



Parts Manual

Mfg. No: 1692374

BAKER Chipper Vacuum 8/25, 8HP

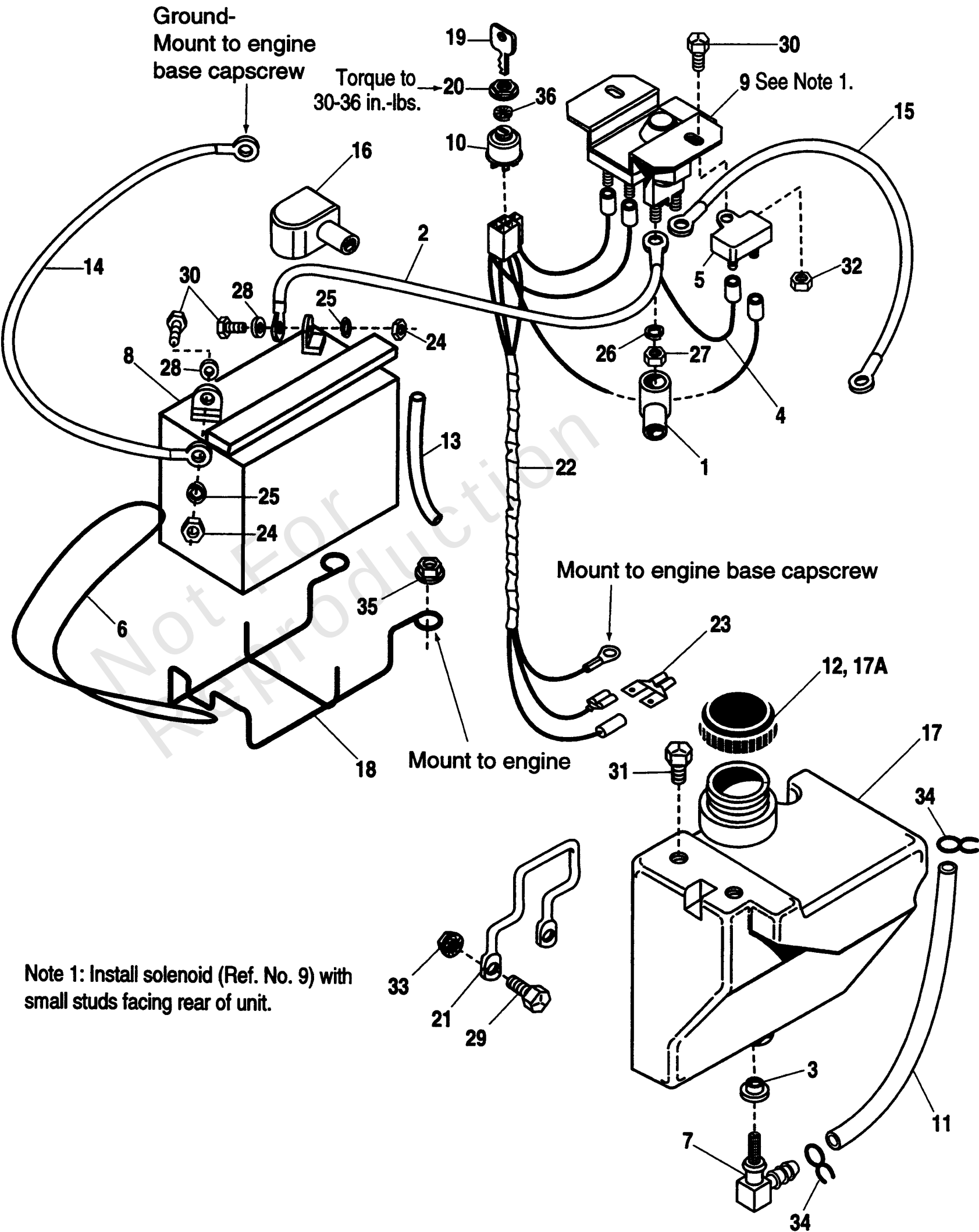
Model Components	Page
Battery & Fuel Tank-8HP Models.....	4
Engine, Cone & Plate Assemblies.....	8
Frame & Front Wheels Group.....	10
Handles & Controls Group.....	12
Housing Group.....	14
Nozzle & Flap Assemblies.....	16
Peerless Model 100-108: Service Parts.....	18
Rotor Group.....	20
Transmission & Rear Wheels Group.....	22
Transmission: Case & Input Shaft.....	24
Transmission: Range Shift Assembly.....	26
Transmission: Reduction Shaft Assembly.....	28
Transmission: Shift Shaft Assembly.....	30
Vacuum Hose.....	32
Torque Specification Chart.....	34

Not For
Reproduction

Battery & Fuel Tank-8HP Models

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 1692374



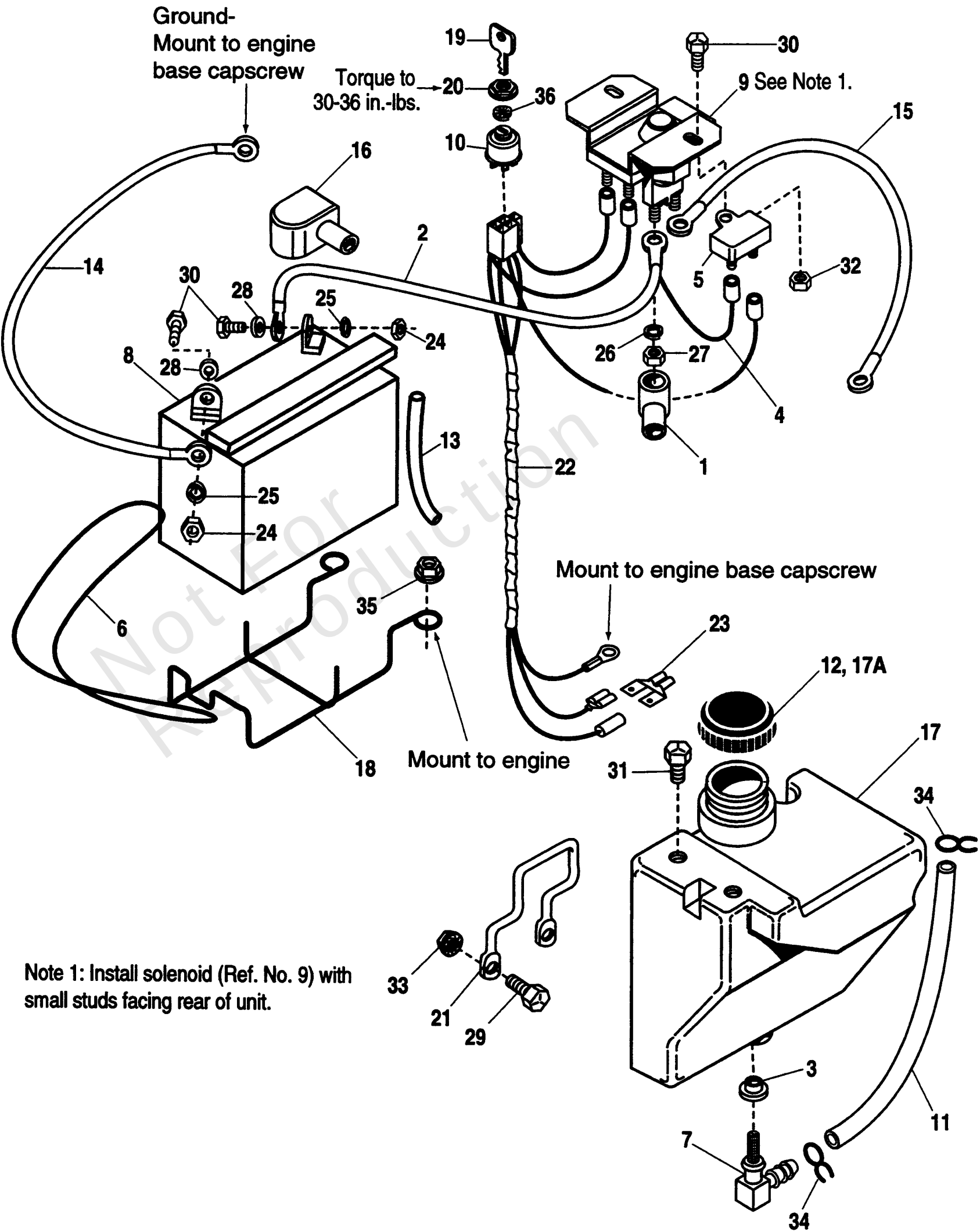
Battery & Fuel Tank-8HP Models

REF NO	PART NO	QTY	DESCRIPTION
1	2122023SM	3	COVER, Terminal -Used on electric start models only.
2	1603618SM	1	WIRE, Battery to Solenoid, 8" -Used on electric start models only.
3	1654930SM	1	BUSHING, Fuel Tank
4	1665237SM	1	WIRE, Circuit Breaker to Tab Adapter -Used on electric start models only.
5	1665238SM	1	BREAKER-CIRCUIT -Used on electric start models only.
6	1665872SM	1	STRAP, Battery -Used on electric start models only.
7	1674792SM	1	ELBOW, Fuel Tank
8	1685215SM	1	BATTERY,12V -Used on electric start models only.
9	1686981SM	1	SOLENOID -Used on electric start models only.
10	1686734SM	1	IGNITION SWITCH -Used on electric start models only.
11	1718678SM	1	HOSE, Fuel Tank
12	1704366SM	1	CAP, Fuel Tank, w/built in fuel gauge (Used on black tank)
13	1704389	1	HOSE, Drain, 9" -Used on electric start models only.
14	1707056SM	1	WIRE, Battery to Gound, 15" -Used on electric start models only.
15	1707056SM	1	WIRE, Solenoid to Starter, 15" -Used on electric start models only.
16	1709086SM	1	BOOT, Battery -Used on electric start models only.
17	1713945SM	1	FUEL TANK
17A	1714020SM	1	CAP, Fuel Tank, vented (Used on clear tank)
18	1714031SM	1	SUPPORT, Battery -Used on electric start models only.
19	1714054SM	2	KEY-IGNITIOM W/PLASTI -Used on electric start models only.
20	1714055SM	1	NUT, Ignition Switch -Used on electric start models only.
21	1714063	1	SUPPORT, Fuel Tank
22	1714093SM	1	WIRING HARNESS -Used on electric start models only.
23	1714438SM	1	TAB, Adapter -Used on electric start models only.
24	1916622SM	3	NUT, Hex, 1/4-20 -Used on electric start models only.
25	1916964SM	3	LOCKWASHER, 1/4 -Used on electric start models only.
26	1917356SM	2	LOCKWASHER, 5/16 -Used on electric start models only.
27	2820263SM	2	NUT, Hex, 5/16-24 -Used on electric start models only.
28	1921319SM	2	WASHER, 1/4 -Used on electric start models only.
29	1921332SM	2	CAPSCREW, Hex Hd., 5/16-18 x 3/4
30	1923341SM	6	CAPSCREW, Hex Hd. 1/4-20 x 3/4 -Used on electric start models only.
31	1931648SM	2	SCREW, Hex Whizlock, 5/16-18 x 1/2
32	1930642SM	2	NUT, 2-way Lock, 1/4-20 -Used on electric start models only.
33	1931277SM	2	NUT, Serrated, Flange Lock, 5/16-18

Battery & Fuel Tank-8HP Models

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 1692374



Battery & Fuel Tank-8HP Models

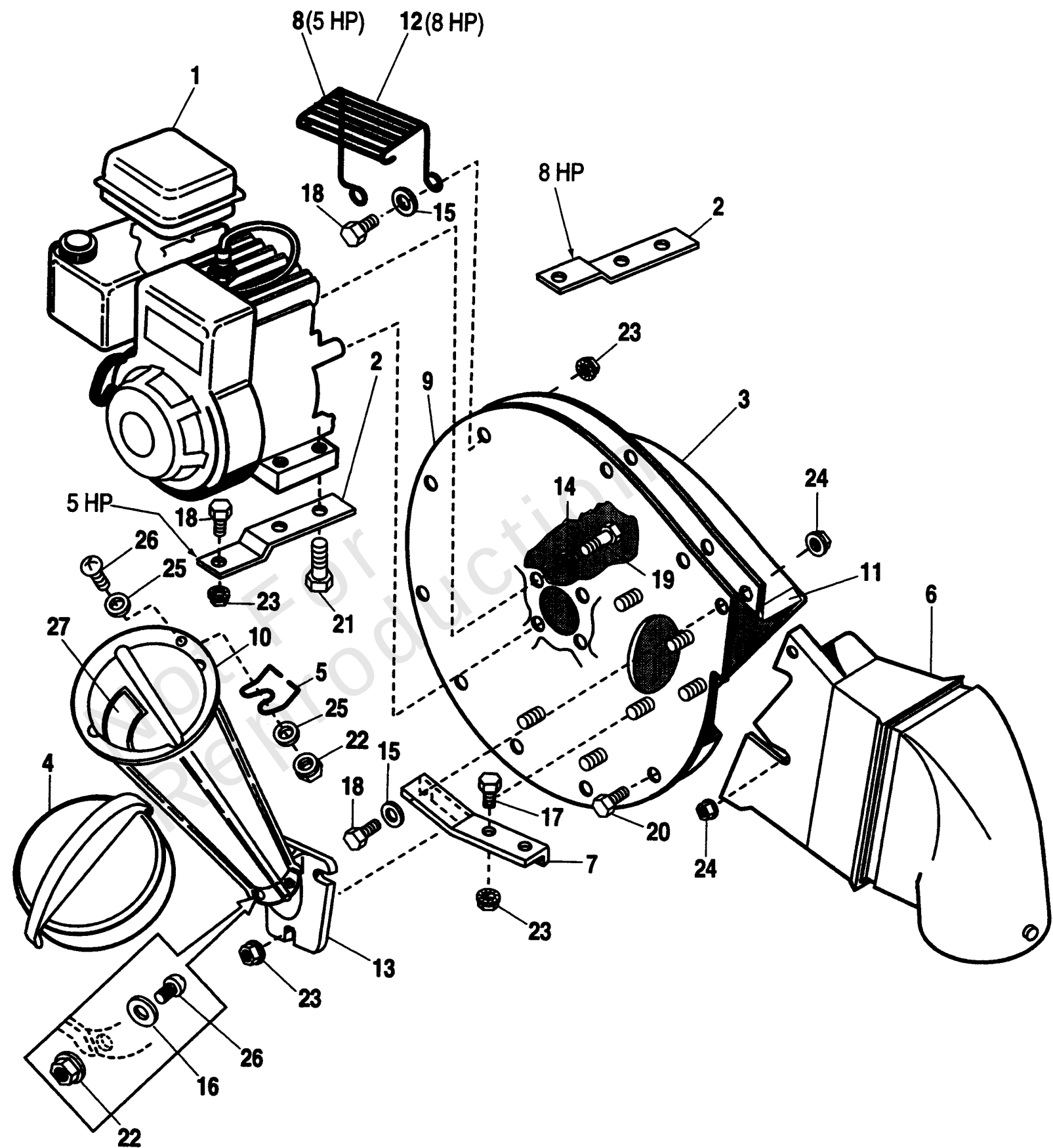
REF NO	PART NO	QTY	DESCRIPTION
34	2860112SM	2	CLAMP, Hose
35	1960339SM	2	NUT, Hex, Large Flange, "C" Lock, 3/8-16 -Used on electric start models only.
36	1960547SM	1	LOCKWASHER-INTERNAL -Used on electric start models only.

Not For Reproduction

Engine, Cone & Plate Assemblies

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 1692374



Engine, Cone & Plate Assemblies

REF NO	PART NO	QTY	DESCRIPTION
1	-----	1	ENGINE, 5 HP (Briggs & Stratton)
1	-----	1	ENGINE, 8 HP (Briggs & Stratton)
1	-----	1	ENGINE, 8 HP, Electric Start, (Briggs & Stratton)
2	1713864	1	ENGINE SUPPORT, 5 HP
2	1713865SM	1	ENGINE SUPPORT, 8 HP
3	1713866SM	1	FAN HOUSING ASSY.
4	1713868SM	1	CAP, Cone
5	1713869SM	1	HINGE, Cap
6	1713870SM	1	TUBE, Discharge
7	1713872SM	1	BRACE
8	1714033SM	1	GUARD, Muffler (5 HP models)
9	1714085SM	1	PLATE ASSY., Engine
10	1709409SM	1	CONE, Orange
10	1714091SM	1	CONE, Yellow
11	1714344SM	2	SEAL, Fan Housing
12	1714711	1	GUARD, Muffler (8 HP models)
13	1713272SM	1	CASTING, Cone, 3"
14	1917356SM	4	LOCKWASHER, 5/16
15	1919326SM	3	WASHER, 5/16
16	1921319SM	4	WASHER, 1/4
17	1921332SM	2	CAPSCREW, Hex Hd., 5/16-18 x 3/4
18	703570	4	CAPSCREW, Hex Head, 5/16-18 x 1 1/4
19	1921515SM	4	CAPSCREW, Hex Hd., 5/16-24 x 3/4
20	1925205SM	7	CAPSCREW, Hex Hd., 5/16-18 x 3/4
21	1928635SM	2	SCREW, Taptite, 3/8-16 x 1-1/4 (Manual start models only)
22	1930642SM	5	NUT, 2 Way Lock, 1/4 x 20
23	1931277SM	10	NUT, Serrated, Flange Lock., 5/16-18
24	1935048SM	5	NUT, Hex, Flange Lock, 5/16-18
25	1960151SM	2	WASHER, 1/4
26	1960507SM	5	SCREW, Allen Hd. 1/4 x 3/4
27	1729207SM	1	DECAL, Danger

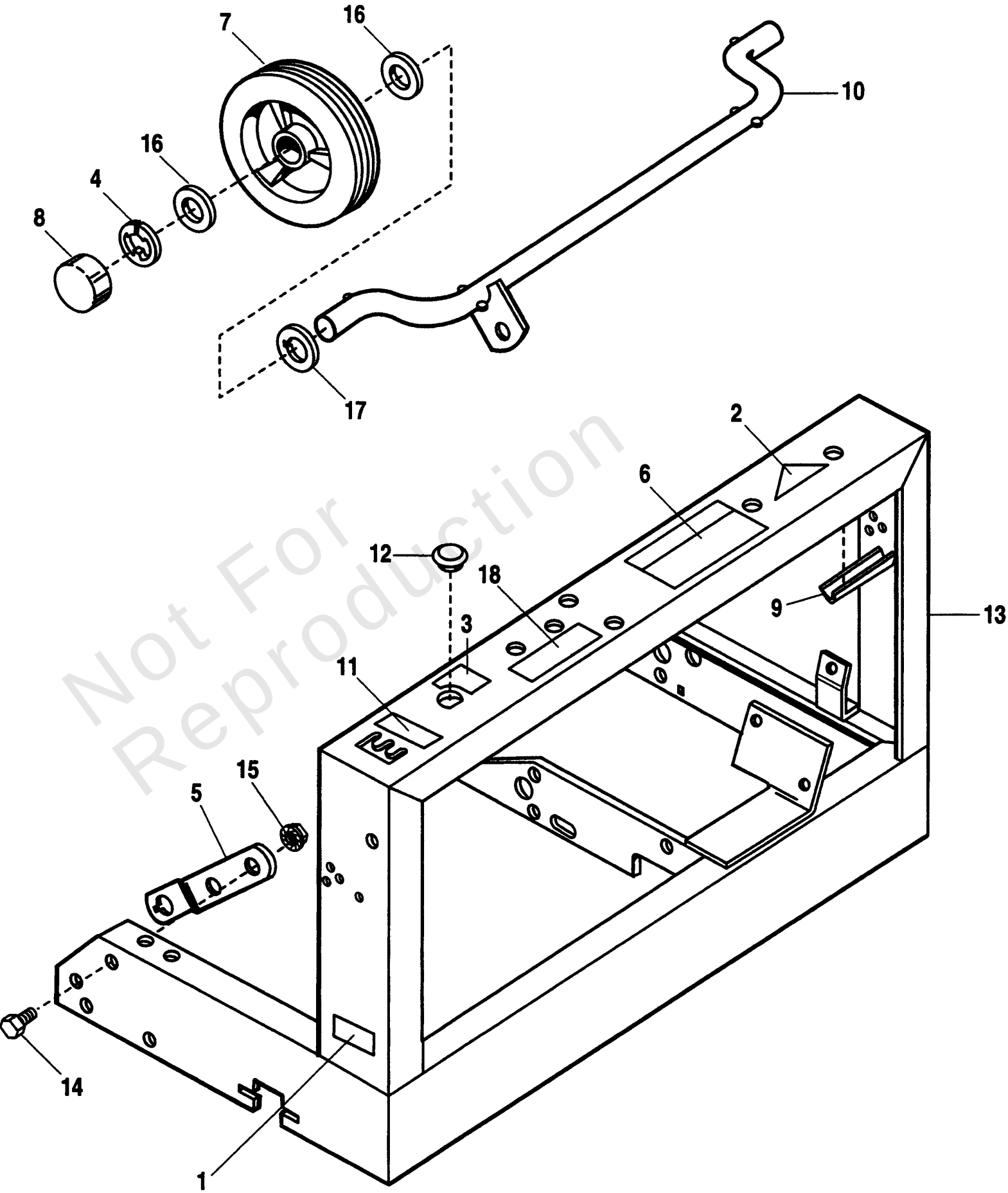
Footnotes:

Note:* See your local Briggs & Stratton distributor for parts and service.

Frame & Front Wheels Group

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 1692374

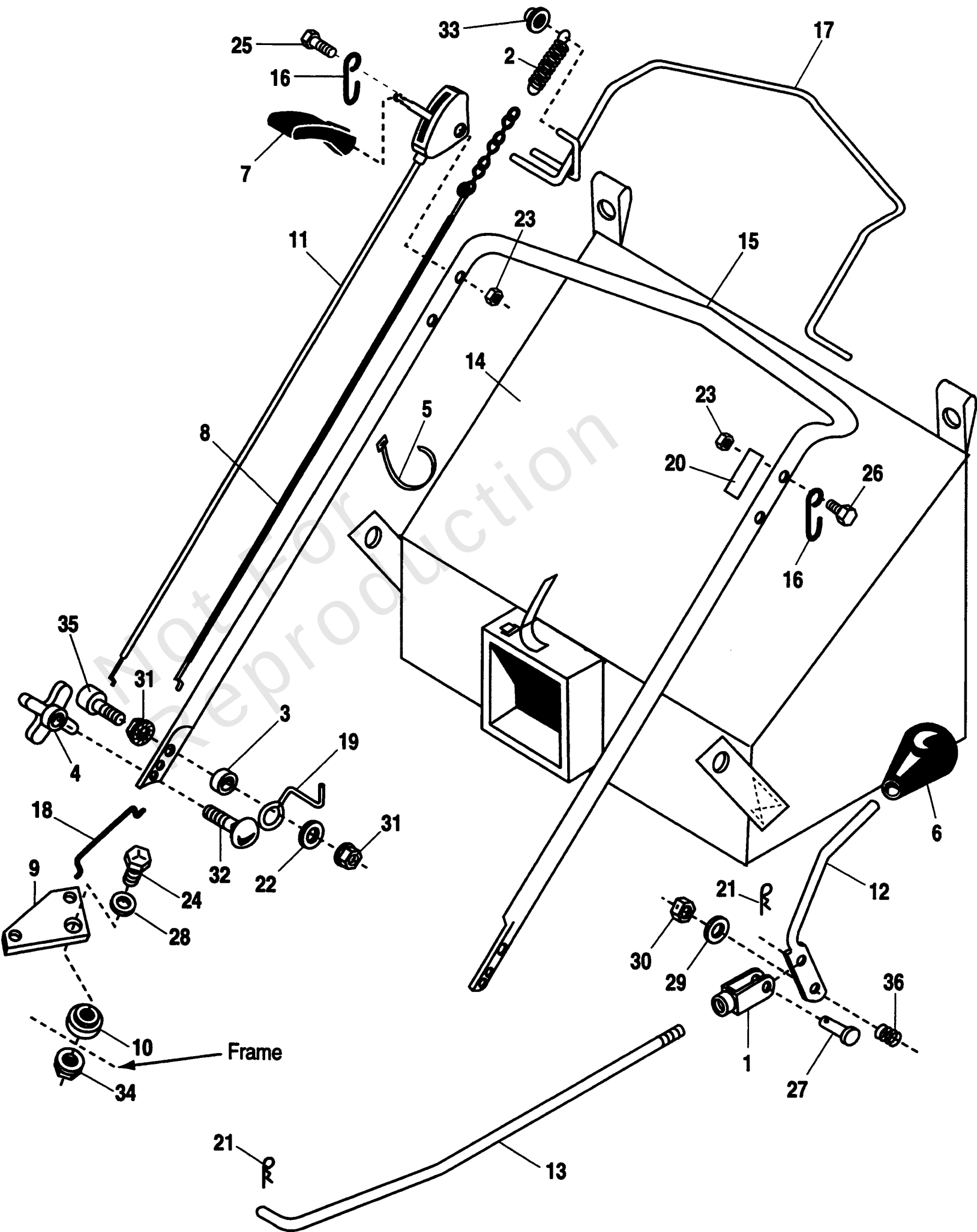


Frame & Front Wheels Group

REF NO	PART NO	QTY	DESCRIPTION
1	-----	1	I.D. PLATE
2	-----	1	DECAL, OPEI
3	174885	1	DECAL, Ignition -(Electric start models only)
4	1704420SM	2	KLIP RING, External (for 5/8" Shaft)
5	1713884SM	2	BRACKET Axle
6	1713885SM	1	DECAL, Operating Instructions
7	1713935SM	2	WHEEL, Front, 8 x 1-3/4
8	1713936SM	2	HUBCAP, Front Wheels
9	1714032SM	1	EDGE PROTECTOR
10	1714034SM	1	AXLE ASSY., Front
11	1714343	1	DECAL, Nozzle height
12	1714480SM	1	PLUG -(Manual start models only)
13	1714976SM	1	FRAME ASSY. -When replacing the frame on the following models you must also order Height Adjustment Handle Kit, part no. 1686666.
14	1921332SM	4	CAPSCREW, Hex Hd., 5/16-18 x 3/4
15	1931277SM	4	NUT, Serrated, Flange Lock, 5/16-18
16	1960020SM	4	WASHER, Plain, 21/32
17	1960537	1	WASHER, Keyhole
18	1729207SM	1	DECAL, Danger

Footnotes:

Note:* Not a servicable part.
Note:* Not a serviceable part.



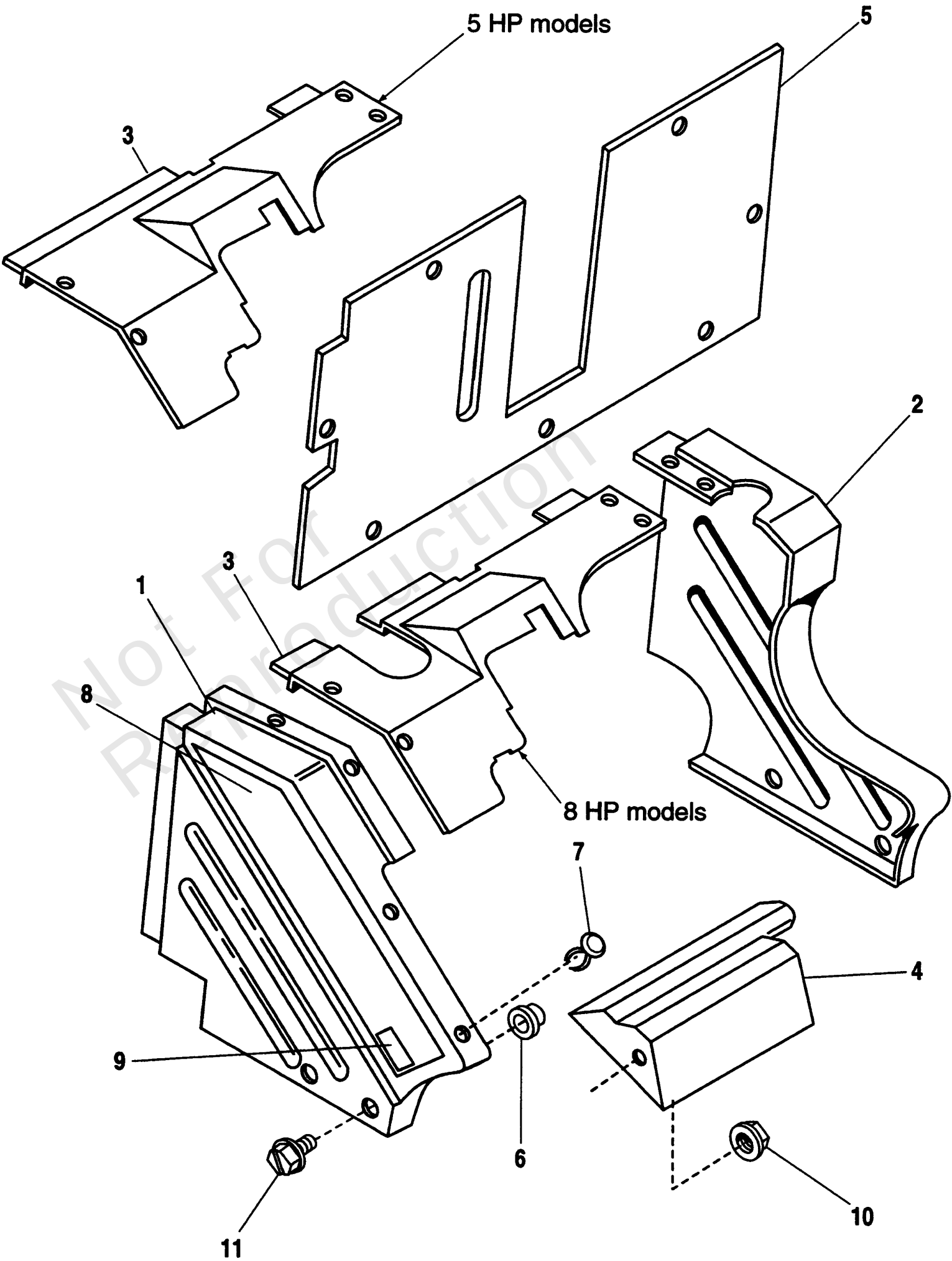
Handles & Controls Group

REF NO	PART NO	QTY	DESCRIPTION
1	2108157SM	1	CLEVIS
2	2118495SM	1	SPRING
3	1665889SM	2	SPACER
4	1670578SM	2	KNOB-INT THR .312-18
5	1701011SM	2	TIE, Self-locking
6	1713843SM	1	KNOB, Handle, Height Adjustment
7	1713846SM	1	HANDLE, Shift Control
8	1713914SM	1	CABLE, Traction
9	1713915SM	1	BELLCRANK
10	1713916SM	1	SPACER, Pivot
11	1713917SM	1	CABLE, Shift Control
12	1713919SM	1	HANDLE, Height Adjustment
13	1713920SM	1	ROD
14	1713940SM	1	BAG
15	1713941SM	1	HANDLE
16	1713942SM	2	HOOK, Bag
17	1713943SM	1	BAIL ASSY.
18	1713944SM	1	LINK, Traction
19	1713953SM	1	GUIDE, Cable
20	1714451	1	DECAL, Clutch Bail
21	1918196SM	2	PIN, Quick
22	1919326SM	1	WASHER, 5/16
23	1920397SM	2	NUT, Hex, Nylock 1/4-20
24	703570	1	CAPSCREW, Hex Head, 5/16-18 x 1 1/4
25	1921963SM	1	CAPSCREW, Hex Hd., 1/4-20 x 2
26	1922837SM	1	CAPSCREW, Hex Hd., 1/4-20 x 1-1/2
27	1923087SM	1	PIN, Yoke
28	1924874SM	1	WASHER, 5/16
29	1924940SM	1	WASHER, 3/8
30	1930645SM	1	NUT, Center Lock, 3/8-16
31	1931277SM	4	NUT, Serrated, Flange, 5/16-18
32	1931333SM	2	CARRIAGE BOLT, 5/16-18 x 3/4
33	1932718SM	1	PUSH NUT, Pal, 5/16
34	1935048SM	1	NUT, Hex, Flange Lock, 5/16-18
35	1960539	2	CAPSCREW, Hex, Socket Hd., 5/16-18 x 1-3/4
36	1729278SM	1	SPRING

Housing Group

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 1692374



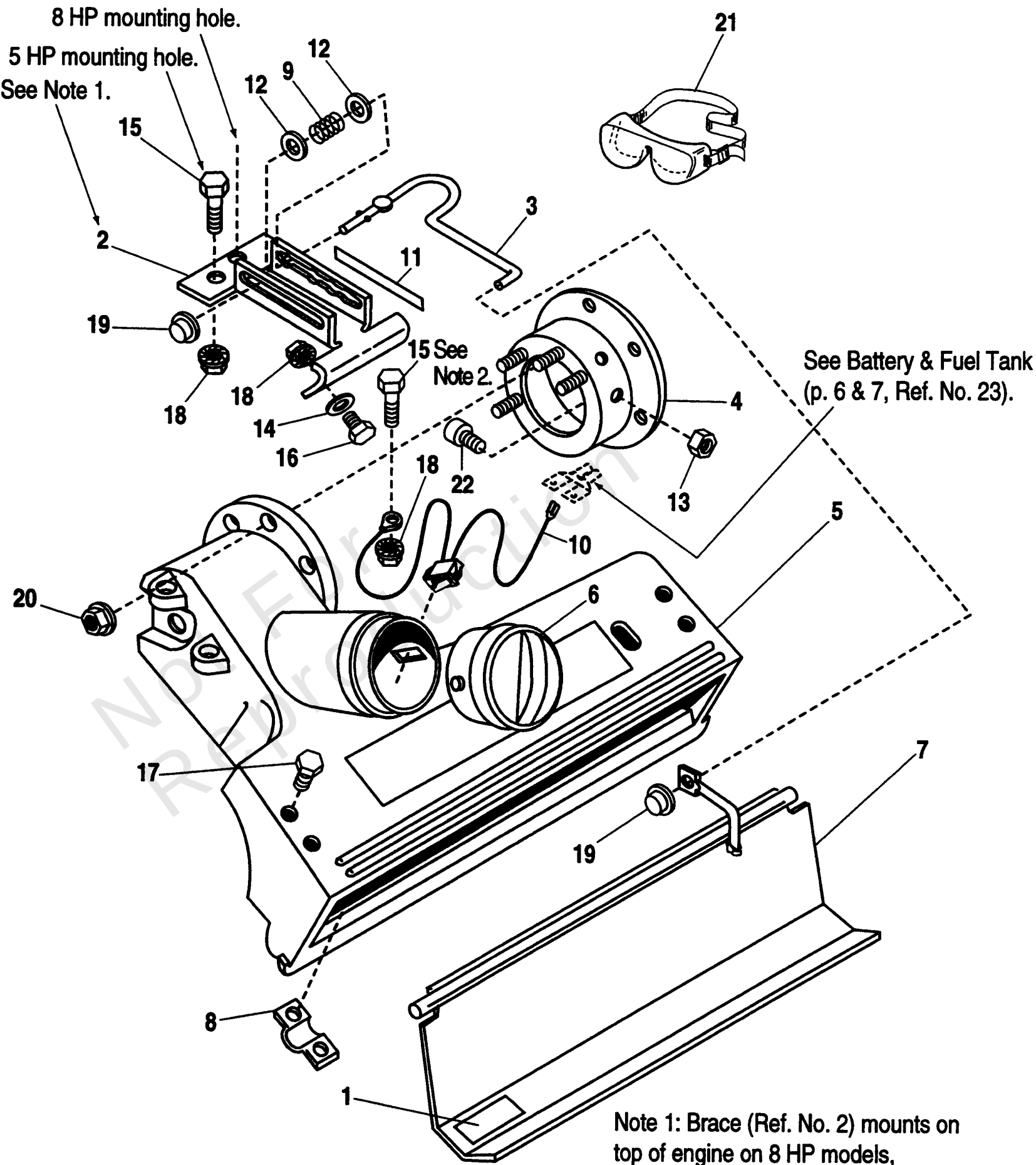
Housing Group

REF NO	PART NO	QTY	DESCRIPTION
1	1714133SM	1	COVER, RH
2	1714134	1	COVER, LH
3	1714232SM	1	COVER, Top (8 HP models)
3	1714135SM	1	COVER, Top (5 HP models)
4	1714136	1	COVER, Bottom
5	1714166SM	1	COVER, Rear
6	1714205SM	4	GROMMET, Front Mount
7	1714206SM	14	FASTENER, Panel
8	1714225SM	1	DECAL (Simplicity 5/25)
8	1714226	1	DECAL (Baker 5/25)
8	1714227	1	DECAL (Simplicity 8/25)
8	1714228	1	DECAL (Baker 8/25)
9	1714229SM	1	DECAL, Electric Start
10	1935048SM	1	NUT, Hex, Flange Lock, 5/16-18
11	1960001SM	4	SCREW, Plastite, #10-14 x 5/8

Nozzle & Flap Assemblies

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 1692374



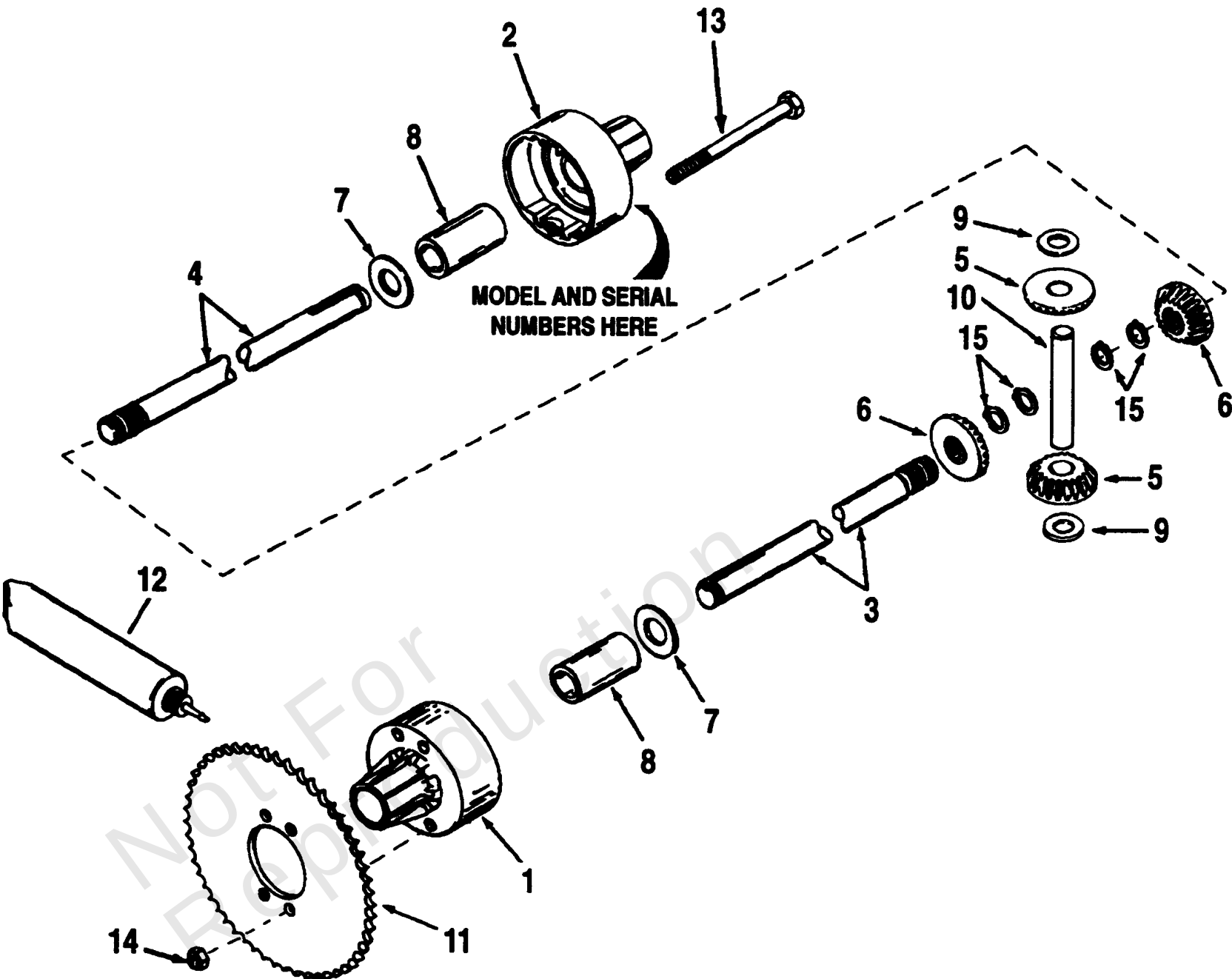
Nozzle & Flap Assemblies

REF NO	PART NO	QTY	DESCRIPTION
1	1709529SM	1	DECAL, Danger
2	1713921SM	1	BRACE
3	1713923SM	1	ROD, Flap
4	1713925	1	SHREDDER HOUSING ASSY.
5	1713927SM	1	NOZZLE, (Simplicity)
5	1713927SM	1	NOZZLE, (Baker)
6	1713929SM	1	PLUG, Nozzle
7	1713930SM	1	FLAP ASSY.
8	1713934SM	2	CLAMP, Shaft
9	1714345SM	1	SPRING
10	1714348SM	1	SWITCH, Interlock N.C.
11	1714940	1	DECAL, Nozzle Opening
12	1919326SM	2	WASHER, 5/16
13	1919438SM	2	NUT, Nylock, 5/16-18
14	1920283SM	1	WASHER, 5/16
15	1921221SM	2	CAPSCREW, Hex Hd., 5/16-18 x 1/2
16	1921332SM	1	CAPSCREW, Hex, Hd., 5/16-18 x 3/4
17	1930416	4	SCREW, Taptite, #10-32 x 3/8
18	1931277SM	3	NUT, Serrated, Flange Lock, 5/16-18
19	1932718SM	2	PUSH NUT, 5/16
20	1935048SM	5	NUT, Hex, Flange Lock, 5/16-18
21	1729013SM	1	GOGGLES
22	1729214SM	2	CAPSCREW, Hex, Socket Hd., 5/16-18 x 1/2

Peerless Model 100-108: Service Parts

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 1692374



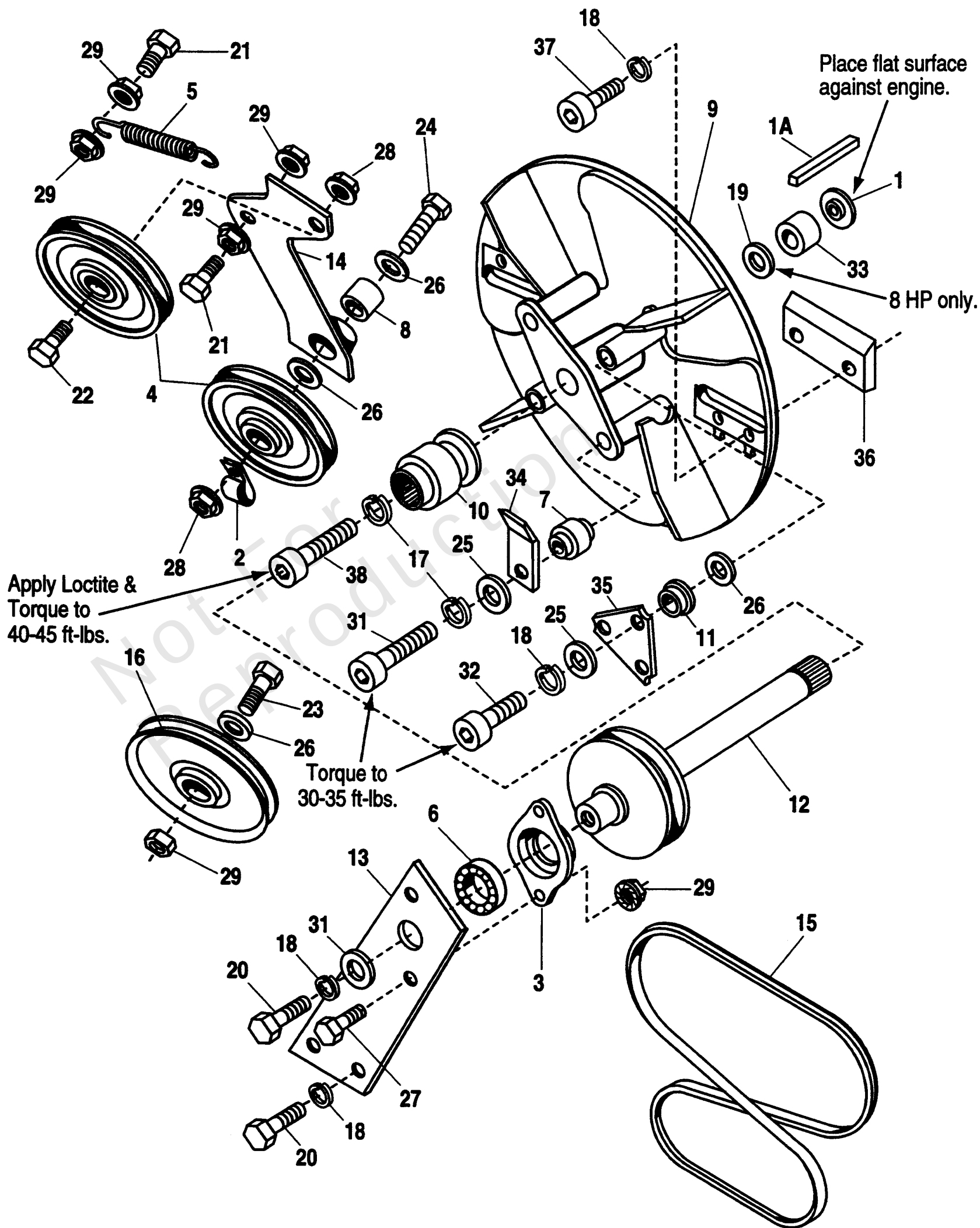
Peerless Model 100-108: Service Parts

REF NO	PART NO	QTY	DESCRIPTION
1	PER - 774344	1	HOUSING, Differential Carrier (Incl. Ref. No. 13)
2	PER - 774645	1	CARRIER, Differential (Incl. qty. 1, Ref. No. 8)
3	PER - 774979	1	AXLE, 20-3/16" Long
4	PER - 774980	1	AXLE, 8-1/32" Long
5	PER - 778068	2	BEVEL PINION (16 teeth)
6	PER - 778221	2	GEAR, Bevel, 16 Tooth
7	PER - 780001	2	Washer (.056 wide) (USE AS NEEDED)
8	PER - 780077	2	BUSHING
9	PER - 780096	2	WASHER, Thrust
10	PER - 786040	1	PIN, Drive
11	PER - 786041A	1	SPROCKET, Optional (45 teeth-7.389" O.D.)
12	PER - 788067B	1	GREASE (32 oz. Bottle Bentonite grease)
13	PER - 792041	4	SCREW, Hex, Flanged Hd., 5/16-18 x 3-15/16
14	PER - 792042	4	NUT, Lock, 5/16-18
15	PER - 792125	2	* RING, Retaining, (Pkg. of 2)

Rotor Group

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 1692374



Rotor Group

REF NO	PART NO	QTY	DESCRIPTION
1	2118403SM	1	SHIELD
1A	2805100SM	1	KEY, 1/4 sq. x 2-1/4
2	2826271SM	1	CLAMP, Cable
3	1667341SM	1	RETAINER, Bearing
4	1668827SM	2	IDLER PULLEY, "V"
5	1704442SM	1	SPRING
6	1705897SM	1	BEARING, BALL 11/16X1
7	1709525SM	2	SPACER
8	1709614SM	1	SPACER, Tube
9	1713886SM	1	ROTOR ASSY.
10	1713890SM	1	HUB ASSY.
11	1713893SM	2	BUSHING, Flanged
12	1713894SM	1	SHAFT ASSY.
13	1713897SM	1	PLATE, Bearing
14	1713898SM	1	IDLER ARM ASSY.
15	1713901SM	1	V-BELT, 60"
16	1714092SM	1	IDLER PULLEY, Flat, 4"
17	1916965SM	3	LOCKWASHER, 3/8
18	1917356SM	3	LOCKWASHER, 5/16
19	1918267SM	1	WASHER (8 HP models only)
20	1921332SM	3	CAPSCREW, Hex Hd., 5/16-18 x 3/4
21	703570	2	CAPSCREW, Hex Head, 5/16-18 x 1 1/4
22	1921969SM	1	CAPSCREW, Hex Hd., 3/8-16 x 1-1/2
23	1921971SM	1	CAPSCREW, Hex Hd., 3/8-16 x 1-3/4
24	1921973SM	1	CAPSCREW, Hex Hd., 3/8-16 x 2-3/4
25	1922755SM	4	WASHER, 3/8
26	1924940SM	5	WASHER, Flat 3/8
27	1925205SM	2	CAPSCREW, Hex Hd., 5/16-18 x 5/8
28	1930645SM	3	NUT, Hex, Flange "C" Lock, 3/8-16
29	1931277SM	6	NUT, Serrated, Flange Lock, 5/16-18
30	1960141SM	1	WASHER, 5/16
31	1960508SM	2	CAPSCREW, Hex, Socket Hd., 3/8-16 x 2
32	1960543SM	2	CAPSCREW, Hex, Socket Hd., 3/8-16 x 1-1/4
33	1729132SM	1	SPACER (Used on 5 HP models only)
34	1729137SM	2	"J" HAMMER
35	1729138SM	2	* HAMMER, Triangle
36	1729148SM	2	KNIFE-.250THK 1.37 WD
37	1729215SM	4	CAPSCREW, Hex, Socket Hd., 5/16 x 5/8
38	1729235SM	1	CAPSCREW, Hex, Socket Hd., 3/8-24 x 2

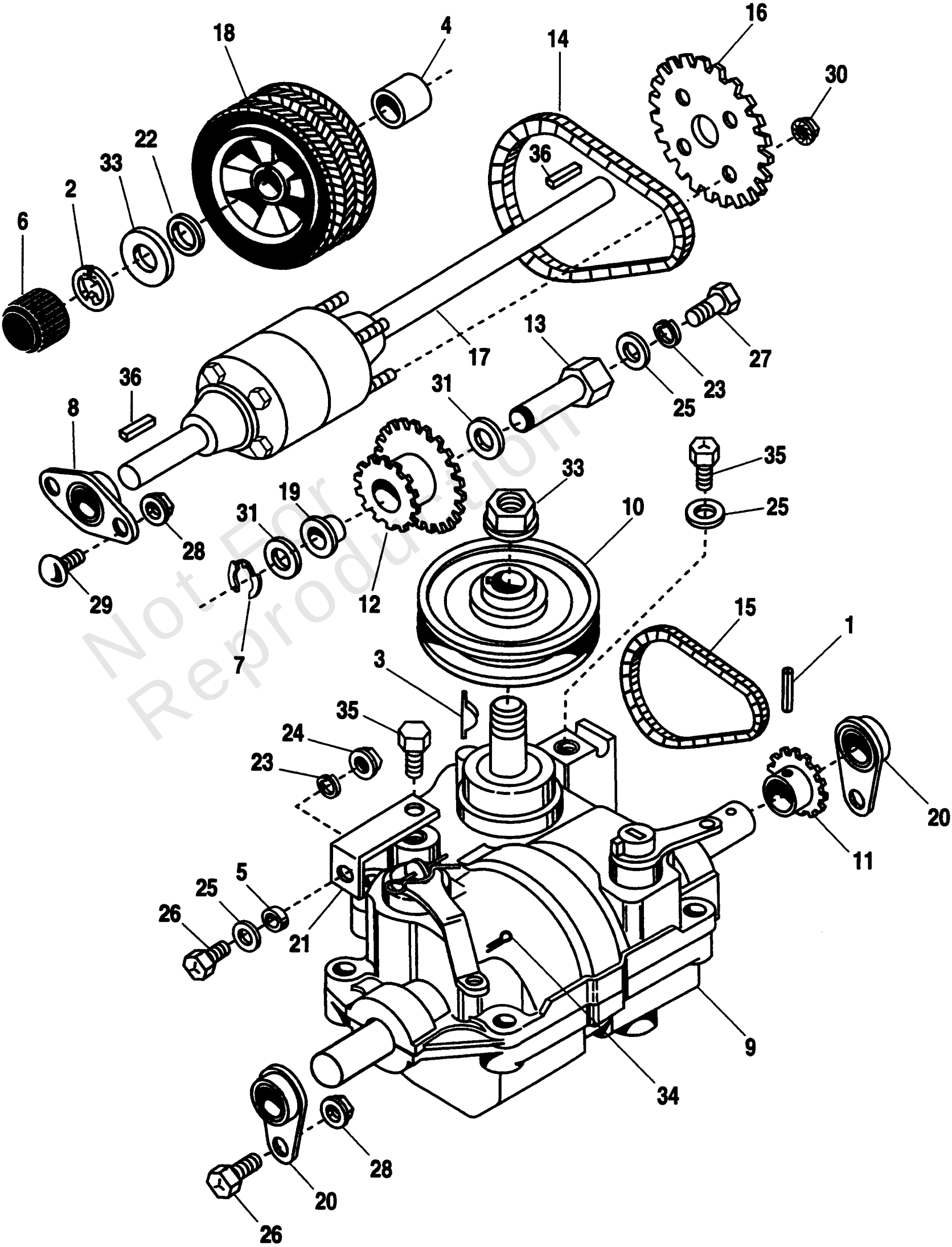
Footnotes:

Note:* The following models were built without triangular hammers: Mfg. No. 1692371 S/N 2286 & up, Mfg. No. 1692372 S/N 1756 & up, Mfg. No. 1692373 S/N 1735 & up, Mfg. No. 1692374 S/N 1218 & up, Mfg. No. 1692466 S/N 1777 & up, Mfg. No. 1692467 S/N 1276

Transmission & Rear Wheels Group

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 1692374



Transmission & Rear Wheels Group

REF NO	PART NO	QTY	DESCRIPTION
1	2816001SM	1	PIN-SPRING .188 X 1.0
2	2827794SM	2	KLIPRING, .75 Dia Shaft
3	2860397SM	1	KEY, Hi-Pro, 1/8 x 17/32
4	1663180SM	2	SPACER
5	1665844SM	1	SPACER
6	1673333SM	2	HUBCAP, Rear Wheel
7	1708554SM	1	KLIP RING, 3/8
8	1712345SM	2	BEARING, Flanged
9	1713838SM	1	TRANSMISSION (See pages 20-27 for service parts)
10	1713902SM	1	PULLEY ASSY.
11	1713905SM	1	SPROCKET, 10T
12	1713906SM	1	SPROCKET, Idler
13	1713909SM	1	SHAFT, Sprocket
14	1713910SM	1	CHAIN, 60 Pitch
15	1713911SM	1	CHAIN, 29 Pitch
16	1713912SM	1	SPROCKET, 54T
17	-----	1	DIFFERENTIAL, Axle Peerless Model 100-108
18	1713937SM	2	WHEEL, Rear, 10 x 3-1/2
19	1714139SM	2	BUSHING, Bronze, Flange, 3/8
20	1714202SM	2	BALL BUSHING ASSY.
21	1714397SM	1	STRAP, Torque
22	1911386SM	2	WASHER, 3/4
23	1917356SM	2	LOCKWASHER 5/16
24	1917372SM	1	NUT, Hex Hd., 5/16-18
25	1919381SM	3	WASHER, 5/16
26	1921332SM	3	CAPSCREW, Hex Hd, 5/16-18 x 3/4
27	1923325SM	1	CAPSCREW, 5/16-18 x 7/8
28	1931277SM	6	NUT, Hex, Flange Lock, 5/16-18
29	1931333SM	4	CARRIAGE BOLT, 5/16-18 x 3/4
30	1935048SM	4	NUT, Flange Lock, 5/16-18
31	1960103SM	2	WASHER, 3/8"
32	2860202SM	2	WASHER, 3/4
33	1960314	1	NUT, Lock, M10
34	1960394SM	1	COTTER PIN, 7/64 x 3/4
35	1960541SM	2	CAPSCREW, Hex Head Taptite, 5/16-18 x 3/4
36	1729279SM	2	KEY, 3/16 sq. x 1-1/2

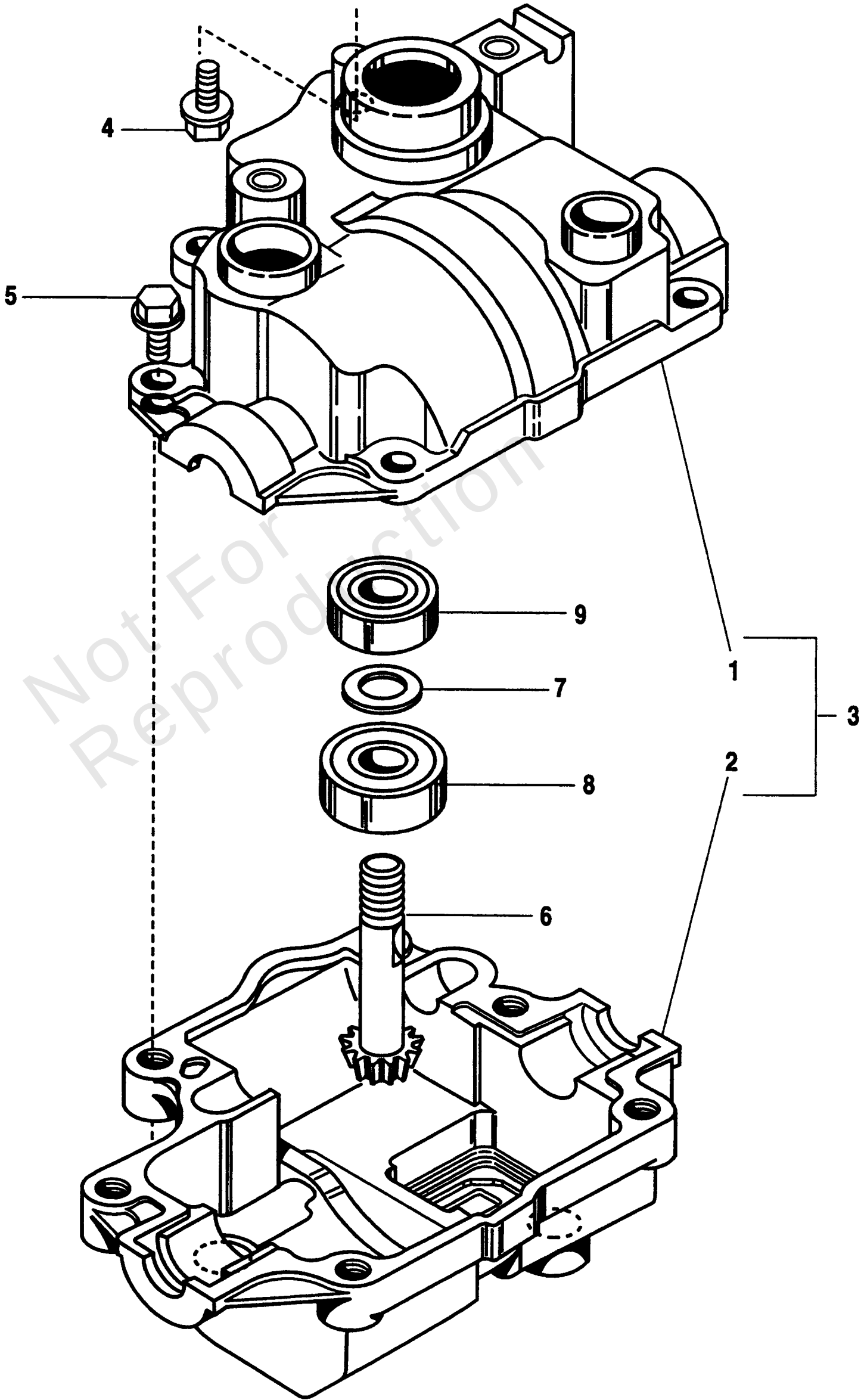
Footnotes:

Note:* See your local authorized Tecumseh/Peerless distributor for parts and service.

Transmission: Case & Input Shaft

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 1692374



Transmission: Case & Input Shaft

REF NO	PART NO	QTY	DESCRIPTION
1	-----	1	CASE, Upper (See Ref. No. 3)
2	-----	1	CASE, Lower (See Ref. No. 3)
3	1714653SM	1	TRANSMISSION CASE KIT
4	1714654	1	SCREW, Self-tapping
5	1714655SM	6	SCREW, Self-tapping
6	1714656SM	1	SHAFT, Input
7	1714658SM	1	WASHER
8	1714659SM	1	BALL BEARING
9	1714660SM	1	BALL BEARING

Not For
Reproduction

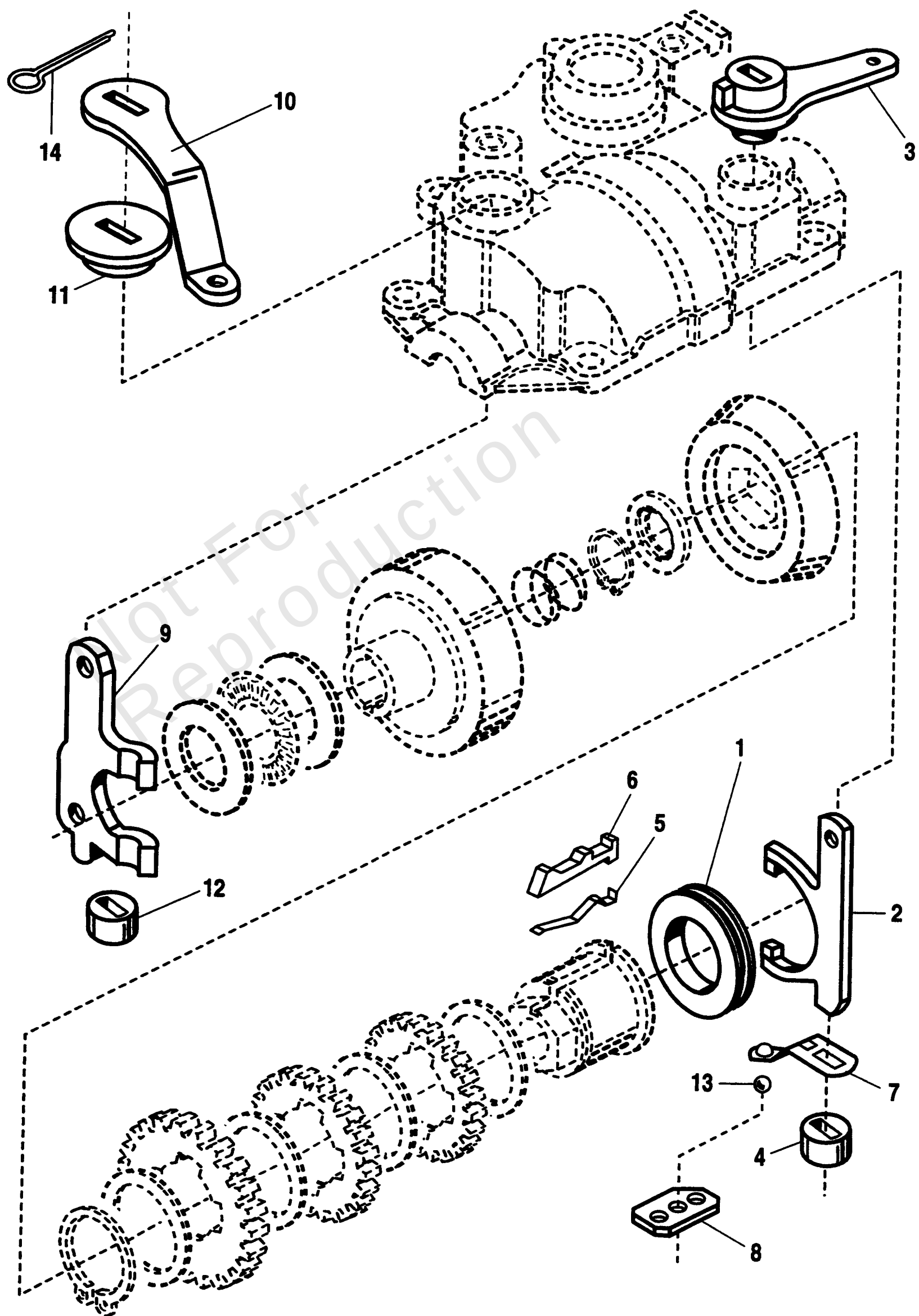
Footnotes:

Note:* Not serviced seperately, order complete Transmission Case Kit.

Transmission: Range Shift Assembly

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 1692374



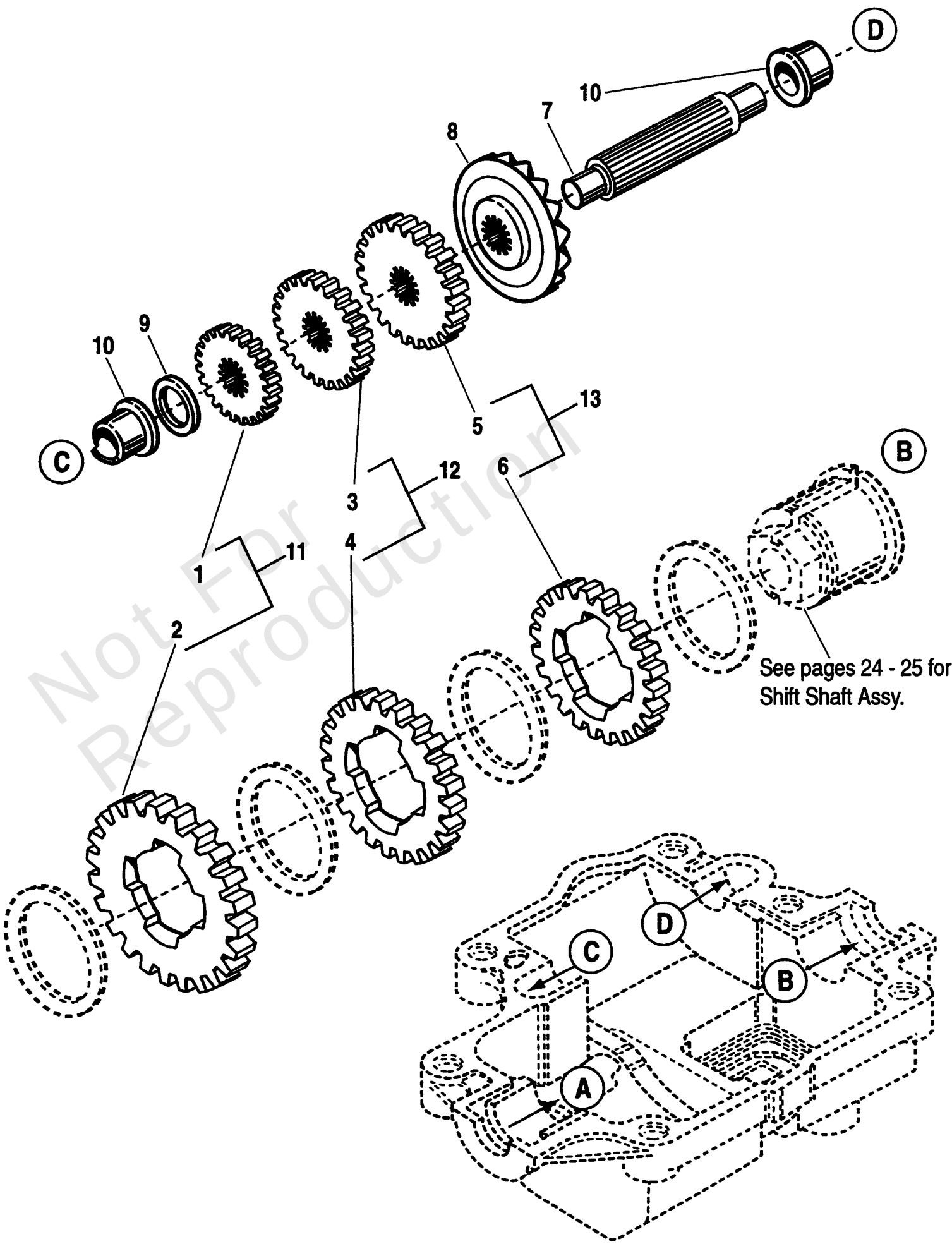
Transmission: Range Shift Assembly

REF NO	PART NO	QTY	DESCRIPTION
1	1714685SM	1	COLLAR, Sliding
2	1714686SM	1	FORK, Shift
3	1714687SM	1	ARM, Shift
4	1714688SM	1	SUPPORT, Fork
5	1714689SM	2	SPRING, Shift
6	1714690SM	2	KEY, Shift
7	1714691SM	1	SPRING
8	1714692SM	1	PLATE
9	1714693SM	1	FORK, Clutch
10	1714694SM	1	ARM, Clutch
11	1714695SM	1	SUPPORT, Upper Clutch
12	1714696SM	1	SUPPORT, Fork
13	1714698SM	1	BALL, 1/8
14	1918451SM	1	PIN, Cotter

Transmission: Reduction Shaft Assembly

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 1692374



Transmission: Reduction Shaft Assembly

REF NO	PART NO	QTY	DESCRIPTION
1	-----	1	GEAR (See Ref. No. 11)
2	-----	1	GEAR (See Ref. No. 11)
3	-----	1	GEAR (See Ref. No. 12)
4	-----	1	GEAR (See Ref. No. 12)
5	-----	1	GEAR (See Ref. No. 13)
6	-----	1	GEAR (See Ref. No. 13)
7	1714661SM	1	SHAFT, Reduction
8	1714662SM	1	RING GEAR
9	1714663SM	1	WASHER
10	1714664SM	1	BUSHING SET (not available individually)
11	1714665SM	1	GEAR SET (Incl. Ref. Nos. 1 & 2)
12	1714666SM	1	GEAR SET (Incl. Ref. Nos. 3 & 4)
13	1714667SM	1	GEAR SET (Incl. Ref. Nos. 5 & 6)

Not For
Reproduction

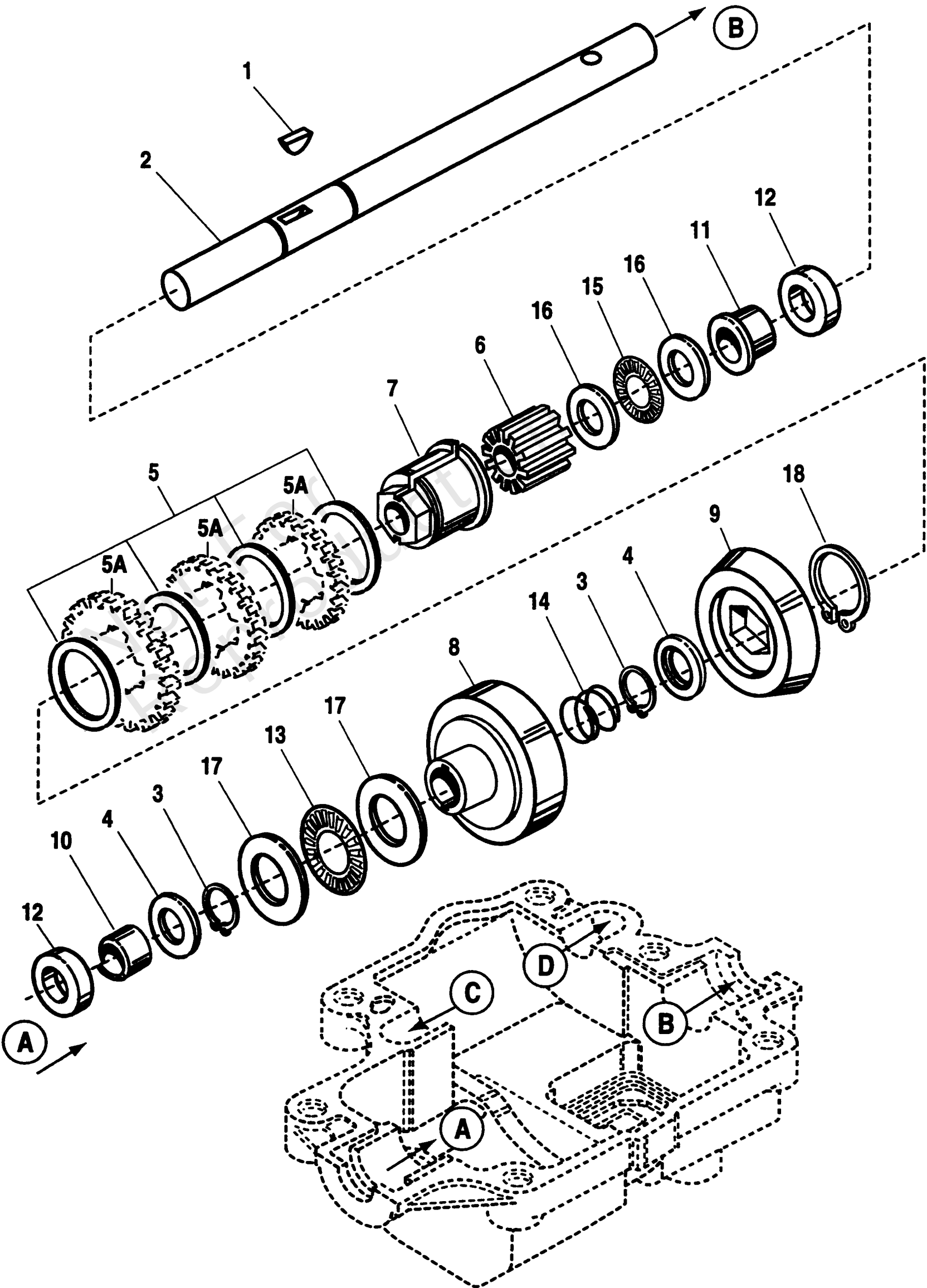
Footnotes:

Note:* Not serviced separately, order complete gear set.

Transmission: Shift Shaft Assembly

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 1692374



Transmission: Shift Shaft Assembly

REF NO	PART NO	QTY	DESCRIPTION
1	1714657SM	1	KEY, Woodruff
2	1714668	1	AXLE, Shaft
3	1714669SM	2	RING
4	1714670SM	2	WASHER, Retainer
5	1714671SM	4	WASHER
5A	-----	*	GEAR SET
6	1714672SM	1	SUPPORT, Key
7	1714673SM	1	COLLAR, Shift
8	1714674SM	1	CONE, Cave
9	1714675SM	1	CONE
10	1714676SM	1	BUSHING
11	1714677SM	1	BUSHING
12	1714678SM	2	SEAL
13	1714679SM	1	THRUST NEEDLE
14	1714680SM	1	SPRING, Return
15	1714681SM	1	THRUST NEEDLE
16	1714682SM	2	WASHER, Thrust
17	1714683SM	2	WASHER, Thrust
18	1714684SM	1	RING

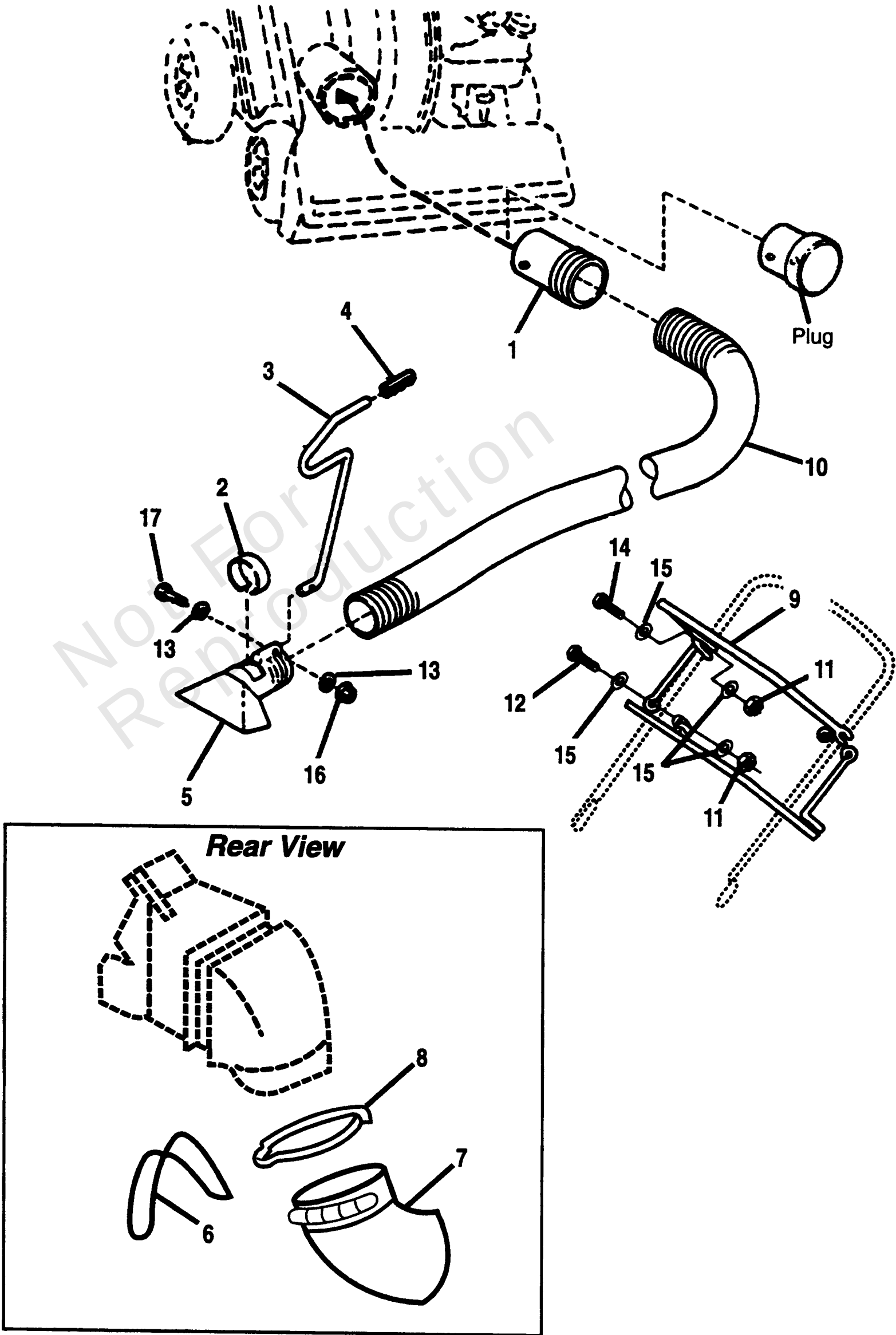
Footnotes:

Note:* Available in sets only. See Ref. Nos. 11, 12 & 13 Transmission:Reduction Shaft Assembly.

Vacuum Hose

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 1692374



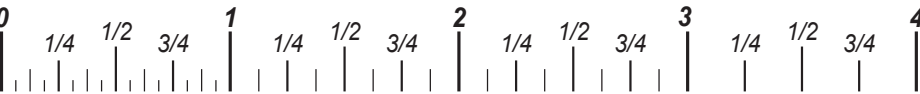
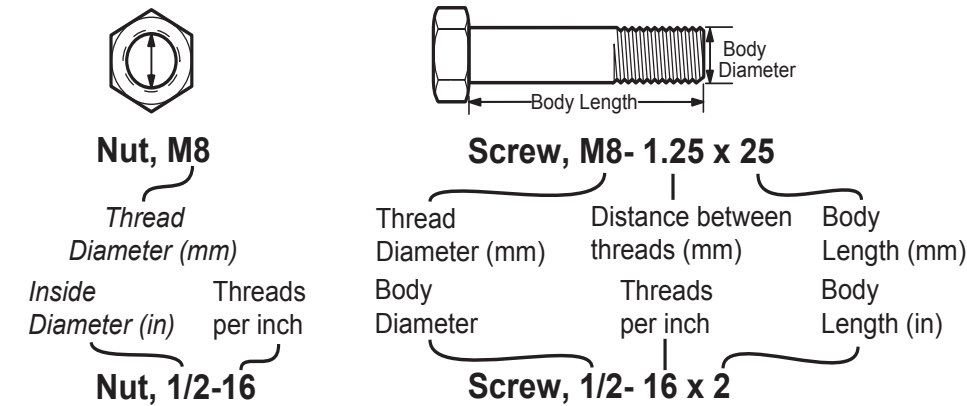
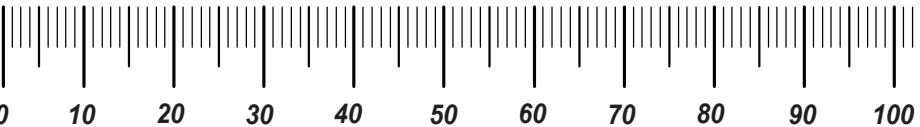
Vacuum Hose

REF NO	PART NO	QTY	DESCRIPTION
1	1023100SM	1	COUPLER
2	1024100SM	1	RING, Plastic
3	1026100	1	HANDLE
4	1028100SM	1	GRIP
5	1030100SM	1	NOZZLE
6	1665872SM	1	STRAP, Rubber
7	1713871SM	1	TUBE, Deflector
8	1714341SM	1	RING
9	1714357SM	2	HOSE CARRIER, Half
10	1714432SM	1	HOSE, 4" Diameter x 15' Long
11	1919438SM	6	NUT, Esna, 5/26-18
12	1921221SM	4	CAPSCREW, 5/16-18 x 1-1/2
13	1921319SM	2	WASHER
14	1921719SM	4	CAPSCREW, 5/16-18 x 2-1/2
15	1960044SM	12	WASHER-0.312(0.33)IDX1
16	1960294SM	1	NUT, Whizlock, 1/4-20
17	1729223SM	1	SCREW, 14-20 x 1-1/2

Hardware Identification & Torque Specifications

Torque Specification Chart								
FOR STANDARD METRIC MACHINE HARDWARE (Tolerance ± 20%)								
Property Class	 Class 5.6		 Class 8.8		 Class 10.9		 Class 12.9	
Size Of Hardware	in/lbs ft/lbs	Nm.	in/lbs ft/lbs	Nm.	in/lbs ft/lbs	Nm.	in/lbs ft/lbs	Nm.
M3	5.88	.56	13.44	1.28	19.2	1.80	22.92	2.15
M4	13.44	1.28	30.72	2.90	43.44	4.10	52.56	4.95
M5	26.4	2.50	60.96	5.75	5.97	8.10	7.15	9.7
M6	44.64	4.3	7.3	9.9	10.3	14	12.1	16.5
M7	5.2	7.1	12.1	16.5	16.9	23	19.9	27
M8	7.7	10.5	17.7	24	25	34	29	40
M10	15	21	35	48	50	67	59	81
M12	26	36	61	83	86.2	117	103	140
M14	42	58	101	132	136	185	162	220
M16	64	88	147	200	210	285	250	340
M18	89	121	202	275	287	390	346	470
M20	126	171	290	390	405	550	486	660
M22	169	230	390	530	559	745	656	890
M24	217	295	497	375	708	960	840	1140
M27	320	435	733	995	1032	1400	1239	1680
M30	435	590	995	1350	1401	1900	1681	2280
M33	590	800	1349	1830	1902	2580	2278	3090
M36	759	1030	1740	2360	2441	3310	2935	3980
M39	988	1340	2249	3050	3163	4290	3798	5150

The guides and ruler furnished below are designed to help you select the appropriate hardware.



Standard Hardware Sizing

When a washer or nut is identified as 1/2" (M8), this is the *Nominal size*, meaning the *inside diameter* is 1/2 inch (8mm metric thread diameter); if a second number is present it represents the *threads per inch* (distance between threads).

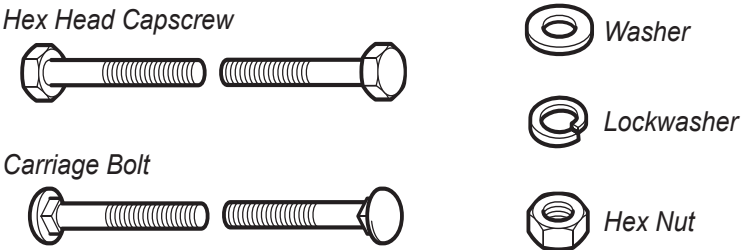
When bolt or capscrew is identified as 1/2 - 16 x 2" (M8 - 1.25 x 50), this means the *Nominal size*, or body diameter is 1/2 inch (8mm metric thread diameter), the second number, 16, represents the *threads per inch*, (*distance between threads*). The final number is the body length of the bolt or screw, 2 inches (50mm).

Torque Specification Chart						
FOR STANDARD MACHINE HARDWARE (Tolerance ± 20%)						
Hardware Grade	 SAE Grade 2		 SAE Grade 5		 SAE Grade 8	
Size Of Hardware	in/lbs ft/lbs	Nm.	in/lbs ft/lbs	Nm.	in/lbs ft/lbs	Nm.
8-32	19	2.1	30	3.4	41	4.6
8-36	20	2.3	31	3.5	43	4.9
10-24	27	3.1	43	4.9	60	6.8
10-32	31	3.5	49	5.5	68	7.7
1/4-20	66	7.6	8	10.9	12	16.3
1/4-28	76	8.6	10	13.6	14	19.0
5/16-18	11	15.0	17	23.1	25	34.0
5/16-24	12	16.3	19	25.8	29	34.0
3/8-16	20	27.2	30	40.8	45	61.2
3/8-24	23	31.3	35	47.6	50	68.0
7/16-14	30	40.8	50	68.0	70	95.2
7/16-20	35	47.6	55	74.8	80	108.8
1/2-13	50	68.0	75	102.0	110	149.6
1/2-20	55	74.8	90	122.4	120	163.2
9/16-12	65	88.4	110	149.6	150	204.0
9/16-18	75	102.0	120	163.2	170	231.2
5/8-11	90	122.4	150	204.0	220	299.2
5/8-18	100	136	180	244.8	240	326.4
3/4-10	160	217.6	260	353.6	386	525.0
3/4-16	180	244.8	300	408.0	420	571.2
7/8-9	140	190.4	400	544.0	600	816.0
7/8-14	155	210.8	440	598.4	660	897.6
1-8	220	299.2	580	788.8	900	1,244.0
1-12	240	326.4	640	870.4	1,000	1,360.0

NOTES

- These torque values are to be used for all hardware excluding: locknuts, self-tapping screws, thread forming screws, sheet metal screws and socket head setscrews.
- Recommended seating torque values for locknuts:
 - for prevailing torque locknuts - use 65% of grade 5 torques.
 - for flange whizlock nuts and screws - use 135% of grade 5 torques.
- Unless otherwise noted on assembly drawings, all torque values must meet this specification.

Common Hardware Types



Wrench & Fastener Size Guide

 1/4" Bolt or Nut Wrench—7/16"	 5/16" Bolt or Nut Wrench—1/2"	 3/8" Bolt or Nut Wrench—9/16"	 7/16" Bolt or Nut Wrench (Bolt)—5/8" Wrench (Nut)—11/16"	 1/2" Bolt or Nut Wrench—3/4"
M6 Bolt or Nut Wrench—10mm	M8 Bolt or Nut Wrench—13mm	M10 Bolt or Nut Wrench—17mm	M12 Bolt or Nut Wrench—19mm	M14 Bolt or Nut Wrench—22mm

