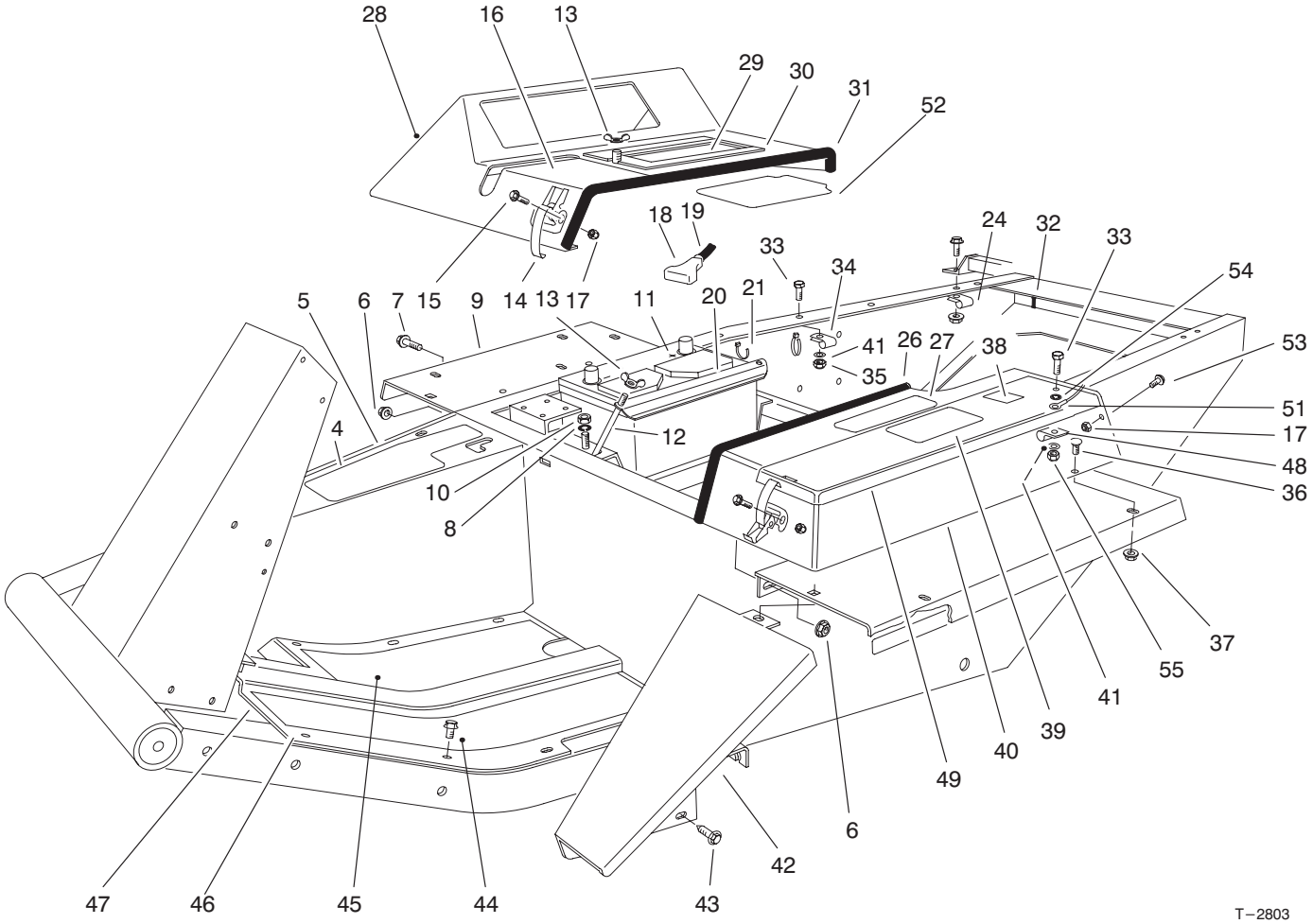
TORO®

Model N0. 30789–200000001 & Up

PARTS CATALOG

# GROUNDSMASTER® 345
## TRACTION UNIT



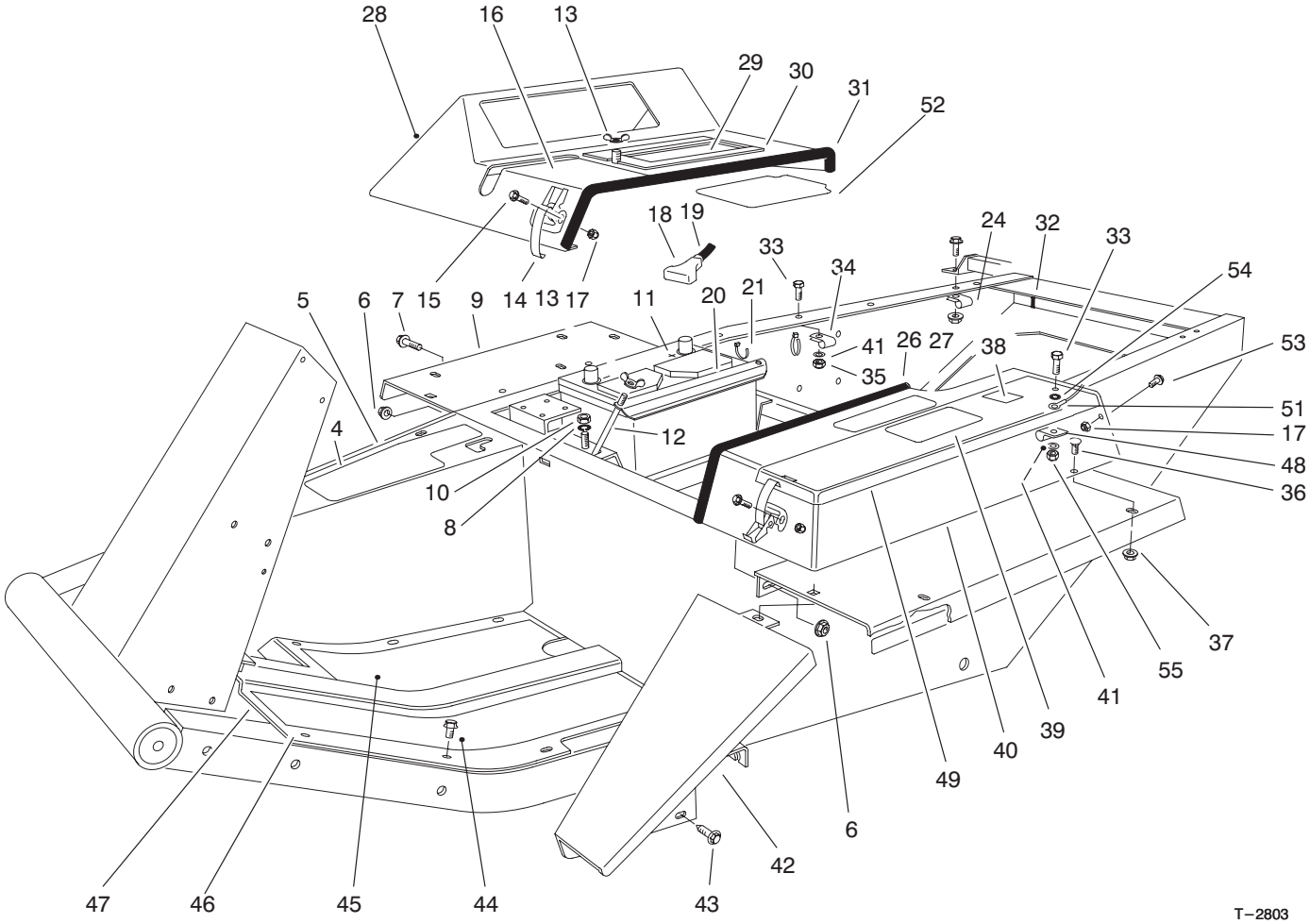

## Main Frame Assembly

| Ref. No. | Part No. | Description | No. Used |
|---|---|---|---|
| 4 | 66–6390 | Decal–Caution | 1 |
| 5 | 21–2660 | Footrest | 1 |
| 6 | 32128–19 | Nut–Flange | 6 |
| 7 | 3234–12 | Screw–HHF | 4 |
| 8 | 3253–4 | Washer–Lock | 2 |
| 9 | 72–3690 | Fender | 2 |
| 10 | 3217–6 | Nut | 2 |
| 11 | 55–7290 | Battery (Group Size 24) | 1 |
| 12 | 24–6390 | Stud–Battery Hold Down | 2 |
| 13 | 32103–2 | Nut–Wing | 2 |
| 14 | 249–21 | Hook Clamp | 3 |
| 15 | 3290–144 | Screw–Machine | 6 |
| 16 | 27–7290 | Decal–Power Take Off | 1 |
| 17 | 3296–2 | Nut–Lock | 9 |
| 18 | 28–1280 | Boot–Cable | 1 |
| †19 | | Cable–Battery Positive | 1 |
| 20 | 24–6420 | Hold Down–Battery | 1 |

| Ref. No. | Part No. | Description | No. Used |
|---|---|---|---|
| 21 | 3290–378 | Cable Tie | 2 |
| 23 | 3234–11 | Capscrew w/Locking Flange | 5 |
| 24 | 2412–39 | Clamp | 2 |
| 25 | 3290–357 | Nut–Lock, Flange | 5 |
| 26 | 37–9650 | Trim | 1 |
| 27 | 67–1710 | Decal–Caution | 1 |
| 28 | 38–4550 | Instrument Cover | 1 |
| 29 | 92–7802 | Decal–Starting Instructions | 1 |
| 30 | 92–7800 | Cover–Battery Access | 1 |
| | | (Incl. Ref. #29 & 52) | 1 |
| 31 | 39–8020 | Trim–Instrument Cover | 1 |
| 32 | 43–4300 | Trim–Rear Frame | 2 |
| 33 | 322–6 | Screw–HH | 1 |
| 34 | 2412–74 | Clamp | 1 |
| 35 | 3296–39 | Nut–Lock | 1 |
| 36 | 3229–1 | Bolt–Carriage | 5 |

† Obtain Locally

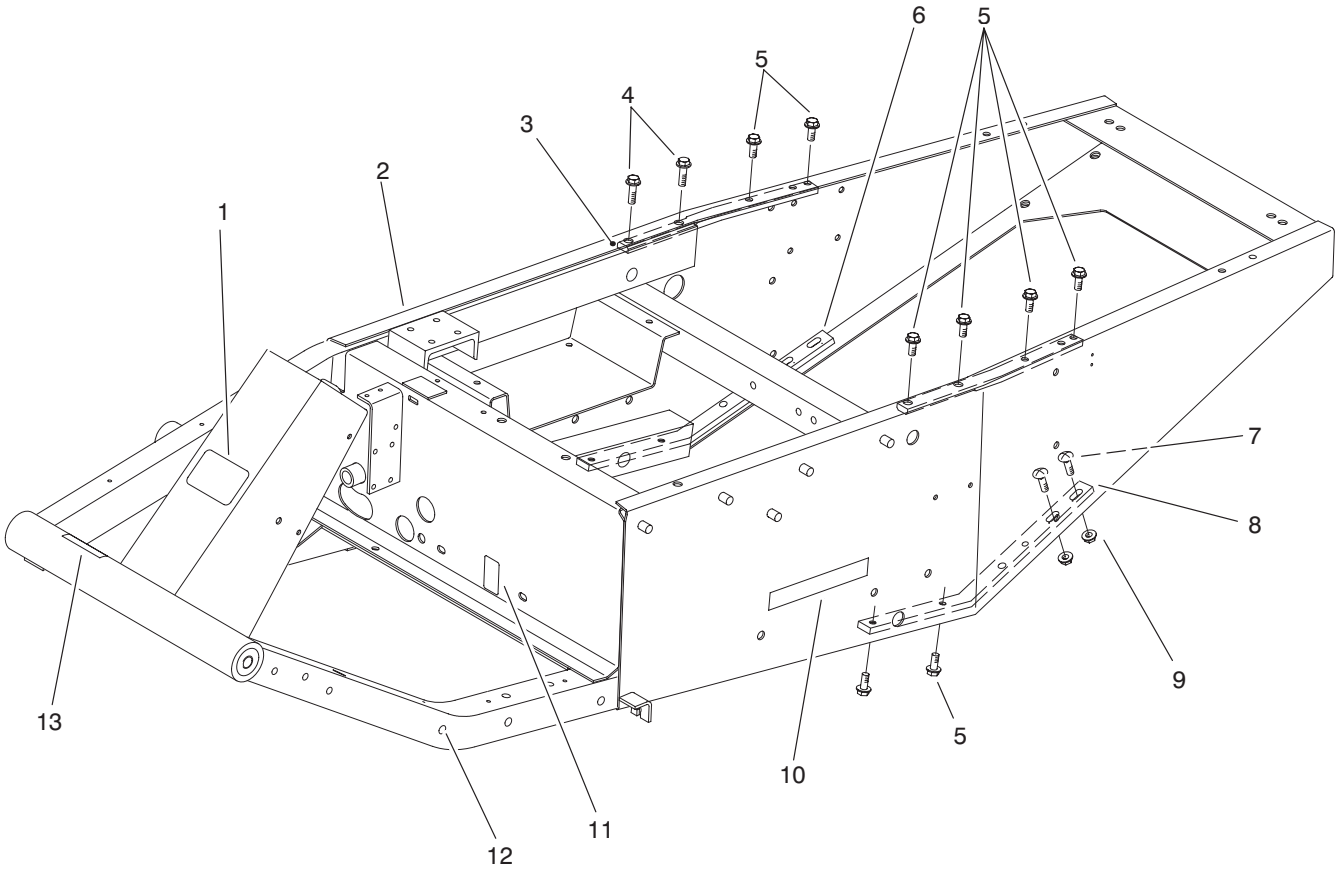
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# Main Frame Assembly (Continued)

| Ref. No. | Part No. | Description | No. Used |
|---|---|---|---|
| 37 | 32128−13 | Nut−Lock, Flange | 5 |
| 38 | 53−4420 | Decal−Fuel | 1 |
| 39 | 27−7310 | Decal−Refueling | 1 |
| 40 | 93−3183 | Tool Box (Incl. Ref. #27) | 1 |
| 41 | 3256−23 | Washer−Flat | 1 |
| 42 | 68−8610 | Fender−Extension | 1 |
| 43 | 3234−14 | Screw−HH | 2 |
| 44 | 32144−10 | Screw−Self Tapping | 11 |
| 45 | 21−2770 | Pad−Foot Rest RH | 1 |

| Ref. No. | Part No. | Description | No. Used |
|---|---|---|---|
| 46 | 21−2760 | Pad−Foot Rest LH | 1 |
| 47 | 88−0070 | Floor Plate | 1 |
| 48 | 98−3883 | Clamp−Wire | 1 |
| 49 | 93−3184 | Cover (Incl. Ref. # 39) | 1 |
| 51 | 18−2770 | Cable−Ground | 1 |
| 52 | 92−7801 | Shield−Cover, Battery | 1 |
| 53 | 3290−144 | Screw−HH | 4 |
| 54 | 3254−2 | Washer−Lock | 1 |
| 55 | 3296−29 | Nut−Lock | 1 |



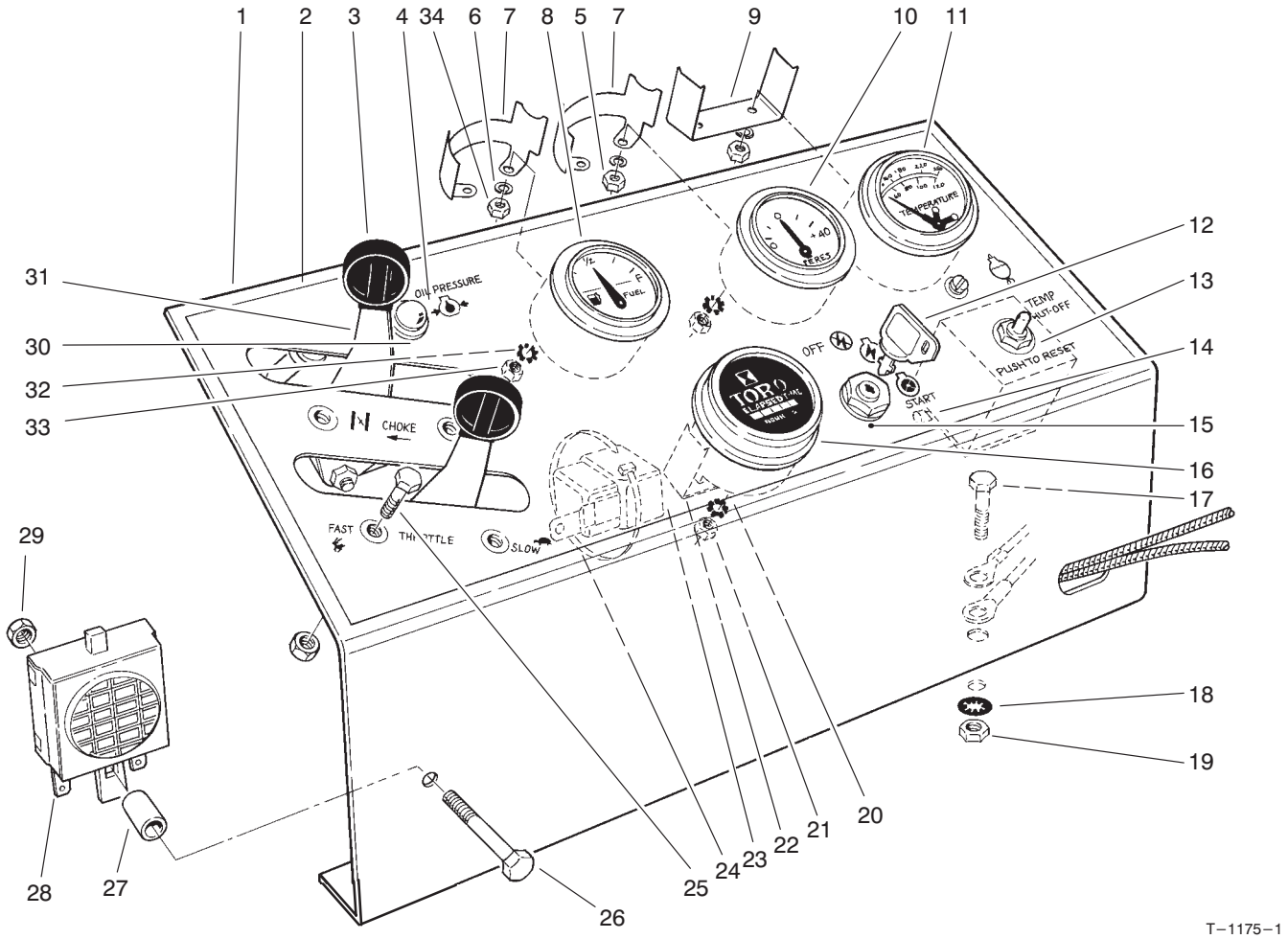

T−2802

# Main Frame Assembly (Continued)

| Ref. No. | Part No. | Description | No. Used |
|---|---|---|---|
| 1 | 70−2200 | Decal−Toro | 1 |
| 2 | 98−3879 | Asm−Frame (Incl. Ref. #1, & 3−13) | 1 |
| 3 | 98−3866 | Brace−Upper | 2 |
| 4 | 3234−24 | Screw−HHF | 2 |
| 5 | 3234−25 | Screw−HHF | 10 |
| 6 | 98−3865 | Brace−Lower Right | 1 |

| Ref. No. | Part No. | Description | No. Used |
|---|---|---|---|
| 7 | 3231−25 | Screw−Carriage | 4 |
| 8 | 98−3864 | Brace−Lower Left | 1 |
| 9 | 32128−21 | Nut−Lock HFH | 4 |
| 10 | 67−1720 | Decal−Torque | 2 |
| 11 | 53−4430 | Decal−Oil Fill | 1 |
| 12 | 32148−9 | Insert−Threaded | 1 |
| 13 | 27−7320 | Decal−Traction Pedal | 1 |

3324−132



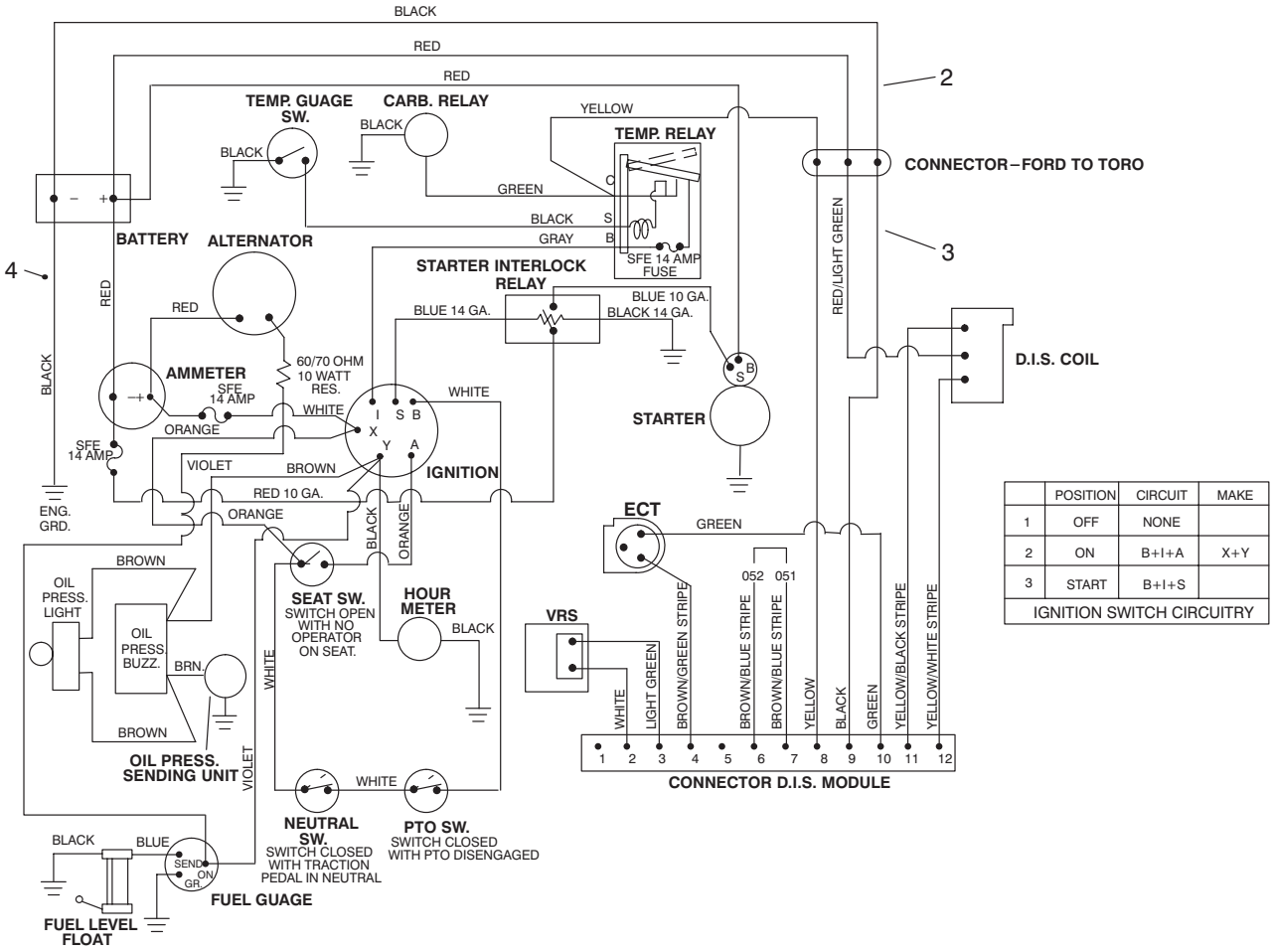

T−1175−1

# Instrument Panel Assembly

| Ref. No. | Part No. | Description | No. Used |
|---|---|---|---|
| 1 | 86−9370 | Panel−Instrument | 1 |
| 2 | 85−7470 | Decal−Instrument Panel | 1 |
| 3 | 233−35 | Knob−Control | 2 |
| 4 | 218−533 | Lens | 1 |
| 5 | 3219−14 | Nut | 4 |
| 6 | 3254−1 | Washer−Lock | 6 |
| 7 | 38−1670 | Mounting Clamp | 2 |
| 8 | 38−1650 | Fuel Gauge (Incl. Ref. #5−7, 32 & 33) | 1 |
| 9 | 218−539 | Clamp | 1 |
| 10 | 38−1660 | Ammeter (Incl. Ref. #5−7, 32 & 33) | 1 |
| 11 | 67−8550 | Engine Temperature Gauge (Incl. Ref. #5, 6 & 9) | 1 |
| 12 | 63−8360 | Key | 1 |
| 13 | 26−6740 | Temperature Reset Relay | 1 |
| †14 | | Fuse Temp. Relay 14 amp SFE | 1 |
| 15 | 27−2360 | Switch | 1 |
| 16 | 12−9990 | Hour Meter (Incl. Ref. #20−22) | 1 |

| Ref. No. | Part No. | Description | No. Used |
|---|---|---|---|
| 17 | 322−5 | Screw−HH | 2 |
| 18 | 3254−2 | Washer−Lock, Int. Tooth | 6 |
| 19 | 3217−6 | Nut | 2 |
| 20 | 3255−5 | Washer−Lock | 1 |
| 21 | 3217−26 | Nut−Hex. | 1 |
| 22 | 218−515 | Mounting Bracket | 1 |
| 23 | 63−7590 | Relay | 1 |
| 24 | 3290−379 | Cable Tie | A/R |
| 25 | 3290−134 | Screw Machine Hex. Hd. | 4 |
| 26 | 3290−360 | Screw Machine Hex. Hd. | 1 |
| 27 | 22−7810 | Spacer | 1 |
| 28 | 22−7820 | Asm−Buzzer | 1 |
| 29 | 3296−12 | Nut−Lock | 5 |
| 30 | 44−2210 | Warning Light (Incl. Ref. #4) | 1 |
| 31 | 67−8560 | Throttle & Choke Control (Incl. Ref. #3) | 2 |
| 32 | 3255−24 | Washer−Lock | 5 |
| 33 | 3217−29 | Nut−Hex. | 6 |
| 34 | 3217−27 | Nut−Hex. | 2 |

†Obtain Locally




| | POSITION | CIRCUIT | MAKE |
|---|---|---|---|
| 1 | OFF | NONE | |
| 2 | ON | B+I+A | X+Y |
| 3 | START | B+I+S | |
| IGNITION SWITCH CIRCUITRY | | | |

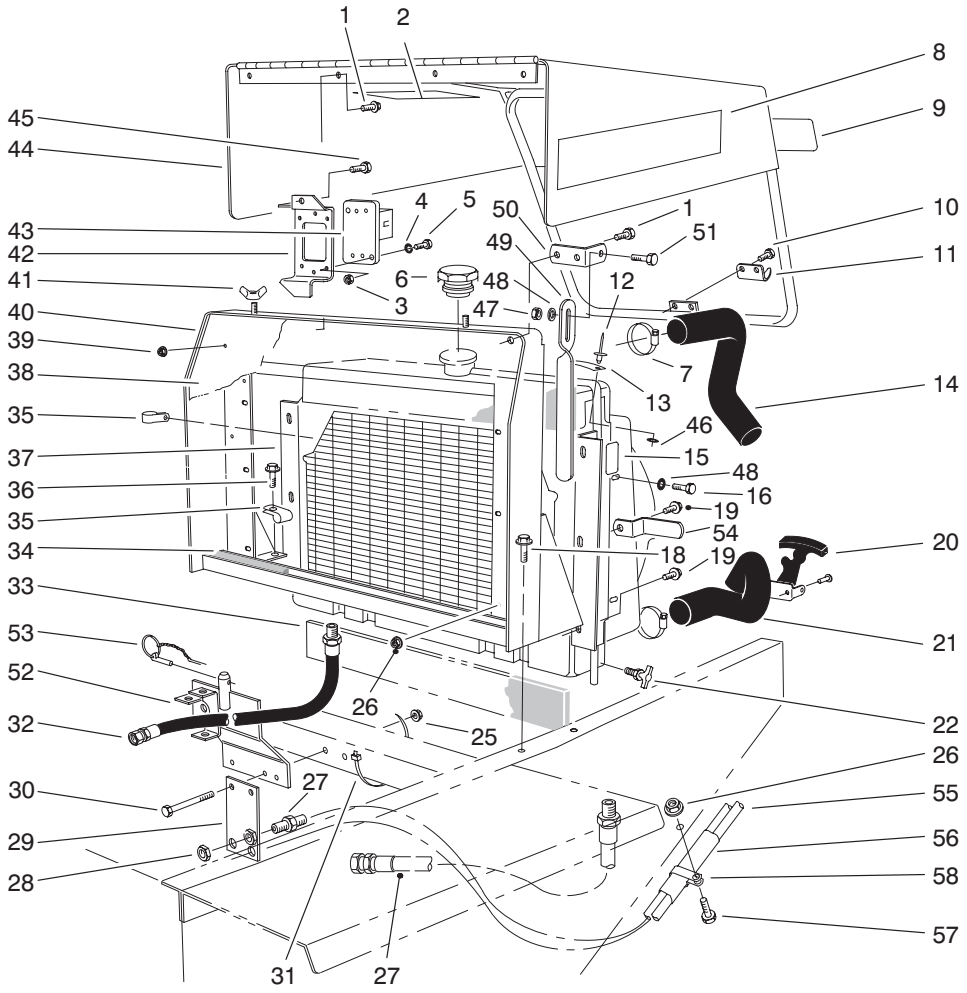
T−0915−1

# Electrical Schematic

| Ref. No. | Part No. | Description | No. Used |
|---|---|---|---|
| 2 | 93−9741 | Asm−Wire−Harness | 1 |

| Ref. No. | Part No. | Description | No. Used |
|---|---|---|---|
| †3 | E9JL−12A200−AC | Wire− Harness (Ford) | 1 |
| 4 | 67−8540 | Cable−Ground | 1 |

†Obtain from your local Ford Power Products Dealer.



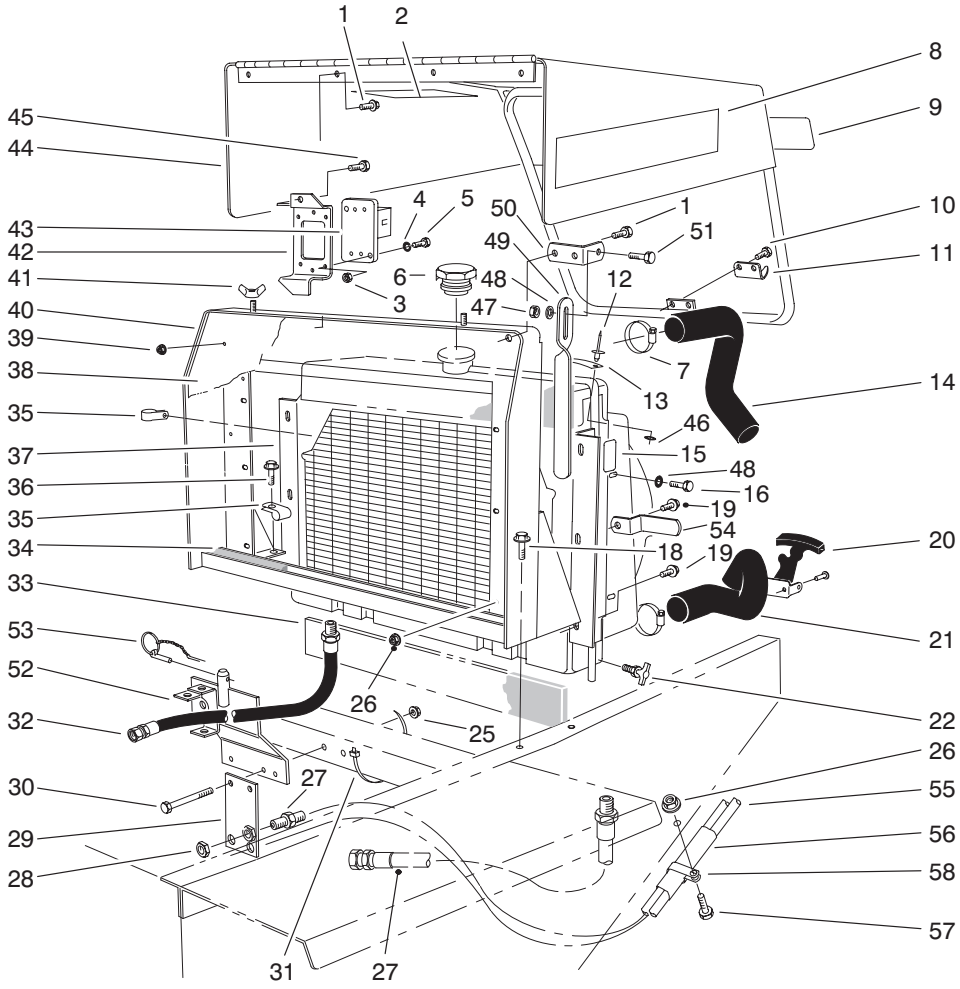

T−0916−4

# Radiator & Hood Assembly

| Ref. No. | Part No. | Description | No. Used |
|---|---|---|---|
| 1 | 32144−10 | Screw−TAP | 5 |
| 2 | 82−8970 | Decal−Coolant Engine | 1 |
| 3 | 48−7890 | Nut−Metric | 2 |
| 4 | 43−5930 | Washer−Metric | 2 |
| 5 | 48−7630 | Screw−Metric | 2 |
| 6 | 66−3240 | Cap−Pressure Radiator | 1 |
| 7 | 2412−3 | Clamp−Hose | 4 |
| 8 | 93−3189 | Decal−Groundsmaster 345 | 2 |
| 9 | 66−6140 | Decal−Toro | 1 |
| 10 | 3290−271 | Rivet | 4 |
| 11 | 249−40 | Keeper | 1 |
| 12 | 3269−13 | Rivet | 2 |
| 13 | 76−8750 | Decal−Warning | 1 |
| 14 | 70−1630 | Hose−Radiator Upper | 1 |
| 15 | 77−3100 | Decal−Warning | 2 |
| 16 | 32104−109 | Screw−HHF | 4 |
| 17 | 67−8640 | Shroud−Radiator | 1 |
| 18 | 3234−25 | Screw−HHF | 1 |
| 19 | 3234−14 | Screw−HHF | 6 |
| 20 | 59−9740 | Latch−Draw (Inc. Ref. #11) | 1 |
| 21 | 67−8660 | Hose−Radiator Lower | 1 |
| 22 | 304−46 | Draincock | 1 |
| 24 | 63−9010 | Asm−Hose (Cooler to Pump) | 1 |
| 25 | 32128−21 | Nut−HF | 3 |

| Ref. No. | Part No. | Description | No. Used |
|---|---|---|---|
| 26 | 32128−20 | Nut−HF | 7 |
| 27 | 340−71 | Union−Bulkhead | 2 |
| 28 | 340−70 | Nut−Lock, Bulkhead | 2 |
| 29 | 68−9160 | Bracket | 1 |
| 30 | 323−14 | Screw−HH | 3 |
| 31 | 3290−379 | Tie−Cable | A/R |
| 32 | 63−8960 | Asm−Hose | 1 |
| 33 | 43−3320 | Foam−Radiator | 2 |
| 34 | 70−1790 | Strip−Foam Sealing | 1 |
| 35 | 2412−39 | Clamp | 2 |
| 36 | 3234−24 | Screw−HHF | 2 |
| 37 | 67−8590 | ASM−Radiator | 1 |
| 38 | 67−9030 | Grille−Radiator | 1 |
| 39 | 32128−33 | Nut−Lock, Flange | 2 |
| 40 | 86−9400 | Support−Radiator | 1 |
| 41 | 32103−2 | Nut−Wing | 2 |
| 42 | 70−1660 | Bracket−E.S.C. | 1 |
| †43 | | Module−E.S.C. | 1 |
| 44 | 14−8459 | Hood | 1 |
| 45 | 321−39 | Screw−HH | 2 |
| 46 | 3269−10 | Washer | 2 |
| 47 | 3296−16 | Nut−Lock | 1 |
| 48 | 3256−22 | Washer−Flat | 5 |
| 49 | 84−5380 | Strap−Hood Prop | 1 |
| 50 | 84−5330 | Bracket−Hood Prop | 1 |
| 51 | 321−6 | Screw−HH | 1 |

†Obtain from your local Ford Power Products Dealer.

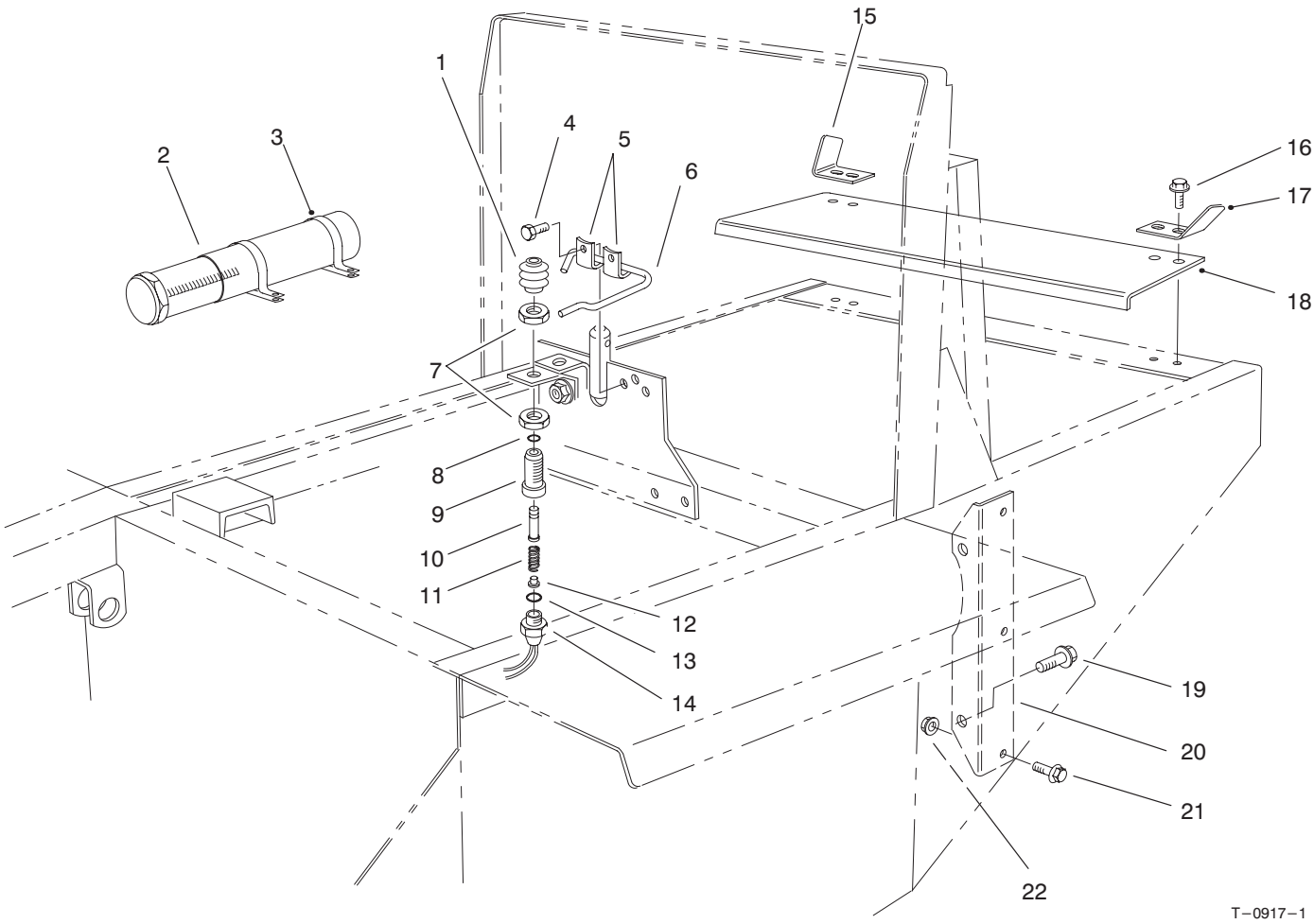



T−0916−4

# Radiator & Hood Assembly (Continued)

| Ref. No. | Part No. | Description | No. Used |
|---|---|---|---|
| 52 | 86−9410 | Support−Seat | 1 |
| 53 | 283−76 | Pin−Lynch | 1 |
| 54 | 86−7060 | Bracket−Hood Hold Down | 1 |
| 55 | 68−9710 | Hose−Steering Cylinder | 2 |

| Ref. No. | Part No. | Description | No. Used |
|---|---|---|---|
| 56 | 56−7980 | Sleeve−Protective | 1 |
| 57 | 322−6 | Screw−HH | 1 |
| 58 | 2412−147 | Clamp | 1 |

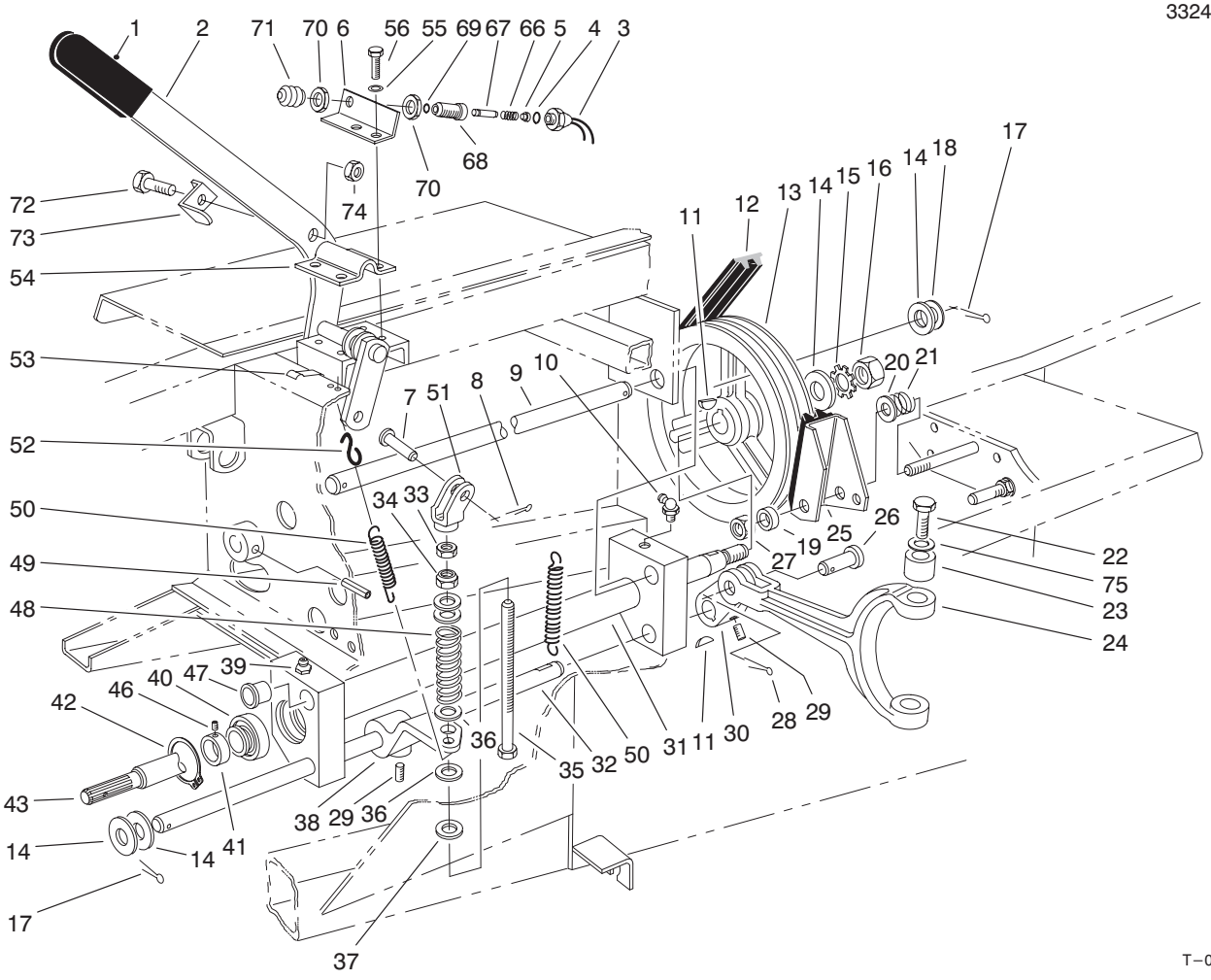



# Interlock Assembly

| Ref. No. | Part No. | Description | No. Used |
|---|---|---|---|
| 1 | 43−8870 | Boot−Switch | 1 |
| 2 | 74−0720 | Tube−Manual | 1 |
| 3 | 2412−133 | R−Clamp | 2 |
| 4 | 32144−10 | Screw−TAP | 2 |
| 5 | 3−6657 | Clip | 2 |
| 6 | 86−7040 | Rod−Seat Prop | 1 |
| 7 | 218−461 | Nut−Jam | 2 |
| 8 | 237−7 | O−Ring | 1 |
| 9 | 43−8620 | Guide−Switch Pin | 1 |
| 10 | 43−8860 | Plunger−Switch | 1 |
| 11 | 43−8600 | Spring−Compression | 1 |
| 12 | 43−8610 | Guide−Spring & Ball Seat | 1 |
| 13 | 237−30 | O−Ring | 1 |

| Ref. No. | Part No. | Description | No. Used |
|---|---|---|---|
| 14 | 72−4320 | Switch−Ball | 1 |
| 15 | 62−3010 | Bracket−RH | 1 |
| 16 | 3234−17 | Screw−HHF | 4 |
| 17 | 62−3020 | Bracket−LH | 1 |
| 18 | 70−1890 | Guard−Flywheel | 1 |
| 19 | 3234−6 | Screw−HHF | 2 |
| 20 | 67−8190 | Bracket−Engine Support | 2 |
| 21 | 3234−11 | Screw−HHF | 6 |
| 22 | 3290−357 | Nut−Lock, Flange | 6 |
| * | 43−9071 | Asm−Switch (Incl. Ref.#1, 7−14, Qty. 1 of Item #7) | 1 |

*Not Illustrated

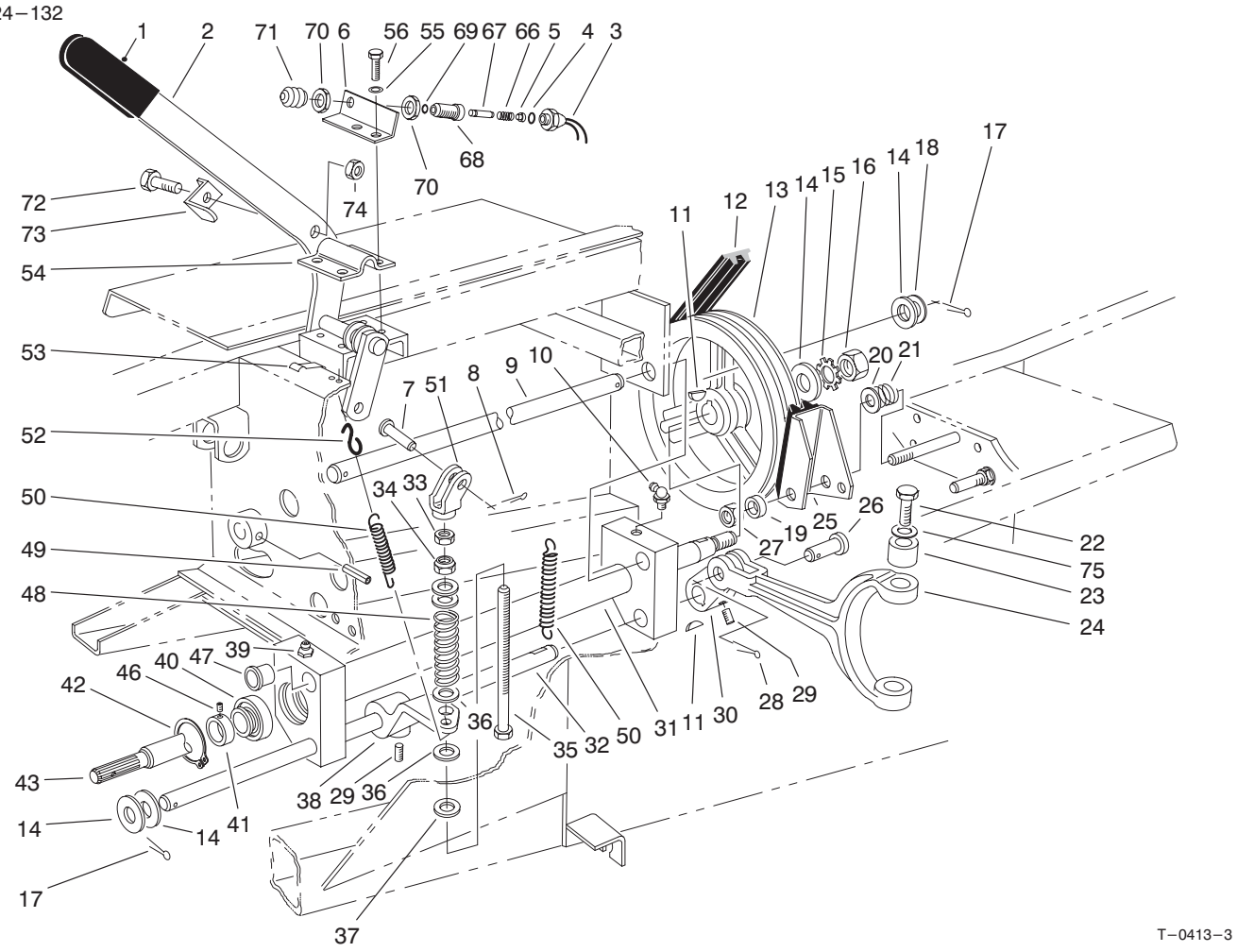



T–0413–3

# Power Take Off Assembly

| Ref. No. | Part No. | Description | No. Used |
|---|---|---|---|
| 1 | 21–1880 | Grip Handle | 1 |
| 2 | 84–8500 | Lever–P.T.O. | 1 |
| 3 | 72–4320 | Switch–Ball | 1 |
| 4 | 237–30 | O–Ring | 1 |
| 5 | 43–8610 | Guide–Spring & Ball Seat | 1 |
| 6 | 84–8520 | Bracket–P.T.O. Switch | 1 |
| 7 | 283–42 | Clevis Pin | 1 |
| 8 | 3272–6 | Cotter Pin | 1 |
| 9 | 43–3860 | Shaft–Pivot P.T.O. | 1 |
| 10 | 302–10 | Fitting–Grease | 1 |
| 11 | 3257–5 | Key–Woodruff | 3 |
| 12 | 53–9660 | V–Belt Torque Team | 1 |
| 13 | 21–0230 | Pulley– P.T.O. | 1 |
| 14 | 3256–28 | Washer–Flat | 4 |
| 15 | 3254–7 | Washer–Lock | 1 |
| 16 | 3219–7 | Nut–Hex. | 1 |
| 17 | 3272–22 | Pin–Cotter | 2 |
| 18 | 3–6498 | Washer | A/R |
| 19 | 3–8812 | Spacer | 1 |
| 20 | 3256–6 | Washer–Flat | 1 |
| 21 | 5–1747 | Spring | 1 |
| 22 | 92–5727 | Screw–HH | 2 |
| 23 | 92–5723 | Bushing–P.T.O. Fork | 2 |
| 24 | 92–4060 | Fork P.T.O. | 1 |
| 25 | 27–7370 | Asm–Brake, P.T.O. | 1 |
| 26 | 93–3769 | Clevis Pin | 1 |

| Ref. No. | Part No. | Description | No. Used |
|---|---|---|---|
| 27 | 3296–28 | Nut–Lock | 1 |
| 28 | 3272–11 | Pin–Cotter | 1 |
| 29 | 3246–3 | Screw–Set | 4 |
| 30 | 92–4058 | Arm–P.T.O. | 1 |
| 31 | 43–5500 | Pivot P.T.O. | 1 |
| 32 | 43–5550 | Shaft– P.T.O. Actuator | 1 |
| 33 | 3219–3 | Nut | 1 |
| 34 | 3296–6 | Nut–Lock | 1 |
| 35 | 27–7900 | Screw–Adjusting | 1 |
| 36 | 3256–41 | Washer–Flat | 4 |
| 37 | 5–0652 | Spacer | 1 |
| 38 | 43–5570 | Arm–P.T.O. Actuator | 1 |
| 39 | 302–2 | Grease Fitting | 1 |
| 40 | 251–252 | Ball Bearing (Incl. Ref. #41) | 2 |
| 41 | 251–234 | Lock Collar (Incl. Ref. #46) | 2 |
| 42 | 32120–22 | Ring–Retaining | 2 |
| 43 | 43–5540 | Shaft P.T.O. | 1 |
| 44 | 62–4260 | Asm–Drive Shaft | 1 |
| 46 | 3246–1 | Screw–Set | 2 |
| 47 | 256–113 | Bushing–Flange | 4 |
| 48 | 21–0400 | Spring–Compression | 1 |
| 49 | 32121–9 | Pin–Roll | 1 |
| 50 | 21–1830 | Spring–Tension | 2 |
| 51 | 43–5630 | Yoke–P.T.O. | 1 |

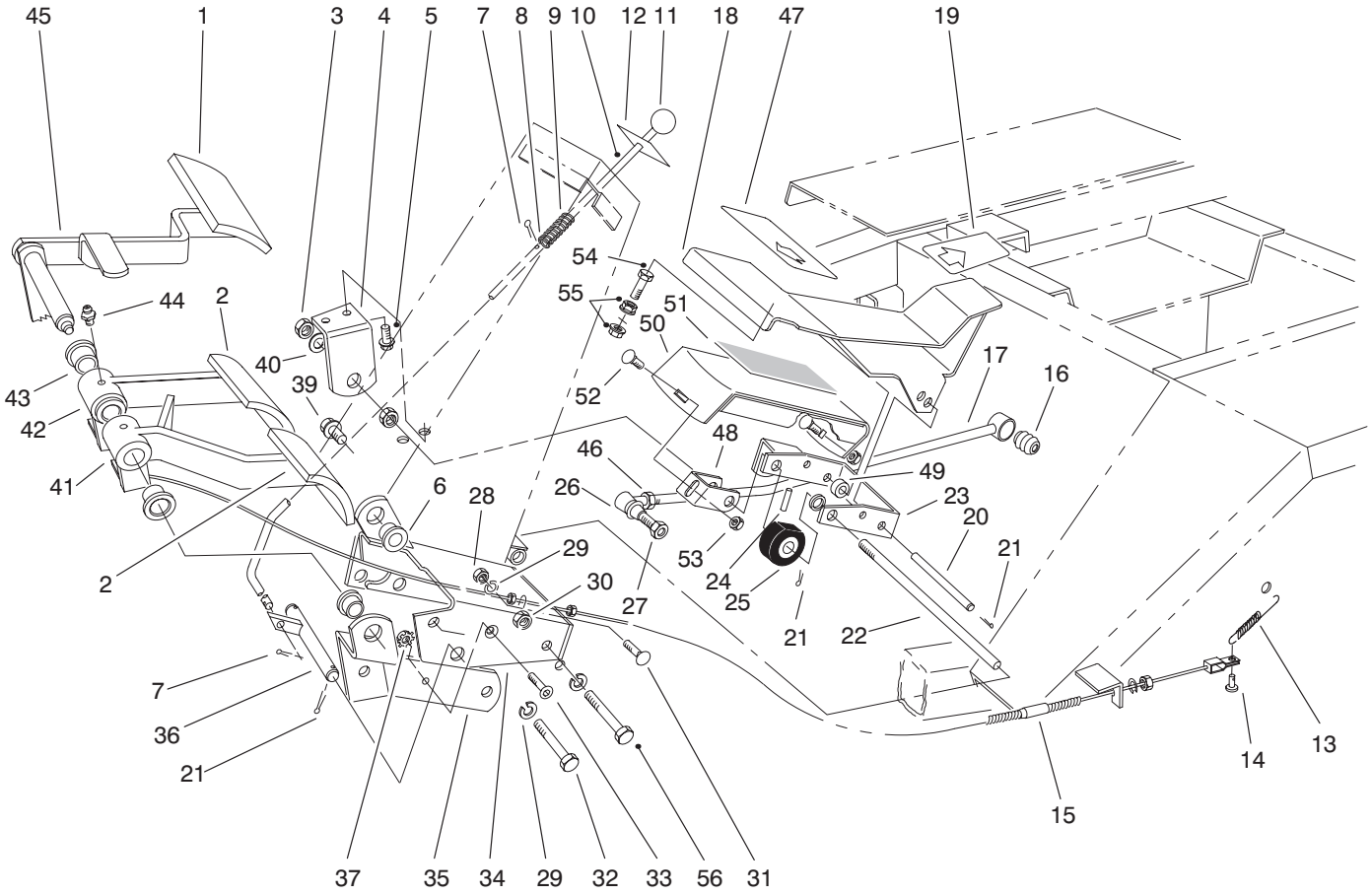



# Power Take Off Assembly (Continued)

| Ref. No. | Part No. | Description | No. Used |
|---|---|---|---|
| 52 | 5−0701 | Spring Anchor | 1 |
| 53 | 212−93 | Wire Clip | 1 |
| 54 | 21−1600 | Clamp P.T.O. Lever | 1 |
| 55 | 3253−21 | Washer−Lock | 4 |
| 56 | 32104−6 | Screw−TAP | 4 |
| 66 | 43−8600 | Spring−Compression | 1 |
| 67 | 43−8860 | Plunger−Switch | 1 |
| 68 | 43−8620 | Guide−Switch Pin | 1 |
| 69 | 237−7 | O−Ring | 1 |

| Ref. No. | Part No. | Description | No. Used |
|---|---|---|---|
| 70 | 218−461 | Nut−Jam | 2 |
| 71 | 43−8870 | Boot−Switch | 1 |
| 72 | 321−4 | Screw−HH | 1 |
| 73 | 86−7050 | Bracket−Switch Actuator | 1 |
| 74 | 3296−16 | Nut−Lock | 1 |
| 75 | 75−9890 | Washer−Shim | A/R |
| * | 43−9071 | Asm−Switch (Incl. Ref. #3−5 & 66−71) (Qty. 1 of Item #70) | 1 |

*Not Illustrated



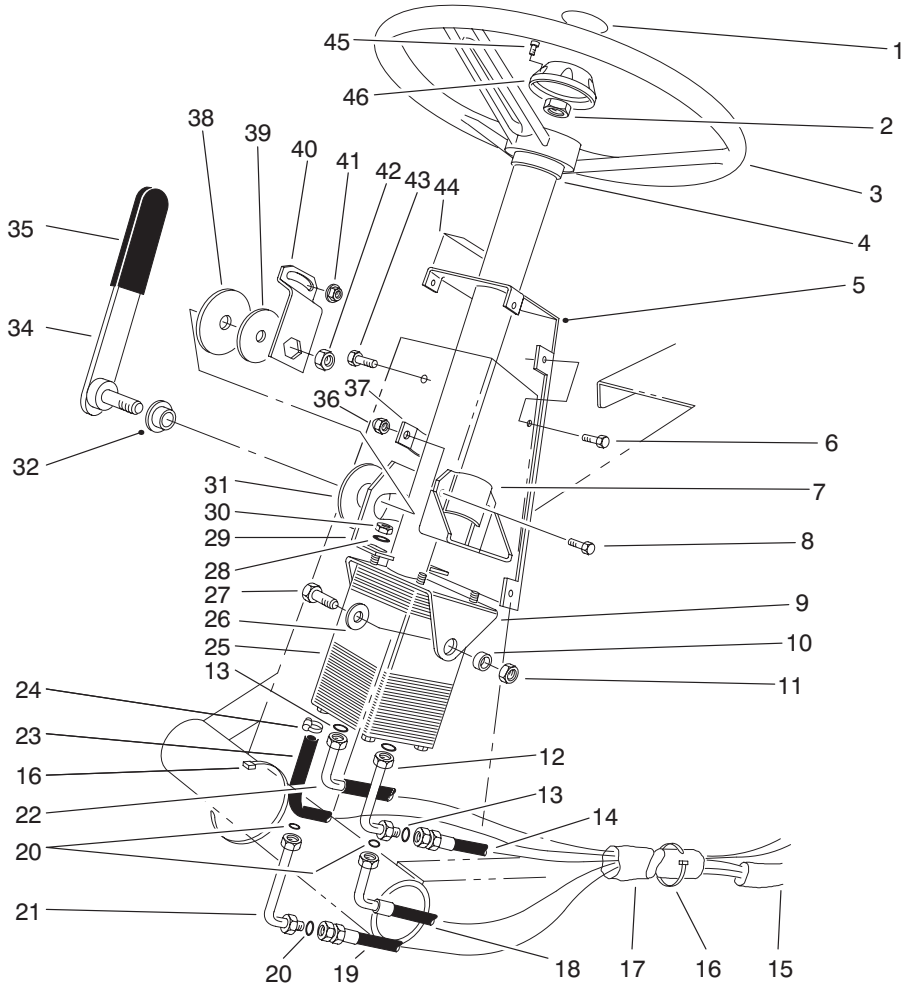

T−0415−8

# Brake Pedal Assembly

| Ref. No. | Part No. | Description | No. Used |
|---|---|---|---|
| 1 | 93−8742 | Pad−Brake | 1 |
| 2 | 93−8743 | Pad−Turn | 2 |
| 3 | 3218−5 | Nut−Jam | 2 |
| 4 | 21−2850 | Mount−RH Pedal | 1 |
| 5 | 11−0590 | Screw−TAP | 2 |
| 6 | 256−156 | Bushing | 5 |
| 7 | 3272−5 | Pin−Cotter | 3 |
| 8 | 3256−22 | Washer−Flat | 1 |
| 9 | 95−1821 | Spring−Compression | 1 |
| 10 | 82−8670 | Rod−Brake Latch | 1 |
| 11 | 233−17 | Knob | 1 |
| 12 | 82−8930 | Decal−Parking Brake | 1 |
| 13 | 3−7243 | Spring−Extension | 2 |
| 14 | 283−58 | Pin−Clevis | 2 |
| 15 | 21−3380 | Cable−LH Brake | 1 |
| * | 21−3370 | Cable−RH Brake | 1 |
| 16 | 23−2270 | Bushing−Rubber | 1 |
| 17 | 23−2240 | Rod−Pump Control | 1 |
| 18 | 94−3304 | Pedal−Traction | 1 |
| 19 | 94−3308 | Pad−Rear Pedal | 1 |
| 20 | 88−1640 | Pin−Traction Pedal | 1 |
| 21 | 3272−6 | Pin−Cotter | 6 |
| 22 | 88−1650 | Shaft−Traction Pedal | 1 |
| 23 | 88−1670 | Bracket−Pivot (Inc. Ref. #6) | 1 |
| 24 | 32121−16 | Pin−Roll | 1 |
| 25 | 28−5220 | Wheel−Friction | 1 |
| 26 | 21−0141 | Asm−Socket RH | 1 |
| 27 | 3220−3 | Nut−Jam | 1 |
| 28 | 3217−7 | Nut−Hex | 2 |

| Ref. No. | Part No. | Description | No. Used |
|---|---|---|---|
| 29 | 3253−21 | Washer−Lock | 4 |
| 30 | 32153−2 | Nut−Lock | 2 |
| 31 | 3231−21 | Bolt−Carriage | 2 |
| 32 | 323−13 | Screw−HH | 1 |
| 33 | 3274−47 | Screw−HSFH | 1 |
| 34 | 27−7590 | Mount−Brake | 1 |
| 35 | 27−9270 | Mount−Brake Pivot Shaft | 1 |
| 36 | 27−7640 | Shaft−Brake Latch | 1 |
| 37 | 32149−2 | Nut | 1 |
| 39 | 3234−11 | Screw−HH | 3 |
| 40 | 3256−26 | Washer−Flat | 1 |
| 41 | 27−7490 | Pedal−LH Brake (Incl. Ref. #43) | 1 |
| 42 | 27−7510 | Pedal−RH Brake (Incl. Ref. #43) | 1 |
| 43 | 256−10 | Bushing | 4 |
| 44 | 302−5 | Fitting−Grease | 2 |
| 45 | 27−8550 | Pedal−Parking Brake | 1 |
| 46 | 3220−5 | Nut−Jam | 1 |
| 47 | 94−3307 | Pad−Front Pedal | 1 |
| 48 | 88−1680 | Bracket−Footrest | 1 |
| 49 | 88−0470 | Tube−Pedal Spacer | 1 |
| 50 | 88−1710 | Footrest | 1 |
| 51 | 88−1720 | Pad−Footrest | 1 |
| 52 | 3230−1 | Bolt−Carriage | 2 |
| 53 | 32128−25 | Nut−Flange Lock | 2 |
| 54 | 323−42 | Screw−HH | 1 |
| 55 | 32128−43 | Nut−HF | 2 |
| 56 | 323−14 | Screw−HH | 1 |

*Not Illustrated

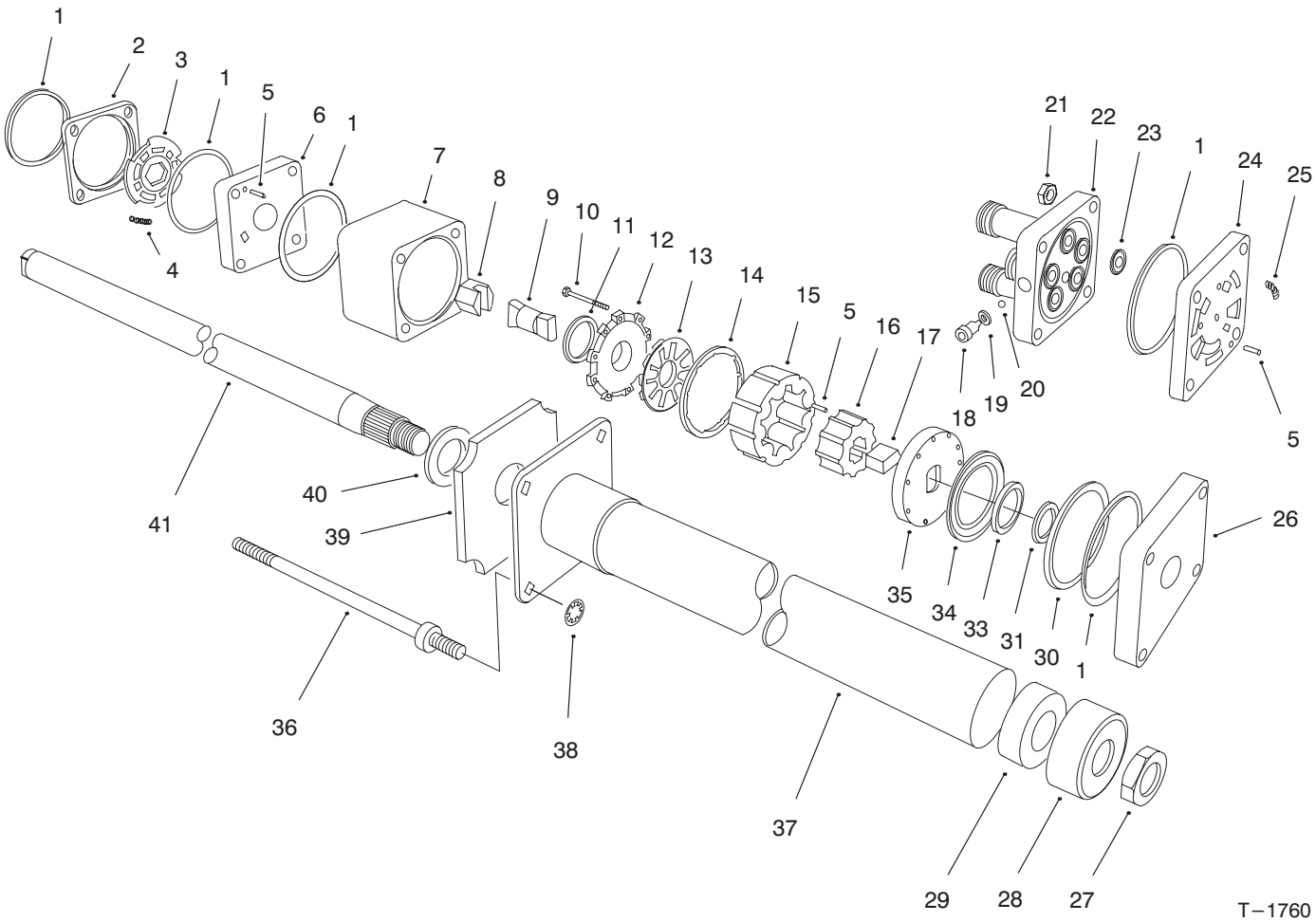



T−1187−3

# Power Steering Assembly

| Ref. No. | Part No. | Description | No. Used |
|---|---|---|---|
| 1 | 68−5370 | Decal−Toro | 1 |
| 2 | 66−9760 | Nut−Hex. | 1 |
| 3 | 75−0560 | Asm−Steering Wheel (Incl. Ref. #45 & 46) | 1 |
| 4 | 21−9260 | Cover−Dust | 1 |
| 5 | 82−8660 | Cover−Tower | 1 |
| 6 | 32144−10 | Screw−HWHTF | 6 |
| 7 | 67−8690 | Support−Column | 1 |
| 8 | 3234−17 | Screw−HH | 2 |
| 9 | 77−3120 | Bracket−Mount, Column | 1 |
| 10 | 80−2960 | Spacer−Tower | 2 |
| 11 | 32153−2 | Nut−Hex. | 2 |
| 12 | 82−8760 | Elbow | 1 |
| 13 | 237−30 | O−Ring | 3 |
| 14 | 63−8970 | Hose−Trans. to Steering | 1 |
| 15 | 70−1390 | Sleeve−Protective | 1 |
| 16 | 3290−379 | Tie−Cable | A/R |
| 17 | 70−1380 | Sleeve−Protective | 1 |
| 18 | 68−9730 | Hose−Steering to Cylinder | 1 |
| 19 | 68−9720 | Hose−Cylinder to Steering | 1 |
| 20 | 237−22 | O−Ring | 3 |
| 21 | 82−8770 | Elbow | 1 |
| 22 | 63−8980 | Hose−Aux. to Valve | 1 |

| Ref. No. | Part No. | Description | No. Used |
|---|---|---|---|
| 23 | 63−8990 | Hose | 1 |
| 24 | 2412−36 | Clamp | 2 |
| 25 | 92−7308 | Valve−Steering, Power | 1 |
| 26 | 3256−46 | Washer−Flat | 2 |
| 27 | 323−6 | Screw−HH | 2 |
| 28 | 3256−3 | Washer−Flat | 4 |
| 29 | 80−2940 | Plate−Pivot | 1 |
| 30 | 3296−20 | Nut−Lock | 4 |
| 31 | 31−0390 | Disc−Friction | 1 |
| 32 | 80−2980 | Boss−Pin | 1 |
| 34 | 93−1353 | Lever−Steering, Tilt | 1 |
| 35 | 21−1880 | Grip−Handle | 1 |
| 36 | 3296−29 | Nut−Lock | 2 |
| 37 | 82−8650 | Clamp−Half | 1 |
| 38 | 82−9010 | Disc−Friction | 1 |
| 39 | 80−2930 | Washer | 1 |
| 40 | 80−2880 | Bracket−Steering, Tilt | 1 |
| 41 | 32128−20 | Nut−Flange | 1 |
| 42 | 3218−7 | Nut−Jam | 1 |
| 43 | 322−4 | Screw−HH | 1 |
| 44 | 82−8940 | Decal−Steering, Tilt | 1 |
| 45 | 32144−21 | Screw | 1 |
| 46 | 68−5140 | Cap−Wheel, Steering | 1 |




T−1760

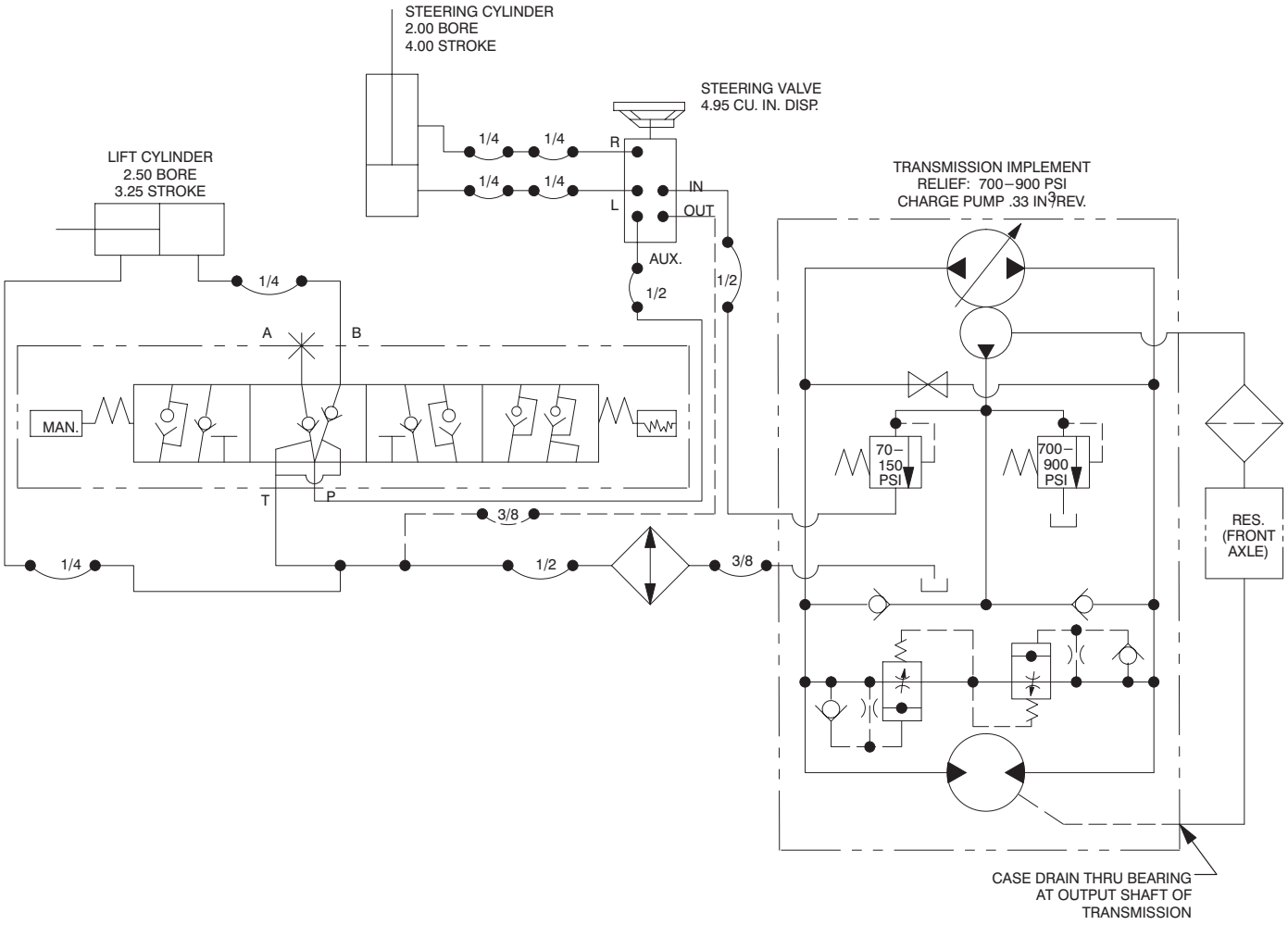
# Power Steering & Valve Assembly NO.92−7308

| Ref. No. | Part No. | Description | No. Used |
|---|---|---|---|
| 1 | | Ring−Seal | 5 |
| 2 | | Ring−Valve | 1 |
| 3 | | Plate−Valve | 1 |
| 4 | | Spring | 3 |
| 5 | | Pin−Alignment | 9 |
| 6 | | Manifold−Isolation | 1 |
| 7 | | Ring−Metering | 1 |
| 8 | | Asm−Hex Drive | 1 |
| 9 | | Link−Drive | 1 |
| 10 | | Screw−HSH | 11 |
| 11 | | Seal−Commutator | 1 |
| 12 | | Cover−Commutator | 1 |
| 13 | | Commutator | 1 |
| 14 | | Ring−Commutator | 1 |
| 15 | | Stator | 1 |
| 16 | | Rotor | 1 |
| 17 | | Spacer−Drive Link | 1 |
| 18 | | Plug | 1 |
| 19 | | O−Ring | 1 |
| 20 | | Ball | 1 |
| 21 | | Nut−Hex | 4 |
| 22 | | Cover−Port | 1 |
| 23 | | O−Ring | 5 |
| 24 | | Manifold−Port | 1 |
| 25 | | Spring | 3 |

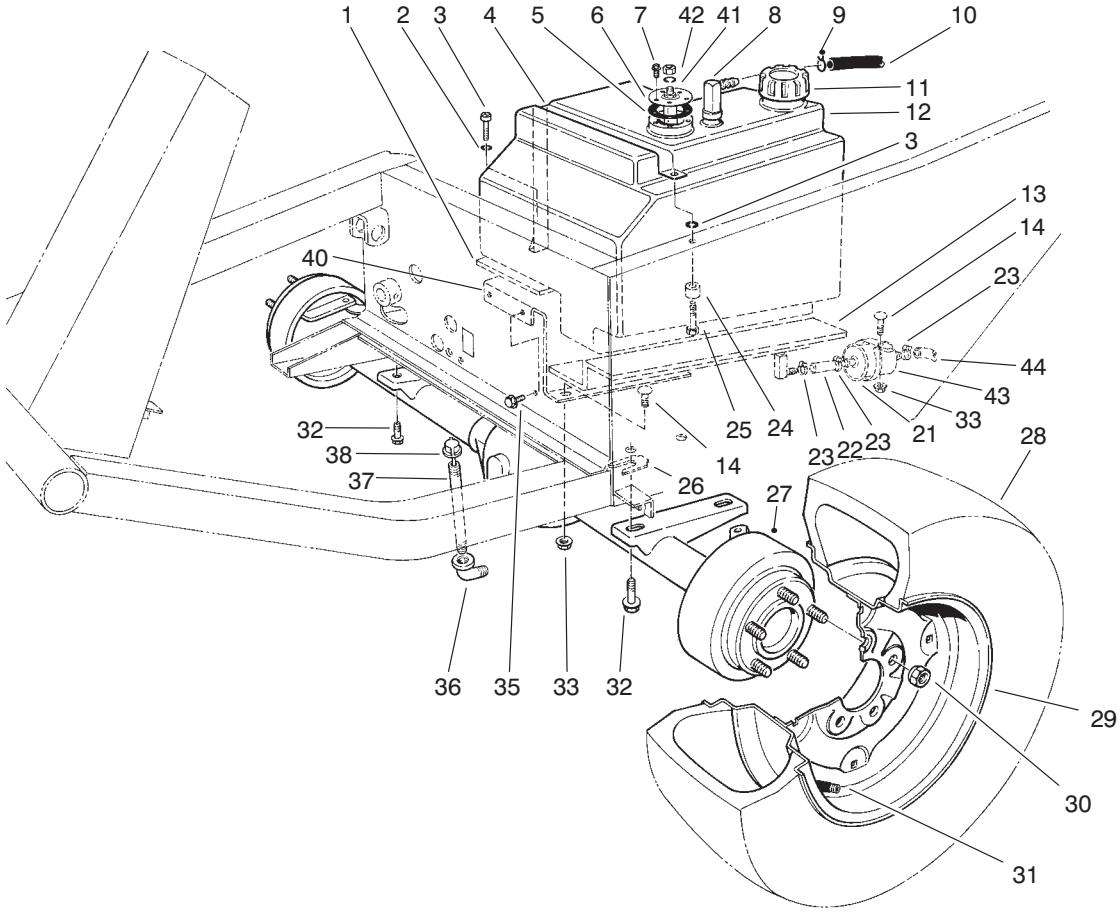
| Ref. No. | Part No. | Description | No. Used |
|---|---|---|---|
| 26 | | Plate−Upper Cover | 1 |
| 27 | 3220−6 | Nut | 1 |
| 28 | 92−7315 | Seal | 1 |
| 29 | | Bearing | 1 |
| 30 | | Spacer−Thrust Bearing | 1 |
| 31 | | Spacer−Seal | 1 |
| 33 | | Seal−Face | 1 |
| 34 | | Bearing−Thrust | 1 |
| 35 | | Plate−Drive | 1 |
| 36 | 92−7310 | Bolt−Special | 4 |
| 37 | | Upper Cover & Jacket | 1 |
| 38 | 92−7316 | Nut−Push On | 4 |
| 39 | 92−7317 | Foam | 1 |
| 40 | | Washer−Retaining | 1 |
| 41 | | Shaft−Input | 1 |
| * | 66−9970 | Kit−Spring (Incl. Ref. #4 & 25) | 1 |
| * | 66−9980 | Kit−Seal (Incl. Ref. #1, 11, 19, 23, 31 & 33) | 1 |
| * | 66−9990 | Kit−Needle Roller (Incl. Ref. #5) | 1 |
| * | 92−7314 | Asm−Column (Incl. Ref. #27−29 & 37−41) | 1 |

*Not Illustrated

# Hydraulic Schematic




T−0418−2




T−0218−1

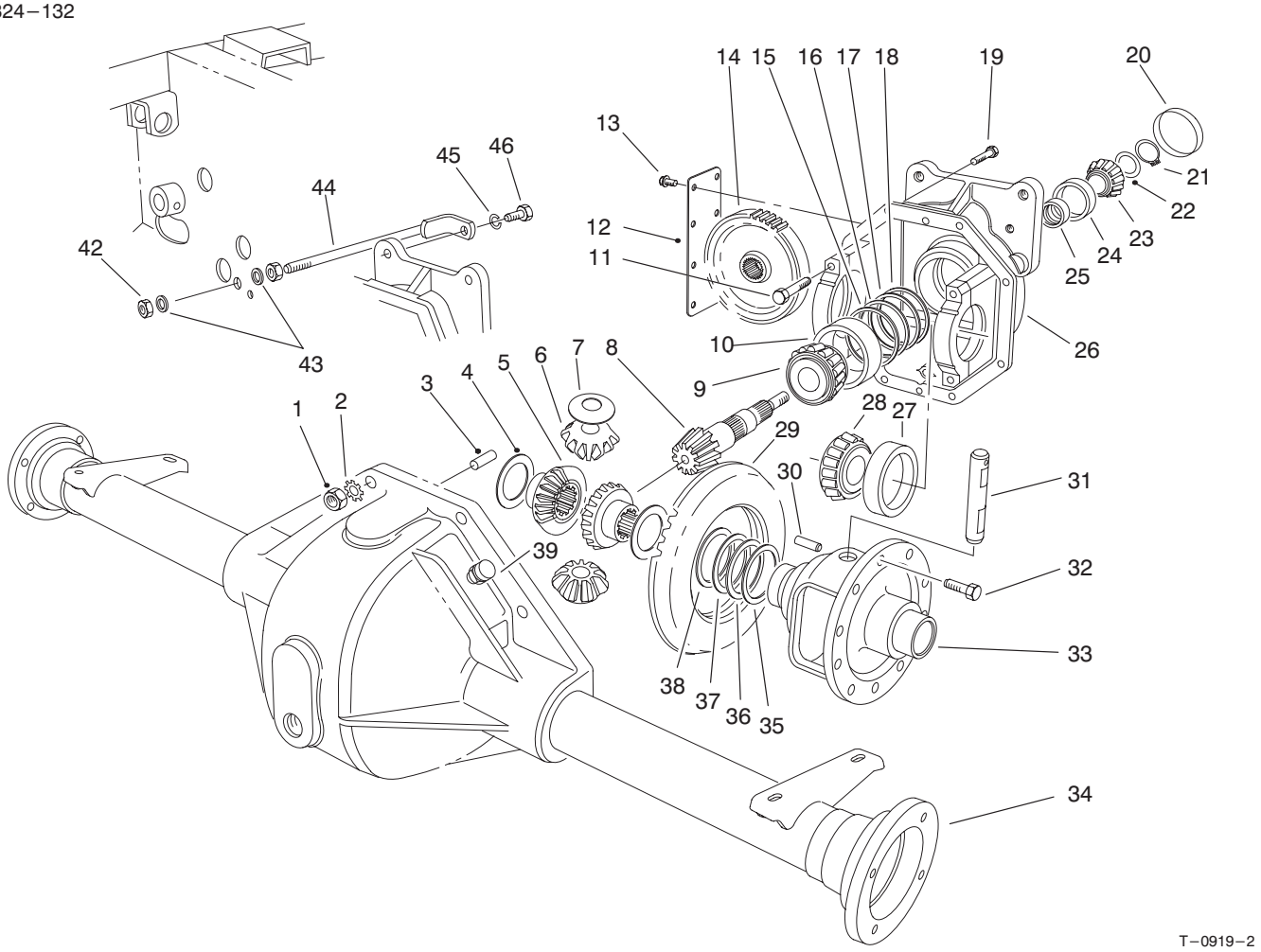
# Front Axle & Fuel Tank Assembly

| Ref. No. | Part No. | Description | No. Used |
|---|---|---|---|
| 1 | 21−3600 | Foam−Support Tank | 1 |
| 2 | 3253−3 | Washer−Lock | 2 |
| 3 | 32104−96 | Screw−HH | 1 |
| 4 | 37−9550 | Strap−Tank Fuel | 1 |
| 5 | 62−7650 | Gasket−Tank Fuel | 1 |
| 6 | 62−6840 | Sender−Fuel Level | 1 |
| 7 | 32144−53 | Screw−HWHTF | 5 |
| 8 | 353−536 | Fitting−Tank, Fuel | 2 |
| 9 | 2412−6 | Clamp | 1 |
| 10 | 63−7630 | Hose−Vent Fuel | 1 |
| 11 | 55−3574 | Cap−Tank Fuel | 1 |
| 12 | 43−9110 | Tank−Fuel (Incl. Ref. #8) | 1 |
| 13 | 21−3610 | Foam−Support Tank | 1 |
| 14 | 3230−2 | Bolt−Carriage | 3 |
| 21 | 2412−96 | Clamp−R | 1 |
| 22 | 92−1662 | Hose−Fuel | 1 |
| 23 | 2412−108 | Clamp | 3 |
| 24 | 22−7810 | Spacer | 1 |
| 25 | 321−6 | Screw−HH | 1 |
| 26 | 42−6080 | Shim−Axle | A/R |
| 27 | 86−9600 | Asm−Front Axle | 1 |
| 28 | 231−101 | Tire | 2 |
| * | 231−95 | Tire−23” x 10.5” x 12” 4 Ply (Optional) 4 Ply | 2 |
| * | 69−9880 | Tire−23” x 10.5” x 12” 6 Ply (Optional) | 2 |

| Ref. No. | Part No. | Description | No. Used |
|---|---|---|---|
| 29 | 217−117 | Rim | 2 |
| * | 217−116 | Rim−23” x 10.5” x 12” (Optional) | 2 |
| 30 | 23−7270 | Nut−Wheel | 10 |
| 31 | 232−31 | Stem−Valve | 2 |
| * | 232−27 | Stem−Valve 23 x 10.5 x 12 (Optional) | 2 |
| 32 | 32144−67 | Screw−Thread Forming | 4 |
| 33 | 32128−20 | Nut−Flange | 3 |
| 35 | 3234−11 | Screw−HHF | 2 |
| 36 | 2811−9 | Elbow−Street | 1 |
| 37 | 289−37 | Nipple−Pipe | 1 |
| 38 | 23−5180 | Dipstick | 1 |
| 40 | 68−9760 | Base−Tank Fuel | 1 |
| 41 | 3253−17 | Washer−Lock | 1 |
| 42 | 3219−14 | Nut | 1 |
| 43 | 18−1520 | Filter−Gas | 1 |
| 44 | 92−1661 | Hose−Fuel | 1 |
| * | 62−7020 | Asm−Wheel & Tire 4 Ply (23” x 10.5” x 12”) (Optional) | 2 |
| * | 69−9870 | Asm−Wheel & Tire 6 Ply (23” x 10.5” x 12”) (Optional) | 2 |
| * | 231−90 | Tube−Inner (Optional) | 2 |
| * | 95−3093 | Kit−400 Hour Filter (Incl. Ref. #43) | 1 |

*Not Illustrated

3324−132



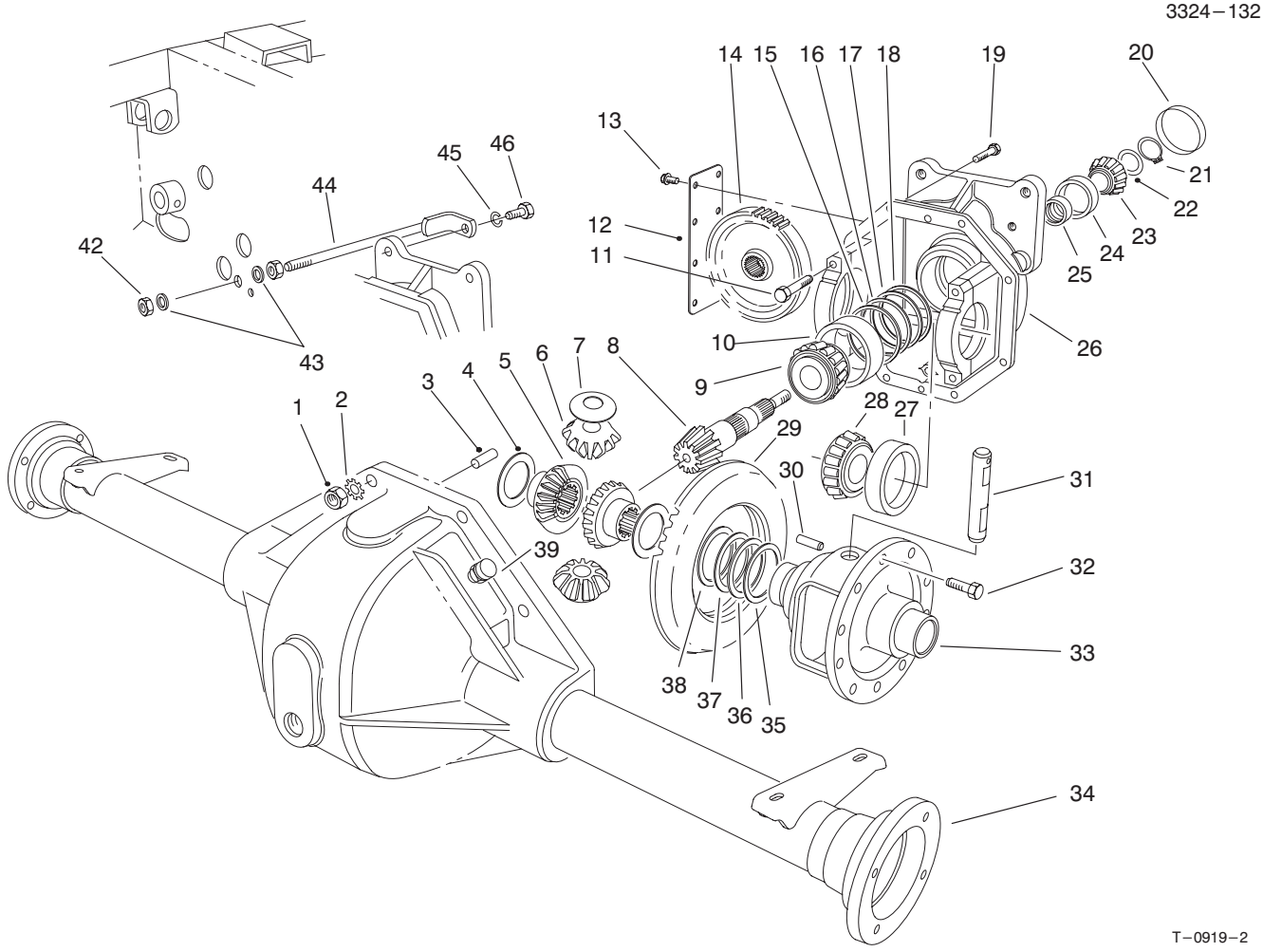

T−0919−2

# Front Axle Assembly NO. 86−9600

| Ref. No. | Part No. | Description | No. Used |
|---|---|---|---|
| 1 | 3219−2 | Nut | 8 |
| 2 | 3255−8 | Washer−Lock | 8 |
| 3 | 21−8270 | Dowel Pin | 2 |
| 4 | 21−7720 | Thrust Washer | 2 |
| 5 | 24−8790 | Differential Bevel Gear Side | 2 |
| 6 | 21−7690 | Pinion Gear | 2 |
| 7 | 21−7730 | Thrust Washer | 2 |
| 8 | | Drive Pinion | 1 |
| 9 | 43−6760 | Roller Bearing Cone | 1 |
| 10 | 43−6750 | Roller Bearing Cup | 1 |
| 11 | 92−1773 | Screw−HH | 4 |
| 12 | 21−7830 | Gear Cover | 1 |
| 13 | 32144−112 | Thread Forming Screw | 8 |
| 14 | 86−7230 | Spur−Gear | 1 |
| 15 | 43−6710 | Adjustment Shim .003 | A/R |
| 16 | 43−6711 | Adjustment Shim .005 | A/R |
| 17 | 43−6712 | Adjustment Shim .010 | A/R |
| 18 | 43−6713 | Adjustment Shim .030 | A/R |
| 19 | 3210−7 | Screw−HH | 8 |
| 20 | 21−7850 | Cap−Plug | 1 |
| 21 | 43−6550 | Snap Ring | 1 |
| 22 | 46−2210 | Shim−Front Pinion Bearing (.031) | A/R |
| * | 46−2211 | Shim−Front Pinion Bearing (.033) | A/R |
| * | 46−2212 | Shim−Front Pinion Bearing (.035) | A/R |

| Ref. No. | Part No. | Description | No. Used |
|---|---|---|---|
| *22 | 46−2213 | Shim−Front Pinion Bearing (.037) | A/R |
| * | 46−2214 | Shim−Front Pinion Bearing (.039) | A/R |
| * | 46−2215 | Shim−Front Pinion Bearing (.041) | A/R/ |
| * | 46−2216 | Shim−Front Pinion Bearing (.043) | A/R |
| * | 46−2220 | Shim−Front Pinion Bearing (.045) | A/R |
| * | 46−2221 | Shim−Front Pinion Bearing (.047) | A/R |
| * | 46−2222 | Shim−Front Pinion Bearing (.049) | A/R |
| * | 46−2223 | Shim−Front Pinion Bearing (.051) | A/R |
| * | 46−2224 | Shim−Front Pinion Bearing (.053) | A/R |
| * | 46−2225 | Shim−Front Pinion Bearing (.055) | A/R |
| * | 46−2226 | Shim−Front Pinion Bearing (.057) | A/R |
| * | 46−2410 | Shim−Front Pinion Bearing (.062) | A/R |
| * | 46−2411 | Shim−Front Pinion Bearing (.064) | A/R |

*Not Illustrated



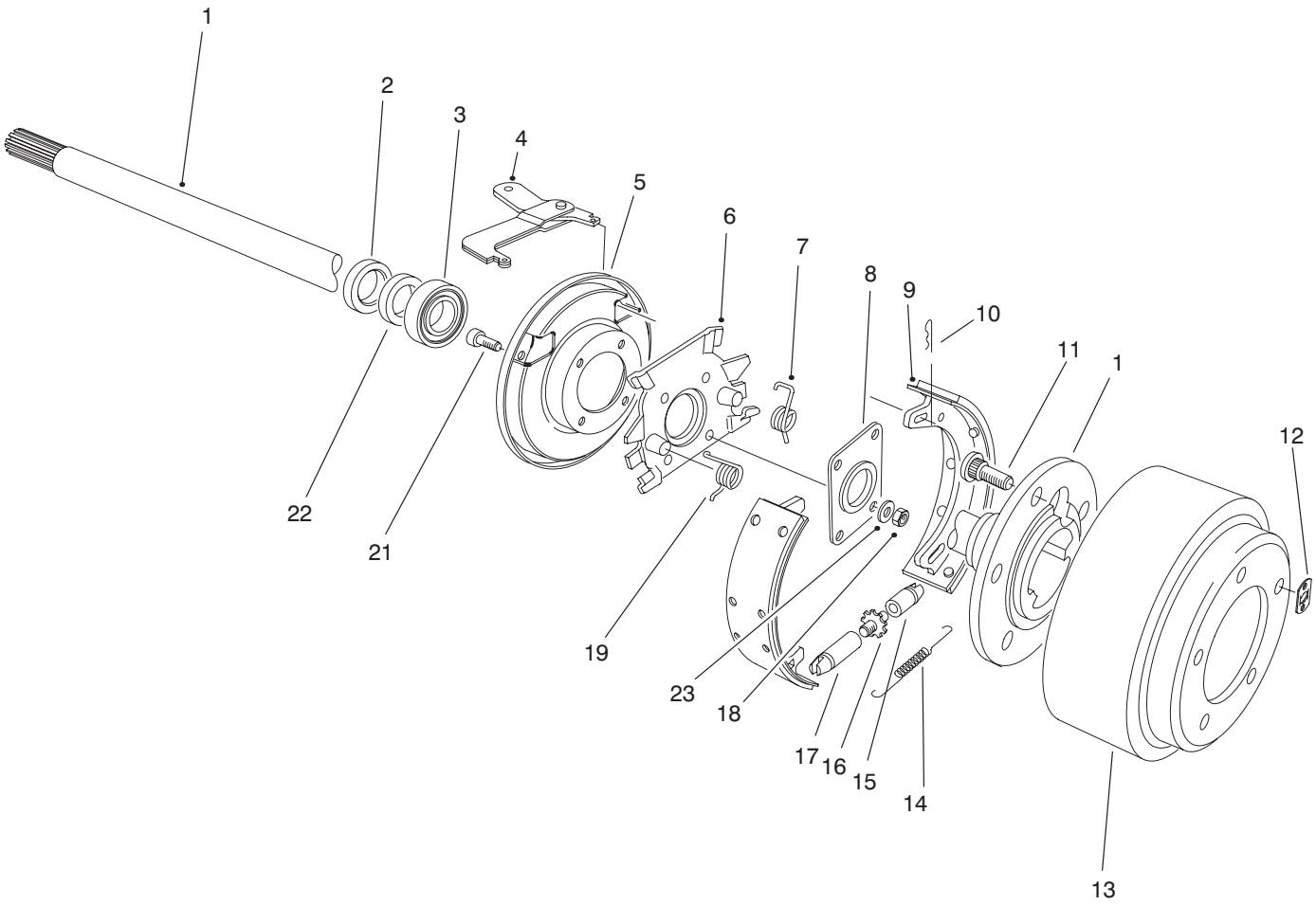

T−0919−2

# Front Axle Assembly NO. 86−9600 (Continued)

| Ref. No. | Part No. | Description | No. Used |
|---|---|---|---|
| *22 | 46−2412 | Shim−Front Pinion Bearing (.066) | A/R |
| * | 46−2413 | Shim−Front Pinion Bearing (.068) | A/R |
| * | 46−2414 | Shim−Front Pinion Bearing (.070) | A/R |
| * | 46−2415 | Shim−Front Pinion Bearing (.072) | A/R |
| * | 46−2416 | Shim−Front Pinion Bearing (.074) | A/R |
| * | 46−2420 | Shim−Front Pinion Bearing (.076) | A/R |
| * | 46−2421 | Shim−Front Pinion Bearing (.078) | A/R |
| * | 46−2422 | Shim−Front Pinion Bearing (.080) | A/R |
| * | 46−2423 | Shim−Front Pinion Bearing (.082) | A/R |
| * | 46−2424 | Shim−Front Pinion Bearing (.084) | A/R |
| * | 46−2425 | Shim−Front Pinion Bearing (.086) | A/R |
| * | 46−2426 | Shim−Front PInion Bearing (.088) | A/R |
| 23 | 254−91 | Bearing Cone | 1 |
| 24 | 254−90 | Bearing Cup | 1 |

| Ref. No. | Part No. | Description | No. Used |
|---|---|---|---|
| 25 | 21−8020 | Spacer−Pinion Bearing | 1 |
| 26 | 86−9580 | Upper Housing (Incl. Ref. #11) | 1 |
| 27 | 254−66 | Cup−Tapered Bearing | 2 |
| 28 | 254−65 | Cone−Tapered Bearing | 2 |
| 29 | | Ring Gear | 1 |
| 30 | 32121−15 | Roll Pin | 1 |
| 31 | 21−7700 | Pinion Mate Shaft | 1 |
| 32 | 21−7770 | Drive Gear Screw | 5 |
| 33 | 21−7670 | Differential Case | 1 |
| 34 | 43−6840 | Lower Housing | 1 |
| 35 | 21−8120 | Adjustment Shim .030 | A/R |
| 36 | 21−8110 | Adjustment Shim .010 | A/R |
| 37 | 21−8100 | Adjustment Shim .005 | A/R |
| 38 | 21−8090 | Adjustment Shim .003 | A/R |
| 39 | 72−9420 | Vent Tube Assembly | 1 |
| * | 92−4903 | Asm−Upper Hsg., 2WD (Incl. Ref.#4−33 & 35−38) | 1 |
| * | 92−4848 | Asm−Gear & Pinion (Incl. Ref. #8 & 29) | 1 |
| 42 | 3217−9 | Nut | 2 |
| 43 | 3256−5 | Washer−Flat | 2 |
| 44 | 24−9830 | Support−Axle | 1 |
| 45 | 3253−21 | Washer−Lock | 1 |
| 46 | 323−6 | Screw−HH | 1 |

*Not Illustrated



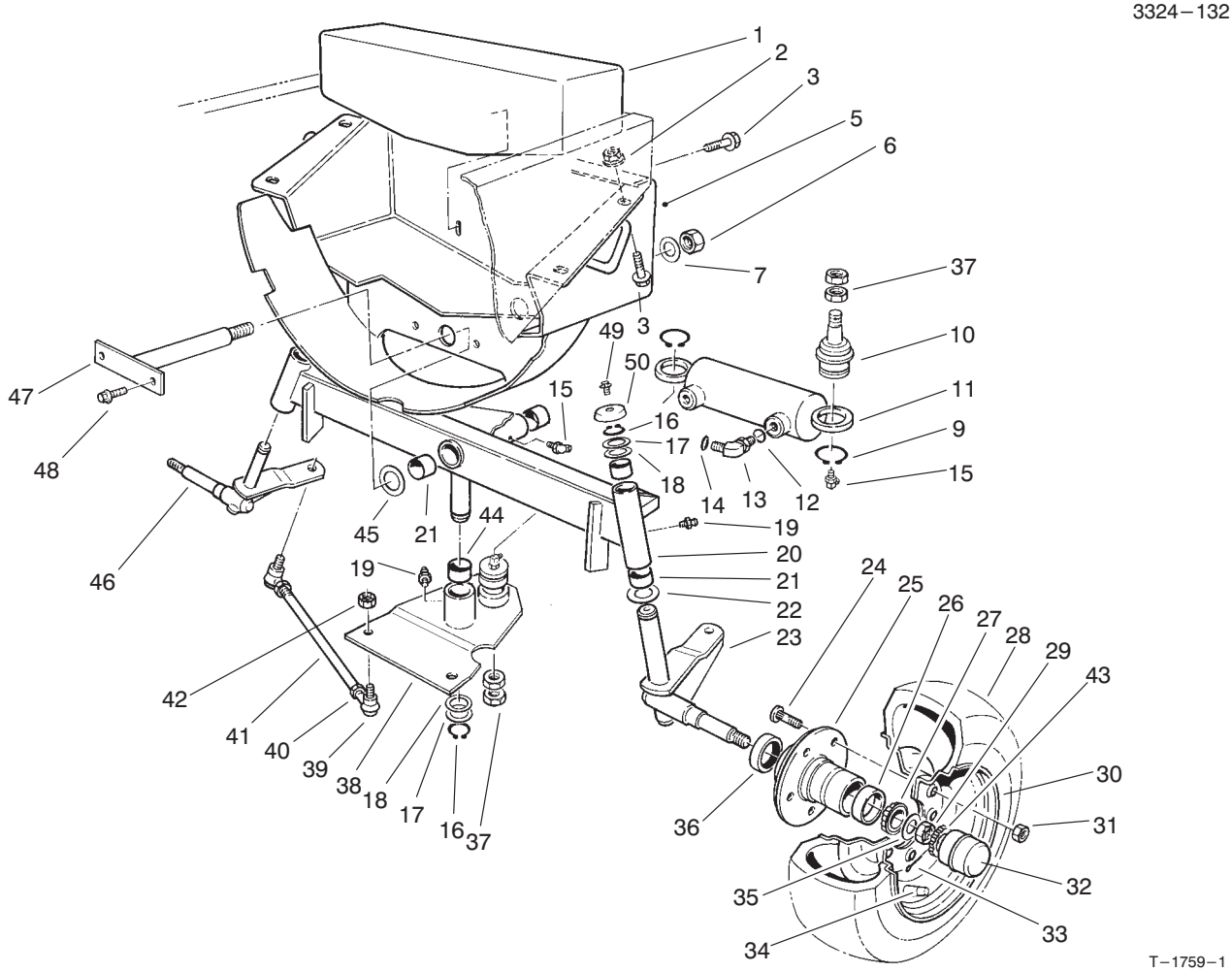

T–0421–6

# Brake Assembly

| Ref. No. | Part No. | Description | No. Used |
|---|---|---|---|
| 1 | 28–0650 | Flanged Axle Shaft | 2 |
| 2 | 92–1774 | Oil Seal | 2 |
| 3 | 21–8180 | Bearing | 2 |
| 4 | 24–9180 | Strut & Lever Parking Brake | 2 |
| 5 | 21–9450 | Dust Shield | 2 |
| 6 | 43–6810 | Torque–Spider | 2 |
| 7 | 21–9430 | Spring–Shoe Return RH | 2 |
| 8 | 28–0670 | Oil Seal | 2 |
| 9 | 84–8600 | Asm–Shoe & Lining (Set of 4) | 1 |
| 10 | 21–9460 | Retainer–Brake Lever | 4 |
| 11 | 242–34 | Axle Flange Stud | 10 |

| Ref. No. | Part No. | Description | No. Used |
|---|---|---|---|
| 12 | 21–8360 | Clip–Retaining | 2 |
| 13 | 28–0680 | Drum–Brake | 2 |
| 14 | 21–9440 | Spring–Adjusting Screw | 2 |
| 15 | 21–9390 | Socket–Adjusting Screw | 2 |
| 16 | 21–9370 | Screw–Adjusting | 2 |
| 17 | 21–9380 | Nut–Pivot | 2 |
| 18 | 94–6935 | Nut–Lock | 8 |
| 19 | 21–9420 | Spring–Shoe Return LH | 2 |
| 21 | 94–6934 | Screw–Socket Hd. | 8 |
| 22 | 24–8840 | Ring–Wheel Bearing | 2 |
| 23 | 94–6936 | Washer | 8 |
| * | 92–8775 | Gasket Kit–Liquid | 2 |

*Not Illustrated

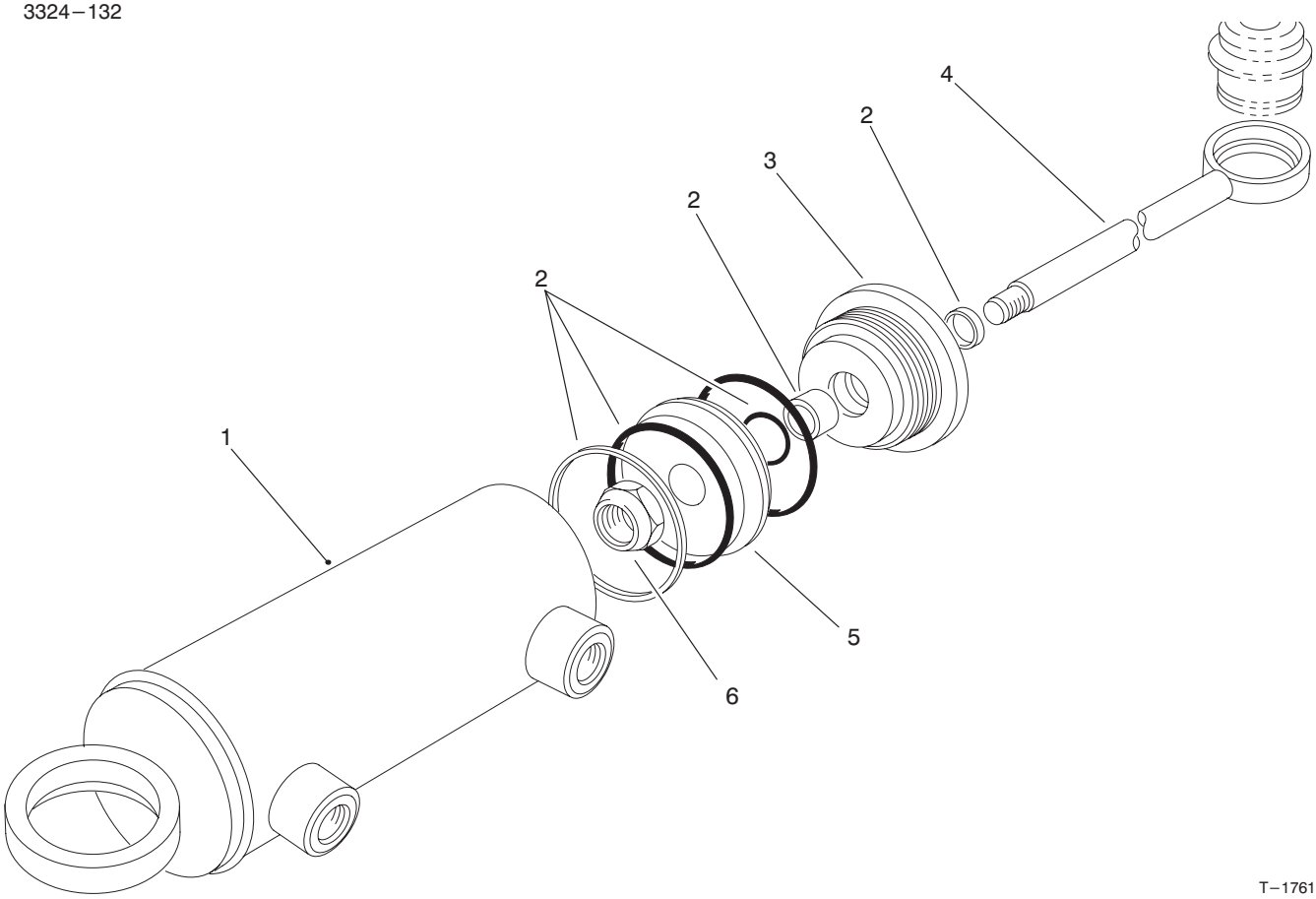



# Rear Wheel & Axle Assembly

| Ref. No. | Part No. | Description | No. Used |
|---|---|---|---|
| 1 | 98-3869-01 | Weight−Axle Rear | 1 |
| 2 | 32128−23 | Nut−Lock, Flange | 4 |
| 3 | 3234−32 | Screw−HHF | 6 |
| 5 | 92−7841 | Support−Axle Rear | 1 |
| 6 | 32146−20 | Nut−Lock | 1 |
| 7 | 71−4540 | Washer−Thrust | 1 |
| 9 | 32151−104 | Ring−Retaining | 2 |
| 10 | 92−5838 | Ball Joint | 2 |
| 11 | 92−7828 | Cylinder−Hydraulic | 1 |
| 12 | 237−78 | O−Ring | 1 |
| 13 | 340−54 | Fitting−45° | 1 |
| 14 | 237−22 | O−Ring | 1 |
| 15 | 302−11 | Fitting | 3 |
| 16 | 32151−36 | Ring−Retaining | 3 |
| 17 | 5−1226 | Washer | A/R |
| 18 | 10−8110 | Washer | 3 |
| 19 | 302−5 | Fitting | 3 |
| 20 | 100−6566 | Axle−Rear (Inc. Ref. #21) | 1 |
| 21 | 67−1750 | Bushing−Axle | 6 |
| 22 | 256−121 | Bushing−Thrust | 2 |
| 23 | 93−3198 | Asm−Spindle LH | 1 |
| 24 | 10−6830 | Stud−Drive | 10 |
| 25 | 21−2820 | Hub−Wheel (Incl. Ref. #24 & 26) | 2 |
| 26 | 254−72 | Cup−Bearing | 4 |
| 27 | 254−94 | Cone−Bearing | 4 |
| 28 | 231−105 | Tire | 2 |

| Ref. No. | Part No. | Description | No. Used |
|---|---|---|---|
| 29 | 3220−7 | Nut−Jam | 2 |
| 30 | 217−106 | Wheel | 2 |
| 31 | 242−50 | Nut−Wheel | 10 |
| 32 | 241−119 | Cap−Dust | 2 |
| 33 | 3272−13 | Pin−Cotter | 2 |
| 34 | 232−31 | Stem−Valve w/Cap | 2 |
| 35 | 93−0309 | Washer−Tab | 2 |
| 36 | 253−129 | Closure | 2 |
| 37 | 3220−6 | Nut−Jam | 4 |
| 38 | 92−7821 | Pivot−Steering (Incl. Ref. #44) | 1 |
| 39 | 21−0140 | Asm−Socket RH (Inc. Ref. #42) | 2 |
| * | 21−0150 | Asm−Socket LH (Inc. Ref. #42) | 2 |
| 40 | 3220−5 | Nut−Jam RH Thread | 2 |
| * | 3220−12 | Nut−Jam LH Thread | 2 |
| 41 | 21−2000 | Rod−Tie | 2 |
| 42 | 3220−3 | Nut−Jam | 8 |
| 43 | 93−0307 | Retainer−Nut, Lock | 2 |
| 44 | 256−242 | Bushing | 2 |
| 45 | 56−2460 | Washer | A/R |
| 46 | 93−3199 | Asm−Spindle RH | 1 |
| 47 | 92−7843 | Pin−Axle Rear | 1 |
| 48 | 32144−14 | Screw−TAP | 2 |
| 49 | 3234−13 | Screw | 2 |
| 50 | 66−2990 | Cup−Spindle | 2 |

*Not Illustrated

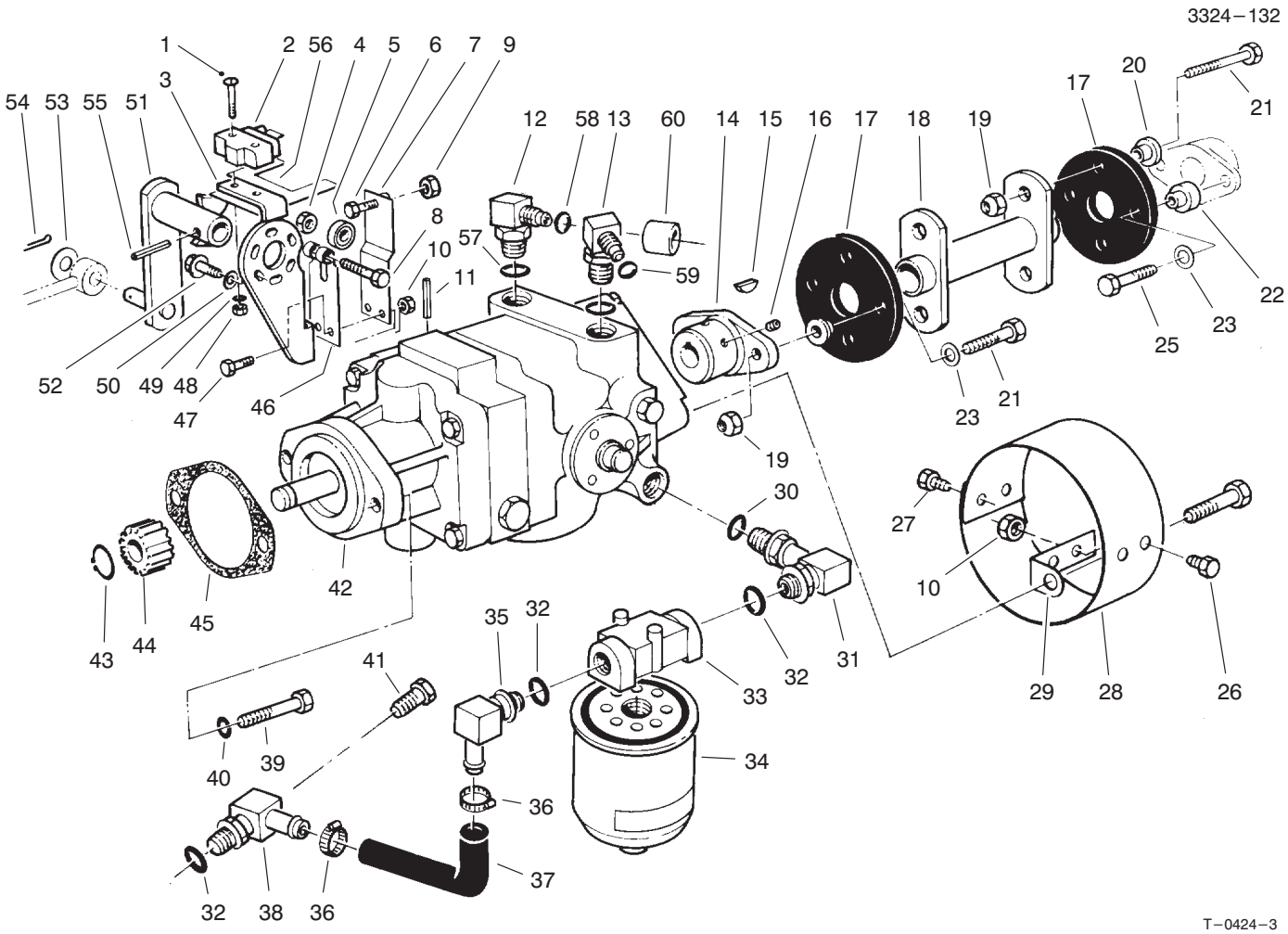



T−1761−2

# Hydraulic Steering Cylinder NO. 92−7828

| Ref. No. | Part No. | Description | No. Used |
|---|---|---|---|
| 1 | | Asm−Tube | 1 |
| 2 | 92−6593 | Seal Kit | 1 |
| 3 | 92−6588 | Gland | 1 |
| 4 | | Asm−Piston Rod | 1 |

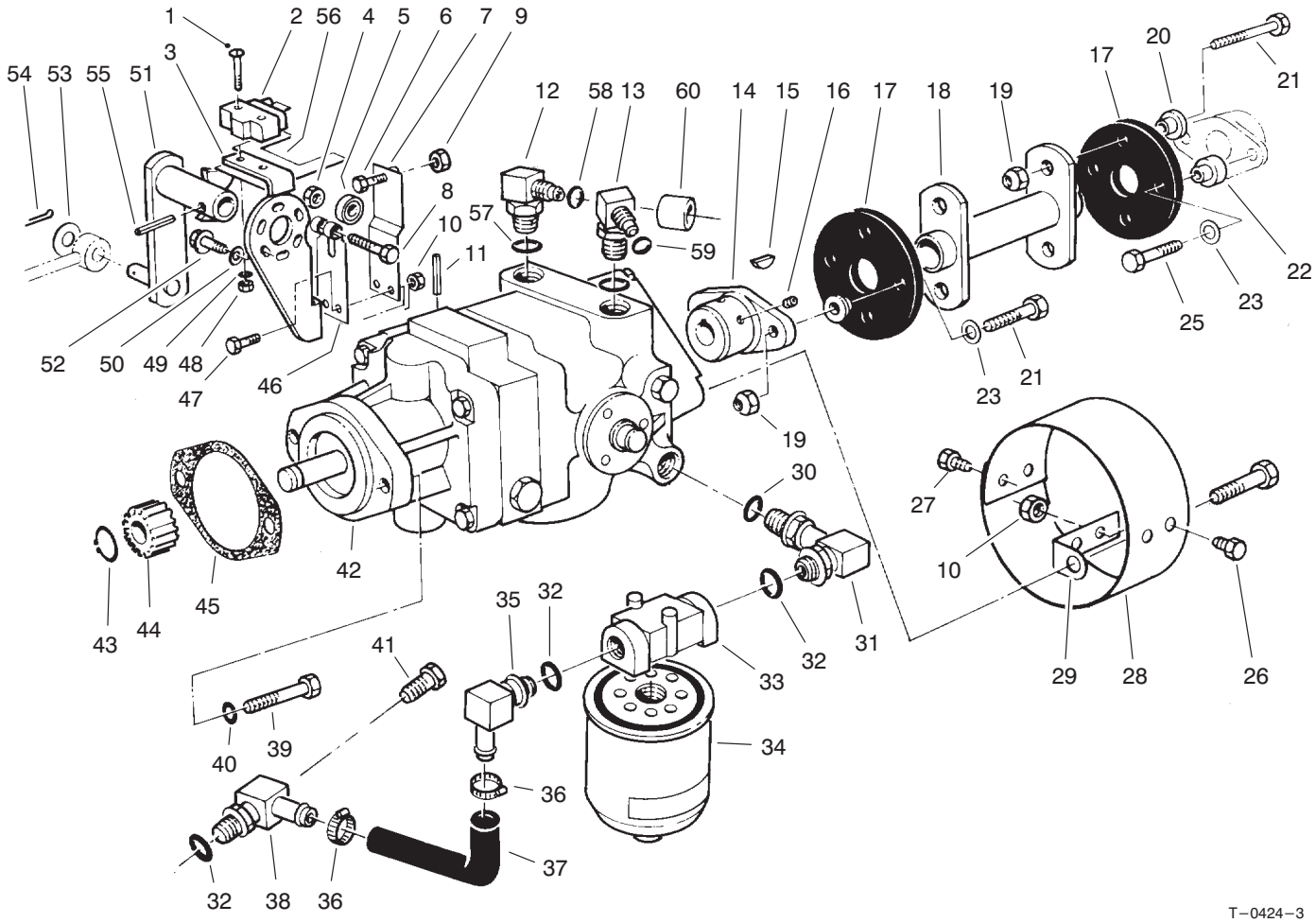
| Ref. No. | Part No. | Description | No. Used |
|---|---|---|---|
| 5 | 66−1940 | Piston | 1 |
| 6 | 66−1930 | Nut−Lock | 1 |
| * | 92−7828 | Cylinder−Hydraulic (Incl. Ref. #1−6) | 1 |




# Hydraulic Transmission Assembly

| Ref. No. | Part No. | Description | No. Used |
|---|---|---|---|
| 1 | 3249–11 | Screw–Round Hd. Mach. | 2 |
| 2 | 29–6163 | Micro Switch | 1 |
| 3 | 29–6120 | Pump Plate | 1 |
| 4 | 3296–29 | Nut–Lock | 1 |
| 5 | 251–259 | Ball Bearing | 1 |
| 6 | 3210–7 | Screw–HH | 1 |
| 7 | 29–6170 | Extended Leaf Spring | 1 |
| 8 | 322–17 | Screw–HH | 1 |
| 9 | 3219–2 | Nut–Hex | 1 |
| 10 | 3296–42 | Nut–Lock | 6 |
| 11 | 32121–6 | Roll Pin | 1 |
| 12 | 340–77 | Elbow | 1 |
| 13 | 340–99 | Elbow | 1 |
| 14 | 33–4380 | Pump Hub | 1 |
| 15 | 3257–32 | Woodruff Key | 1 |
| 16 | 3241–5 | Square Hd. Set Screw | 2 |
| 17 | 44–2230 | Rubber Coupling | 2 |
| 18 | 46–6390 | Drive Coupling | 1 |
| 19 | 32152–1 | Nut–Lock | 8 |
| 20 | 27–6600 | Spacer Rubber Coupling | 6 |
| 21 | 322–6 | Screw–HH | 6 |
| 22 | 27–6590 | Spacer Rubber Coupling | 2 |
| 23 | 3256–3 | Washer–Flat | 4 |
| 25 | 322–8 | Screw–HH | 2 |
| 26 | 321–2 | Screw–HH | 2 |
| 27 | 321–4 | Screw–HH | 2 |

| Ref. No. | Part No. | Description | No. Used |
|---|---|---|---|
| 28 | 54–9300 | Cover | 1 |
| 29 | 54–9290 | Bracket | 2 |
| 30 | 237–80 | O–Ring | 1 |
| 31 | 68–8660 | Elbow | 1 |
| 32 | 237–81 | O–Ring | 3 |
| 33 | 68–8990 | Head–Filter | 1 |
| 34 | 23–9740 | Oil Filter | 1 |
| 35 | 353–987 | Elbow | 1 |
| 36 | 2412–34 | Clamp–Hose | 2 |
| 37 | 68–9650 | Hose–Axle | 1 |
| 38 | 70–2620 | Elbow–90° | 1 |
| 39 | 323–7 | Screw–HH | 2 |
| 40 | 3253–21 | Washer–Lock | 2 |
| 41 | 353–508 | Plug–Drain | 1 |
| 42 | 92–8947 | Transmission–Inline | 1 |
| 43 | 32120–72 | Ring–Retaining External | 1 |
| 44 | 86–7220 | Gear–Transmission Output | 1 |
| 45 | 41–8760 | Gasket–Transmission | 1 |
| 46 | 29–6150 | Leaf Spring | 1 |
| 47 | 321–6 | Screw–HH | 2 |
| 48 | 3217–16 | Nut | 2 |
| 49 | 3254–9 | Washer–Lock | 2 |
| 50 | 3255–7 | Washer–Lock | 3 |
| 51 | 28–9570 | Pump Lever | 1 |
| 52 | 11–9760 | Screw–TAP | 3 |
| 53 | 3256–6 | Washer–Flat | 1 |

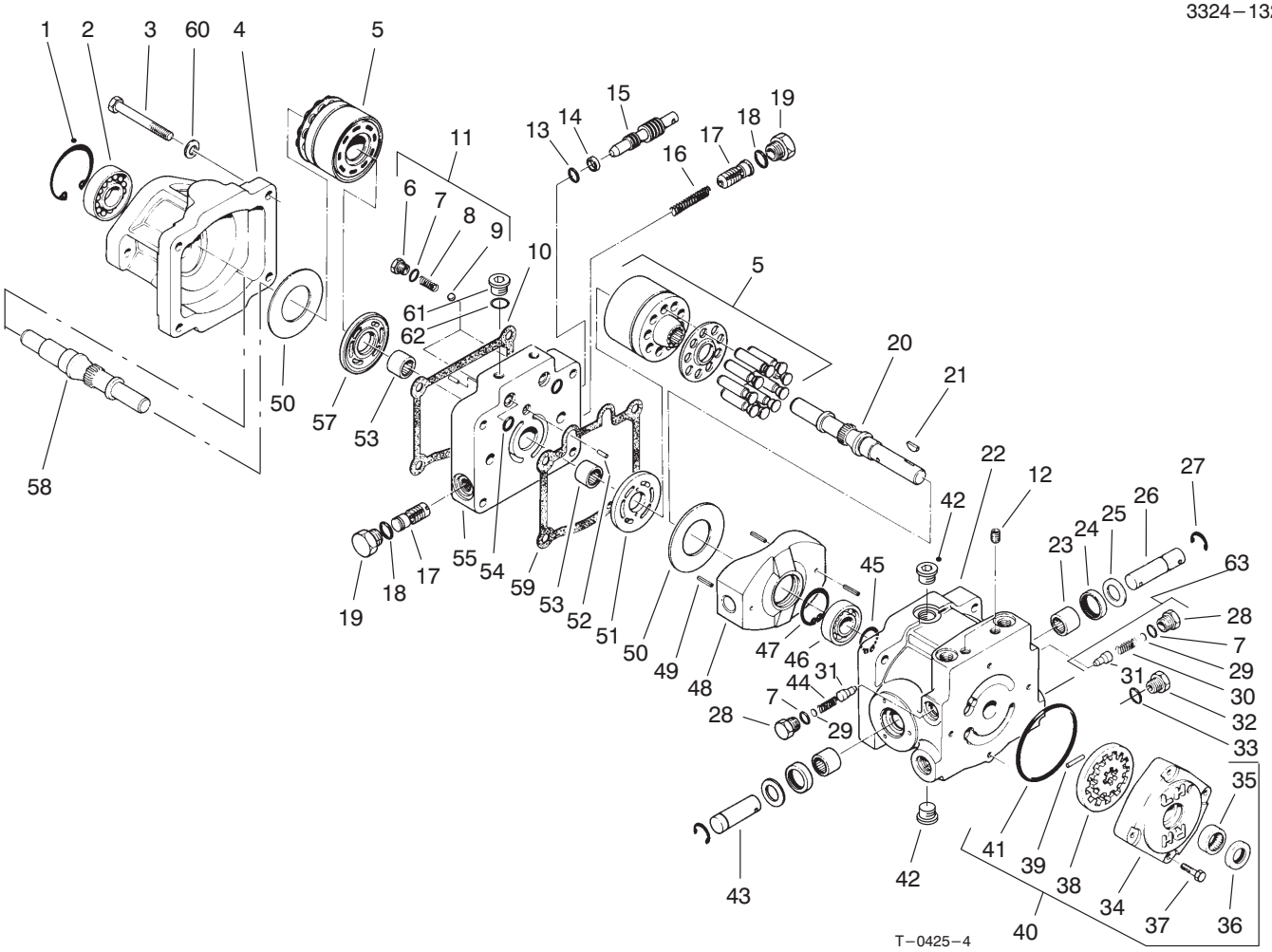



# Hydraulic Transmission Assembly (Continued)

| Ref. No. | Part No. | Description | No. Used |
|---|---|---|---|
| 54 | 3272−10 | Cotter Pin | 1 |
| 55 | 32121−24 | Roll Pin | 1 |
| 56 | 46−8810 | Stop−Leaf Spring | 1 |
| 57 | 237−42 | O−Ring | 2 |
| 58 | 237−22 | O−Ring | 1 |

| Ref. No. | Part No. | Description | No. Used |
|---|---|---|---|
| 59 | 237−30 | O−Ring | 1 |
| 60 | 38−3400 | Guard−Rubber | 1 |
| * | 95−3093 | Kit−400 Hour Filter (Incl. Ref. #34) | 1 |

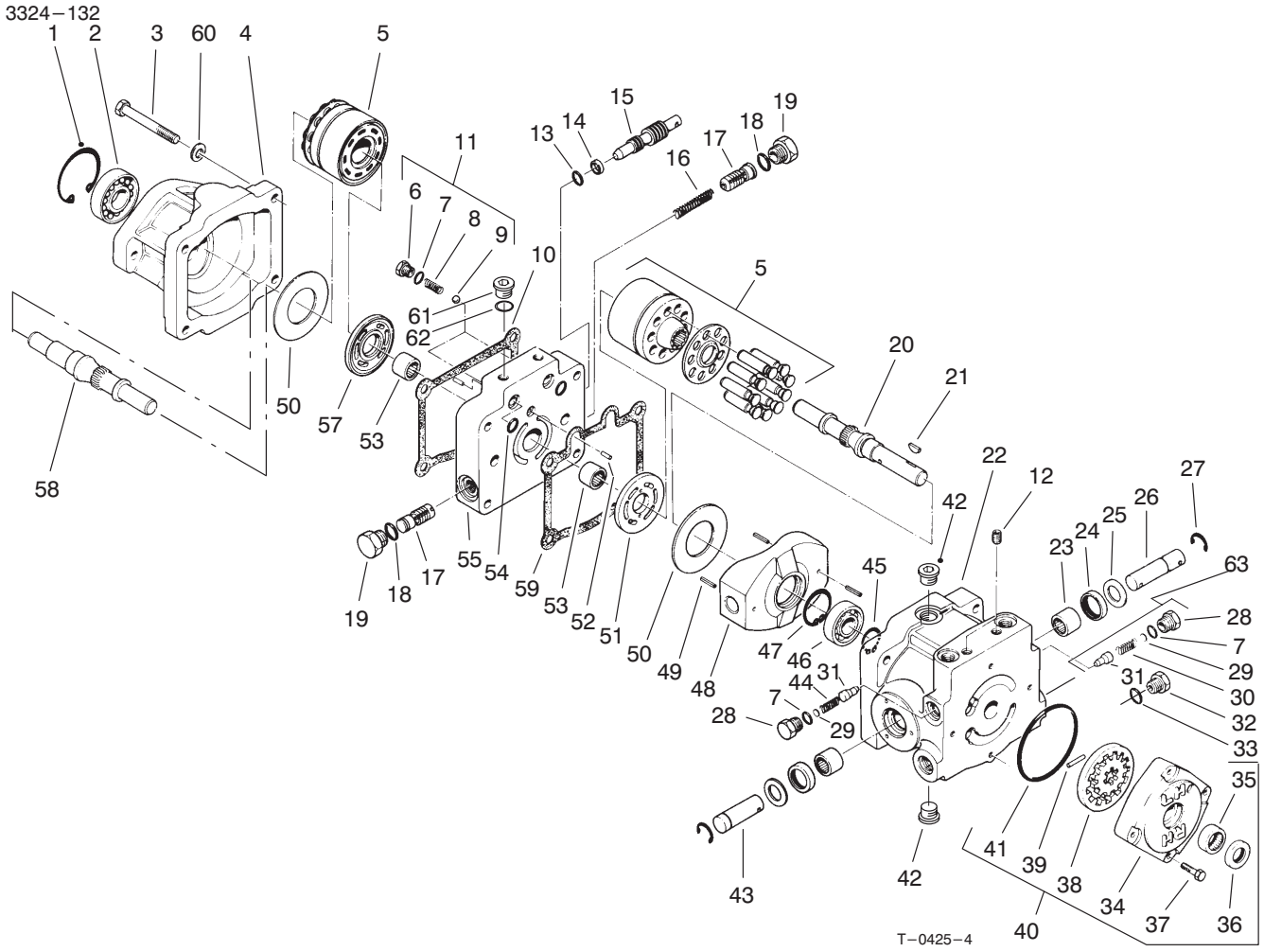
* Not Illustrated




# Transmission Assembly No. 92−8947

| Ref. No. | Part No. | Description | No. Used |
|---|---|---|---|
| 1 | 32120−8 | Retaining Ring | 1 |
| 2 | 72−3750 | Roller Bearing | 1 |
| 3 | 323−56 | Screw−HH | 4 |
| 4 | 67−9080 | Motor Housing | 1 |
| 5 | 48−1800 | Kit−Cylinder Block | 2 |
| 6 | 25−2650 | Check Valve Plug | 2 |
| 7 | 237−86 | O−Ring | 4 |
| 8 | 25−2640 | Valve Spring | 2 |
| 9 | 25−2490 | Ball | 2 |
| 10 | 67−9100 | Gasket | 1 |
| 12 | 285−17 | Pipe Plug | 2 |
| 13 | 237−22 | O−Ring | 1 |
| 14 | 25−2630 | Back Up Ring | 1 |
| 15 | 88−8220 | By Pass Valve | 1 |
| 16 | 25−2610 | Accel. Valve Spring | 1 |
| 17 | 25−2410 | Asm−Accel. Valve | 2 |
| 18 | 76−1900 | O−Ring | 2 |
| 19 | 353−550 | Plug−Hex. Hd. | 2 |
| 20 | 67−8020 | Pump Shaft | 1 |
| 21 | 3257−32 | Woodruff Key | 1 |
| 22 | 54−7890 | Pump Housing (Incl. Ref. #12 & 23−25) | 1 |
| 23 | 252−82 | Needle Bearing | 2 |
| 24 | 25−3210 | Lip Seal | 2 |
| 25 | 25−2510 | Washer−Flat | 2 |
| 26 | 25−2580 | Trunnion Shaft | 1 |

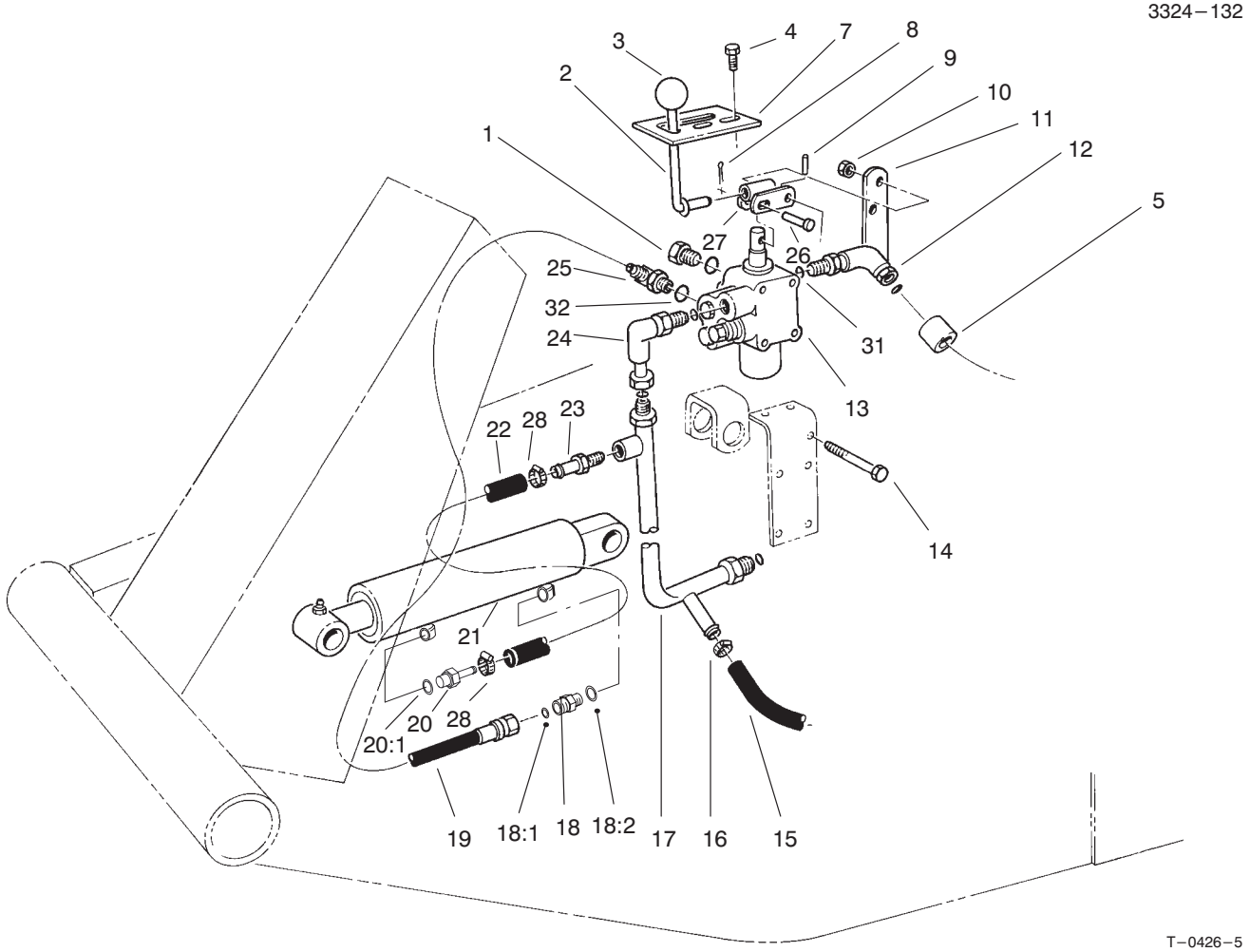
| Ref. No. | Part No. | Description | No. Used |
|---|---|---|---|
| 27 | 32151−46 | Retaining Ring | 2 |
| 28 | 25−2460 | Plug−HH | 2 |
| 29 | 25−2470 | Shim Pack | 2 |
| 30 | 25−2570 | Valve Spring | 1 |
| 31 | 83−7260 | Relief Valve Cone | 2 |
| 32 | 353−551 | Plug−HH | 1 |
| 33 | 237−80 | O−Ring | 1 |
| 34 | 25−2550 | Charge Pump Housing | 1 |
| 35 | 67−8050 | Needle Bearing | 1 |
| 36 | 93−4133 | Lip Seal | 1 |
| 37 | 322−4 | Screw−HH | 4 |
| 38 | 25−2680 | Asm−Gerotor | 1 |
| 39 | 25−2530 | Headless Straight Pin | 1 |
| 40 | 25−3190 | Charge Pump (Incl. Ref. #34−39 & 41) | 1 |
| 41 | 237−95 | O−Ring | 1 |
| 42 | 67−9090 | Plug | 2 |
| 43 | 25−2500 | Trunnion Shaft | 1 |
| 44 | 25−2480 | Valve Spring | 1 |
| 45 | 32120−15 | Retaining Ring | 1 |
| 46 | 251−8 | Ball Bearing | 1 |
| 47 | 32120−11 | Retaining Ring | 1 |
| 48 | 25−2450 | Variable Swashplate | 1 |
| 49 | 32121−91 | Coil Spring Pin | 3 |
| 50 | 25−2380 | Thrust Plate | 2 |
| 51 | 25−2440 | Pump Valve Plate | 1 |




# Transmission Assembly No. 92−8947 (Continued)

| Ref. No. | Part No. | Description | No. Used |
|---|---|---|---|
| 52 | 25−2430 | Dowel Pin | 2 |
| 53 | 46−8400 | Needle Bearing | 2 |
| 54 | 93−4132 | O−Ring | 2 |
| 55 | 92−8918 | Center Section | 1 |
| 57 | 25−2390 | Motor Valve Plate | 1 |
| 58 | 46−8410 | Motor Shaft | 1 |
| 59 | 25−2400 | Gasket | 1 |

| Ref. No. | Part No. | Description | No. Used |
|---|---|---|---|
| 60 | 93−0312 | Washer | 4 |
| 61 | 92−8776 | Plug (Incl. Ref. #62) | 4 |
| 62 | 92−8777 | O−Ring | 2 |
| 63 | 49−8520 | Kit−Relief, Implement (Incl. Ref. #7 & 28−31) | 1 |



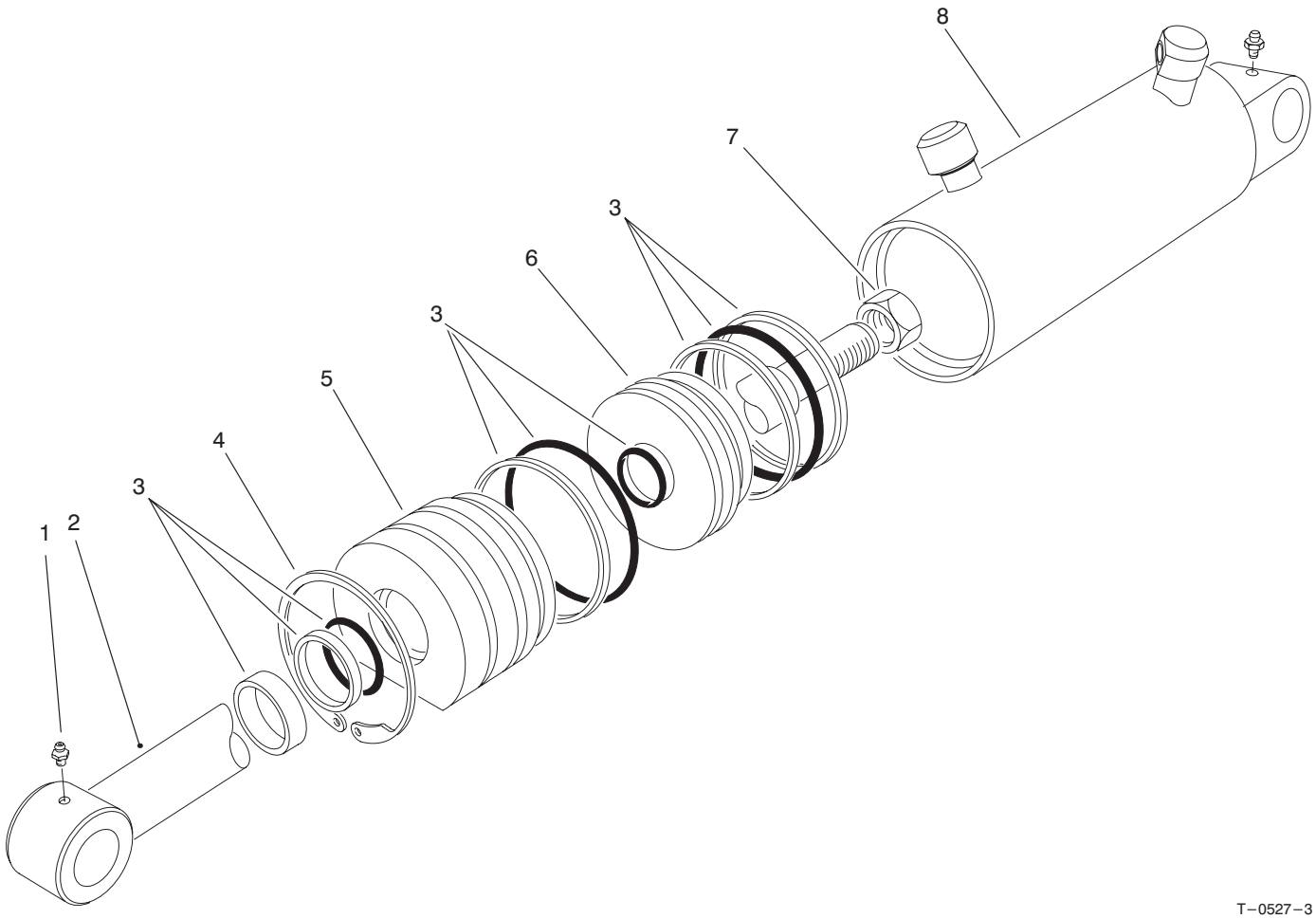

T−0426−5

# Valve & Cylinder Assembly

| Ref. No. | Part No. | Description | No. Used |
|---|---|---|---|
| 1 | 353−512 | Plug | 1 |
| 2 | 21−8620 | Lever Valve | 1 |
| 3 | 233−21 | Knob | 1 |
| 4 | 32144−10 | Screw−TAP | 2 |
| 5 | 38−3400 | Guard−Rubber | 1 |
| 7 | 21−8640 | Latch Valve Lever | 1 |
| 8 | 3272−6 | Cotter Pin | 1 |
| 9 | 32121−73 | Pin Slotted Spring | 1 |
| 10 | 3296−42 | Nut−Lock | 5 |
| 11 | 21−9010 | Pivot Mount−Valve Lever | 1 |
| 12 | 340−99 | Fitting−90˚ Elbow | 1 |
| 13 | 43−1710 | Asm−Valve | 1 |
| 14 | 321−23 | Screw−HH | 5 |
| 15 | 63−8990 | Hose | 1 |
| 16 | 2412−36 | Clamp−Hose | 1 |
| 17 | 63−9260 | Manifold−Valve | 1 |
| 18 | 340−2 | Elbow 90˚ | 1 |

| Ref. No. | Part No. | Description | No. Used |
|---|---|---|---|
| 18:1 | 237−22 | O−Ring | 1 |
| 18:2 | 237−42 | O−Ring | 1 |
| 19 | 92−7833 | Hose−Valve to Cylinder | 1 |
| 20 | 95−8849 | Fitting−90˚ Barb | 1 |
| 20:1 | 237−78 | O−Ring | 1 |
| 21 | 100−6586 | Cylinder−Hydraulic | 1 |
| * | 100−6591 | Cylinder−Hydraulic (Optional) | 1 |
| 22 | 92−7834 | Hose | 1 |
| 23 | 304−73 | Fitting−Straight Barb | 1 |
| 24 | 340−110 | Elbow−90˚ | 1 |
| 25 | 340−97 | Fitting−90˚ | 1 |
| 26 | 283−17 | Pin | 1 |
| 27 | 21−8590 | Link −Valve Lever | 1 |
| 28 | 2412−108 | Clamp Hose | 2 |
| 31 | 237−42 | O−Ring | 2 |
| 32 | 237−78 | O−Ring | 2 |

*Not Illustrated

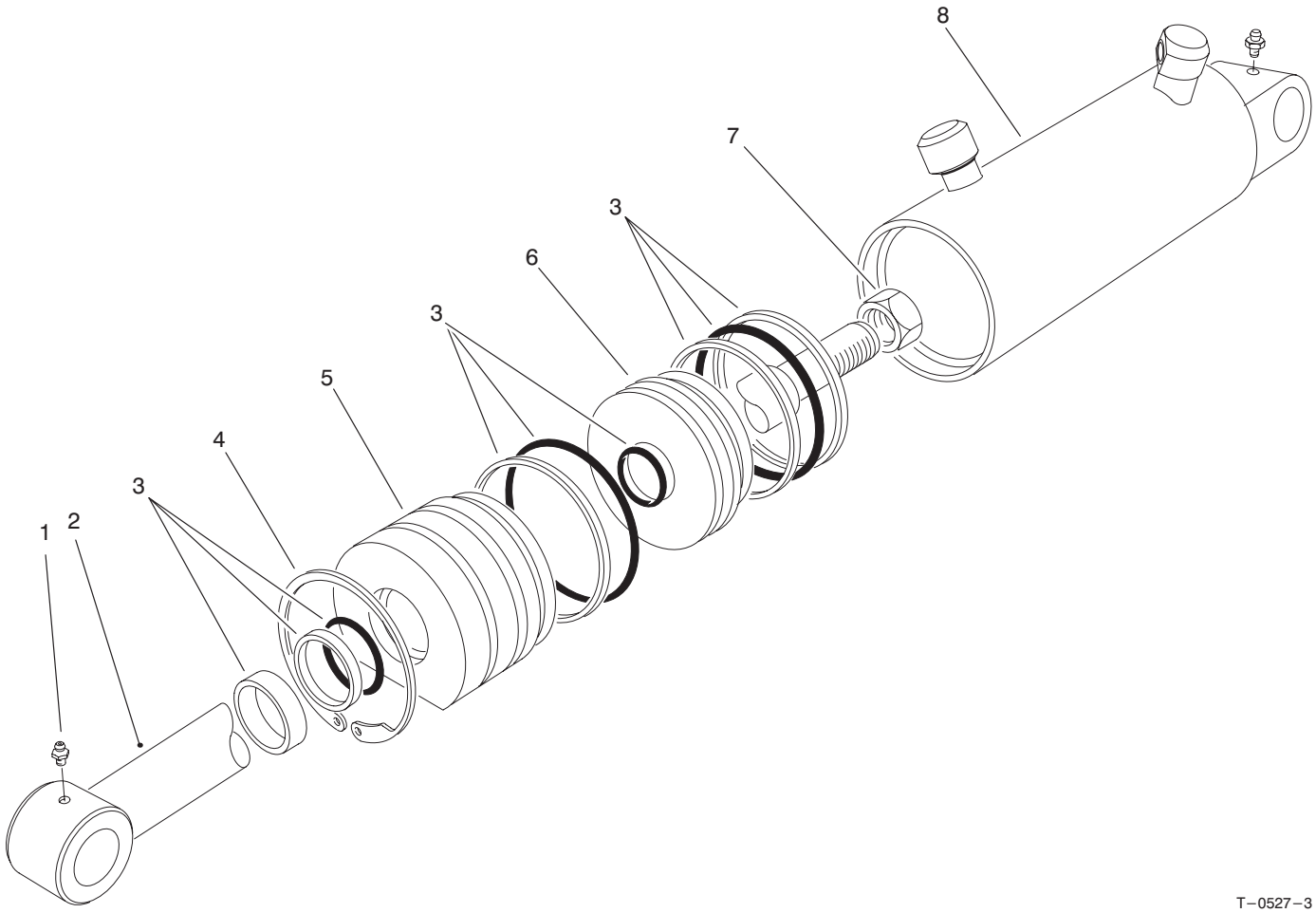



T–0527–3

# Hydraulic Lift Cylinder Assembly No. 100–6586 (2–1/2" Bore)

| Ref. No. | Part No. | Description | No. Used |
|---|---|---|---|
| 1 | 302–55 | Fitting–Grease | 2 |
| 2 | 61–4980 | Shaft–w/Clevis | 1 |
| 3 | 61–4960 | Repair Kit | 1 |
| 4 | 61–4990 | Ring–Retaining | 1 |
| 5 | 60–9780 | Head | 1 |
| 6 | 60–9770 | Piston | 1 |
| 7 | 60–9760 | Nut | 1 |
| *8 | | Barrel | 1 |

*Not available separately.

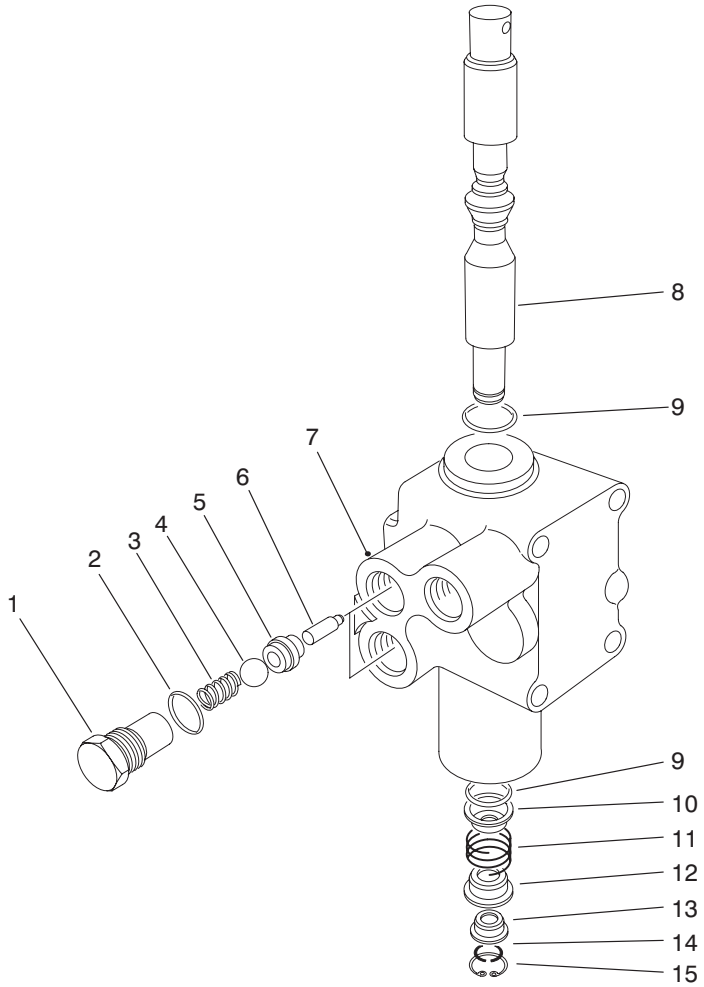



T−0527−3

# Hydraulic Lift Cylinder Assembly No. 100−6591 (3” Bore)

| Ref. No. | Part No. | Description | No. Used |
|---|---|---|---|
| 1 | 302−55 | Grease Fitting | 2 |
| 2 | 67−5480 | Shaft | 1 |
| 3 | 67−5500 | Repair Kit | 1 |
| 4 | 67−5470 | Ring−Retaining | 1 |
| 5 | 67−5460 | Head | 1 |
| 6 | 67−5450 | Piston | 1 |
| 7 | 60−9760 | Nut−Hex | 1 |
| *8 | | Barrel | 1 |

*Not available separately.

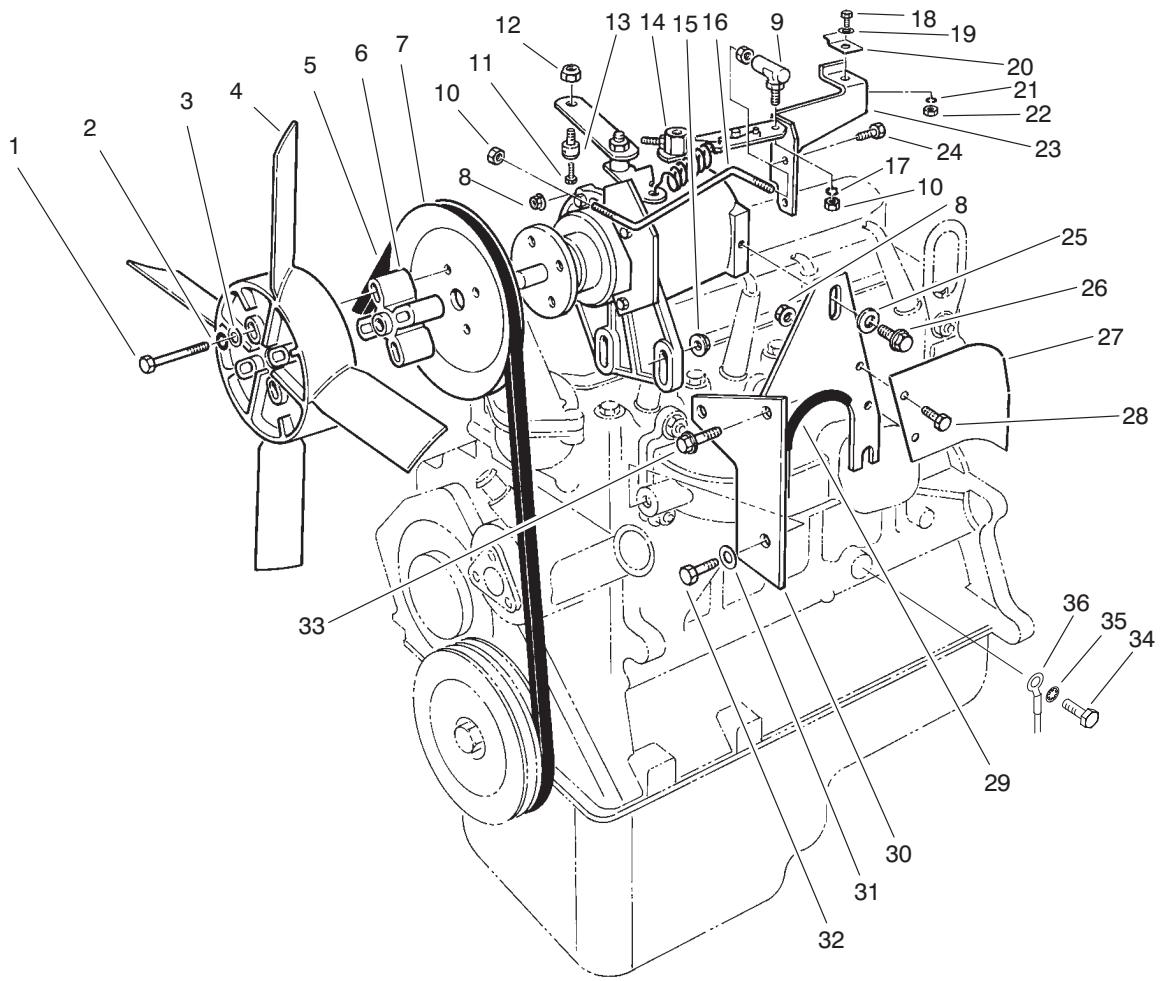



T−0428−1

# Control Valve Assembly No. 43−1710

| Ref. No. | Part No. | Description | No. Used |
|---|---|---|---|
| 1 | 22−8330 | Plug | 2 |
| 2 | 237−42 | O−Ring | 2 |
| 3 | 22−8340 | Spring | 2 |
| 4 | 22−8350 | Ball | 2 |
| 5 | 22−8370 | Seat−Check Valve | 2 |
| 6 | 22−8360 | Pin−Cam | 2 |
| 7 | 43−1730 | Body | 1 |
| 8 | 22−8420 | Spool | 1 |

| Ref. No. | Part No. | Description | No. Used |
|---|---|---|---|
| 9 | 22−8500 | O−Ring | 2 |
| 10 | 22−8380 | Spring Retainer | 1 |
| 11 | 22−8410 | Spring | 1 |
| 12 | 22−8390 | Spring Retainer | 1 |
| 13 | 22−8400 | Spacer Float | 1 |
| 14 | 22−8480 | Spring Ring Spool | 1 |
| 15 | 22−8490 | Snap Ring | 1 |




T−0921−2

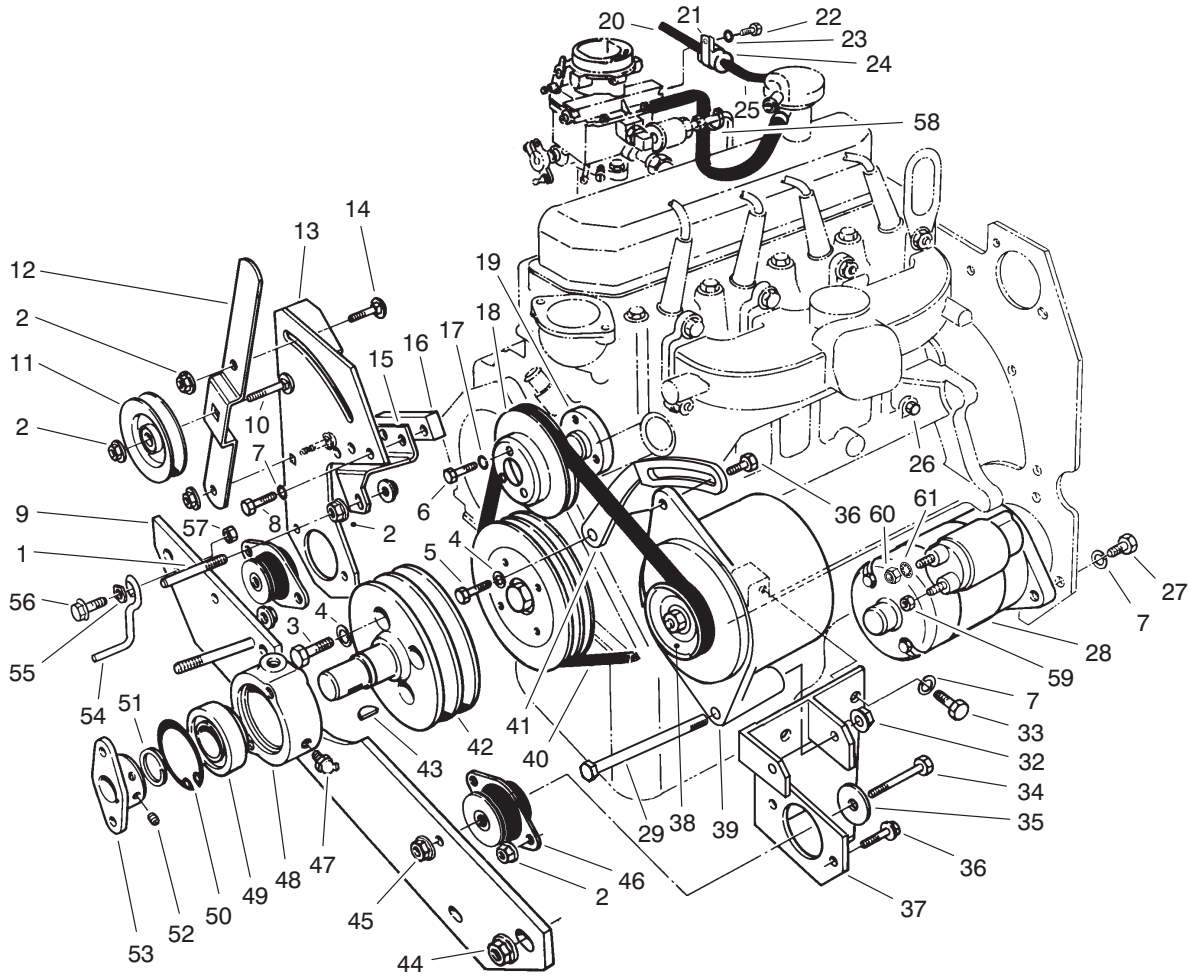
# Engine Assembly

| Ref. No. | Part No. | Description | No. Used |
|---|---|---|---|
| 1 | 322−12 | Screw−HH | 4 |
| 2 | 3253−4 | Washer−Lock | 4 |
| 3 | 3256−2 | Washer−Flat | 4 |
| †4 | E7JL-8600-AA | Fan | 1 |
| 5 | 67−8510 | Belt−Fan | 1 |
| 6 | 67−8390 | Spacer−Fan | 1 |
| 7 | 67−8380 | Pulley−Fan | 1 |
| 8 | 32128−33 | Nut−HHF | 4 |
| 9 | 21−5640 | Joint−Ball | 1 |
| 10 | 3219−14 | Nut−Hex | 3 |
| 11 | 25−8640 | Screw−Machine | 1 |
| 12 | 3296−20 | Nut−Lock | 1 |
| 13 | 43−3780 | Swivel−Cable Throttle | 1 |
| 14 | 67−8360 | Governor | 1 |
| 15 | 3290−357 | Nut−Lock, Flange | 2 |
| 16 | 67−8250 | Rod−Throttle | 1 |
| 17 | 3253−12 | Washer−Lock | 1 |
| 18 | 321−4 | Screw−HH | 1 |

| Ref. No. | Part No. | Description | No. Used |
|---|---|---|---|
| 19 | 3256−22 | Washer−Flat | 1 |
| 20 | 2412−31 | Clamp−Cable | 1 |
| 21 | 3253−3 | Washer−Lock | 1 |
| 22 | 3217−5 | Nut | 1 |
| 23 | 67−8240 | Bracket−Throttle | 1 |
| 24 | 321−6 | Screw−HH | 2 |
| 25 | 3256−56 | Washer−Flat | 1 |
| 26 | 3234−5 | Screw−HHF | 1 |
| 27 | 67−8920 | Shield−Heat | 1 |
| 28 | 321−39 | Screw−HH | 2 |
| 29 | 70−2040 | Guard−Trim | 1 |
| 30 | 67−9150 | Support−Governor | 1 |
| 31 | 33094−00 | Washer−Flat | 1 |
| 32 | 33114−020 | Screw−HH | 1 |
| 33 | 3234−11 | Screw−HHF | 2 |
| 34 | 33115−020 | Screw | 1 |
| 35 | 3254−3 | Washer−Lock | 1 |
| 36 | 18−2770 | Cable−Ground | 1 |

*Not Illustrated
†Obtain from your local Ford Power Products Dealer.

3324−132



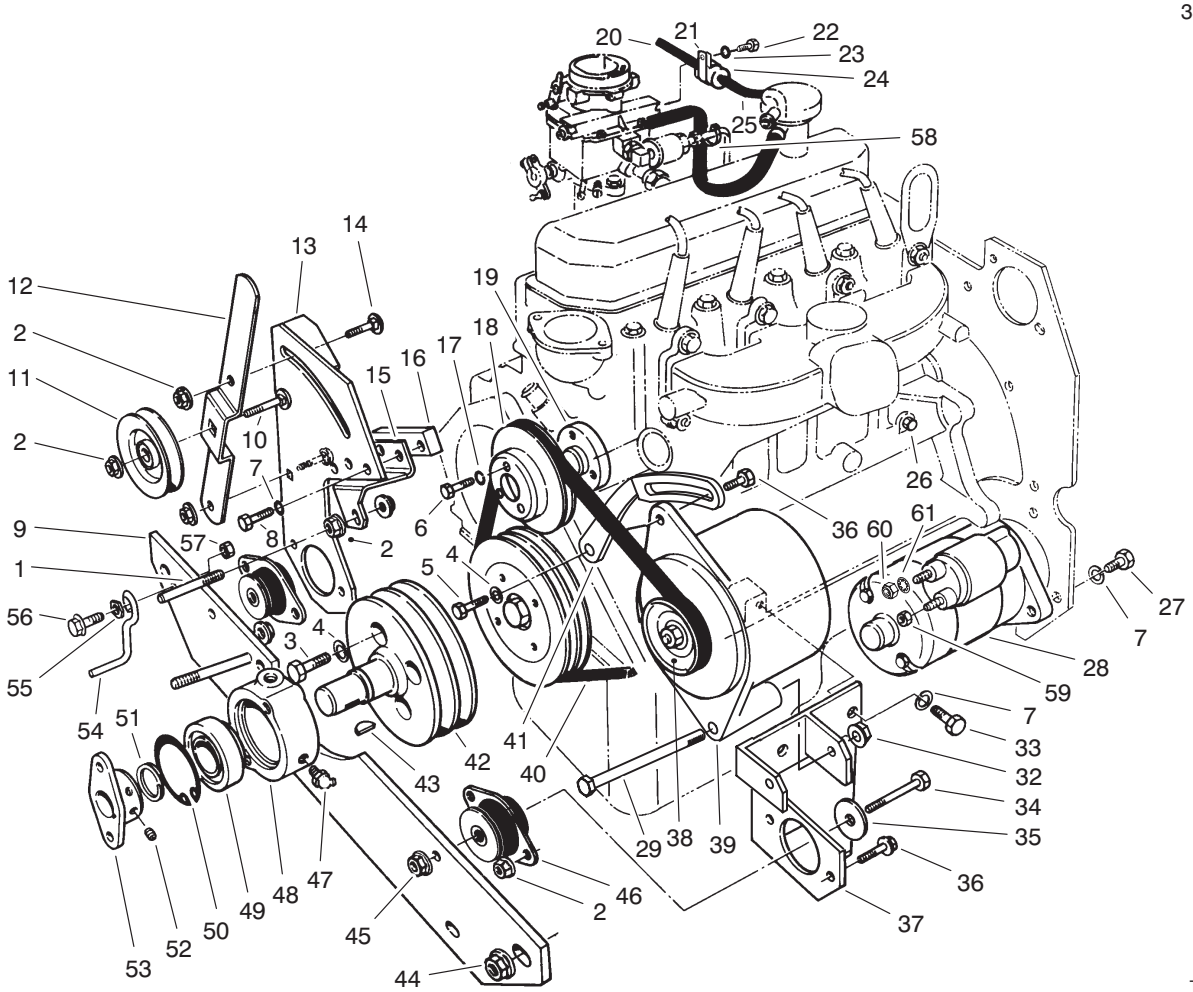

T−0922−2

# Engine Assembly

| Ref. No. | Part No. | Description | No. Used |
|---|---|---|---|
| 1 | 21−1820 | Stud−Retainer Belt | 3 |
| 2 | 3290−357 | Nut−Lock, Flange | 12 |
| 3 | 33114−045 | Screw−Metric | 4 |
| 4 | 42−9850 | Washer−Lock | 5 |
| 5 | 33114−030 | Screw−Metric | 1 |
| 6 | 33113−025 | Screw−Metric | 3 |
| 7 | 48−9590 | Washer−Lock | 8 |
| 8 | 48−7800 | Screw−Metric | 3 |
| 9 | 75−9900 | Support−Engine Front | 1 |
| 10 | 3231−28 | Bolt−Carriage | 1 |
| 11 | 63−8140 | Pulley−Idler | 1 |
| 12 | 67−8890 | Arm−Idler | 1 |
| 13 | 67−8310 | Mount−Engine Front RH | 1 |
| 14 | 3231−22 | Bolt−Carriage | 2 |
| 15 | 67−8350 | Bracket−Guide Belt | 1 |
| 16 | 67−8340 | Bar−Spacer | 1 |
| 17 | 43−5930 | Washer−Lock | 3 |
| †18 | | Pulley−Water Pump | 1 |
| 19 | 67−8910 | Spacer−Pulley | 1 |
| 20 | 70−1920 | Hose−Vacuum | 1 |
| †21 | 384007−S | Clamp−Valve | 1 |
| 22 | 3250−29 | Screw−PH | 1 |
| 23 | 3256−21 | Washer−Flat | 1 |
| †24 | D4FZ-9C369-A | Fuel Separator | 1 |

| Ref. No. | Part No. | Description | No. Used |
|---|---|---|---|
| 25 | 70−1910 | Hose−Vac. Advance | 1 |
| †26 | 353055−S7 | Plug−Water Drain | 1 |
| 27 | 33115−030 | Screw−Metric | 3 |
| †28 | 91AB-11000-JB | Starter | 1 |
| 29 | 3212−17 | Screw−HH | 1 |
| 32 | 3296−38 | Nut−Hex Flange | 1 |
| 33 | 33115−025 | Screw−Metric | 2 |
| 34 | 324−11 | Screw−HH | 2 |
| 35 | 53−9480 | Washer−Snubber | 2 |
| 36 | 3234−11 | Screw−Flange Lock | 5 |
| 37 | 93−7663 | Mount−Engine Front LH | 1 |
| 38 | D3JL-10A352-B | Pulley−Alternator | 1 |
| 39 | EZJL-10346-AB | Alternator | 1 |
| 40 | 92−9785 | Belt−Alternator | 1 |
| 41 | 93−8489 | Arm Adjust Alternator | 1 |
| 42 | 67−8460 | Pulley−Engine | 1 |
| 43 | 3257−33 | Key−Woodruff | 1 |
| 44 | 32128−23 | Nut−Lock, Flange | 2 |
| 45 | 32128−37 | Nut−Lock, Flange | 2 |
| 46 | 53−9680 | Mount−Engine | 2 |
| 47 | 302−10 | Fitting−Grease | 1 |
| 48 | 43−3720 | Collar Bearing | 1 |
| 49 | 251−252 | Bearing | 1 |
| 50 | 32120−22 | Ring−Retaining Int. | 1 |

†Obtain from your local Ford Power Products Dealer.

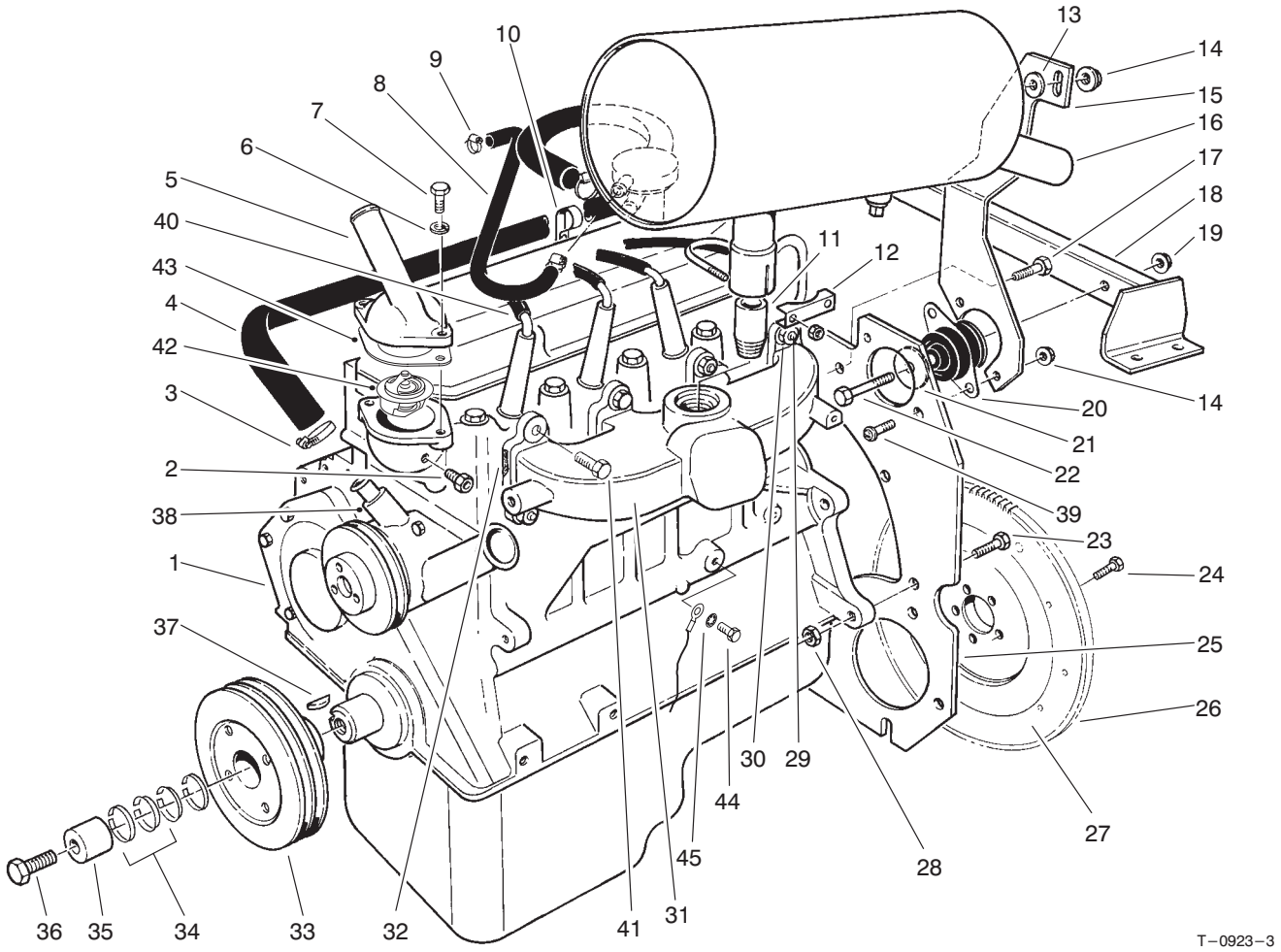



T−0922−2

# Engine Assembly (Continued)

| Ref. No. | Part No. | Description | No. Used |
|---|---|---|---|
| 51 | 32120−69 | Ring−Retaining Ext. | 1 |
| 52 | 3241−5 | Screw−Sq. Hd. Set | 2 |
| 53 | 27−1960 | Hub−Engine | 1 |
| 54 | 63−1400 | Rod−Belt | 1 |
| 55 | 3290−224 | Washer−Pyramidal | 1 |
| 56 | 3234−18 | Screw−HHF | 1 |

| Ref. No. | Part No. | Description | No. Used |
|---|---|---|---|
| 57 | 32153−2 | Nut−Lock | 1 |
| 58 | 3290−379 | Cable−Tie | A/R |
| 59 | 48−7890 | Nut | 1 |
| 60 | 33014−00 | Nut | 1 |
| 61 | 3254−2 | Washer−Lock | 1 |

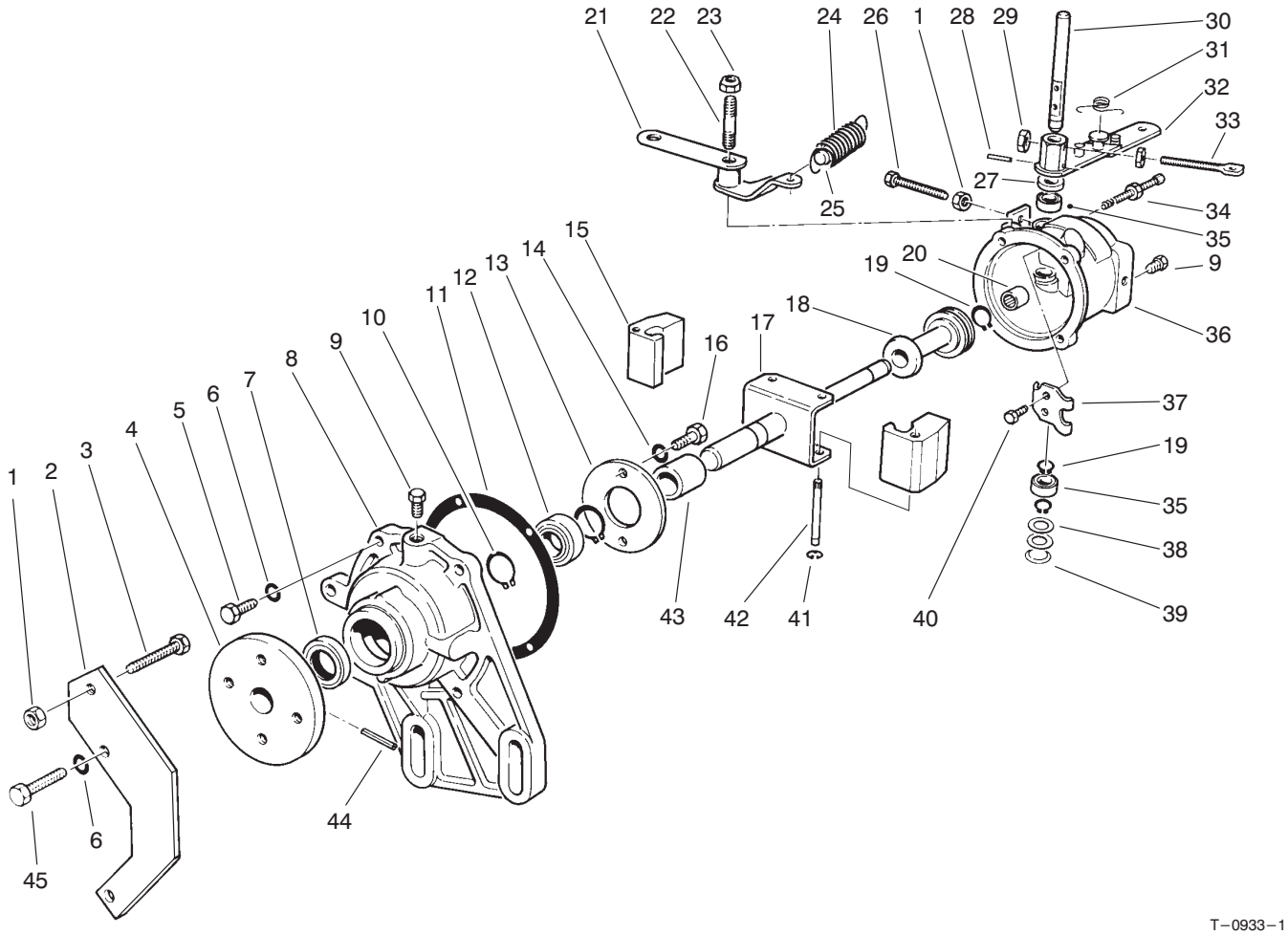



# Engine Assembly

| Ref. No. | Part No. | Description | No. Used |
|---|---|---|---|
| ‡1 | Model VSG-413 | Engine | |
| | | TYPE 6005A | 1 |
| 2 | 70−1690 | Adapter−Gauge Temp. | 1 |
| 3 | 2412−119 | Clamp−Hose | 2 |
| 4 | 70−1670 | Hose−Heater | 1 |
| 5 | 67−8940 | Connector−Outlet | 1 |
| †6 | E630173-S71 M | Washer−Lock | 2 |
| †7 | E6021 87−S72 | Screw−Cap | 2 |
| 8 | 70−2050 | Hose−Breather | 1 |
| 9 | 2412−108 | Clamp | 2 |
| 10 | 2412−39 | Clamp−R | 1 |
| 11 | 67−9130 | Pipe−Muffler | 1 |
| 12 | 2112−6 | Clamp−Muffler | 1 |
| 13 | 5−0652 | Spacer | 1 |
| 14 | 3290−357 | Nut−Lock, Flange | 5 |
| 15 | 67−8420 | Bracket−Muffler | 1 |
| 16 | 67−9120 | Muffler | 1 |
| †17 | N605799−S2 | Bolt | 2 |
| 18 | 67−8480 | Support−Engine Rear | 1 |
| 19 | 32128−37 | Nut−Lock, Flange | 2 |
| 20 | 53−9680 | Mount−Engine | 2 |
| 21 | 53−9480 | Washer−Snubber | 2 |
| 22 | 324−11 | Screw−HH | 2 |
| †23 | N800057−S2 | Bolt | 4 |

| Ref. No. | Part No. | Description | No. Used |
|---|---|---|---|
| †24 | D2RY−6379−A | Bolt | 6 |
| 25 | 67−8440 | Plate−Support Engine | 1 |
| †26 | D8RZ−6384−A | Ring Gear−Flywheel | 1 |
| †27 | 89BM-6375-BA | Asm−Flywheel | |
| | | (Incl. Ref. #26) | 1 |
| †28 | N620482−S2 | Nut | 4 |
| †29 | E805697−S76 | Stud | 6 |
| †30 | N620481−S2 | Nut | 6 |
| †31 | F5JL-9430-CA | Manifold−Exhaust | 1 |
| †32 | 89BM-9448-BA | Gasket−Manifold | 4 |
| †33 | E7JL-6A312-AA | Pulley | 1 |
| †34 | E7JL-6N300-AA | Locking Ring Set | 2 |
| †35 | E7JL-6378-AB | Compression Ring | 1 |
| †36 | E7JL-6K340-AA | Bolt | 1 |
| †37 | Dory-6B316-A | Key | 1 |
| †38 | 92BX8591−CA | Kit−Water Pump | |
| | | (Incl. Pulley & Gasket) | 1 |
| 39 | 3234−11 | Screw−HHF | 4 |
| 40 | 86−7921 | Cover−Spark Plug Wire | 4 |
| 41 | 33114−030 | Screw−HH | 2 |
| †42 | D4PZ−8575−A | Thermostat | 1 |
| †43 | D1FZ−8255−B | Gasket | 1 |
| 44 | 33115−020 | Screw−HH | 1 |
| 45 | 3254−3 | Washer−Lock | 1 |

†Obtain from your local Ford Power Products Dealer.
‡Note: Includes all Ford part numbers from all pages.

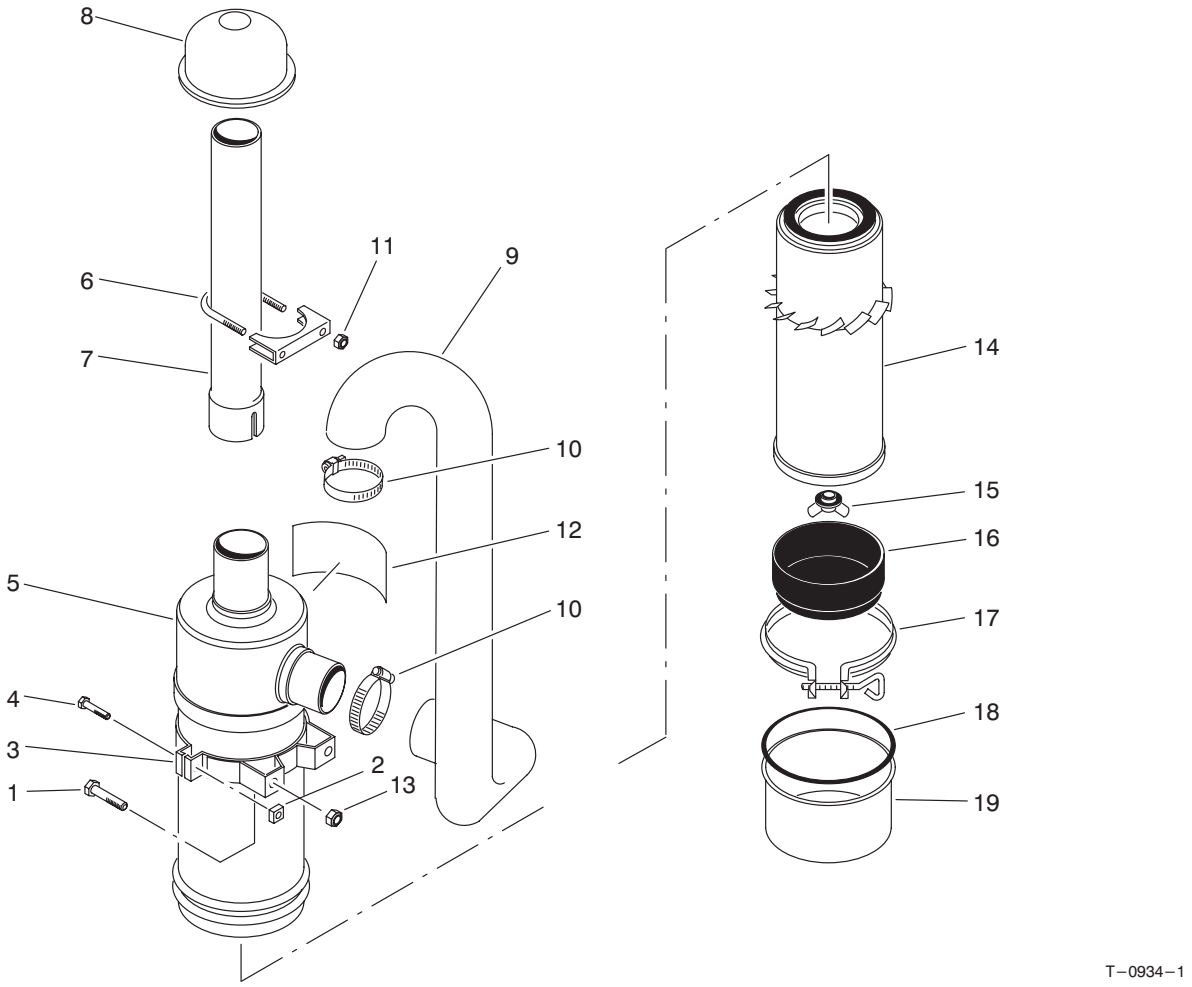



# Governor Assembly No. 67–8360

| Ref. No. | Part No. | Description | No. Used |
|---|---|---|---|
| 1 | 3219–1 | Nut | 2 |
| 2 | 70–2160 | Bracket–Speed Stop | 1 |
| 3 | 72–5920 | Screw | 1 |
| 4 | 67–8370 | Hub | 1 |
| 5 | 18–5620 | Screw | 2 |
| 6 | 18–5630 | Washer–Lock | 4 |
| 7 | 18–5580 | Seal–Oil Front | 1 |
| 8 | 70–2060 | Cover–Governor | 1 |
| 9 | 285–17 | Plug–Pipe | 2 |
| 10 | 18–5640 | Ring–Retaining | 2 |
| 11 | 18–5790 | Gasket | 1 |
| 12 | 70–2140 | Bearing–Front | 1 |
| 13 | 70–2130 | Clamp–Bearing to Cover | 1 |
| 14 | 18–5770 | Washer–Lock | 2 |
| 15 | 70–2150 | Flyweight | 2 |
| 16 | 329–3 | Screw–HH | 2 |
| 17 | 70–2110 | Main Shaft & Yoke | 1 |
| 18 | 70–2100 | Asm–Sleeve & Bearing | 1 |
| 19 | 18–5540 | Ring–Retaining | 3 |
| 20 | 72–5940 | Bearing–Needle | 1 |
| 21 | 70–2070 | Lever–Speed Adjusting | 1 |
| 22 | 70–2090 | Stud–Pivot Lever | 1 |
| 23 | 3296–5 | Nut–Lock | 1 |

| Ref. No. | Part No. | Description | No. Used |
|---|---|---|---|
| 24 | 72–5860 | Spring–Governor | 1 |
| 25 | 72–5850 | Pin–Force Idle | 1 |
| 26 | 72–5930 | Screw | 1 |
| 27 | 71–4780 | Seal–Oil Rocker Shaft | 1 |
| 28 | 18–5750 | Pin | 1 |
| 29 | 3219–2 | Nut | 2 |
| 30 | 72–5890 | Shaft–Rocker | 1 |
| 31 | 18–5410 | Spring–Torsion | 1 |
| 32 | 72–5880 | Asm–Throttle Lever (Incl. Ref. #31) | 1 |
| 33 | 72–5870 | Eyebolt | 1 |
| 34 | 72–5910 | Asm–Bumper Screw | 1 |
| 35 | 18–5450 | Bearing | 2 |
| 36 | 70–2080 | Body | 1 |
| 37 | 18–5520 | Lever–Rocker | 1 |
| 38 | 18–5440 | Spacer | 2 |
| 39 | 18–5430 | Plug–Expansion | 1 |
| 40 | 18–5530 | Screw & Lockwasher | 2 |
| 41 | 18–5670 | Retainer–Pin Pivot | 2 |
| 42 | 18–5660 | Pin–Pivot Flyweight | 2 |
| 43 | 70–2120 | Spacer | 1 |
| 44 | 32121–51 | Pin–Hub To Shaft | 1 |
| 45 | 71–4770 | Screw | 2 |

3324−132



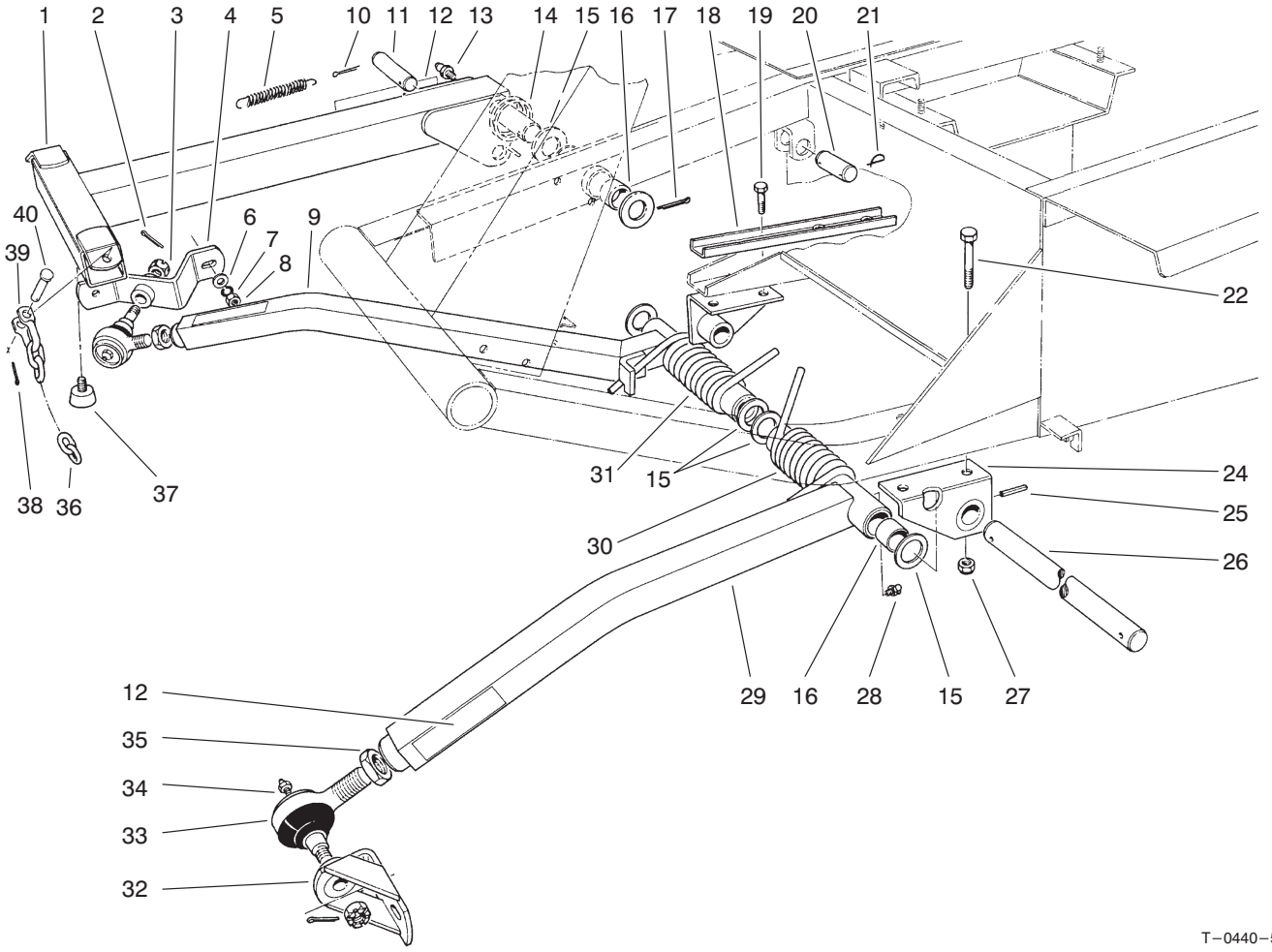

T−0934−1

# Air Cleaner Assembly

| Ref. No. | Part No. | Description | No. Used |
|---|---|---|---|
| 1 | 322−3 | Screw−HH | 4 |
| 2 | 32107−11 | Nut | 2 |
| 3 | 27−7170 | Asm−Band (Incl. Ref. #2 & 4) | 2 |
| 4 | 3258−19 | Round Hd. Machine Screw | 2 |
| 5 | 27−7100 | Asm−Air Cleaner (Incl. Ref. #12, 14−19) | 1 |
| 6 | 20−4840 | Muffler Clamp (Incl. Ref. #11) | 1 |
| 7 | 43−3810 | Tube Air Cleaner | 1 |
| 8 | 27−7180 | Asm−Cap, Air Inlet | 1 |
| 9 | 82−5590 | Hose−Air Cleaner | 1 |

| Ref. No. | Part No. | Description | No. Used |
|---|---|---|---|
| 10 | 2412−42 | Hose Clamp | 2 |
| 11 | 3217−6 | Nut | 2 |
| 12 | 27−7160 | Decal−Instructions | 1 |
| 13 | 32128−20 | Nut−Lock, Flange Hd. | 4 |
| 14 | 27−7110 | Asm−Element | 1 |
| 15 | 27−7120 | Asm−Nut & Gasket | 1 |
| 16 | 27−7140 | Skirt−Baffle | 1 |
| 17 | 27−7130 | Asm−Clamp | 1 |
| 18 | 80−3330 | Gasket | 1 |
| 19 | 27−7150 | Asm−Cup | 1 |
| * | 95−3093 | Kit−400 Hour Filter (Incl. Ref. #14) | 1 |

*Not Illustrated



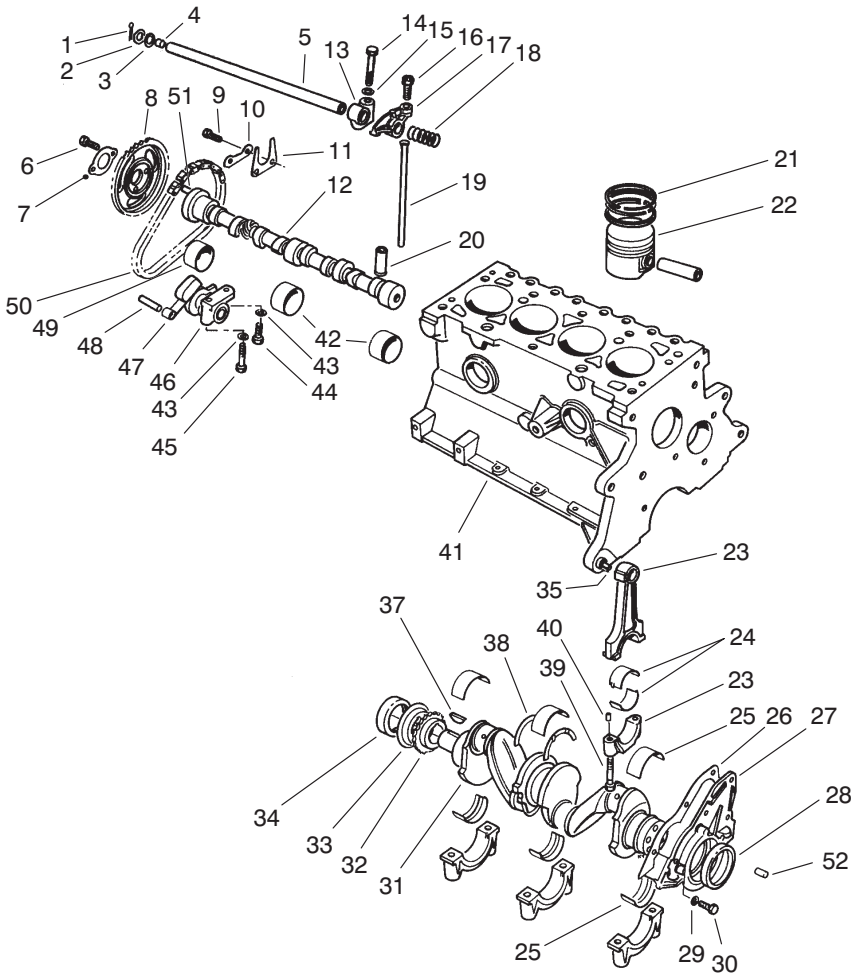

T−0440−5

# Push Arm Assembly

| Ref. No. | Part No. | Description | No. Used |
|---|---|---|---|
| 1 | 66−6370 | Lift Arm | 1 |
| 2 | 3272−11 | Cotter Pin | 2 |
| 3 | 32136−2 | Nut | 2 |
| 4 | 21−3020 | Ball Joint Mount | 1 |
| 5 | 21−1830 | Spring Tension | 1 |
| 6 | 3256−25 | Washer−Flat | 1 |
| 7 | 3253−6 | Washer−Lock | 2 |
| 8 | 3217−8 | Full Nut | 2 |
| 9 | 66−7150 | Push Arm RH (Incl. Ref. #16 & 28) | 1 |
| 10 | 3272−24 | Cotter Pin | 1 |
| 11 | 24−9510 | Pin | 1 |
| 12 | 55−4300 | Warning Decal | 3 |
| 13 | 302−5 | Grease Fitting | 1 |
| 14 | 46−8840 | Spring Lift Arm | 1 |
| 15 | 5−1754 | Washer | 6 |
| 16 | 256−126 | Bushing | 6 |
| 17 | 3272−33 | Cotter Pin | 1 |
| 18 | 23−1950 | Support Reinforcement | 1 |
| 19 | 324−4 | Screw−HH | 2 |
| 20 | 3−7292 | Pin | 1 |

| Ref. No. | Part No. | Description | No. Used |
|---|---|---|---|
| 21 | 5−3126 | Spring Pin | 3 |
| 22 | 324−12 | Screw−HH | 2 |
| 24 | 21−2860 | Push Arm Bracket | 2 |
| 25 | 32121−84 | Roll Pin | 2 |
| 26 | 21−2990 | Shaft Pivot | 1 |
| 27 | 32128−42 | Nut−Flange | 4 |
| 28 | 302−33 | Grease Fitting | 2 |
| 29 | 21−2960 | Push Arm LH (Incl. Ref. #16 & 28) | 1 |
| 30 | 21−2900 | Spring−Torsion LH | 1 |
| 31 | 21−2890 | Spring−Torsion RH | 1 |
| 32 | 21−3050 | Ball Joint Mount LH | 1 |
| 33 | 86−8100 | Asm−Ball Joint | 2 |
| 34 | 302−5 | Grease Fitting | 2 |
| 35 | 21−3000 | Jam Nut | 2 |
| 36 | 3−1365 | Chain−Lift | 3 |
| 37 | 67−9800 | Bumper | 3 |
| 38 | 3272−10 | Cotter Pin | 6 |
| 39 | 5−2942 | Shackle | 1 |
| 40 | 283−10 | Pin | 1 |

3324−132




T−1004−1

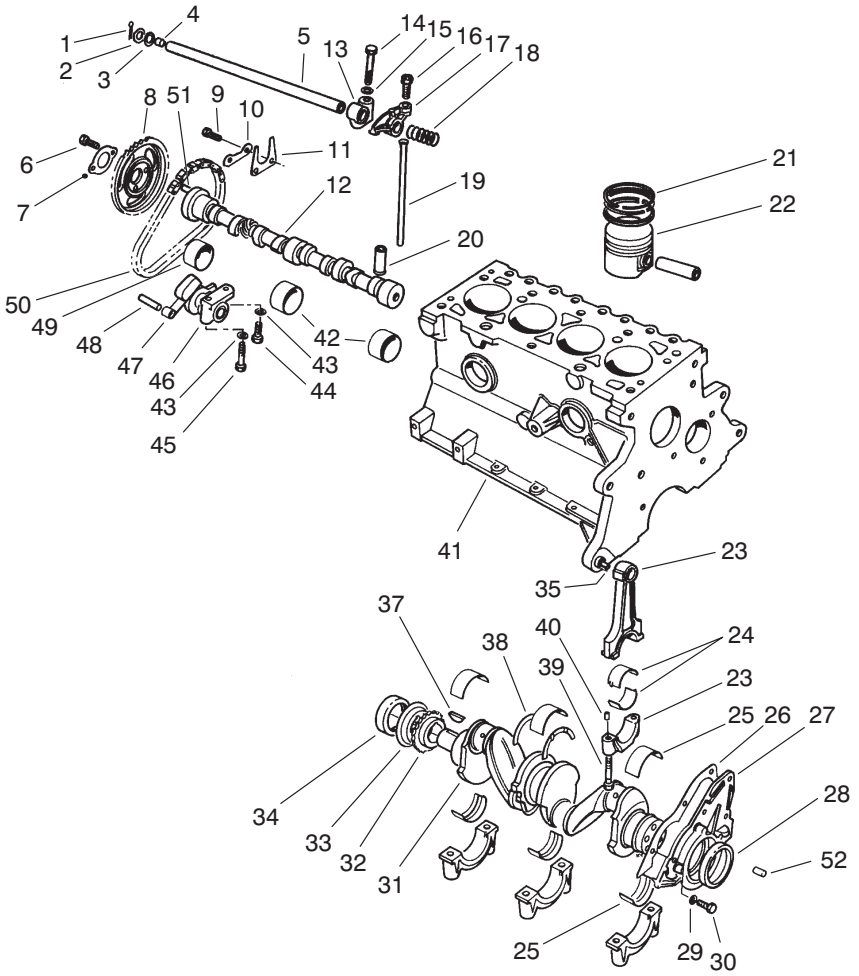
# Crankshaft & Camshaft Assembly

| Ref. No. | Part No. | Description | No. Used |
|---|---|---|---|
| 1 | 72025−S7 | Cotter Pin | 2 |
| 2 | 77BM−6598−AB | Washer−Spring | 2 |
| 3 | DORY−6590−A | Washer−Flat | 2 |
| 4 | 357966−S | Plug−Rocker Arm Shaft | 2 |
| 5 | 89BM−6A557−AA | Asm−Rocker Arm Shaft (Incl. Ref. #4) | 1 |
| 6 | E602351−S72 | Bolt | 2 |
| 7 | DORY−6258−A | Retainer | 1 |
| 8 | 77BM−6256−AA | Sprocket−Camshaft | 1 |
| 9 | N602166−S2 | Bolt | 2 |
| 10 | DORY−6255−A | Retainer | 1 |
| 11 | DORY−6269−A | Plate−Thrust | 1 |
| 12 | 89BM−6251−AA | Camshaft | 1 |
| 13 | 77BM−6531−BB | Support−Rocker Shaft | 4 |
| 14 | E800509−S72 | Bolt−Rocker Support | 4 |
| 15 | E630031−S101 | Washer | 4 |
| 16 | DORY−6549−B | Screw | 8 |
| 17 | 89BM−6529−AB | Valve Rocker Arm−R.H. (Inc. Ref. #16) | 4 |
| * | 89BM−6K528−AB | Valve Rocker Arm−L.H. (Inc. Ref. #16) | 4 |
| 18 | DORY−6587−A | Spring−Locating | 3 |
| 19 | 89BM−6565−AA | Rod−Valve Push | 8 |
| 20 | 89BM−6500−AA | Tappet−STD. | 8 |
| 21 | 89BM−6148−DA | Ring Set−STD. | 4 |
| * | 89BM−6148−EA | Ring Set−.020 OS. | A/R |
| * | 89BM−6148−FA | Ring Set−.040 OS. | A/R |

| Ref. No. | Part No. | Description | No. Used |
|---|---|---|---|
| 22 | 89BM−6102−DA | Asm−Piston STD. (Inc. Ref. #21) | 4 |
| * | 89BM−6102−EA | Asm−Piston .020 OS. (Inc. Ref. #21) | A/R |
| * | 89BM−6102−FA | Asm−Piston .040 OS. (Inc. Ref. #21) | A/R |
| 23 | 89BM−6200−AD | Asm−Connecting Rod | 4 |
| 24 | 89BM−6211−AA | Bearing−Rod STD. | 8 |
| * | 89BM−6211−BA | Bearing−Rod .001 U.S. | A/R |
| * | 89BM−6211−CA | Bearing−Rod .010 U.S. | A/R |
| * | 89BM−6211−DA | Bearing−Rod .020 U.S. | A/R |
| * | 89BM−6211−EA | Bearing−Rod .030 U.S. | A/R |
| 25 | 89BM−6333−AA | Bearing−Crank Upper STD. OD STD. ID | 5 |
| * | 89BM−6331−AA | Bearing−Crank Lower STD. OD STD. ID | 5 |
| * | 89BM−6333−BA | Bearing−Crank Upper STD. OD .005 US. ID | A/R |
| * | 89BM−6331−BA | Bearing−Crank Lower STD. OD .005 US. ID | A/R |
| * | 89BM−6333−CA | Bearing−Crank Upper STD. OD .010 US. ID | A/R |

*Not Illustrated

Note: Order parts from your local Ford Power Products Dealer.




T–1004–1

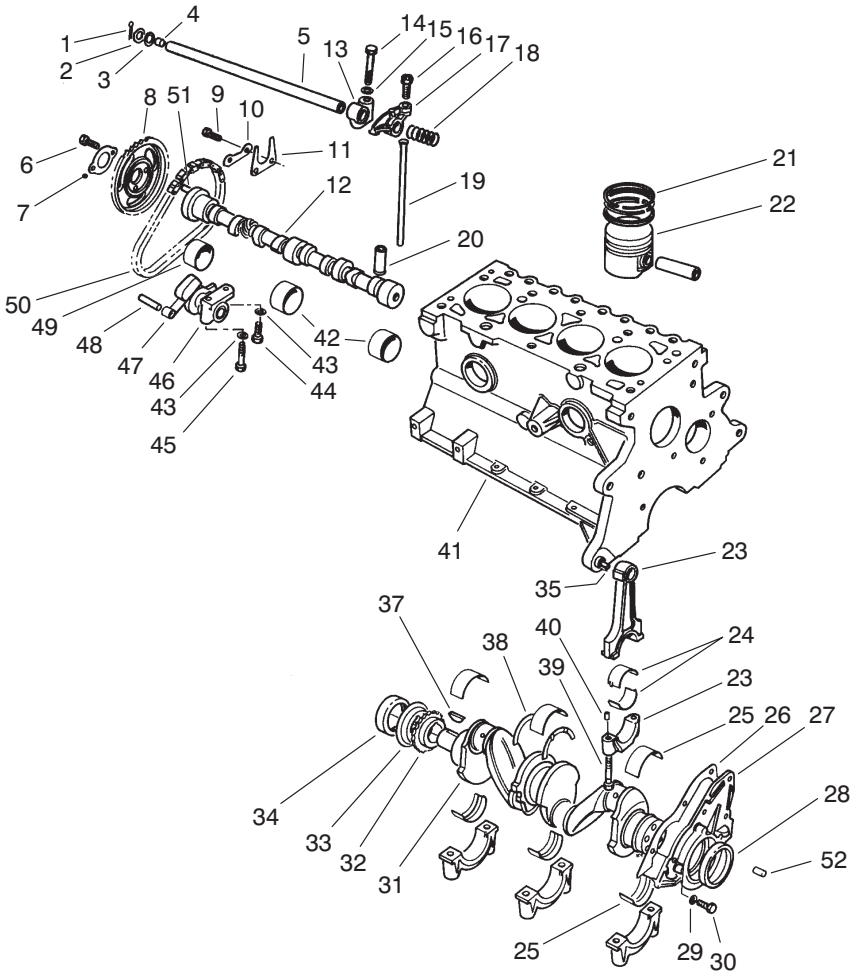
# Crankshaft & Camshaft Assembly (Continued)

| Ref. No. | Part No. | Description | No. Used |
|---|---|---|---|
| *25 | 89BM–6333–DA | Bearing–Crank Upper .015 OD STD. ID | A/R |
| * | 89BM–6331–DA | Bearing–Crank Lower .015 OD STD. ID | A/R |
| * | 89BM–6333–EA | Bearing–Crank Upper STD. OD .020 US. ID | A/R |
| * | 89BM–6331–EA | Bearing–Crank Lower STD. OD .020 US. ID | A/R |
| * | 89BM–6333–FA | Bearing–Crank Upper STD. OD .030 US. ID | A/R |
| * | 89BM–6331–FA | Bearing–Crank Lower STD. OD .030 US. ID | A/R |
| * | 89BM–6333–GA | Bearing–Crank Upper .015 OS. OD .010 US. ID | A/R |
| * | 89BM–6331–GA | Bearing–Crank Lower .015 OS. OD .010 US. ID | A/R |
| * | 89BM–6333–HA | Bearing–Crank Upper .015 OS. OD .020 U.S. ID | A/R |
| * | 89BM–6331–HA | Bearing–Crank Lower .015 OS. OD .020 US. ID | A/R |
| 26 | 89BM–6344–BA | Gasket Rear Retainer | 1 |
| 27 | 86BM–6K318–AA | Asm–Retainer, Rear | 1 |
| 28 | 86HM–6701–A1A | Seal Crankshaft Rear | 1 |
| 29 | E630173–S71M | Lockwasher | 4 |
| 30 | E602187–S72 | Bolt | 4 |
| 31 | 89BM–6303–DA | Asm–Crankshaft | 1 |
| 32 | DORY–6306–A | Sprocket | 1 |
| 33 | D8RZ–6310–A | Slinger Oil | 1 |
| 34 | 83BM–6700–A4A | Seal–Front Cover | 1 |
| 35 | 70HM–6397–AA | Dowel | 2 |
| 37 | D0RY–6B316–A | Key–Woodruff | 1 |
| 38 | 89BM–6A341–AA | Washer–Bearing Thrust STD. | 2 |
| * | 89BM–6A341–BA | Washer–Bearing Thrust .015 OS. | A/R |
| 39 | 89BM–6214–DB | Bolt–Connecting Rod | 8 |
| 40 | 116336–ES100 | Dowel Pin–Rod | 8 |
| 41 | 89BM–6011–DA | Cylinder Block | 1 |
| 42 | DORY–6261–A | Bearing–STD. ID STD. OD | 2 |
| * | DORY–6262–B | Bearing–STD. ID +.020 OD | A/R |
| 43 | 34805–S8 | Lockwasher | 2 |
| 44 | E602166–S72 | Bolt | 1 |
| 45 | E600116–S72 | Bolt | 1 |
| 46 | DIFZ–6284–A | Tensioner | 1 |

*Not Illustrated

Note: Order parts from your local Ford Power Products Dealer.

3324−132




T−1004−1

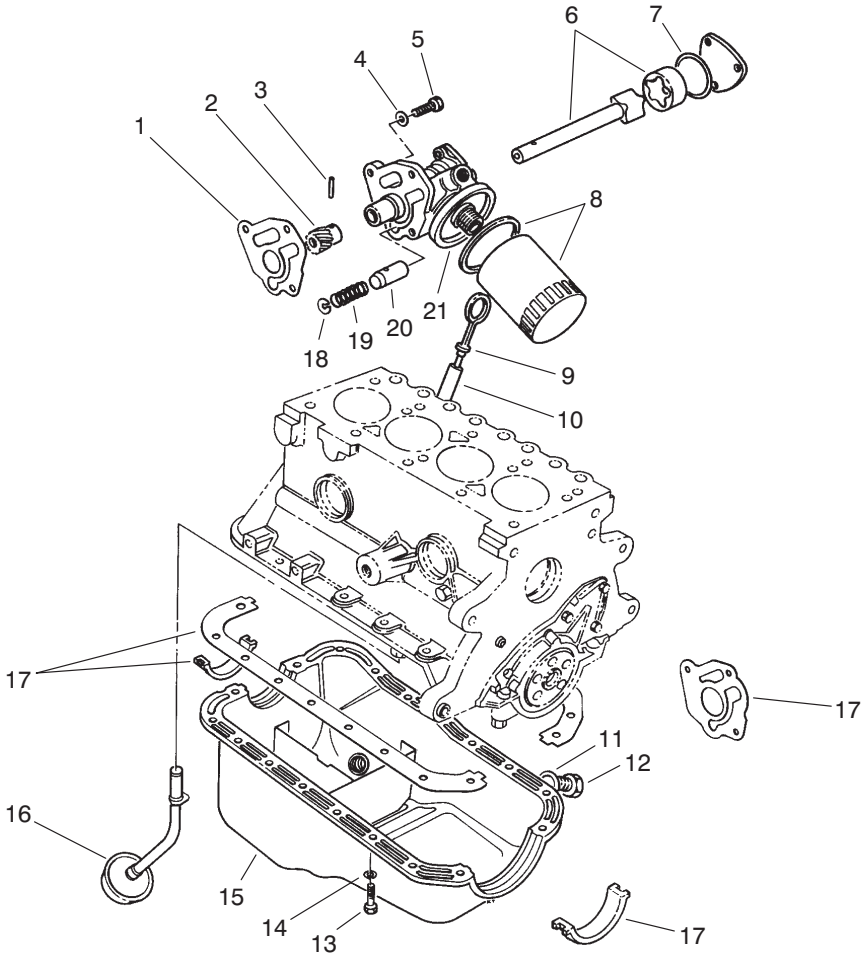
# Crankshaft & Camshaft Assembly (Continued)

| Ref. No. | Part No. | Description | No. Used |
|---|---|---|---|
| 47 | 77BM−6K255−AC | Arm−Tensioner | 1 |
| 48 | E43−CP−1 | Pin | 1 |
| 49 | DORY−6261−A | Bearing−STD. ID STD. OD | 1 |
| * | DORY−6261−B | Bearing−STD. ID +.020 OD | A/R |
| 50 | DORY−6268−A | Chain | 1 |

| Ref. No. | Part No. | Description | No. Used |
|---|---|---|---|
| 51 | E93A−6253−A | Dowel | 1 |
| 52 | E−840161−S | Dowel | 1 |
| * | 93BX−6014−AA | Kit−Gasket, Upper (Less Head Gasket) | 1 |
| * | 89BM−6051−C2B | Head Gasket | 1 |
| * | 93BX−6013−BA | Kit−Gasket, Lower | 1 |

*Not Illustrated

Note: Order parts from your local Ford Power Products Dealer.



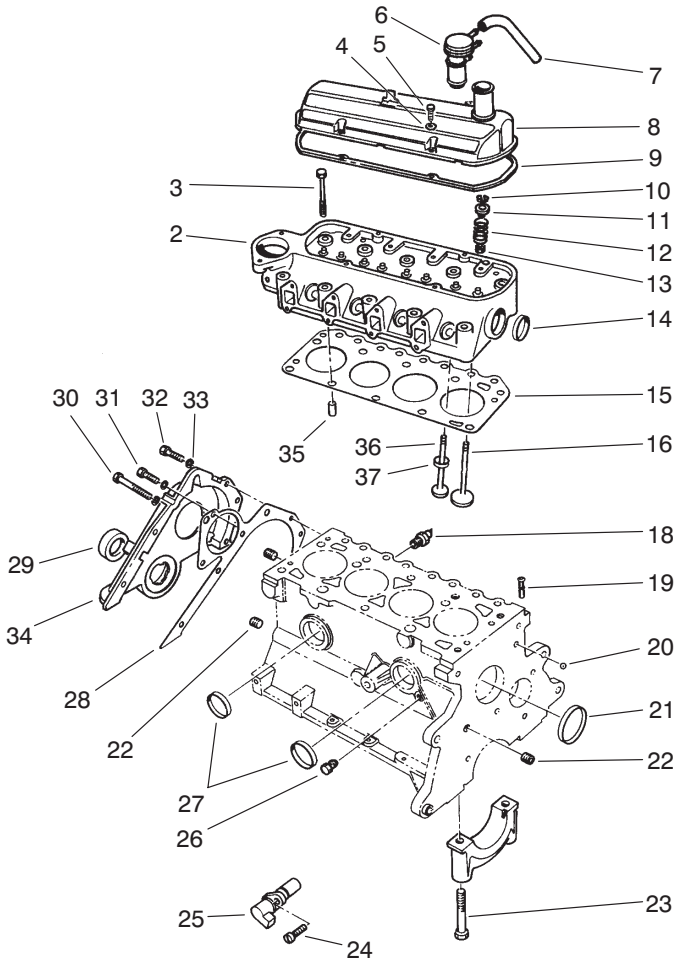

T−1003−1

# Oil Pump & Filter Assembly

| Ref. No. | Part No. | Description | No. Used |
|---|---|---|---|
| 1 | 96BM−6659−A1A | Gasket−Oil Pump | 1 |
| 2 | DORY−6652−A | Gear | 1 |
| 3 | 72432−S | Pin−Drive Gear | 1 |
| 4 | E630173−S71M | Lockwasher | 3 |
| 5 | E800519−S72 | Bolt | 3 |
| 6 | DIFZ−6608−B | Rotor & Shaft | 1 |
| 7 | 116682−ES | Seal Cover Plate | 1 |
| 8 | 95−3304 | Filter−Oil | 1 |
| 9 | 92BM−6750−AA | Indicator−Oil Level | 1 |
| 10 | 89BM−6784−AA | Tube Oil Level Indicator | 1 |
| 11 | E9DZ−6734−B | Gasket Oil Drain Plug | 1 |

| Ref. No. | Part No. | Description | No. Used |
|---|---|---|---|
| 12 | E9DZ−6730−B | Plug−Oil Drain | 1 |
| 13 | E602165−S72 | Bolt | 18 |
| 14 | 34805−S8 | Lockwasher | 18 |
| 15 | 86BM−6675−AA | Oil Pan | 1 |
| 16 | 86BM−6617−AA | Asm−Oil Pickup Tube | 1 |
| 17 | A850X−6013−A2A | Kit−Gasket Seal | 1 |
| 18 | DORY−6666−A | Plug | 1 |
| 19 | DORY−6670−A | Spring | 1 |
| 20 | DORY−6674−A | Plunger | 1 |
| 21 | D8RZ−6600−A | Pump−Oil | 1 |

Note: Order parts from your local Ford Power Products Dealer.




T−1002−1

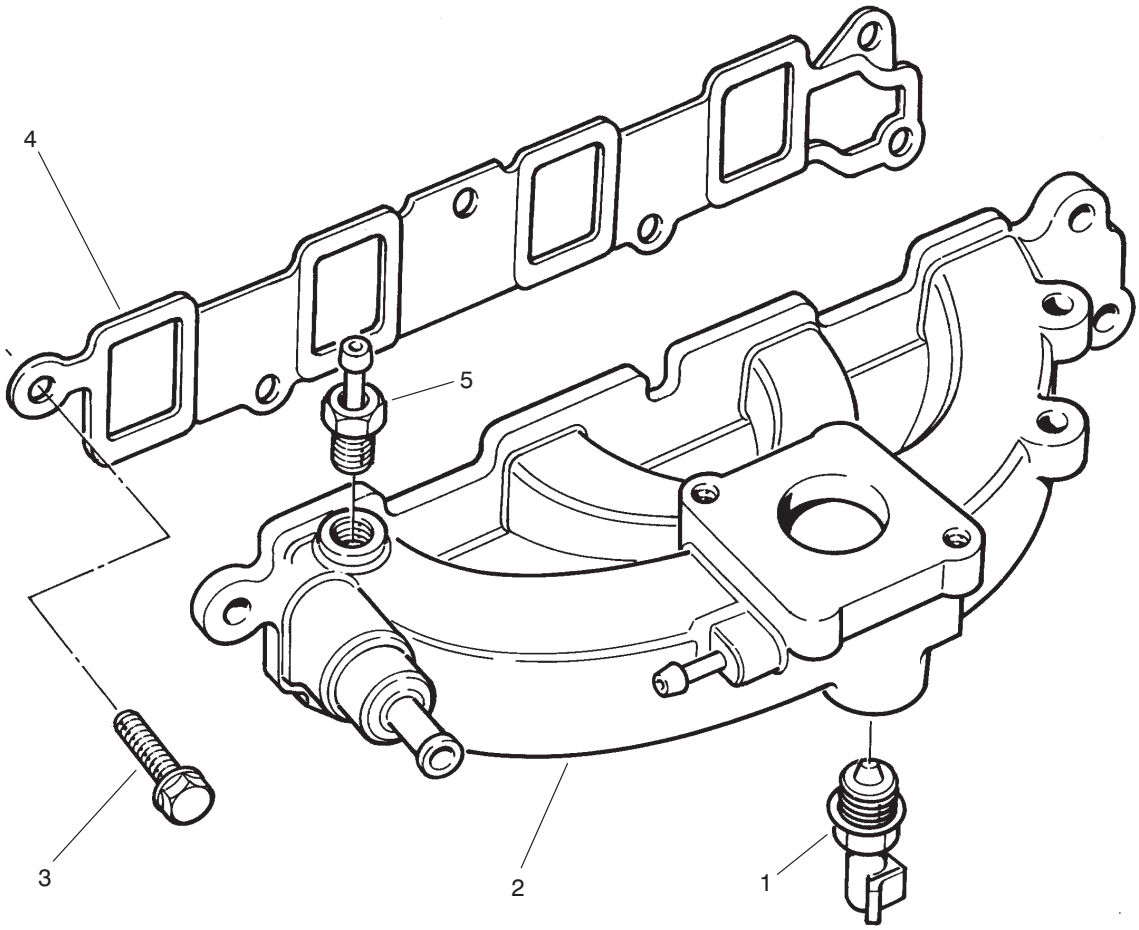
# Cylinder Head & Valve Assembly

| Ref. No. | Part No. | Description | No. Used |
|---|---|---|---|
| 2 | 89BM−6049−DD | Asm−Cylinder Head | 1 |
| 3 | 89BM−6065−DA | Bolt−Cylinder Head | 10 |
| 4 | E630024−S201 | Washer−Flat | 4 |
| 5 | E800516−S72 | Screw−Rocker Cover | 4 |
| 6 | 84BF−6K614−CA | Cap−Oil Fill | 1 |
| 7 | E9JL−6K609−AA | Hose−PCV | 1 |
| 8 | 91BM−6582−GA | Cover−Rocker Arm | 1 |
| 9 | 77BM−6584−CA | Gasket−Cover | 1 |
| 10 | 88WM−6518−AA | Lock Valve Spring | 16 |
| 11 | 89BM−6A536−AA | Retainer | 8 |
| 12 | 89BM−6513−AA | Spring−Valve | 8 |
| 13 | 88WM−6571−BB | Seal−Valve Stem | 8 |
| 14 | DORY−6026−A | Plug | 1 |
| 15 | 89BM−6051−C2B | Gasket−Cylinder Head | 1 |
| 16 | 89BM−6507−BA | Valve−Intake−Std. | 4 |
| * | 89BM−6507−BC | Valve−Intake .040mm 0.S. | A/R |
| 18 | E7RZ−9278−A | Switch Oil Pressure | 1 |
| 19 | D8RZ−6767−A | Adapter | 1 |
| 20 | E890100−S | Plug−Ball−Oil Gallery | 1 |

| Ref. No. | Part No. | Description | No. Used |
|---|---|---|---|
| 21 | DORY−6026−A | Plug | 1 |
| 22 | F1ZZ−6026−A | Plug | 3 |
| 23 | D1FZ−6345−A | Bolt−Bearing Cap | 10 |
| 24 | E802666−S72 | Screw | 1 |
| 25 | 89BF−6C315−AB | Transducer | 1 |
| 26 | 353055−S7 | Plug | 1 |
| 27 | DORY−6026−A | Plug | 2 |
| 28 | D8RZ−6020−A | Gasket−Front Cover | 1 |
| 29 | 83BM−6700−A4A | Seal−Front Cover | 1 |
| 30 | E800518−S72 | Bolt | 1 |
| 31 | E600113−S72 | Bolt | 3 |
| 32 | E800512−S72 | Bolt | 4 |
| 33 | E832108−S71M | Lockwasher | 8 |
| 34 | 95BM−6019−AC | Asm−Cover & Seal (Incl. Ref. #29) | 1 |
| 35 | E840126S | Dowel | 2 |
| 36 | 89BM−6505−EA | Valve−Exhaust .040mm 0.S. | A/R |
| * | 89BM−6505−CA | Valve−Exhaust Std. | 4 |
| 37 | 89BM−6057−A2E | Insert−Exhaust Seat | 4 |

*Not Illustrated

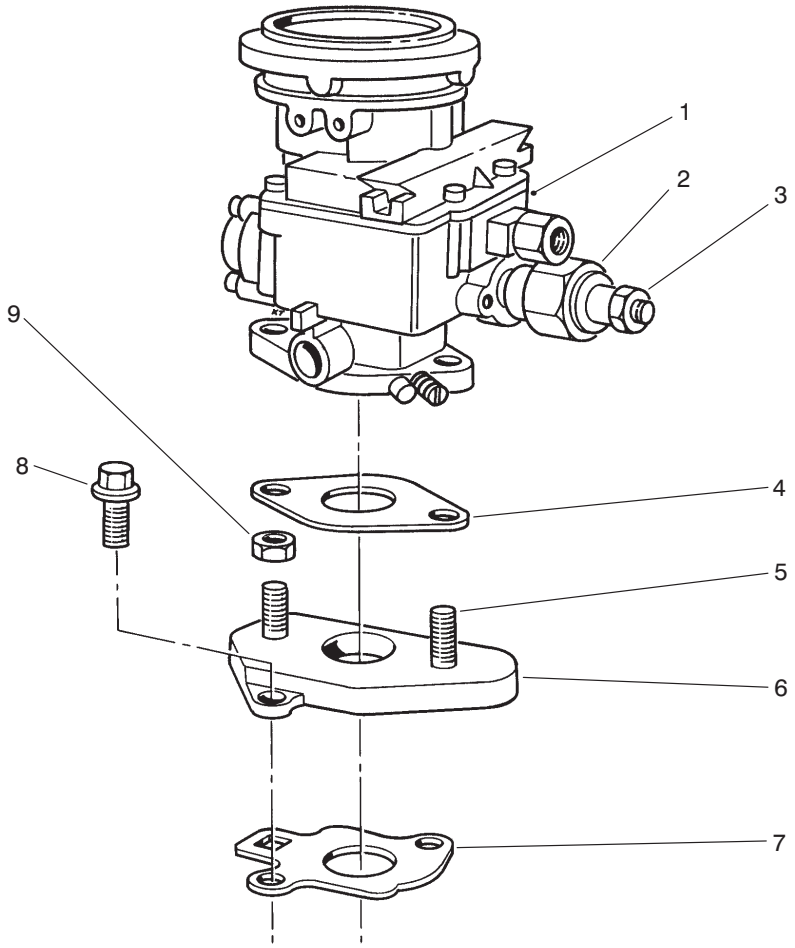
Note: Order parts from your local Ford Power Products Dealer.




T–1176–1

# Manifold Assembly

| Ref. No. | Part No. | Description | No. Used |
|---|---|---|---|
| 1 | E1AZ–12A648–A | Sensor–Temp. Water | 1 |
| 2 | 89BF–9424–AD | Manifold–Intake | 1 |
| 3 | E800157–S72 | Bolt | 6 |
| 4 | 89BM–9441–AB | Gasket–Intake Manifold | 1 |
| 5 | 77BF–9K442–AA | Adapter–Vacuum | 1 |



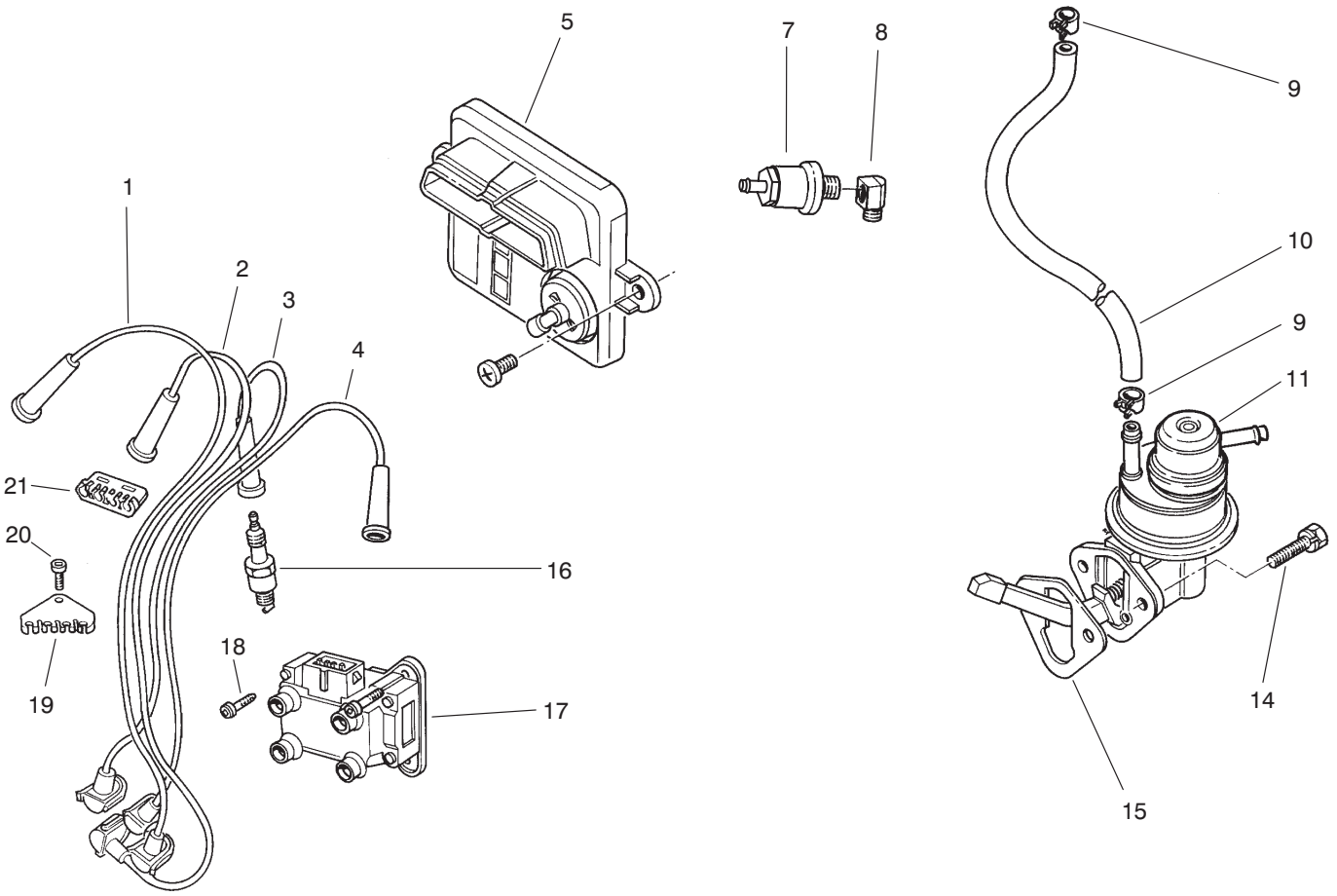

T−0999−1

# Carburetor Assembly

| Ref. No. | Part No. | Description | No. Used |
|---|---|---|---|
| 1 | F8JL−9510LA | Asm−Carburetor | 1 |
| 2 | 84FB−9K765−BA | Solenoid | 1 |
| 3 | N621903−S2 | Nut & Washer | 1 |
| 4 | E5JL−9447−BA | Gasket | 1 |
| 5 | E804216S | Stud | 2 |

| Ref. No. | Part No. | Description | No. Used |
|---|---|---|---|
| 6 | E8JL−9A589−CB | Adapter | 1 |
| 7 | 87BF−9447−BA | Gasket | 1 |
| 8 | N800055−S | Bolt | 2 |
| 9 | N620041−S51 | Nut | 2 |

Note: Order parts from your local Ford Power Products Dealer.




T–1233–2

# Ignition & Fuel Pump Assembly

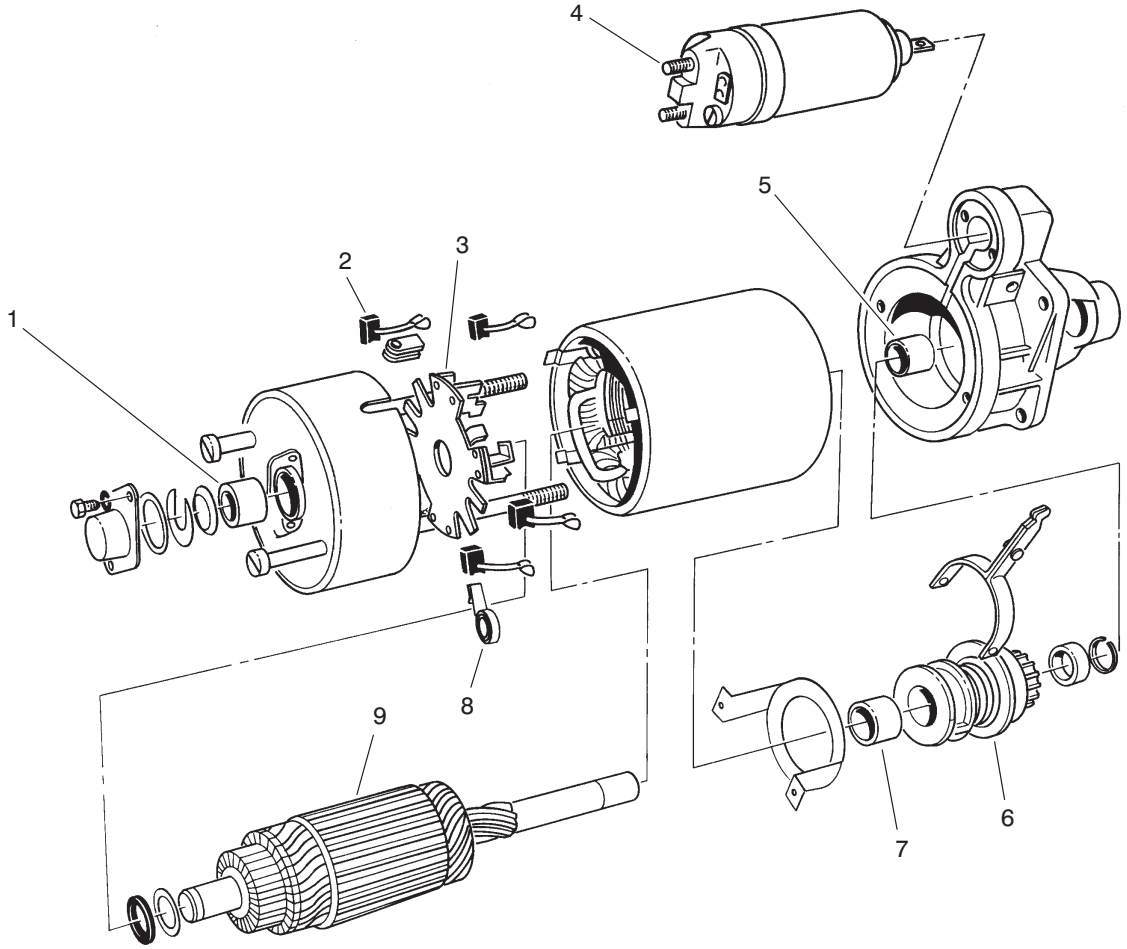
| Ref. No. | Part No. | Description | No. Used |
|---|---|---|---|
| 1 | 89BF–12287–AC | Wire–Spark Plug #4 | 1 |
| 2 | 89BF–12284–AD | Wire–Spark Plug #3 | 1 |
| 3 | 89BF–12283–AD | Wire–Spark Plug #2 | 1 |
| 4 | 88BF–12286–AD | Wire–Spark Plug #1 | 1 |
| 5 | 89FB–12A297–GA | Module–Ignition | 1 |
| †7 | FG778–B | Filter–Fuel (Motorcraft) | 1 |
| 8 | 370829–S101 | Elbow | 1 |
| 9 | 380882–S32 | Clamp–Fuel Hose | A/R |
| 10 | 381103–S180A | Hose–Fuel | 1 |
| 11 | 83BF–9350–AA | Fuel Pump | 1 |

| Ref. No. | Part No. | Description | No. Used |
|---|---|---|---|
| 14 | N602551–S2 | Screw & Washer | 2 |
| 15 | 83BM–9417–A1A | Gasket–Fuel Pump | 1 |
| 16 | AGRF22 | Spark Plug | |
| * | AGSF22C | (Motorcraft) | 4 |
| 17 | 96BF–12024–A1A | Asm–Coil & Bracket | 1 |
| 18 | E804335–S201 | Screw | 3 |
| 19 | 89BF–12297–AA | Separator–Wire | 1 |
| 20 | E802166–S76 | Screw | 1 |
| 21 | E865648–S | Separator–Wire | 1 |

*Not Illustrated

†For use on Serial No. 40501 & UP

Note: Order parts from your local Ford Power Products Dealer.




T−1005−1

# Starter Motor Assembly (91AB11000JB)

| Ref. No. | Part No. | Description | No. Used |
|---|---|---|---|
| 1 | | Bushing−Brush End | 1 |
| 2 | | Brush Set | 1 |
| 3 | | Holder−Brush | 1 |
| 4 | F7JL−11450−AA | Solenoid−Starter | 1 |
| 5 | | Bushing−Drive End | 1 |

| Ref. No. | Part No. | Description | No. Used |
|---|---|---|---|
| 6 | F7JL−11350−BA | Kit−Starter Drive | 1 |
| 7 | | Bushing−Starter Drive | 1 |
| 8 | | Spring−Brush | 4 |
| 9 | | Kit−Armature Install | 1 |
| * | | Kit−Wiring, Service | 1 |

*Not Illustrated

Note: Order parts from your local Ford Power Products Dealer.

## PRODUCT CHANGES

In an effort to make improvements available to TORO owners as quickly as possible minor changes are incorporated into Toro's products from time to time that do not become immediately shown in the Parts Catalog. If such a change has been made in your unit which is not reflected in your manual see your TORO Distributor or his Authorized TORO Service Dealer for information and part numbers.

## IDENTIFICATION AND ORDERING

**MODEL AND SERIAL NUMBERS**

The Groundsmaster 345 has two identification numbers; a model number and a serial number. The two numbers are stamped on a plate which is located on the main frame under the seat. In any correspondence concerning the Groundsmaster 345, supply model and serial numbers to assure that correct information and replacement parts are obtained.

To order replacement parts from an Authorized TORO Service Dealer supply the following information:

1. Model and serial number of the Groundsmaster 345.
2. Part number description and the quantity of part(s) desired.

**NOTE**: Do not order by reference number if a parts catalog is being used; use the PART NUMBER.

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Compliance with Radio Interference Regulations Certified.
Certifie Conforme au Reglement sur le Brouillage Radioelectrique.

Litho in U.S.A.

# Maintenance Record

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