 | 47 126 29 | Starter Bracket | 1 |
| 9 | KH10181 | 41 086 19 | Thru Bolt 1/4-20 x 5-1/16 | 2 |
| 10 | KH10210 | 41 227 04 | Commutator End Cap Assembly (Includes Item 11) | 1 |
| 11 | KH10515 | 52 755 15 | Brush Kit | 1 |
| 12 | KH10247 | 45 170 02 | Armature | 1 |
| 13 | KH10209 | 41 227 03 | Drive End Cap | 1 |
| 14 | KH10323 | 47 755 07 | Drive Kit (Includes Item 15) | 1 |
| 15 | KH10324 | 47 755 13 | Drive Parts Kit | 1 |
| Not Illustrated | | | | |
| | KH10135 | 25 450 03 | Caution Tag | 1 |

SECTION 8 - KOHLER ENGINE FLYWHEEL

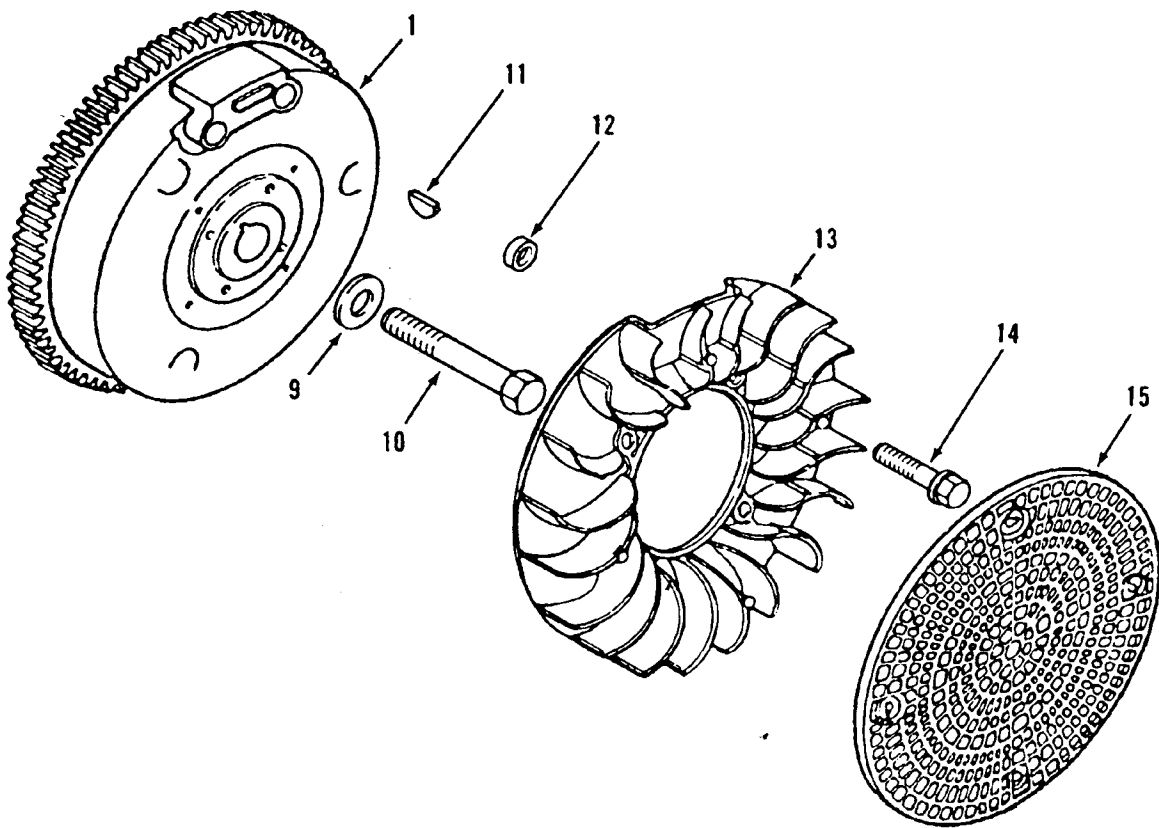


Figure 8-2 Flywheel

SECTION 8 - KOHLER ENGINE FLYWHEEL

| WHEEL HORSE ITEM | PART NO. | VENDOR PART NUMBER | DESCRIPTION | Quantity |
|---------------------------------------|----------|-----------------------|--|----------|
| Figure 8-2 KOHLER FLYWHEEL | | | | |
| 1 | KH10263 | 47 025 53 | Flywheel 312 | 1 |
| 9 | KH10436 | 52 114 02 | Plain Washer 13/32 ID, 1-3/8 OD | 1 |
| 10 | KH10098 | 25 086 04 | Hex. Mach. Screw 3/8-24 x 1-1/8 | 1 |
| 11 | KH10588 | X-46-3 | Woodruff Key 3/16 x 1 | 1 |
| 12 | KH10112 | 25 112 04 | Spacer 17/64 ID, 3/8 OD 15/64 Lg | 4 |
| 13 | KH10124 | 25 157 01 | Fan | 1 |
| 14 | KH10107 | 25 086 21 | Hex. Washer Hd. Screw 1/4-20 x 5/8 | 4 |
| 15 | KH10126 | 25 162 01 | Grass Screen | 1 |

SECTION 8 - KOHLER ENGINE FUEL SYSTEM

| WHEEL HORSE ITEM | PART NO. | VENDOR PART NUMBER | DESCRIPTION | Quantity |
|--|----------|-----------------------|---|----------|
| Figure 8-3 KOHLER FUEL SYSTEM | | | | |
| 17 | 106234 | ----- | Fuel Tank | 1 |
| 18 | 106945 | ----- | Fuel Cap & gauge (Includes Item 19) | 1 |
| 19 | 106931 | ----- | Rubber Seal | 1 |
| 20 | 926697 | ----- | S.T. Bolt 5/16-18 x 1 | 2 |
| 21 | 920039 | ----- | Washer 3/8 | 2 |
| 22 | 908016 | ----- | Bolt 5/16-18 x 5/8 | 3 |
| 23 | 920082 | ----- | Lockwasher 5/16 | 1 |
| 24 | 104047 | ----- | Rubber Bushing | 1 |
| 25 | 104048 | ----- | Fuel Shut-Off Valve | 1 |
| 26 | 103787 | ----- | Fuel Line 62" | 1 |
| 27 | 108898 | ----- | Corbin Clamp | 2 |
| 28 | 950154 | ----- | Hose Clamp 1/2" (1.3 cm) Diameter | 2 |
| | 105490 | ----- | Clamp 1" (2.5 cm) Diameter | 2 |
| 29 | KH10319 | 47 559 04 | Fuel Pump Assy (Includes items 30 & 31) | 1 |
| 30 | KH10095 | 25 041 05 | Fuel Pump Gasket | 1 |
| 31 | KH10549 | X-25-63 | Plain Washer 1/4 | 2 |
| 32 | KH10552 | X-174-2 | Pozidriv. F.H. Sems Screw 1/4-20 x 3/4 | 2 |
| 33 | KH10586 | X-426-9 | Hose Clamp | 2 |
| 34 | KH10130 | 25 353 01 | Fuel Line 1/4 I.D. x 5-1/2" Lg | 1 |
| 35 | KH10123 | 25 155 02 | Hose Connector 90 Degree (For 1/4 I.D. Rubber Hose) | 2 |

SECTION 8 - KOHLER ENGINE GOVERNOR LINKAGE

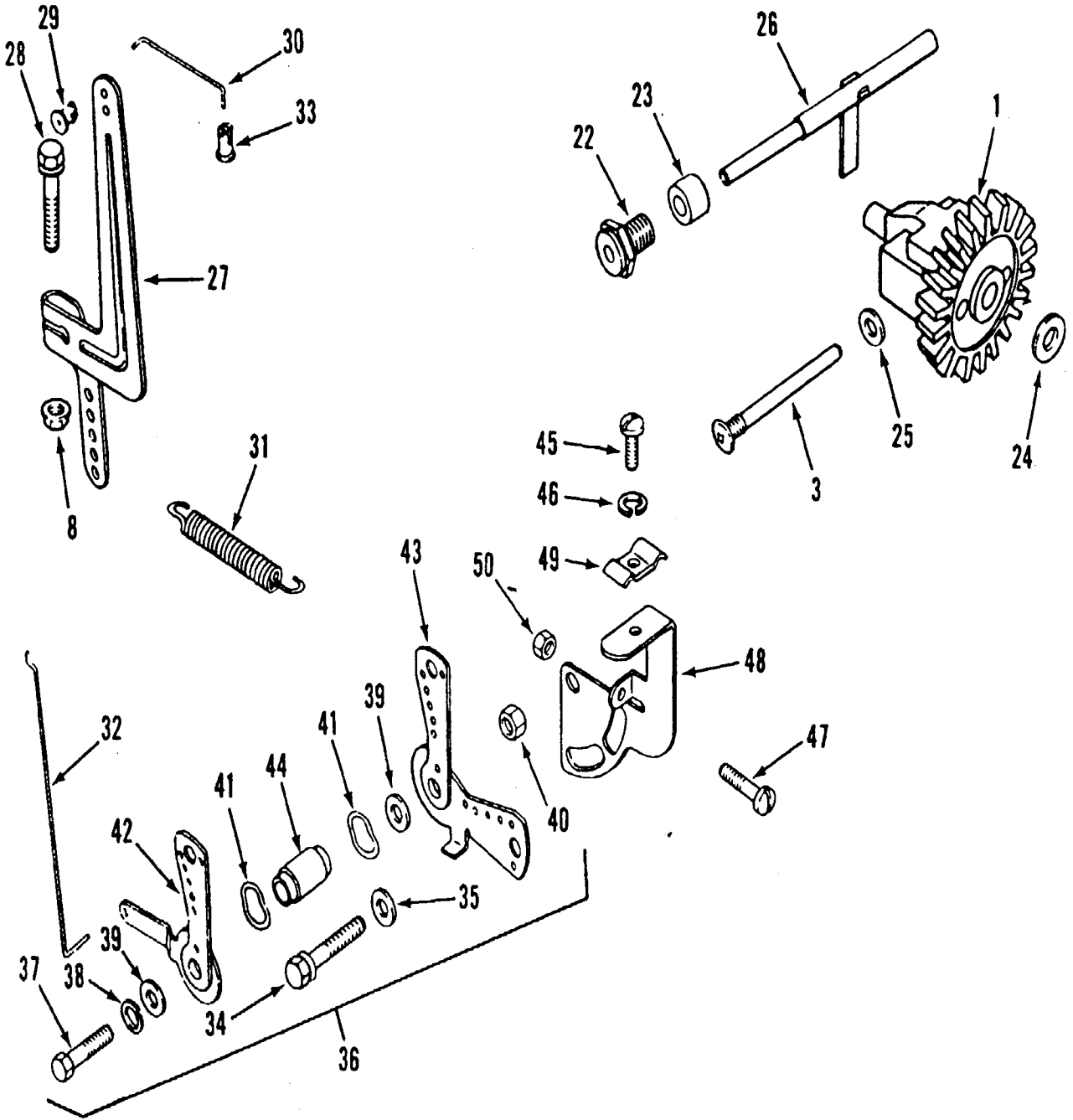
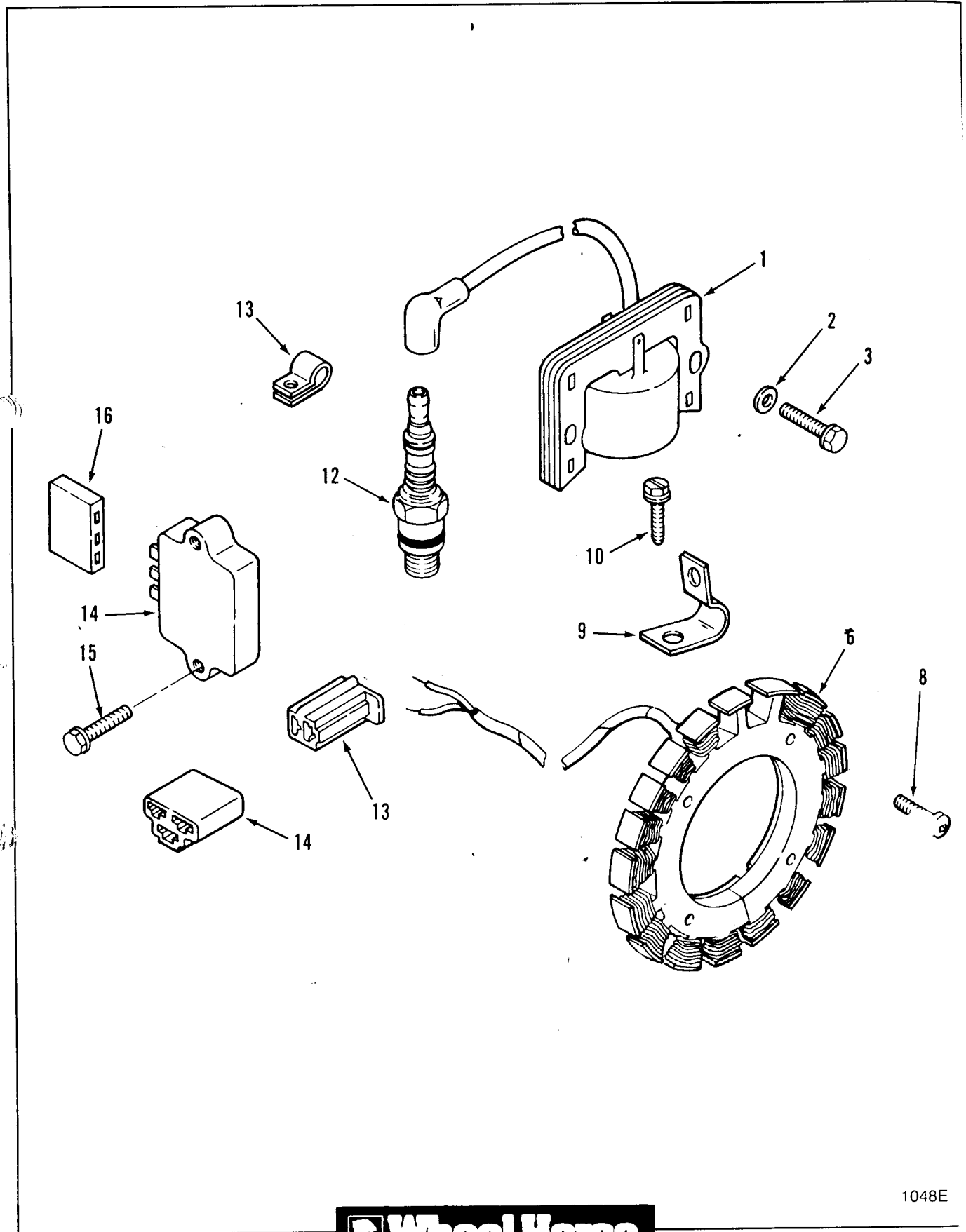


Figure 8-4 Governor Linkage

SECTION 8 - KOHLER ENGINE GOVERNOR LINKAGE

| WHEEL HORSE ITEM | PART NO. | VENDOR PART NUMBER | DESCRIPTION | Quantity |
|---|----------|-----------------------|--|----------|
| Figure 8-4 KOHLER GOVERNOR LINKAGE | | | | |
| 1 | KH10660 | A-235743-S | Governor Gear Kit (Includes 24) | 1 |
| 3 | KH10035 | 231355 | Governor Stop Pin | 1 |
| 8 | KH10629 | X-799-1 | Palnut 1/4-20 | 1 |
| 22 | KH10070 | 235476 | Governor Shaft Bushing | 1 |
| 23 | KH10585 | X-400-80 | Spacer | 1 |
| 24 | KH10087 | 237022 | Thrust Washer | 1 |
| 25 | KH10138 | 25 468 01 | Plain Washer | 1 |
| 26 | KH10538 | A-235256-S | Governor Cross Shaft Kit | 1 |
| 27 | KH10295 | 47 090 20 | Governor Lever | 1 |
| 28 | KH10626 | X-776-1 | H.C. Sems Screw 1/4-20 x 1/2 | 1 |
| 29 | KH10668 | 47 158 06 | White Bushing | 1 |
| 30 | KH10288 | 47 079 05 | Governor Linkage (Governor to Carb.) | 1 |
| 31 | KH10296 | 47 091 01 | Governor Spring (Governor to Carb.) | 1 |
| 32 | KH10287 | 47 079 01 | Choke Linkage (Carb. to Choke Shaft) | 1 |
| 33 | KH10125 | 25 158 07 | Yellow Bushing | 1 |
| 34 | KH10545 | X-1320-6 | H.C. Sems Screw 1/4-20 x 1/2 | 1 |
| 35 | KH10570 | X-25-72 | Plain Washer 1/4 | 1 |
| 36 | KH10291 | 47 087 03 | Choke Lever Assembly (Includes Items 37 thru 44) | 1 |
| 37 | KH10600 | X-5-26 | H.C. Screw 1/4-20 x 1-1/2 | 1 |
| 38 | KH10556 | X-20-1 | Lockwasher 1/4 | 1 |
| 39 | KH10549 | X-25-63 | Plain Washer 1/4 | 1 |
| 40 | KH10624 | X-76-2 | Hex. Nut 1/4-20 | 1 |
| 41 | KH10152 | 275690 | Wave Washer | 2 |
| 42 | KH10293 | 47 090 07 | Choke Control Lever | 1 |
| 43 | KH10294 | 47 090 08 | Throttle Control Lever | 1 |
| 44 | KH10302 | 47 112 02 | Spacer 23/64 O D , 13/16 Lg | 1 |
| 45 | KH10551 | X-15-5 | F.H.M. Screw # 10-24 x 1/2 | 1 |
| 46 | KH10555 | X-19-1 | Lockwasher # 10 | 1 |
| 47 | KH10040 | 232556 | Screw | 1 |
| 48 | KH10303 | 47 126 09 | Clutch Control Bracket | 1 |
| 49 | KH10308 | 47 237 02 | Clamp | 1 |
| 50 | KH10619 | X-72-4 | Hex Nut # 8-32 | 1 |

SECTION 8 - KOHLER ENGINE IGNITION SYSTEM



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Figure 8-5 Ignition System

SECTION 8 - KOHLER ENGINE IGNITION SYSTEM

| WHEEL HORSE ITEM | PART NO. | VENDOR PART NUMBER | DESCRIPTION | Quantity |
|--|----------|-----------------------|---|----------|
| Figure 8-5 KOHLER IGNITION SYSTEM | | | | |
| 1 | KH10320 | 47 584 01 | Ignition Module (Before Serial # 1715900013) | 1 |
| | KH10321 | 47 584 02 | Ignition Module (After Serial # 1715900003) | 1 |
| 2 | KH10572 | X-25-79 | Plain Washer # 10 | 2 |
| 3 | KH10548 | X-156-1 | H.C. Sems Screw # 10-24 x 7/8 | 2 |
| 6 | KH10091 | 237878 | Stator Kit 15 amp (Includes Item # 8) | 1 |
| 8 | KH10627 | X-778-1 | Pozidriv. Pan Hd. Screw # 10-24 x 3/4 | 4 |
| 9 | KH10618 | X-728-1 | Lead Clip | 1 |
| 10 | KH10606 | X-67-49 | Hex. Washer Hd. Screw # 8-32 x 3/8 | 1 |
| 12 | KH10056 | 235041-S | Spark Plug | 1 |
| 13 | KH10010 | 210281 | Hi-Tension Clip | 1 |
| 14 | KH10215 | 41 503 05 | Regulator-Rectifier | 2 |
| 15 | KH10543 | X-132-4 | H.C. Sems Screw 1/4-20 x 1 | 1 |
| 16 | KH10082 | 236602 | Female Connector (3 Contact) | 1 |
| Not Illustrated | | | | |
| | KH10315 | 47 518 43 | Lead-White w/Diode, Svc. Replacement Lead For Leads. w/Diode (5') All Before Serial # 1715900013 | 1 |
| | KH10314 | 47 518 37 | Lead-White, Module to Connector (15") After, Serial # 1715900003) | 1 |
| | KH10313 | 47 518 36 | Lead-Violet, Regulator-Rectifier to Connector (23") | 1 |

SECTION 8 - THROTTLE, CHOKE & EXHAUST SYSTEM

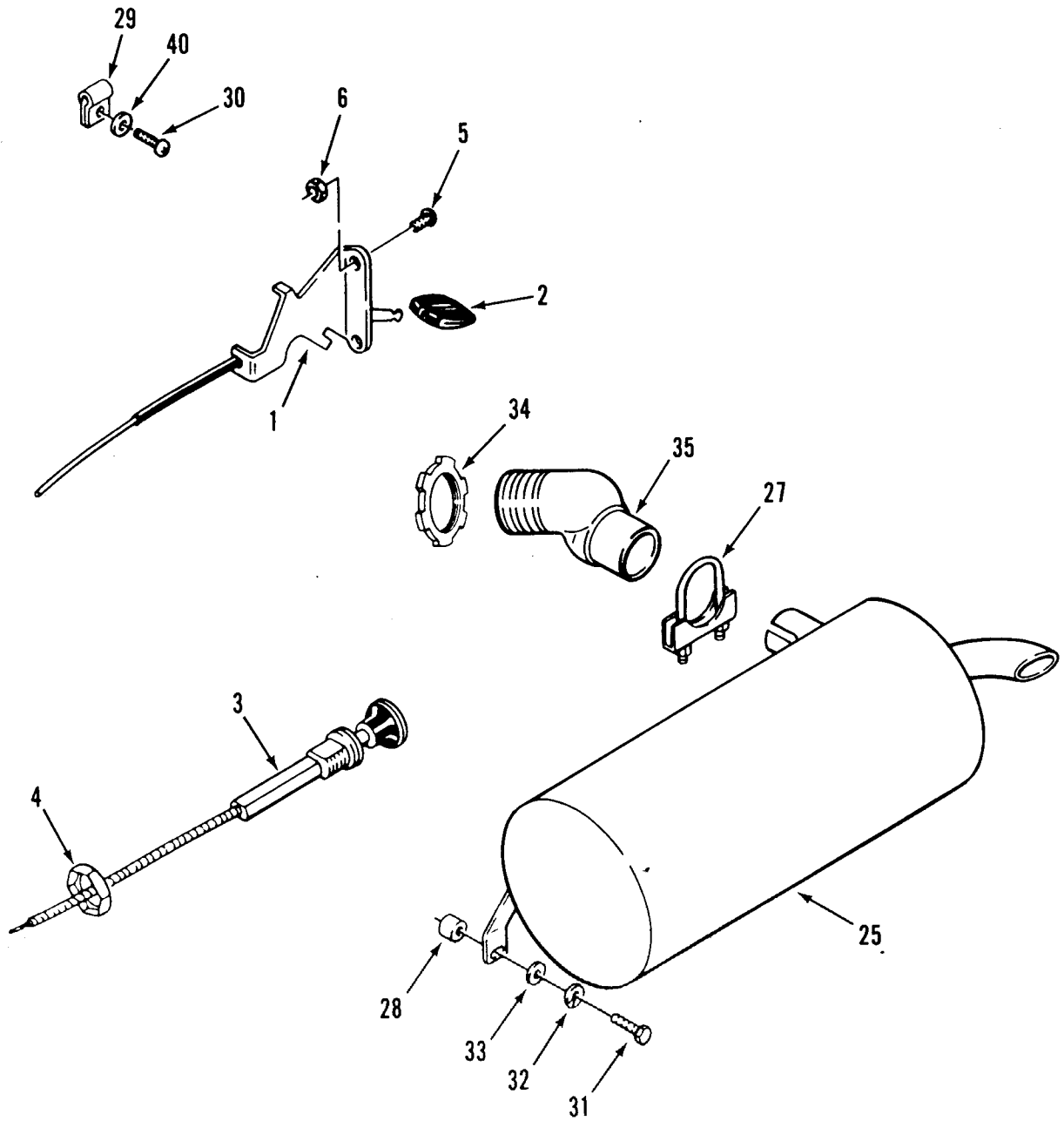
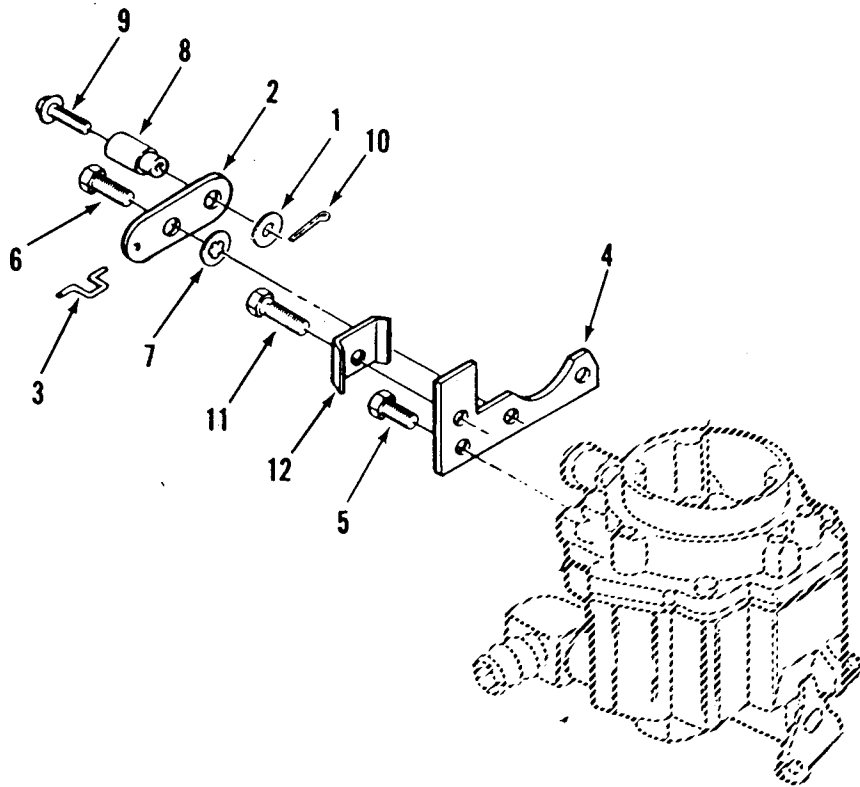


Figure 8-6 Throttle, Choke & Exhaust

SECTION 8 - THROTTLE, CHOKE & EXHAUST

| ITEM | PART NUMBER | DESCRIPTION | Quantity |
|-------------------------------------|-------------|--|----------|
| Figure 8-6 | | | |
| THROTTLE CHOKE & EXHAUST | | | |
| 1 | 112199 | Throttle Control 312 | 1 |
| | 115392 | Throttle Control 316 | 1 |
| 2 | 108917 | Knob-Throttle Control | 1 |
| 3 | 112214 | Choke Control 312 | 1 |
| | 114951 | Choke Control 316 | 1 |
| 4 | 109530 | Palnut | 1 |
| 5 | 9107922 | Screw # 10-24 x 1/2 Black | 2 |
| 6 | 915740 | Lock Nut # 10-24 | 2 |
| 25 | 112213 | Muffler 312 | 1 |
| 27 | 106858 | Clamp 312 | 1 |
| 28 | 6876 | Spacer 312 | 1 |
| 9 | KH10344 | Cable Clamp 312 (vendor # 48 154 01) | 1 |
| 30 | KH10610 | Hex Washer Hd Screw 1/4-20 x 7/16, 312, (vendor # X-67-83) | 1 |
| 31 | 908020 | Bolt 5/16-18 x 1-1/, 312 | 1 |
| 32 | 920082 | Lock Washer 5/16, 312 | 1 |
| 33 | 920008 | washer 5/16, 312 | 1 |
| 34 | KH10535 | Locknut 312 (vendor # AC-1536) | 1 |
| 35 | KH10278 | Elbow 312 (vendor # 45 054 01) | 1 |
| 40 | KH10570 | Washer 1/4, 312 (vendor # X-25-72) | 1 |

SECTION 8 - ONAN CHOKE LINKAGE



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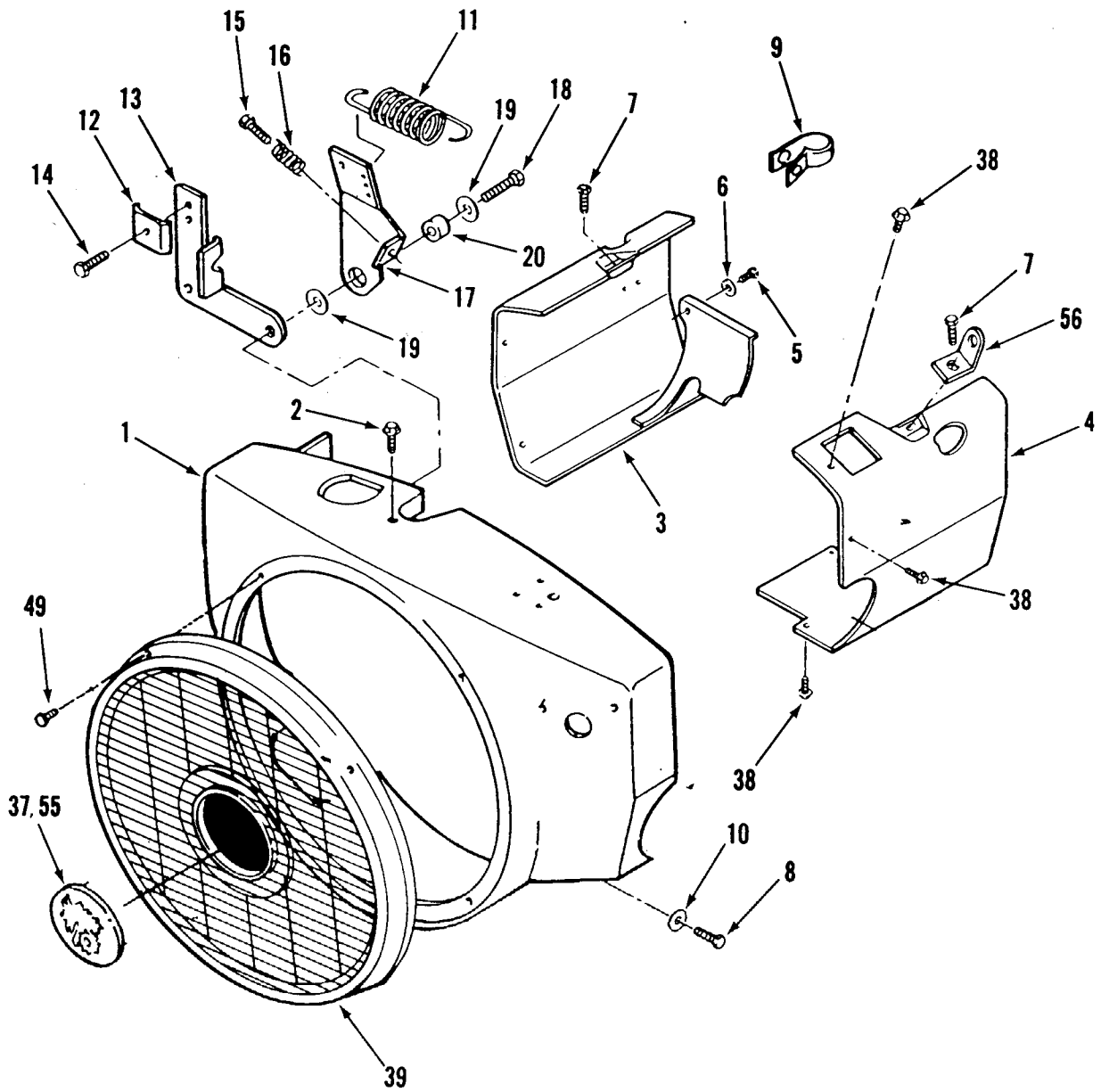


Figure 8-7 Onan Choke Linkage

SECTION 8 - ONAN CHOKE LINKAGE

| WHEEL HORSE ITEM | PART NO. | VENDOR PART NUMBER | DESCRIPTION | Quantity |
|--|----------|-----------------------|--|----------|
| Figure 8-7 ONAN CHOKE LINKAGE | | | | |
| 1 | NN10364 | 526-0140 | Flat Washer # 10 | 2 |
| 2 | NN10233 | 153-0523 | Choke Lever | 1 |
| 3 | NN10231 | 153-0500 | Choke Link | 1 |
| 4 | NN10234 | 153-0524 | Choke Cable Bracket | 1 |
| 5 | NN10412 | 821-0004 | Washer Hd. Cap Screw # 10-32 x 1-1/4 | 1 |
| 6 | NN10400 | 815-0480 | Shoulder Screw # 10-32 x .34 | 1 |
| 7 | NN10424 | 854-0010 | Lockwasher IT # 10 | 1 |
| 8 | NN10230 | 152-0155 | Choke Lever Swivel | 1 |
| 9 | NN10410 | 815-0693 | Machine Screw # 8-32 x .375 | 1 |
| 10 | NN10333 | 516-0059 | Cotter Pin | 1 |
| 11 | NN10395 | 815-0359 | Washer Hd. ST Screw # 10-32 x 7/8 | 1 |
| 12 | NN10440 | 153-0593 | Choke Cable Clip | 1 |

SECTION 8 - ONAN BLOWER HOUSING AND GOVERNOR



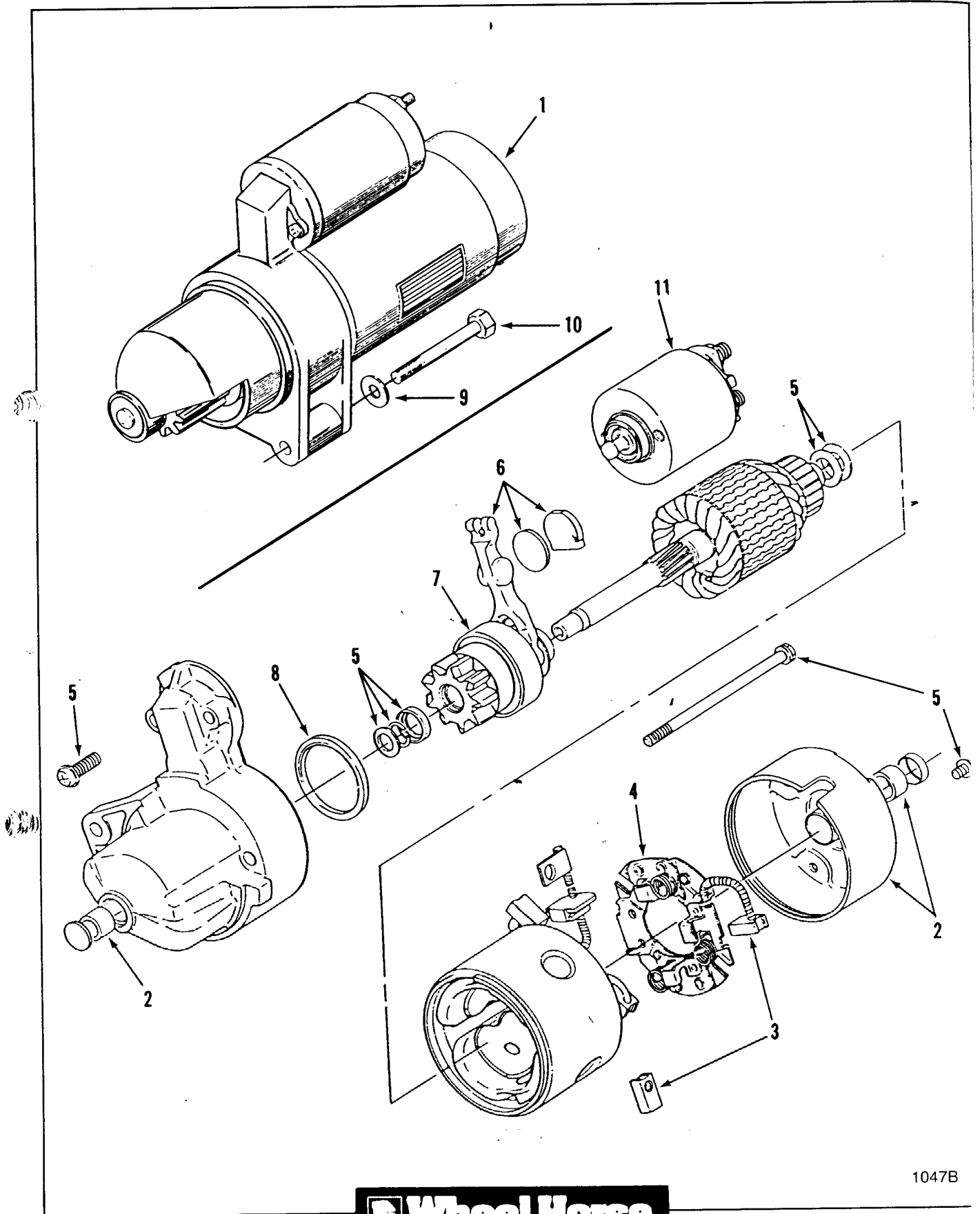
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Figure 8-8 Onan Blower Housing and Governor

SECTION 8 - ONAN BLOWER HOUSING AND GOVERNOR

| WHEEL HORSE ITEM | PART NO. | VENDOR PART NUMBER | DESCRIPTION | Quantity |
|--|----------|-----------------------|--|----------|
| Figure 8-8 ONAN BLOWER HOUSING AND GOVERNOR | | | | |
| 1 | NN10173 | 134-4654-01 | Blower Housing | 1 |
| 2 | NN10392 | 815-0261 | Washer Hd. ST Screw 1/4-20 x 7/16 | 1 |
| 3 | NN10170 | 134-4615-01 | Cylinder Air Housing | 1 |
| 4 | NN10169 | 134-4614-01 | Cylinder Air Housing | 1 |
| 5 | NN10393 | 815-0290 | Washer Hd. ST Screw 1/4-20 x 5/8 | 2 |
| 6 | NN10357 | 526-0021 | Flat Washer 1/4 | 2 |
| 7 | NN10417 | 821-0016 | Washer Hd. Screw 5/16-18 x 3/4 | 2 |
| 8 | NN10393 | 815-0290 | Washer Hd. ST Screw 1/4-20 x 5/8 | 4 |
| 9 | NN10289 | 332-2319 | Alt. Leads Wire Clamp | 1 |
| 10 | NN10356 | 526-0018 | Flat Washer 1/4 | 1 |
| 11 | NN10217 | 150-1214 | Governor Spring-5 Ball | 1 |
| 12 | NN10440 | 153-0593 | Cable Clamp | 1 |
| 13 | NN10225 | 150-1725 | Cable bracket | 1 |
| 14 | NN10395 | 815-0359 | ST Screw # 10-32 x 1/2 | 1 |
| 15 | NN10410 | 815-0510 | ST Screw # 6-32 x 5/8 | 1 |
| 16 | NN10219 | 150-1398 | Idle Setting Spring | 1 |
| 17 | NN10223 | 150-1576 | Governor Control Arm w/o Swivel | 1 |
| 18 | NN10397 | 815-0436 | Washer Hd. Cap Screw 1/4-20 x 1/2 | 2 |
| 19 | NN10357 | 526-0021 | Flat Washer 1/4 | 1 |
| 20 | NN10218 | 150-1269 | Control Arm Bushing | 1 |
| 37 | NN10340 | 517-0136 | Black Nylon Bushing | 1 |
| 38 | NN10414 | 821-0008 | Washer Hd. Cap Screw 1/4-20 x 5/16 | 4 |
| 39 | NN10174 | 134-4689 | Stationary Guard | 1 |
| 49 | NN10406 | 815-0575 | Washer Hd. Screw 1/4-20 x 3/8 | 4 |
| 55 | NN10435 | 99-2389 | Nameplate Logo | 1 |
| 56 | NN10296 | 403-1523-01 | Lifting Bracket | 2 |

SECTION 8 - ONAN STARTER



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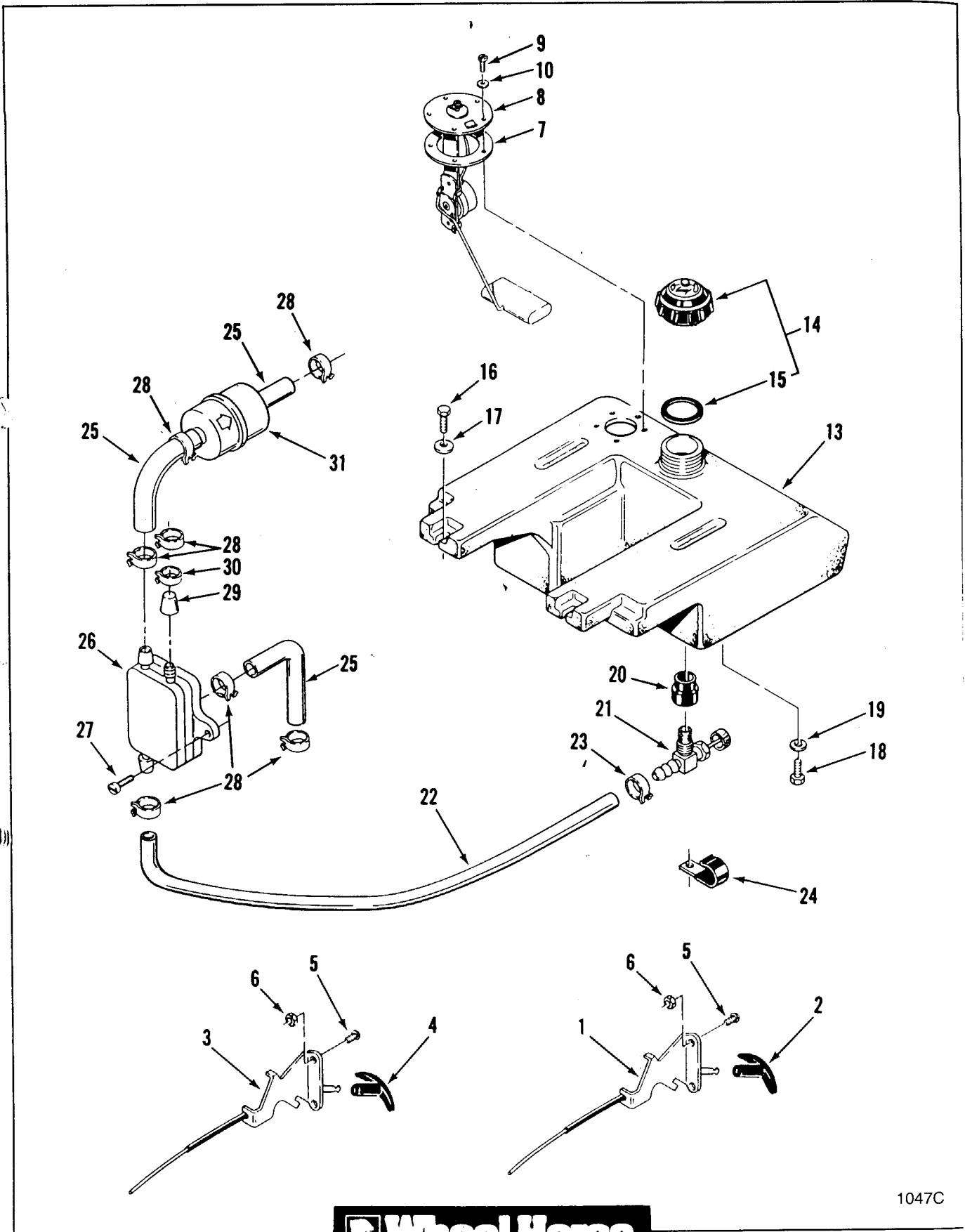


Figure 8-9 Onan Starter

SECTION 8 - ONAN STARTER

| WHEEL HORSE ITEM | PART NO. | VENDOR PART NUMBER | DESCRIPTION | Quantity |
|---------------------|----------|-----------------------|--|----------|
| Figure 8-9 | | | | |
| ONAN STARTER | | | | |
| 1 | NN10268 | 191-1808-04 | Starter, Complete-See Components Below | 1 |
| 2 | NN10262 | 191-1762 | Bushing Kit (Includes Frt Bushing and Rear Cap w/Bushing) | 1 |
| 3 | NN10263 | 191-1763 | Starter Brush Kit (Includes Positive Brush (2) and Negative Brush w/Pigtail) .. | 1 |
| 4 | NN10264 | 191-1764 | Starter Brush Holder (Includes Brush Holder w/Negative Brush) | 1 |
| 5 | NN10265 | 191-1765 | Starter Hdwr Kit (Includes Solenoid Screws (2), Brush Holder Screws (2), Thru Bolts (2), Armature Shims (2), Pinion Stop Collar, and Pinion Retaining Ring) | 1 |
| 6 | NN10266 | 191-1766 | Starter Shift Lever Kit (Includes Shift Lever, Wear Plate and Rubber Plug) | 1 |
| 7 | NN10270 | 191-1810 | Starter Clutch (Includes Pinion Gear w/Clutch) | 1 |
| 8 | NN10271 | 191-1811 | Dust Seal | 1 |
| 9 | NN10363 | 526-0122 | Flat Washer 5/16 | 2 |
| 10 | NN10376 | 800-0039 | Cap Screw 5/16-18 x 3-1/2 | 2 |
| 11 | NN10269 | 191-1809 | Starter Solenoid Kit (Includes Solenoid, Spring and Plunger) | 1 |

SECTION 8 - ONAN THROTTLE CHOKE AND FUEL CONTROLS



1047C



Figure 8-10 Onan Throttle Choke and Fuel Controls

SECTION 8 - ONAN THROTTLE CHOKE AND FUEL CONTROLS

| ITEM | PART NUMBER | DESCRIPTION | Quantity |
|---|-------------|--|----------|
| Figure 8-10 ONAN THROTTLE CHOKE AND FUEL CONTROL | | | |
| 1 | 114026 | Throttle Control | 1 |
| 2 | 108509 | Knob-Throttle Control | 1 |
| 3 | 114027 | Choke Control | 1 |
| 4 | 108510 | Knob-Throttle Control | 1 |
| 5 | 9107922 | Screw # 10-24 x 1/2 | 4 |
| 6 | 915740 | Lock Nut # 10-24 | 4 |
| 7 | 113372 | Gasket | 1 |
| 8 | 113358 | Fuel Level Sender | 1 |
| 9 | 910807 | Screw # 10-32 x 1/2 | 5 |
| 10 | 920079 | Lockwasher # 10 | 5 |
| 13 | 114012 | Fuel Tank (Includes items 20 & 21) | 1 |
| 14 | 113926 | Fuel Cap (Includes item 15) | 1 |
| 15 | 106931 | Rubber Seal | 1 |
| 16 | 926697 | ST Bolt 5/16-18 x 1 | 2 |
| 17 | 920039 | Washer 3/8 | 2 |
| 18 | 908016 | Bolt 5/16-18 x 5/8 | 3 |
| 19 | 920082 | Lockwasher 5/6 | 2 |
| 20 | 104047 | Rubber Bushing | 1 |
| 21 | 104048 | Fuel Shut-Off Valve | 1 |
| 22 | 2739 | Fuel Line 53 in | 1 |
| 23 | 108898 | Corbin Clamp | 2 |
| 24 | 950154 | Hose Clamp 1/2 in (13 cm) Diameter | 2 |
| | 105490 | Clamp 1 in. (2.5 cm) Diameter | 1 |
| 25 | NN10302 | Fuel Line 12in. (Vendor # 503-0707) | 2 |
| 26 | NN10212 | Fuel Pump (Vendor # 149-1982) | 1 |
| 27 | NN10403 | ST Pan Hd. Screw # 10-24 x 5/8 (Vendor # 815-0555) | 2 |
| 28 | NN10303 | Hose Clamp 1/2 (Vendor # 503-0731) | 6 |
| 29 | NN10211 | Fuel Fitting Cap (Vendor # 149-1321) | 1 |
| 30 | NN10301 | Hose Clamp 7/16 (Vendor # 503-0301) | 1 |
| 31 | NN10213 | Fuel Filter (Vendor # 149-2005) | 1 |

SECTION 9 - ELECTRICAL SYSTEM

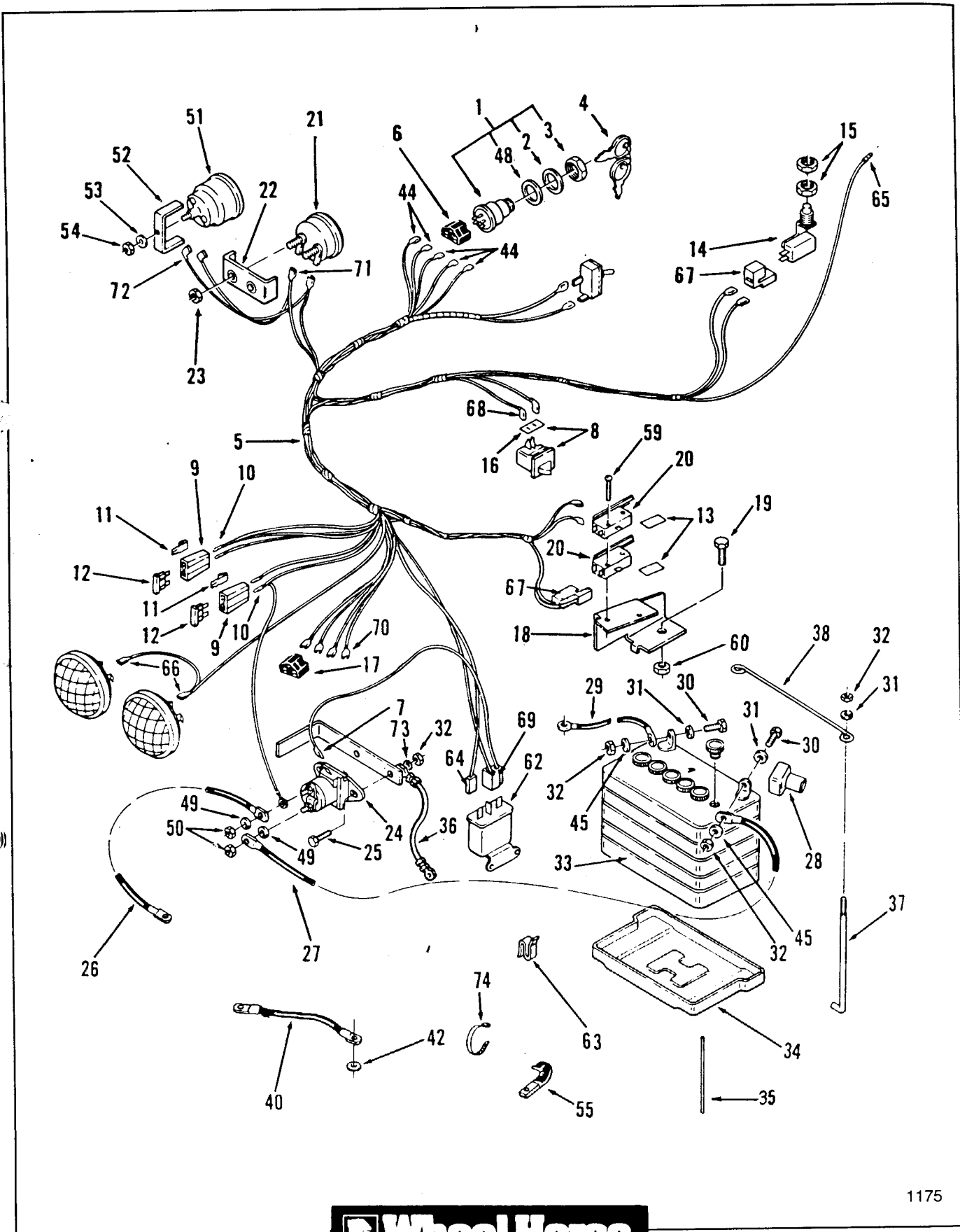


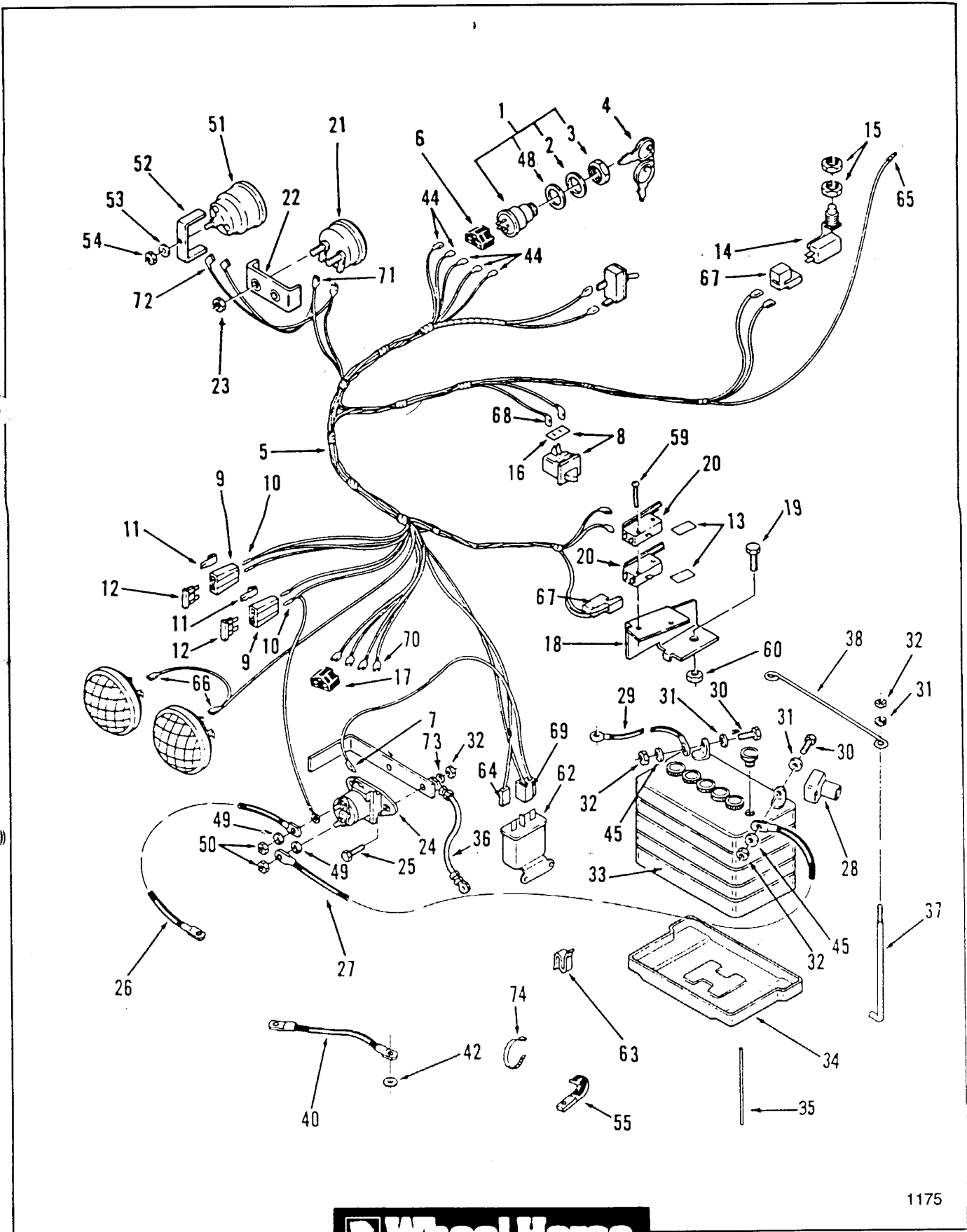
Figure 9-1 Electrical System

SECTION 9 - ELECTRICAL SYSTEM

| ITEM | PART NUMBER | DESCRIPTION | Quantity |
|--------------------------|-------------|--|----------|
| Figure 9-1 | | | |
| ELECTRICAL SYSTEM | | | |
| 1 | 111216 | Ignition Switch (W/101884 & 920160) - 316-8 Only | 1 |
| | 111215 | Ignition Switch (W/101884 & 920160) - 312-8 Only | 1 |
| 2 | 920160 | Internal Tooth Lockwasher 5/8 | 1 |
| 3 | 101884 | Special Nut | 1 |
| 4 | 111220 | Ignition Key - Set of 2 | 1 |
| | 111214 | Padded Ignition Key - Set of 2 | 1 |
| 5 | 114731 | Wiring Harness Assembly 312 | 1 |
| | 114290 | Wiring Harness Assembly 316 | 1 |
| 6 | 105302 | Connector Body - Ignition Switch - Part of 5 | 1 |
| 7 | 518105 | Terminal - Part of 5 | 1 |
| 8 | 103480 | Clutch/Brake Interlock Switch | 1 |
| 9 | 109117 | Single Fuse Body - Part of 5 | 1 |
| 10 | 108895 | One-Way Terminal - Part of 5 | 1 |
| 11 | 109445 | Fuse Body Clip - Part of 5 | 1 |
| 12 | 109355 | Fuse 15 Amp - ATO or ATC | 1 |
| | 109102 | Fuse 25 Amp - ATO or ATC | 1 |
| 13 | 111642 | Switch Insulator Barrier | 2 |
| 14 | 114240 | Seat Switch | 1 |
| 15 | 105805 | Nut 15/32-32 | 2 |
| 16 | 110502 | Dirt Shield | 1 |
| 17 | 112185 | Connector Body - Part of 5 | 1 |
| 18 | 115411 | Switch Support | 1 |
| 19 | 926671 | S.T. Bolt 1/4-20 x 1/2 | 1 |
| 20 | 111332 | PTO Interlock Switch | 2 |
| 21 | 110741 | Voltmeter (w/109650) (Not on All Units) | 1 |
| 22 | 109650 | Back Clamp-Voltmeter | 1 |
| 23 | 5924 | Nut nr. 10-32 E.S | 2 |
| 24 | 110167 | Solenoid | 1 |
| 25 | 926671 | Whizlock Bolt 1/4-20 x 1/2 | 2 |
| 26 | 111069 | Cable - Solenoid To Starter Single Cylinder | 1 |
| 27 | 111074 | Cable - Battery (+) To Solenoid | 1 |
| 28 | 109553 | Terminal Cover | 1 |
| 29 | 111069 | Cable - Battery (-) To Ground | 1 |
| 30 | 908003 | Bolt 1/4-20 x 3/4 | 2 |
| 31 | 920007 | Washer 1/4 SAE | 4 |
| 32 | 915111 | Eslok Nut 1/4-20 | 6 |
| 33 | 105842 | Battery 316-8 Only | 1 |
| | 104962 | Battery 312-8 Only | 1 |
| 34 | 106948 | Battery Tray | 1 |
| 35 | 114720 | Battery Drain Tube | 1 |
| | *114210 | Wire w/3/8 1/4 ring terminals | 1 |
| | *114211 | Wire-6" w/1/4 ring terminal and female terminal | 1 |
| | *114212 | Wire-6" w/5/16 1/4 ring terminal | 1 |
| 36 | 112842 | Ground Wire | 1 |

* Parts for model 316-8 only - not illustrated

SECTION 9 - ELECTRICAL SYSTEM



1175



Figure 9 - 1 Electrical System

SECTION 9 - ELECTRICAL SYSTEM

| ITEM | PART NUMBER | DESCRIPTION | Quantity |
|---|-------------|--|----------|
| Figure 9-1 ELECTRICAL SYSTEM (CONTINUED) | | | |
| 37 | 109547 | Hook - Battery Hold Down | 2 |
| 38 | 113010 | Battery Hold Down | 1 |
| 40 | 109910 | Ground Hood to Frame - 312-8 Only | 1 |
| | 114820 | Ground Wire 316-8 Only | 1 |
| 42 | 920155 | Internal Tooth Lockwasher 5/16 | 1 |
| 44 | 102651 | Female Terminal 1/4 - Part of 5 | 8 |
| 45 | 920081 | Lockwasher 1/4 | 4 |
| 48 | 920262 | Special Washer | 1 |
| 49 | 920007 | Washer 1/4 SAE | 2 |
| 50 | 915661 | Nut 1/4-20 | 2 |
| 51 | 113469 | Hourmeter Complete (includes items 52, 53 & 54) (Not on All units) | 1 |
| 52 | 114017 | Steel Clamp | 1 |
| 53 | 920120 | Lockwasher | 1 |
| 54 | 915962 | Keps Nut | 2 |
| 55 | 8830 | Clip | X |
| 59 | 910478 | Screw nr. 4-40 x 1 1/4 | 2 |
| 60 | 915732 | E.S. Nut nr. 4-40 | 2 |
| 62 | 106833 | Relay 312 | 1 |
| 63 | 519337 | Cable Clip | 1 |
| 64 | 518105 | Terminal - Part of 5 | X |
| 65 | 6921 | Shut Plug Terminal - Part of 5 | 1 |
| 67 | 111498 | Connector - part of 5 | 2 |
| 68 | 518077 | Terminal - Part of 5 | 2 |
| 69 | 110459 | Connector 312 - Part of 5 | 1 |
| 70 | 105312 | Connector - Part of 5 | 4 |
| 71 | 105306 | Terminal - Part of 5 | 1 |
| 72 | 518246 | Terminal - Part of 5 | 1 |
| 73 | 920122 | External Tooth Lockwasher | 1 |
| 74 | 100571 | Cable Tie | X |
| | 114052 | Headlight Wire Harness (Not Illustrated) | 1 |

SECTION 9 - ELECTRICAL SYSTEM

| ITEM | PART NUMBER | DESCRIPTION | Quantity |
|------|-------------|---|----------|
| | | Figure 9-2 ELECTRICAL SYSTEM | |
| 3 | 111353 | Test Switch | 1 |
| 4 | 114825 | P.C. Board w/Lights | 1 |
| 5 | 111331 | Indicator Light | 5 |
| 6 | 111343 | Indicator Lens & Bushing Assy | 5 |
| 8 | 112216 | Wiring Harness - 312-8 Only | 1 |
| | 113139 | Wiring Harness - 316-8 Only | 1 |
| 9 | 111332 | Parking Brake Switch | 1 |
| 13 | 910948 | Screw nr. 4-40 x 3/4 | 2 |
| 14 | 915732 | E.S. Hex Nut nr. 4-40 | 2 |
| 15 | 519337 | Clip | 1 |
| 16 | 520198 | Piggy-Back Connector | 2 |
| 17 | 111485 | Fully Insulated (Part of 8) | 4 |
| 19 | 111498 | 3 Terminal Connector (Part of 8) | 1 |
| 20 | 520197 | Piggy-Back Connector (Part of 8) | 1 |
| 22 | 111374 | Molex Connector (Part of 8) | 1 |
| 23 | 113131 | Male Terminal (Part of 8) | 1 |
| 24 | 111359 | Hex Nut | 2 |
| 25 | 111360 | Indexed Washer | 1 |

SECTION 9 - ELECTRICAL SYSTEM

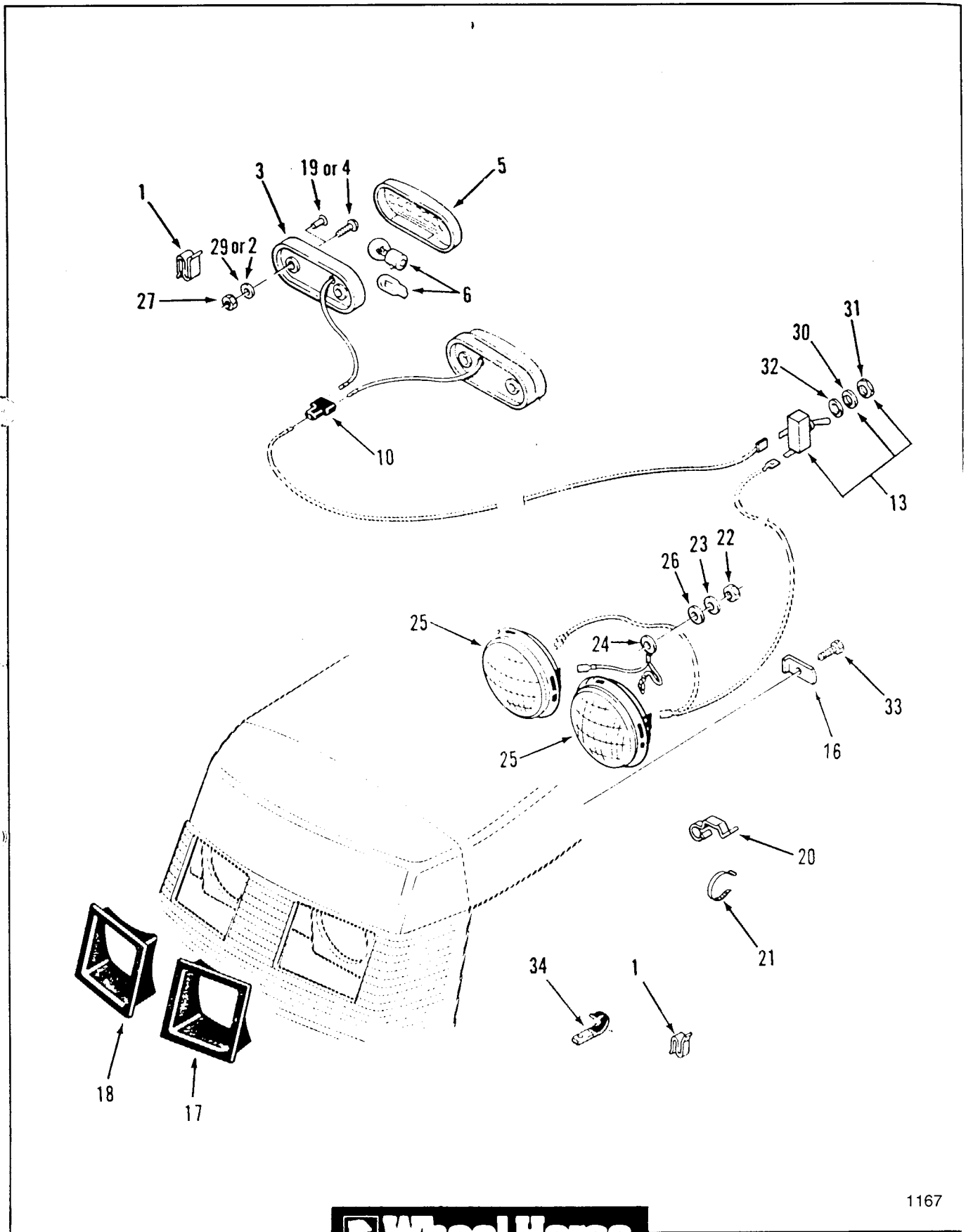


Figure 9-3 Electrical System

SECTION 9 - ELECTRICAL SYSTEM

| ITEM | PART NUMBER | DESCRIPTION | Quantity |
|--------------------------|-------------|---|----------|
| Figure 9-3 | | | |
| ELECTRICAL SYSTEM | | | |
| 1 | 3023 | Clip-Small | X |
| 2 | 920079 | Lockwasher nr. 10 (Optional) | 4 |
| 3 | 105202 | Taillight Base W/Bulb | 2 |
| 4 | 910808 | Screw nr. 10-32 x 5/8 (Optional) | 4 |
| 5 | 112564 | Taillight Lens | 2 |
| 6 | 8043 | Light Bulb - Metal Base (Auto nr. 1895) | 2 |
| | 109045 | Light Bulb - All Glass (Auto nr. 194) | 2 |
| 10 | 7618 | Connector 3-Wire | 1 |
| 13 | 102138 | Light Switch | 1 |
| 16 | 109459 | Clamp | 2 |
| 17 | 109495 | L.H. Headlight Bezel | 1 |
| | 109494 | R.H. Headlight Bezel | 1 |
| 19 | 923795 | Poprivet 3/16 x .402 Aluminium (Production) | 4 |
| 20 | 8519 | Clip-Large | X |
| 21 | 100571 | Cable Tie | X |
| 22 | 915662 | Nut 5/16-18 E.S. | 1 |
| 23 | 920155 | Lockwasher 5/16 | 1 |
| 24 | 108130 | Headlight Ground Wire | 1 |
| 25 | 102881 | Headlight | 2 |
| 26 | 920008 | Washer 5/16 SAE | 1 |
| 27 | 915551 | Nut nr. 10-32 (Optional) | 4 |
| 29 | 920004 | Washer nr. 8 (Use With Poprivet-Production) | 4 |
| 30 | 102950 | Lockring | 1 |
| 31 | 8786 | Nut | 1 |
| 32 | 920259 | Special Washer | 1 |
| 33 | 926671 | Bolt Hex 1/4-20 x 1/2 ST | 2 |
| 34 | 8830 | Clip | 1 |

SECTION 10 - WHEELS AND TIRES

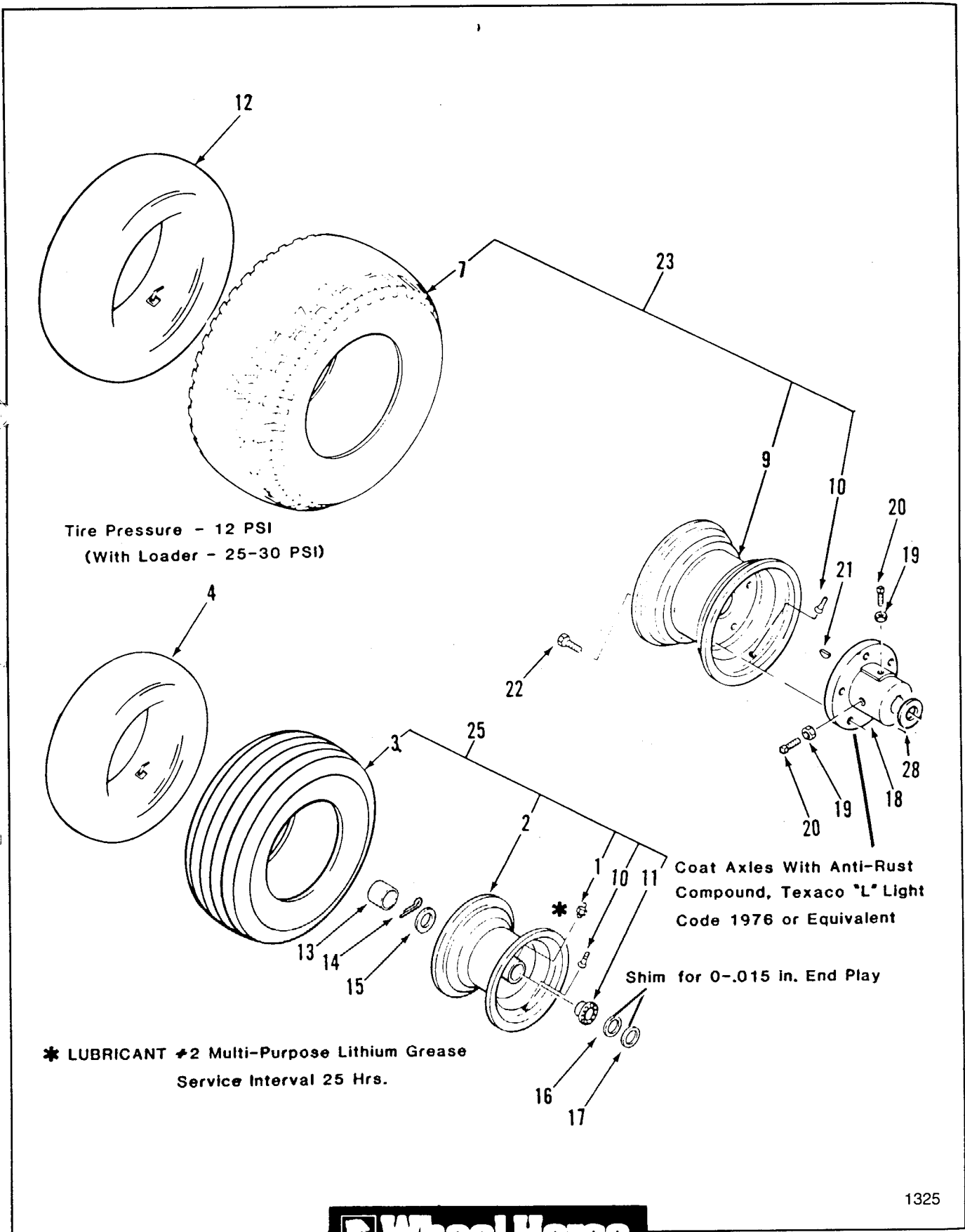
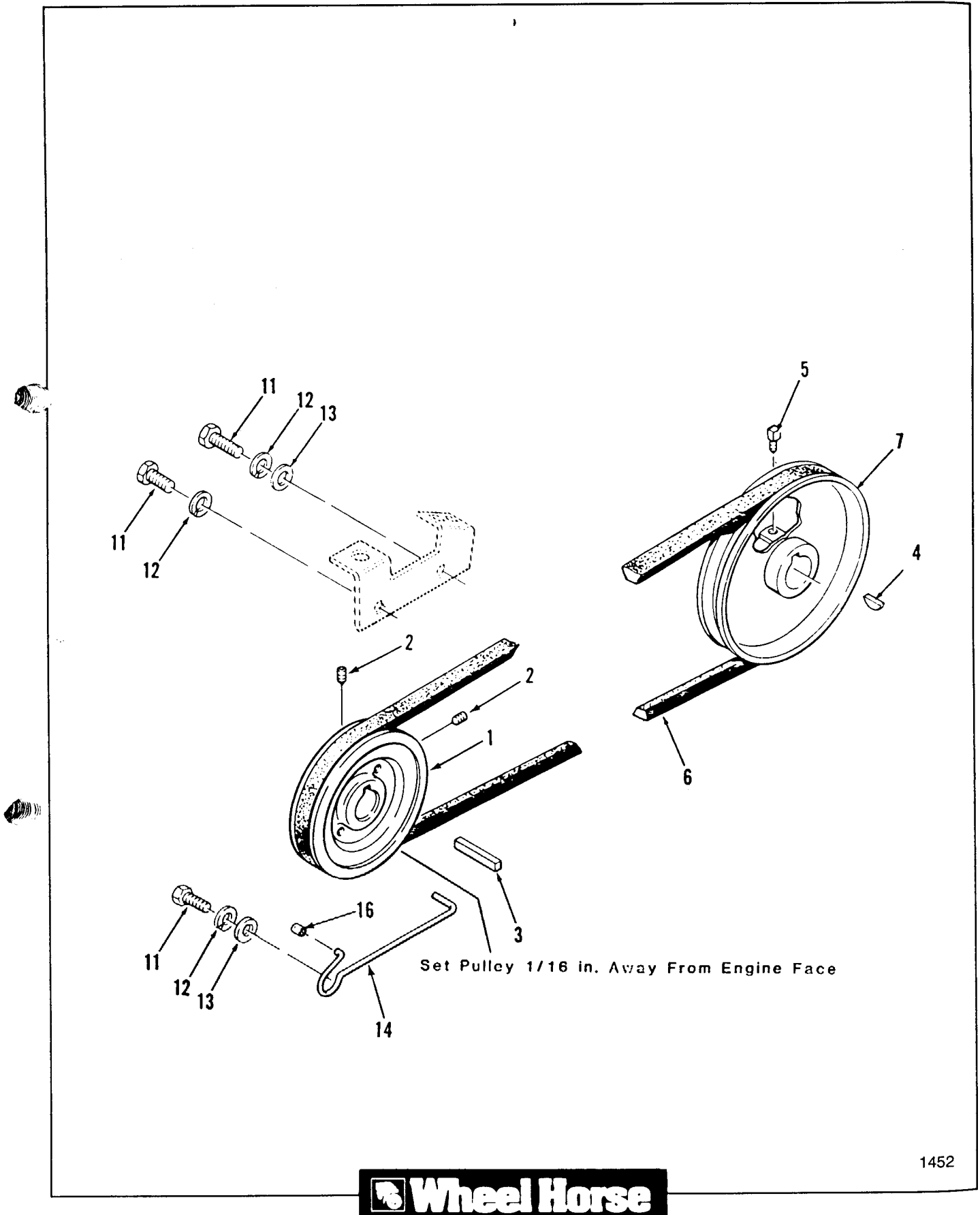


Figure 10 - 1 Wheels and Tires

SECTION 10 -WHEELS AND TIRES

| ITEM | PART NUMBER | DESCRIPTION | Quantity |
|------|-------------|--|----------|
| | | Figure 10-1 WHEELS AND TIRES | |
| 1 | 109500 | Grease Fitting | 2 |
| 2 | 110693 | Front Wheel (includes item 1, 10, 11) | 2 |
| 3 | 8119 | Frt Tire 15x6.00-6 Turf Trd | 2 |
| 4 | 100079 | Tube - Service Only | 2 |
| 7 | 111517 | Rear Tire 22x9.00-12 Turf Tread | 2 |
| 9 | 111516 | Rear Wheel 12x7 | 2 |
| 10 | 5108 | Valve Stem | 2 |
| 11 | 110513 | Ball Bearing | 4 |
| 12 | 7007 | Rear Tube | 2 |
| | 100291 | Tube Cleat Tires | 2 |
| 13 | 109154 | Hubcap | 2 |
| 14 | 932026 | Cotter Pin 5/32 x 1 1/4 | 2 |
| 15 | 109114 | Special Hub Cap Washer | 2 |
| 16 | 1278 | Shim Washer .050 | X |
| 17 | 5210 | Shim Washer .015 | X |
| 18 | 105762 | Hub Rear Wheel 1" I.D | 2 |
| 19 | 915236 | Jam Nut 3/8-16 | 4 |
| 20 | 909554 | Set Screw 3/8-16x1 | 4 |
| 21 | 937097 | Woodruff Key 1/4x1 | 2 |
| 22 | 1004 | Lug Bolt | 10 |
| 23 | 111518 | Rear Wheel & Tire Assy | 2 |
| 25 | 110692 | Front Wheel & Tire Assy <i>15x6.00x6</i> | 2 |



1452

Wheel Horse

Figure 11 - 1 Drive Belt and Pulleys

SECTION 11 - DRIVE BELT, PULLEYS AND PTO CLUTCH

| ITEM | PART NUMBER | DESCRIPTION | Quantity |
|---|-------------|--|----------|
| Figure 11-1 DRIVE BELT AND PULLEYS | | | |
| 1 | 7466 | Engine Drive Pulley | 1 |
| 2 | 909862 | Set Screw 5/16-18 x 5/16 | 2 |
| 3 | 105453 | Key 1/4 x 1/4 x 3/4 | 1 |
| 4 | 937221 | Hi-Pro Key 5/32 x 5/8 | 1 |
| 5 | 909540 | Set Screw 5/16-18 x 1/2 Nylok | 2 |
| 6 | 7473 | Drive Belt 312-8 | 1 |
| | 107939 | Drive belt 316-8 | 1 |
| 7 | 106165 | Transmission Drive Pulley | 1 |
| 11 | 908047 | Bolt 7/16-14 x 1 1/4 | 3 |
| 12 | 920084 | Lockwasher 7/16 | 3 |
| 13 | 920010 | Washer 7/16 SAE | 3 |
| 14 | 113855 | Belt Guide - Bottom - 316-8 Only | 1 |
| | 111242 | Belt Guide - Bottom - 312-8 Only | 1 |
| 16 | 112841 | Cap | 1 |

Section 11 - DRIVE BELT, PULLEYS AND PTO CLUTCH

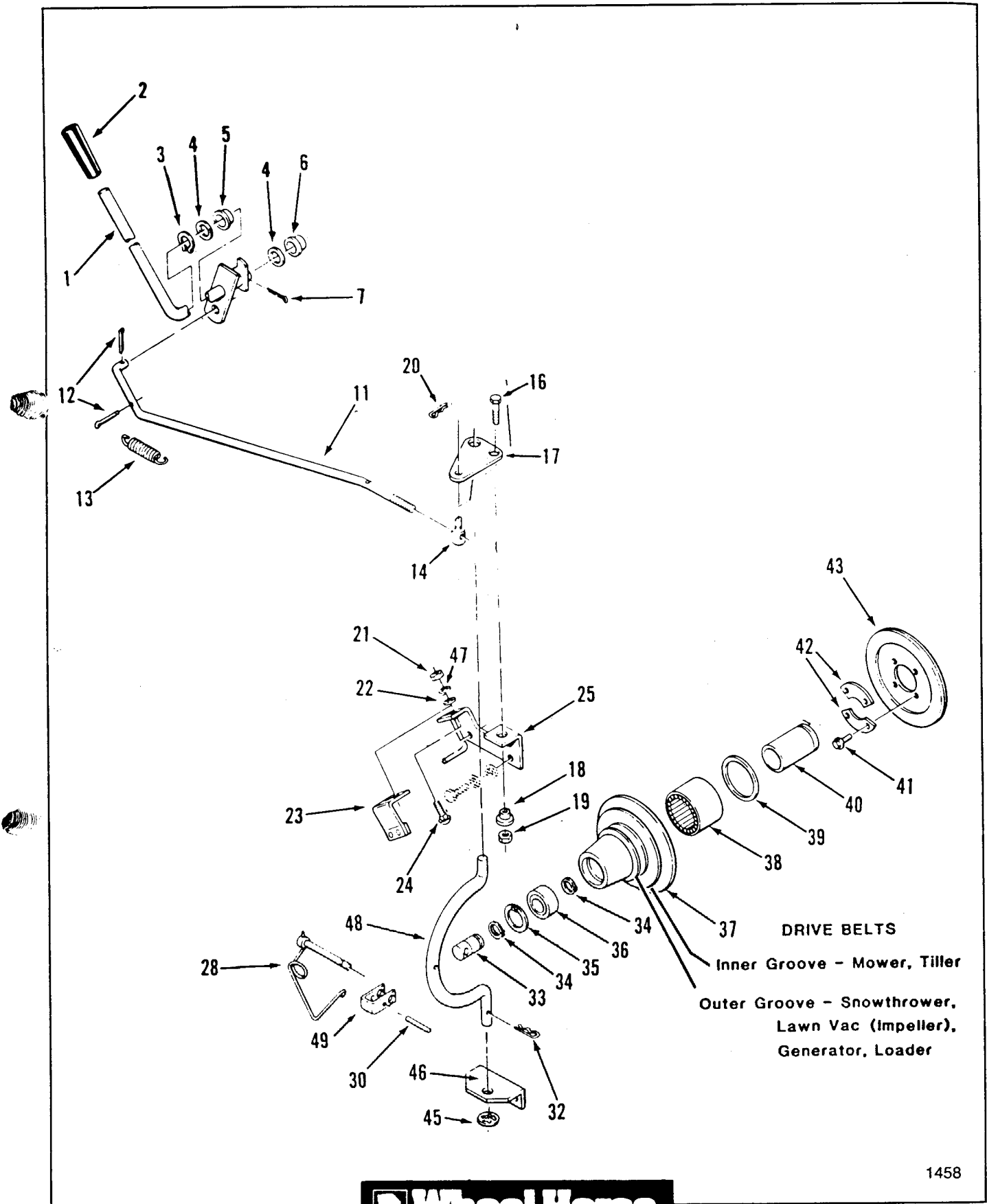


Figure 11-2 PTO Clutch and Control

SECTION 11 - DRIVE BELT, PULLEYS AND PTO CLUTCH

| ITEM | PART NUMBER | DESCRIPTION | Quantity |
|-------------------------------|-------------|------------------------------------|----------|
| Figure 11-2 | | | |
| PTO CLUTCH AND CONTROL | | | |
| 1 | 111234 | PTO Clutch lever | 1 |
| 2 | 9038 | Grip | 1 |
| 3 | 106649 | Grip Ring | 1 |
| 4 | 3765 | Shim Washer | 2 |
| 5 | 5666 | Nyliner Bushing | 1 |
| 6 | 5983 | Bushing | 1 |
| 7 | 932016 | Cotter Pin 1/8 x 3/4 | 1 |
| 11 | 111052 | PTO Clutch Rod | 2 |
| 12 | 932016 | Cotter Pin 1/8 x 3/4 | 2 |
| 13 | 103125 | Spring | 1 |
| 14 | 110656 | Trunnion | 1 |
| 16 | 908034 | Bolt 3/8-16 x 1 | 1 |
| 17 | 110669 | PTO Plate | 1 |
| 18 | 104859 | Spacer | 1 |
| 19 | 915663 | Nut 3/8-16 E.S. | 1 |
| 20 | 933505 | Hairpin Cotter | 1 |
| 21 | 915234 | Jam Nut 1/4-20 | 2 |
| 22 | 920007 | Washer 1/4 SAE | 2 |
| 23 | 110665 | PTO Brake Assembly | 1 |
| 24 | 900015 | Carriage Bolt 1/4-20 x 3/4 | 2 |
| 25 | 113853 | Engine bracket - 316-8 Only | 1 |
| | 111240 | Engine Bracket - 312-8 Only | 1 |
| 28 | 111314 | Locking Pin | 1 |
| 30 | 933274 | Spirol Pin 5/32 x 1 3/8 | 1 |
| 32 | 933506 | Hairpin Cotter | 1 |
| 33 | 102872 | Stub Shaft | 1 |
| 34 | 936125 | Snap Ring 3/4 External | 2 |
| 35 | 936032 | Snap Ring 1 3/4 Internal | 1 |
| 36 | 109842 | Ball Bearing | 1 |
| 37 | 103478 | Pulley Housing | 1 |
| 38 | 106769 | Needle bearing | 1 |
| 39 | 6663 | Seal | 1 |
| 40 | 6658 | Bearing Race | 1 |
| 41 | 908002 | Nylok Bolt 1/4-20 x 5/8 | 4 |
| 42 | 6659 | Retainer | 2 |
| 43 | 114881 | Clutch Plate & Facing | 1 |
| 45 | 106695 | Push-On Ring | 1 |
| 46 | 102870 | Rod Support Housing | 1 |
| 47 | 920081 | Lock Washer 1/4 | 1 |
| 48 | 113108 | PTO Housing Rod - 312-8 Only | 1 |
| | 113876 | PTO Housing Rod - 316-8 Only | 1 |
| 49 | 113107 | Clevis | 1 |

SECTION 12 - SEAT AND DECALS

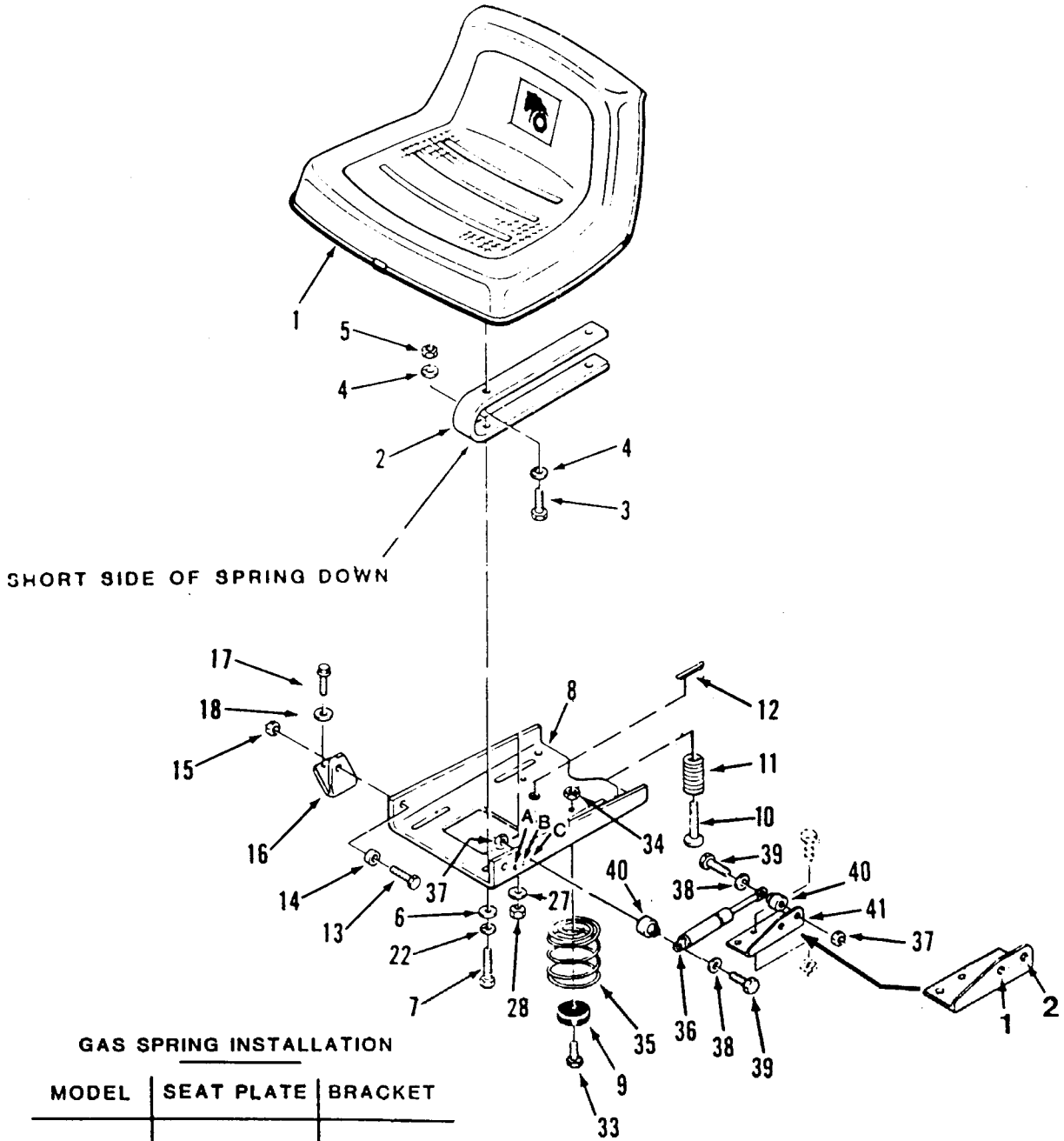
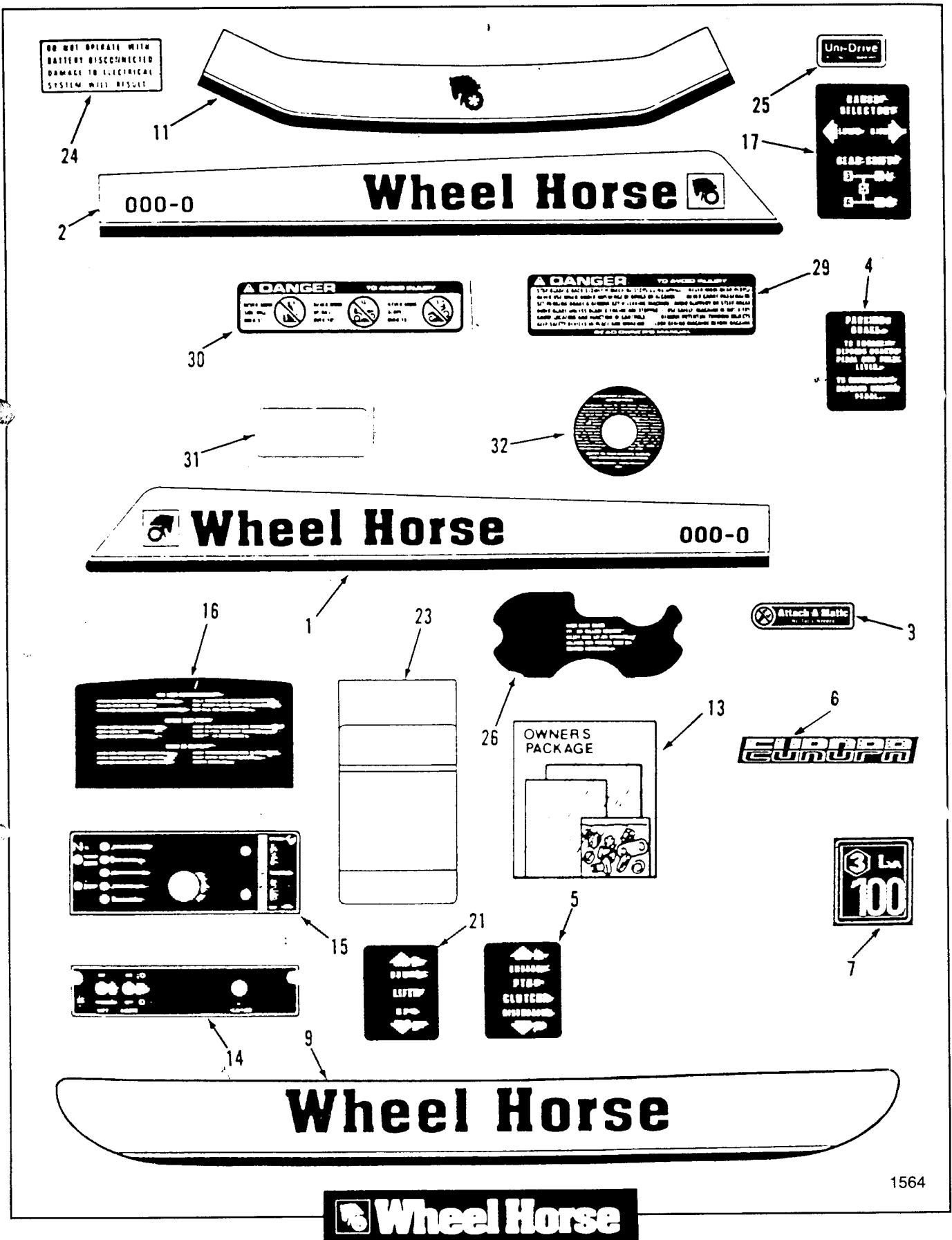


Figure 12 - 1 Seat

SECTION 12 - SEAT AND DECALS

| ITEM | PART NUMBER | DESCRIPTION | Quantity |
|--------------------|-------------|----------------------------------|----------|
| Figure 12-1 | | | |
| SEAT | | | |
| 1 | 113986 | Seat | 1 |
| 2 | 110920 | Seat Spring | 2 |
| 3 | 908017 | Bolt 5/8-18 x 3/4 | 4 |
| 4 | 920082 | Lockwasher 5/16 | 8 |
| 5 | 915112 | Nut 5/16-18 | 4 |
| 6 | 920008 | Washer 5/16 SAE | 4 |
| 7 | 908018 | Bolt 5/16-18 x 7/8 | 4 |
| 8 | 112478 | Seat Pivot Plate | 1 |
| 9 | 108889 | Bumper | 2 |
| 10 | 106449 | Pin | 1 |
| 11 | 114267 | Spring | 1 |
| 12 | 932008 | Cotter Pin 3/32 x 3/4 | 1 |
| 13 | 908018 | Bolt 5/16-18 x 7/8 | 2 |
| 14 | 105503 | Bushing | 2 |
| 15 | 915662 | Nut 5/16-18 E.S. | 2 |
| 16 | 112744 | Pivot Bracket RH | 1 |
| | 112745 | Pivot Bracket LH | 1 |
| 17 | 913464 | S.T. Bolt 5/16-18 x 7/8 | 4 |
| 18 | 920008 | Washer 5/16 SAE | 4 |
| 30 | 923784 | Poprivet 1/8 x .232 | 1 |
| 33 | 908019 | Bolt 5/16-18 x 1 | 2 |
| 34 | 915662 | E.S. Nut 5/16-18 | 2 |
| 35 | 114496 | Seat Lifter Spring - Black | 2 |
| 36 | 114343 | Gas Spring | 1 |
| 37 | 915661 | Nut 1/4-20 E.S. | 2 |
| 38 | 920007 | Washer 1/4 SAE | 2 |
| 39 | 908006 | Bolt 1/4-20 x 1/-1/4 | 2 |
| 40 | 114344 | Spacer | 2 |
| 41 | 114345 | Gas Spring Bracket | 1 |

SECTION 12 - SEAT AND DECALS



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Figure 12 - 2 Decals

SECTION 12 - SET AND DECALS

| ITEM | PART NUMBER | DESCRIPTION | Quantity |
|--------------------|-------------|--|----------|
| Figure 12-2 | | | |
| DECALS | | | |
| 1 | 115000 | Decal-Hood RH 312 | X |
| | 116632 | Decal-Hood RH TORO 312 | X |
| | 115036 | Decal-Hood RH 316 | X |
| | 116682 | Decal-Hood RH TORO 316 | X |
| 2 | 115001 | Decal-Hood LH 312 | X |
| | 116633 | Decal-Hood LH TORO 312 | X |
| | 115037 | Decal-Hood LH 316 | X |
| | 116683 | Decal-Hood LH TORO 316 | X |
| 3 | 115197 | Decal-Attach-a-Matic | 1 |
| | 88160 | Decal-Attach-a-Matic German | 1 |
| | 88161 | Decal-Attach-a-Matic French | 1 |
| | 88162 | Decal-Attach-a-Matic Dutch | 1 |
| 4 | 111510 | Decal-Parking Brake | 1 |
| | 88278 | Decal-Parking Brake German | 1 |
| | 88279 | Decal-Parking Brake French | 1 |
| | 88280 | Decal-Parking Brake Dutch | 1 |
| 5 | 111960 | Decal-PTO Clutch | 1 |
| | 88081 | Decal-PTO Clutch Symbol | 1 |
| 6 | 111342 | Decal-Europa | 2 |
| 7 | 114621 | Decal-Europe Noise | 1 |
| 9 | 114925 | Decal-Rear Fender | 1 |
| | 116549 | Decal-Rear Fender TORO | 1 |
| 11 | 114926 | Decal-Hood Front | 1 |
| | 116546 | Decal-Hood Front TORO | 1 |
| 13 | 807204 | Loose Parts Package 312 | X |
| | 807206 | Loose Parts Package 316 | X |
| 14 | 111501 | Decal-Switch Plate | 1 |
| | 88145 | Decal-Switch Plate Symbol | 1 |
| 15 | 111260 | Decal-Lower Dash Throttle - 316 | 1 |
| | 88260 | Decal-Lower Dash Throttle 316 German | 1 |
| | 88261 | Decal-Lower Dash Throttle 316 French | 1 |
| | 88262 | Decal-Lower Dash Throttle 316 Dutch | 1 |
| | 112198 | Decal-Lower Dash Throttle 312 | 1 |
| | 88148 | Decal-Lower Dash Throttle 312 German | 1 |
| | 88149 | Decal-Lower Dash Throttle 312 French | 1 |
| | 88150 | Decal-Lower Dash Throttle 312 Dutch | 1 |
| 16 | 114929 | Decal Rear Hood | 1 |
| | 88159 | Decal Rear Hood German | 1 |
| | 88079 | Decal Rear Hood French | 1 |
| | 88080 | Decal Rear Hood Dutch | 1 |
| 17 | 111534 | Decal-Hi-Low Shift | 1 |
| | 88157 | Decal-Hi-Low-Shift Symbol | 1 |
| 21 | 112168 | Decal-Lift | 1 |
| | 88067 | Decal-Lift German | 1 |
| | 88066 | Decal-Lift French | 1 |
| | 88068 | Decal-Lift Dutch | 1 |

SECTION 12 - SEAT AND DECALS

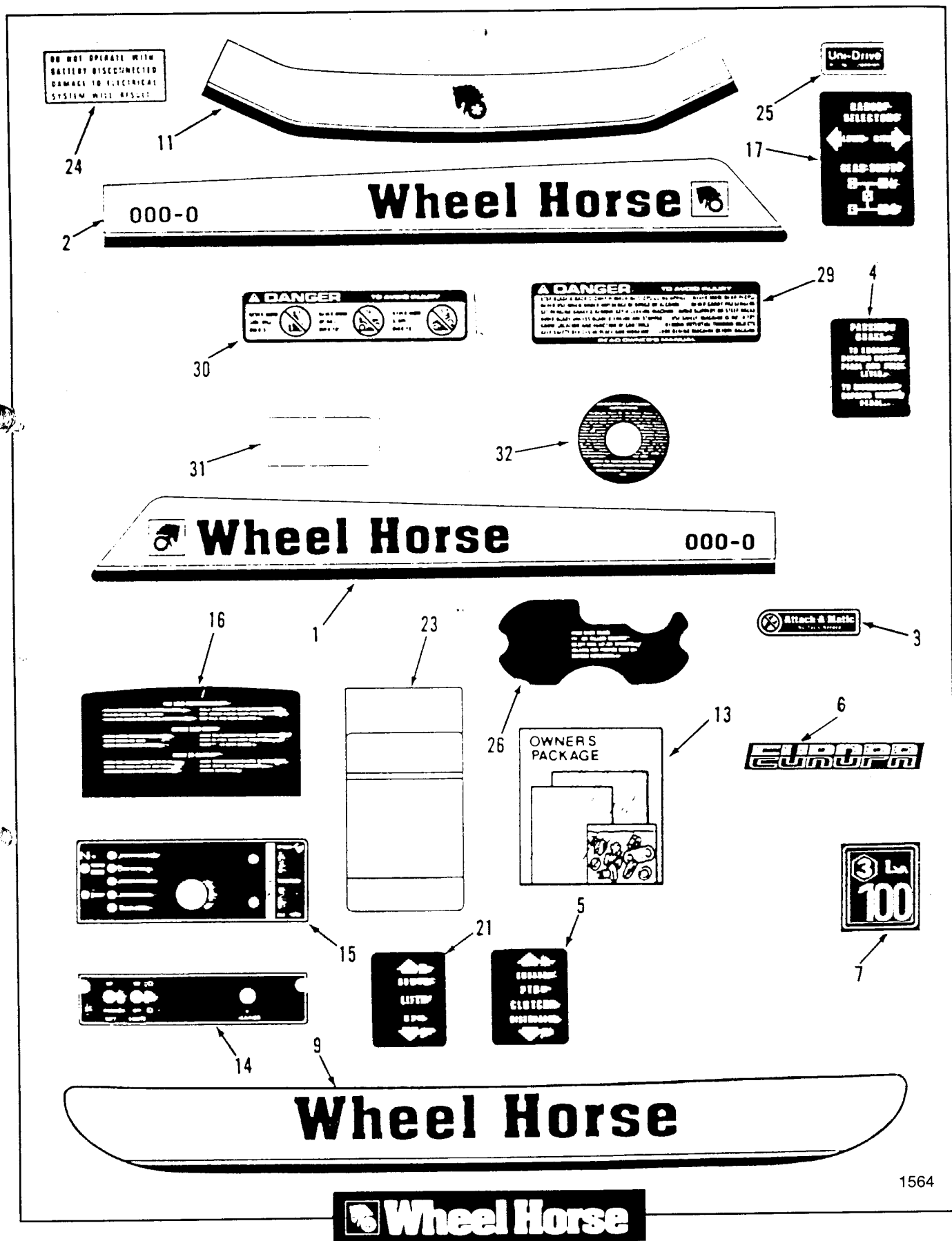


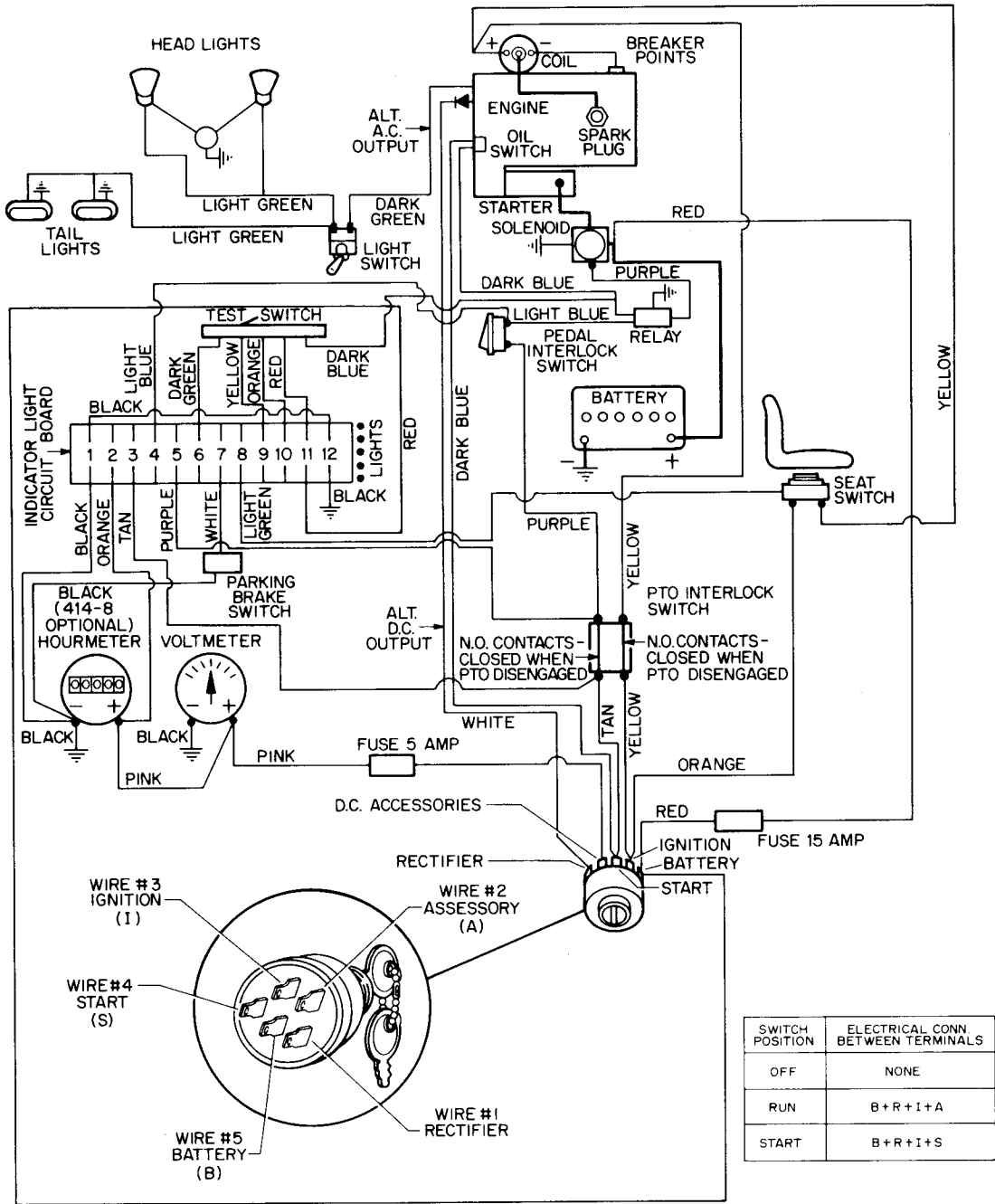
Figure 12 - 2 Decals

SECTION 12 - SET AND DECALS

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| ITEM | PART NUMBER | DESCRIPTION | Quantity |
|------|-------------|---|----------|
| | | Figure 12-2 | |
| | | DECALS (CONTD) | |
| 23 | 115398 | Decal-Maintenance | 1 |
| | 88064 | Decal-Maintenance German | 1 |
| | 88063 | Decal-Maintenance French | 1 |
| | 88065 | Decal-Maintenance Dutch | 1 |
| 24 | 111926 | Decal-Electrical System | 1 |
| | 88121 | Decal-Electrical System German | 1 |
| | 88122 | Decal-Electrical System French | 1 |
| | 88123 | Decal-Electrical System Dutch | 1 |
| 25 | 104955 | Decal-Uni-Drive | 1 |
| 26 | 114296 | Decal-Seat Lifter | 1 |
| | 88087 | Decal-Seat Lifter German | 1 |
| | 88088 | Decal-Seat Lifter French | 1 |
| | 88089 | Decal-Seat Lifter Dutch | 1 |
| 29 | 112678 | Decal-Danger | 1 |
| | 88154 | Decal-Danger German | 1 |
| | 88155 | Decal-Danger French | 1 |
| | 88156 | Decal-Danger Dutch | 1 |
| 30 | 112679 | Decal-Danger | 1 |
| | 88163 | Decal-Danger German | 1 |
| | 88164 | Decal-Danger French | 1 |
| | 88165 | Decal-Danger Dutch | 1 |
| 31 | 112403 | VIN Tag Overlay | 1 |
| 32 | KH10191 | Decal-Air Cleaner/Lub. (vendor nr. 41 113 02) | 1 |

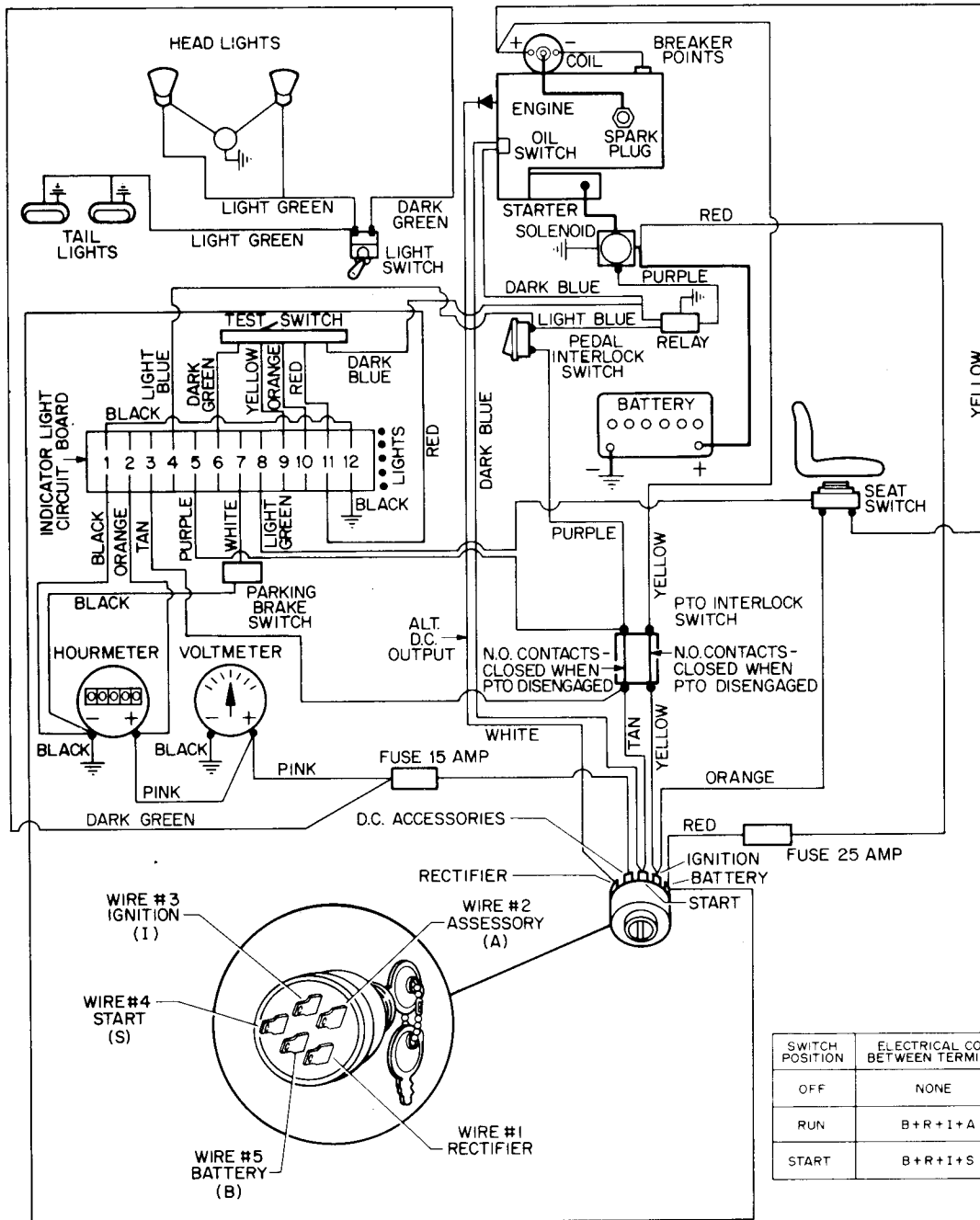
WIRING DIAGRAM — 312, 414 MODELS



| SWITCH POSITION | ELECTRICAL CONN BETWEEN TERMINALS |
|-----------------|-----------------------------------|
| OFF | NONE |
| RUN | B+R+I+A |
| START | B+R+I+S |



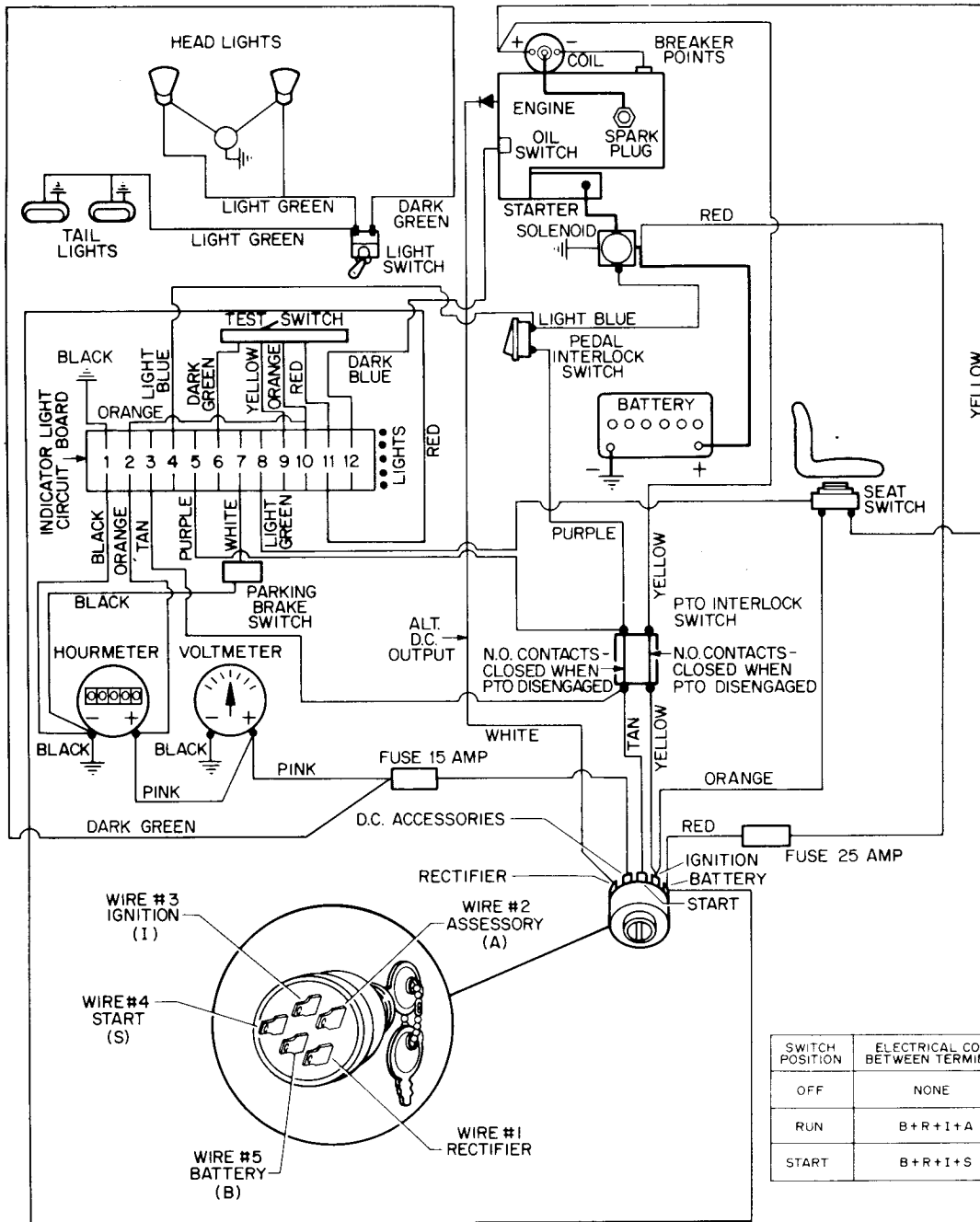
WIRING DIAGRAM – 416 MODEL



| SWITCH POSITION | ELECTRICAL CONN. BETWEEN TERMINALS |
|-----------------|------------------------------------|
| OFF | NONE |
| RUN | B+R+I+A |
| START | B+R+I+S |



WIRING DIAGRAM – 417 MODEL



| SWITCH POSITION | ELECTRICAL CONN BETWEEN TERMINALS |
|-----------------|-----------------------------------|
| OFF | NONE |
| RUN | B+R+I+A |
| START | B+R+I+S |

