Form No. 3323–651

Greensmaster® 3100

2 Wheel Drive Traction Unit

Model No. 04353—200000001 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.

© The TORO Company — 1999
All Rights Reserved

Contents

Description	Page
Control Pedal Assembly	4
Control Pedal Assembly (Continued)	5
Traction Controls Assembly	6
Front Wheel and Brake Assembly	7
Hydraulic Drive Motor Assembly No. 92–9199	8
Steering Arm Assembly	9
Power Steering Valve No. 92–8690	10
Pull Frame Assembly R.H.	11
Hydraulic Cylinder Assembly No. 99–8159	12
Pull Frame Assembly L.H.	13
Pull Frame Assembly Rear	14
Hydraulic Cylinder No. 99–8160	15
Seat Assembly	16
Seat Assembly (Continued)	17
Control Valve Installation Assembly	18
Control Valve Installation Assembly (Continued)	19
Engine Installation Assembly	20
Hydraulic Pump Installation Assembly	21
Hydraulic Pump 92–9764	22
Frame Assembly	23
Rear Wheel Assembly	24
Hydraulic Cylinder Assembly No. 83–2330	25
Control Panel Assembly	26
Electrical Schematic	27
Hydraulic Reservoir Assembly	28
Fuel Tank Assembly	29
Hydraulic Schematic	30
Reel Motor Installation Assembly	31
Reel Motor No. 94–3506	32
Control Valve Assembly No. 84–2203 (Sections 1&2)	33
Control Valve Ass5mbly No. 84–2203 (Sections 1&2)(Continued)	34
Control Valve Asse7bly No. 84–2203 (Sections 3 Thru 5)	35
Control Valve Assembly No. 84–2203 (Sections 3 Thru 5) (Continued)	36
Special Tools	37
Special Tools (Continued)	38
Engine Briggs & Stratton Model 303447–1179–E1	39–49

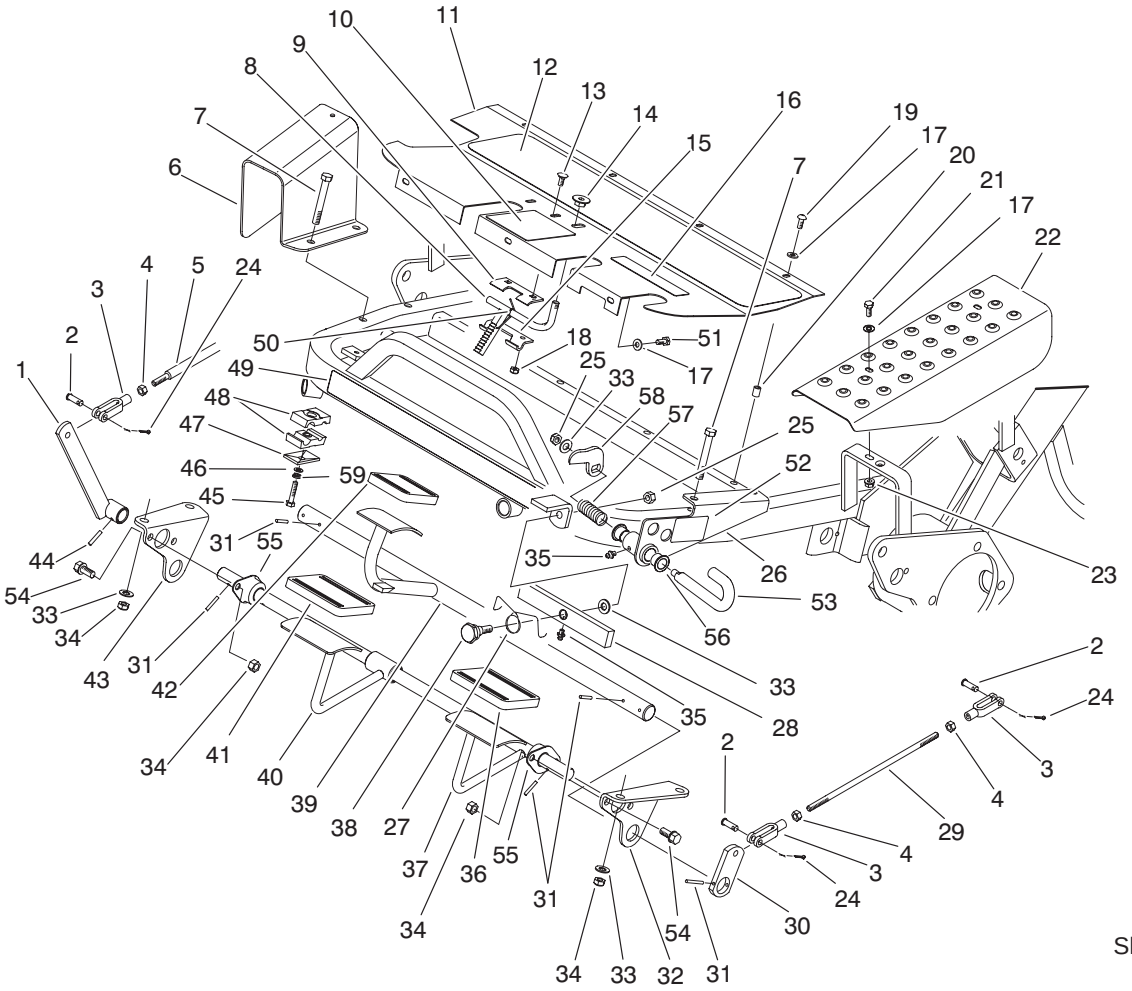
Accessories

Description	Model / Part No.
Individual Reel Shut Off Kit	28–2150
Basket Reinforcement Kit	26–0900
Thatching Reels	04493
Variable Speed Kit	04422
Traction Tire	231–124
Armrests	30707
Spiker	04494
Tri–Roller	04495
Backlapping Kit	92–9656
Backlap Kit – 2 Speed, 3 Position	94–1870
8 Blade, 4 Bolt (Heavy Duty) Cutting Unit	04404
8 Blade, 4 Bolt Cutting Unit	04408
11 Blade, 4 Bolt Cutting Unit	04406
8 Blade, SPA Cutting Unit	04468
11 Blade, SPA Cutting Unit	04450
8 Blade, 4 Bolt Cutting Unit	04480
11 Blade, 4 Bolt Cutting Unit	04481
8 Blade, SPA Cutting Unit	04482
11 Blade, SPA Cutting Unit	04483
8 Blade, 4 Bolt (Heavy Duty) Cutting Unit	04484

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

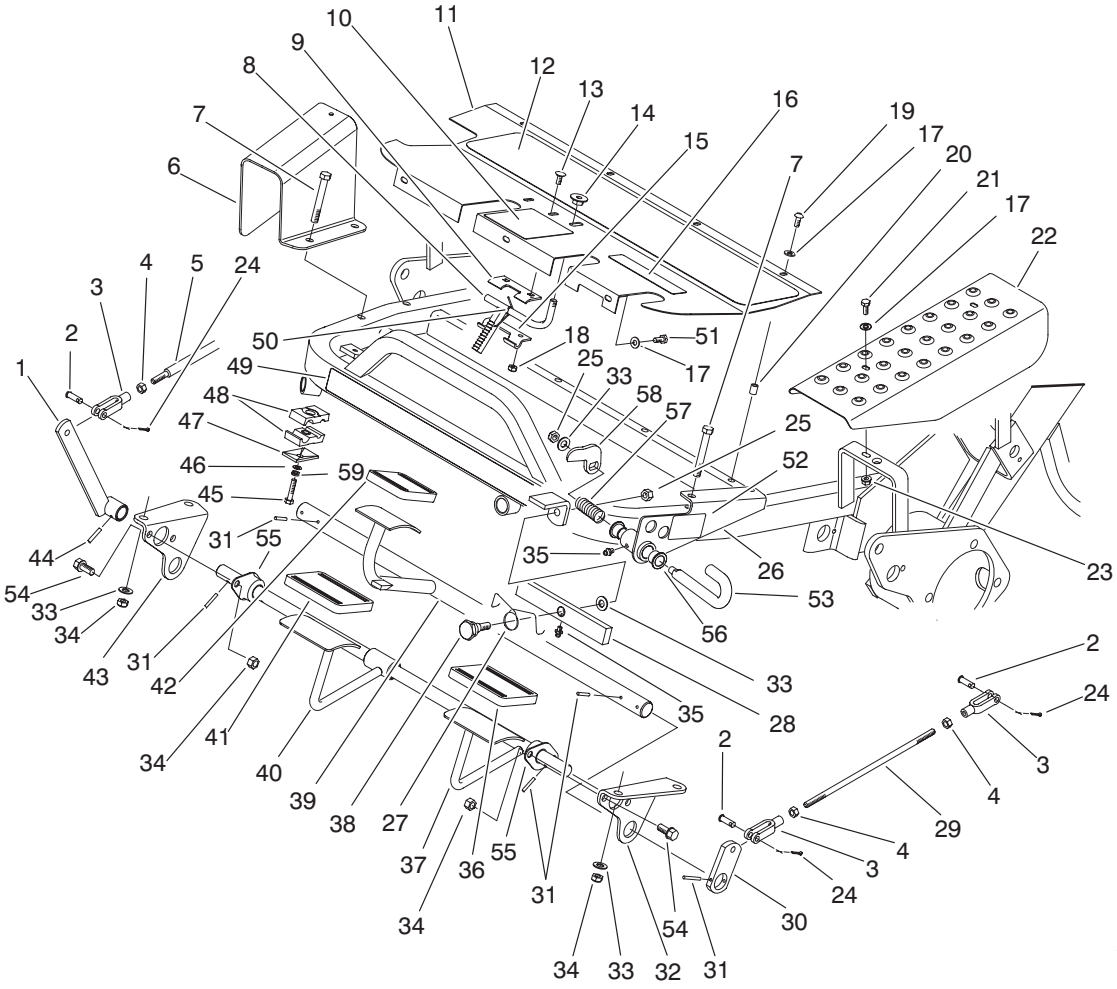


Sheet No.: 2

Control Pedal Assembly

Ref. No.	Part No.	Qty.	Description
1	49–6200–01	1	Lever–Cutting
2	283–61	5	Pin–Yoke
3	282–2	5	Yoke
4	3220–2	5	Nut–Jam
5	49–5430	1	Control Rod
6	49–6110–01	1	Guard
7	323–13	4	Screw–HH
8	10–7850	1	Latch–Parking Brake
9	95–1628	1	Hinge – Upper
10	93–8062	1	Decal–Parking Brake
11	83–0640–01	1	Footrest Plate
12	49–6120	1	Footrest Pad
13	3229–11	2	Screw–CARR
14	32141–111	1	Nut–Adjusting
15	95–1629	1	Hinge – Lower
16	93–8075	1	Decal–Mow/Lift
17	3256–1	9	Washer–Flat
18	3296–16	2	Nut–Lock, NI
19	3274–31	4	Screw–HSBH
20	32148–6	8	Nut–Insert
21	321–4	2	Screw–HH
22	83–0200–01	1	L/H Cover Plate
23	32128–33	2	Nut–HF
24	3272–6	5	Pin–Cotter
25	3296–39	2	Nut–Lock, NI
26	93–9901–01	1	Bracket–Lockout, Mow

Ref. No.	Part No.	Qty.	Description
27	83–0080	1	Spring–Pivot, Lift
28	83–0060	1	Lift – Pivot
29	27–2270	2	Rod–Brake Adjustment
30	10–8100–01	2	Strap–Brake Shaft
31	32121–35	8	Pin–Roll
32	88–9640–01	1	Bracket–LH Lift Pivot
33	3256–38	6	Washer–Flat
34	3296–59	8	Nut–Lock, NI
35	302–5	2	Fitting–Lube
36	93–7631	1	Lift Foot Pad
37	88–9660	1	Shaft–Cut Control
38	83–2590	1	Shoulder Bolt–Pivot
39	83–0160	1	Shaft–Brake
40	83–0140	1	Pedal–Mow
41	93–7630	1	Pad–Foot
42	93–7629	1	Foot Pad – Brake
43	88–9630–01	1	Bracket–RH Lift Pivot
44	32121–6	1	Pin–Roll
45	321–11	1	Screw–HH
46	3256–22	1	Washer–Flat
47	69–9760	1	Coverplate
48	56–7970	2	Tube Clamp
49	88–9620	1	Decal–Gr 3100
50	10–8140	1	Bracket–Spring, Latch
51	321–3	3	Screw–HH



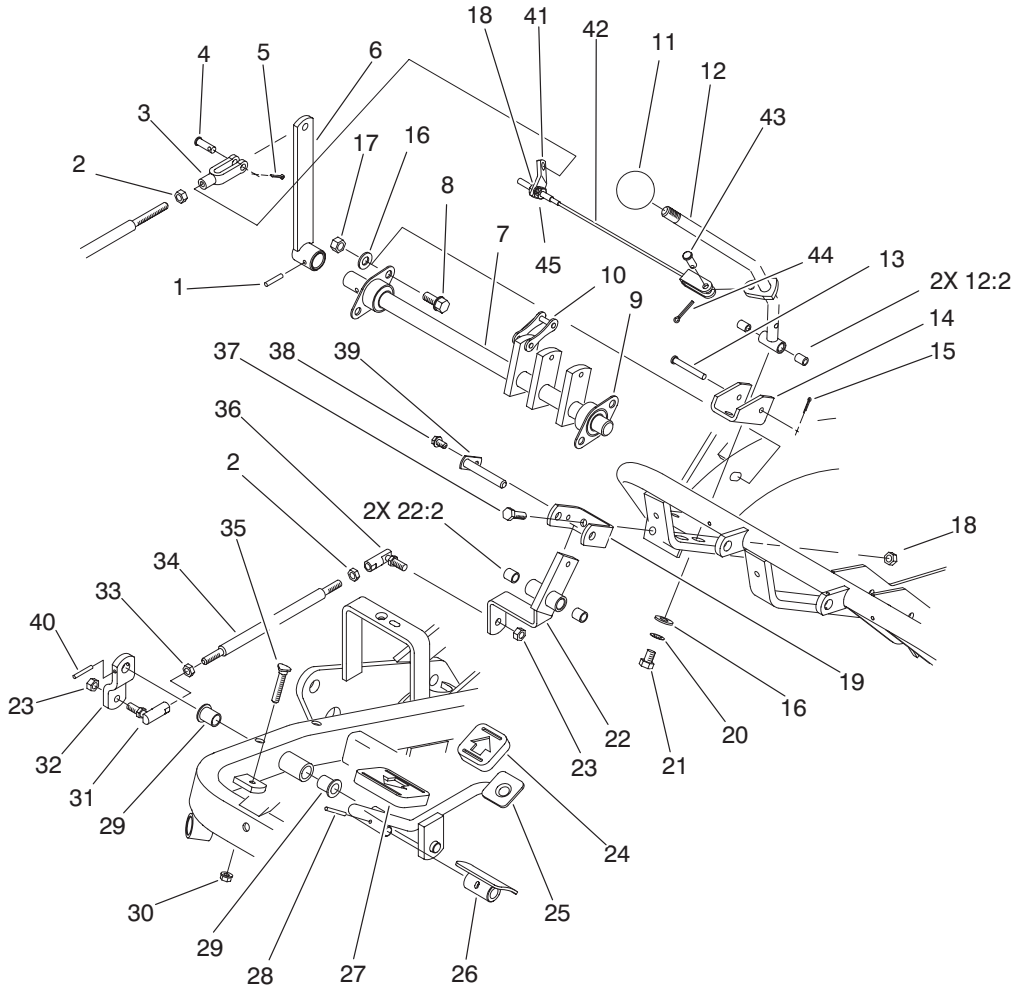
Sheet No.: 2

Control Pedal Assembly (Continued)

Ref. No.	Part No.	Qty.	Description
52	93–9898	1	Decal – Lock
53	93–9903	1	Pin – Lockout Mow
54	3234–1	4	Screw–HHF
55	27–2320	2	Bearing ASM
56	3–1506	2	Bushing
57	76–0410	1	Spring Comp
58	93–9904	1	Arm – Lockout Mow
59	3253–3	1	Washer–Lock/Sp
*60	37–8130	3	Grass Basket
*61	65–8320	1	Gauge Bar
*62	32122–22	1	Screw–HH
*63	3219–14	1	Nut–Hex
*64	93–6691	3	Decal–Bolt, Eccentric

Ref. No.	Part No.	Qty.	Description

* Not illustrated

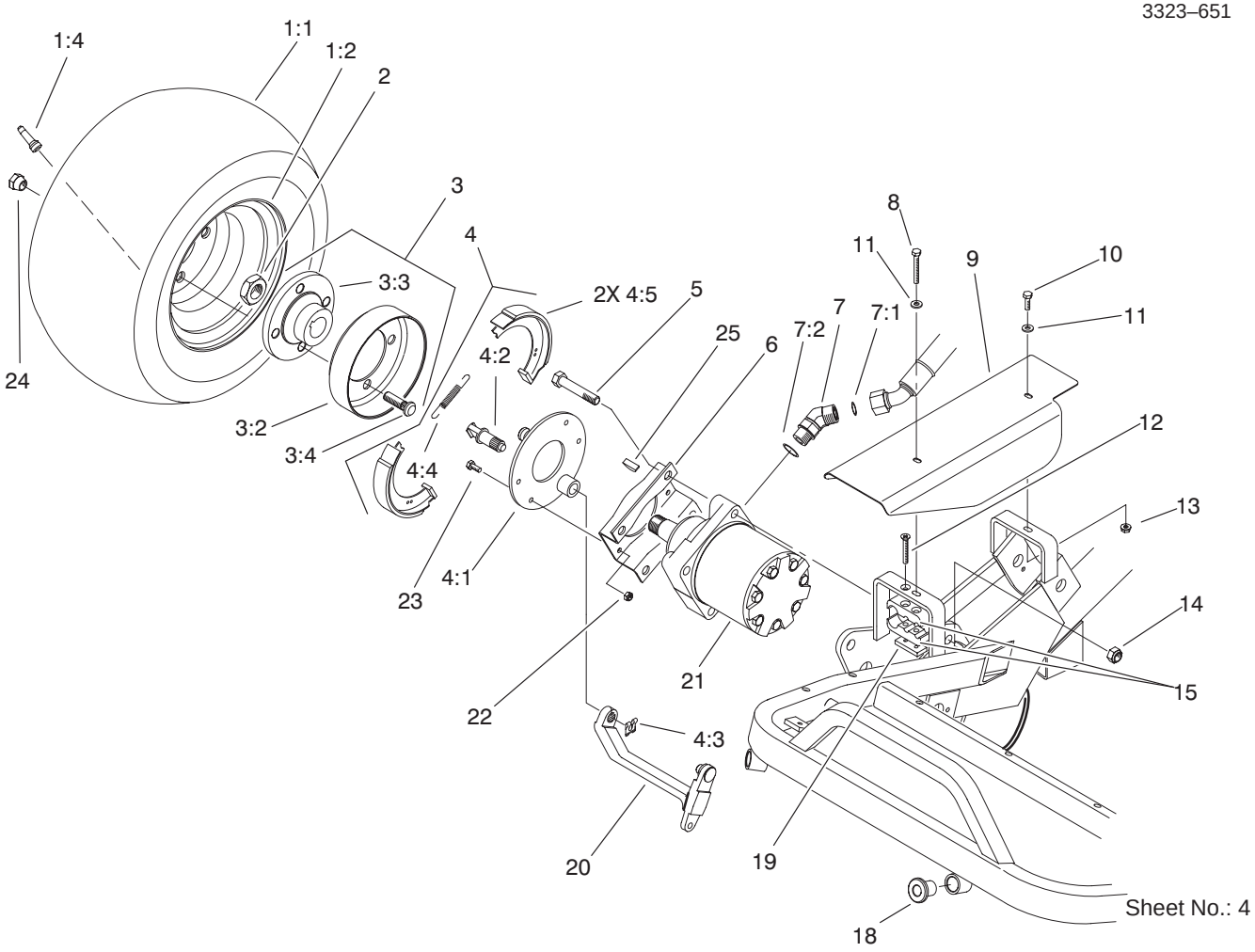


Sheet No.: 3

Traction Controls Assembly

Ref. No.	Part No.	Qty.	Description
1	32121–6	1	Pin–Roll
2	3220–2	2	Nut–Jam
3	282–2	1	Yoke
4	283–61	1	Pin–Yoke
5	3272–6	1	Pin–Cotter
6	47–5320–01	1	Lever
7	44–0870	1	Cam Shaft ASM
8	3234–1	4	Screw–HHF
9	27–2320	2	Bearing ASM
10	57–6220	5	Link–Connecting
11	233–48	1	Knob
12	93–9934	1	Handle–Traction
12:2	256–251	2	Bushing
13	283–57	1	Pin
14	49–6220	1	Bracket–Control Arm
15	3272–4	1	Pin–Cotter
16	3256–24	6	Washer–Flat
17	3296–59	4	Nut–Lock, NI
18	3296–29	3	Nut–Lock,NI
19	49–6250	1	Bracket–Pivot
20	3254–6	2	Washer–Lock/Int
21	3211–2	2	Screw–HH
22	49–6260	1	Pivot ASM
22:2	256–2	2	Bushing
23	3296–4	2	Nut–Lock NI
24	74–9110	1	Pad–Pedal, Reverse

Ref. No.	Part No.	Qty.	Description
25	83–0540–01	1	Traction Pedal ASM
26	49–6440–03	1	Pedal–Forward
27	74–9100	1	Pad–Pedal, Forward
28	32121–45	1	Pin–Spring
29	256–155	2	Bushing–Flange
30	32128–20	1	Nut–HF
31	2411–42	1	Ball Joint, LH
32	83–0630	1	Traction Pivot Arm
33	3220–20	1	Nut–Jam LH
34	83–0580	1	Rod – Traction Control
35	17–9420	1	Screw – Handle
36	2411–43	1	Ball Joint
37	322–5	2	Screw–HH
38	12–3270	1	Screw
39	49–6290	1	Pivot Shaft ASM
40	32121–51	1	Pin–Roll
41	93–9936	1	Bracket – Traction Return
42	93–9937	1	Cable ASM – Traction
43	283–62	1	Pin–Clevis
44	3272–10	1	Pin–Cotter
45	3217–6	1	Nut–Hex



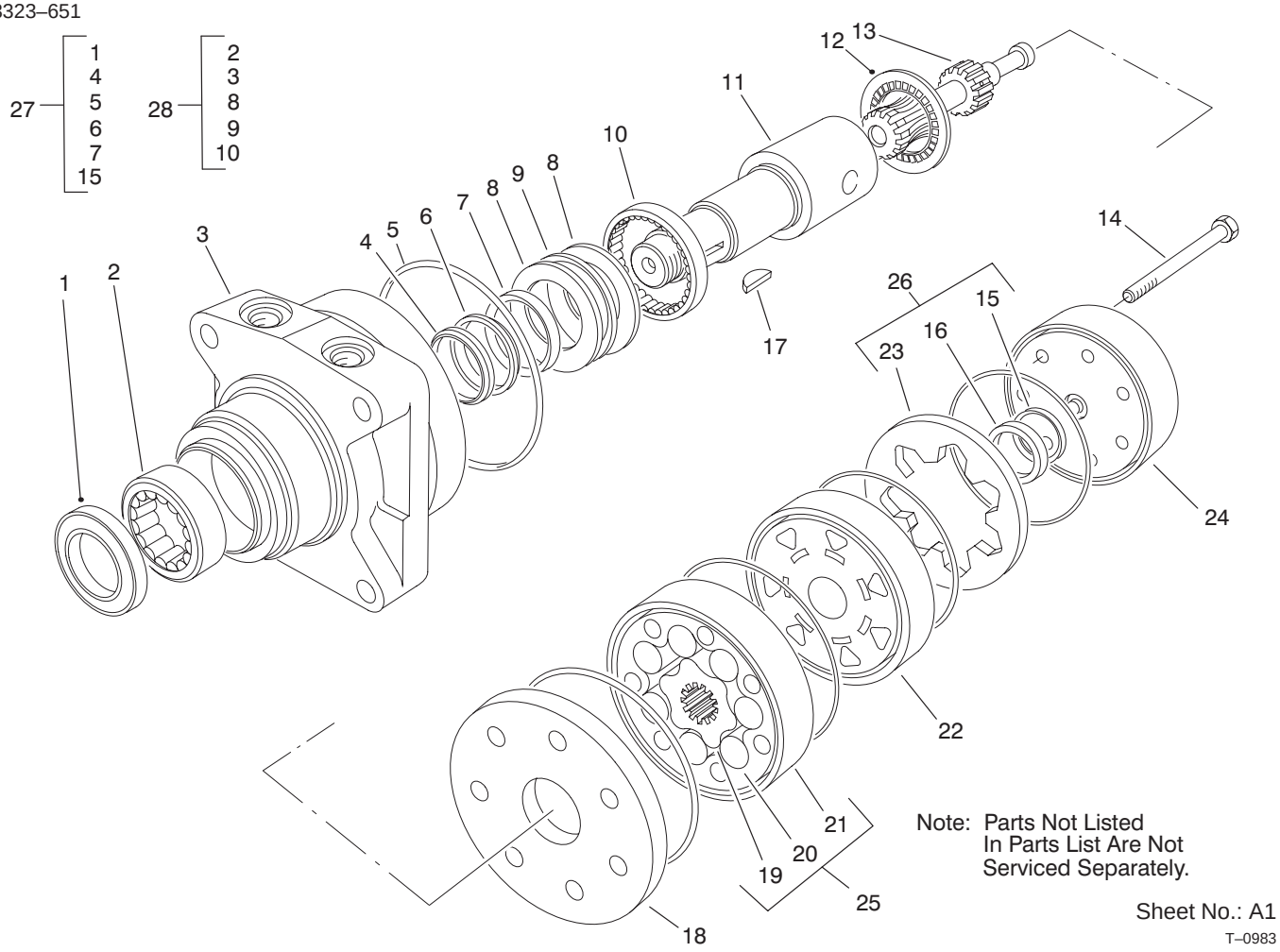
Front Wheel and Brake Assembly

Ref. No.	Part No.	Qty.	Description
1		2	Wheel & Tire ASM
1:1	28–3680	1	Tire
1:2	217–60	1	Rim
1:4	232–24	1	Stem–Valve
*1:5	232–37	1	Tube
2	26–3790	2	Nut–Lock
3	10–6821	2	Brake Drum ASM
3:2	10–6850	1	Drum–Brake
3:3	10–6870–03	1	Wheel Hub
3:4	85–6540	4	Stud–Drive
4	71–1500	2	Brake Assembly
4:1	70–9870	1	Plate–Backing
4:2	70–9860	1	Cam–Brake
4:3	70–9850	1	Clip–Retaining
4:4	70–9880	2	Spring–Return
4:5	70–9840	2	Shoe–Brake
5	325–11	8	Screw–HH
6	84–2000–03	2	Bracket–Brake
7	340–14	4	Fitting–Hydraulic 45 DEG
7:1	237–65	1	O–Ring
7:2	237–80	1	O–Ring
8	321–11	1	Screw–HH
9	83–0190–01	1	Cover–RH
10	321–4	1	Screw–HH
11	3256–22	2	Washer–Flat

Ref. No.	Part No.	Qty.	Description
12	32108–100	1	Screw–FH
13	32128–33	1	Nut–HF
14	3296–23	8	Nut–Lock, NI
15	57–6140	2	Clamp Half–Tube
18	83–1700	2	Bushing – Flange
19	83–1220	1	Plate–Clamp
20	93–2096	2	Lever – Brake
21	92–9199	2	Motor–Hydraulic
22	3296–42	8	Nut–Lock
23	321–5	8	Screw–HH
24	242–50	8	Nut–Lug
25	3257–42	2	Key–Woodruff

* Not illustrated

3323–651

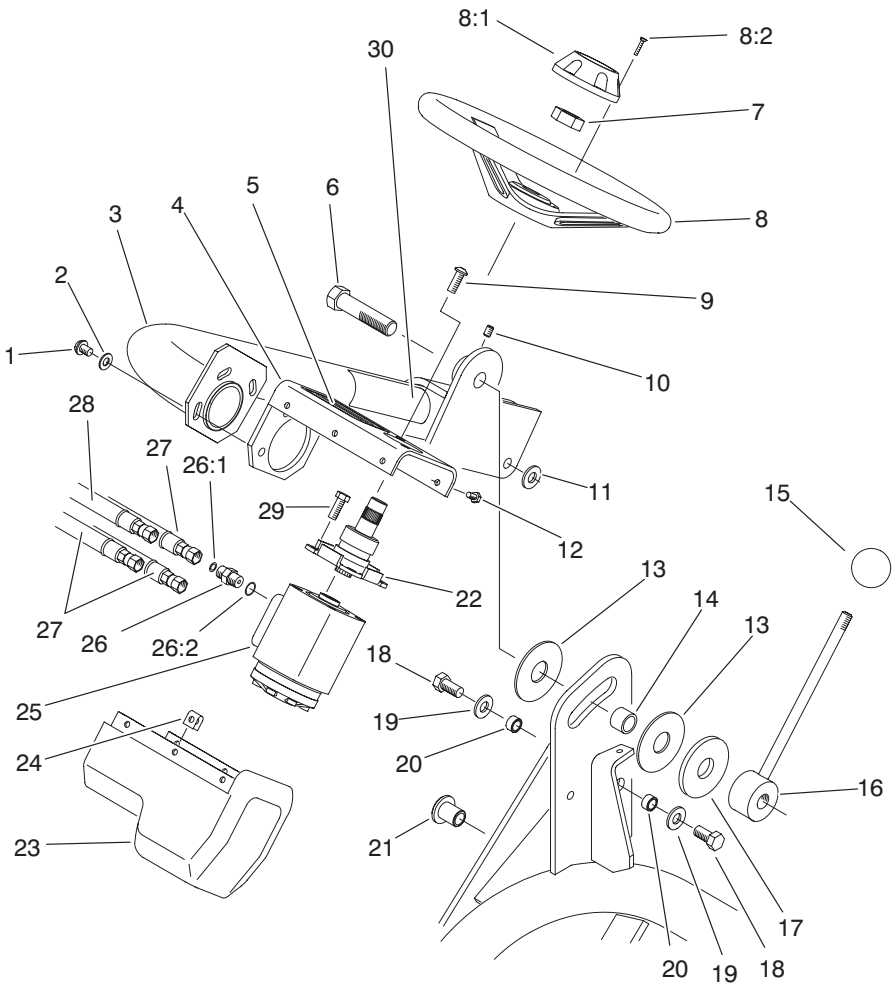


Hydraulic Drive Motor Assembly No. 92–9199

Ref. No.	Part No.	Qty.	Description
11	76–0860	1	Shaft–Coupling
12	76–0850	1	Bearing–Thrust
13	92–9761	1	Link – Drive
14	92–9762	7	Screw – Cap, Hex Hd
17	3257–42	1	Key–Woodruff
18	76–0870	1	Wear Plate
22	76–0840	1	Manifold
24	76–0940	1	End Cover ASM
*25	92–9763	1	Rotor Set
*26	76–0880	1	Commutator ASM
*27	94–8178	1	Kit–Seal
*28	76–0810	1	Housing ASM–Wheel Motor

Ref. No.	Part No.	Qty.	Description

* Not illustrated

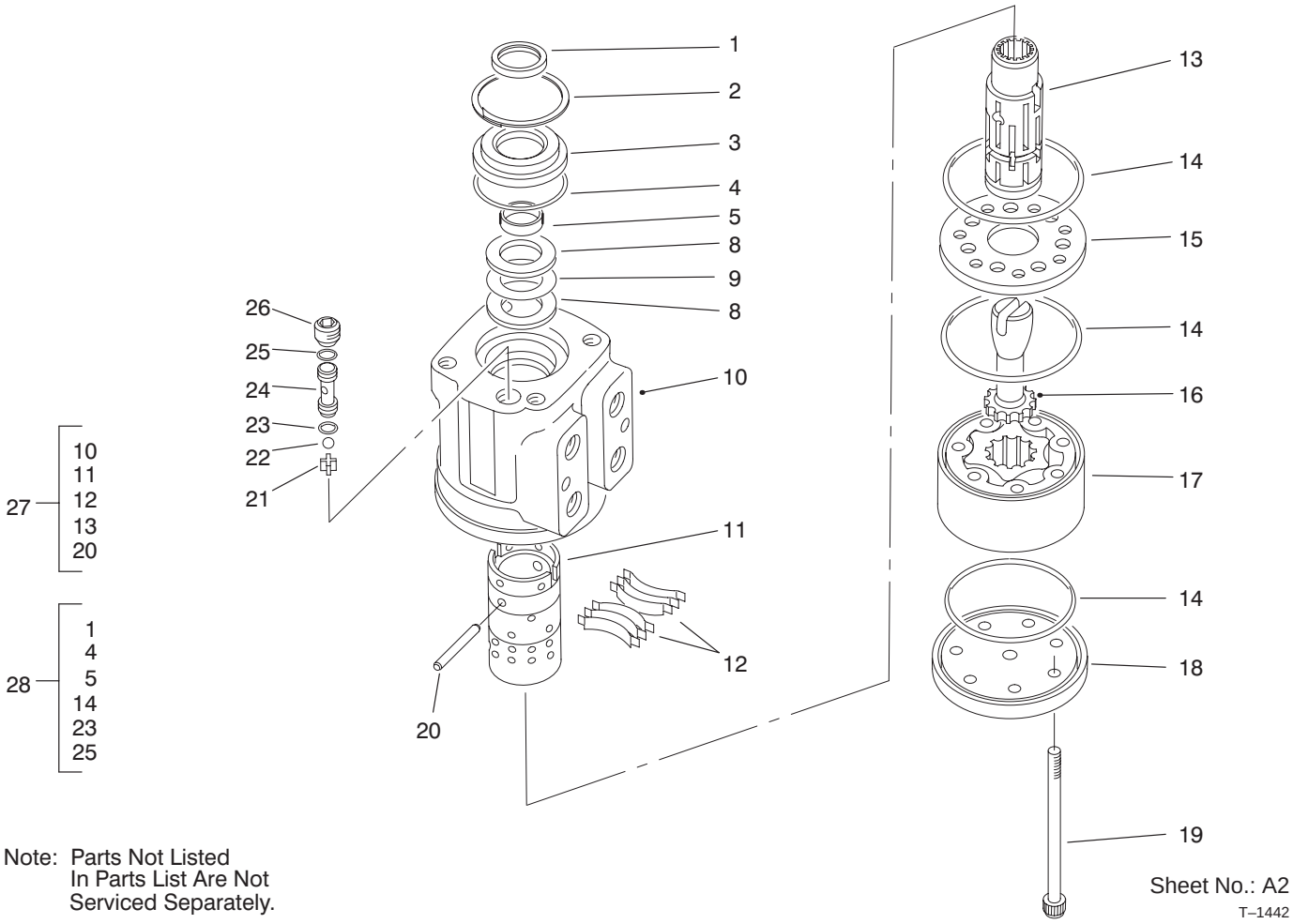


Sheet No.: 5

Steering Arm Assembly

Ref. No.	Part No.	Qty.	Description
1	3274–80	3	Screw–HH
2	3256–80	3	Washer–Flat
3	83–0650–01	1	Arm–Steering
4	83–0780–03	1	Support–Steering Valve
5	93–8063	1	Decal–Warning
6	83–0750	1	Screw–HH LH
7	47–6990	1	Nut
8	68–5130	1	Steering Wheel
8:1	68–5140	1	Cap–Steering Wheel
8:2	32144–21	1	Screw F/W
9	3274–63	2	Screw–HSH
10	3246–3	1	Screw–HS
11	65–6390	1	Washer – Thrust, Plain
12	3274–39	6	Screw–HSBH
13	83–0740	2	Disc – Friction
14	83–0730	1	Spacer – Lockup
15	233–48	1	Knob
16	83–0700–03	1	Handle–Lockup
17	83–0760	1	Spacer – Lockup Plate
18	325–4	2	Screw–HH
19	3256–26	2	Washer–Flat
20	47–2890	2	Bushing
21	83–1700	1	Bushing – Flange
22	83–1420	1	Column–Steering
23	83–0810	1	Cover – Steering

Ref. No.	Part No.	Qty.	Description
24	3290–277	6	Nut–Speed
25	92–8690	1	Steering Control Valve
26	340–1	4	Adapter
26:1	237–35	1	O–Ring
26:2	237–42	1	O–Ring
27	83–1350	3	Hose–Hydraulic
28	83–1360	1	Hose–Hydraulic
29	323–4	2	Screw–HH
30	93–8068	1	Decal–Steering Arm



Note: Parts Not Listed In Parts List Are Not Serviced Separately.

Sheet No.: A2

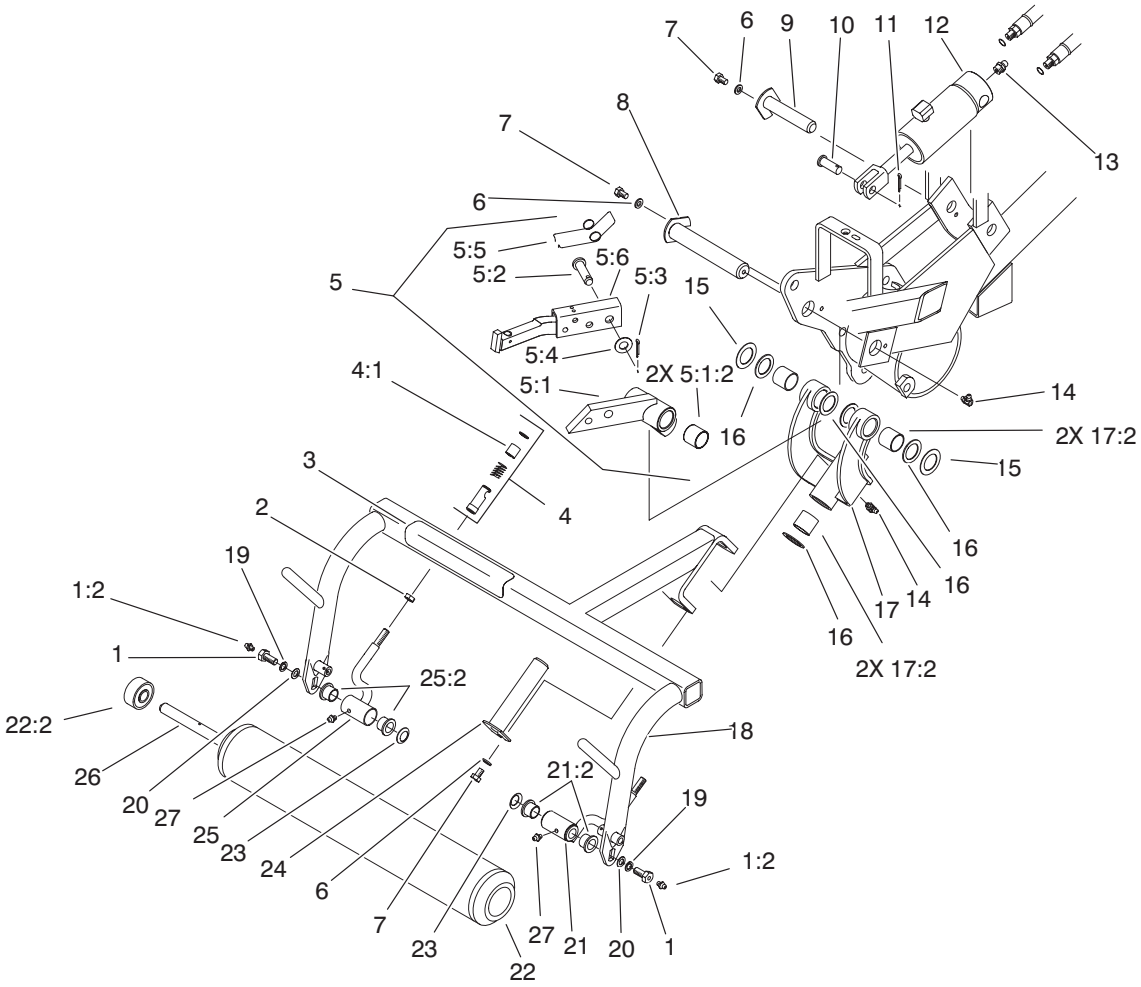
T–1442

Power Steering Valve No. 92–8690

Ref. No.	Part No.	Qty.	Description
2	52–9230	1	Retaining Ring
3	92–8691	1	Bushing–Seal Gland
8	59–6730	2	Race
9	59–6740	1	Bearing
12	83–1860	1	Kit–Centering, Spring
15	92–8697	1	Plate – Wear
16	70–8250	1	Drive
17	83–1870	1	Gerotor Sub–Assembly
18	92–8694	1	Cap – End
19	92–8696	7	Screw – Torx Head
20	59–6830	1	Kit–Centering Pin
21	52–9290	1	Retainer–Checkball
22	52–9280	1	Checkball
24	52–9270	1	Seat–Ball Check
26	52–9260	1	Setscrew
*27	83–1880	1	Control Parts ASM
*28	92–9749	1	Kit–Seal

Ref. No.	Part No.	Qty.	Description

* Not illustrated

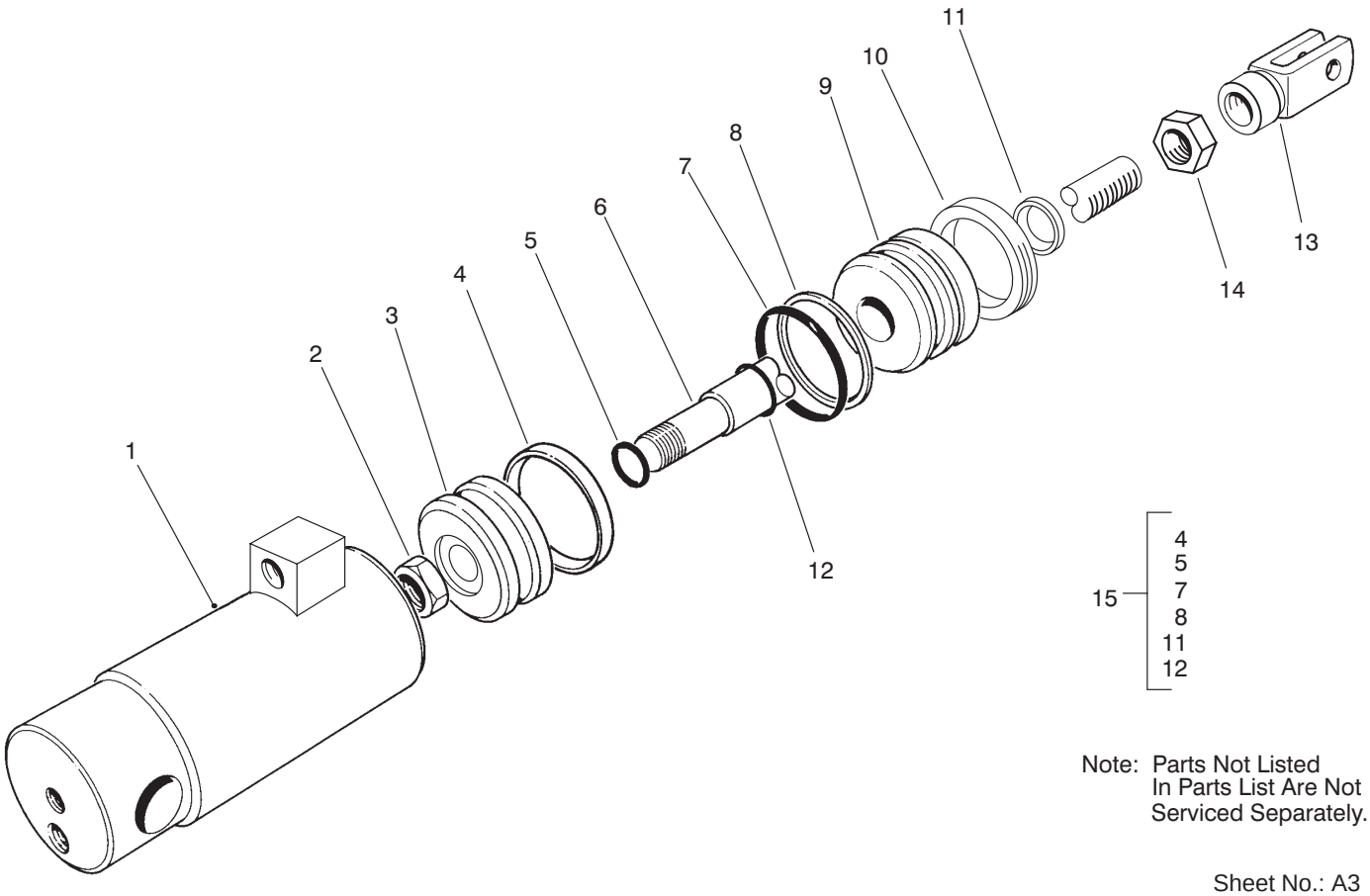


Sheet No.: 6

Pull Frame Assembly R.H.

Ref. No.	Part No.	Qty.	Description
1	11–0160	2	Roller Shaft Screw ASM
1:2	302–5	1	Fitting–Lube
2	3220–3	2	Nut–Jam
3	93–8064	1	Decal–Danger
4	99–1460	2	Ball Joint Receiver ASM
4:1	99–1461	1	Sleeve – Ball Joint
5		1	RH Lift Arm ASM
5:1	62–2440	1	Lift Arm ASM
5:1:2	3–0348	2	Bushing
5:2	63–8750	1	Pivot Pin
5:3	3272–11	1	Pin–Cotter
5:4	3256–26	1	Washer–Flat
5:5	57–7650	1	Spring–Torsion
5:6	94–5588–01	1	Bar–Lift, R/H
6	3256–23	3	Washer–Flat
7	322–1	3	Screw–HH
8	10–6110	1	Pin–Hinge
9	10–6060	1	Pin–Pivot, Ram
10	283–8	1	Pin–Clevis
11	3272–11	1	Pin–Cotter
12	99–8159	1	Hydraulic Cylinder ASM
13	302–2	1	Fitting–Grease
14	302–60	2	Fitting–Lube

Ref. No.	Part No.	Qty.	Description
15	5–1226	2	Washer
16	10–8110	6	Washer–Thrust
17	10–7820	1	Pivot Hinge ASM
17:2	3–0348	4	Bushing
18	92–9177–01	1	Frame–Pull, RH
19	3253–21	2	Washer–Lock/Sp
20	3256–24	2	Washer–Flat
21	92–0586	1	Pull Arm ASM
21:2	3–1506	2	Bushing
22	52–2720	1	Roller ASM
22:2	251–141	2	Bearing–Ball
23	3290–317	2	Washer–Spring
24	10–6090	1	Pin–Pivot
25	92–0585	1	Pull Arm ASM
25:2	3–1506	2	Bushing
26	21–8470	1	Shaft–Roller
27	302–5	2	Fitting–Lube



Note: Parts Not Listed In Parts List Are Not Serviced Separately.

Sheet No.: A3

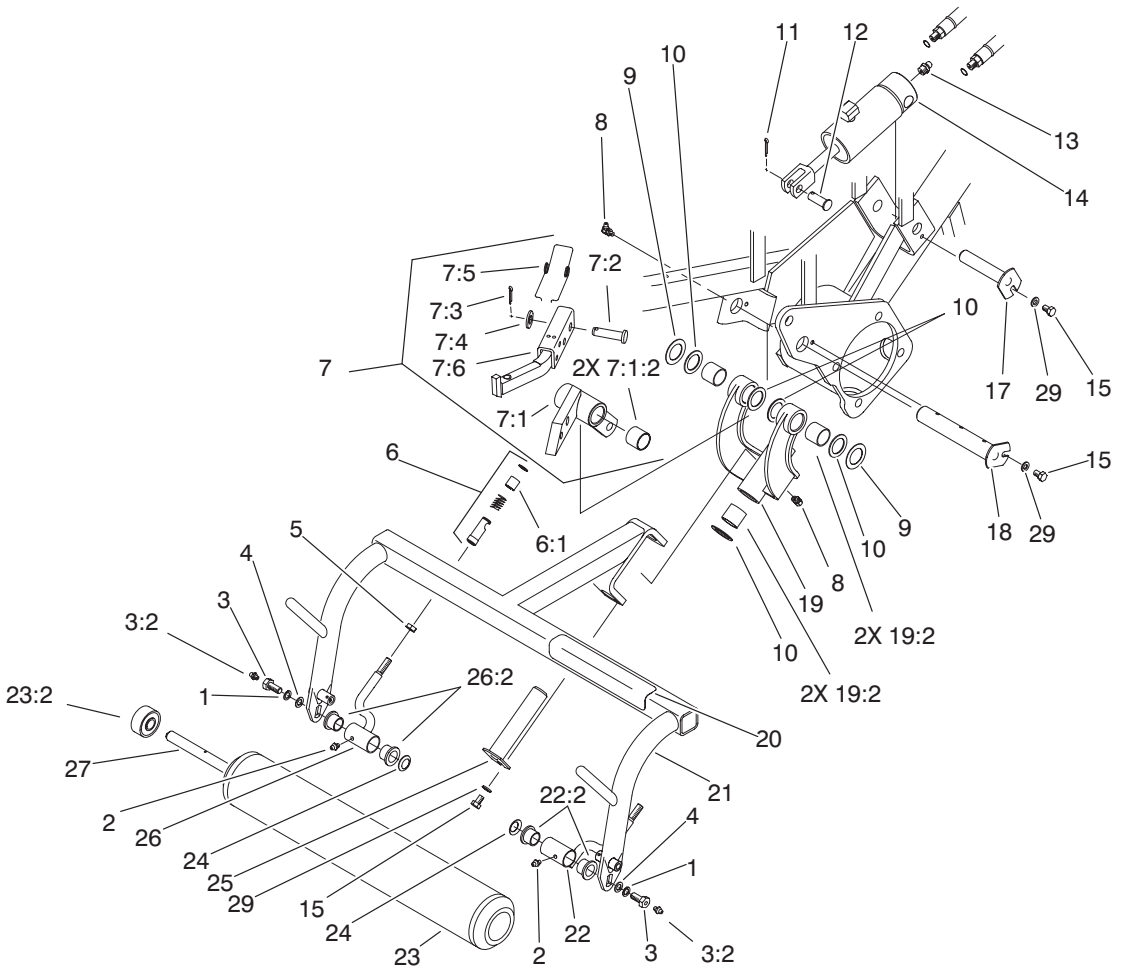
T–3154–1

Hydraulic Cylinder Assembly No. 99–8159

Ref. No.	Part No.	Qty.	Description
2	32152–10	1	Locknut – Top Deform
3	52–1990	1	Piston–Hyd Cylinder
13	76–1850	1	Clevis
14	3220–6	1	Nut–Jam
*15	99–8163	1	Kit – Seal Repair

Ref. No.	Part No.	Qty.	Description

* Not illustrated

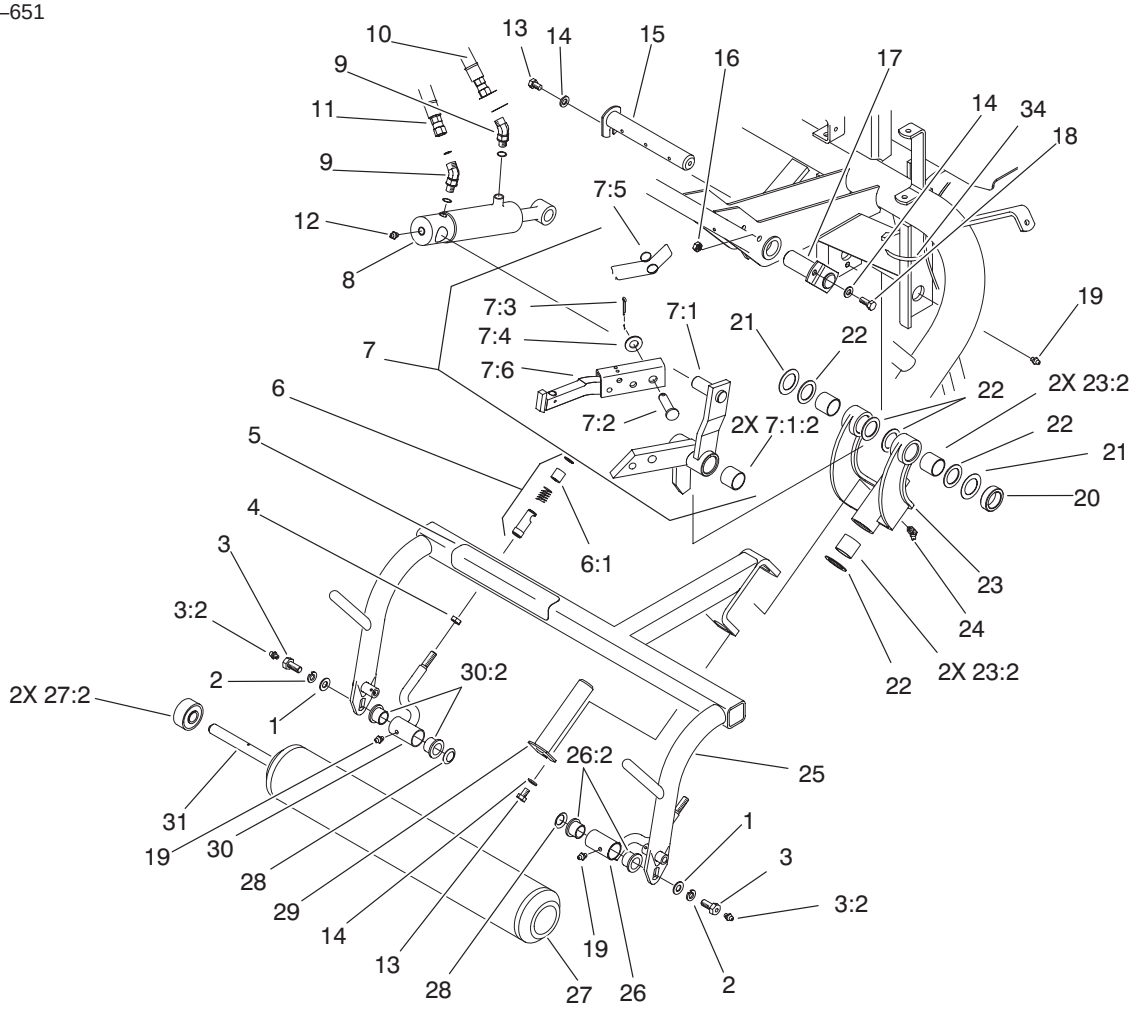


Sheet No.: 7

Pull Frame Assembly L.H.

Ref. No.	Part No.	Qty.	Description
1	3253–21	2	Washer–Lock/Sp
2	302–5	2	Fitting–Lube
3	11–0160	2	Roller Shaft Screw ASM
3:2	302–5	1	Fitting–Lube
4	3256–24	2	Washer–Flat
5	3220–3	2	Nut–Jam
6	99–1460	2	Ball Joint Receiver ASM
6:1	99–1461	1	Sleeve – Ball Joint
7		1	LH Lift Arm ASM
7:1	62–2460	1	Lift Arm ASM
7:1:2	3–0348	2	Bushing
7:2	63–8750	1	Pivot Pin
7:3	3272–11	1	Pin–Cotter
7:4	3256–26	1	Washer–Flat
7:5	57–7650	1	Spring–Torsion
7:6	94–5586–01	1	Bar–Lift, LH
8	302–60	2	Fitting–Lube
9	5–1226	2	Washer
10	10–8110	6	Washer–Thrust
11	3272–11	1	Pin–Cotter
12	283–8	1	Pin–Clevis
13	302–2	1	Fitting–Grease
14	99–8159	1	Hydraulic Cylinder ASM

Ref. No.	Part No.	Qty.	Description
15	322–1	3	Screw–HH
17	10–6060	1	Pin–Pivot, Ram
18	10–6110	1	Pin–Hinge
19	10–7820	1	Pivot Hinge ASM
19:2	3–0348	4	Bushing
20	93–8064	1	Decal–Danger
21	92–9176–01	1	Frame–Pull, LH
22	92–0586	1	Pull Arm ASM
22:2	3–1506	2	Bushing
23	52–2720	1	Roller ASM
23:2	251–141	2	Bearing–Ball
24	3290–317	2	Washer–Spring
25	10–6090	1	Pin–Pivot
26	92–0585	1	Pull Arm ASM
26:2	3–1506	2	Bushing
27	21–8470	1	Shaft–Roller
29	3256–23	3	Washer–Flat

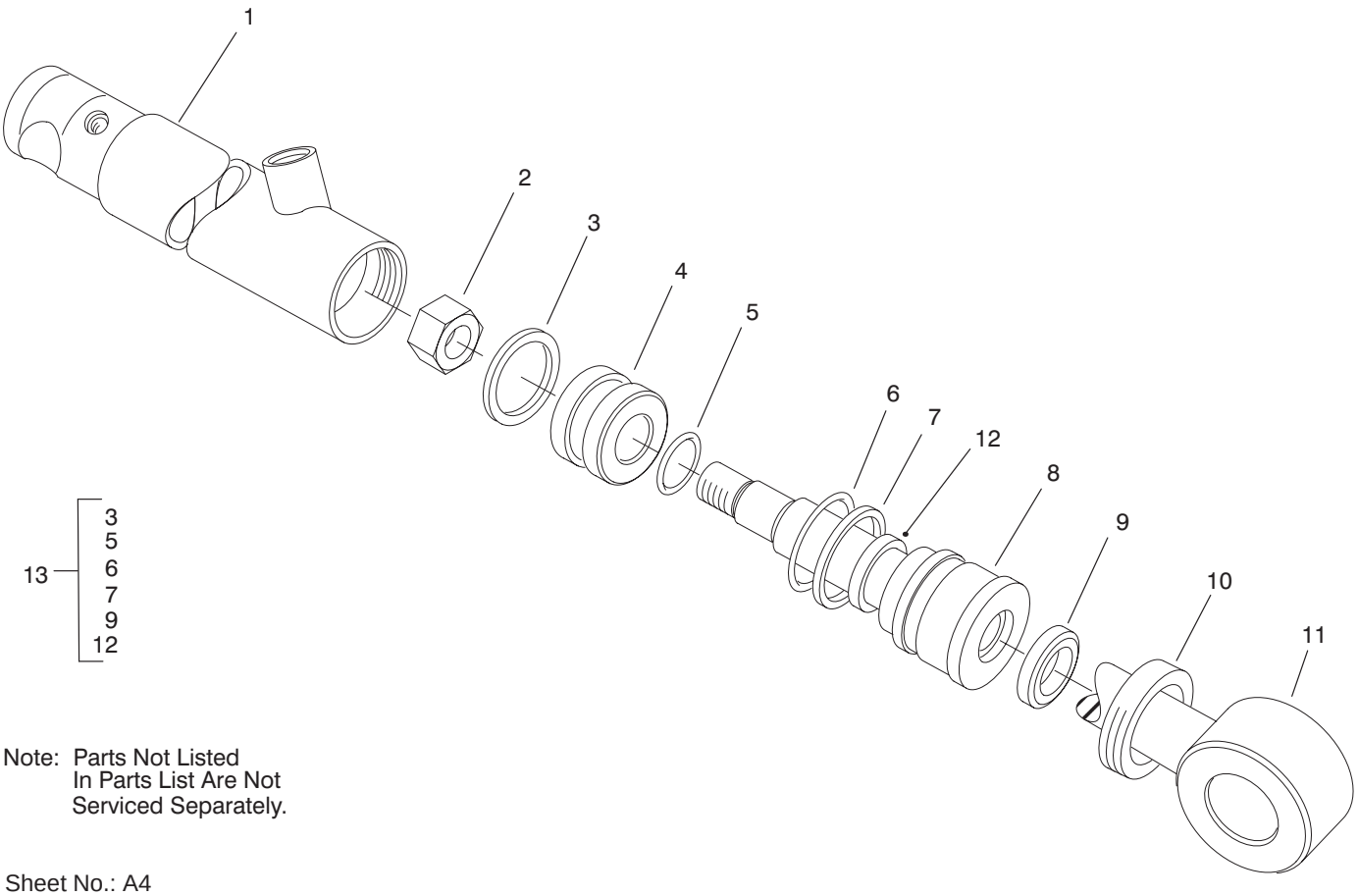


Sheet No.: 8

Pull Frame Assembly Rear

Ref. No.	Part No.	Qty.	Description
1	3256–24	2	Washer–Flat
2	3253–21	2	Washer–Lock/Sp
3	11–0160	2	Roller Shaft Screw ASM
3:2	302–5	1	Fitting–Lube
4	3220–3	2	Nut–Jam
5	93–8064	1	Decal–Danger
6	99–1460	2	Ball Joint Receiver ASM
6:1	99–1461	1	Sleeve – Ball Joint
7		1	Center Lift Arm ASM
7:1	68–5380	1	Center Lift Arm ASM
7:1:2	3–0348	2	Bushing
7:2	63–8750	1	Pivot Pin
7:3	3272–11	1	Pin–Cotter
7:4	3256–26	1	Washer–Flat
7:5	57–7650	1	Spring–Torsion
7:6	62–2420–01	1	Bar–Lift
8	99–8160	1	Hydraulic Cylinder ASM
9	340–103	2	Fitting
10	83–1680	1	Hose–Hydraulic
11	88–9700	1	Hose–Hydraulic
12	302–2	1	Fitting–Grease
13	322–1	2	Screw–HH
14	3256–23	3	Washer–Flat

Ref. No.	Part No.	Qty.	Description
15	27–2550	1	Pin–Hinge
16	3296–29	1	Nut–Lock,NI
17	68–5560	1	Pin–Cylinder,Pivot
18	322–3	1	Screw–HH
19	302–5	3	Fitting–Lube
20	93–2384	1	Spacer – Carrier
21	5–1226	2	Washer
22	10–8110	6	Washer–Thrust
23	10–7820	1	Pivot Hinge ASM
23:2	3–0348	4	Bushing
24	302–60	1	Fitting–Lube
25	86–9820–01	1	Frame–Pull, R/H & Rr
26	92–0586	1	Pull Arm ASM
26:2	3–1506	2	Bushing
27	52–2720	1	Roller ASM
27:2	251–141	2	Bearing–Ball
28	3290–317	2	Washer–Spring
29	10–6090	1	Pin–Pivot
30	92–0585	1	Pull Arm ASM
30:2	3–1506	2	Bushing
31	21–8470	1	Shaft–Roller
34	3290–379	1	Tie–Cable



Note: Parts Not Listed
In Parts List Are Not
Serviced Separately.

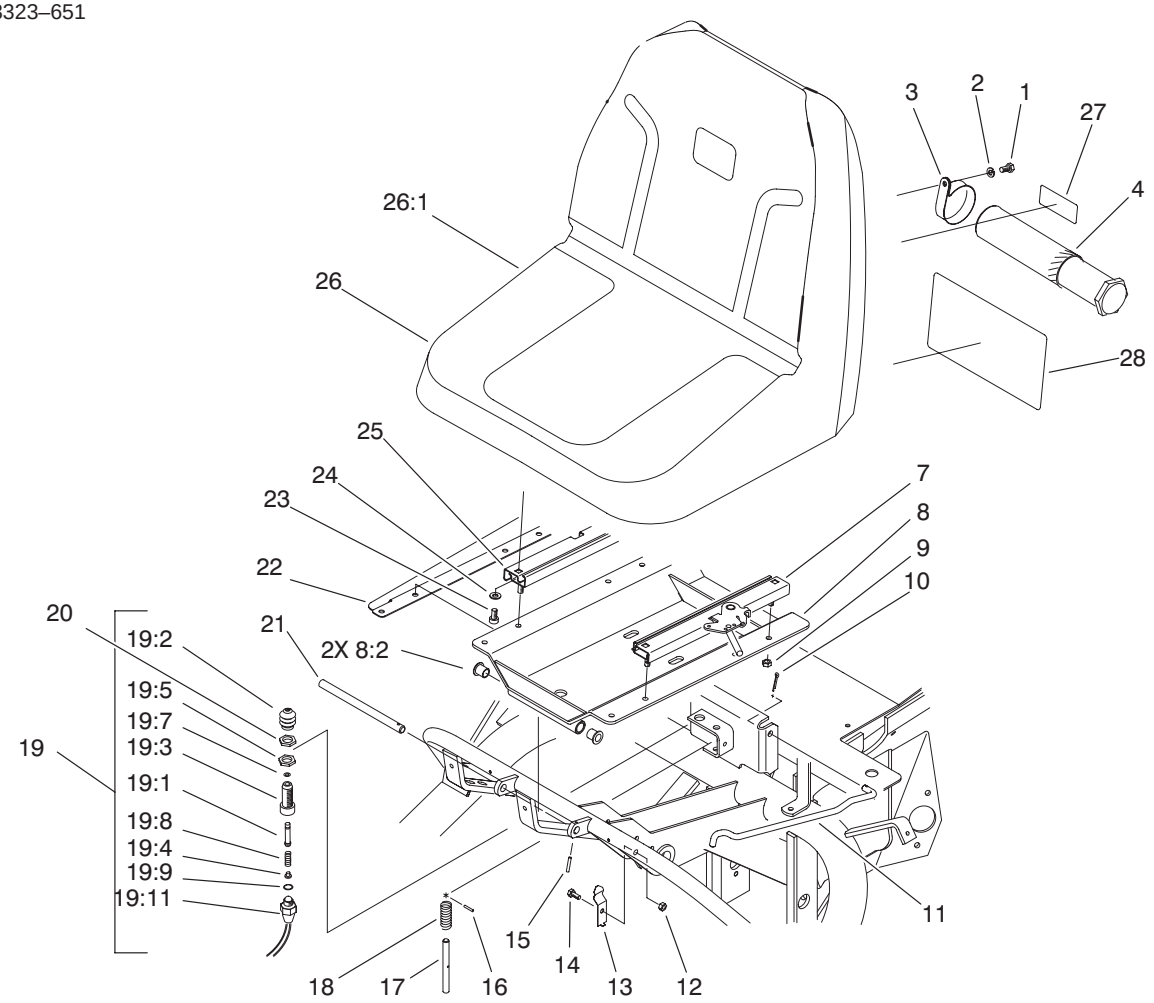
Sheet No.: A4
T–3155–1

Hydraulic Cylinder No. 99–8160

Ref. No.	Part No.	Qty.	Description
2	32152–10	1	Locknut – Top Deform
4	70–2780	1	Piston
*13	99–8162	1	Kit – Seal Repair, 1.50

Ref. No.	Part No.	Qty.	Description

* Not illustrated



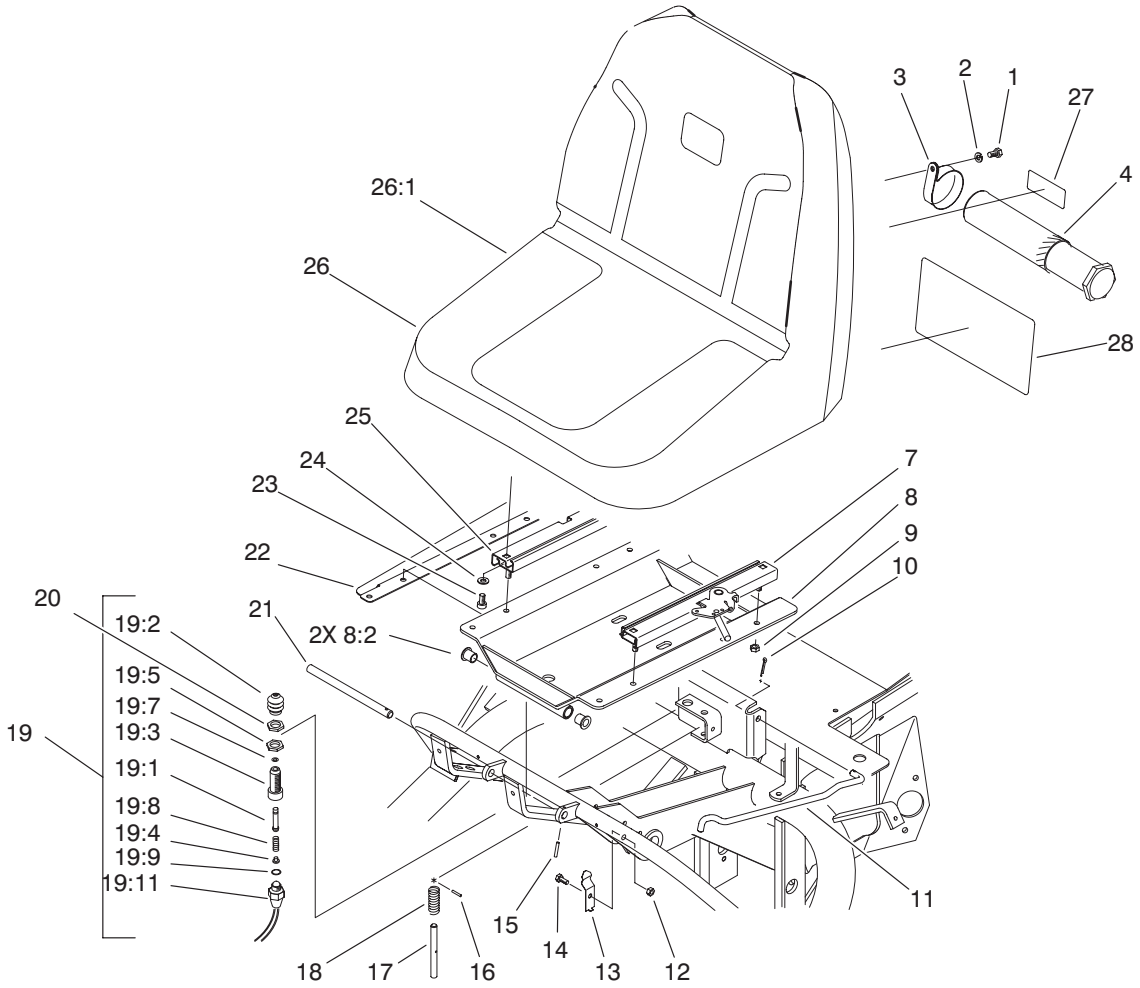
Sheet No.: 9

Seat Assembly

Ref. No.	Part No.	Qty.	Description
1	322–2	2	Screw–HH
2	3253–4	2	Washer–Lock/Sp
3	2412–133	2	R–Clamp
4	74–0720	1	Tube–Manual
7	51–0790	1	L/H Seat Adjuster–4”
8	83–1270	1	Seat Support ASM
8:2	256–155	2	Bushing–Flange
9	3296–29	4	Nut–Lock,NI
10	3272–11	1	Pin–Cotter
11	68–5100	1	Prop Seat Rod
12	3296–16	1	Nut–Lock, NI
13	68–5310	1	Prop Rod Clip
14	321–3	1	Screw–HH
15	32121–45	1	Pin–Spring
16	3284–3	1	Groove Pin
17	51–0350	1	Seat Spring Pin
18	3–6685	1	Spring
19	43–9071	1	Limit Switch ASM
19:1	43–8860	1	Switch Plunger
19:2	43–8870	1	Switch Boot
19:3	43–8620	1	Guide–Pin,Switch
19:4	43–8610	1	Guide
19:5	218–461	1	Nut–HH
19:7	237–7	1	O Ring
19:8	43–8600	1	Spring–Compression
19:9	237–30	1	O–Ring

Ref. No.	Part No.	Qty.	Description
19:11	72–4320	1	Switch
20	218–461	1	Nut–HH
21	49–5880	1	Shaft–Support, Seat
22	83–1840–01	1	R/H Valve Cover
23	3274–12	4	Screw–HSH
24	3256–23	4	Washer–Flat
25	51–0780	1	Slider–Seat
26	100–3187	1	Seat ASM
26:1	92–6534	1	Shell
*26:2	351–80	1	Clip
*26:3	351–78	1	Edging
*26:4	100–6411	1	Cushion–Replacement
27	93–8067	1	Decal–Hydraulic Oil
*28	93–7257	1	Decal–Service, Portugese
*28	93–7258	1	Decal–Service, Norwegian
*28	93–7259	1	Decal–Service, Finnish
*28	93–7260	1	Decal–Service, Danish
*28	93–7261	1	Decal–Service, Dutch
28	94–8036	1	Decal – Service
*28	83–2490	1	Service Decal
*28	84–9240	1	Decal – Service
*28	84–9250	1	Decal – Service
*28	84–9280	1	Decal – Service

* Not illustrated



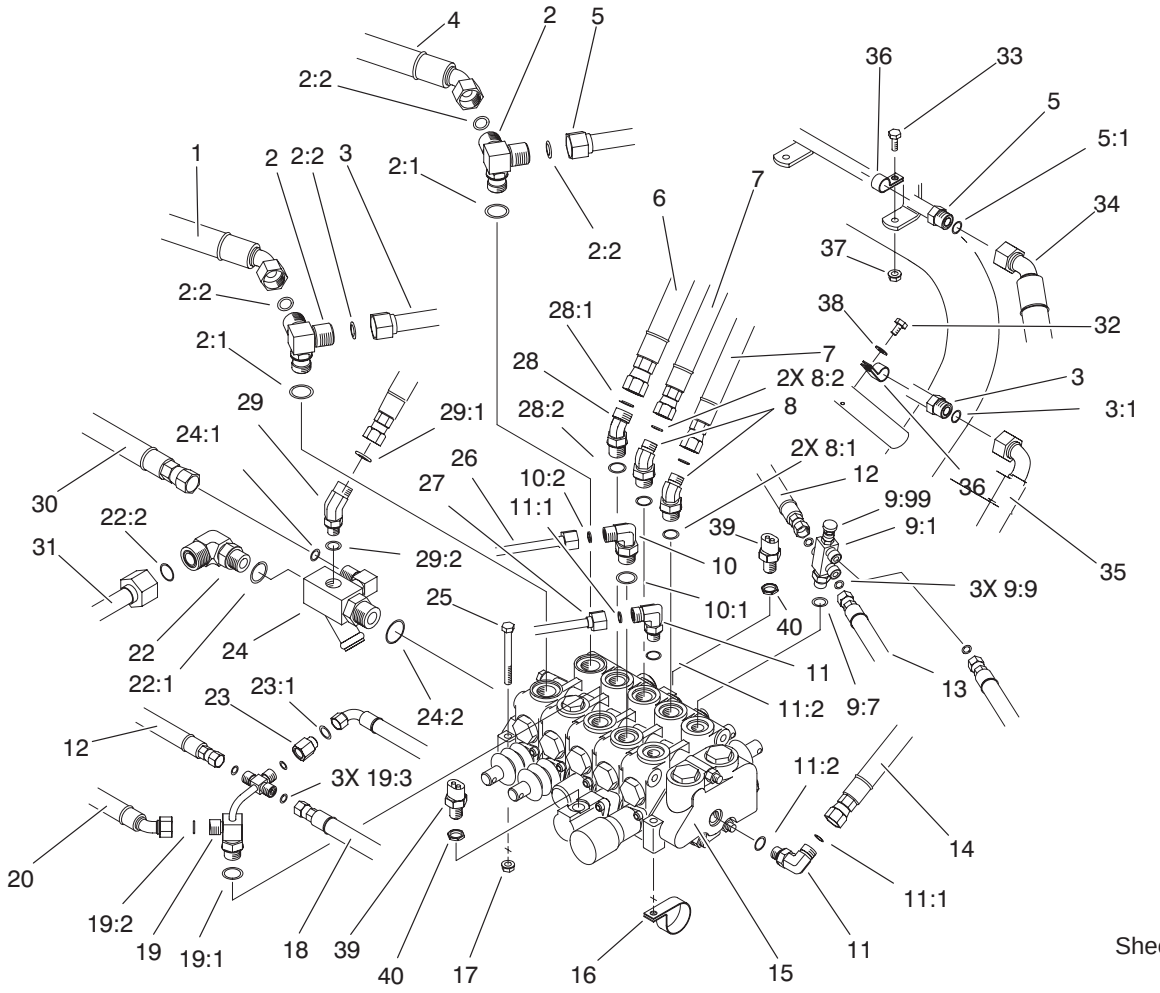
Sheet No.: 9

Seat Assembly (Continued)

Ref. No.	Part No.	Qty.	Description
*28	84–9270	1	Decal – Service
*28	84–9260	1	Decal – Service

Ref. No.	Part No.	Qty.	Description

* Not illustrated

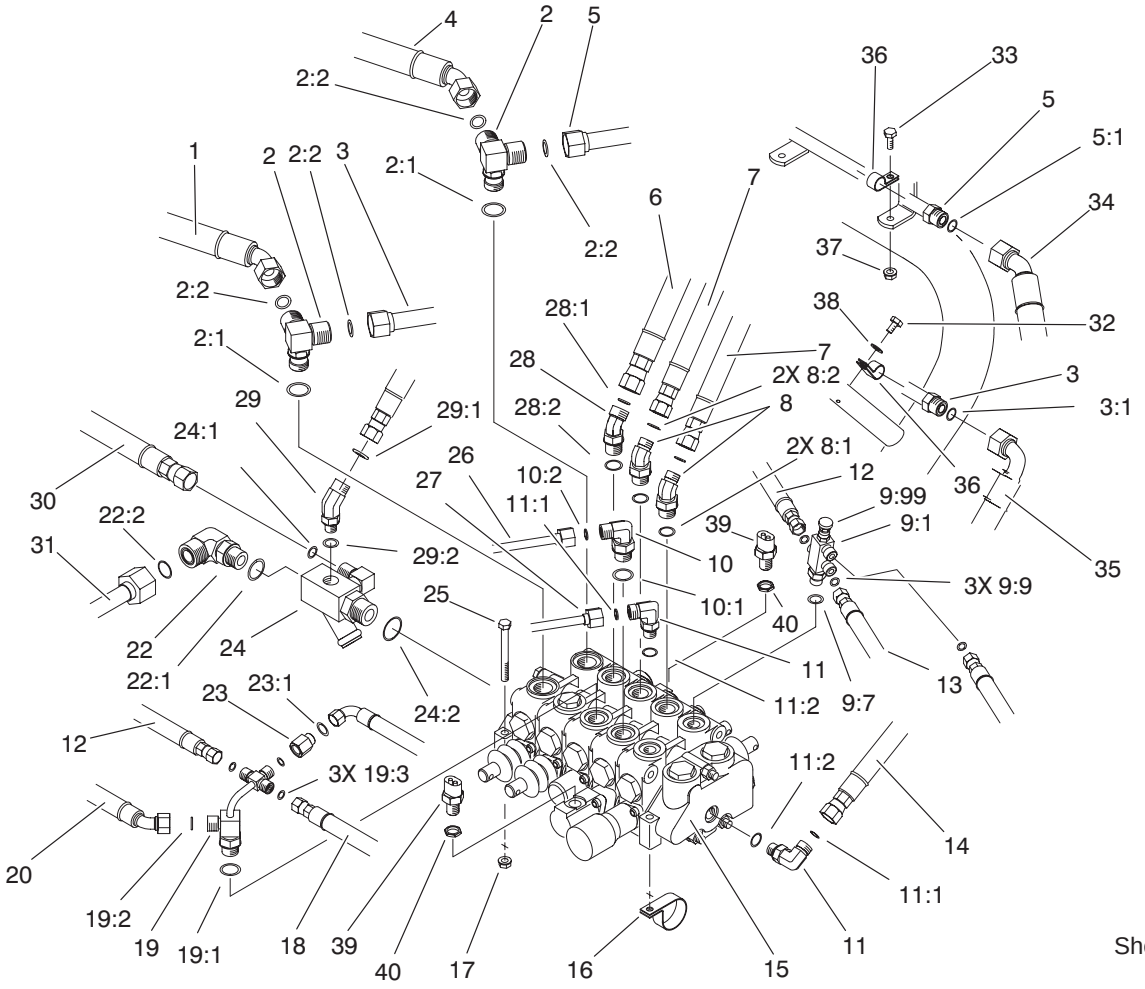


Sheet No.: 10

Control Valve Installation Assembly

Ref. No.	Part No.	Qty.	Description
1	98–0647	1	Hose–Hydraulic
2	63–4050	2	Fitting
2:1	237–80	1	O–Ring
2:2	237–65	2	O–Ring
3	70–7130	1	Tube Line
3:1	237–65	2	O–Ring
4	98–0646	1	Hose–Hydraulic
5	83–1200	1	Tube–Traction, LH Lower
5:1	237–65	1	O–Ring
6	98–2151	1	Hose–Hydraulic
7	98–0649	2	Hose–Hydraulic
8	340–138	2	Fitting
8:1	237–79	1	O–Ring
8:2	237–22	1	O–Ring
9	93–2556	1	Needle Valve ASM
9:1	93–2555	1	Fitting – Body
9:7	237–42	1	O–Ring
9:9	237–21	3	O Ring
9:99	93–2554	1	Needle ASM
10	340–18	1	Fitting
10:1	237–79	1	O–Ring
10:2	237–22	1	O–Ring
11	340–77	2	Fitting–Hyd. 90°
11:1	237–22	1	O–Ring
11:2	237–42	1	O–Ring

Ref. No.	Part No.	Qty.	Description
12	92–9767	2	Hose
12:1	237–78	1	O–Ring
13	83–1690	1	Hose–Hydraulic
13:1	237–78	1	O–Ring
14	98–2150	1	Hose–Hydraulic
15	84–2203	1	Control Valve–5 Spool
16	304–61	1	Clamp–Hose
17	32128–20	3	Nut–HF
18	63–3850	1	Hose ASM
18:1	237–78	1	O–Ring
19	83–1670	1	Fitting – Tube Assy
19:1	237–79	1	O–Ring
19:2	237–22	1	O–Ring
19:3	237–21	3	O Ring
20	95–5986	1	Hose–Hydraulic
22	340–16	1	Fitting
22:1	237–80	1	O–Ring
22:2	237–58	1	O–Ring
23	71–0990	1	Orifice
23:1	237–21	1	O Ring
24	68–5260	1	Manifold–Tee
24:1	237–30	1	O–Ring
24:2	237–81	1	O–Ring
25	322–14	3	Screw–HH
26	63–4030	1	Hydraulic Tube
27	63–4020	1	Hydraulic Tube



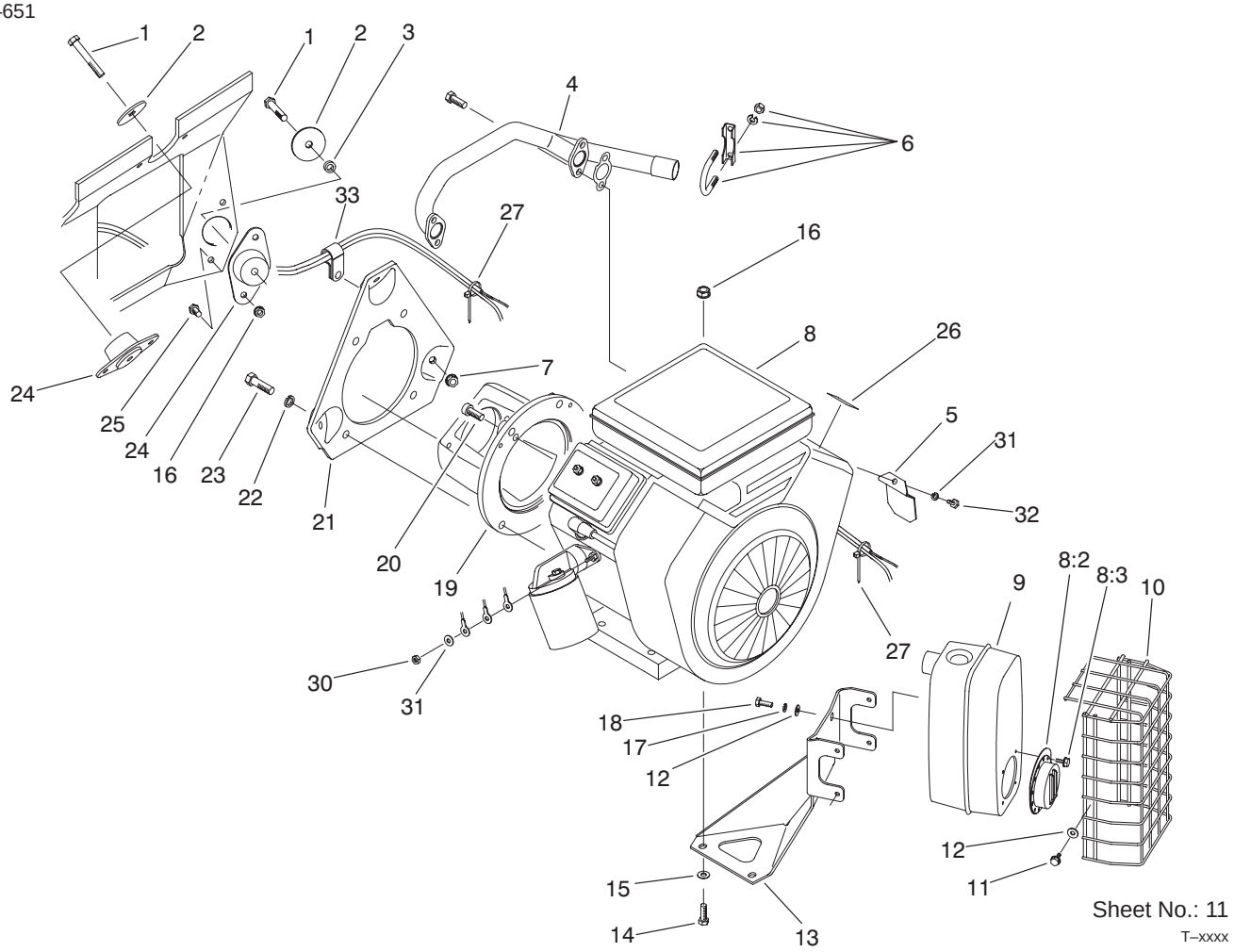
Sheet No.: 10

Control Valve Installation Assembly (Continued)

Ref. No.	Part No.	Qty.	Description
28	340–101	1	Fitting
28:1	237–30	1	O–Ring
28:2	237–79	1	O–Ring
29	340–137	1	Fitting
29:1	237–21	1	O Ring
29:2	237–42	1	O–Ring
30	95–5987	1	Hose–Hydraulic
31	63–4040	1	Tube–Hydraulic
31:1	237–30	2	O–Ring
32	12–3270	1	Screw
33	3234–4	1	Screw–Hfh
34	98–0648	1	Hose ASM – Hyd
35	98–2153	1	Hose ASM – Hyd
36	2412–41	2	Clamp
37	3296–16	1	Nut–Lock, NI
38	3256–22	1	Washer–Flat
39	83–1890	2	Switch–Ball
40	38–0410	2	Hex Nut

Ref. No.	Part No.	Qty.	Description

3323–651



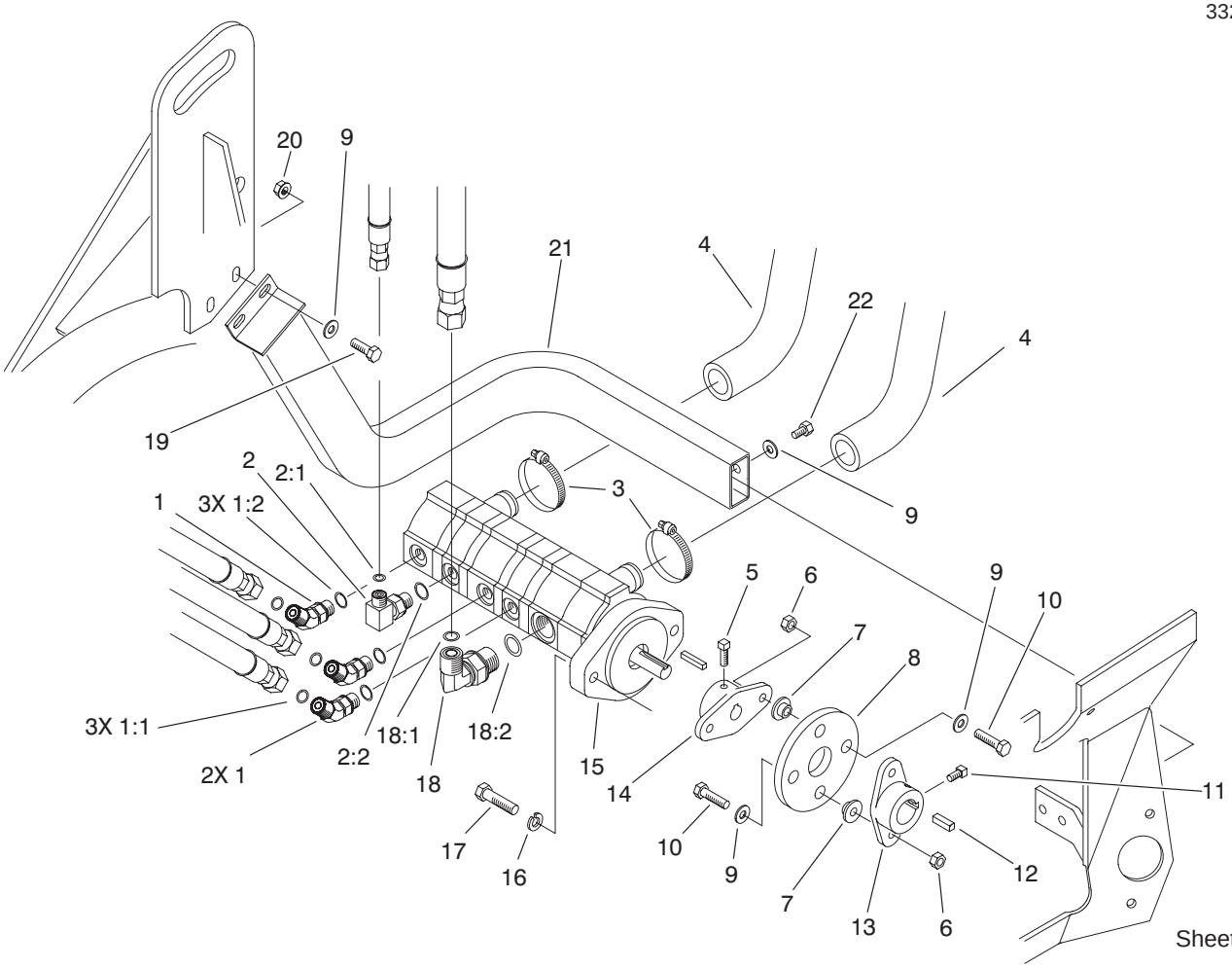
Sheet No.: 11

T–xxxx

Engine Installation Assembly

Ref. No.	Part No.	Qty.	Description
1	323–12	3	Screw–HH
2	83–1040	3	Washer – Flat
3	83–1050	2	Spacer
4	83–1080	1	Exhaust Manifold ASM
5	83–2310	1	Shield – Regulator
6	2112–11	1	Muffler Clamp
7	3290–357	3	Nut–Flange, Lock
8	98–0636	1	Engine ASM
8:2	83–2220	1	Deflector–Exhaust
8:3	83–2230	4	Screw–HH
9	98–0616	1	Muffler ASM
10	83–1400–03	1	Muffler Shield
11	12–3270	4	Screw
12	3256–1	8	Washer–Flat
13	83–1630–03	1	Bracket–Muffler Support
14	322–8	2	Screw–HH
15	3256–23	2	Washer–Flat
16	32128–20	8	Nut–HF
17	3253–3	4	Washer–Lock/Sp
18	49–2040	4	Screw–Taptite
19	83–1060–03	1	Adapter–Pump
20	3274–7	2	Screw–HSH
21	85–8120–03	1	Plate–Engine Mount
22	3253–6	4	Washer–Lock/Sp
23	324–7	4	Screw–HH

Ref. No.	Part No.	Qty.	Description
24	83–1030	3	Mount–Engine
25	322–3	6	Screw–HH
26	93–8069	1	Decal–Hot Surface
27	3290–379	2	Tie–Cable
30	43–2830	1	Hex Nut
31	43–5930	2	Spring Washer
32	33113–016	1	Screw–HH
33	2412–81	1	Clamp



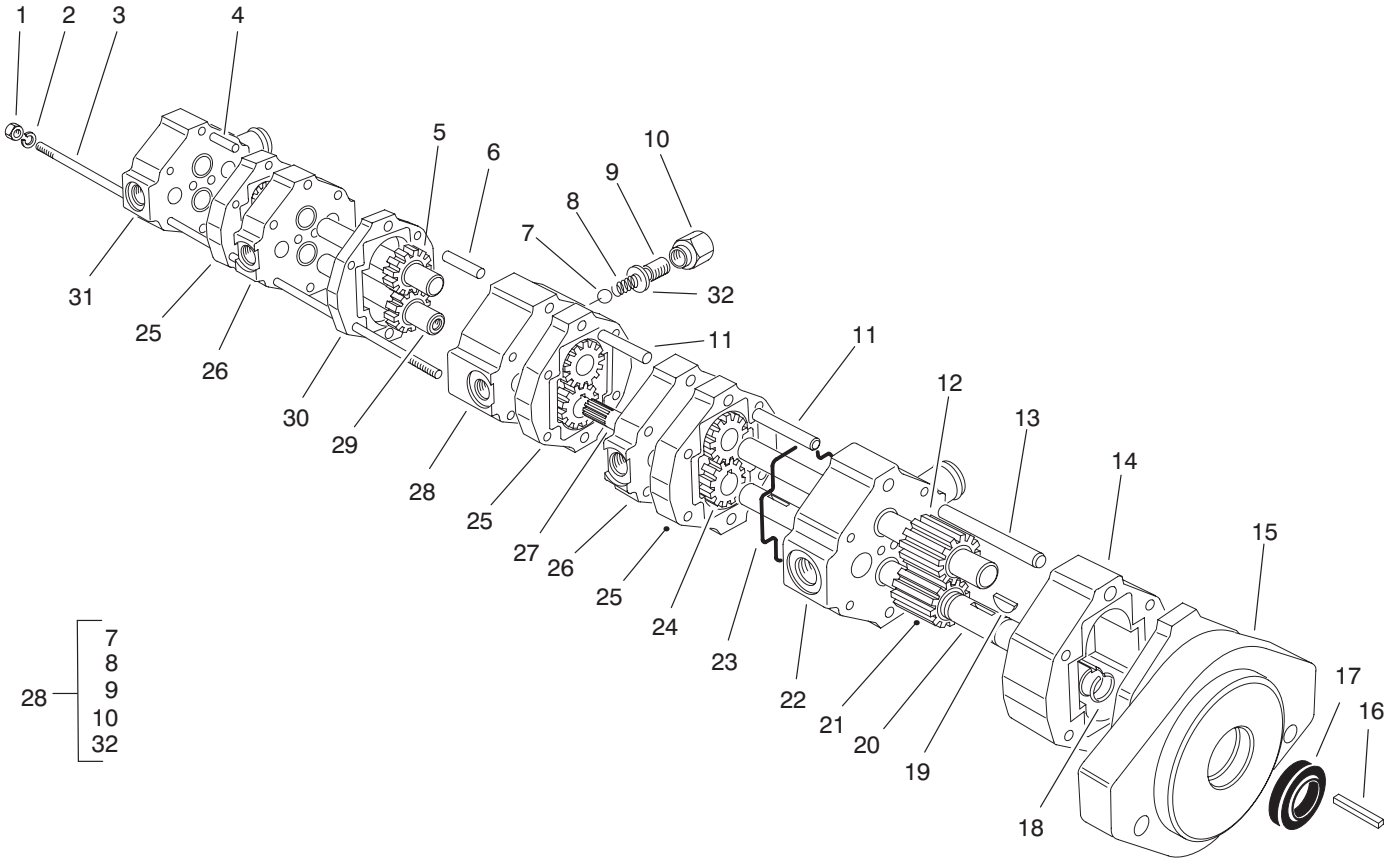
Sheet No.: 12

Hydraulic Pump Installation Assembly

Ref. No.	Part No.	Qty.	Description
1	340–87	3	Fitting–Hyd., 45°
1:1	237–22	1	O–Ring
1:2	237–42	1	O–Ring
2	340–82	1	Adapter
2:1	237–42	1	O–Ring
2:2	237–35	1	O–Ring
3	2412–34	2	Clamp–Hose
4	83–0910	2	Hose–Inlet, Pump
5	3241–6	2	Screw, Sq Hd
6	3296–29	4	Nut–Lock,NI
7	27–6600	4	Spacer–Coupling
8	44–2230	1	Coupling–Rubber
9	3256–23	8	Washer–Flat
10	322–6	4	Screw–HH
11	3241–2	2	Screw–SQH
12	10–7070	1	Key–Square
13	27–1960	1	Hub–Engine
14	27–1970	1	Hub–Pump
15	92–9764	1	Hydraulic Pump ASM
16	3253–21	2	Washer–Lock/Sp
17	323–8	2	Screw–HH
18	340–105	1	Fitting–Hyd., 90°
18:1	237–30	1	O–Ring
18:2	237–80	1	O–Ring
19	322–4	2	Screw–HH
20	32128–20	2	Nut–HF

Ref. No.	Part No.	Qty.	Description
21	83–1940–01	1	Guard–Pump
22	322–1	2	Screw–HH

3323–651



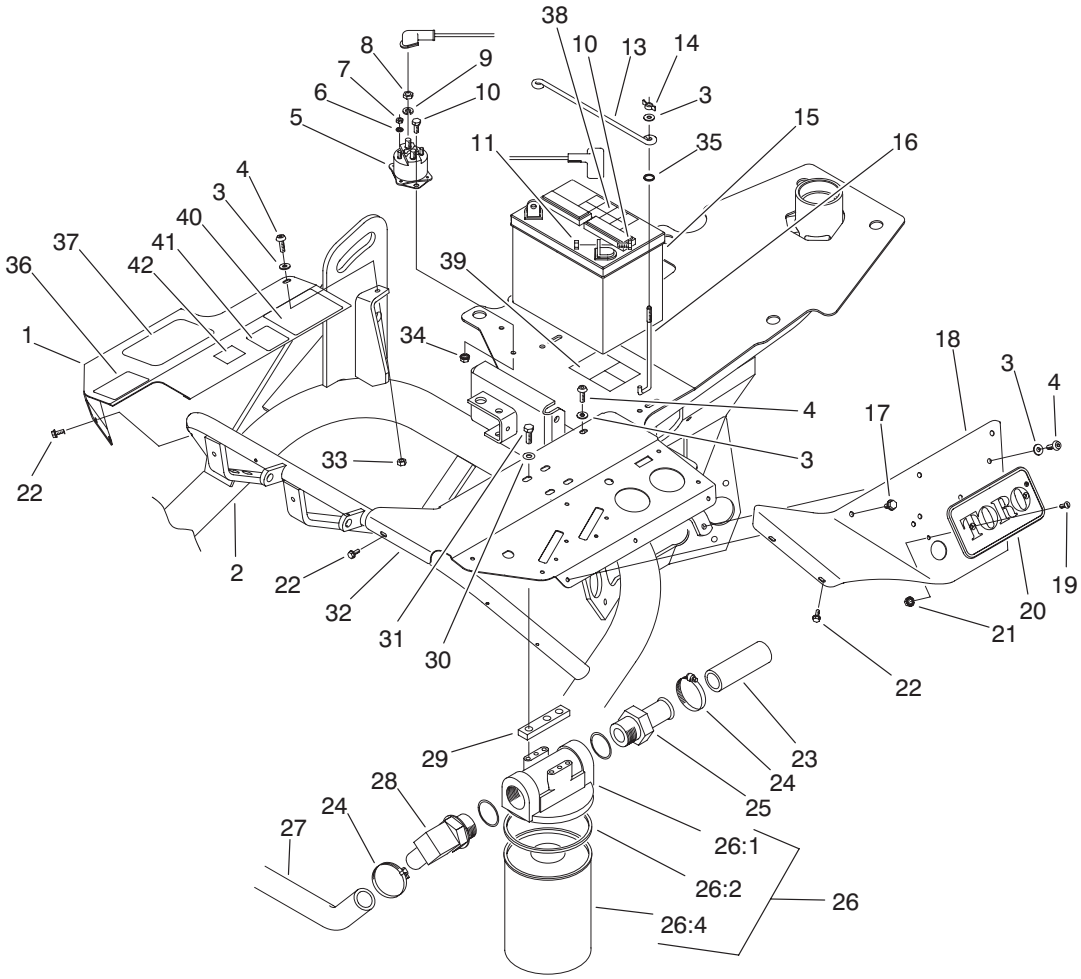
Note: Parts Not Listed In Parts List Are Not Serviced Separately.

Sheet No.: A6

T–0645

Hydraulic Pump 92–9764

Ref. No.	Part No.	Qty.	Description
1	3217–6	4	Nut–Hex
2	354–16	4	Washer
3	354–17	4	Stud
4	354–11	2	Dowel
5	354–9	1	Idler Shaft & Gear ASM
6	354–12	2	Dowel
11	354–13	4	Dowel
12	92–9774	1	Shaft & Gear ASM
13	354–14	2	Dowel Pin
14	92–9766	1	Plate–Gear
15	354–2	1	Body Assembly
16	5–0946	1	Key–Square
17	354–15	1	Seal–Oil
18	353–886	2	Ring–Retaining
19	353–884	4	Key
20	92–9772	1	Shaft–Drive
21	92–9773	1	Gear – 59b
22	354–3	1	Bearing Plate ASM
23	353–922	10	Ring–Seal
24	353–967	6	Gear
25	353–969	3	Plate–Gear
26	353–923	2	Plate
27	354–5	1	Adaptor–Splined
28	354–4	1	Bearing Plate ASM
29	354–8	1	Drive Shaft & Gear ASM
30	354–6	1	Plate–Gear
31	354–7	1	Pump Cover Assembly
32	354–35	1	Gasket

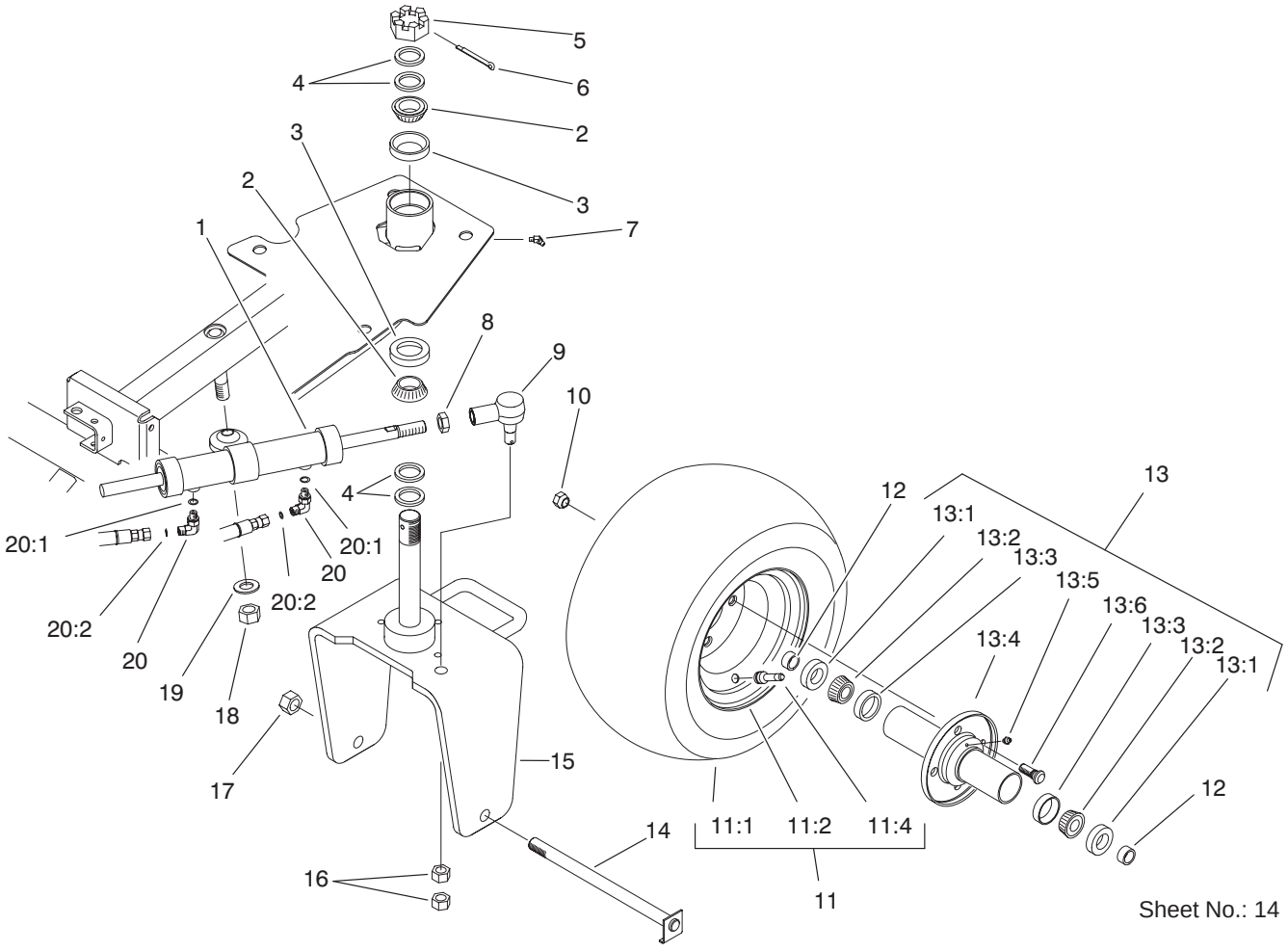


Sheet No.: 13

Frame Assembly

Ref. No.	Part No.	Qty.	Description
1	94–2694–01	1	Cover–RH
2	92–9164–01	1	Frame ASM
3	3256–22	5	Washer–Flat
4	3274–69	3	Screw–HSBH
5	28–4210	1	Solenoid
6	3254–1	2	Washer–Lock/Int
7	3219–14	2	Nut–Hex
8	3218–13	2	Nut–Jam
9	3253–4	2	Washer–Lock/Sp
10	321–3	4	Screw–HH
11	3217–5	2	Nut–Hex
13	72–4790	1	Battery Hold Down
14	32103–12	2	Nut–Wing
15	92–1677	1	Battery–Dry
16	56–7720	2	Post–Battery
17	46–8560	3	Screw–Flange
18	83–0840–01	1	Valve Cover Shield
19	3290–470	2	Screw–HSFH
20	61–3310	1	Plate–Logo
21	32149–7	2	Nut–Keps
22	32104–76	5	Screw–Acorn Slot
23	83–1430	1	Hose – Return Line
24	2412–34	3	Clamp–Hose
25	353–563	1	Fitting–Hydraulic, Straight
26		1	Filter & Head ASM

Ref. No.	Part No.	Qty.	Description
26:1	44–5560	1	Head–Oil Filter
26:2	72–3850	1	Seal– Oil Filter
26:4	74–3570	1	Filter
27	68–5880	1	Hose–Hydraulic
28	353–564	1	Fitting–90°
29	27–2380	2	Spacer
30	3256–23	4	Washer–Flat
31	322–4	4	Screw–HH
32	83–0830–01	1	Upper Control Panel
33	3296–16	3	Nut–Lock, NI
34	32149–2	2	Nut–Keps
35	237–143	2	0–Ring
36	93–8065	1	Decal–Traction
37	67–1300	1	Decal – Toro
38	93–7276	1	Decal – Danger
39	93–6668	1	Decal – Battery
40	92–5524	1	Decal–Noise Rating
41	63–9920	1	Decal–Noise Level
42	93–7252	1	Decal–C.e. Mark



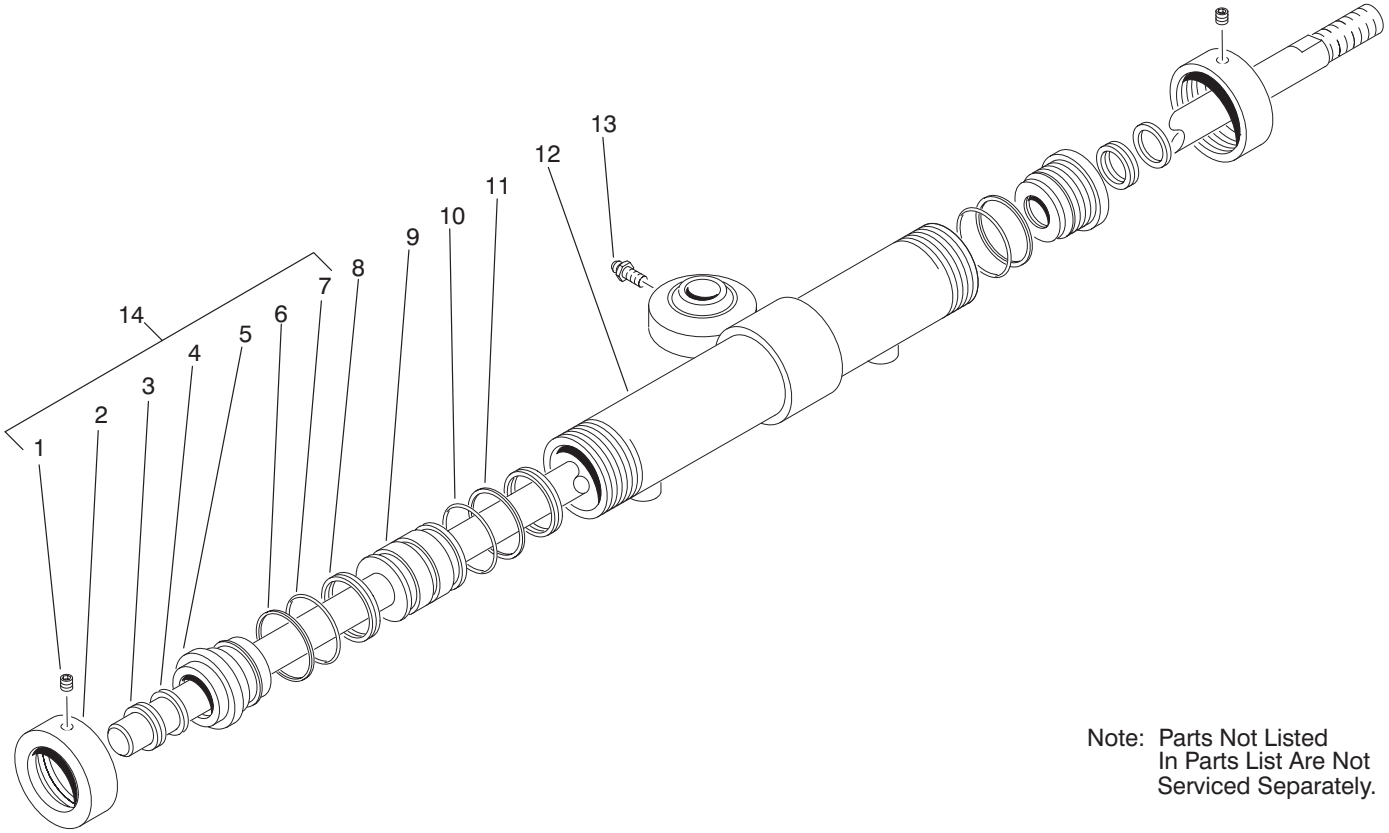
Sheet No.: 14

Rear Wheel Assembly

Ref. No.	Part No.	Qty.	Description
1	83–2330	1	Cylinder – Steering
2	254–70	2	Cone–Bearing
3	254–61	2	Cup–Bearing
4	18–6320	4	Washer–Steering
5	32136–9	1	Nut Hex Slot
6	3272–37	1	Pin, Cotter
7	302–11	1	Fitting–Lube,45°
8	84–5300	1	Nut–Jam
9	83–1640–03	1	Rod End ASM
10	242–50	4	Nut–Lug
11		1	Wheel & Tire ASM
11:1	28–3680	1	Tire
11:2	217–60	1	Rim
11:4	232–24	1	Stem–Valve
*11:5	232–37	1	Tube
12	74–3730	2	Spacer – Rear Spindle
13		1	Hub – Sulky Tire
13:1	253–111	2	Oil Seal
13:2	254–78	2	Cone–Bearing
13:3	254–79	2	Bearing–Roller, Cup
13:4	75–9440	1	Hub ASM
13:5	302–55	1	Zerk
13:6	10–6830	4	Stud–Type, Drive
14	5–3934	1	Bolt–Caster
15	95–5952–01	1	Fork–Castor
16	3220–6	2	Nut–Jam

Ref. No.	Part No.	Qty.	Description
17	3296–67	1	Nut–Lock NI
18	3217–12	1	Nut–Hex
19	3256–28	1	Washer–Flat
20	340–132	2	90 Elbow
20:1	237–78	1	O–Ring
20:2	237–21	1	O Ring

* Not illustrated



Note: Parts Not Listed In Parts List Are Not Serviced Separately.

Sheet No.: A7

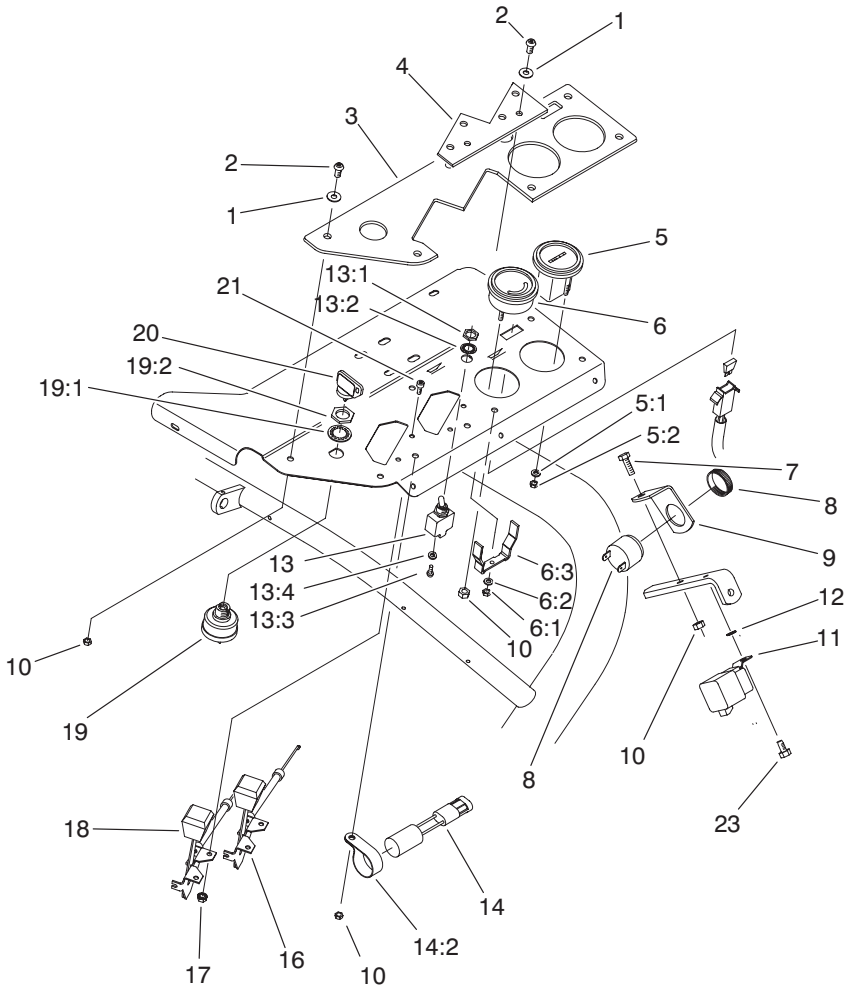
T–1313

Hydraulic Cylinder Assembly No. 83–2330

Ref. No.	Part No.	Qty.	Description
1	3245–1	2	Screw–Set, HSH
2	83–2340	2	Cap – Threaded
5	83–2350	2	Cap – Head, Thread
9	83–2360	1	ASM–Rod
12	83–2370	1	Barrel ASM
13	302–5	1	Fitting–Lube
*14	83–2380	1	Kit–Repair, Seal

Ref. No.	Part No.	Qty.	Description

* Not illustrated

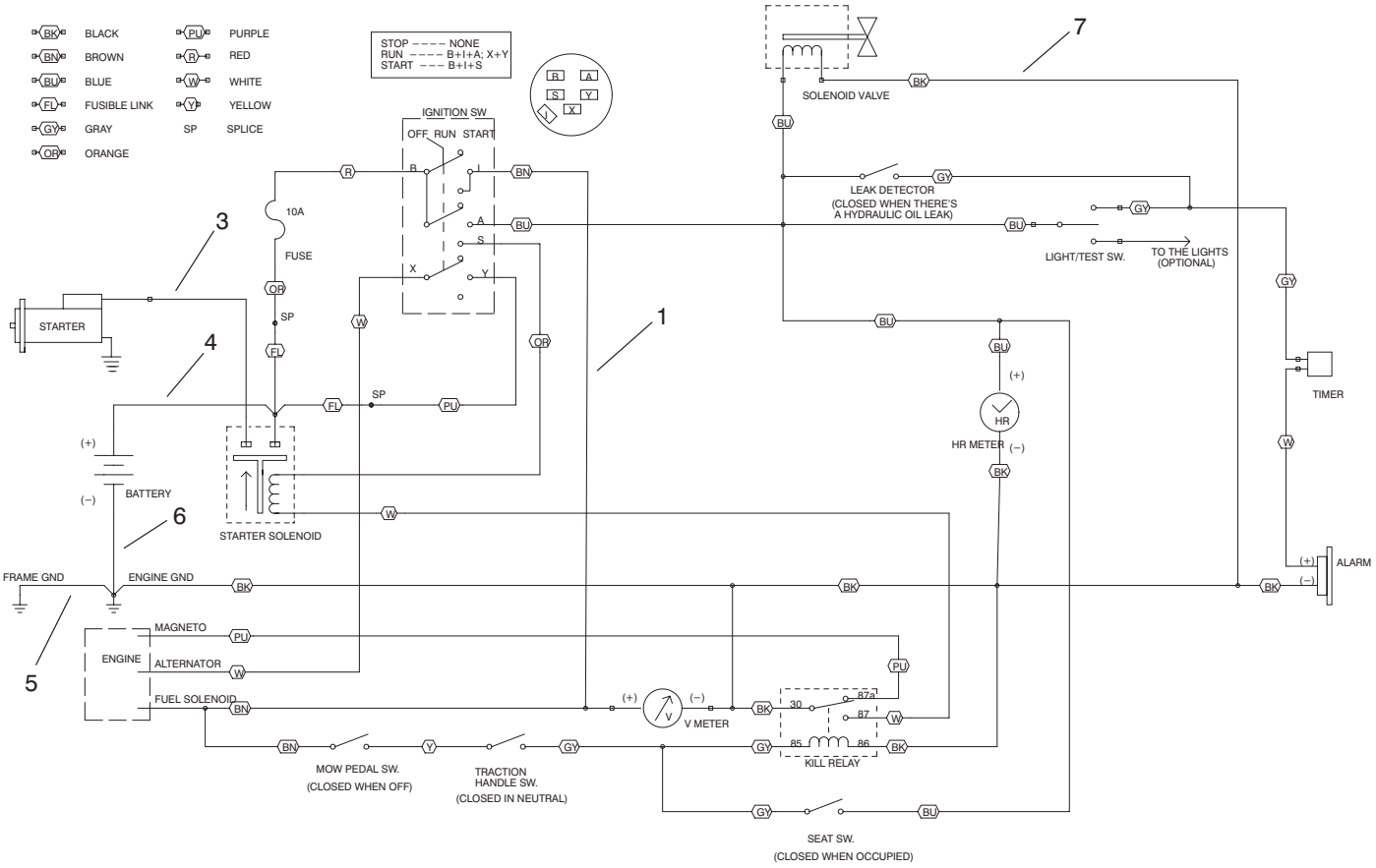


Sheet No.: 15

Control Panel Assembly

Ref. No.	Part No.	Qty.	Description
1	3256–1	8	Washer–Flat
2	3274–69	8	Screw–HSBH
3	93–8061	1	Panel – Control
4	83–2030	1	Plate–Filler
5	66–2950	1	Guage–Hourmeter
5:1	3255–20	2	Washer–Lock, Ext. Tooth
5:2	3217–25	2	Nut–Hex
6	98–2160	1	Voltmeter
6:1	3217–27	1	Nut–Hex
6:2	3255–25	1	Washer–Lock/Ext
6:3	78–0080	1	Clamp–Mounting
7	321–4	1	Screw–HH
8	98–2159	1	Audio – Alarm
9	83–1530	1	Bracket– Buzzer Support
10	3296–16	9	Nut–Lock, NI
11	70–1480	1	Relay
12	3255–7	1	Washer–Lock/Ext
13	83–1660	1	Switch – 3 Position
13:1	218–498	2	Locknut–Hex.
13:2	218–589	1	Washer F/W
13:3	218–588	3	Screw F/W
13:4	3253–19	3	Washer–Lock/Sp
14	83–2280	1	Timer – Delay
14:1		1	Timer – Delay

Ref. No.	Part No.	Qty.	Description
14:2	98–4604	1	Clamp–R
16	83–0040	1	Control – Choke
17	3296–27	4	Nut–Lock NI
18	83–0030	1	Control – Throttle
19	88–9830	1	Switch–Ignition
19:1	3254–5	1	Washer–Lock/Int
19:2	218–461	1	Nut–HH
20	63–8360	2	Key–Ignition
21	3273–26	4	Hex Soc Screw
23	32104–95	1	Screw–HWH



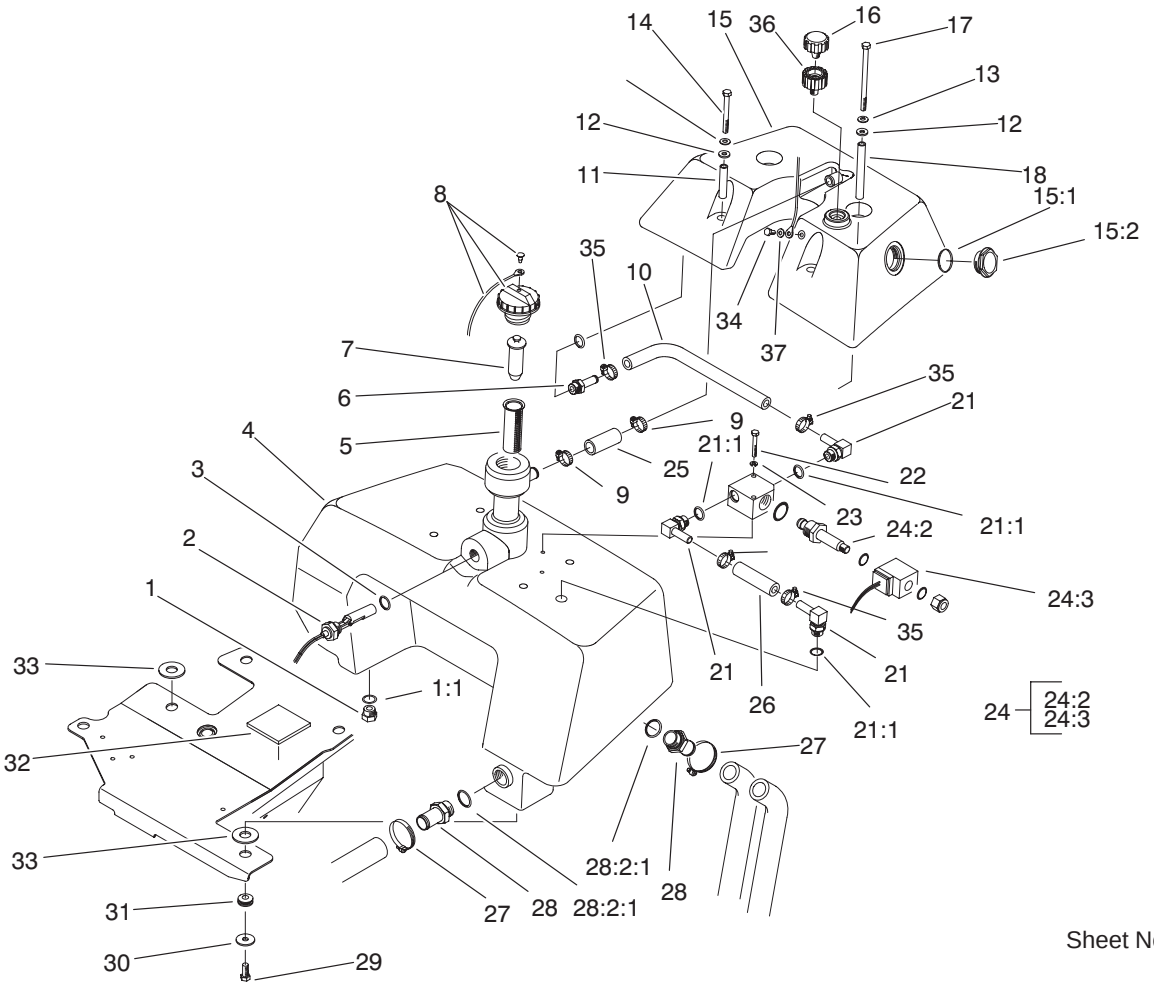
Sheet No.: 19

Electrical Schematic

Ref. No.	Part No.	Qty.	Description
1	98–2163	1	Wire Harness – Main
3	98–2161	1	Wire ASM
4	83–2420	1	Cable ASM–Positive
*4:2	28–8080	1	Boot–Terminal
*4:3	83–2430	1	Boot – Terminal
5	83–1150	1	Wire ASM–Engine Ground
6	98–2165	1	Cable ASM – Negative
*6:1	83–1150	1	Wire ASM–Engine Ground
*6:2	98–0603	1	Boot – Terminal
7	98–2162	1	Harness – Leak Detector

Ref. No.	Part No.	Qty.	Description

* Not illustrated

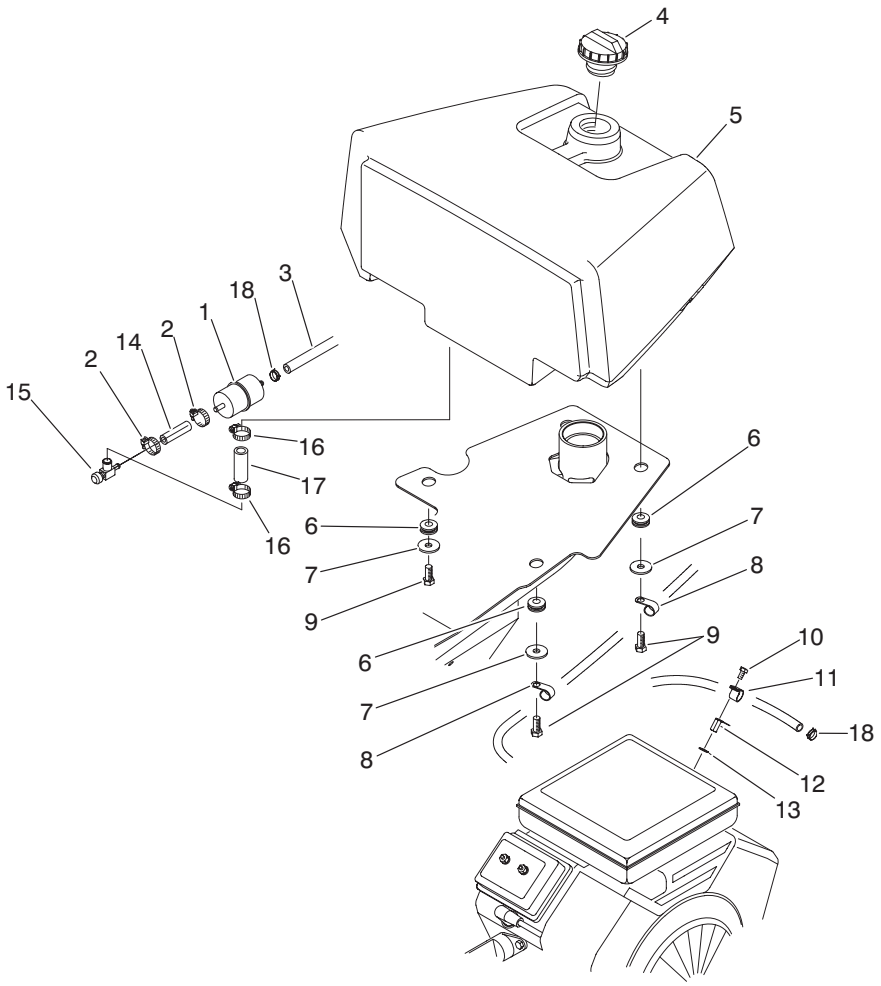


Sheet No.: 16

Hydraulic Reservoir Assembly

Ref. No.	Part No.	Qty.	Description
1	353–550	1	Plug–Hydraulic
1:1	237–79	1	O–Ring
2	83–1450	1	Sensor–Oil Level
3	237–80	1	O–Ring
4	92–8966	1	Tank – Hyd
5	83–1520	1	Filler Screen
6	354–121	1	Fitting–Hydraulic, Straight
7	92–4063	1	Plug – Filler Cap
8	93–7160	1	Cap – Hyd Oil
9	2412–141	2	Clamp – Worm Drive
10	83–2070	1	Valve Hose
11	83–1550	2	Spacer – Tube, Short
12	83–1470	4	Washer – Neoprene
13	3256–71	4	Washer–Flat
14	322–14	2	Screw–HH
15	83–2100	1	Tank–Auxiliary, Hydraulic
15:1	94–8166	1	O–Ring
15:2	83–2250	1	Guage–Sight
16	68–6150	1	Breather–Air
17	322–29	2	Screw–HH
18	83–1560	2	Spacer – Tube, Long
21	354–120	3	Fitting–Hydraulic
21:1	237–79	2	O–Ring
22	321–11	2	Screw–HH

Ref. No.	Part No.	Qty.	Description
23	3253–3	2	Washer–Lock/Sp
24	83–1460	1	Solenoid Valve ASM
24:2	83–2000	1	Spool–Valve
24:3	83–2010	1	Coil – Valve
25	83–2090	1	Hose–Overflow
26	83–2080	1	Hose–Valve, Tank
27	2412–34	3	Clamp–Hose
28	83–0870–01	3	Fitting – Hose Barb
28:2		1	Fitting – Hose Barb
28:2:1	237–177	1	O–Ring
29	323–6	3	Screw–HH
30	63–8410	3	Washer
31	240–11	3	Grommet
32	83–2390	1	Pad – Tank
33	83–2400	2	Spacer/Washer;Tank
34	321–2	1	Screw–HH
35	2412–36	4	Clamp–Hose
36	92–8020	1	Adapter – Breather
37	3256–22	1	Washer–Flat



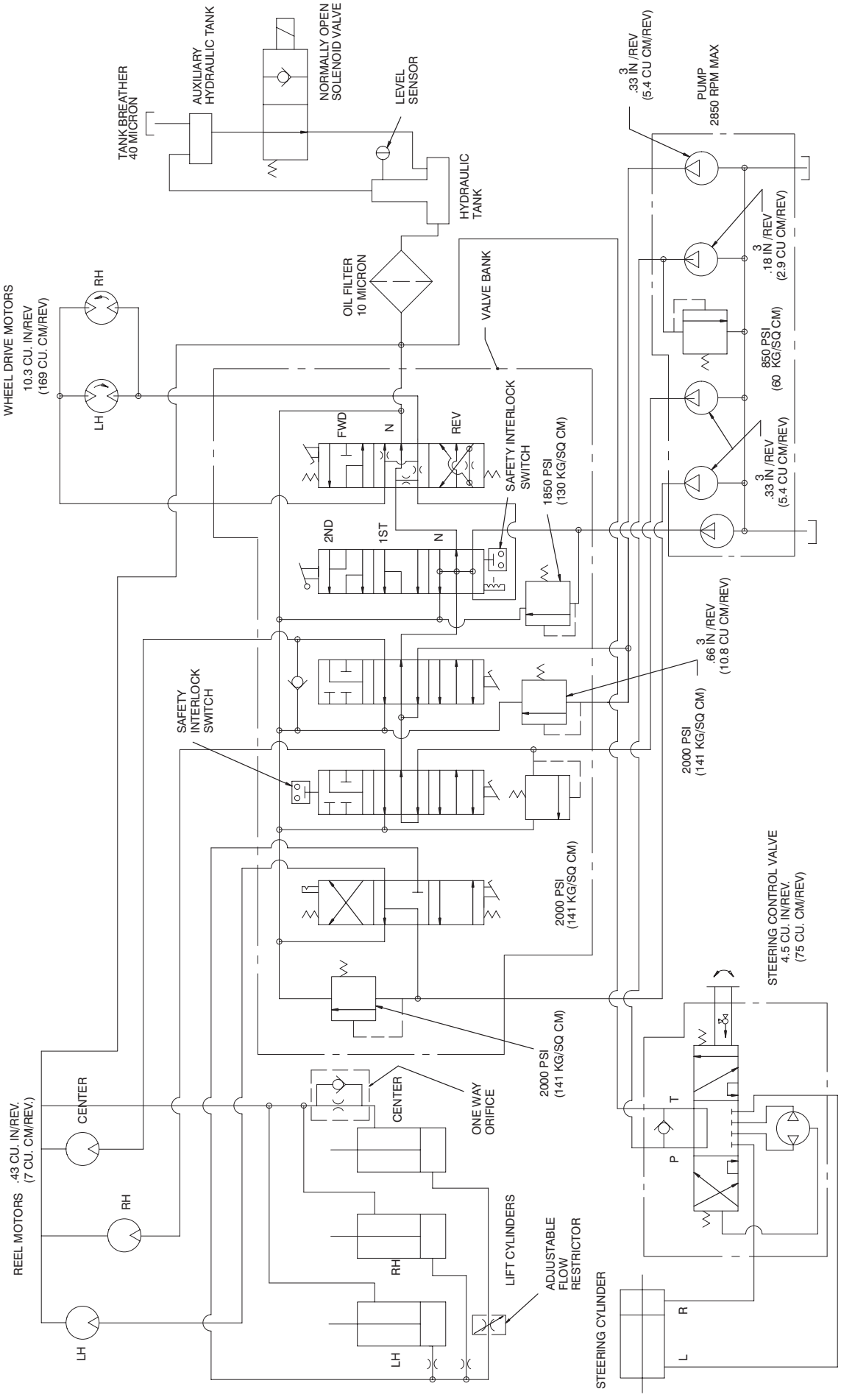
Sheet No.: 17

Fuel Tank Assembly

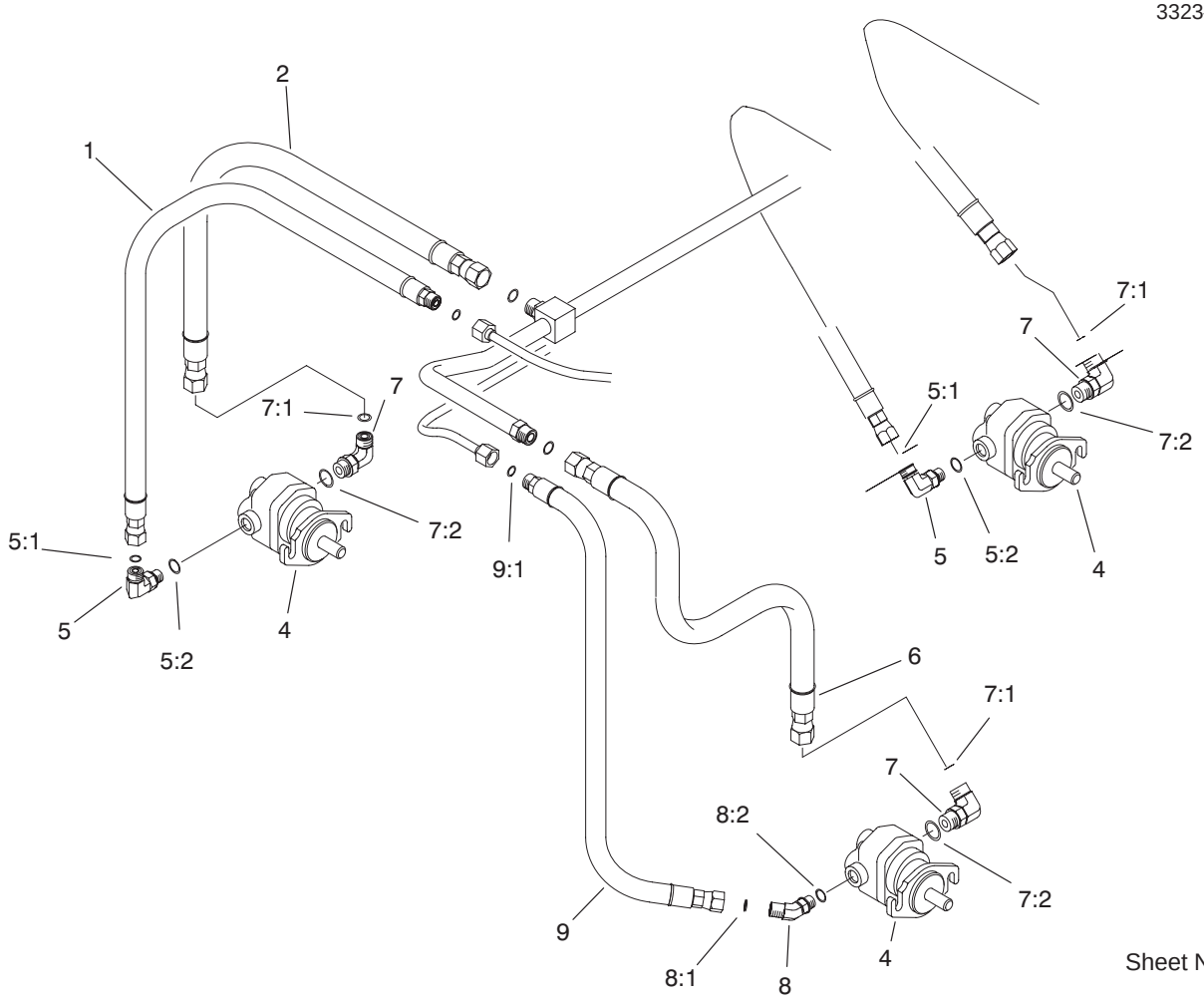
Ref. No.	Part No.	Qty.	Description
1	94–2690	1	Filter–Fuel
2	2412–108	2	Clamp–Worm
3	83–2041	1	Hose–Fuel
4	93–7170	1	Cap–Fuel
5	92–7189	1	Tank – Gas
6	240–11	4	Grommet
7	63–8410	4	Washer
8	2412–41	3	Clamp
9	323–6	4	Screw–HH
10	33113–012	1	Screw–HH
11	2412–94	1	Clamp
12	83–2200	1	Nut
13	3256–63	1	Washer–Flat
14	83–2040	1	Hose – Gas Line
15	83–1390	1	Fitting – Fuel Shut–Off
16	2412–36	2	Clamp–Hose
17	56–2230	1	Hose–Fuel
18	2412–98	2	Clamp

Ref. No.	Part No.	Qty.	Description

Hydraulic Schematic



T–1302



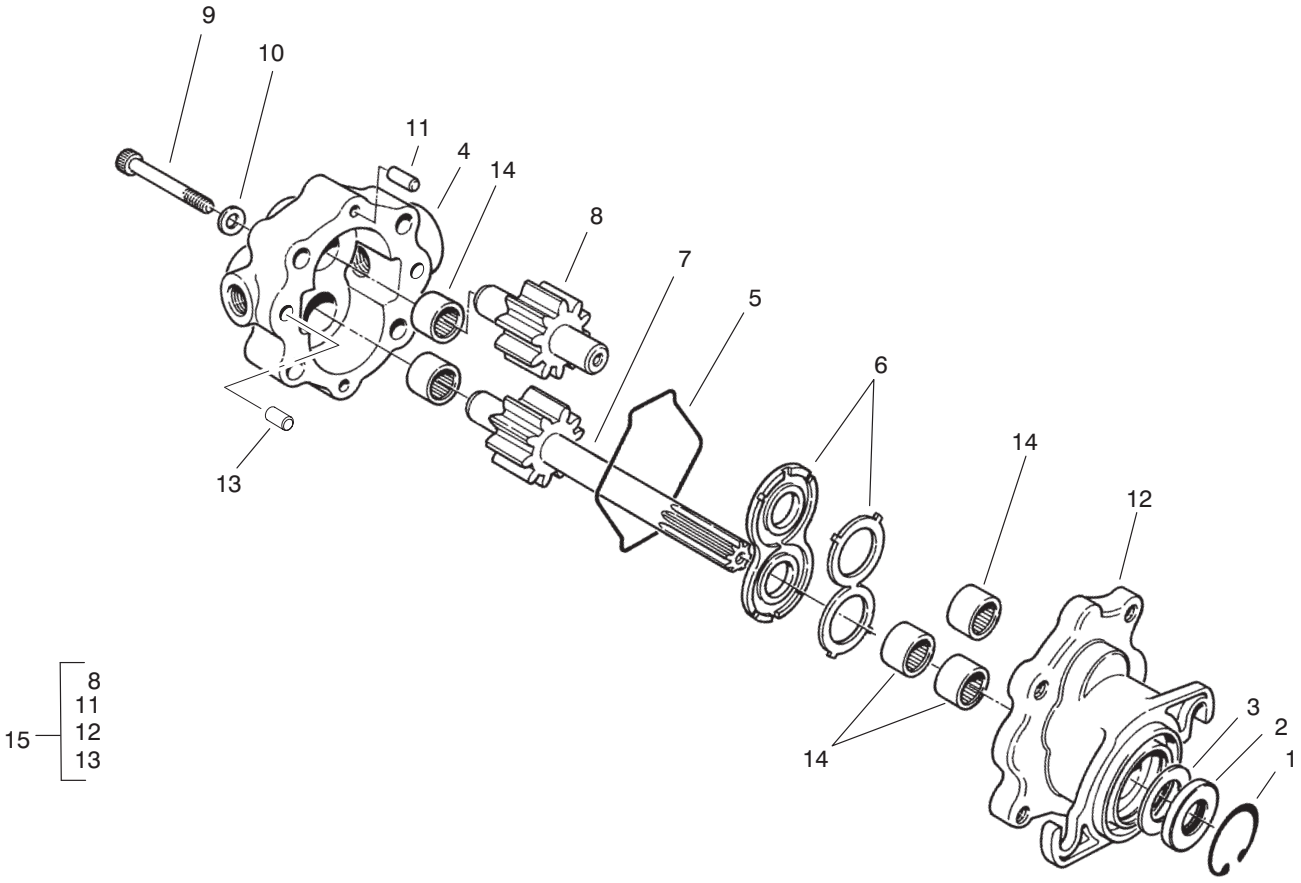
Sheet No.: 18

Reel Motor Installation Assembly

Ref. No.	Part No.	Qty.	Description
1	95–5984	1	Hose–Hydraulic
1:1	237–22	1	O–Ring
2	95–5985	1	Hose–Hydraulic
4	94–3506	3	Reel Motor
5	340–77	2	Fitting–Hyd. 90°
5:1	237–22	2	O–Ring
5:2	237–42	2	O–Ring
6	95–5989	1	Hose–Hydraulic
7	340–98	3	Fitting–90°
7:1	237–30	3	O–Ring
7:2	237–79	3	O–Ring
8	340–87	1	Fitting–Hyd., 45°
8:1	237–22	1	O–Ring
8:2	237–42	1	O–Ring
9	95–5988	1	Hose–Hydraulic
9:1	237–22	1	O–Ring

Ref. No.	Part No.	Qty.	Description

* Not illustrated



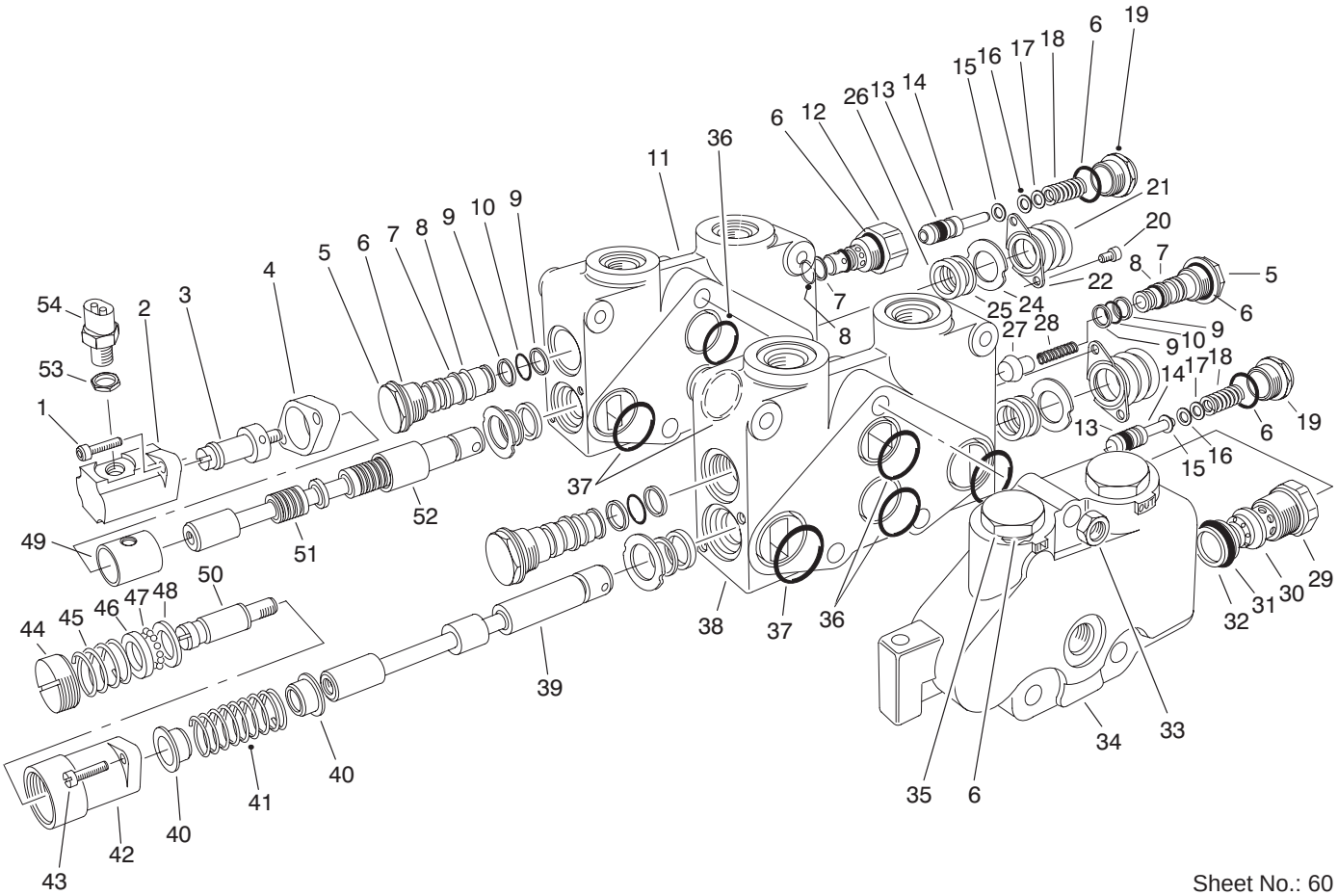
Note: Parts Not Listed In Parts List Are Not Serviced Separately.

Sheet No.: A8
T–1872

Reel Motor No. 94–3506

Ref. No.	Part No.	Qty.	Description
1	32151–41	3	Snap Ring
3	353–590	3	Spacer
4	94–3507	3	Cover ASM
5	354–46	3	Seal Ring
6	74–3810	3	Load Plate ASM
7	94–3508	3	Driveshaft & Gear ASM
8	94–3509	3	Shaft & Gear ASM – Idler
9	354–50	12	Screw – Hex Socket Hd
10	354–51	12	Washer
11	353–599	6	Dowel Pin
12	92–8795	3	Body ASM
13	92–8796	6	Pin – Dowel
15	92–8863	3	Repair Kit

Ref. No.	Part No.	Qty.	Description



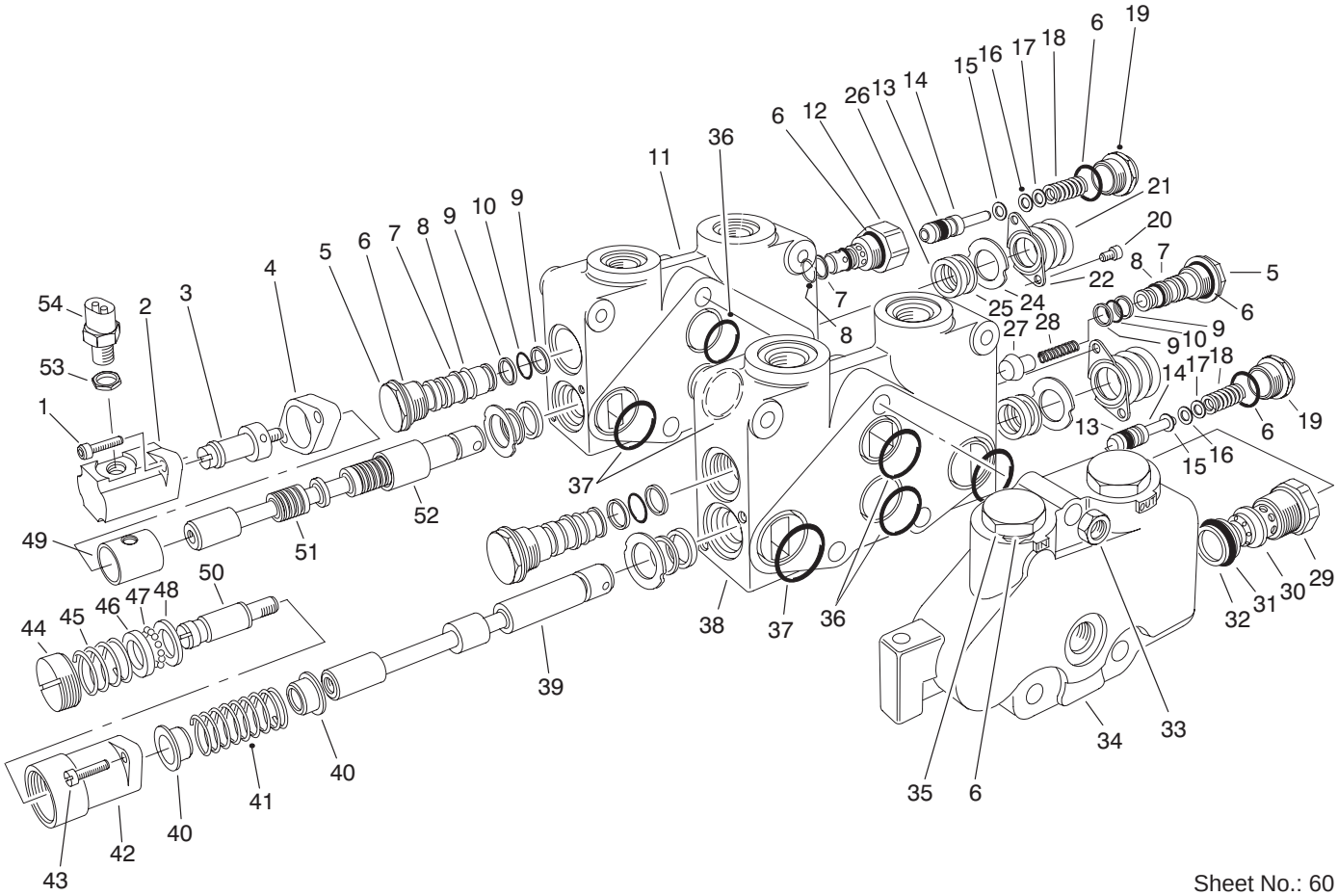
Sheet No.: 60

T–1318

Control Valve Assembly No. 84–2203 (Sections 1&2)

Ref. No.	Part No.	Qty.	Description
1	3274–70	2	Screw–HSH
2	353–727	1	Special Bonnet
3	353–729	1	Detent Stud
4	353–733	1	Bonnet Spacer
5	353–481	3	Lift Check ASM
6	237–54	8	O Ring
7	353–306	4	Backup Washer
8	353–305	4	O Ring
9	353–303	6	Backup Washer
10	353–302	3	O Ring
12	353–851	1	Relief Body
13	353–392	2	Piston Ring
14	353–531	2	Poppet & Ring ASM
15	353–328	2	.040 Shim
16	353–329	2	.020 Shim
17	353–330	2	.010 Shim
18	353–855	2	Spring
19	353–334	2	Relief Cap
20	3274–52	4	Screw–HSH
21	353–575	2	Boot
22	93–3651	2	Retainer – Boot
24	92–2547	4	Seal – Retainer
25	92–2546	4	Wiper – Seal
26	353–957	4	Seal Cup
27	353–301	1	Poppet Lift Check
28	353–304	1	Lift Check Spring

Ref. No.	Part No.	Qty.	Description
29	353–331	1	O Ring Seal
30	353–760	1	Body Relief
31	353–758	1	O–Ring Seal
32	353–952	1	Back–Up Seal
33	3217–7	3	Nut–Hex
34	353–772	1	Left Cover
35	353–721	2	Plug
40	353–417	2	Stop Collar
41	99–6850	1	Spring–Compression
42	99–8181	1	Bonnet–R Det
43	3274–15	2	Screw–HSH
44	353–763	1	Adj Cap
45	99–1475	1	Spring – Compression
46	42–2680	1	Ball Race
47	52–5880	12	Detent Ball
48	354–29	1	Trust Plate
49	353–728	1	Sleeve
50	353–762	1	Spud – Det Out
52	353–732	1	Detent Sleeve
53	38–0410	1	Hex Nut
54	83–1890	1	Switch–Ball
55	353–766	1	Relief Cart
56	99–8182	1	Sec 1–V20c Spl ASM
57	353–837	1	Section #2
58	99–8180	1	Positioner–R Det O/Asy



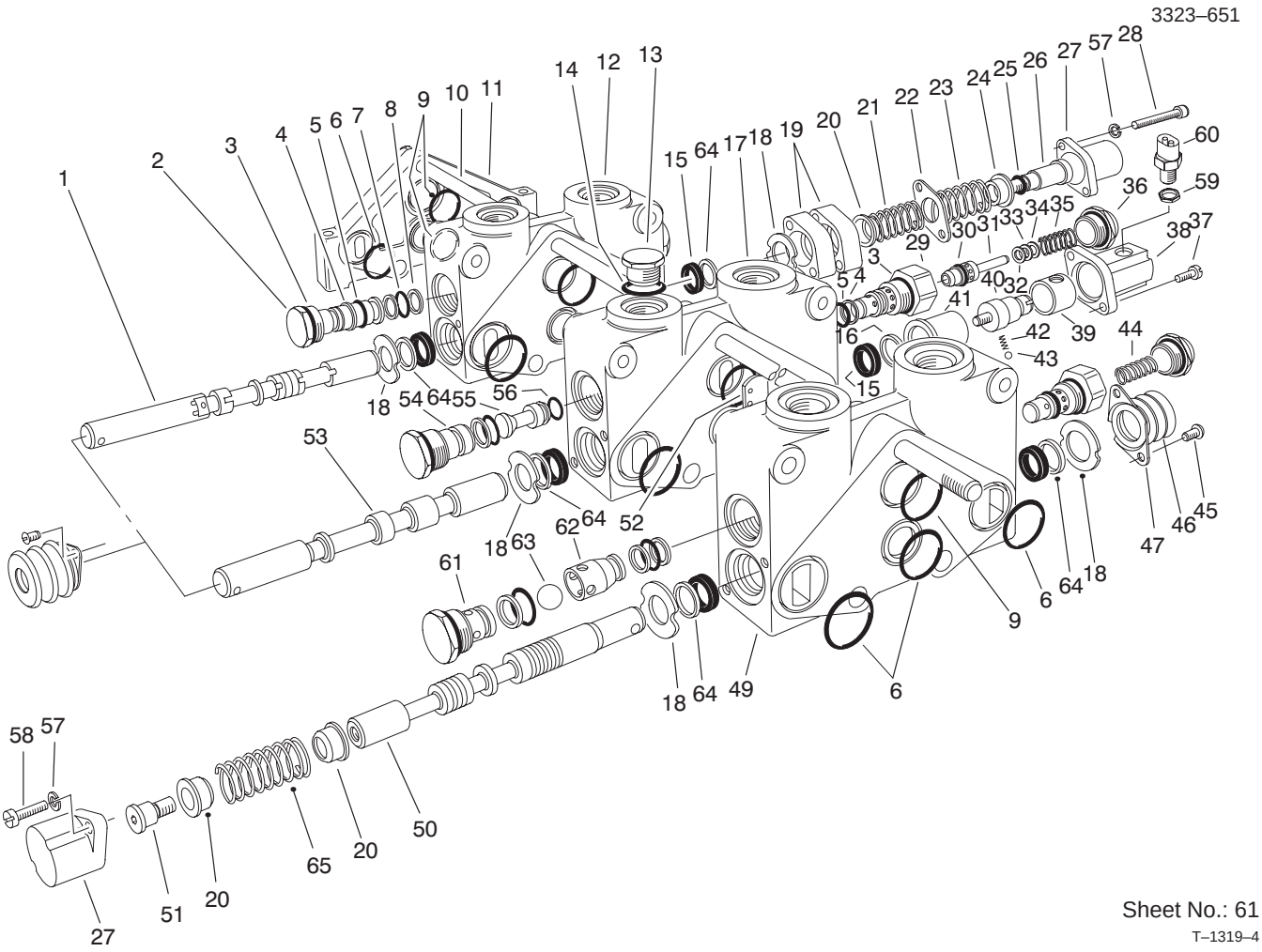
Sheet No.: 60

T–1318

Control Valve Assembly No. 84–2203 (Sections 1&2) (Continued)

Ref. No.	Part No.	Qty.	Description
59	353–839	1	Bonnet ASM
60	353–642	2	Relief Cartridge
61	93–3652	2	Dust Boot
62	353–835	1	Section Seal
63	92–2548	1	Kit – Spool Set
64	92–2545	1	Kit – Spool Set

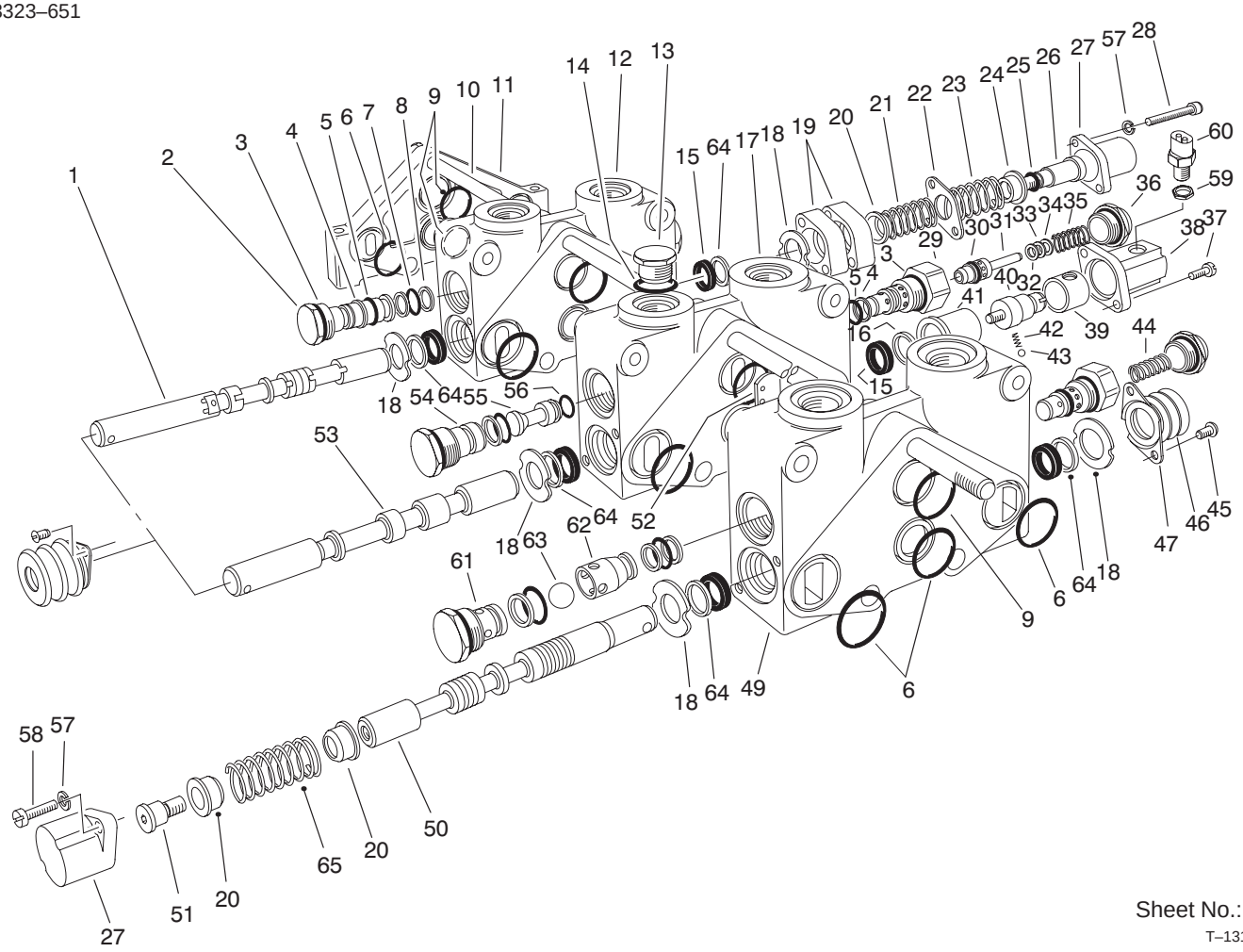
Ref. No.	Part No.	Qty.	Description



Control Valve Assembly No. 84–2203 (Sections 3 Thru 5)

Ref. No.	Part No.	Qty.	Description
1	94–5434	1	Spool
2	353–481	3	Lift Check ASM
3	237–54	6	O Ring
4	353–306	5	Backup Washer
5	353–305	5	O Ring
7	353–302	3	O Ring
8	353–303	6	Backup Washer
10	353–853	3	Bolt
11	353–668	1	Cover Plate
13	353–550	1	Plug–Hydraulic
13:1	237–79	1	O–Ring
14	353–848	1	O–Ring
15	353–957	6	Seal Cup
16	353–958	1	Washer
18	92–2547	5	Seal – Retainer
19	353–733	2	Bonnet Spacer
20	353–417	3	Stop Collar
21	353–831	1	Spring
22	353–529	1	Plate – Seal Retainer
23	92–3148	1	Spring – Traction
24	353–808	1	Spring Collar
25	353–830	1	O–Ring Seal
26	94–4248	1	Spool Collar
27	99–6895	2	Bonnet
28	354–28	2	Hex Socket Screw
29	353–851	2	Relief Body

Ref. No.	Part No.	Qty.	Description
30	353–392	2	Piston Ring
31	353–531	2	Poppet & Ring ASM
32	353–328	2	.040 Shim
33	353–329	2	.020 Shim
34	353–330	2	.010 Shim
35	353–398	1	Spring
36	353–334	2	Relief Cap
37	52–5900	4	Screw
38	353–847	1	Bonnet
39	353–849	1	Sleeve
40	353–846	1	Spud
41	353–845	1	Detent Sleeve
42	353–730	1	Spring
43	353–731	1	1/4 Dia Ball
44	353–855	1	Spring
45	3274–52	6	Screw–HSH
46	353–575	3	Boot
47	93–3651	3	Retainer – Boot
51	52–5860	1	Spool Collar
52	354–122	1	Spool #4
54	353–953	1	Plug ASM
55	353–844	1	Plug
56	353–850	1	O–Ring Seal
57	3253–3	4	Washer–Lock/Sp
58	3274–84	4	Screw–HSH
59	38–0410	1	Hex Nut



Sheet No.: 61

T–1319–4

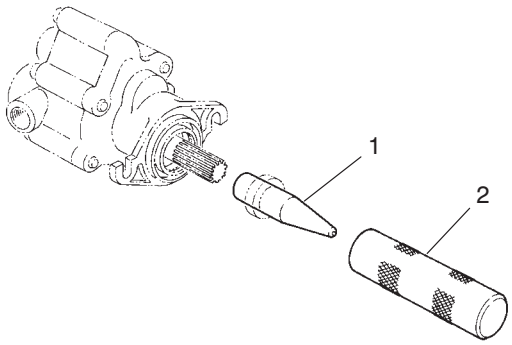
Control Valve Assembly No. 84–2203 (Sections 3 Thru 5) (Continued)

Ref. No.	Part No.	Qty.	Description
60	83–1890	1	Switch–Ball
61	353–483	1	Check Body
62	353–484	1	Check Ball Return
63	353–737	1	Check Ball
64	92–2546	5	Wiper – Seal
65	99–6850	1	Spring–Compression
66	354–129	1	Anticavitation Ck Assy
67	353–835	1	Section Seal
68	93–3652	3	Dust Boot
69	99–8183	1	Sec 3–V20t ASM
70	354–25	1	Valve Sect 4
71	93–1386	1	Section – 5 Pump Assy
72	353–841	1	Spool Position ASM
73	353–840	1	Bonnet ASM
74	353–642	1	Relief Cartridge
75	353–833	1	Positioner ASM
76	92–2548	1	Kit – Spool Set
77	92–2549	1	Kit – Spool Set
78	92–2545	1	Kit – Spool Set

Ref. No.	Part No.	Qty.	Description

SPECIAL TOOLS

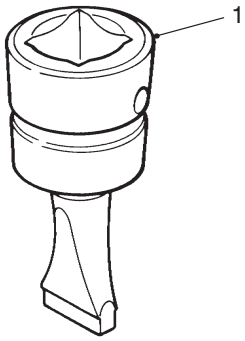
REEL MOTOR SEAL INSTALLATION TOOLS



T–0727

Ref. No.	Part No.	Description	No. Used
1	TOR491430	Protector – Seal	1
2	TOR491450	Installer – Seal	1

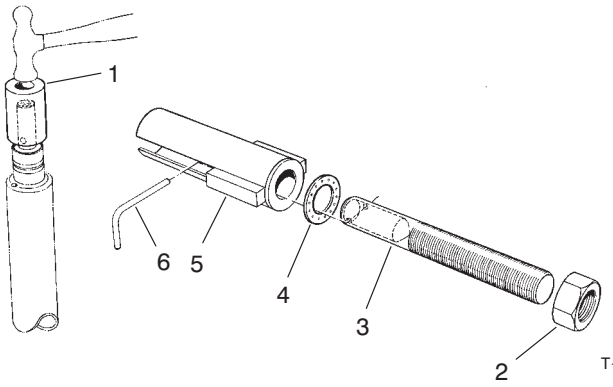
BED KNIFE SCREW TOOL NO. TOR510880



T–0729

Ref. No.	Part No.	Description	No. Used
1		Tool – Bed Knife Screw	1

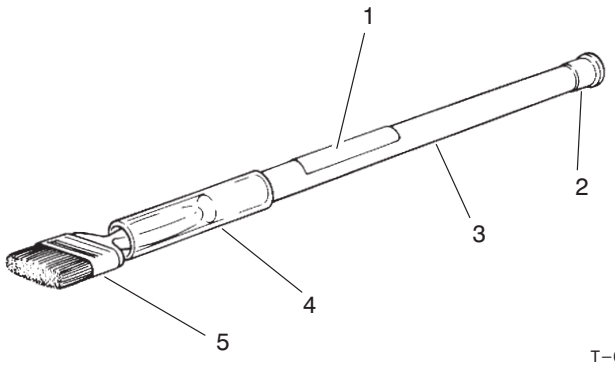
BEARING REPLACEMENT TOOL KIT NO. TOR238900



T–0730

Ref. No.	Part No.	Description	No. Used
1	23–8880	Driver – Bearing	2
2	3219–18	Nut – Hex.	1
3	23–8840	Puller – Bolt	1
4	22–6090	Washer – Thrust	1
5	23–8850	Tube – Support	1
6	23–8860	Pin – Bearing Rplcmnt.	1

BACKLAPPING BRUSH ASSEMBLY NO. 29–9100



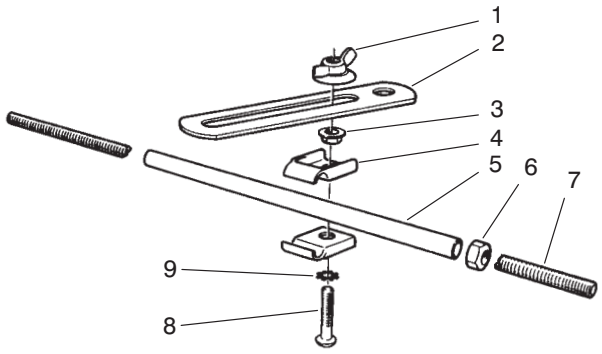
T–0731

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

Note: Special tools may be ordered from: Owatonna Tool Company 2013 4th St. NW Owatonna, MN 55060

SPECIAL TOOLS (Continued)

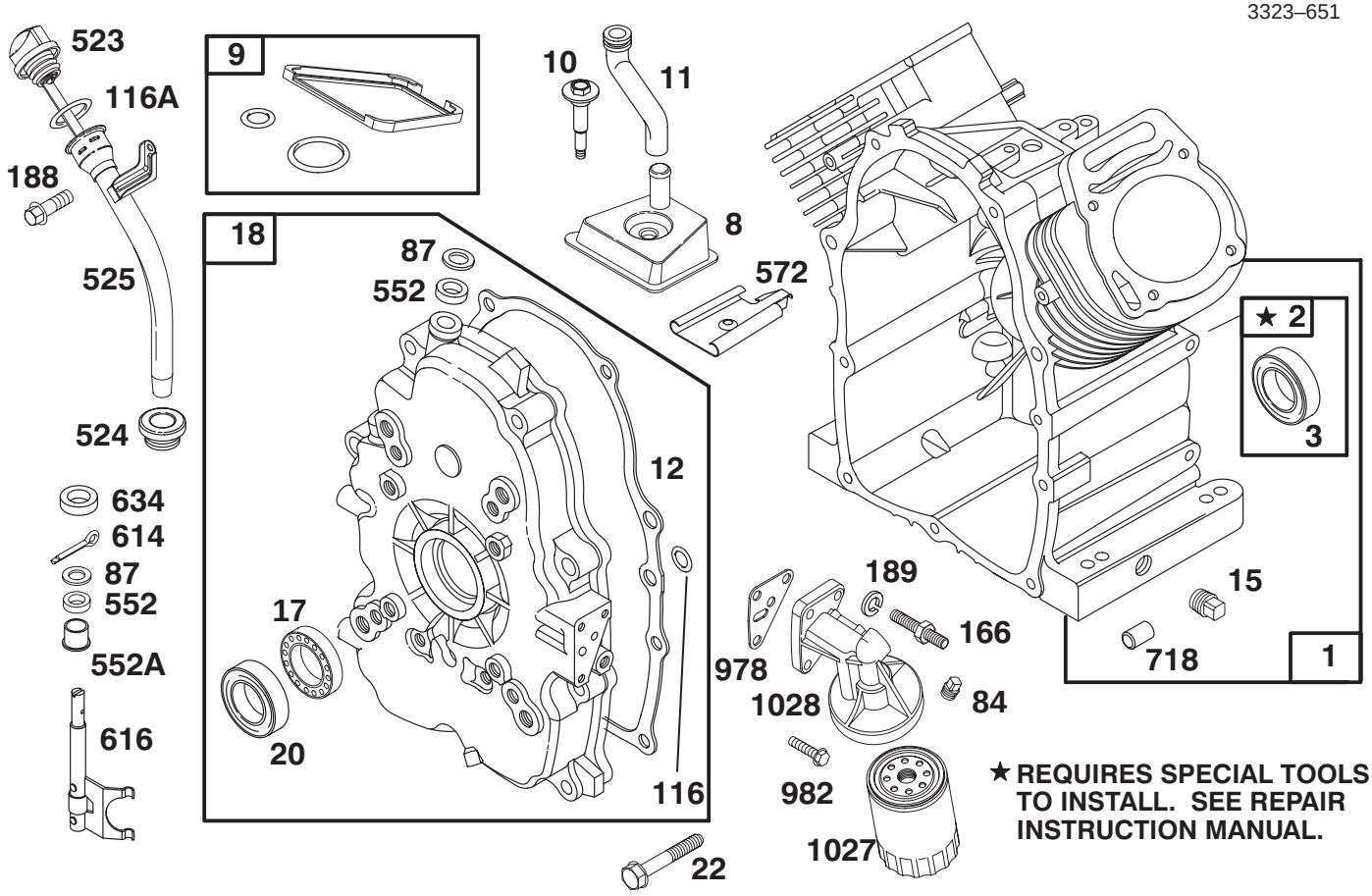
ALIGNMENT TOOL NO. TOR200120



T–0732

Ref. No.	Part No.	Description	No. Used
1	3–4808	Nut – Wing	1
2	20–0110	Bracket – Alignment	1
3	32128–20	Nut – Lock, Flange	1
4	3–6657	Clip – Skid	2
5	20–0070	Tube	1
6	3219–2	Nut – Hex.	1
7	20–0080	Rod	1
8	32122–35	Screw – Truss Head	1
9	3255–8	Washer – Lock, Int. Tooth	1

Note: Special tools may be ordered from: Owatonna Tool Company
2013 4th St. NW
Owatonna, MN 55060



Assemblies include all parts shown in frames.

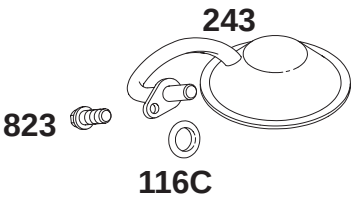
Sheet No.:
T–xxxx

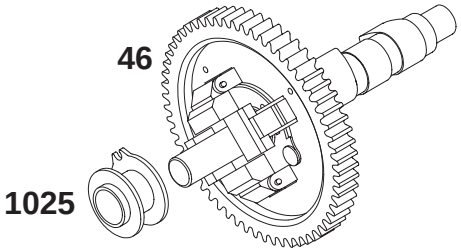
Engine Briggs & Stratton Model 303447–1179–E1

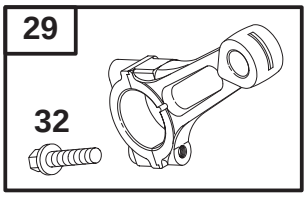
Ref. No.	Part No.	Qty.	Description
1	808440	1	Cylinder Assembly
2	808534	1	Bearing–Cylinder
*3	805101	1	Seal – Oil
8	807795	1	Breather Assembly
*9	807688	1	Gasket – Breather
10	805751	1	Screw – Hex.Washer Head
11	806083	1	Tube – Breather
12	806190	1	Gasket – Crankcase Cover
15	805048	1	Plug – Oil Drain
17	805754	1	Bearing – Ball
18	808502	1	Cover Assy. – Crankcase
*20	805049	1	Seal – Oil
22	805696	1	Screw – Crankcase Cover
84	91488	1	Plug – Pipe
*87	805054	1	Seal – Governor Shaft
116	806191	1	O–Ring (Crankcase Cover)
*116A	805386	1	O Ring (Dipstick)
166	805073	1	Stud – Oil Filter Adapter
188	805247	1	Screw – Hex. Head
189	805449	1	Lockwasher

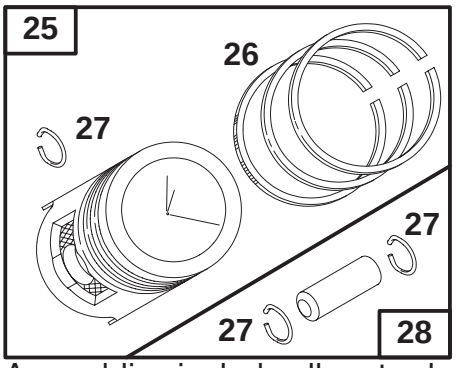
Ref. No.	Part No.	Qty.	Description
523	807977	1	Dipstick
*524	281370	1	Seal – Fill Tube
525	807584	1	Tube – Oil Fill
552	805412	1	Bushing – Governor Shaft
552A	805413	1	Bushing – Governor Shaft
572	805197	1	Baffle – Breather
614	806096	1	Pin – Cotter
616	807596	1	Fork – Governor
634	805416	1	Washer – Governor Shaft
718	805103	1	Dowel – Crankcase
*978	805250	1	Gasket – Oil Filter Adapter
982	805030	1	Screw
1027	492932	1	Filter – Oil
1028	808325	1	Adapter – Oil Filter
1058	273685	1	Owner's Manual

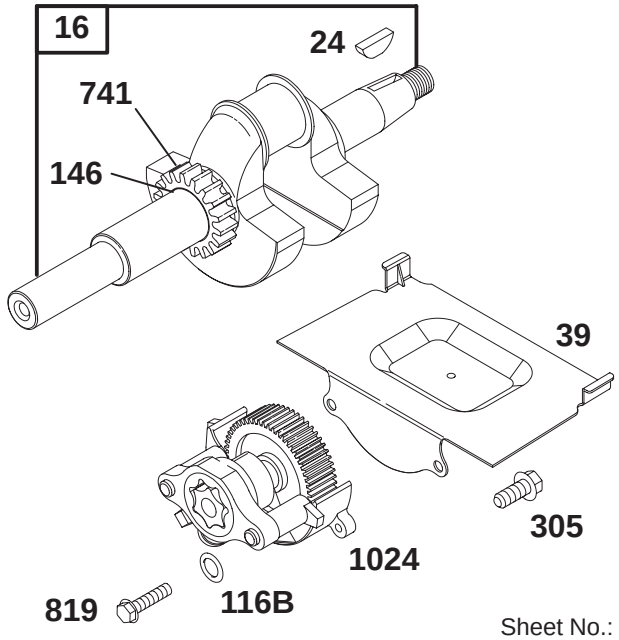
*Included in Gasket Set – Part No. 808390.











Assemblies include all parts shown in frames.

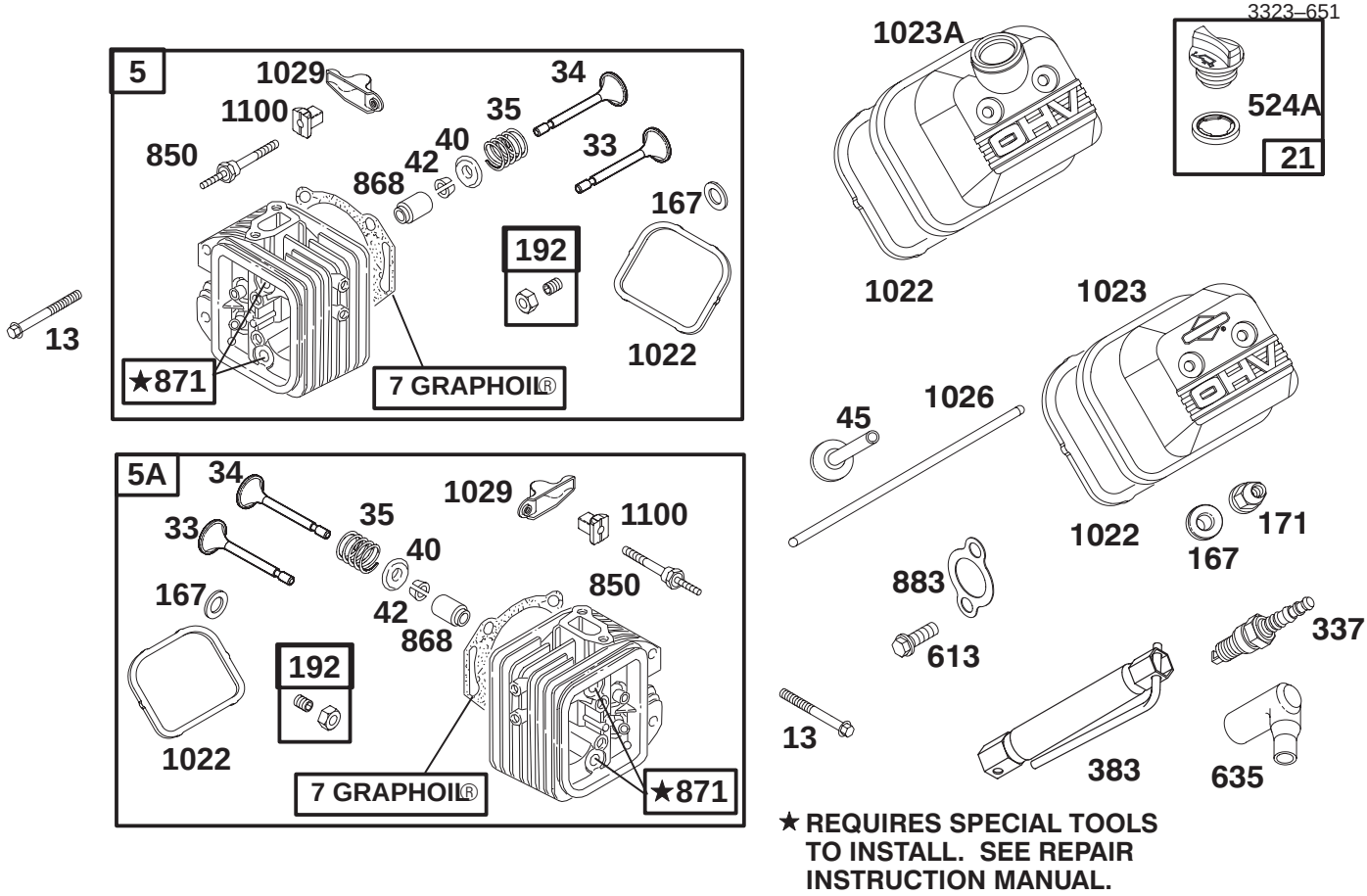
Sheet No.:
T–xxxx

Engine Briggs & Stratton Model 303447–1179–E1

Ref. No.	Part No.	Qty.	Description
16	808417	1	Crankshaft
24	806066	1	Key – Flywheel
25	807619	1	Piston Assembly (Standard)
	807807	1	Piston Assembly (.010 O.S.)
	807809	1	Piston Assembly (.020 O.S.)
	807811	1	Piston Assembly (.030 O.S.)
26	807620	1	Ring Set – Piston (Standard)
	807808	1	Ring Set – Piston (.010 O.S.)
	807810	1	Ring Set – Piston (.020 O.S.)
	807812	1	Ring Set – Piston (.030 O.S.)
27	805099	1	Lock – Piston Pin
28	807621	1	Piston Pin Assembly
29	807900	1	Connecting Rod Assembly
	807809	1	Rod – Connecting (.020 U.S.)
32	805395	1	Screw – Connecting Rod

Ref. No.	Part No.	Qty.	Description
39	805654	1	Deflector – Oil
46	807542	1	Gear – Cam
*116B	805058	1	O–Ring (Oil Pump)
*116C	805316	1	O–Ring (Pick – Up Tube)
146	94196	1	Key – Timing
243	807598	1	Screen – Oil Pump Pick–Up
305	805406	1	Screw
741	805984	1	Gear – Timing
819	805057	1	Screw
823	805317	1	Screw – Mounting
1024	807644	1	Oil Pump Assembly
1025	805313	1	Slider – Governor

*Included in Gasket Set – Part No. 808390.



★ REQUIRES SPECIAL TOOLS TO INSTALL. SEE REPAIR INSTRUCTION MANUAL.

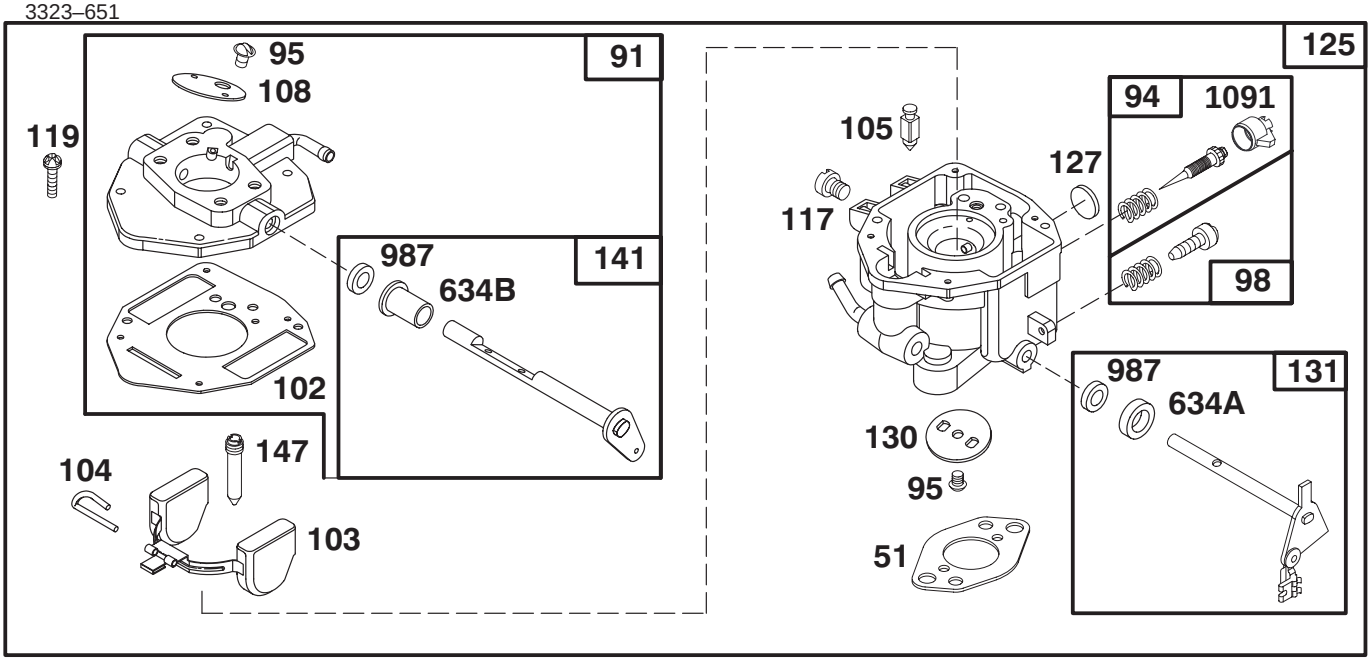
Assemblies include all parts shown in frames.

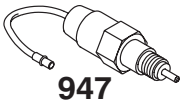
Sheet No.:
T–xxxx

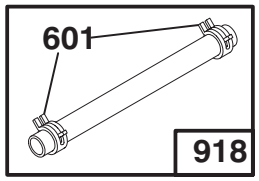
Engine Briggs & Stratton Model 303447–1179–E1

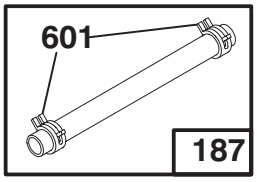
Ref. No.	Part No.	Qty.	Description
5	808381	1	Head – Cylinder (Cyl. #1)
5A	808382	1	Head – Cylinder (Cyl. #2)
*‡7	806085	1	Gasket – Cylinder Head
13	805097	1	Screw – Cylinder Head
21	491832	1	Plug – Oil Filler
33	807681	1	Valve – Exhaust
34	807680	1	Valve – Intake
35	805937	1	Spring – Valve
40	805092	1	Retainer – Valve Spring
42	807683	1	Retainer – Valve
45	262679	1	Tappet – Valve
*‡167	805420	1	Washer – Valve Cover
‡171	805019	1	Nut – Nylock
192	807623	1	Screw – Valve Adjustment
337	496018	1	Plug – Spark
383	19374	1	Wrench – Spark Plug
*‡524A	271983	1	Seal – Filler Plug
613	805158	1	Screw – Hex.
635	805529	1	Elbow – Spark Plug
868	805094	1	Seal – Valve Guide
871	805084	1	Guide – Valve
*‡883	805024	1	Gasket – Exhaust Manifold
850	806037	1	Stud – Rocker Arm
*‡1022	806039	1	Gasket – Valve Cover
1023	805100	1	Cover – Valve
1023A	808032	1	Cover – Valve
1026	805352	1	Rod – Push (Intake Valve) Note: 805617 Rod – Push (Exhaust Valve)
1029	806036	1	Arm – Rocker
1100	806038	1	Pivot – Rocker Arm

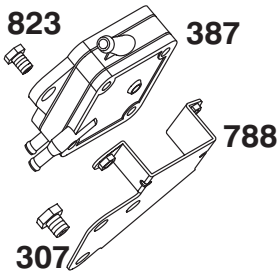
*Included in Gasket Set – Part No. 808390.
‡Included in Valve Overhaul Kit – Part No. 808392.











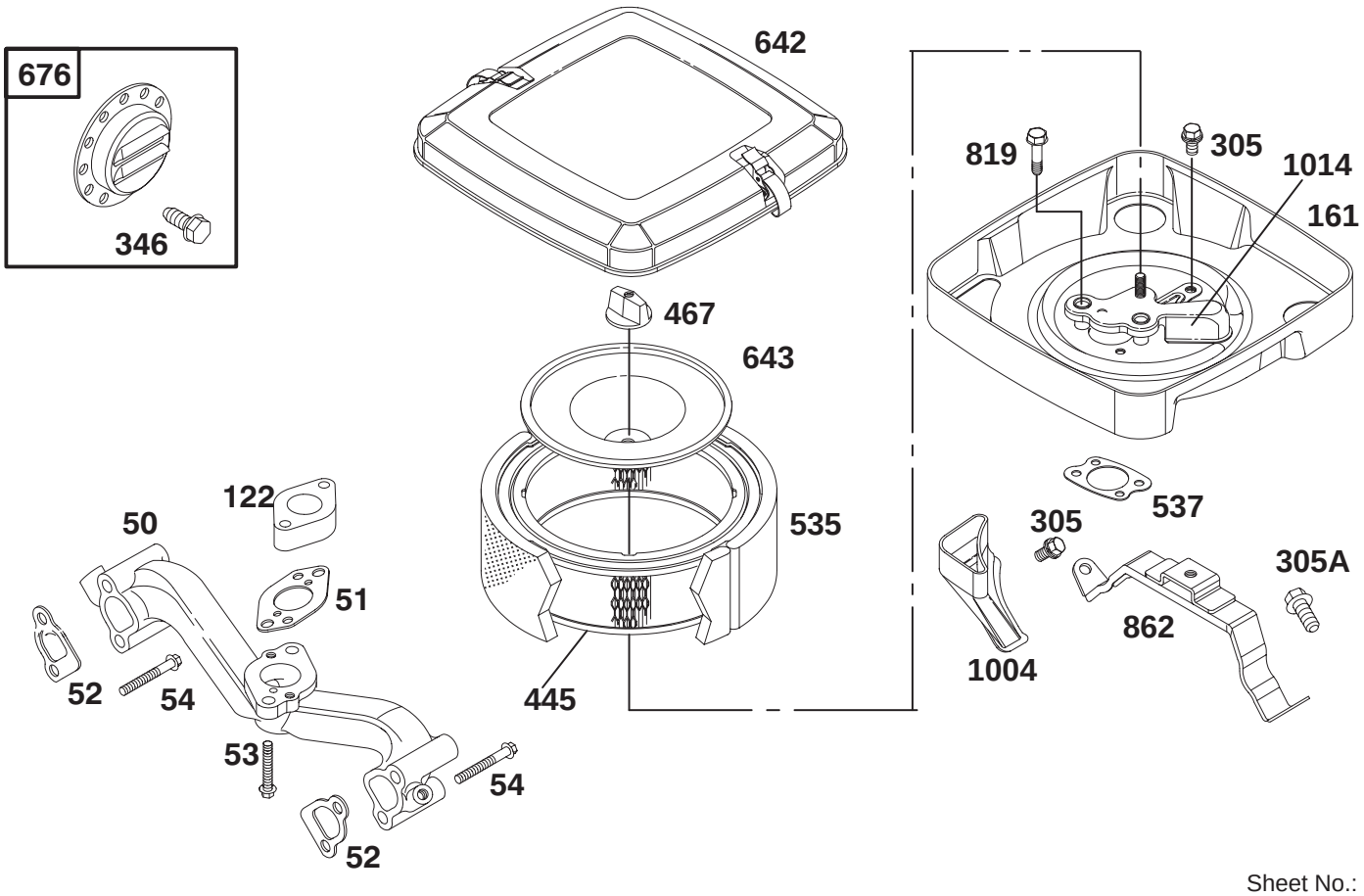
Assemblies include all parts shown in frames.

Sheet No.:
T–xxxx

Engine Briggs & Stratton Model 303447–1179–E1

Ref. No.	Part No.	Qty.	Description
*51	805700	1	Gasket – Carburetor Mtg.
91	807919	1	Body – Upper Carburetor
95	805538	1	Screw – Valve Mtg.
98	808177	1	Screw – Throttle Adj.
†102	805541	1	Gasket – Carburetor Body
103	805546	1	Float Assembly
†104	805545	1	Pin – Float Hinge
†105	805547	1	Valve – Fuel Inlet
108	805539	1	Valve – Choke
117	805852	1	Jet – Main
	805537	1	Jet – Main (High Altitude)
†94	808257	1	Valve – Idle Adjust
119	805540	1	Screw – Upper Body Mtg.
125	808251	1	Carburetor Assembly
†127	805559	1	Plug – Welch
130	805554	1	Valve – Throttle
131	807720	1	Shaft – Throttle
141	807722	1	Shaft – Choke
†147	805553	1	Jet – Slow Speed
187	296004		Line – Fuel
		1	(Cut to Required Length)
307	805025	1	Screw – Hex. Hd.
387	491922	1	Pump – Fuel
601	93053	1	Clamp – Hose
†634A	805557	1	Collar – Throttle
†634B	805543	1	Collar – Choke
788	807685	1	Bracket – Fuel Pump
823	805317	1	Screw – Mounting
918	393815		Line – Vacuum
		1	(Cut to Required Length)
947	807664	1	Solenoid
†987	805544	1	Seal – Shaft
1091	805862	1	Cap – Limiter

*Included in Gasket Set – Part No. 808390.
†Included in Carburetor Kit – Part No. 808273.



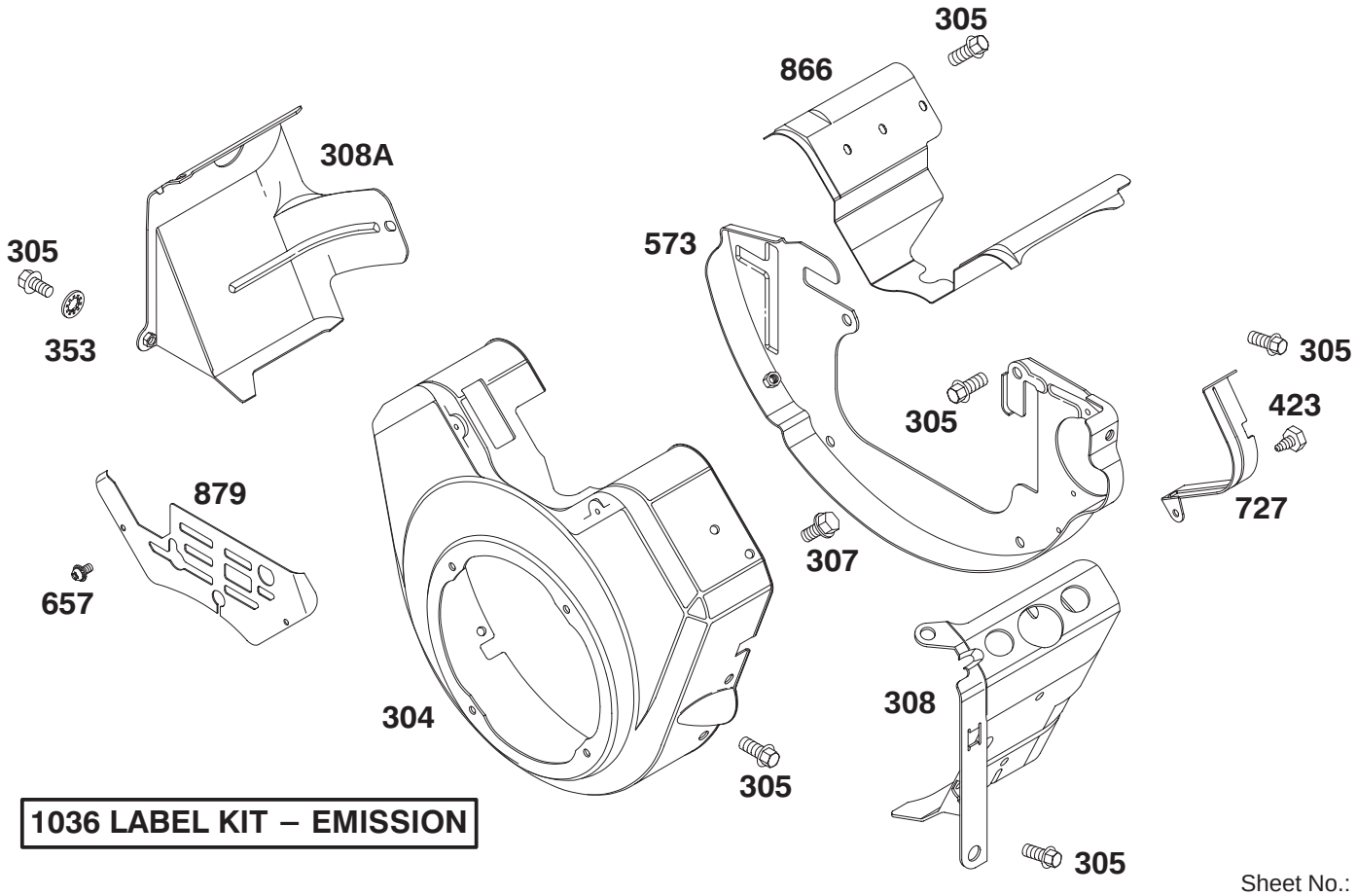
Sheet No.:
T–xxxx

Engine Briggs & Stratton Model 303447–1179–E1

Ref. No.	Part No.	Qty.	Description
50	805772	1	Manifold – Intake
*51	805700	1	Gasket – Carburetor Mtg.
*‡52	805023	1	Gasket – Intake Manifold
53	805466	1	Screw
54	805006	1	Screw
122	805328	1	Spacer – Carburetor
161	807857	1	Base – Air Cleaner
305	805406	1	Screw – Hex. (M6 x 12mm)
305A	805902	1	Screw – Hex. (M6 x 16mm)
346	94896	1	Screw – Hex.
445	394018	1	Filter– Air
467	491875	1	Knob – Air Cleaner
535	272490	1	Filter– Air
*537	805655	1	Gasket – Air Cleaner
642	807862	1	Cover – Air Cleaner
643	805631	1	Plate – Air Cleaner
676	397630	1	Deflector – Muffler
819	805057	1	Screw – Hex. Hd.
862	807796	1	Bracket – Air Cleaner
1004	805632	1	Strap – Cleaner Mounting

Ref. No.	Part No.	Qty.	Description
1014	807797	1	Shield – Carburetor

*Included in Gasket Set – Part No. 808390.
‡Included in Valve Overhaul Kit – Part No. 808392.



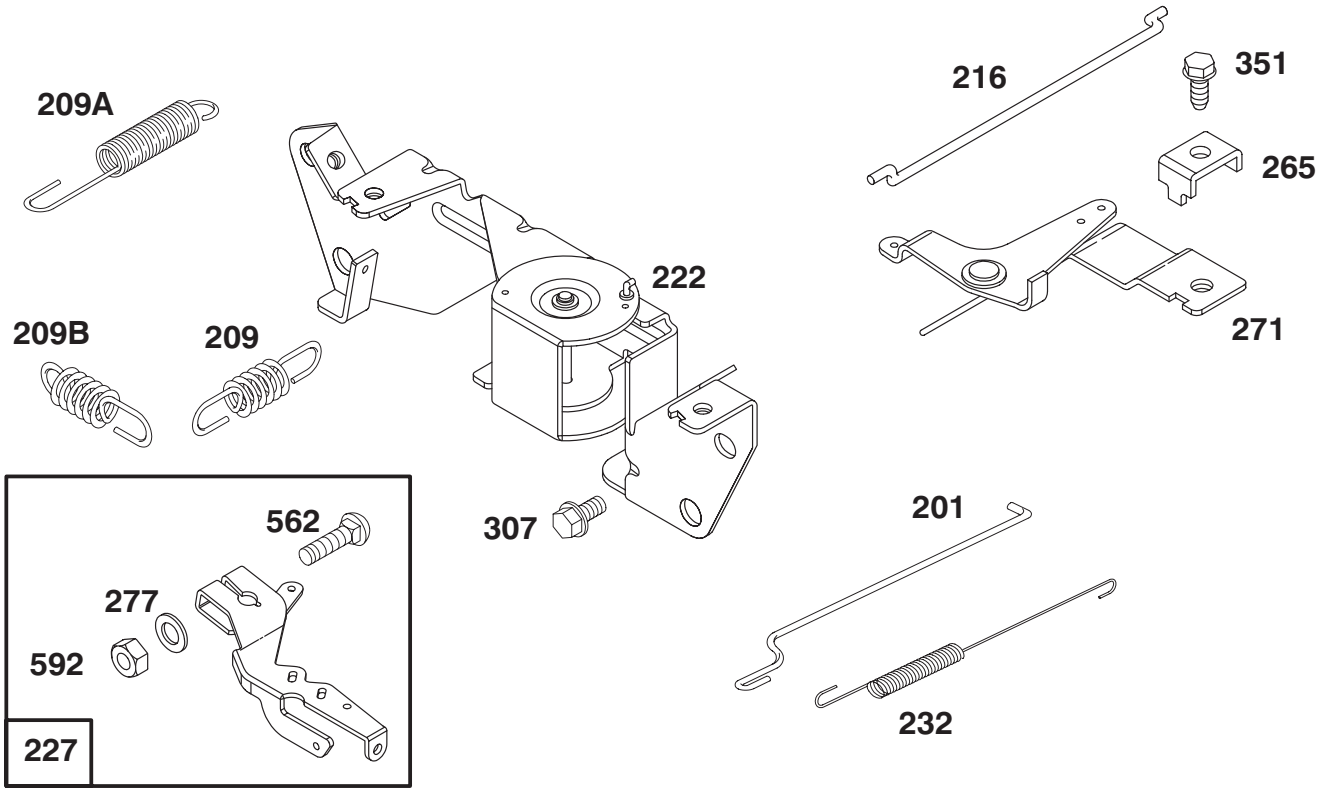
1036 LABEL KIT – EMISSION

Sheet No.:
T–xxxx

Engine Briggs & Stratton Model 303447–1179–E1

Ref. No.	Part No.	Qty.	Description
304	807898	1	Housing – Blower
305	805406	1	Screw – Hex. Head
307	805025	1	Screw – Hex. Head
308	808309	1	Cover – Air Guide (Cyl. #1)
308A	808098	1	Cover – Air Guide (Cyl. #2)
353A	806101	1	Washer – Lock
423	805260	1	Screw – Hex. Head
573	807663	1	Back Plate Assembly
657	805009	1	Screw – Hex. Head
727	805505	1	Shield – Starter
866	805738	1	Valley Cover – Air Guide
879	805841	1	Cover – Carburetor
1036	499366	1	Label Kit – Emission

Ref. No.	Part No.	Qty.	Description



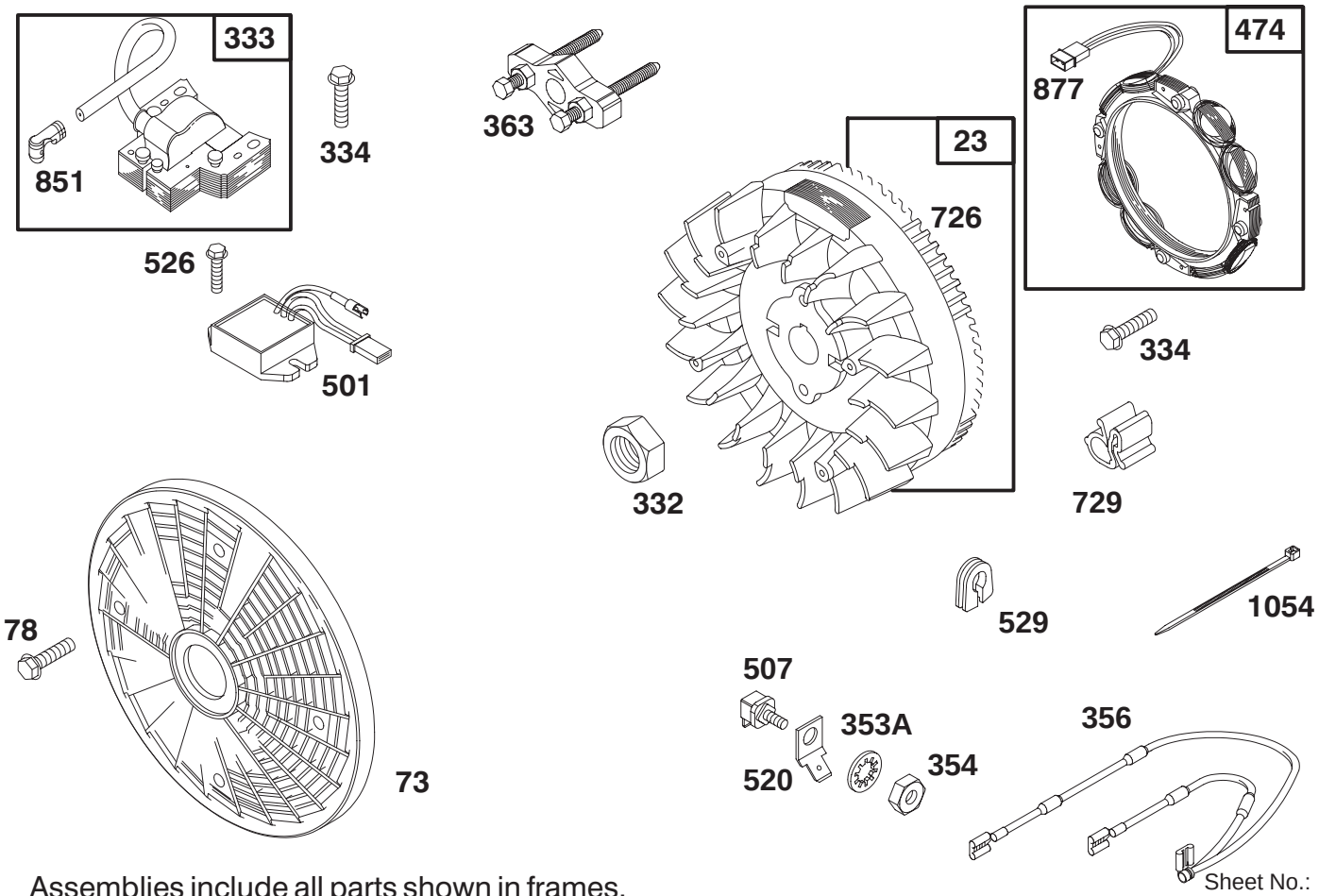
Assemblies include all parts shown in frames.

Sheet No.:
T–xxxx

Engine Briggs & Stratton Model 303447–1179–E1

Ref. No.	Part No.	Qty.	Description
201	805480	1	Link – Governor
209	805464	1	Spring – Governor
209A	805450	1	Spring – Governed Idle
209B	806105	1	Spring – Governor
216	805439	1	Link – Choke
222	808195	1	Bracket – Governor Control
227	807528	1	Lever Assembly – Governor
232	805465	1	Spring – Governor Link
265	221535	1	Clamp – Casing
271	808145	1	Bracket – Choke Control
277	805018	1	Washer
307	805025	1	Screw – Hex. Head
351	805169	1	Screw – Hex. Head
562	805381	1	Bolt – Carriage
592	805383	1	Nut – Hex.

Ref. No.	Part No.	Qty.	Description



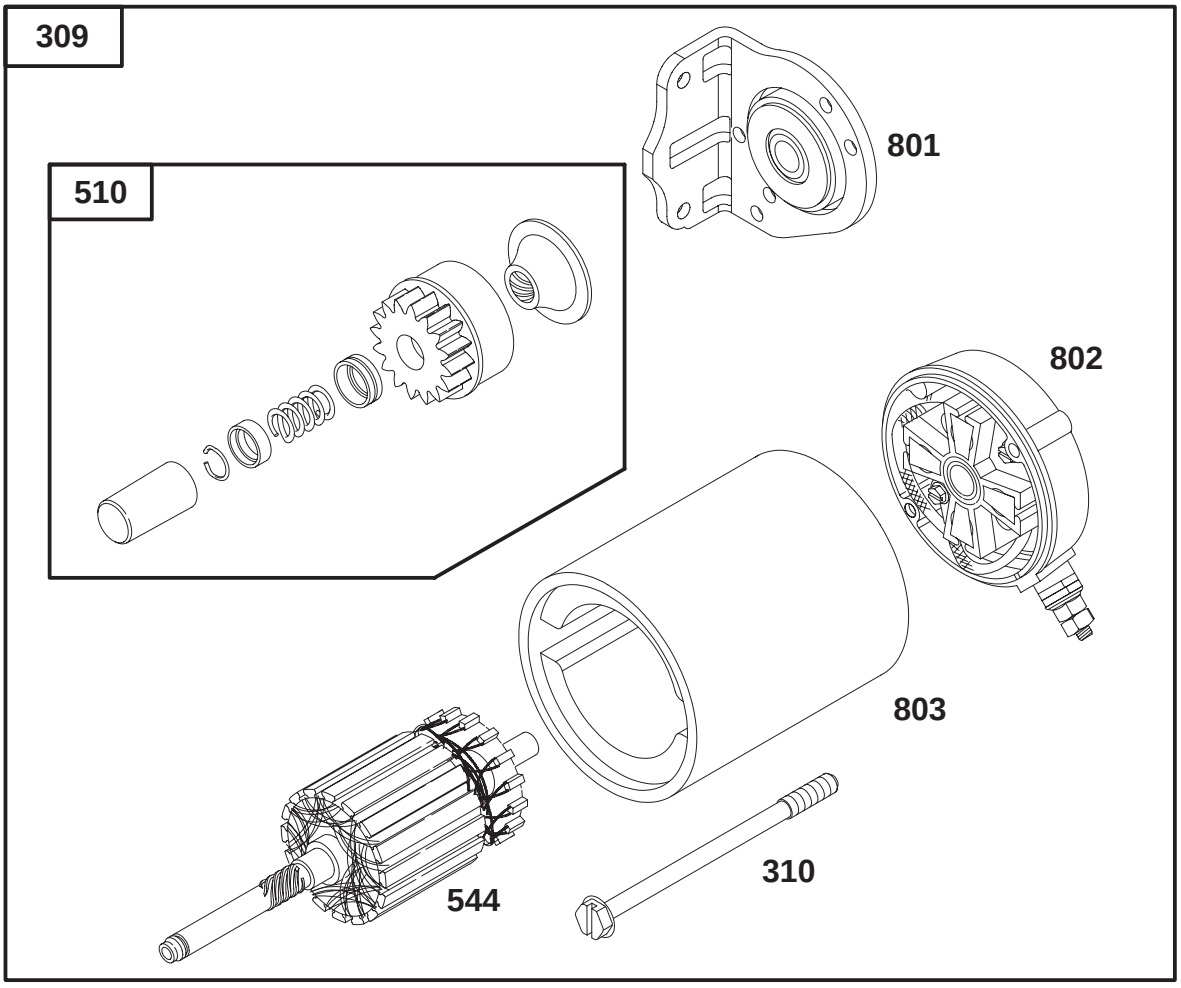
Assemblies include all parts shown in frames.

Sheet No.:
T–xxxx

Engine Briggs & Stratton Model 303447–1179–E1

Ref. No.	Part No.	Qty.	Description
23	808128	1	Flywheel – Magneto
73	494439	1	Screen – Rotating
78	805447	1	Screw – Hex. Hd.
332	806028	1	Nut – Hex.
333	492341	1	Armature – Magneto
334	805407	1	Screw – Hex. Hd.
353	92791	1	Washer – Lock (Internal Tooth)
354	90576	1	Nut – Hex.
356	493792	1	Wire – Assy.
363	19203	1	Puller – Flywheel
474	393295	1	Stator – Alternator
501	394890	1	Regulator – Alternator
507	398525	1	Insulator
520	93722	1	Terminal – Spade
526	805448	1	Screw – Hex. Hd.
529	805641	1	Grommet
726	808162	1	Gear – Flywheel Ring Includes Mounting Hardware
729	280470	1	Clip – Wire
851	493880	1	Terminal – Ignition Cable
877	393537	1	Wire – Alternator
1054	280275	1	Tie – Cable

Ref. No.	Part No.	Qty.	Description

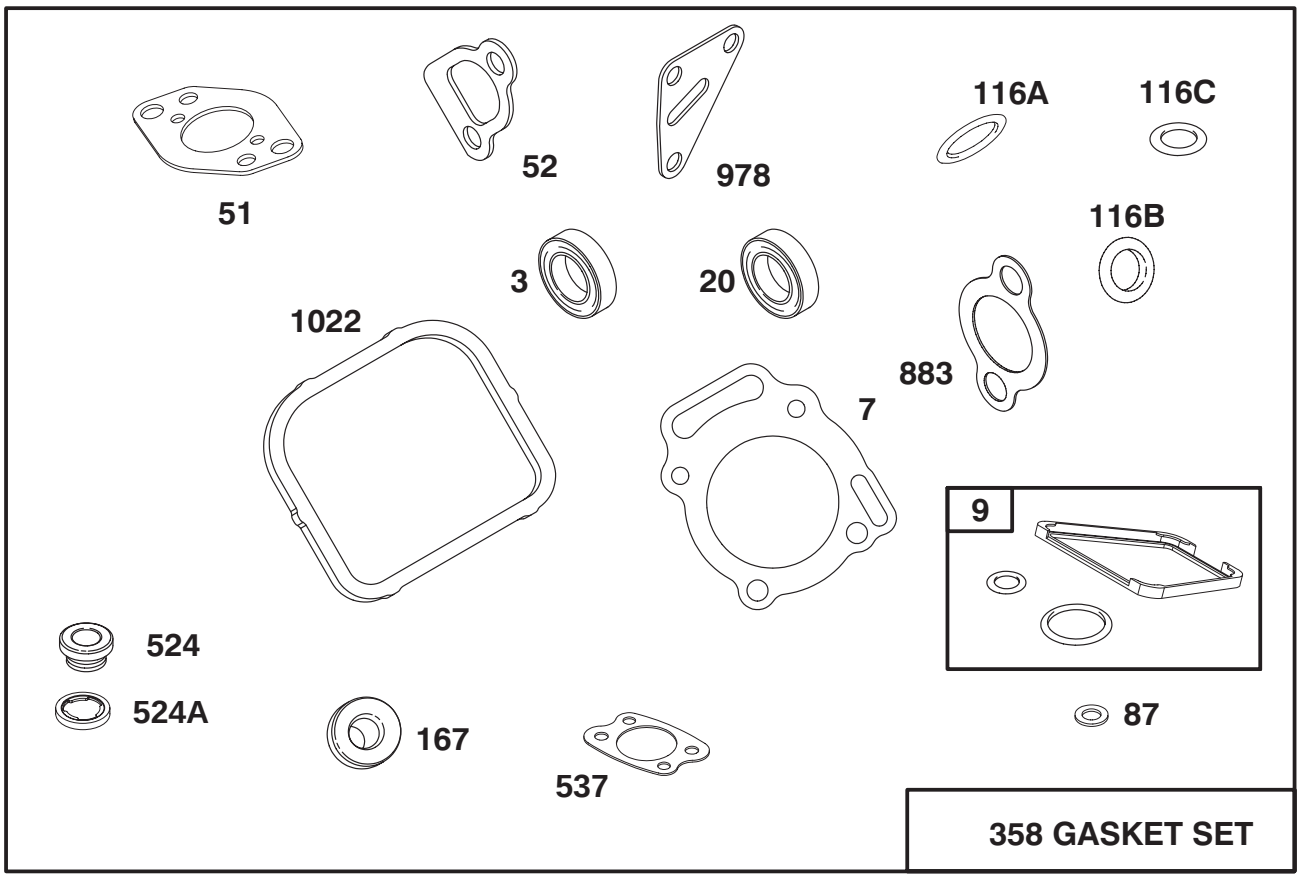


Sheet No.:
T–xxxx

Engine Briggs & Stratton Model 303447–1179–E1

Ref. No.	Part No.	Qty.	Description
188	805247	1	Screw–Hex. Head
309	808106	1	Motor–Starter
310	496880	1	Bolt–Thru
510	496881	1	Drive–Starter
544	496816	1	Armature–Starter
801	496814	1	Cap–Drive
802	496813	1	Cap–End Note: Includes 496887 Brush Set.
803	496815	1	Housing–Starter

Ref. No.	Part No.	Qty.	Description



Assemblies include all parts shown in frames.

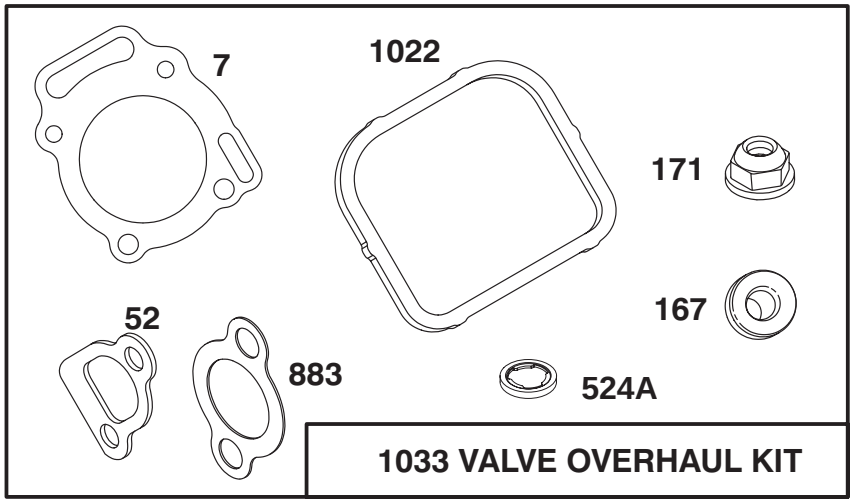
Sheet No.:
T–xxxx

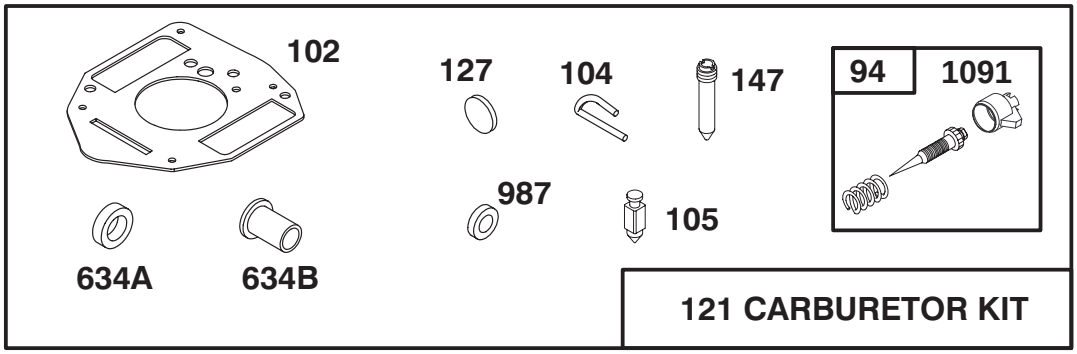
Engine Briggs & Stratton Model 303447–1179–E1

Ref. No.	Part No.	Qty.	Description
*3	805101	1	Seal – Oil
*‡7	806085	1	Gasket – Cylinder Head
*9	807688	1	Gasket – Breather
*20	805049	1	Seal – Oil
*51	805700	1	Gasket – Carburetor Mtg.
‡*52	805023	1	Gasket – Intake Manifold
*87	805054	1	Seal – Governor Shaft
*116A	805386	1	O–Ring (Dipstick)
*116B	805058	1	O–Ring (Oil Pump)
*116C	805316	1	1O–Ring (Pick – Up Tube)
*‡167	805420	1	Washer – Valve Cover
358	808390	1	Gasket Set
*524	281370	1	Seal – Fill Tube
*‡524A	271983	1	Seal – Filler Plug
*537	805655	1	Gasket – Air Cleaner
*883	805024	1	Gasket – Exhaust Manifold
*978	805250	1	Gasket – Oil Filter Adapter
*‡1022	806039	1	Gasket – Valve Cover

Ref. No.	Part No.	Qty.	Description

*Included in Gasket Set – Part No. 808390.
‡Included in Valve Overhaul Kit – Part No. 808392.





Assemblies include all parts shown in frames.

Sheet No.:
T–xxxx

Engine Briggs & Stratton Model 303447–1179–E1

Ref. No.	Part No.	Qty.	Description
*‡7	806085	1	Gasket – Cylinder Head
*‡52	805023	1	Gasket – Intake Manifold
†94	808257	1	Valve – Idle Adjust
†102	805541	1	Gasket – Carburetor Body
†104	805545	1	Pin – Float Hinge
†105	805547	1	Valve – Fuel Inlet
121	808273	1	Carburetor Kit
†127	805559	1	Plug – Welch
†147	805553	1	Jet – Slow Speed
*‡167	805420	1	Washer – Valve Cover
‡171	805019	1	Nut – Nylock
*‡524A	271983	1	Seal – Filler Plug
†634A	805557	1	Collar – Throttle805557
†634B	805543	1	Collar – Choke
*‡883	805024	1	Gasket – Exhaust Manifold
†987	805544	1	Seal – Shaft
*‡1022	806039	1	Gasket – Valve Cover
1033	808392	1	Overhaul Kit – Valve
†1091	805862	1	Cap – Limiter

Ref. No.	Part No.	Qty.	Description

*Included in Gasket Set – Part No. 808390.
†Included in Carburetor Kit – Part No. 808273.
‡Included in Valve Overhaul Kit – Part No. 808392.

Maintenance Record

Date								

Maintenance Record

Date								


TORO®