Form No. 3324–354

# Greensmaster® 500

## Traction Unit

**Model No. 04130—200000501 and Up**

# Parts Catalog

### Ordering Replacement Parts

To order replacement parts, please supply: the part number, the quantity, and the description of each part desired.

### Understanding Reference Numbers

Each identified part in an illustration has a reference number. The reference number for a part also appears in the parts list, along with other information about the part.

This catalog uses two special reference number formats, one to indicate parts in a service assembly and another to indicate the quantity of a given part in an illustration.

#### Service Assembly Reference Numbers

Parts in service assemblies have reference numbers in the form **a:b.** The **a** represents the reference number of the entire service assembly and the **b** represents a sequential number unique to each part within the service assembly.

For example, a wheel assembly might be identified by reference number **6**, the tire by **6:1**, the valve by **6:2**, and the wheel by **6:3**. When you order the assembly identified by reference number 6, you receive all parts identified by reference numbers 6:1, 6:2, and 6:3. However, you may also order any part individually.

Reference numbers of this type appear in illustrations and in part lists.

#### Reference Numbers Indicating Quantity

In an illustration, if a reference number indicates more than one part, the reference number has the form **nX y.** The **n** represents the quantity of the part, the **X** is the multiplication symbol, and the **y** represents the reference number.

For example, in an illustration, the reference number **2X 37** means that two of the parts identified by reference number 37 are indicated.

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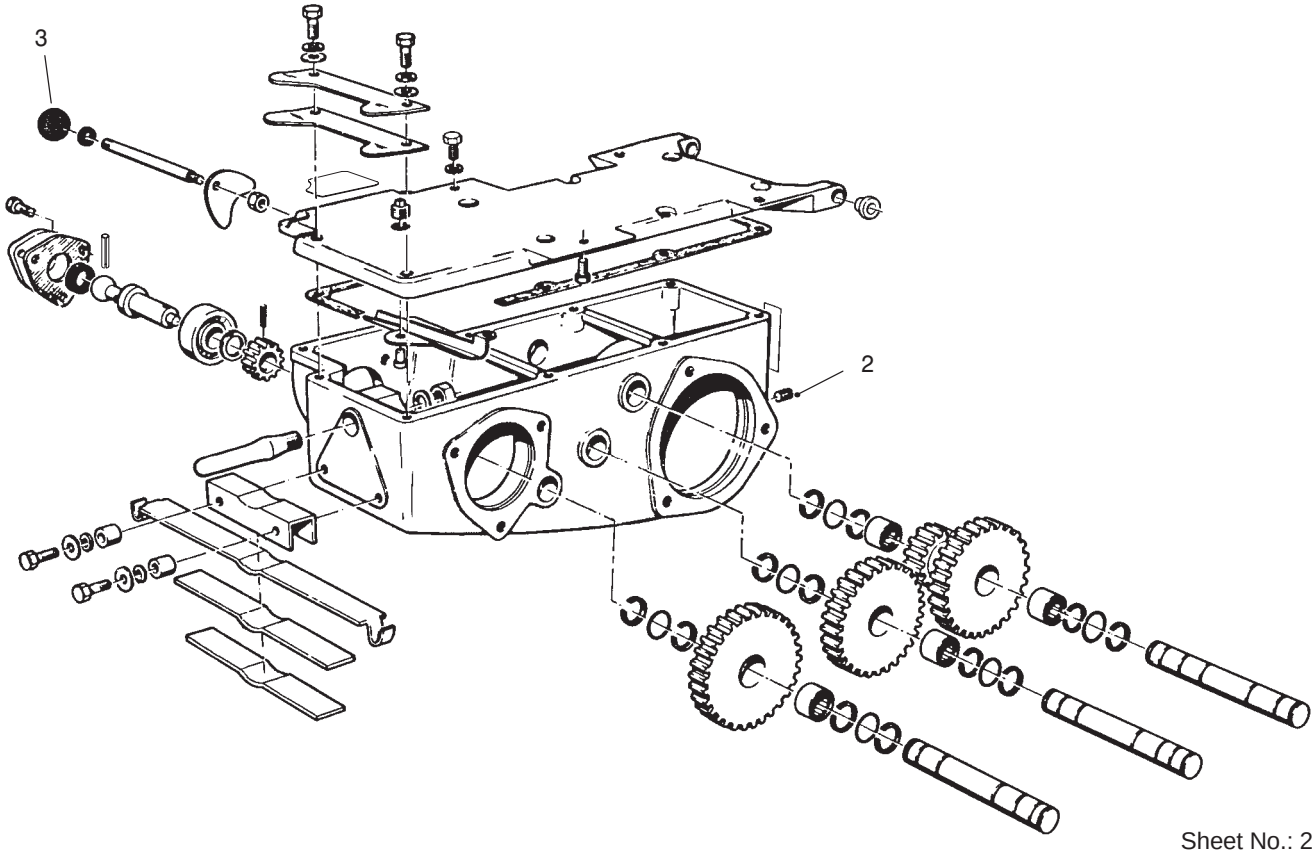

## Accessories

| Description | Model / Part No. |
|---|---|
| Brush Kit | 2–2949 |
| Urethane Comb Kit | 8–2560 |
| Bedknife, Low Cut | 88–8990 |
| Spark Arrester Muffler Kit | 98–3426 |
| Cutting Unit (without roller) | 04215 |
| Sectional Roller | 4–7319 |
| Skid Kit | 4–7299 |
| Full Roller Kit | 4–7309 |
| Micro–Cut Bedknife 1/16 HOC | 95–3147 |
| Wiehle Roller, Rear Cutting Unit | 100–1556 |
| Light Kit | 04058 |

## Part Description Abbreviations

Part descriptions in this catalog may include the following abbreviations.

| Abbreviation | Meaning |
|---|---|
| AR | as required |
| ASM | assembly |
| CARR | carriage |
| DEG | degrees |
| FH | flat head |
| GA | gauge |
| HF | hex flange |
| HH | hex head |
| HHF | hex head flange |
| HLH | hex lag head |
| HJ | hex jam |
| HOC | height-of-cut |
| HS | hex socket |
| HSBH | hex socket button head |
| HSFH | hex socket flat head |
| HSH | hex socket head |
| HWH | hex washer head |
| HWHTF | hex washer head thread forming |
| INC | incorporated |
| LH | left hand |
| NI | nylon insert |
| PPH | Phillips pan head |
| PTH | Phillips truss head |
| PTO | power take off |
| RH | right hand |
| SFH | slotted fillister head |
| SHH | slotted hex head |
| SQH | square head |
| SHWH | slotted hex washer head |
| SPH | slotted pan head |
| SRH | slotted round head |
| STD | standard |
| TAP | self tapping |
| TTH | Torx truss head |
| WH | wing head |

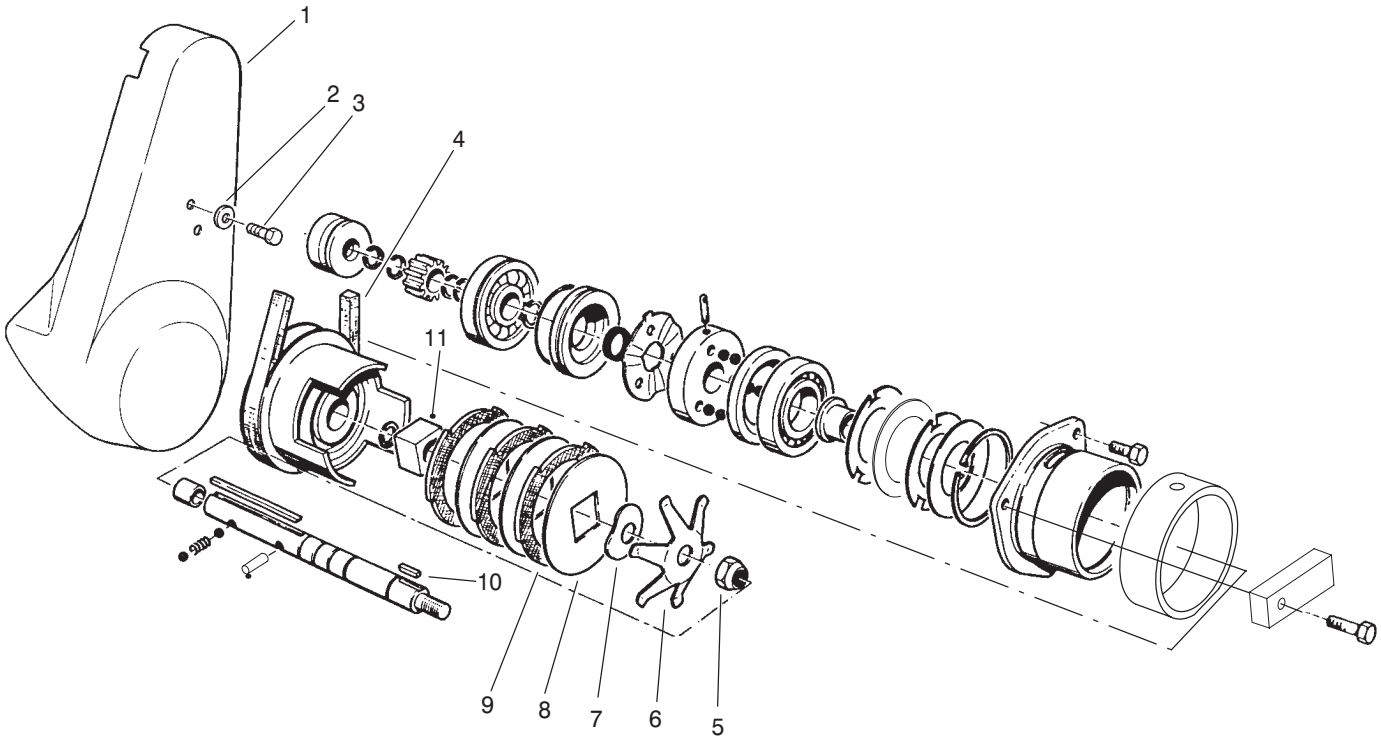



Sheet No.: 2

# Transmission Case Assembly

| Ref. No. | Part No. | Qty. | Description |
|---|---|---|---|
| 2 | 281–1 | 1 | Plug–Pipe, SQH |
| 3 | 3–0631 | 1 | Ball Grip |

| Ref. No. | Part No. | Qty. | Description |
|---|---|---|---|

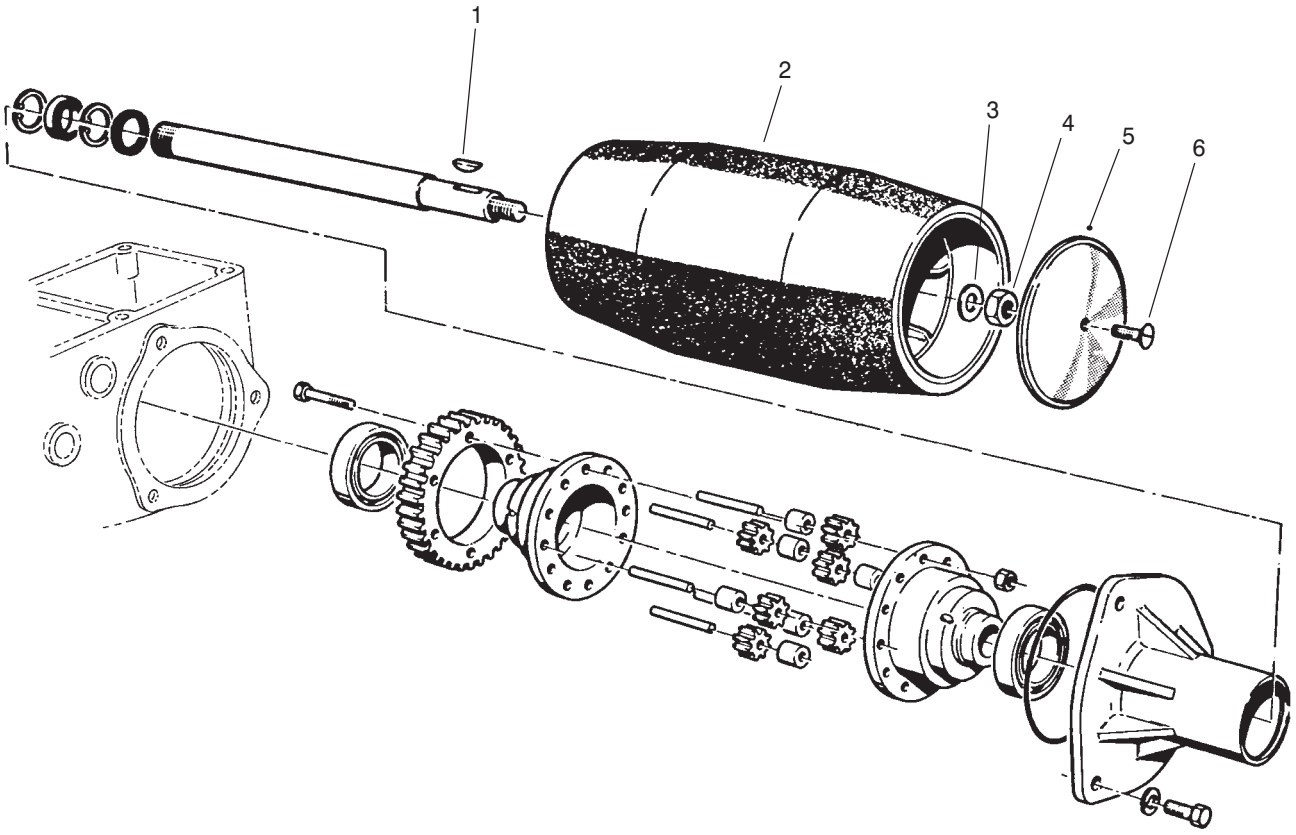



Sheet No.: 3

# Clutch Shaft Assembly

| Ref. No. | Part No. | Qty. | Description |
|---|---|---|---|
| 1 | 88–8740 | 1 | Guard–Belt |
| 2 | 3253–3 | 2 | Washer–Lock/Sp |
| 3 | 32144–10 | 2 | Screw–HWH |
| 4 | 95–1811 | 1 | V–Belt |
| 5 | 3296–6 | 1 | Nut–Lock, NI |
| 6 | 3–0478 | 1 | Spring–Clutch |
| 7 | 3290–211 | 1 | Washer–Spring |
| 8 | 3–0477 | 3 | Clutch Plate |
| 9 | 99–5902 | 3 | Disc–Clutch |
| 10 | 3–6801 | 1 | Key |
| 11 | 3–0472 | 1 | Driver–Clutch |

| Ref. No. | Part No. | Qty. | Description |
|---|---|---|---|

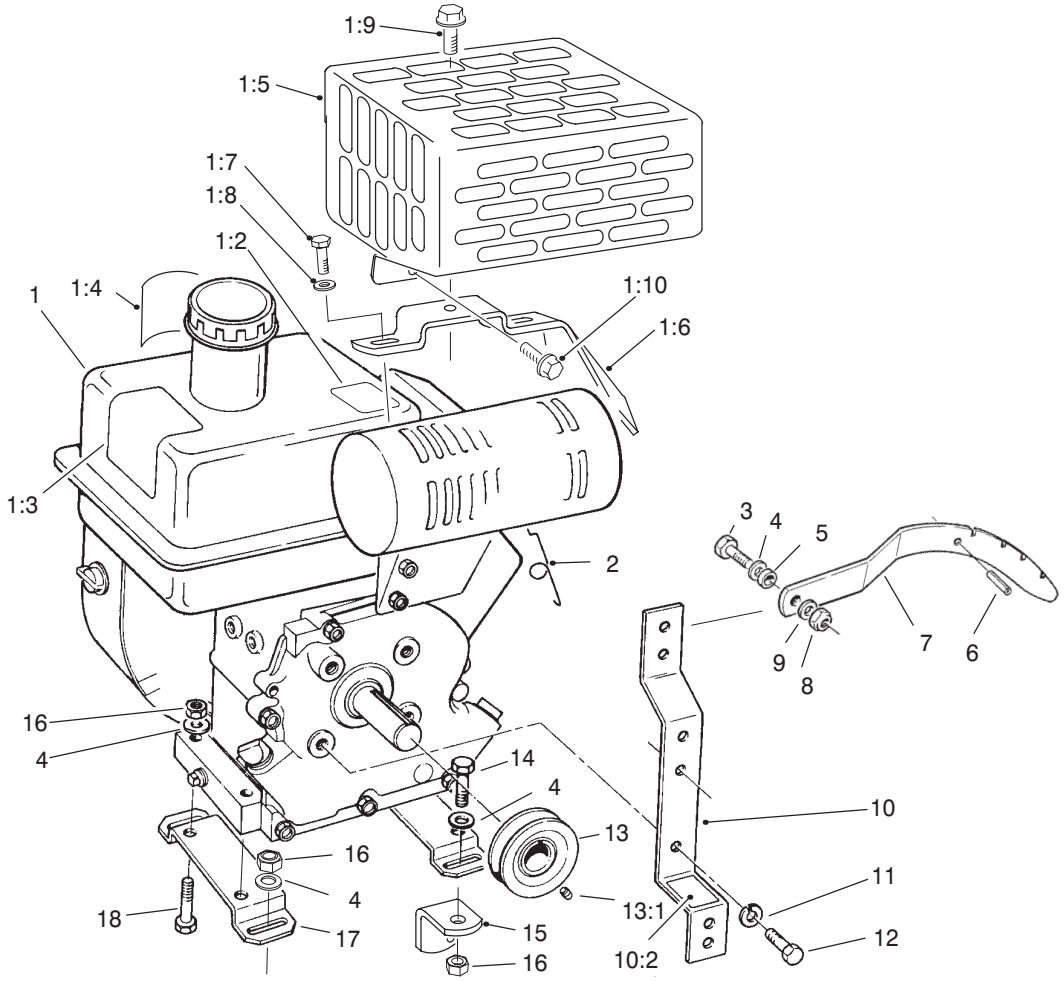



Sheet No.: 4

# Drum Assembly

| Ref. No. | Part No. | Qty. | Description |
|---|---|---|---|
| 1 | 3257–23 | 2 | Key–Woodruff |
| 2 | 3–0492 | 2 | Roller ASM |
| 3 | 3256–26 | 2 | Washer–Flat |
| 4 | 3296–19 | 2 | Nut–Lock NI |
| 5 | 3–8347 | 2 | Hub Cap |
| 6 | 32108–50 | 2 | Screw |

| Ref. No. | Part No. | Qty. | Description |
|---|---|---|---|

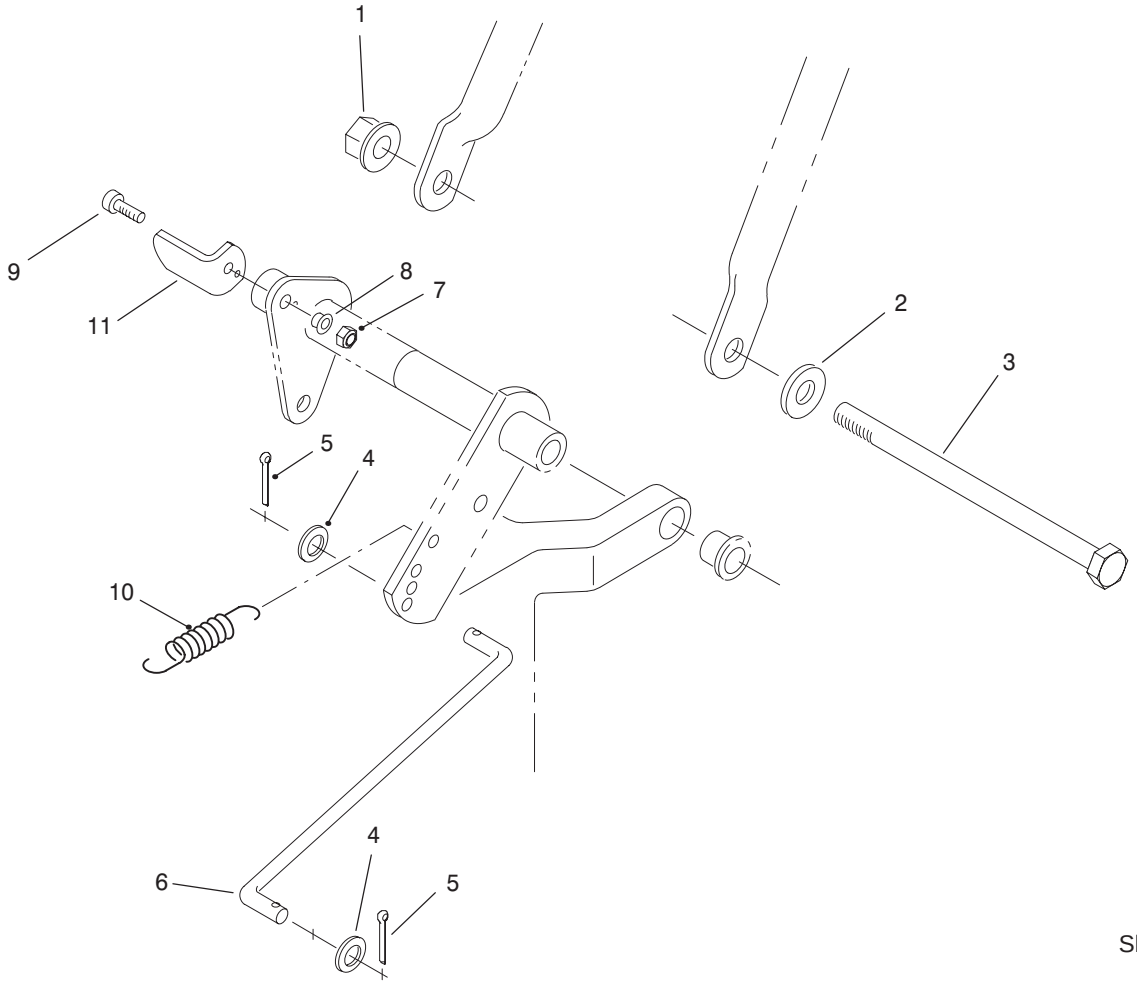



Sheet No.: 5

# Engine Assembly

| Ref. No. | Part No. | Qty. | Description |
|---|---|---|---|
| 1 | 99–4265 | 1 | Engine ASM |
| 1:2 | 83–2560 | 1 | Decal–Hot Surface (Japan) |
| 1:2 | 93–8069 | 1 | Decal–Surface, Hot |
| 1:3 | 92–4813 | 1 | Decal–Danger (Japan) |
| 1:3 | 93–7348 | 1 | Decal–Danger |
| 1:4 | 93–9886 | 1 | Decal–Fuel |
| 1:5 | 98–3432–03 | 1 | Guard – Muffler |
| 1:6 | 98–3421 | 1 | Bracket – Muffler Guard |
| 1:7 | 33113–012 | 2 | Screw–HH |
| 1:8 | 3256–22 | 2 | Washer–Flat |
| 1:9 | 46–6810 | 1 | Screw & Washer ASM |
| 1:10 | 93–8550 | 1 | Bolt–Flanged |
| 2 | 88–8690 | 1 | Wire–Throttle |
| 3 | 322–16 | 1 | Screw–HH |
| 4 | 3256–23 | 9 | Washer–Flat |
| 5 | 88–9080 | 1 | Spacer |
| 6 | 32121–11 | 1 | Pin–Roll |
| 7 | 88–8680 | 1 | Handle |
| 8 | 3296–47 | 1 | Nut–Lock, NI |
| 9 | 3–3287 | 1 | Spacer–Latch, Handle |
| 10 | 95–7283 | 1 | Bracket – Pivot, ASM |
| 10:2 | 93–9356 | 1 | Decal–Warning, Belt |
| 11 | 3253–31 | 2 | Washer–Lock/Sp |
| 12 | 33114–020 | 2 | Screw–HH |

| Ref. No. | Part No. | Qty. | Description |
|---|---|---|---|
| 13 | 244–58 | 1 | Pulley |
| 13:1 | 3245–32 | 1 | Screw–HS |
| 14 | 322–5 | 4 | Screw–HH |
| 15 | 95–7280 | 1 | Bracket – Spring |
| 16 | 32153–3 | 8 | Nut–Lock |
| 17 | 88–8650–01 | 2 | Mount–Motor |
| 18 | 322–17 | 4 | Screw–HH |

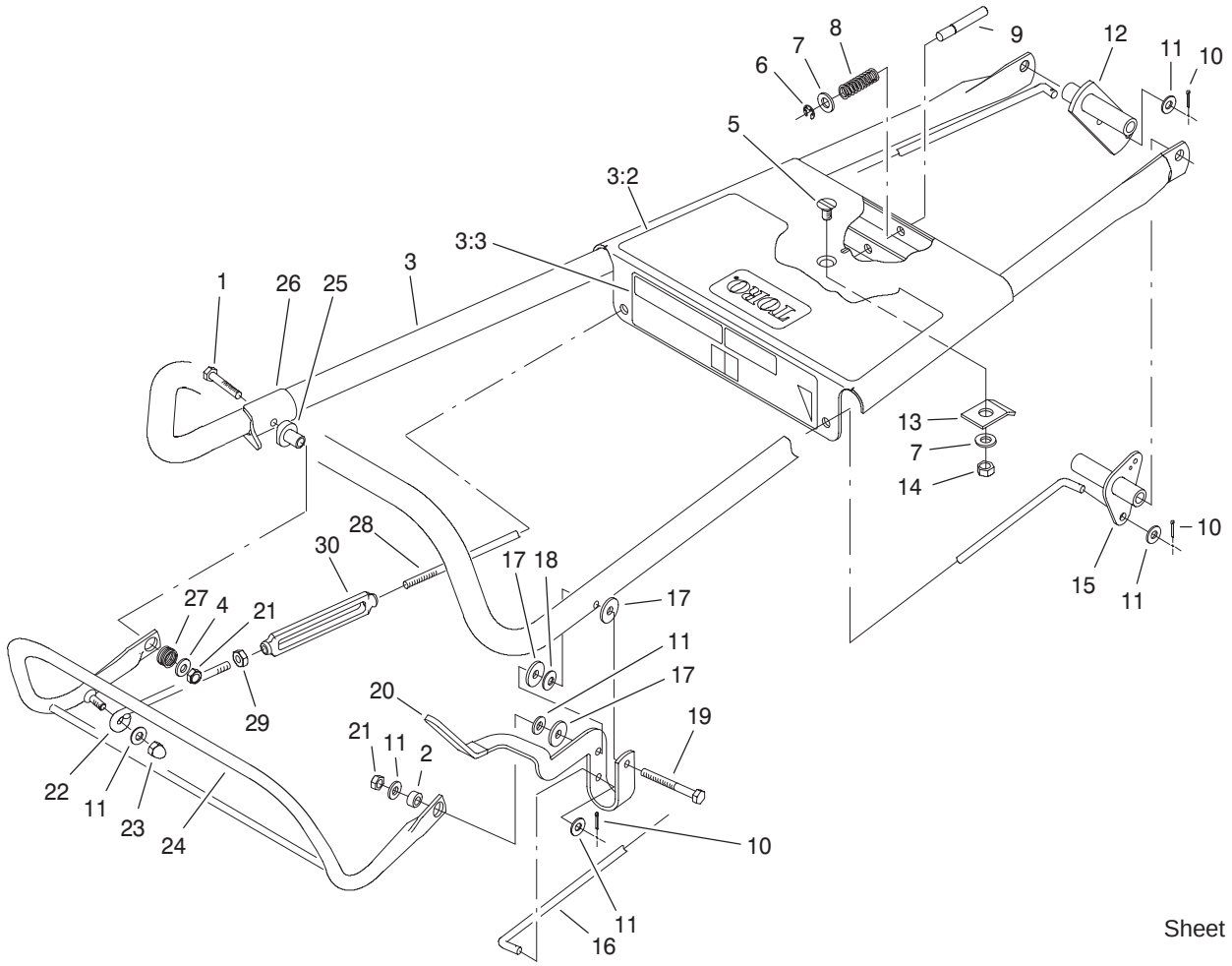



Sheet No.: 6

# Handle Installation Assembly

| Ref. No. | Part No. | Qty. | Description |
|---|---|---|---|
| 1 | 32128–19 | 1 | Nut–HF |
| 2 | 3256–24 | 1 | Washer–Flat |
| 3 | 323–30 | 1 | Screw–HH |
| 4 | 3256–14 | 2 | Washer–Flat |
| 5 | 3272–1 | 2 | Pin–Cotter |
| 6 | 98–3433 | 1 | Rod – Clutch |
| 7 | 3296–1 | 1 | Nut–Lock NI |
| 8 | 3–0526 | 1 | Retainer |
| 9 | 3250–17 | 1 | Screw–PPH |
| 10 | 71–5470–03 | 1 | Brake Spring |
| 11 | 98–3437 | 1 | Stop – Throttle |

| Ref. No. | Part No. | Qty. | Description |
|---|---|---|---|

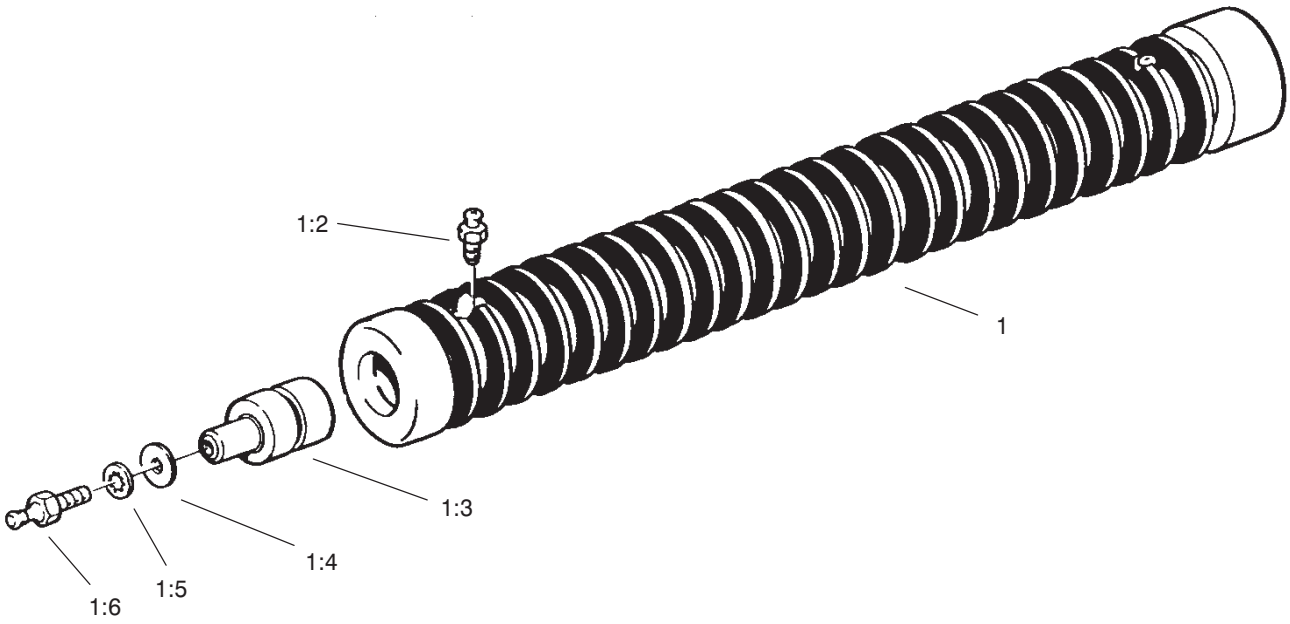



Sheet No.: 7

# Handle Assembly

| Ref. No. | Part No. | Qty. | Description |
|---|---|---|---|
| 1 | 321–15 | 1 | Screw–HH |
| 2 | 98–3425 | 1 | Spacer |
| 3 | 99–2302 | 1 | Handle ASM |
| 3:2 | 95–7266 | 1 | Decal – Handle |
| 3:3 | 95–7298 | 1 | Decal – Control |
| 4 | 3256–67 | 1 | Washer–Flat |
| 5 | 57–4910 | 1 | Screw |
| 6 | 32120–35 | 1 | E–Ring |
| 7 | 3256–23 | 2 | Washer–Flat |
| 8 | 5–0776 | 1 | Spring |
| 9 | 5–0765 | 1 | Pin |
| 10 | 3272–1 | 3 | Pin–Cotter |
| 11 | 3256–22 | 6 | Washer–Flat |
| 12 | 98–3401–01 | 1 | Clutch–Bellcrank |
| 13 | 98–3403 | 1 | Tab |
| 14 | 3296–47 | 1 | Nut–Lock, NI |
| 15 | 98–3405–01 | 1 | Crank–Throttle |
| 16 | 3–3422 | 1 | Clutch Cont Rod |
| 17 | 66–2921 | 3 | Washer–Friction |
| 18 | 3290–436 | 1 | Washer–Belleville |
| 19 | 321–14 | 1 | Screw–HH |
| 20 | 98–3408 | 1 | Lever–Throttle |
| 21 | 3296–56 | 2 | Nut–Lock, NI |
| 22 | 99–3711 | 1 | Rod–Clutch Control, Upper |
| 23 | 32111–14 | 1 | Cap Nut |

| Ref. No. | Part No. | Qty. | Description |
|---|---|---|---|
| 24 | 98–3415–03 | 1 | Bail ASM |
| 25 | 49–1631 | 1 | Spacer–Support |
| 26 | 99–8073 | 1 | Latch |
| 27 | 85–6750 | 1 | Spring–Control |
| 28 | 99–3712 | 1 | Rod–Clutch Control, Lower |
| 29 | 3217–5 | 1 | Nut–Hex |
| 30 | 99–8080 | 1 | Body – Turnbuckle |



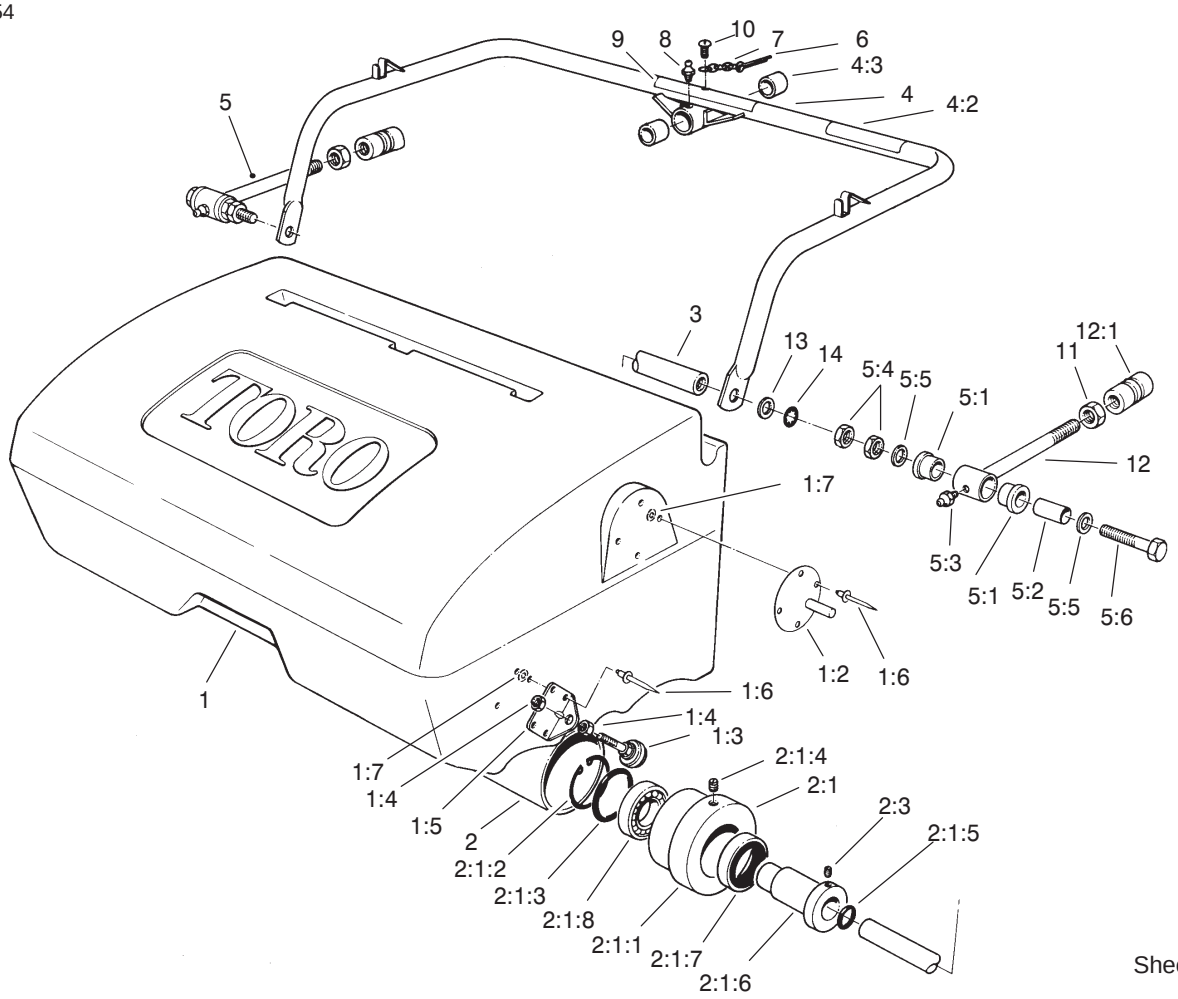

Sheet No.: 9

T–3609

# Roller Assembly No. 88–8900

| Ref. No. | Part No. | Qty. | Description |
|---|---|---|---|
| 1 | 88–8900 | 1 | Wiehle Roller ASM |
| 1:2 | 302–5 | 2 | Fitting–Lube |
| 1:3 | 88–8890 | 2 | Bearing–Wiehle Roller |
| 1:4 | 3256–24 | 2 | Washer–Flat |
| 1:5 | 3254–6 | 2 | Washer–Lock, Int. |
| 1:6 | 94–2958 | 2 | Stud–Ball |

| Ref. No. | Part No. | Qty. | Description |
|---|---|---|---|

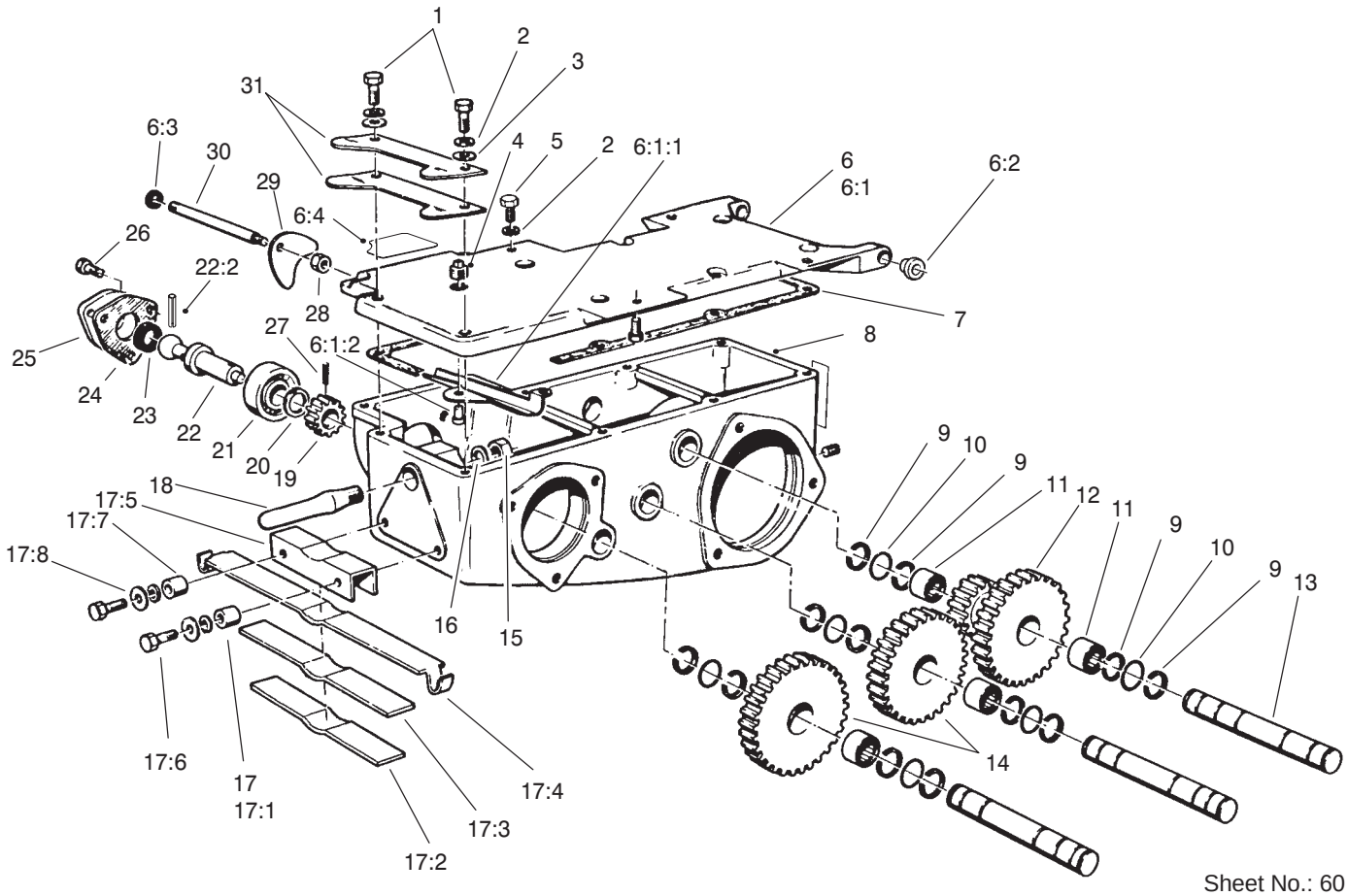



Sheet No.: 10

# Basket and Yoke Assembly

| Ref. No. | Part No. | Qty. | Description |
|---|---|---|---|
| 1 | 88–8770 | 1 | Grass Basket ASM |
| 1:2 | 88–8910 | 2 | Pivot |
| 1:3 | 32141–36 | 2 | Screw–Adjust, Level |
| 1:4 | 3218–2 | 4 | Nut–Jam |
| 1:5 | 5–3464 | 2 | Adjusting Bracket |
| 1:6 | 3269–4 | 16 | Rivet–Pop |
| 1:7 | 3256–51 | 16 | Washer–Flat |
| 2 | 5–1382 | 1 | Front Roller ASM |
| 2:1 | | 2 | Bearing/Housing ASM |
| 2:1:1 | 5–1384 | 1 | Housing – Bearing |
| 2:1:2 | 32151–13 | 1 | Ring–Snap, Internal |
| 2:1:3 | 237–68 | 1 | O–Ring |
| 2:1:4 | 285–17 | 1 | Plug–Pipe |
| 2:1:5 | 237–69 | 1 | O–Ring |
| 2:1:6 | 11–3050 | 1 | Sleeve |
| 2:1:7 | 253–118 | 1 | Seal–Oil |
| 2:1:8 | 251–205 | 1 | Bearing–Ball |
| 2:3 | 3245–35 | 2 | Screw–HS |
| 3 | 5–1390 | 1 | Roller Shaft Yoke |
| 4 | 99–4264 | 1 | Yoke ASM |
| 4:2 | 93–6688 | 1 | Decal–Danger |
| 4:3 | 3–2156 | 2 | Bushing |
| 5 | 3–4510 | 2 | Pull Arm ASM |
| 5:1 | | 1 | Pull Arm & Bshg ASM |
| 5:1:1 | 3–1506 | 2 | Bushing |
| 5:2 | 3–3436 | 1 | Sleeve |

| Ref. No. | Part No. | Qty. | Description |
|---|---|---|---|
| 5:3 | 302–5 | 1 | Fitting–Lube |
| 5:4 | 3220–3 | 2 | Nut–Jam |
| 5:5 | 3256–24 | 2 | Washer–Flat |
| 5:6 | 8–5770 | 1 | Capscrew–Special |
| 6 | 3272–50 | 1 | Pin–Cotter |
| 7 | 3–0696 | 1 | Yoke–Chain |
| 8 | 302–5 | 1 | Fitting–Lube |
| 9 | 3–1828–01 | 1 | Wear Plate |
| 10 | 32104–81 | 1 | Screw–Head, Pan |
| 11 | 3220–3 | 2 | Nut–Jam |
| 12 | 99–1460 | 2 | Ball Joint Receiver ASM |
| 12:1 | 99–1461 | 1 | Sleeve–Joint, Ball |
| 13 | 3256–24 | 2 | Washer–Flat |
| 14 | 3254–6 | 2 | Washer–lock, Int. |

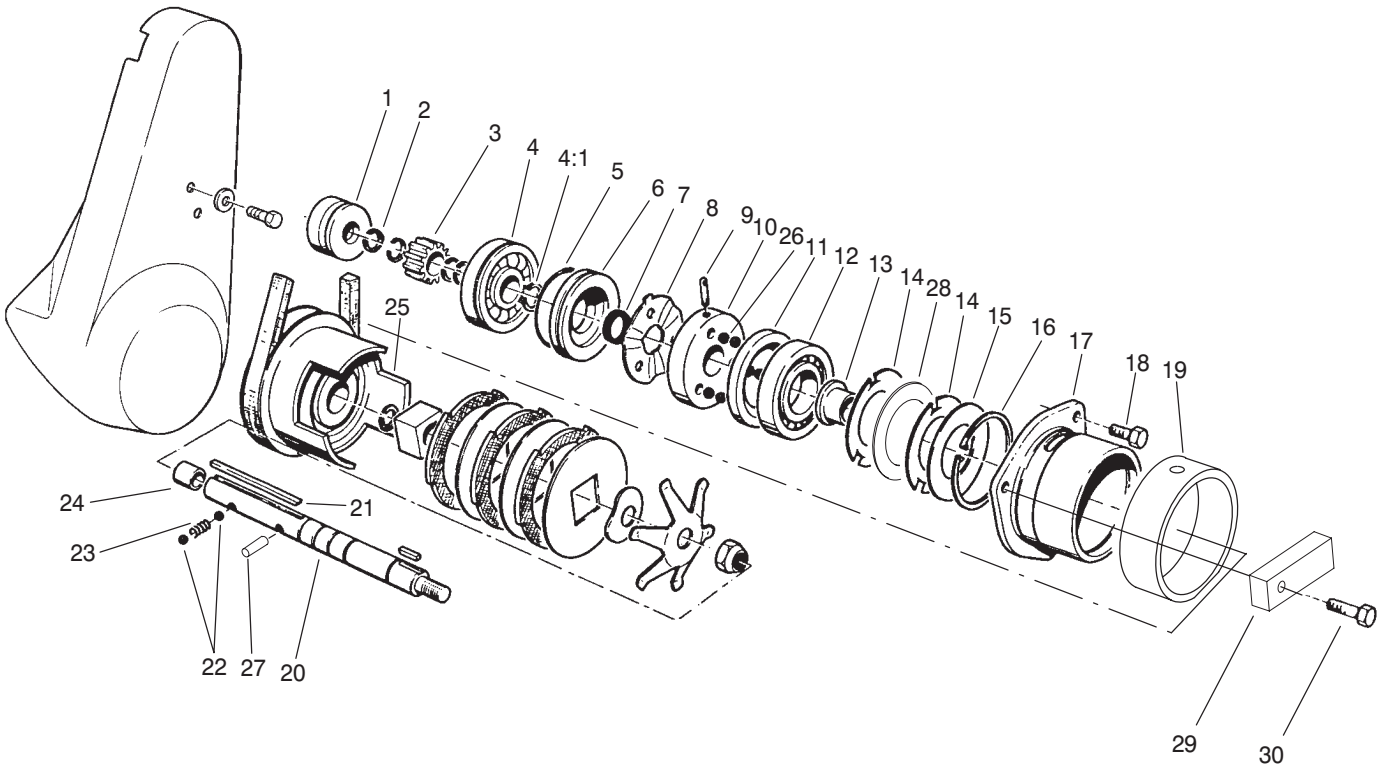



Sheet No.: 60

# Transmission Assembly

| Ref. No. | Part No. | Qty. | Description |
|---|---|---|---|
| 1 | 321–11 | 2 | Screw–HH |
| 2 | 3253–3 | 10 | Washer–Lock/Sp |
| 3 | 3256–2 | 2 | Washer–Flat |
| 4 | 281–3 | 1 | Plug–Pipe |
| 5 | 321–8 | 8 | Screw–HH |
| 6 | 98–3412 | 1 | Cover ASM |
| 6:1 | | 1 | Cover ASM |
| 6:1:1 | 3–1716 | 1 | Pan–Drip, Oil |
| 6:1:2 | 3295–2 | 2 | Rivet–Semi |
| 6:2 | 3–1776 | 2 | Grommet |
| 6:3 | 253–88 | 1 | Seal–Oil |
| 6:4 | 95–7271 | 1 | Decal – Clutch |
| 7 | 3–0485 | 1 | Gasket–Transmission |
| 8 | 3–4371 | 1 | Case ASM |
| 9 | 32120–63 | 12 | Ring–Snap |
| 10 | 237–22 | 6 | O–Ring |
| 11 | 252–49 | 4 | Bearing–Needle |
| 12 | 3–0457 | 1 | Intermediate Gear |
| 13 | 3–0455 | 3 | Idler Shaft |
| 14 | 3–0456 | 2 | Idler Gear |
| 15 | 3296–28 | 1 | Nut–Lock NI |
| 16 | 3256–26 | 1 | Washer–Flat |
| 17 | | 1 | Lift Spring ASM |
| 17:1 | 3–2074 | 2 | Spacer |
| 17:2 | 3–2075 | 1 | Lower Leaf |
| 17:3 | 99–6899 | 1 | Leaf – Center |

| Ref. No. | Part No. | Qty. | Description |
|---|---|---|---|
| 17:4 | 92–4995 | 1 | Main Leaf |
| 17:5 | 92–4992 | 1 | Lift Spring Bracket |
| 17:6 | 322–8 | 2 | Screw–HH |
| 17:7 | 3254–2 | 2 | Washer–Lock, Internal |
| 17:8 | 3256–23 | 2 | Washer–Flat |
| 18 | 95–1810 | 1 | Yoke Pivot |
| 19 | 3–0592 | 1 | Clutch–Reel, Male |
| 20 | 3–4494 | 1 | Thrust Washer |
| 21 | 251–163 | 1 | Bearing–Ball |
| 22 | 2–4779 | 1 | Univ Driver & Pin ASM |
| 22:2 | 32121–25 | 1 | Pin–Roll |
| 23 | 253–59 | 1 | Seal–Oil |
| 24 | 3–2072 | 1 | Bearing Seal |
| 25 | 95–1807 | 1 | Cover–Bearing |
| 26 | 32140–40 | 3 | Screw–HH |
| 27 | 32121–4 | 1 | Pin–Roll |
| 28 | 32152–5 | 1 | Nut–Conelock |
| 29 | 3–0488 | 1 | Shift Fork |
| 30 | 3–0486 | 1 | Reel Clutch Rod |
| 31 | 3–1830 | 2 | Flat Spring |

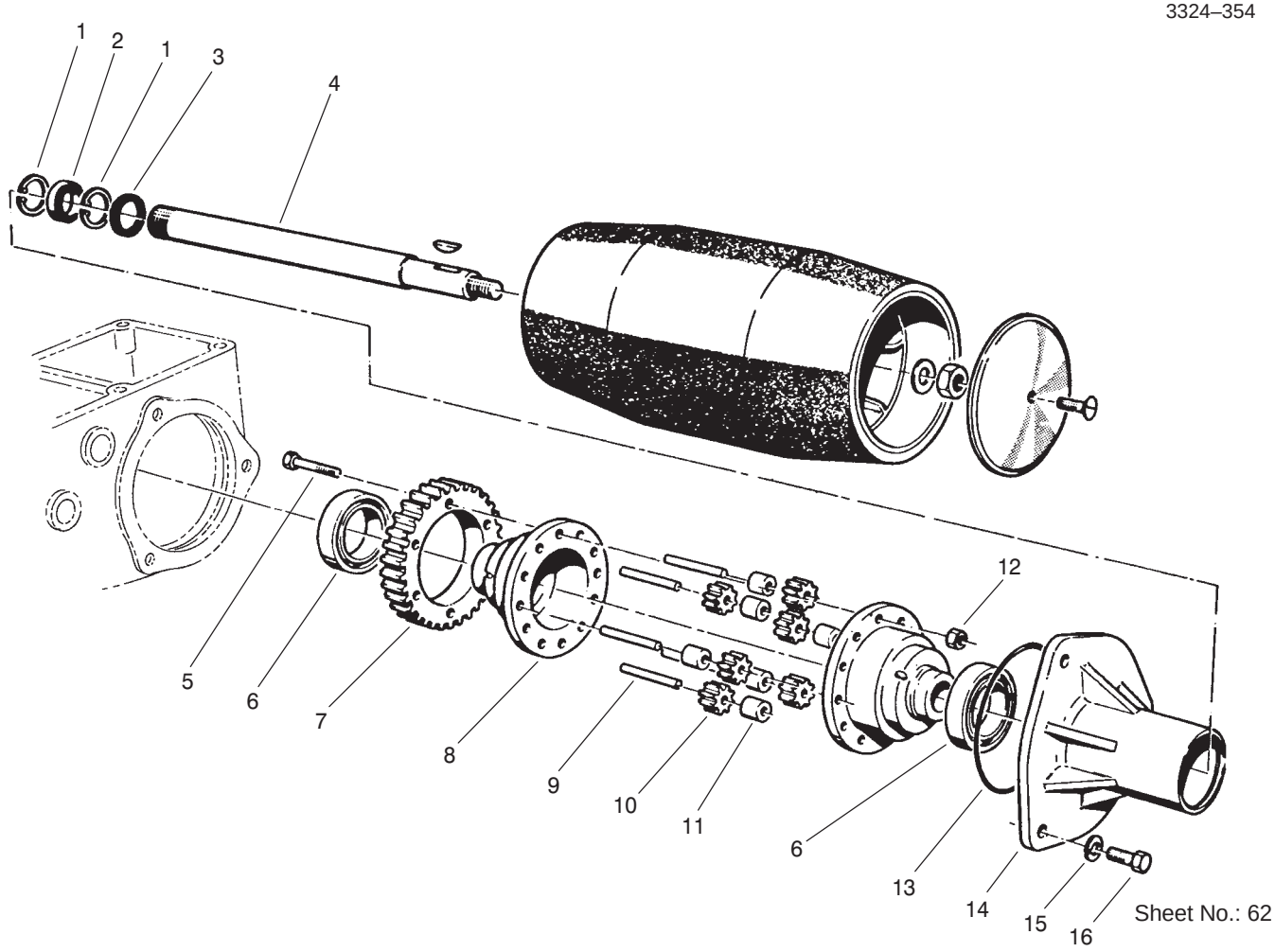



Sheet No.: 61

# Clutch Shaft Assembly

| Ref. No. | Part No. | Qty. | Description |
|---|---|---|---|
| 1 | 3–0465 | 1 | Female Clutch |
| 2 | 32120–64 | 5 | Ring–Snap, External |
| 3 | 88–8700 | 1 | Gear–Pinion |
| 4 | 251–139 | 1 | Bearing–Ball |
| 4:1 | 251–149 | 1 | Ring–Snap |
| 5 | 237–38 | 1 | O–Ring |
| 6 | 3–1545 | 1 | Spacer–Clutch |
| 7 | 253–83 | 1 | Seal–Oil |
| 8 | 98–3410 | 1 | Cam – Clutch |
| 9 | 95–6082 | 1 | Pin – Clutch |
| 10 | 3–0470 | 1 | Clutch Actuator |
| 11 | 3–0471 | 1 | Clutch Backing Plate |
| 12 | 251–140 | 1 | Bearing–Ball |
| 13 | 3–4066 | 1 | Bushing |
| 14 | 3290–264 | 2 | Washer–Wave |
| 15 | 3–0481 | 1 | Washer–Clutch |
| 16 | 32120–65 | 1 | Ring–Snap |
| 17 | 5–1423 | 1 | Clutch Housing |
| 18 | 3274–15 | 2 | Screw–HSH |
| 19 | 98–3400 | 1 | Sleeve – Clutch |
| 20 | 95–7293 | 1 | Shaft–Clutch |
| 21 | 88–8730 | 1 | Key–Clutch Shaft |
| 22 | 255–5 | 2 | Ball–Steel |
| 23 | 3–0460 | 1 | Spring–Detent |
| 24 | 256–112 | 1 | Bushing |
| 25 | 3–0480 | 1 | Pulley–Clutch |

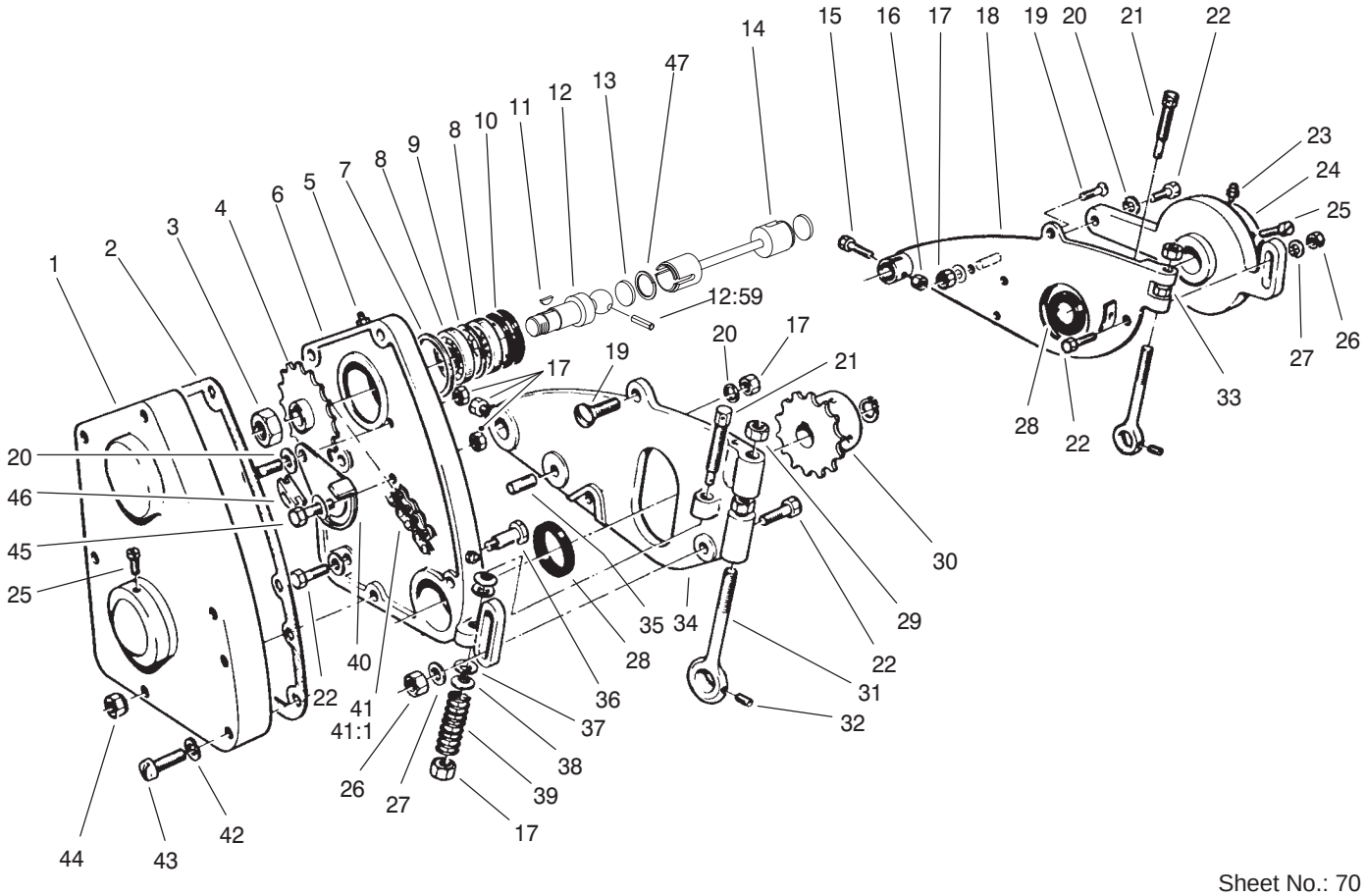
| Ref. No. | Part No. | Qty. | Description |
|---|---|---|---|
| 26 | 255–8 | 6 | Ball–Steel |
| 27 | 32121–45 | 1 | Pin–Spring |
| 28 | 88–9030 | 1 | Washer – Special |
| 29 | 100–3396 | 1 | Stop–Clutch Lever |
| 30 | 321–8 | 1 | Screw–HH |




# Differential Case and Shaft Assembly

| Ref. No. | Part No. | Qty. | Description |
|---|---|---|---|
| 1 | 32120–62 | 4 | Ring–Retaining |
| 2 | 251–137 | 2 | Bearing–Ball |
| 3 | 253–82 | 2 | Seal–Oil |
| 4 | 3–8392 | 2 | Axle |
| 5 | 3273–23 | 6 | Screw–HS |
| 6 | 251–138 | 2 | Bearing–Ball |
| 7 | 3–0454 | 1 | Ring Gear |
| 8 | 3–0450 | 2 | Case–Differential |
| 9 | 3–0452 | 6 | Shaft–Gear, Differential |
| 10 | 3–3858 | 6 | Gear–Differential |
| 11 | 3–0453 | 6 | Spacer–Gear, Differential |
| 12 | 3296–27 | 6 | Nut–Lock NI |
| 13 | 237–33 | 2 | O–Ring |
| 14 | 3–0596 | 2 | Housing–Axle |
| 15 | 3253–4 | 6 | Washer |
| 16 | 322–4 | 6 | Screw–HH |

| Ref. No. | Part No. | Qty. | Description |
|---|---|---|---|

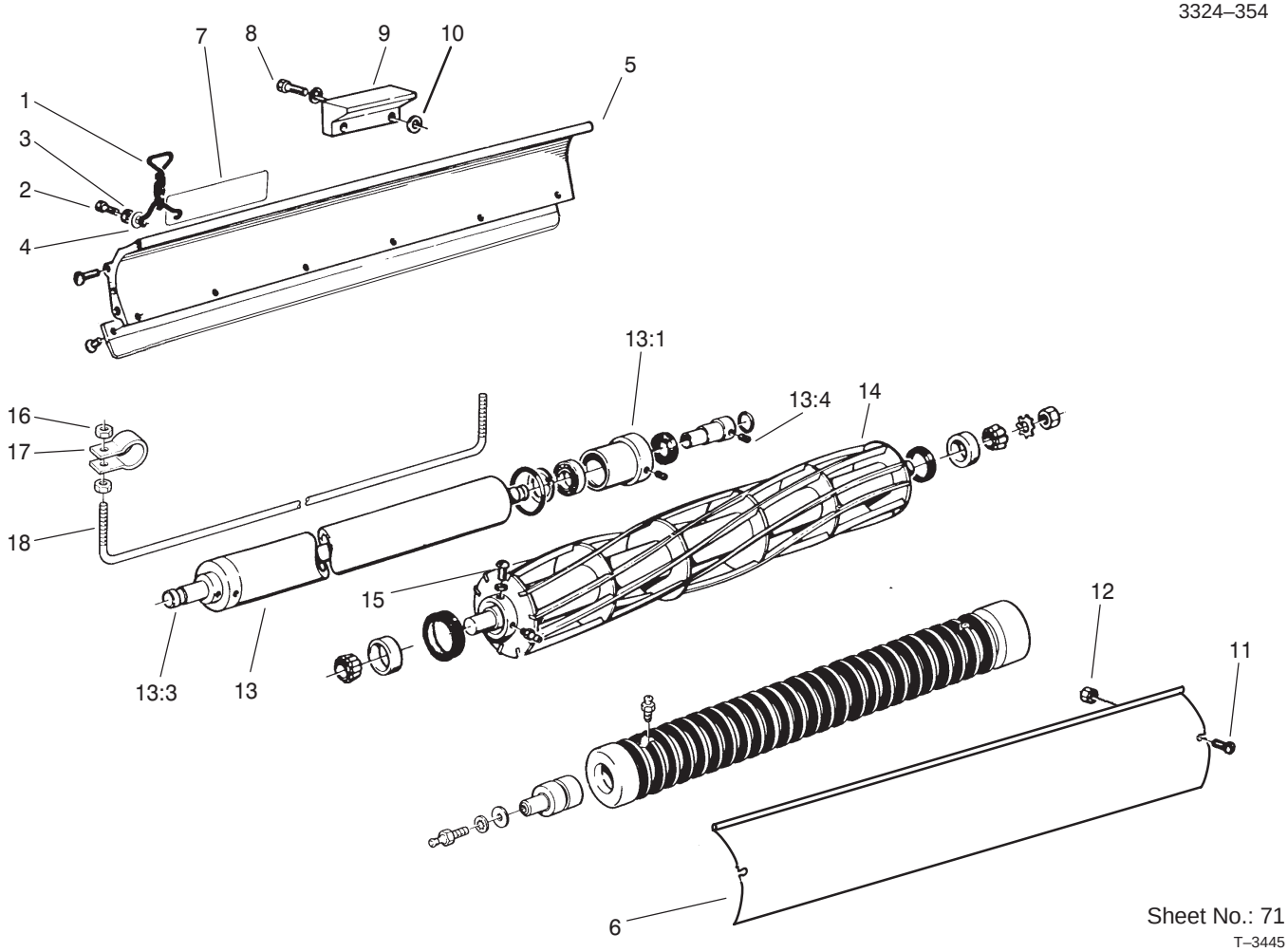



Sheet No.: 70

# Cutting Unit Frame Assembly

| Ref. No. | Part No. | Qty. | Description |
|---|---|---|---|
| 1 | 3–2964–01 | 1 | Cover–Drive, Reel |
| 2 | 92–4991 | 1 | Gasket–Cover, Reel |
| 3 | 3296–33 | 1 | Nut–Lock, NI |
| 4 | 88–8930 | 1 | Sprocket |
| 5 | 302–5 | 1 | Fitting–Lube |
| 6 | 3–5786–01 | 1 | Reel Bracket RH |
| 7 | 32120–42 | 1 | Ring–Retaining |
| 8 | 251–6 | 2 | Bearing–Ball |
| 9 | 3–3428 | 1 | Washer |
| 10 | 253–59 | 2 | Seal–Oil |
| 11 | 3–2804 | 1 | Key–Woodruff |
| 12 | 2–0039 | 1 | Universal Driver ASM |
| 12:59 | 32121–25 | 1 | Pin–Roll |
| 13 | 3–1852 | 2 | Pad |
| 14 | 3–0584–01 | 1 | Universal Shaft ASM |
| 15 | 321–9 | 2 | Screw–HH |
| 16 | 32153–4 | 2 | Locknut |
| 17 | 3296–13 | 6 | Nut–Lock NI |
| 18 | 3–5783–01 | 1 | LH Side Plate |
| 19 | 3290–141 | 6 | Screw–HSFH |
| 20 | 3256–22 | 4 | Washer–Flat |
| 21 | 3–5793 | 2 | Reel Adjustment Screw |
| 22 | 329–13 | 4 | Screw–HH |
| 23 | 302–14 | 2 | Vent Fitting |
| 24 | 3–6524–01 | 1 | Reel Bracket |
| 25 | 3274–26 | 2 | Screw–HSH |

| Ref. No. | Part No. | Qty. | Description |
|---|---|---|---|
| 26 | 3296–3 | 2 | Nut–Lock NI |
| 27 | 3–5792 | 2 | Washer |
| 28 | 99–4268 | 2 | Seal–Oil |
| 29 | 3296–45 | 2 | Nut–Lock, NI |
| 30 | 3–5802 | 1 | Reel Sprocket |
| 31 | 3–5785 | 2 | Roller Adj Screw |
| 32 | 3245–7 | 2 | Screw |
| 33 | 3217–9 | 2 | Nut–HH |
| 34 | 3–5784–01 | 1 | RH Side Plate |
| 35 | 3–5797 | 2 | Spacer |
| 36 | 95–1826 | 2 | Bolt–Special |
| 37 | 3–0566 | 4 | Washer–Concave |
| 38 | 3–0565 | 4 | Washer–Convex |
| 39 | 3–5787 | 2 | Spring–Compression |
| 40 | 3–0463 | 1 | Idler Arm–Chain |
| 41 | 88–8920 | 1 | Roller Chain |
| 41:1 | 2710–31 | 1 | #35 Connecting Link |
| 42 | 3253–17 | 5 | Washer–Lock/Sp |
| 43 | 32105–5 | 5 | Screw |
| 44 | 3–3554 | 2 | Nut–Special |
| 45 | 329–3 | 2 | Screw–HH |
| 46 | 3–0554 | 1 | Chain Idler Shoe |
| 47 | 32120–69 | 1 | Ring–Snap |



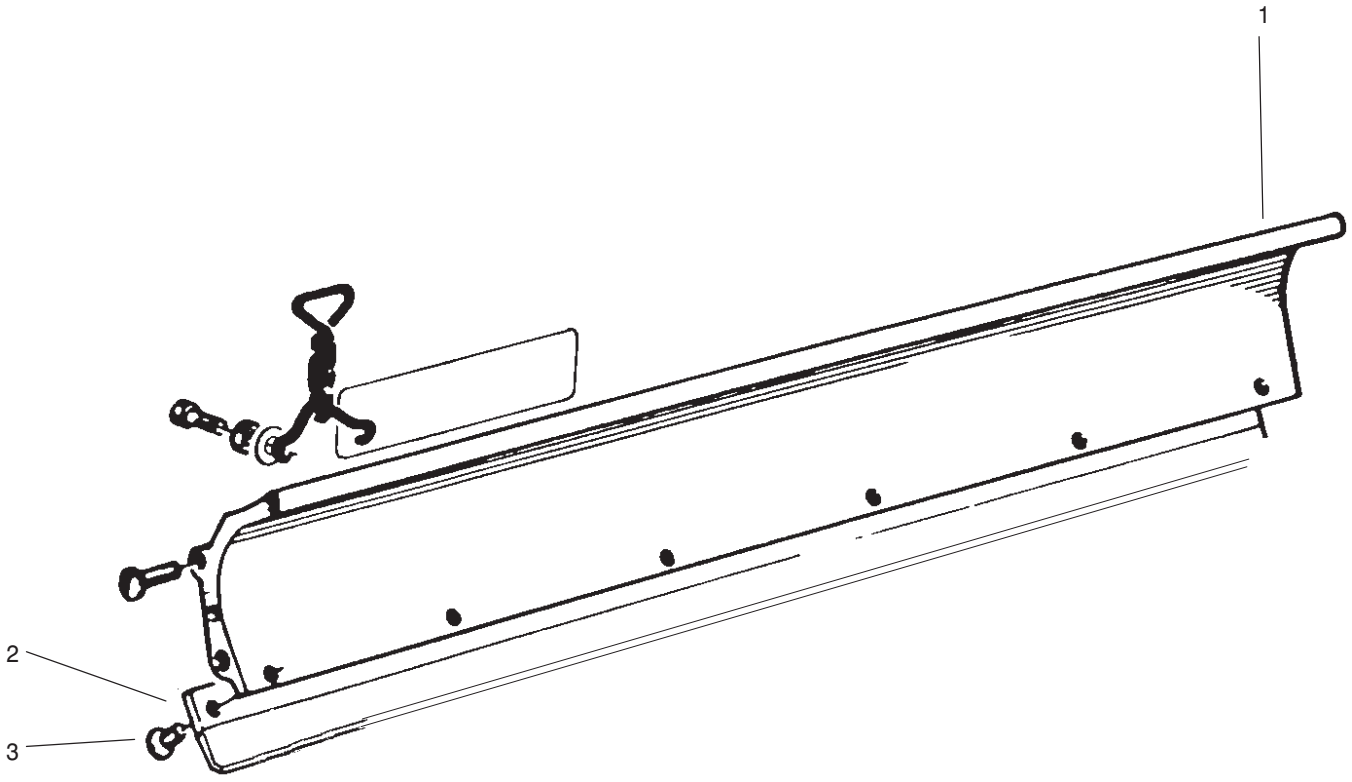

Sheet No.: 71
T–3445

# Bedknife, Reel, and Roller Assembly

| Ref. No. | Part No. | Qty. | Description |
|---|---|---|---|
| 1 | 92–4994 | 2 | Chain–Lift, Reel |
| 2 | 321–2 | 4 | Screw–HH |
| 3 | 3253–3 | 6 | Washer–Lock/Sp |
| 4 | 3–0988 | 2 | Lift Bail |
| ★5 | | 1 | Guard & Bedknife ASM |
| 6 | 3–2057–01 | 1 | Reinf & Gr Shield |
| 7 | 93–6688 | 1 | Decal–Danger |
| 8 | 321–8 | 2 | Screw–HH |
| 9 | 3–4981–01 | 1 | Weight |
| 10 | 3256–22 | 4 | Washer–Flat |
| 11 | 3258–61 | 2 | Screw |
| 12 | 3296–13 | 2 | Nut–Lock NI |
| 13 | 39–9590 | 1 | Roller ASM |
| ★13:1 | | 2 | Bearing/Housing ASM |
| 13:3 | 5–1422 | 1 | Shaft–Roller, Rear |
| 13:4 | 3245–35 | 2 | Screw–HS |
| 14 | 4–2219 | 1 | Reel ASM |
| 15 | 3274–29 | 4 | Screw–HSFH |
| 16 | 32149–2 | 4 | Nut–Keps |
| 17 | 88–9010 | 2 | Bracket – Scraper |
| 18 | 88–9020 | 1 | Rod – Scraper |

| Ref. No. | Part No. | Qty. | Description |
|---|---|---|---|

★ Not Serviced

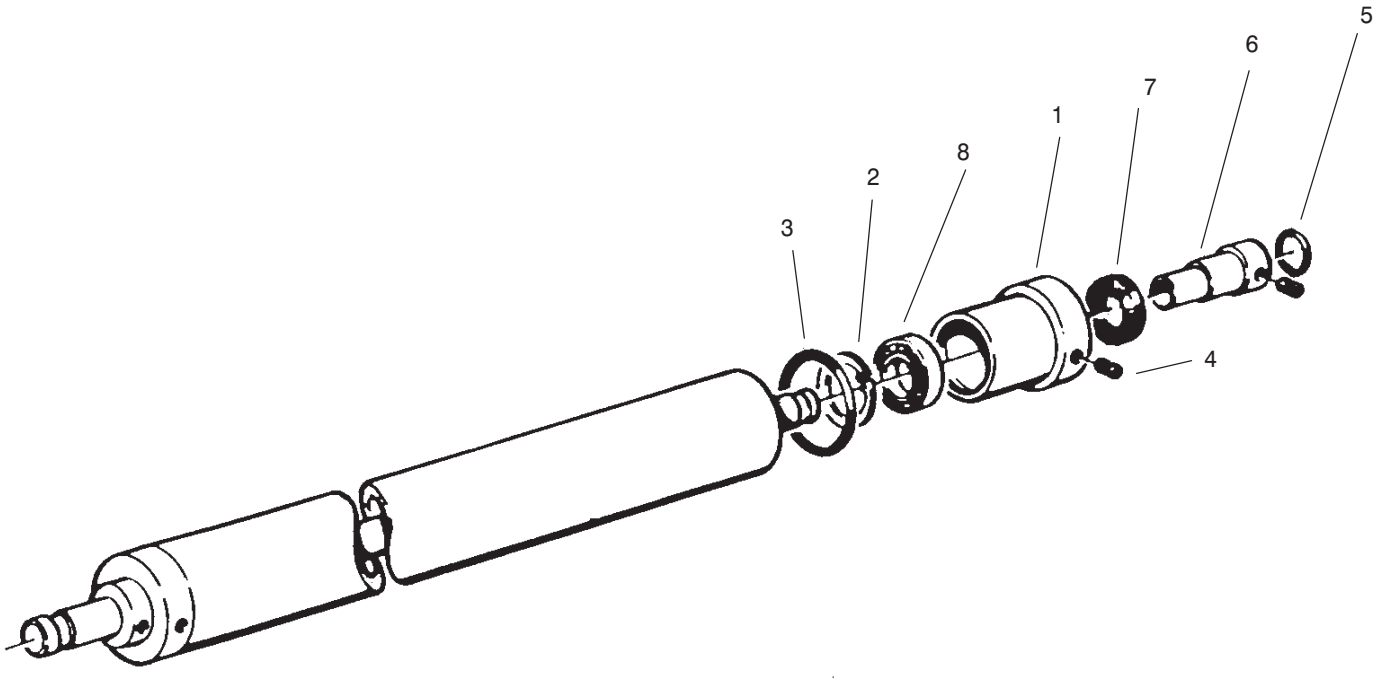



Sheet No.: A1
T–3613

# Guard and Bedknife Assembly

| Ref. No. | Part No. | Qty. | Description |
|---|---|---|---|
| 1 | 3–0601–01 | 1 | Guard |
| 2 | 95–3147 | 1 | Bedknife – Micro Cut |
| 2 | 88–9000 | 1 | Bedknife–Tournament |
| 2 | 88–8990 | 1 | Bedknife – Machined |
| 3 | 57–4910 | 6 | Screw |

| Ref. No. | Part No. | Qty. | Description |
|---|---|---|---|

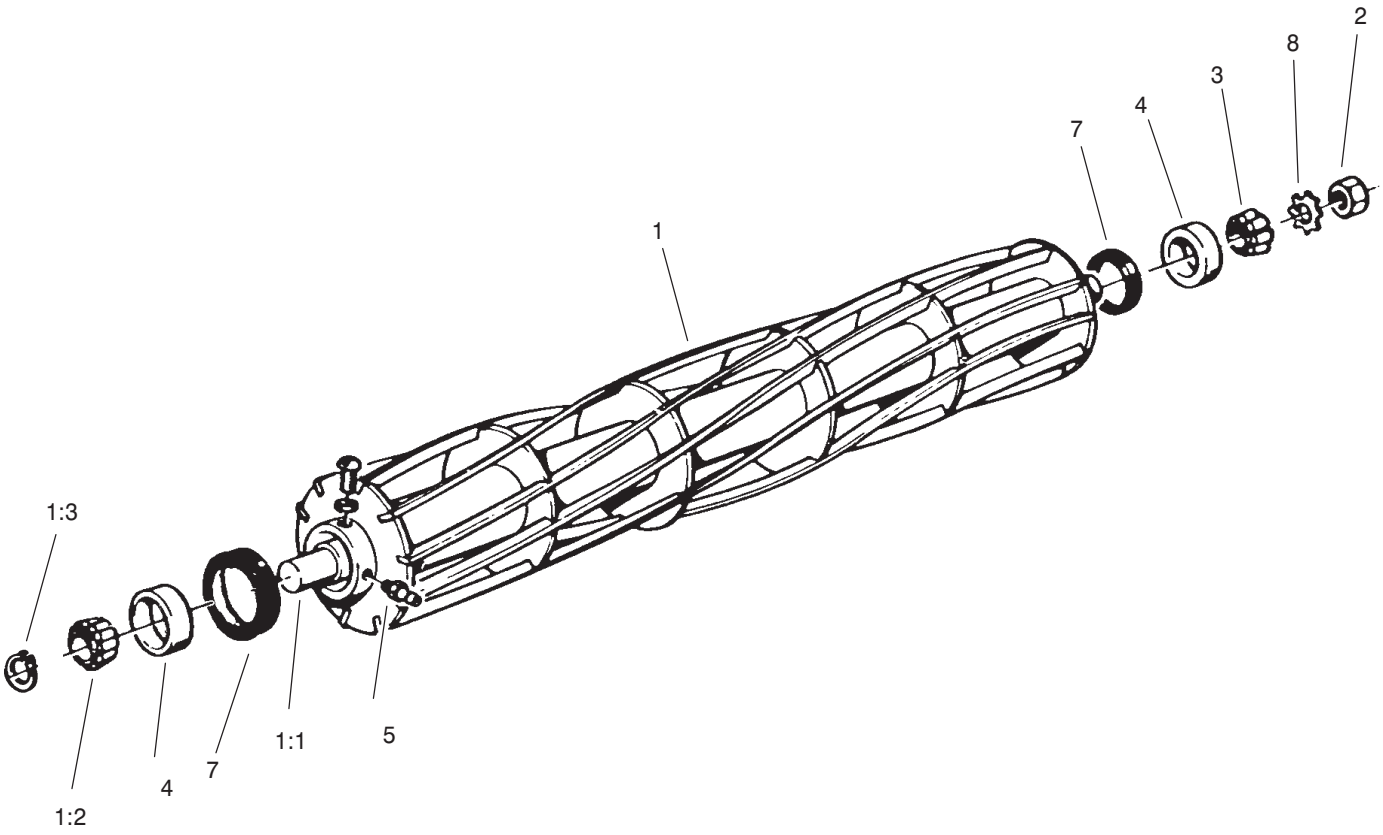



Sheet No.: A2
T–3610

# Bearing Housing Assembly for Roller Assembly No. 39–9590

| Ref. No. | Part No. | Qty. | Description |
|---|---|---|---|
| 1 | 5–1384 | 1 | Housing – Bearing |
| 2 | 32151–13 | 1 | Ring–Snap, Internal |
| 3 | 237–68 | 1 | O–Ring |
| 4 | 285–17 | 1 | Plug–Pipe |
| 5 | 237–69 | 1 | O–Ring |
| 6 | 11–3050 | 1 | Sleeve |
| 7 | 253–118 | 1 | Seal–Oil |
| 8 | 251–205 | 1 | Bearing–Ball |

| Ref. No. | Part No. | Qty. | Description |
|---|---|---|---|




Sheet No.: A3
T–3611

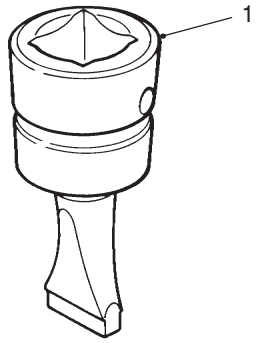
# Real and Bearing Assembly NO. 4–2219

| Ref. No. | Part No. | Qty. | Description |
|---|---|---|---|
| 1 | | 1 | Reel & Bearing ASM |
| 1:1 | 5–1393 | 1 | Reel Shaft |
| 1:2 | 254–68 | 1 | 11/16 Roller Brg Cone |
| 1:3 | 32151–12 | 1 | Ring–Retaining |
| 2 | 254–86 | 1 | Locknut |
| 3 | 254–68 | 1 | 11/16 Roller Brg Cone |
| 4 | 254–67 | 2 | 1.570 Roller Brg Cup |
| 5 | 302–5 | 2 | Fitting–Lube |
| 7 | 253–120 | 2 | 3/4 X .250 Oil Seal |
| 8 | 254–87 | 1 | Lockwasher |

| Ref. No. | Part No. | Qty. | Description |
|---|---|---|---|

# Special Tools

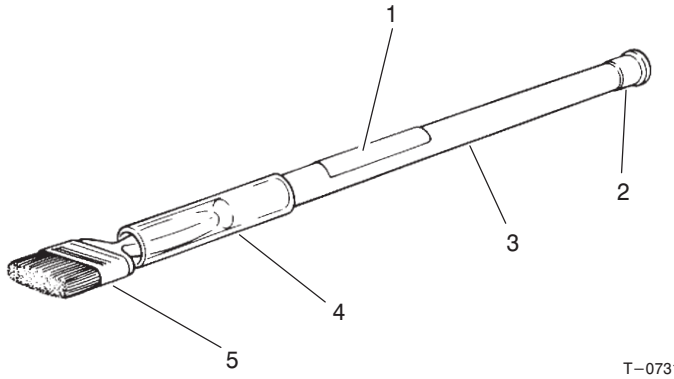
## BEDKNIFE SCREW TOOL NO. *TOR510880




T–0729

| Ref No. | Part No. | Qty. | Description |
|---|---|---|---|
| 1 | | 1 | Tool–Bedknife Screw |

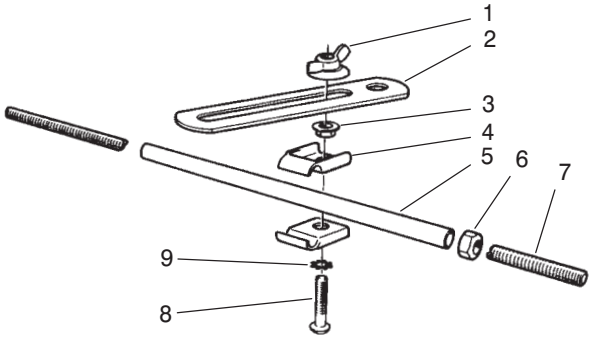
## BACKLAPPING BRUSH ASSEMBLY NO. *TOR299100




T–0731

| Ref No. | Part No. | Qty. | Description |
|---|---|---|---|
| 1 | 12–9140 | 1 | Decal |
| 2 | 2410–18 | 1 | Plug |
| 3 | 29–9080 | 1 | Handle |
| 4 | 29–9090 | 1 | Hose–Handle |
| 5 | 36–4310 | 1 | Brush |

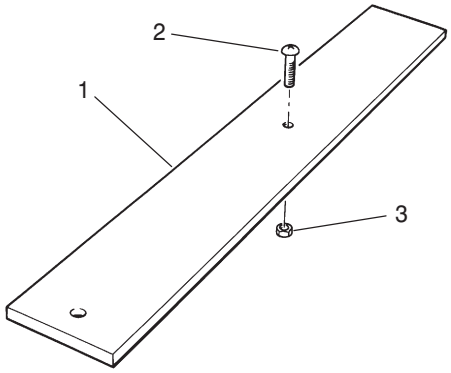
## ALIGNMENT TOOL NO. TOR200120




T–0732

| Ref No. | Part No. | Qty. | Description |
|---|---|---|---|
| 1 | | 1 | Nut–Wing |
| 2 | | 1 | Bracket–Alignment |
| 3 | 32128–20 | 1 | Nut–HFH |
| 4 | 3–6657 | 2 | Clip–Skid |
| 5 | | 1 | Tube |
| 6 | 3219–2 | 1 | Nut–Hex |
| 7 | | 1 | Rod |
| 8 | 32122–35 | 1 | Screw–Head, Truss |
| 9 | 3255–8 | 1 | Washer–Lock |

## GAUGE BAR ASSEMBLY NO. *TOR138199



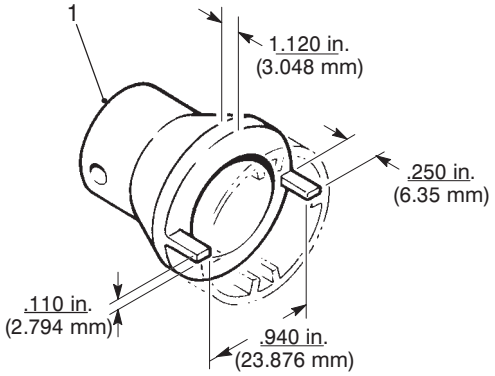

T–1151

| Ref No. | Part No. | Qty | Description |
|---|---|---|---|
| 1 | 65–8320 | 1 | Bar–HOC |
| 2 | 32122–2 | 1 | Screw–Head, Round |
| 3 | 3219–14 | 1 | Nut–Hex |

*Obtain these items directly from OTC 2013 4th St. Owatonna, MN. 55060 1–800–533–0492 (in Minnesota and Canada 1–507–455–7050) Fax. 507–455–7011.

# Special Tools

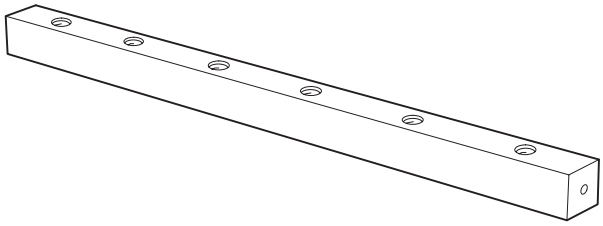
## REEL BEARING ADJUSTMENT SOCKET NO. *TOR31826




T–0480

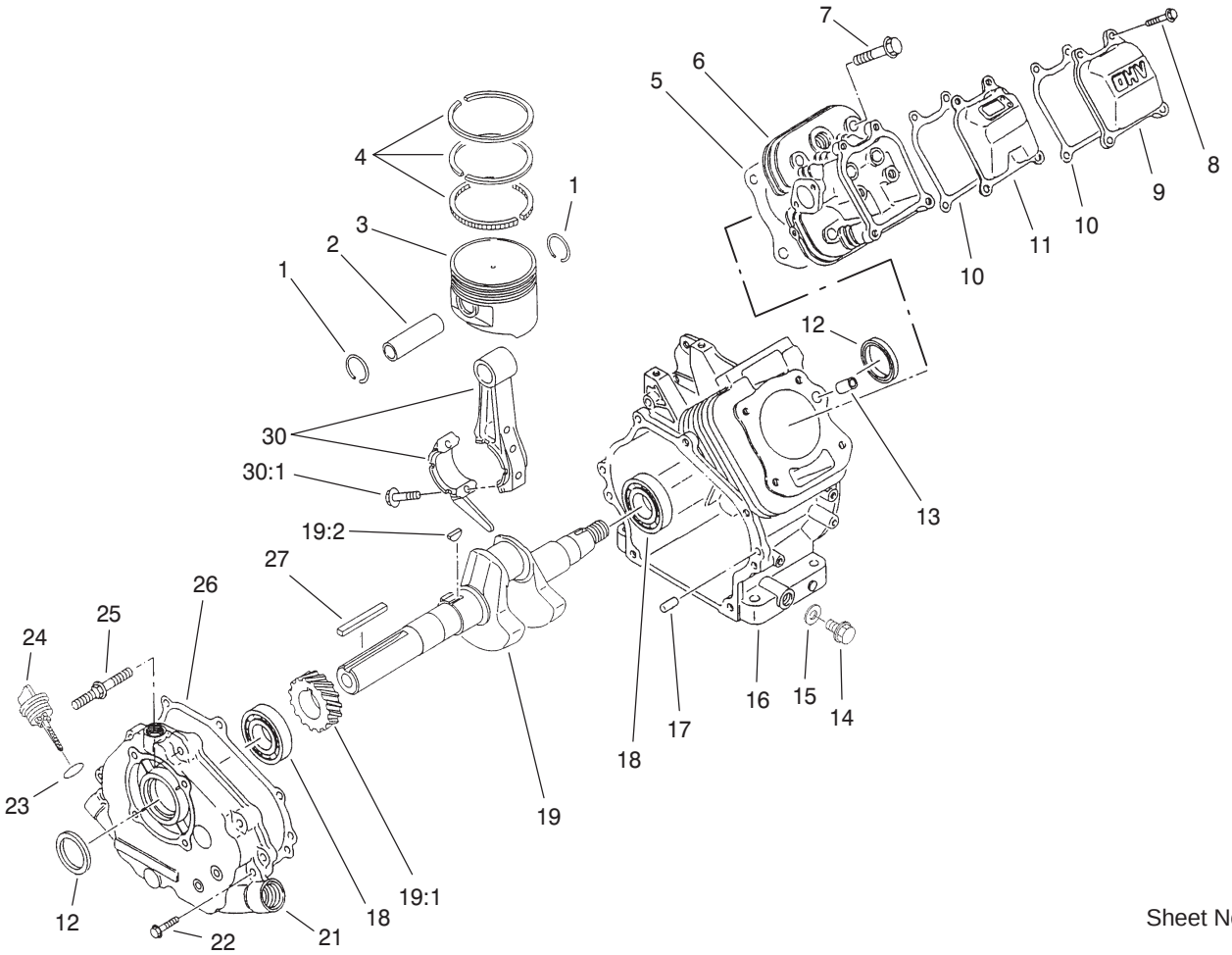
| Ref No. | Part No. | Qty. | Description |
|---|---|---|---|
| 1 | | 1 | Pinion Removal Tool Note: Modify #3–1826 by removing material as indicated to achieve final dimensions for reel bearing adjustment socket. |

## BED KNIFE GRINDING BAR *TOR31397



T–2451

*Obtain these items directly from OTC 2013 4th St. Owatonna, MN. 55060 1–800–533–0492 (in Minnesota and Canada 1–507–455–7050) Fax. 507–455–7011.

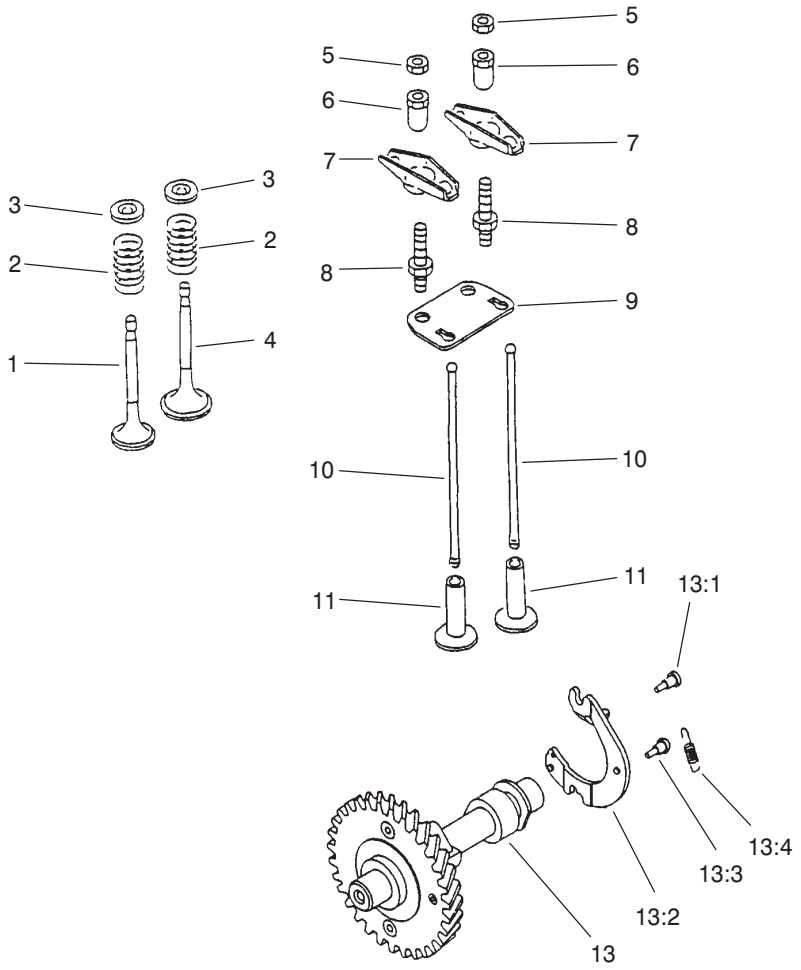



Sheet No.: 50

# Crankcase Assembly
# Part No. 99–4265 Engine, Model FE120D–CS02

| Ref. No. | Part No. | Qty. | Description |
|---|---|---|---|
| 1 | 93–8500 | 2 | Ring – Retaining |
| 2 | 93–8501 | 1 | Pin – Piston |
| 3 | 93–8502 | 1 | Piston |
| 3 | 94–6836 | 1 | Piston – 0.5 O/S |
| 4 | 93–8503 | 1 | Piston Ring Set |
| 4 | 94–6837 | 1 | Piston Ring Set – .05mm |
| 5 | 93–8504 | 1 | Gasket Head |
| 6 | 93–8505 | 1 | Head–Cylinder |
| 7 | 93–8506 | 4 | Bolt–Flanged |
| 8 | 94–6838 | 4 | Bolt – Flanged |
| 9 | 93–8508 | 1 | Case–Rocker |
| 10 | 93–8509 | 2 | Gasket–Rocker |
| 11 | 93–8510 | 1 | Breather |
| 12 | 93–8511 | 2 | Seal–Oil |
| 13 | 93–8512 | 2 | Pin |
| 14 | 93–8513 | 2 | Plug–Drain |
| 15 | 93–8514 | 2 | Gasket–Drain Plug |
| 16 | 93–8515 | 1 | Crankcase |
| 17 | 93–8516 | 2 | Pin |
| 18 | 93–8517 | 2 | Bearing–Ball |
| 19 | 93–8696 | 1 | Crankshaft ASM |
| 19:1 | 94–9043 | 1 | Gear – Helical |
| 19:2 | 93–8526 | 1 | Key |

| Ref. No. | Part No. | Qty. | Description |
|---|---|---|---|
| 21 | 93–8697 | 1 | Crankcase Cover |
| 22 | 93–8521 | 7 | Bolt–Flanged |
| 23 | 94–9041 | 2 | Seal – O–Ring |
| 24 | 93–8523 | 2 | Cap–Oil–Filter |
| 25 | 93–8524 | 1 | Stud |
| 26 | 93–8525 | 1 | Gasket–Crankcase |
| 27 | 93–8698 | 1 | Key |
| 30 | 93–8528 | 1 | Connecting Rod ASM |
| 30:1 | 93–8527 | 2 | Bolt–Rod |

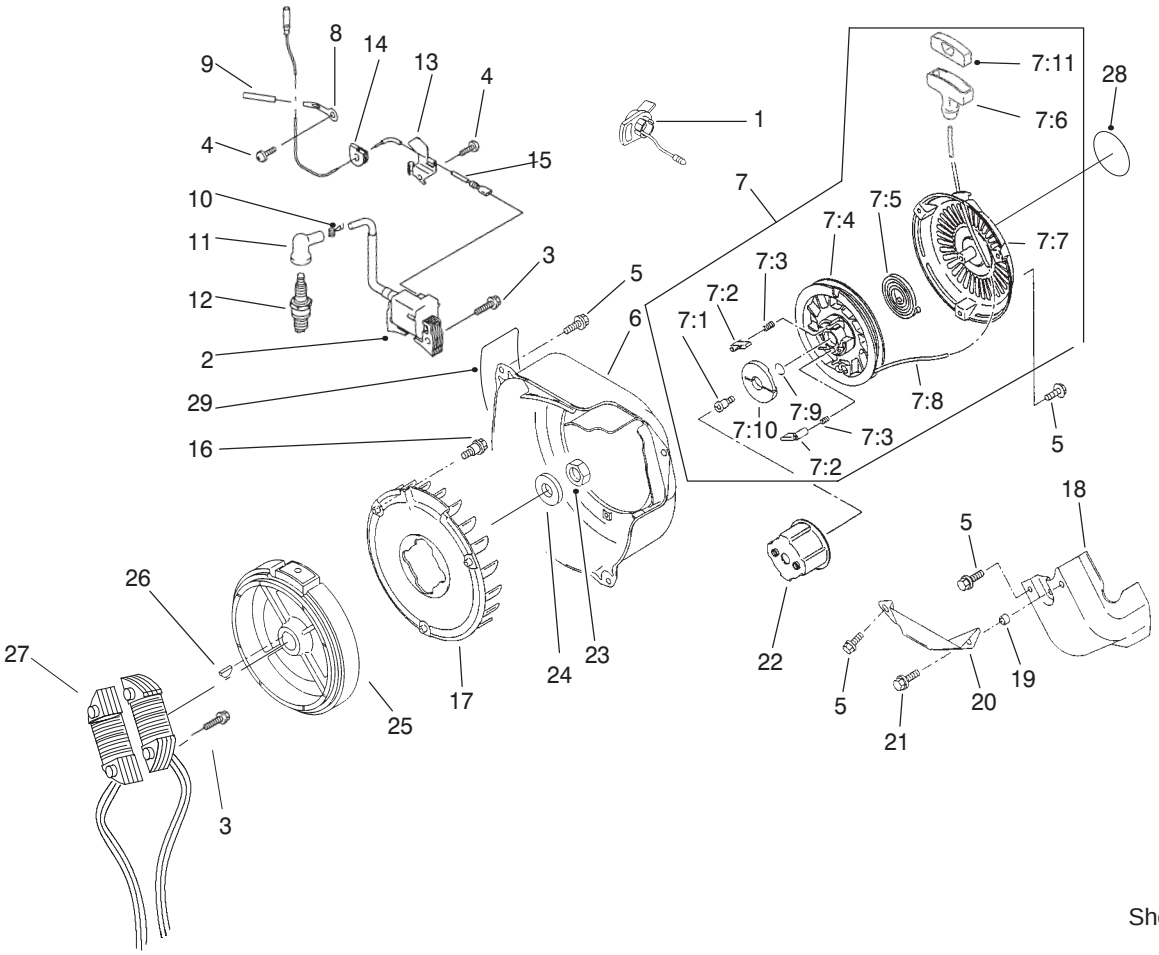



Sheet No.: 51

# Camshaft and Valves Assembly
# Part No. 99–4265 Engine, Model FE120D–CS02

| Ref. No. | Part No. | Qty. | Description |
|---|---|---|---|
| 1 | 93–8529 | 1 | Valve–Exhaust |
| 2 | 93–8530 | 2 | Spring–Valve |
| 3 | 93–8531 | 2 | Retainer–Spring |
| 4 | 93–8532 | 1 | Valve–Intake |
| 5 | 93–8533 | 2 | Nut |
| 6 | 93–8534 | 2 | Nut |
| 7 | 93–8535 | 2 | Arm–Rocker |
| 8 | 93–8536 | 2 | Bolt |
| 9 | 93–8537 | 1 | Guide |
| 10 | 93–8538 | 2 | Rod–Push |
| 11 | 93–8539 | 2 | Tappet |
| 13 | 93–8699 | 1 | Camshaft ASM |
| 13:1 | 93–8540 | 2 | Pin |
| 13:2 | 93–8543 | 1 | Decompressor |
| 13:3 | 93–8542 | 1 | Pin |
| 13:4 | 93–8541 | 1 | Spring |

| Ref. No. | Part No. | Qty. | Description |
|---|---|---|---|

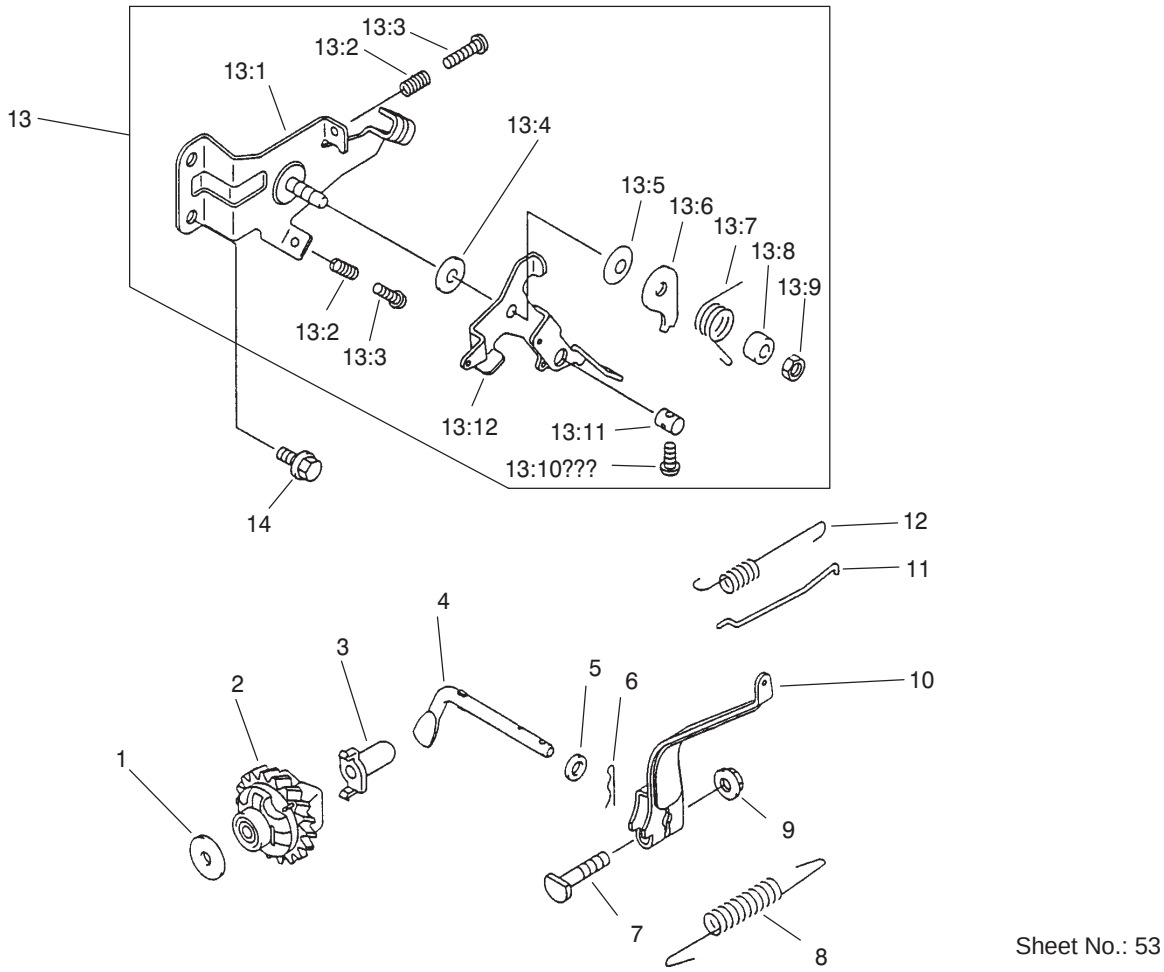



Sheet No.: 52

# Ignition Assembly
# Part No. 99–4265 Engine, Model FE120D–CS02

| Ref. No. | Part No. | Qty. | Description |
|---|---|---|---|
| 1 | 93–8546 | 1 | Switch |
| 2 | 94–9031 | 1 | Ignition Coil ASM |
| 3 | 93–8548 | 6 | Bolt–Flanged |
| 4 | 93–8549 | 1 | Screw |
| 5 | 93–8550 | 10 | Bolt–Flanged |
| 6 | 94–9047 | 1 | Housing – Fan |
| 7 | 93–8552 | 1 | Recoil Starter ASM |
| 7:1 | 93–8553 | 1 | Screw |
| 7:2 | 93–8554 | 2 | Pawl–Recoil |
| 7:3 | 93–8555 | 2 | Spring–Return |
| 7:4 | 93–8556 | 1 | Reel–Recoil |
| 7:5 | 93–8557 | 1 | Spring |
| 7:6 | 94–9045 | 1 | Grip – Recoil Starter |
| 7:7 | 94–9046 | 1 | Case – Recoil |
| 7:8 | 93–8560 | 1 | Rope |
| 7:9 | 93–8561 | 1 | Ring–Retaining |
| 7:10 | 93–8562 | 1 | Guide–Pawl |
| 7:11 | 94–9044 | 1 | Cap – Grip |
| 8 | 94–9039 | 1 | Clamp |
| 9 | 94–9040 | 1 | Tube |
| 10 | 94–9049 | 1 | Spring–Terminal |
| 11 | 93–8585 | 1 | Cap–Spark Plug |
| 12 | 93–8584 | 1 | Spark Plug |
| 13 | 93–8583 | 1 | Clamp |

| Ref. No. | Part No. | Qty. | Description |
|---|---|---|---|
| 14 | 93–8582 | 1 | Grommet |
| 15 | 94–9038 | 1 | Wire – Lead |
| 16 | 94–6840 | 3 | Bolt – Flanged |
| 17 | 93–8572 | 1 | Fan |
| 18 | 93–8563 | 1 | Shroud–Engine |
| 19 | 93–8564 | 1 | Collar |
| 20 | 93–8565 | 1 | Shroud–Engine |
| 21 | 93–8566 | 1 | Bolt–Flanged |
| 22 | 93–8567 | 1 | Pulley–Recoil |
| 23 | 93–8568 | 1 | Nut |
| 24 | 93–8569 | 1 | Washer |
| 25 | 99–6237 | 1 | Flywheel ASM |
| 26 | 93–8571 | 1 | Key |
| 27 | 99–4267 | 1 | Coil–Lighting |
| 28 | 94–9027 | 1 | Label – Recoil |
| 34 | 93–8689 | 1 | Decal–Instructions |

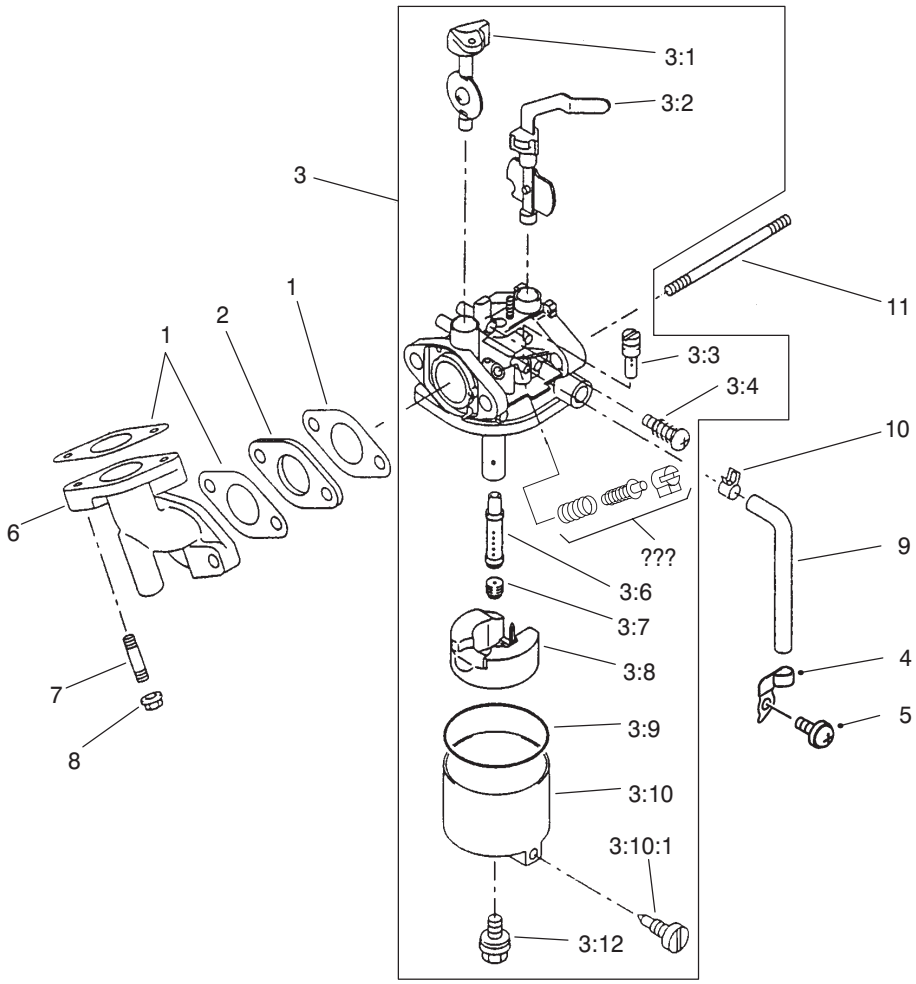



Sheet No.: 53

# Governor Assembly
# Part No. 99–4265 Engine, Model FE120D–CS02

| Ref. No. | Part No. | Qty. | Description |
|---|---|---|---|
| 1 | 94–6842 | 1 | Washer |
| 2 | 94–6841 | 1 | Governor ASM |
| 3 | 93–8610 | 1 | Sleeve |
| 4 | 93–8609 | 1 | Arm–Pivot |
| 5 | 93–8608 | 1 | Washer |
| 6 | 93–8607 | 1 | Pin–Snap |
| 7 | 93–8606 | 1 | Bolt |
| 8 | 94–9030 | 1 | Govenor Spring |
| 9 | 93–8631 | 1 | Nut |
| 10 | 93–8603 | 1 | Arm–Governor |
| 11 | 93–8602 | 1 | Rod–Governor |
| 12 | 93–8601 | 1 | Spring |
| 13 | 93–8599 | 1 | Control Panel ASM |
| 13:1 | 93–8587 | 1 | Panel–Control |
| 13:2 | 93–8588 | 2 | Spring |
| 13:3 | 93–8589 | 2 | Bolt |
| 13:4 | 93–8590 | 1 | Washer |
| 13:5 | 93–8591 | 1 | Spring |
| 13:6 | 93–8592 | 1 | Plate |
| 13:7 | 93–8593 | 1 | Spring |
| 13:8 | 93–8594 | 1 | Spacer |
| 13:9 | 93–8595 | 1 | Nut |
| 13:11 | 93–8597 | 1 | Nut |
| 13:12 | 93–8598 | 1 | Lever |

| Ref. No. | Part No. | Qty. | Description |
|---|---|---|---|
| 14 | 93–8600 | 2 | Bolt–Flanged |

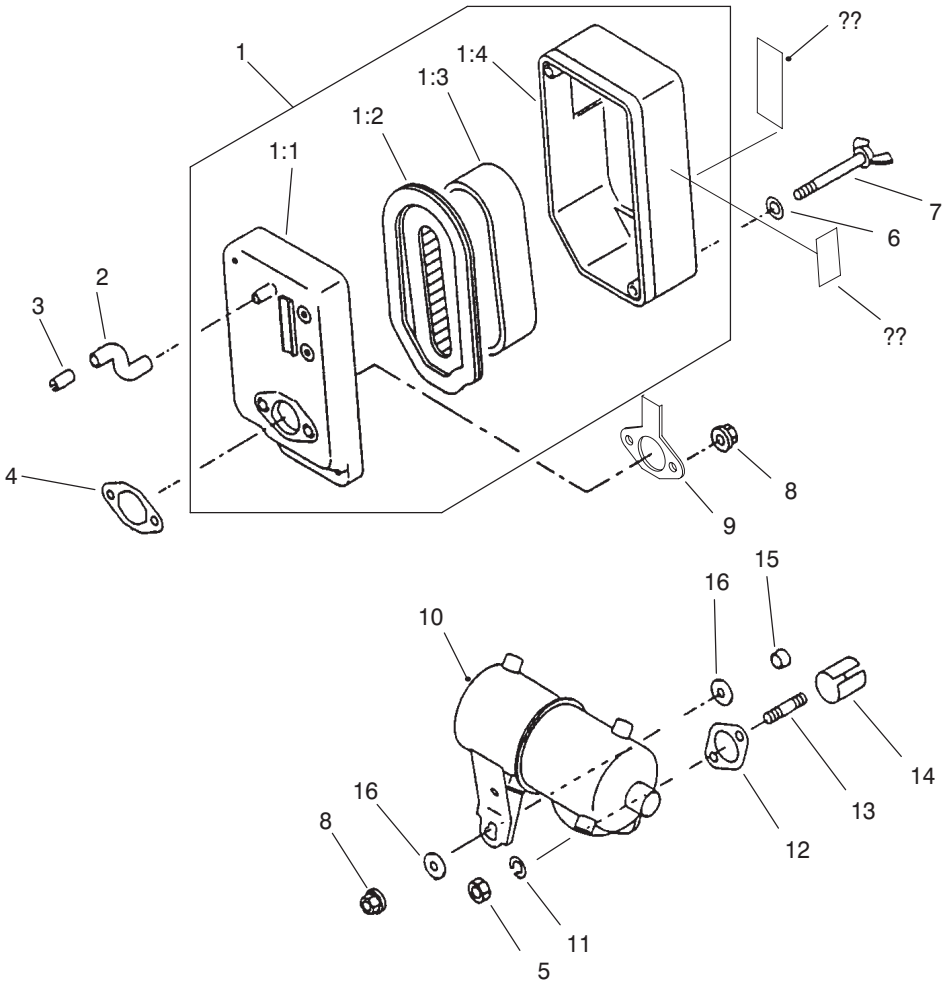



Sheet No.: 54

# Carburetor Assembly
# Part No. 99–4265 Engine, Model FE120D–CS02

| Ref. No. | Part No. | Qty. | Description |
|---|---|---|---|
| 1 | 93–8613 | 3 | Gasket |
| 2 | 94–9048 | 1 | Insulator |
| 3 | 94–9032 | 1 | Carburetor ASM |
| 3:1 | 94–9033 | 1 | Throttle Valve ASM |
| 3:2 | 93–8617 | 1 | Valve Choke |
| 3:3 | 94–9037 | 1 | Jet – Pilot #40 |
| 3:4 | 93–8619 | 1 | Screw ASM |
| 3:6 | 94–9035 | 1 | Nozzle – Main |
| 3:7 | 94–9036 | 1 | Jet – Main #65 |
| 3:7 | 98–8736 | 2 | Jet Main No 60 High Alt |
| 3:7 | 98–8735 | 2 | Jet Main No 62 High Alt |
| 3:8 | 94–6844 | 1 | Float ASM |
| 3:9 | 93–8624 | 1 | Gasket |
| 3:10 | 93–8625 | 1 | Float Chamber ASM |
| 3:10:1 | 93–8626 | 1 | Screw ASM |
| 3:12 | 93–8627 | 1 | Bolt |
| 4 | 94–6846 | 1 | Clamp |
| 5 | 94–6845 | 1 | Screw |
| 6 | 93–8633 | 1 | Pipe–Intake |
| 7 | 93–8632 | 2 | Bolt–Stud |
| 8 | 93–8631 | 2 | Nut |
| 9 | 93–8630 | 1 | Tube |

| Ref. No. | Part No. | Qty. | Description |
|---|---|---|---|
| 10 | 93–8629 | 1 | Clamp |
| 11 | 93–8628 | 1 | Bolt–Stud |

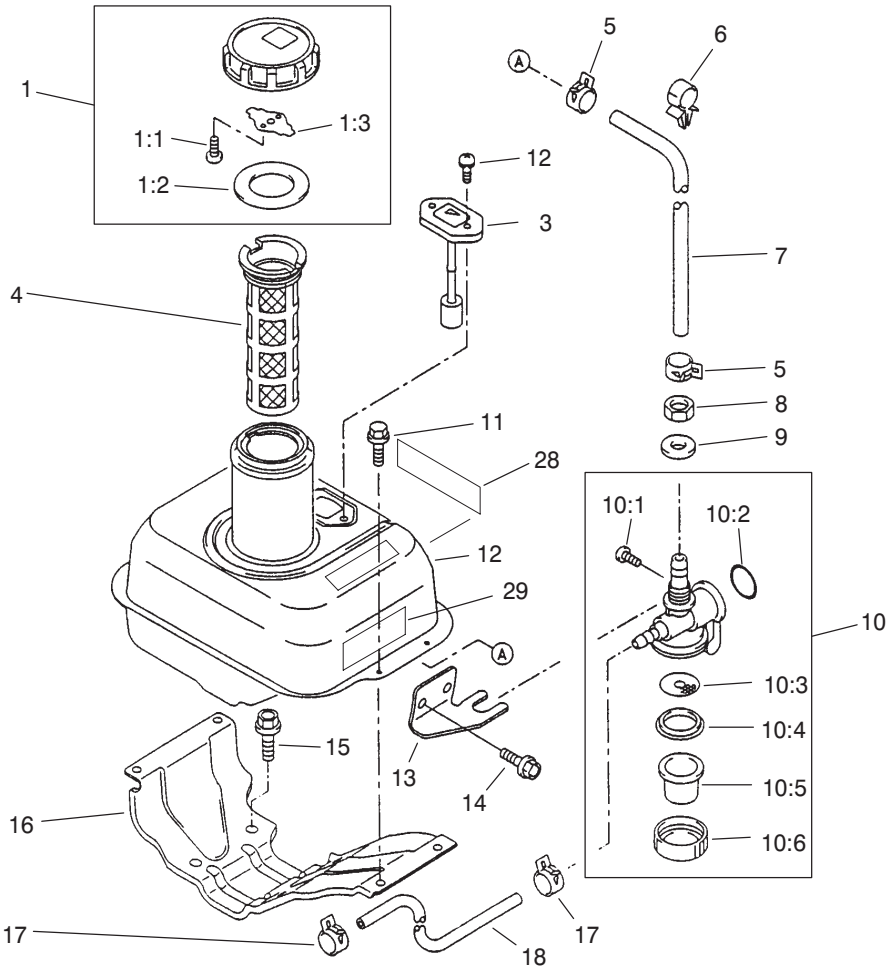



Sheet No.: 55

# Air Filter and Muffler Assembly
# Part No. 99–4265 Engine, Model FE120D–CS02

| Ref. No. | Part No. | Qty. | Description |
|---|---|---|---|
| 1 | 93–8634 | 1 | Air Filter ASM |
| 1:1 | 93–8635 | 1 | Case Filter ASM |
| 1:2 | 93–8636 | 1 | Element–Air Filter |
| 1:3 | 93–8637 | 1 | Element–Air Filter |
| 1:4 | 93–8638 | 1 | Cap–Air Filter |
| 2 | 93–8659 | 1 | Tube |
| 3 | 93–8658 | 1 | Pipe |
| 4 | 93–8657 | 1 | Gasket–Air Filter |
| 5 | 93–8656 | 2 | Nut–Hex |
| 6 | 93–8639 | 2 | Washer |
| 7 | 93–8640 | 2 | Bolt |
| 8 | 93–8631 | 3 | Nut |
| 9 | 93–8642 | 1 | Plate–Air Filter |
| 10 | 98–3427 | 1 | Muffler |
| 11 | 93–8655 | 2 | Washer–Spring |
| 12 | 93–8654 | 1 | Gasket–Muffler |
| 13 | 94–6848 | 2 | Bolt – Stud |
| 14 | 93–8652 | 1 | Pipe–Exhaust |
| 15 | 93–8651 | 1 | Collar |
| 16 | 93–8650 | 2 | Washer |
| 27 | 93–8690 | 1 | Decal–Maintenance |
| 28 | 93–8687 | 1 | Decal–Choke |

| Ref. No. | Part No. | Qty. | Description |
|---|---|---|---|




Sheet No.: 56

# Fuel Tank Assembly
# Part No. 99–4265 Engine, Model FE120D–CS02

| Ref. No. | Part No. | Qty. | Description |
|---|---|---|---|
| 1 | 93–8660 | 1 | Fuel Cap ASM |
| 1:1 | 93–8661 | 2 | Screw |
| 1:2 | 93–8662 | 1 | Gasket |
| 1:3 | 93–8663 | 1 | Spring |
| 2 | 93–8686 | 2 | Screw |
| 3 | 93–8685 | 1 | Gauge–Fuel |
| 4 | 94–6826 | 1 | Filter – Fuel |
| 5 | 93–8664 | 2 | Clamp |
| 6 | 93–8665 | 1 | Clamp |
| 7 | 93–8666 | 1 | Tube |
| 8 | 94–9042 | 1 | Nut |
| 9 | 93–8668 | 1 | Washer |
| 10 | 93–8669 | 1 | TAP ASM |
| 10:1 | 93–8670 | 1 | Screw |
| 10:2 | 93–8671 | 1 | Seal–O–Ring |
| 10:3 | 94–6849 | 1 | Filter – TAP |
| 10:4 | 93–8673 | 1 | Gasket |
| 10:5 | 93–8674 | 1 | Cup–TAP |
| 10:6 | 93–8675 | 1 | Nut |
| 11 | 93–8683 | 4 | Bolt |
| 12 | 93–8682 | 1 | Tank–Fuel |
| 13 | 93–8681 | 1 | Bracket |
| 14 | 93–8680 | 2 | Bolt–Flanged |
| 15 | 94–6825 | 4 | Bolt – Flanged |

| Ref. No. | Part No. | Qty. | Description |
|---|---|---|---|
| 16 | 93–8678 | 1 | Bracket–Tank |
| 17 | 93–8676 | 2 | Clamp |
| 18 | 93–8677 | 1 | Tube |
| 28 | 94–9028 | 1 | Label – Kawasaki |
| 29 | 93–8692 | 1 | Decal–warning |


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