



Parts Manual

Mfg. No: 1690663
7117, 17HP Gear w/Turf Tires and 42"
Rotary Mower

1690501 - 42" Rotary Mower.....

1690646 - 7117, 17HP Gear w/Turf Tires.....

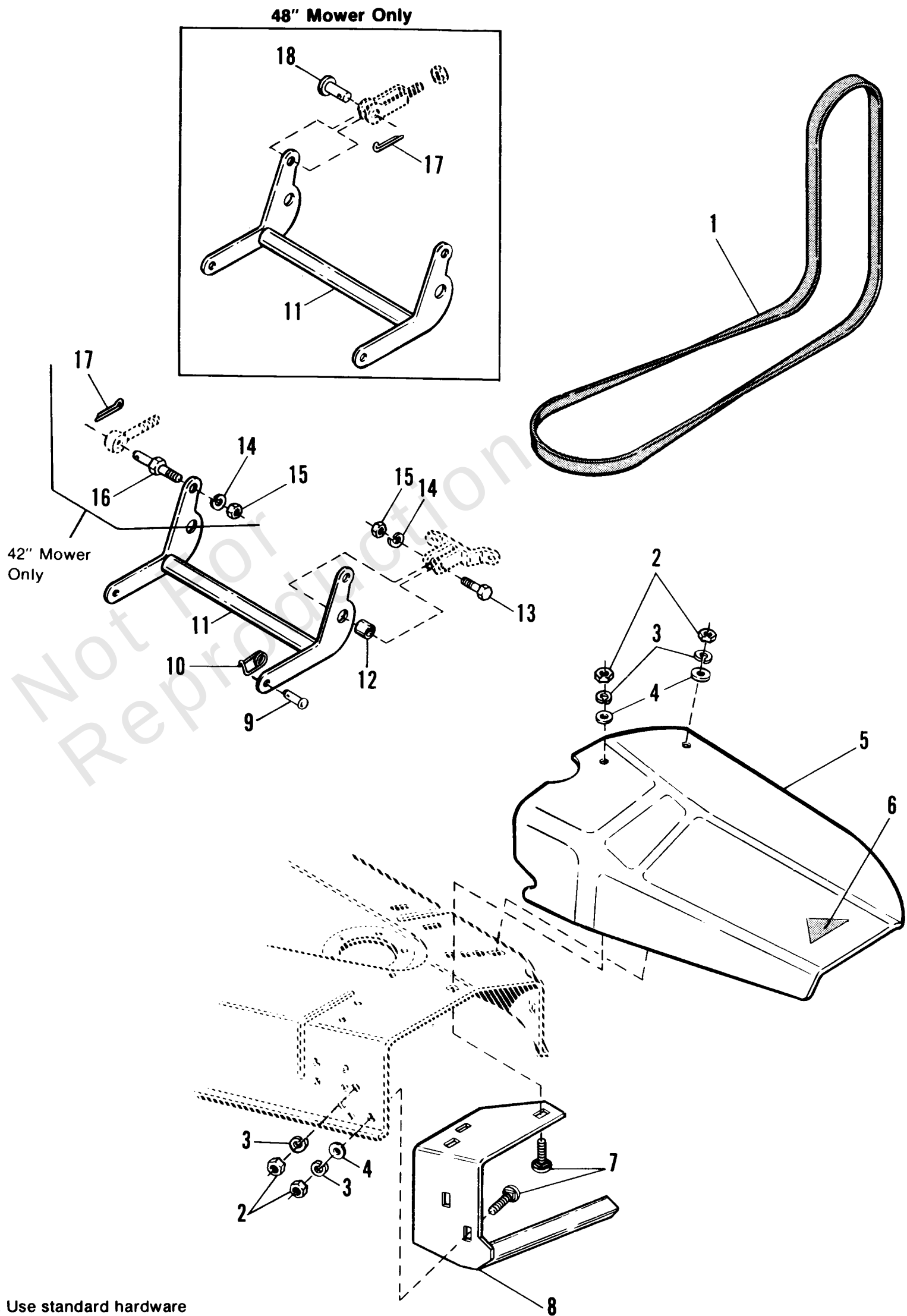
Not For
Reproduction

Model Components	Page
42" & 48" Rotary Mower - Deflector, Stone Guard & Rocker Arm Group.	4
42" Rotary Mower - Cover, Drive & Bail Group.	6
42" Rotary Mower - Height Adjuster & Rollers Group.	8
42" Rotary Mower - Housing & Arbor Group.	10
Bevel Gear & Side Plate Group.	12
Brake Group.	14
Brake Linkage Group.	16
Dash Group.	18
Decal Group.	20
Draw Bar Group.	22
Drive & Clutch Group.	24
Electrical Group.	26
Engine, Exhaust & Drive Shaft Group - 7117.	28
Frame & Footrest Group.	30
Front Axle Group.	32
Hood & Grill Group.	34
Lift Lever & Cable Group.	36
PTO Cone Clutch Group.	38
PTO Control Group.	40
Rear Axle & Differential Group.	42
Seat & Deck Group.	44
Steering Group.	46
Transmission Brake, Drive & Control Group.	50
Transmission Group.	52
Torque Specification Chart.	56

42" & 48" Rotary Mower - Deflector, Stone Guard & Rocker Arm Group

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 1690663



42" & 48" Rotary Mower - Deflector, Stone Guard & Rocker Arm Group

REF NO	PART NO	QTY	DESCRIPTION
1	1666801SM	1	V-BELT, HA, 80.10
1	2108508	1	V-BELT, PTO to Mower-48" Mower
2	1916950SM	4	NUT, Hex, 38-16
3	1916965SM	4	LOCKWASHER, 3/8
4	1924356SM	3	WASHER, Special
5	1651177SM	1	DEFLECTOR-42" Mower (Orange)
5	1729542SM	1	DEFLECTOR-42" Mower (Black)
5	1651184SM	1	DEFLECTOR-48" Mower (Orange)
5	1729543SM	1	DEFLECTOR-48" Mower (Black)
6	-----	1	DECAL, OPEI
7	1960268SM	4	CARRIAGE BOLT, 3/8-16 x 1-1/4
8	2174167SM	1	GUARD ASSY., Stone-42" Mower
8	2174127SM	1	GUARD ASSY., Stone-48" Mower
9	2156306SM	2	PIN-RND HD DRILLED .3
10	2176012SM	2	PIN, Clip
11	2172468A	1	ROCKER ARM ASSY.
12	1725601SM	2	SPACER
13	1921176SM	2	CAPSCREW, Hex Hd., 1/2-13 x 1-1/4
14	1916966SM	4	LOCKWASHER, Spring, 1/2
15	1913744SM	4	NUT, Hex Jam, 1/2-13
16	1651516SM	2	PIN, Pivot (42" Mower only)
17	1918452SM	2	COTTER PIN, 1/8 x 1
18	1960116SM	2	PIN, Yoke, (48" Mower only)

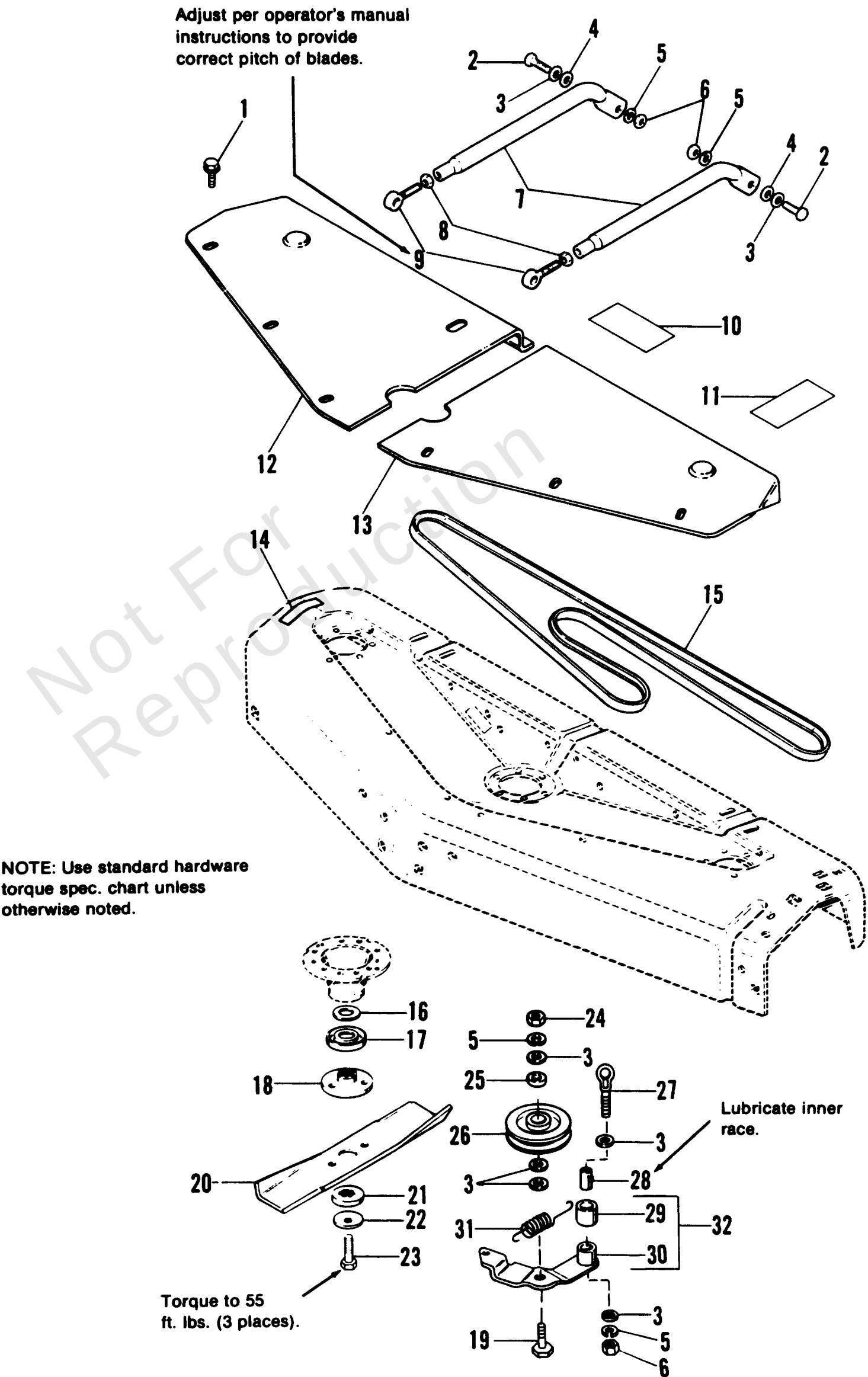
Footnotes:

Note:* Not a servicable part.

42" Rotary Mower - Cover, Drive & Bail Group

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 1690663



42" Rotary Mower - Cover, Drive & Bail Group

REF NO	PART NO	QTY	DESCRIPTION
1	1929000SM	10	SCREW, Hex, Taptite, 1/4-20 x 3/8
2	1921210SM	2	CAPSCREW, Hex Hd., 3/8-16 x 1
3	1919326SM	7	WASHER, 5/16
4	2108717SM	2	SPACER
5	1916965SM	4	LOCKWASHER, 3/8
6	1916950SM	3	NUT, Hex, Full, 3/8-16
7	1651520SM	2	ARM, Adjusting
8	1919262SM	2	NUT, Hex, Jam, 1/2-20
9	2157215SM	2	EYE BOLT
10	1709067SM	1	DECAL, Belt Installation
11	1704277SM	1	DECAL, Danger
12	1676096SM	1	COVER, R.H.
13	1676095CSM	1	COVER, L.H.
14	17074276	1	DECAL, Danger
15	1656960SM	1	BELT, "V" Arbor Drive
16	1700230SM	3	WASHER, Shim
17	1700229SM	3	SHIELD, Grass
18	1655777SM	3	ADAPTOR, Blade
19	1960032SM	1	SCREW, Hex Head, 3/8-16 x 1 1/4
20	1656144ASM	3	BLADE, 42" Mower
21	1656927SM	3	WASHER, Spline
22	1656916SM	3	WASHER, SPRING 0.475I
23	2823471SM	3	CAPSCREW, Hex Hd., 7/16-14 x 1
24	1917421SM	1	NUT, Hex, Jam, 3/8-16
25	1666294SM	1	SPACER
26	1685144SM	1	PULLEY ASSY.
27	2171815SM	1	EYE BOLT
28	1729274SM	1	RACE, Inner
29	1657682SM	1	BUSHING
30	-----	1	LEVER ASSY., Idler (See Ref. No. 32)
31	1656936SM	1	SPRING
32	1685415SM	1	LEVER ASSY., Idler (w/Bushing)

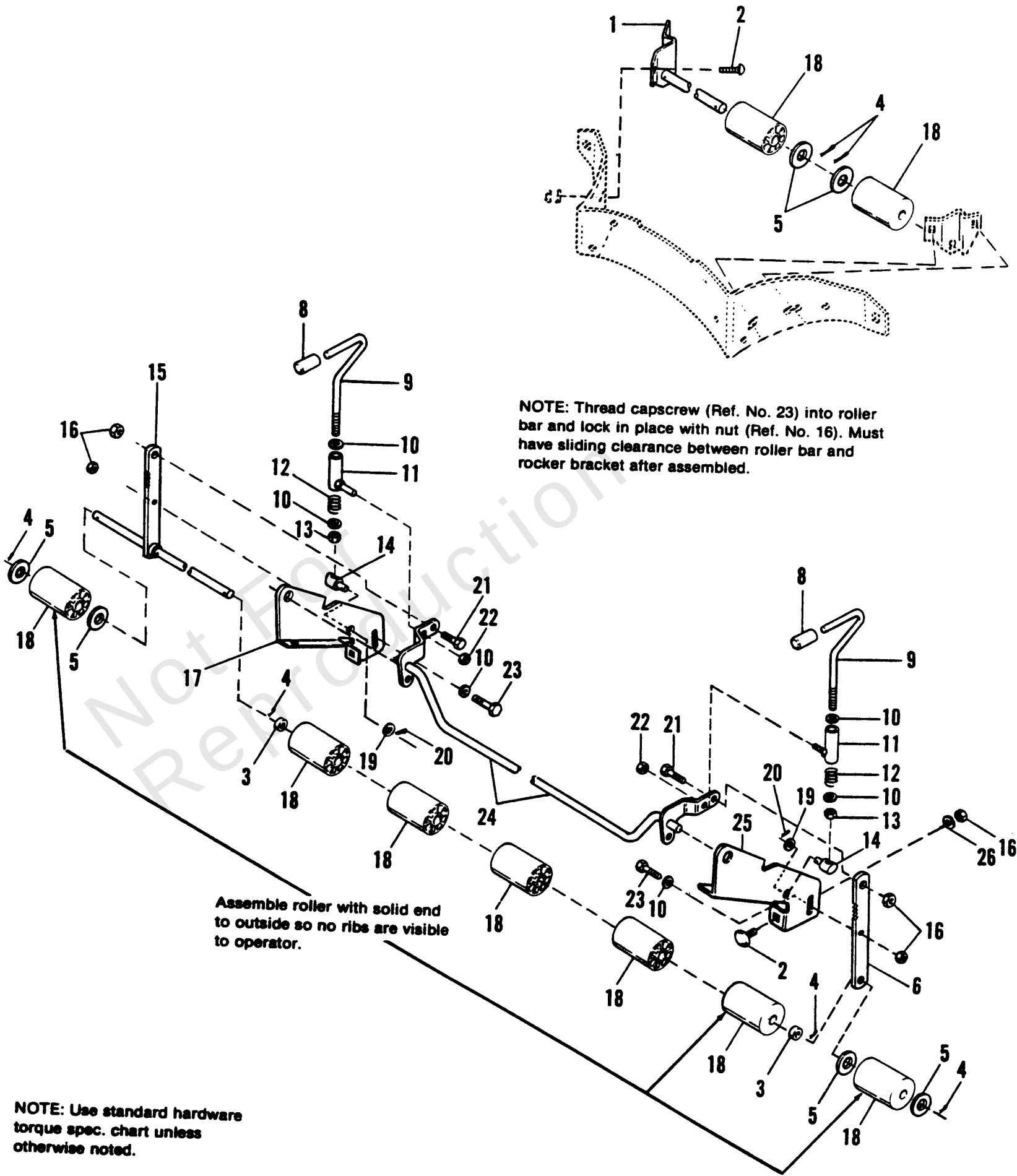
Footnotes:

Note:* Not serviced separately, order complete Lever Assembly.

42" Rotary Mower - Height Adjuster & Rollers Group

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 1690663



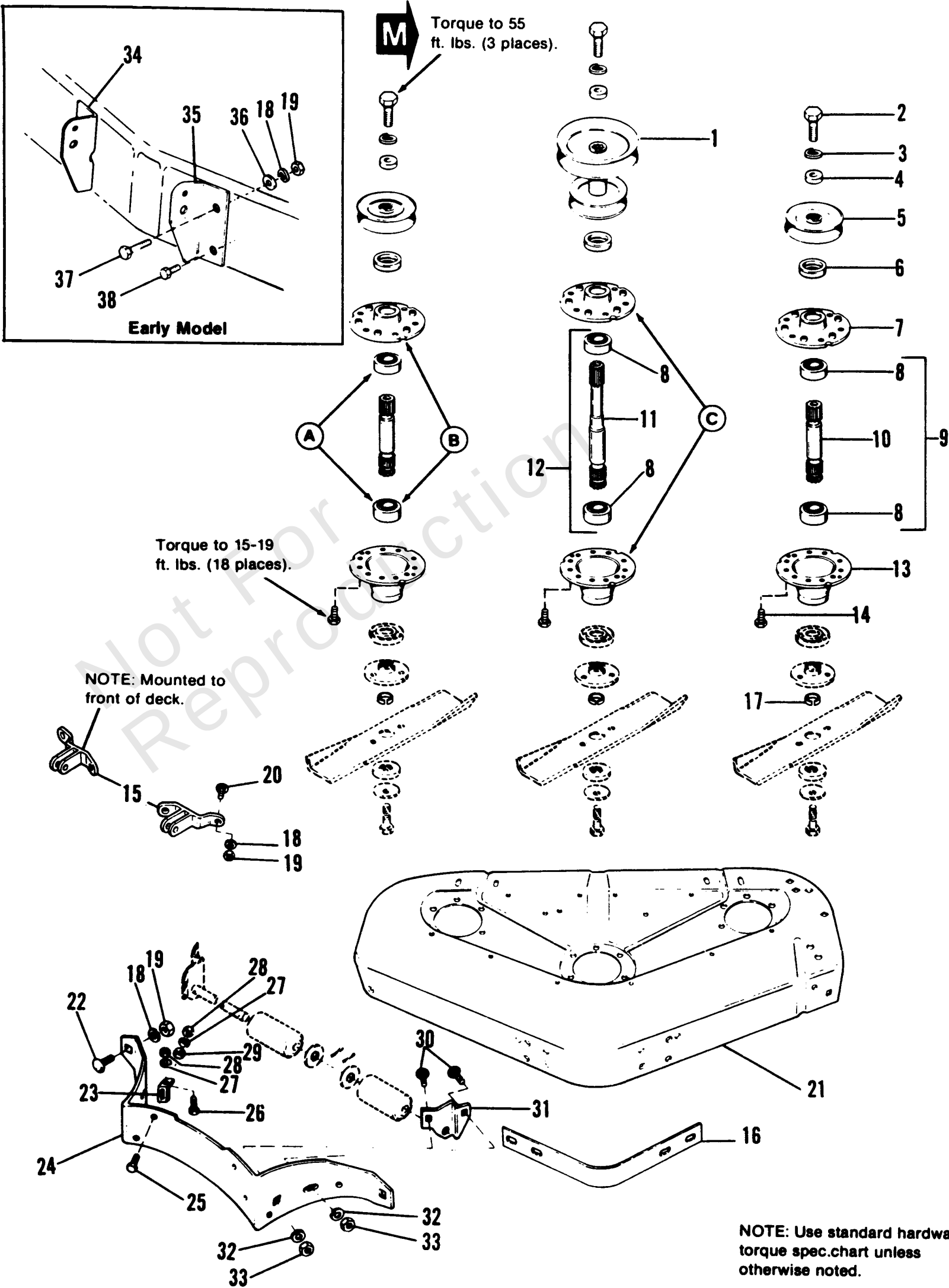
42" Rotary Mower - Height Adjuster & Rollers Group

REF NO	PART NO	QTY	DESCRIPTION
1	2108426SM	1	BRACKET 8 SHAFT ASSY
2	1931348SM	4	BOLT, Carriage 3/8-16 x 3/4
3	2172914SM	2	SPACER -Used after Serial No. 8576
4	1918458SM	6	PIN, Cotter 3/16 x 1
5	1960020SM	6	WASHER, Plain, 21/32
6	1657893A	1	BAR, Roller
7	1668513SM	4	ROLLER, .652 ID, 2.50 OD, 4.10 LG -Used after Serial No. 8576
8	1651820SM	2	GRIP
9	1650394SM	2	HANDLE, Adjusting
10	1924940SM	6	WASHER, Plain, 3/8
11	2108241SM	2	SOCKET ASSY
12	2108360SM	2	SPRING
13	1917421SM	2	NUT, Hex, Jam, 3/8-16
14	2108512SM	2	PIVOT
15	1657894ASM	1	SHAFT ASSY, Roller
16	1916950SM	8	NUT, Hex, Full, 3/8-16
17	2172045ASM	1	BRACKET, Roller, R H
18	2108432SM	3	ROLLER, 2-1/2 x 6-3/4 -Used before Serial No. 8577
19	1924940SM	2	WASHER, Plain, 3/8
20	1918447SM	2	PIN, Cotter, 3/32 x 3/4
21	1921210SM	2	CAPSCREW, Hex Hd, 3/8-16 x 1
22	1930645SM	2	LOCKNUT, Hex, Full, 3/8-16
23	1923490SM	2	CAPSCREW, Hex Hd, 3/8-16 x 1, 5/8 Thd
24	1651514SM	1	ROCKER ARM ASSY
25	2172044SM	1	BRACKET, Roller, L H
26	1916965SM	4	LOCKWASHER, 3/8

42" Rotary Mower - Housing & Arbor Group

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 1690663



42" Rotary Mower - Housing & Arbor Group

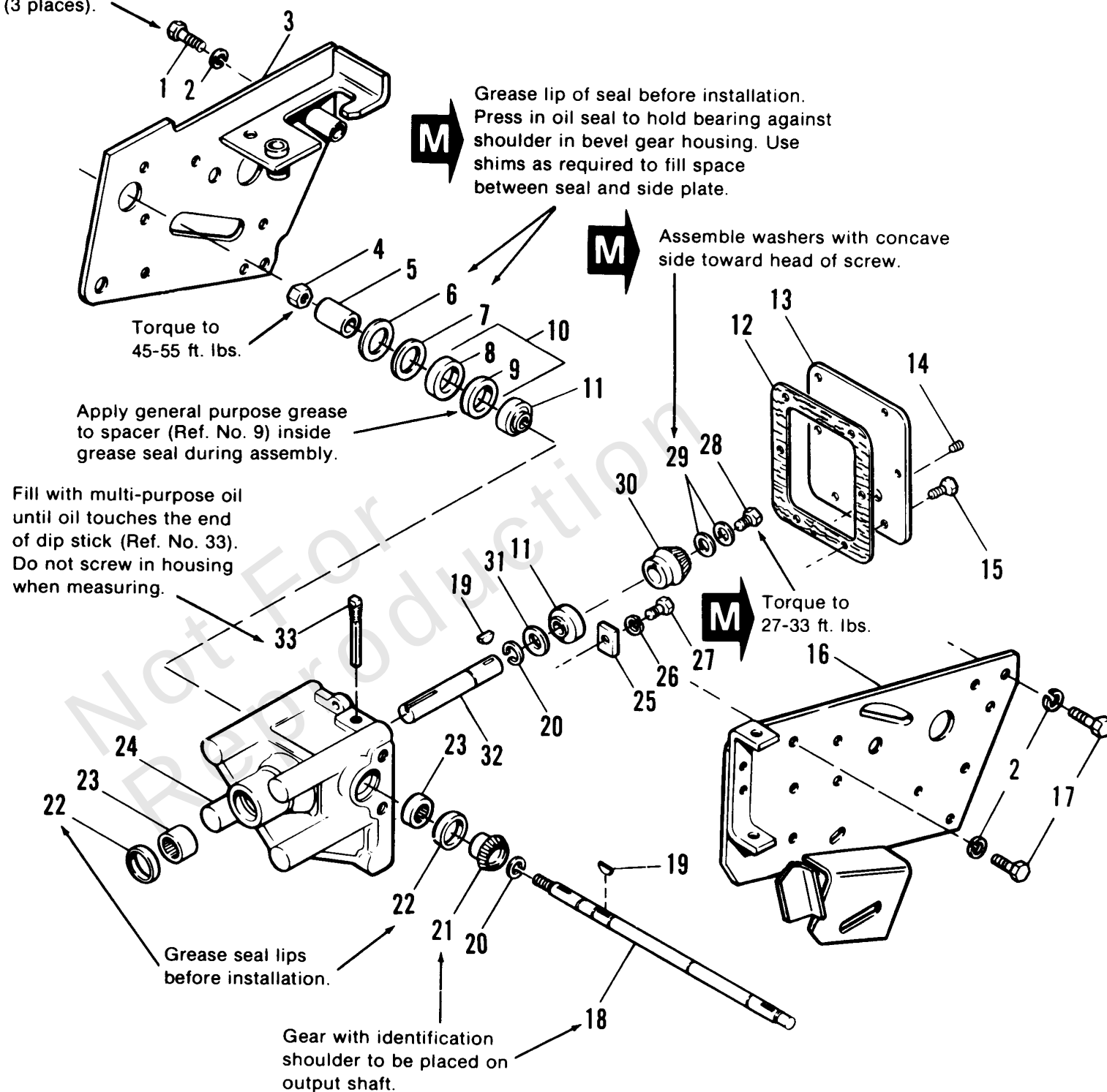
REF NO	PART NO	QTY	DESCRIPTION
1	1656929ASM	1	PULLY ASSY.
2	2823471SM	3	CAPSCREW, Hex Hd., 7/16-14 x 1-1/4
3	1918199SM	3	LOCKWASHER, 7/16
4	1933263SM	3	WASHER, Plain, 29/64
5	1655867ASM	2	PULLEY ASSY., Deck Drive
6	1657969SM	3	SHIELD, Bearing Upper, Arbor
7	1655729ASM	3	HOUSING-ARBOR TOP - B
8	2108202SM	6	BEARING, BALL
9	1685251SM	2	SHAFT & BEARING ASSY., Side (Includes Ref. Nos. 8, 10 8 17)
10	1685245SM	2	SHAFT, Arbor, Side (Includes Ref. No. 17)
11	1685246SM	1	SHAFT, Arbor, Center (Includes Ref. No. 17)
12	1685252SM	1	SHAFT B, BEARING ASSY., Center (Includes Ref. Nos. 8, 11 8 17)
13	1703273ASM	3	HOUSING, BOTTOM
14	1664847SM	18	SCREW, Hex Wash. Hd., Taptite, 5/16-18 x 3/4
15	2108219SM	2	FRONT BRACKET ASSY. -Used after Serial No. 15122
16	2108366SM	1	BAR, Reinforcement -Used after Serial No. 15122
17	1672132SM	3	COLLAR, Mower Arbor
18	1916965SM	6	LOCKWASHER, 3/8
19	1916950SM	6	NUT, Hex, Full, 3/8-16
20	1960268SM	4	BOLT, Carriage 3/8-16 x 1-1/4 -Used after Serial No. 15122
21	1685281SM	1	HOUSING, 42"
22	1931348SM	2	BOLT, Carriage 3/8-16 x 3/4
23	2108186SM	2	CLIP, Baffle
24	1675587SM	1	BAFFLE
25	1921959SM	2	CAPSCREW, Hex Hd., 1/4-20 x 5/8
26	1925592SM	2	SCREW, Thd. Cutting, 1/4-20 x 3/4
27	1916964SM	4	LOCKWASHER, 1/4
28	1916622SM	4	NUT, Hex, Full, 1/4-20
29	1921319SM	2	WASHER, Plain, 1/4
30	1931333SM	2	CARRIAGE BOLT, 5/16-18 x 3/4
31	2108224ASM	1	BRACKET, Roller, L.H.
32	1917356SM	4	LOCKWASHER, 5/16
33	1917372SM	4	NUT, Hex, Full, 5/16-18
34	1651500SM	1	BRACKET, R.H. -Used before Serial No. 15123
35	1651499	1	BRACKET, L.H. -Used before Serial No. 15123
36	1924356SM	2	WASHER, 13/32 -Used before Serial No. 15123
37	1921210SM	2	CAPSCREW, Hex Hd., 3/8-16 x 1 -Used before Serial No. 15123
38	1921965SM	2	CAPSCREW, Hex Hd., 3/8-16 x 3/4

Bevel Gear & Side Plate Group

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 1690663

Apply Loctite to threads when installing capscrews in gear case cover (3 places).



NOTE: Use standard hardware torque spec. chart unless otherwise noted.

Bevel Gear & Side Plate Group

REF NO	PART NO	QTY	DESCRIPTION
1	2820676SM	10	CAPSCREW-HEX HD 7/16-
2	2818199	12	LOCKWASHER, 7/16
3	1606609	1	PLATE ASSY., Side, R.H.
4	2822133	1	LOCKNUT, Hex, Jam, 3/4-16
5	2171792SM	1	SPACER
6	2171790SM	5	SHIM
7	2171791SM	1	SHIM
8	1685088SM	1	SEAL, Oil
9	1663111SM	1	SPACER
10	1685088SM	1	REPAIR KIT, Seal -Ref. No. 10 Includes Ref. Nos. 8 & 9.
11	2172256SM	2	BEARING, Ball
12	2154282SM	1	GASKET
13	2178104	1	COVER
14	2801652SM	1	PLUG, Pipe (if equipped)
15	2830526	6	CAPSCREW, Hex Hd., 1/4-20 x 5/8
16	1666793	1	PLATE ASSY., Side, L.H.
17	2820677	2	CAPSCREW, Hex Hd., 7/16-14 x 1-1/4
18	1685054SM	1	SHAFT, Driven
19	2805123SM	2	KEY, Woodruff, #9
20	2172206SM	2	RING, Retaining
21	2171796SM	1	GEAR, Bevel, Driven
22	2118117SM	2	SEAL, Oil
23	2154279SM	2	BEARING, Needle
24	1656877SM	1	HOUSING, Bevel Gear
25	2154040SM	1	PLATE, Bearing Clamp
26	1917356SM	1	LOCKWASHER, 5/16
27	2825205	1	CAPSCREW, Hex Hd., 5/16-18 x 5/8
28	153281	1	CAPSCREW, Hex Hd., 5/16-18 x 3/4
29	2177649SM	2	WASHER
30	2172752SM	1	GEAR, Bevel, Driven
31	2172753SM	1	WASHER
32	2172750SM	1	SHAFT, Driver
33	2178105SM	1	DIP STICK

Brake Group

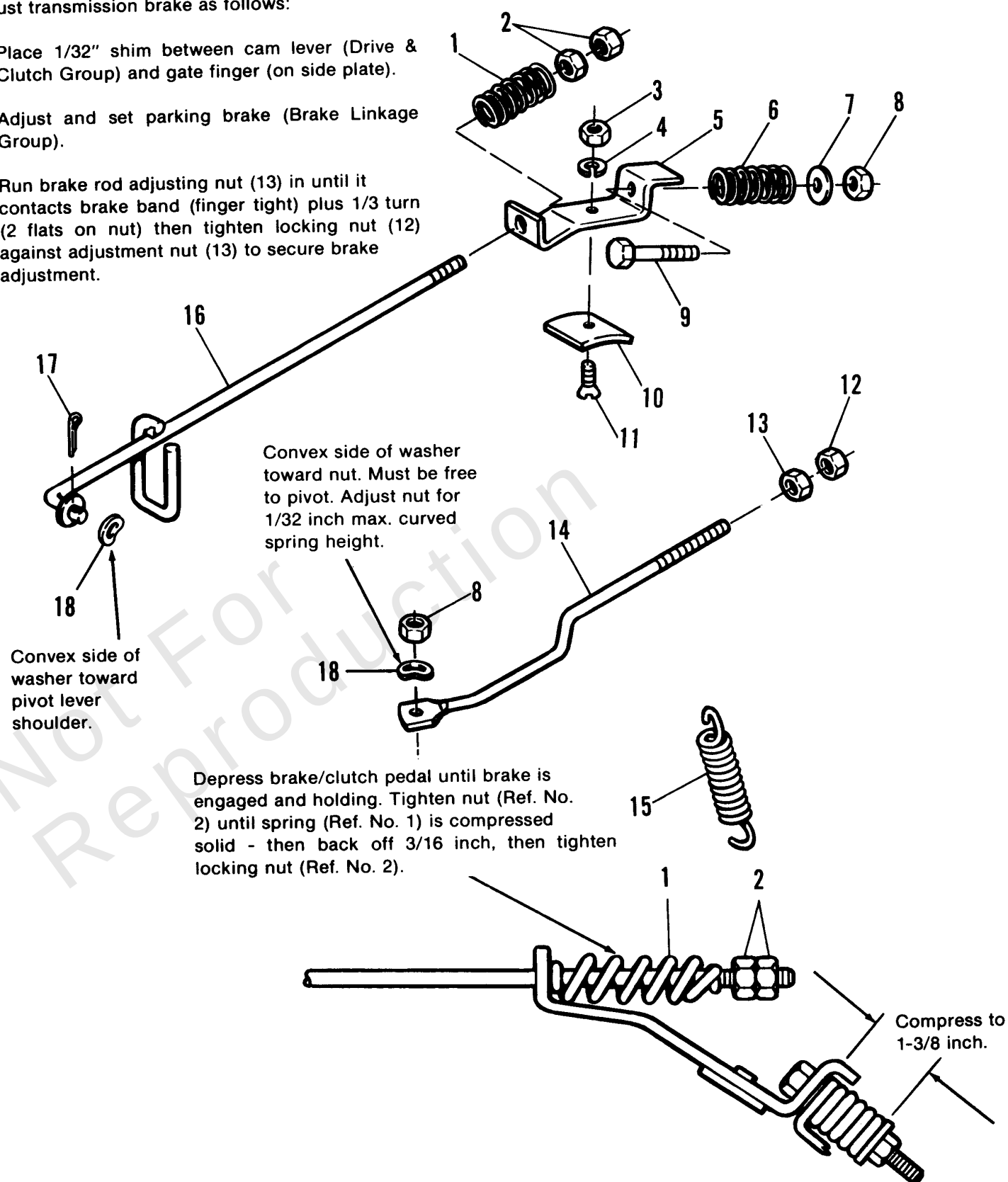
Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 1690663



Adjust transmission brake as follows:

- Place 1/32" shim between cam lever (Drive & Clutch Group) and gate finger (on side plate).
- Adjust and set parking brake (Brake Linkage Group).
- Run brake rod adjusting nut (13) in until it contacts brake band (finger tight) plus 1/3 turn (2 flats on nut) then tighten locking nut (12) against adjustment nut (13) to secure brake adjustment.



NOTE: Use standard hardware torque spec. chart unless otherwise noted.

Brake Group

REF NO	PART NO	QTY	DESCRIPTION
1	2157041SM	1	SPRING
2	1917372SM	2	NUT, Hex, Full, 5/16-18
3	2816621	1	NUT, Hex, Full, #10-24
4	1917356SM	1	LOCKWASHER, #10
5	1657545	1	STRAP
6	1610703	1	SPRING
7	2817377	1	WASHER, 1/4
8	2823362	2	LOCKNUT, Hex, 5/16-18
9	2819355	1	CAPSCREW, Hex Hd., 5/16-18 x 2-1/2
10	1610590SM	1	BRAKE, Sheave
11	2826267SM	1	SCREW, Machine, #10-24 x 5/8
12	2819439	1	LOCKNUT, Hex, Esna, 3/8-16
13	2816950SM	1	NUT, Hex, Full, 3/8-16
14	172722	1	ROD, Brake
15	2174896SM	1	SPRING
16	1608621	1	ROD ASSY., Pulley Brake
17	919313	1	PIN, Cotter, 3/32 x 1/2
18	1668737SM	2	WASHER, Curved Spring

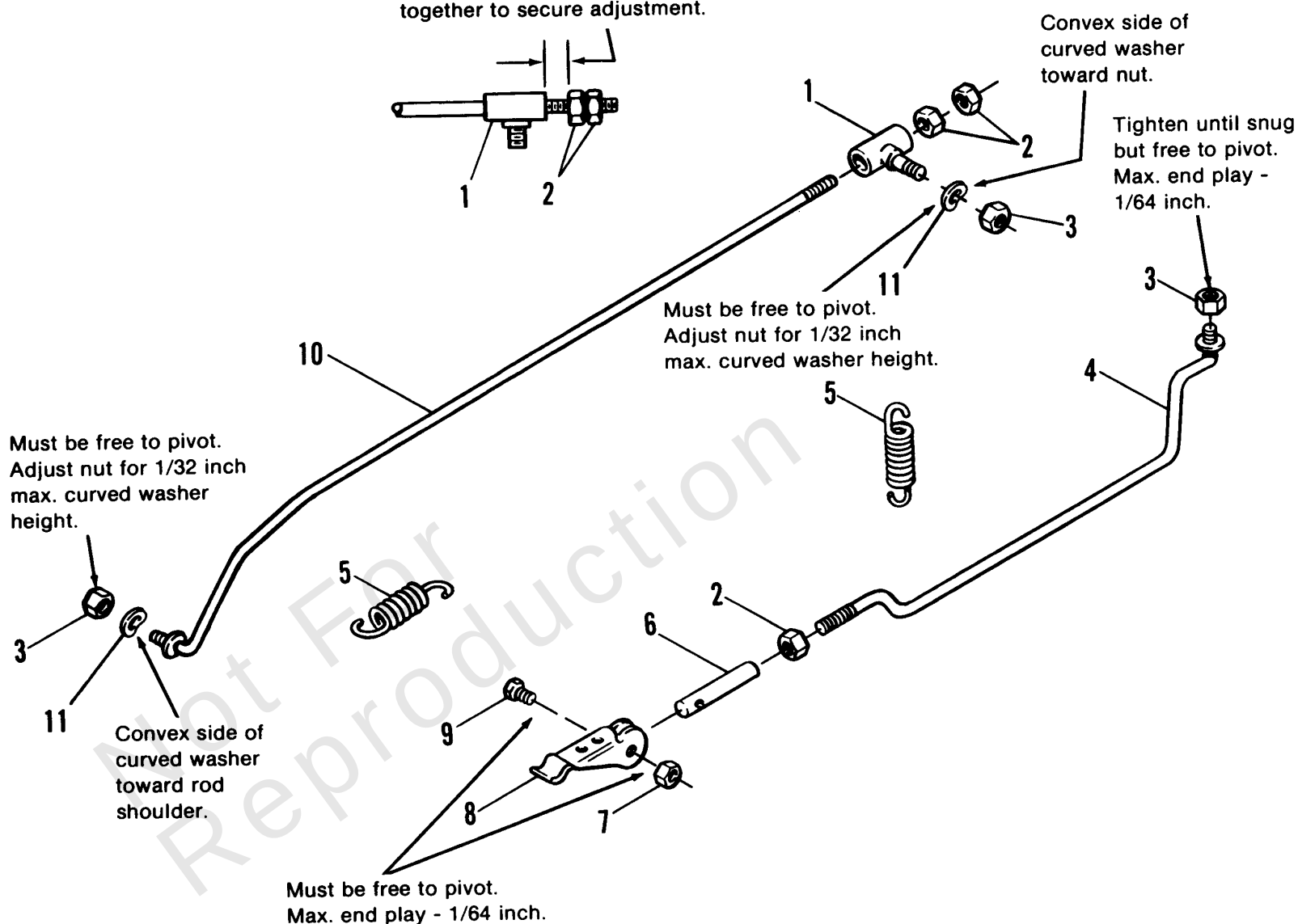
Brake Linkage Group

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 1690663



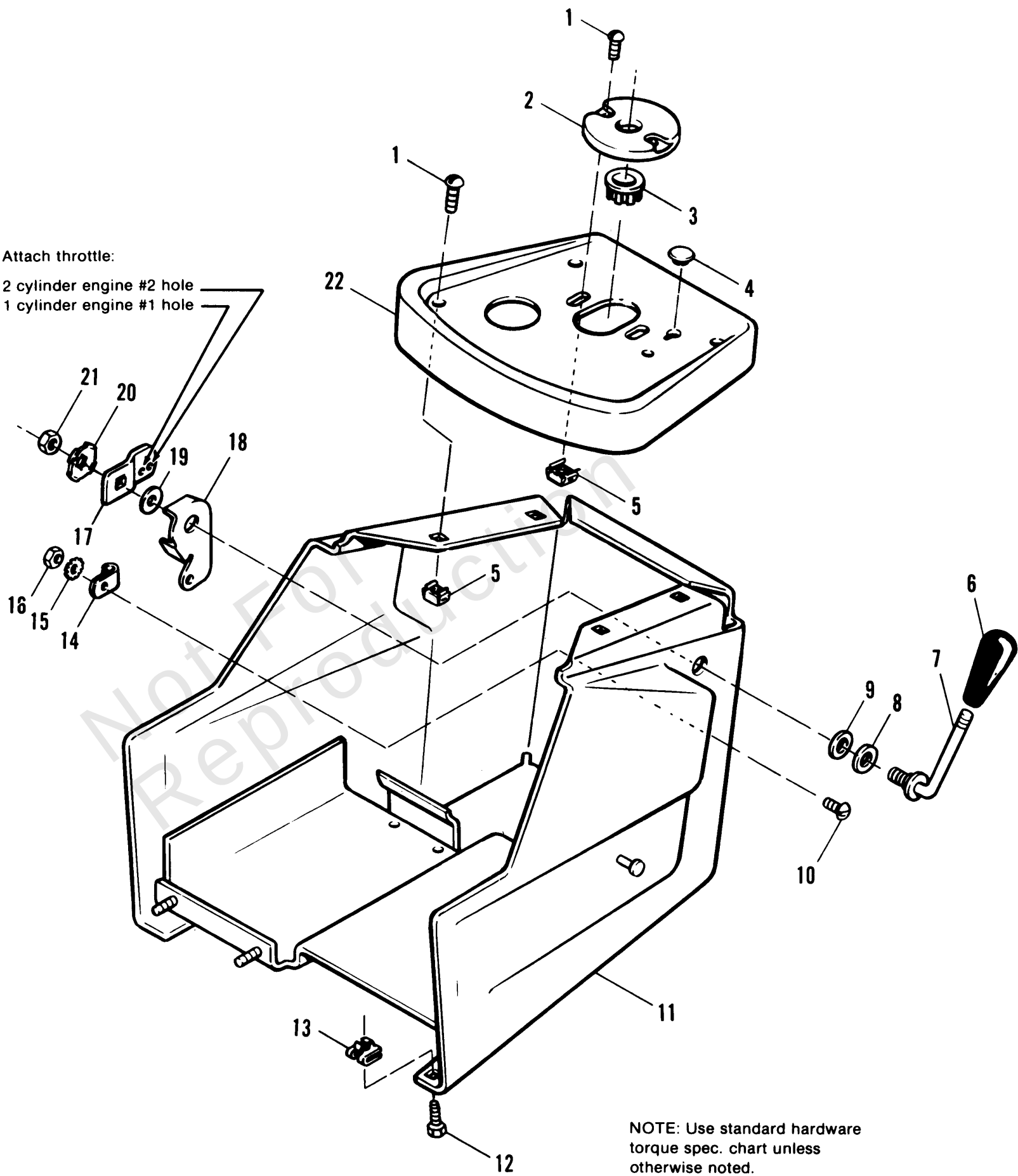
After idler to belt adjustment is complete (refer to Drive & Clutch Group), shift idler pulley to high range belt & adjust stop nuts (2) to clear rod guide (1) by 3/8 inch when clutch is engaged. Lock nuts together to secure adjustment.



NOTE: Use standard hardware torque spec. chart unless otherwise noted.

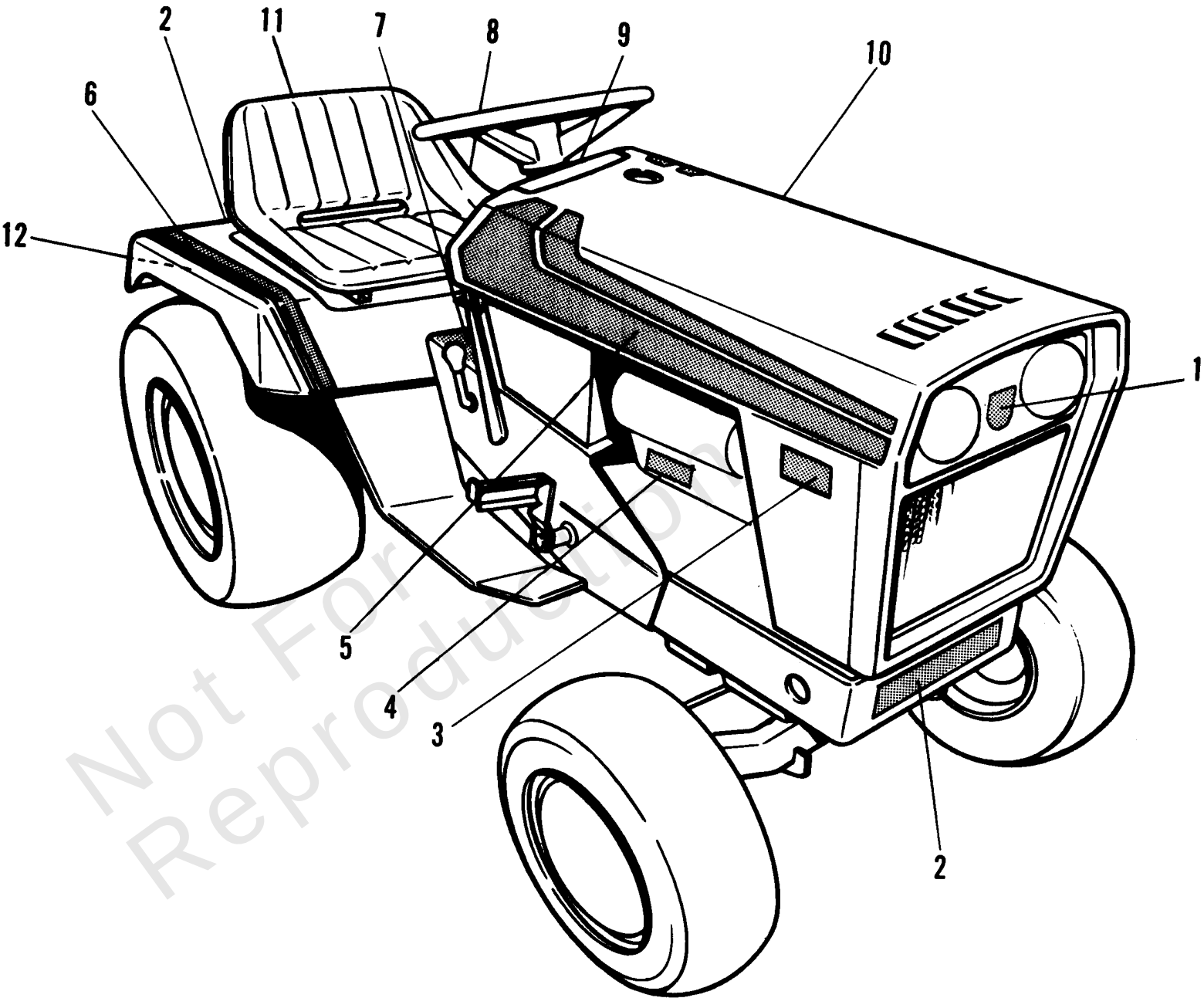
Brake Linkage Group

REF NO	PART NO	QTY	DESCRIPTION
1	2164094SM	1	GUIDE ASSY., Rod
2	1917372SM	3	NUT, Hex, Full, 5/16-18
3	2823362	3	LOCKNUT, Hex, 5/16-18
4	1666791	1	ROD ASSY., Parking Brake
5	2121037SM	2	SPRING
6	2171994SM	1	ROD, End
7	2823358	1	LOCKNUT, Hex, 1/4-20
8	2172108SM	1	LEVER, Parking Brake
9	2826771	1	CAPSCREW, Hex Hd., 1/4-20 x 1
10	1656455	1	ROD ASSY., Clutch & Brake
11	1668737SM	2	WASHER, Curved Spring



Dash Group

REF NO	PART NO	QTY	DESCRIPTION
1	2826025	6	SCREW, Machine, Rd. Hd., 1/4-20 x 1/2
2	2172008SM	1	PLATE, Adjusting, Steering
3	2157077SM	1	BUSHING
4	2177447	1	PLUG, Button
5	2817867	6	NUT, Tinnerman
6	2172038SM	1	KNOB
7	1686629SM	1	HANDLE, Clutch Control
8	2101025SM	1	WASHER
9	2156116	1	WASHER
10	2830531	1	SCREW, Round Hd., #10-32 x 1/2
11	1685408SM	1	DASH ASSY.
12	2830561	8	SCREW, Hex, Self Tapping, #14AB x 3/4
13	9287-03	6	NUT, Speed
14	2158475SM	1	CLIP, Bowden Wire
15	2822711	1	LOCKWASHER, Ext., #10
16	2817415	1	NUT, Machine, Hex, #10-32
17	1666703SM	1	ARM, Throttle
18	2103280SM	1	STOP, Throttle
19	159017	1	WASHER
20	2830665	1	LOCKWASHER, Dished Type, 3/8
21	1930645SM	1	LOCKNUT, Hex, 3/8-16
22	1651000SM	1	PANEL, Instrument



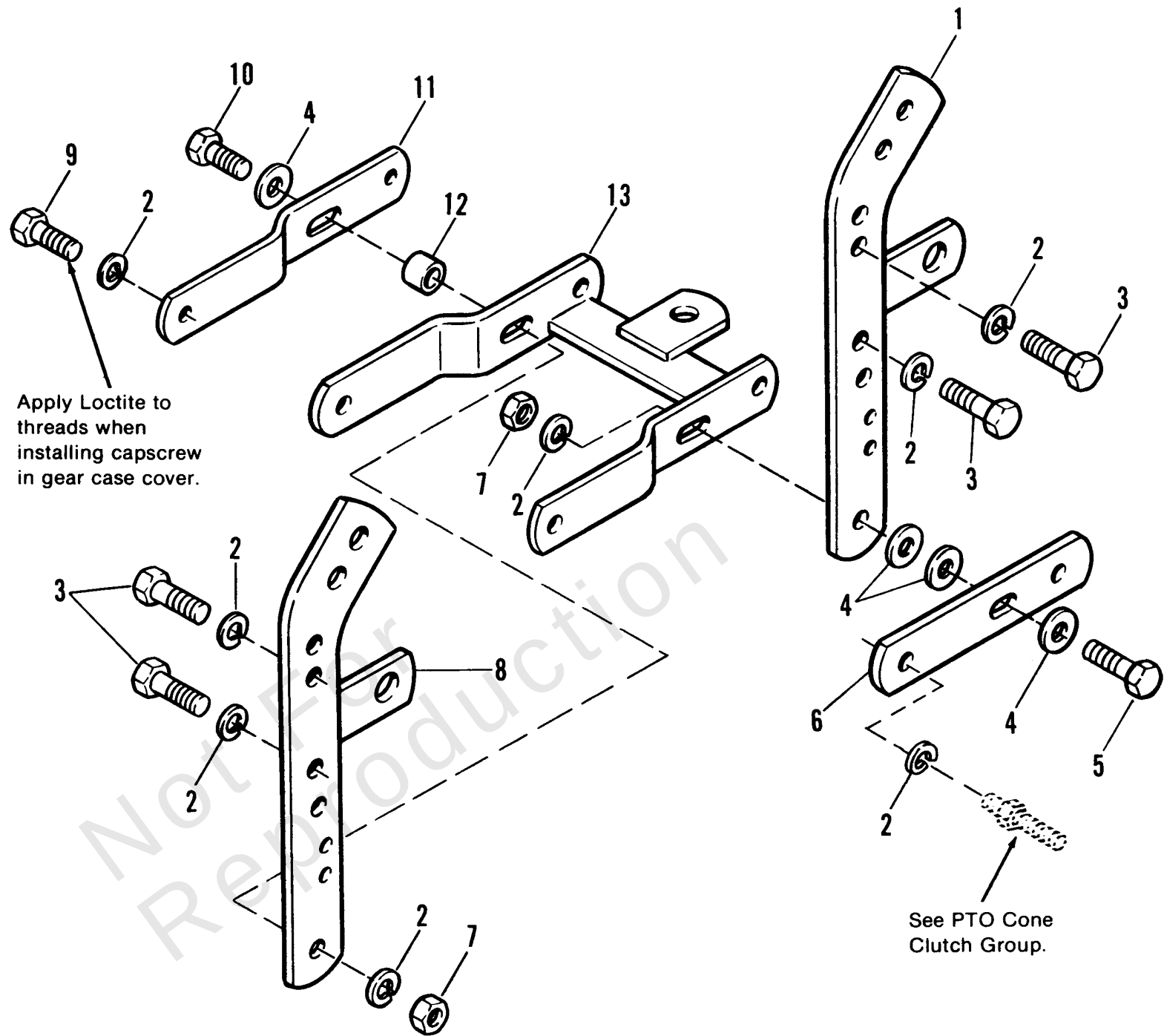
Decal Group

REF NO	PART NO	QTY	DESCRIPTION
1	1666854	1	DECAL, Grille, Simplicity (7117 only)
1	1669356	1	DECAL, Grille (7112 only)
2	2153166	2	DECAL, Simplicity (Qty. 1 on 7112)
3	1668166	2	DECAL, 7112
3	1668167	2	DECAL, 7117
4	1666853	2	DECAL, Twin 17
5	1669441SM	1	DECAL, Hood, RH (7117 only)
5	1669441SM	1	DECAL, Hood, RH (7112 only)
6	1657282	1	DECAL, Seat Deck, RH
7	1666874	1	DECAL, Console
8	1657283	1	DECAL, Seat Deck, LH
9	1666871	1	DECAL, Dash
10	1669442SM	1	DECAL, Hood, LH (7117 only)
10	1669422	1	DECAL, Hood, LH (7112 only)
11	1722551SM	1	DECAL, Seat (7112 only)
12	1669366	1	DECAL, Transmission (7112 only)
12	175216	1	FILM, Lift Lever (on lift lever handle)
12	1657555	1	DECAL, Battery (on battery)
12	2157096	1	DECAL, Caution (on top of engine)
12	1713543SM	1	DECAL, Drive Belts (inside hood)
12	1716534SM	1	DECAL, Warning (under seat deck)
12	1667175	1	DECAL, Adjustment (on left hand side plate)
12	1656050	1	STICKER, Inspection

Draw Bar Group

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 1690663



NOTE: Use standard hardware torque spec. chart unless otherwise noted.

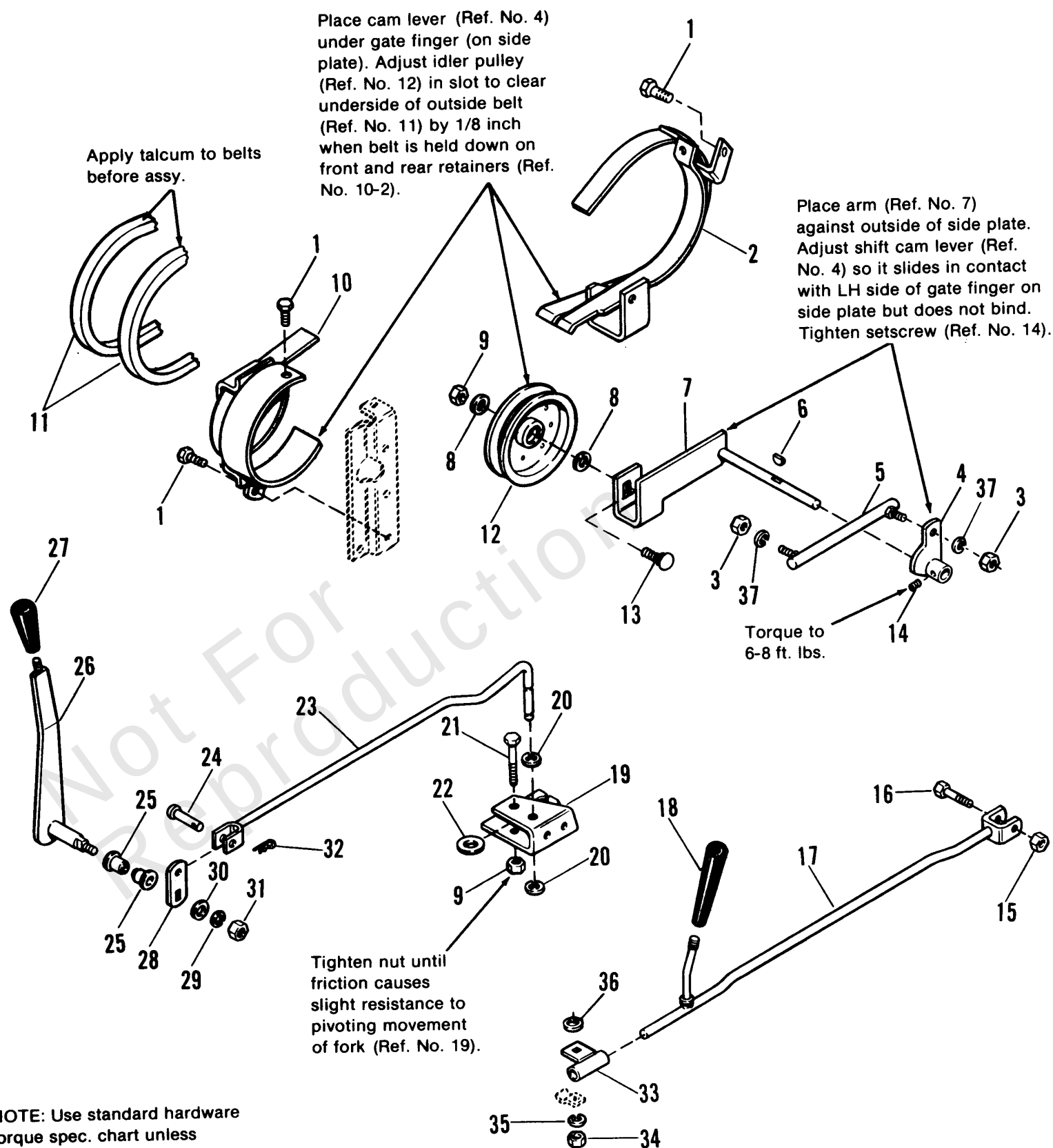
Draw Bar Group

REF NO	PART NO	QTY	DESCRIPTION
1	164304	1	ARM ASSY., L.H.
2	2818199	8	LOCKWASHER, 7/16
3	2820676SM	4	CAPSCREW-HEX HD 7/16-
4	2818430	4	WASHER, Plain, 7/16
5	2820677	1	CAPSCREW, Hex Hd., 7/16-14 x 1-1/4
6	157091	1	BAR, Pull, L.H.
7	2818213	2	NUT, Hex, Full, 7/16-14
8	164284	1	ARM ASSY., R.H.
9	2823027	1	CAPSCREW, Hex Hd., 7/16-14 x 1-3/4
10	926109	1	CAPSCREW, Hex Hd., 7/16-14 x 2-1/4
11	154203	1	BAR, Draw, R.H.
12	1608759SM	1	SPACER
13	154202	1	DRAW BAR ASSY.

Drive & Clutch Group

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 1690663



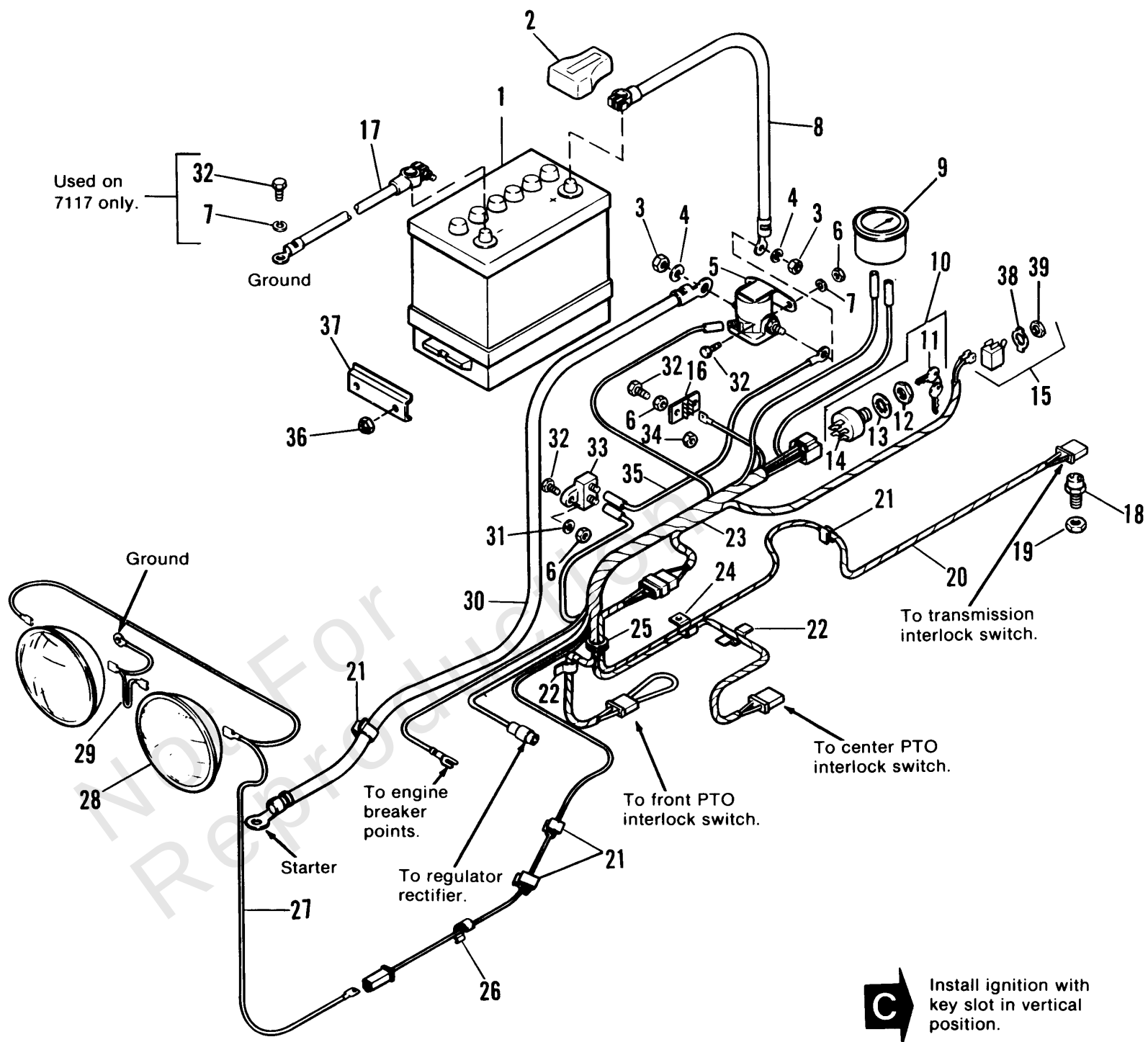
Drive & Clutch Group

REF NO	PART NO	QTY	DESCRIPTION
1	2824856	3	SCREW, Hex Hd., Taptite, 5/16-18 x 1/2
2	1657546	1	RETAINER ASSY., Rear
3	2820263SM	2	NUT, Hex, Full, 5/16-24
4	1607026	1	LEVER ASSY., Cam Shaft
5	1606568	1	JOINT, Ball
6	2805121SM	1	KEY, Woodruff, #5
7	1607025	1	ARM ASSY., Idler
8	2817642	2	WASHER, Plain, 5/16
9	1930645SM	2	LOCKNUT, Hex, 3/8-16
10	1657077	1	RETAINER ASSY., Belt
11	1607967SM	2	V-BELT, Drive
12	1606554SM	1	PULLEY, Idler
13	2822249	1	BOLT, Rd. Hd., 3/8-16 x 1-1/4
14	2828804	1	SETSCREW, 1/4-20 x 1/4
15	2823362	1	LOCKNUT, Hex, 5/16-18
16	2830570	1	CAPSCREW, Hex Hd., 5/16-18 x 1-1/2
17	171559	1	ROD ASSY., Shift
18	2164180	1	HANDLE, Shift Rod
19	1606567	1	FORK, Shift
20	2832724SM	2	E-RING
21	2823701	1	CAPSCREW, Hex Hd., 3/8-16 x 2
22	1657516	1	WASHER
23	1656457	1	ROD ASSY., Control
24	1651167SM	1	PIN
25	2108419	2	BUSHING
26	1656454	1	LEVER ASSY., Control
27	2172038SM	1	KNOB
28	164123	1	LINK
29	1916965SM	1	LOCKWASHER, 3/8
30	1924940SM	1	WASHER, Plain, 3/8
31	2816950SM	1	NUT, Hex, Full, 3/8-16
32	2818447	1	PIN, Cotter, 3/32 x 3/4
33	157020	1	GUIDE ASSY., Shift Rod
34	2816622SM	1	NUT, Hex, Full, 1/4-20
35	2816964SM	1	LOCKWASHER, 1/4
36	2822755	1	WASHER, Plain, 3/8
37	1917356SM	2	LOCKWASHER, 5/16

Electrical Group

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 1690663



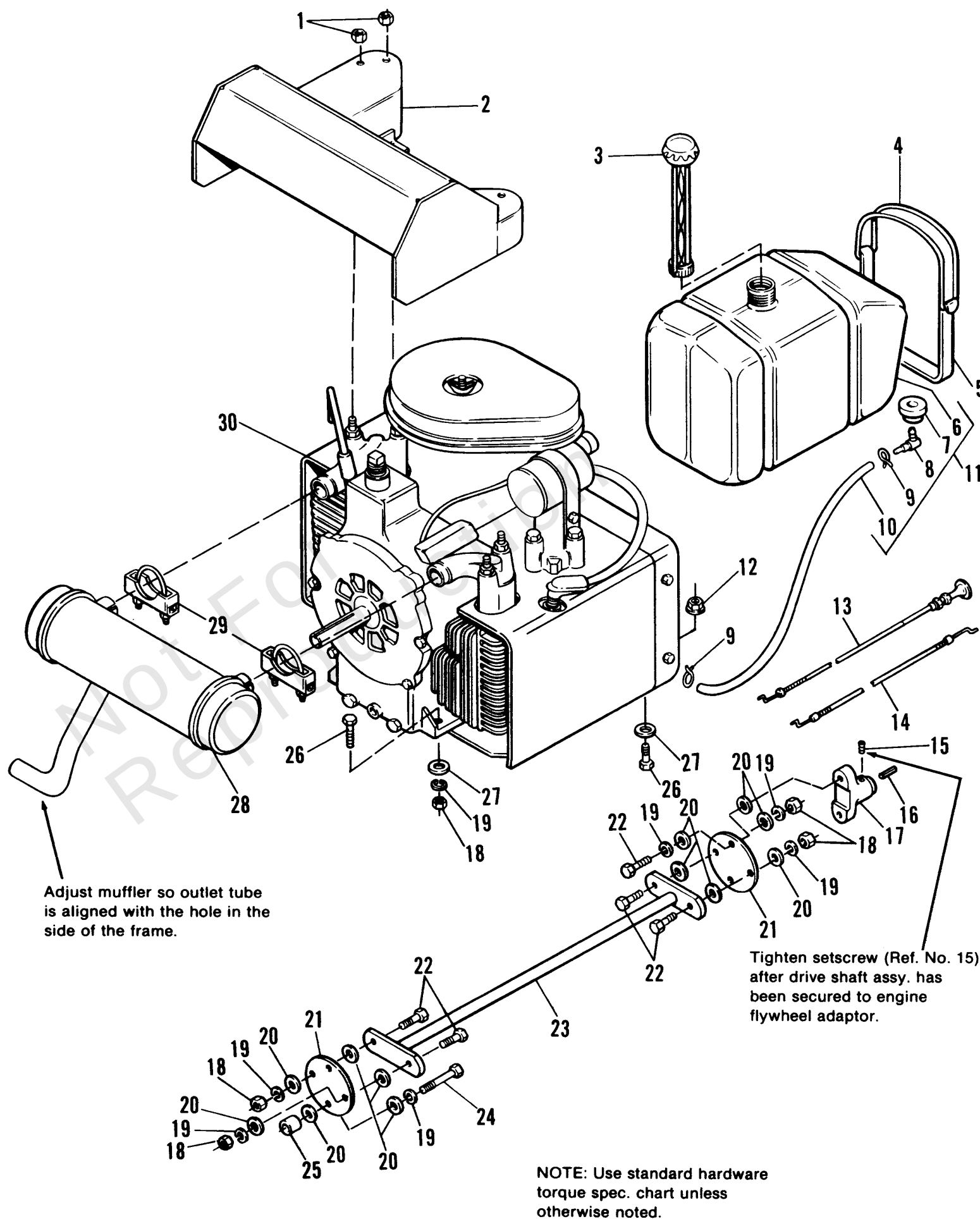
NOTE: Use standard hardware torque spec. chart unless otherwise noted.

Electrical Group

REF NO	PART NO	QTY	DESCRIPTION
1	1685058SM	1	BATTERY (Includes Decals)
2	1713534SM	1	PROTECTOR, Terminal
3	1917372SM	2	NUT, Hex, Full, 5/16-18
4	1917356SM	2	LOCKWASHER, 5/16
5	2122216SM	1	SOLENOID, Starter
6	2816622SM	5	NUT, Hex, Full, 1/4-20
7	2816964SM	2	LOCKWASHER, 1/4 (Qty. 3 on 7117)
8	1665235SM	1	CABLE (Battery to Solenoid)
9	1603189SM	1	AMMETER
10	1607280SM	1	SWITCH & KEY ASSY., Ignition -Ref. No. 10 Includes Ref. Nos. 11, 12, 13, & 14.
11	1717163SM	1	KEY-IGNITION INDAK
12	122235	1	NUT, Special
13	2818906	1	LOCKWASHER, Int., 5/8
14	-----	1	SWITCH, Ignition (See Ref. No. 10)
15	2122184SM	1	SWITCH, Toggle
16	1665230SM	1	BOARD, Terminal
17	2171811SM	1	CABLE (Battery to Ground)
18	2177522SM	1	SWITCH, Interlock
19	1930647	1	NUT, Pal
20	1665236	1	WIRE ASSY.
21	2172434SM	4	CLIP- WIRE DIA .390
22	176912	2	CLIP, Tinnerman
23	1666327	1	HARNESS ASSY.
24	2832771	1	CLIP, Cable
25	2172175	1	GROMMET
26	2172436SM	1	CLIP, Tinnerman
27	1666665SM	1	WIRE ASSY.
28	1665853SM	2	LAMP, Sealed Beam, G.E. #4411-1
29	1666731	1	WIRE ASSY.
30	1666328SM	1	CABLE (Solenoid to Starter)
31	921880	1	LOCKWASHER, 1/4
32	2821959	5	CAPSCREW, Hex Hd., 1/4-20 x 5/8 (Qty. 6 on 7117)
33	1665238SM	1	BREAKER-CIRCUIT
34	2823358	2	LOCKNUT, Hex, 1/4-20
35	1665237SM	1	WIRE ASSY.
36	2824433	2	LOCKNUT, Elastic, 5/16-18
37	2171225SM	1	CLAMP
38	1650878	1	PLATE
39	1650880	1	NUT, Switch

Footnotes:

Note:* Not serviced separately, order complete ignition switch.



Engine, Exhaust & Drive Shaft Group - 7117

REF NO	PART NO	QTY	DESCRIPTION
1	2829001	4	LOCKNUT, Hex, Flange, 5/16-18
2	1666940SM	1	SHIELD ASSY., Heat
3	2171252SM	1	CAP, Fuel Tank
4	2172744SM	2	STRAP, Fuel Tank
5	2171330SM	2	STRAP, Tank
6	-----	1	TANK, Fuel (See Ref. No. 11)
7	1654930SM	1	BUSHING
8	1664460SM	1	FITTING
9	2154372	2	CLAMP, Hose
10	1718678SM	1	HOSE, Fuel
11	1687040SM	1	TANK ASSY., Fuel -Ref. No. 11 includes Ref. Nos. 6, 7, 8, 9 (Qty. 1) & 10.
12	2828352	1	LOCKNUT, Hex, Flange, Whiz, 3/8-16
13	1666269SM	1	CONTROL, Choke
14	1666266SM	1	CONTROL, Throttle
15	2824624	1	SETSCREW, 3/8-24 x 3/8
16	2157427SM	1	KEY
17	2172264SM	1	FLANGE, Drive Shaft
18	2816950SM	7	NUT, Hex, Full, 3/8-16
19	1916965SM	11	LOCKWASHER, 3/8
20	2157424SM	16	WASHER, Special
21	2173026SM	2	COUPLING
22	1920415SM	6	CAPSCREW, Hex Hd., 3/8-16 x 1-1/4
23	1666118SM	1	SHAFT ASSY., Drive
24	2822130	2	CAPSCREW, Hex Hd., 3/8-16 x 2-1/4
25	1656397SM	2	SPACER
26	2821969	4	CAPSCREW, Hex Hd., 3/8-16 x 1-1/2
27	1924940SM	4	WASHER, Plain, 3/8
28	1666923SM	1	MUFFLER, Exhaust
29	2835040SM	2	CLAMP, Exhaust
30	-----	1	ENGINE, 17 HP Kohler

Footnotes:

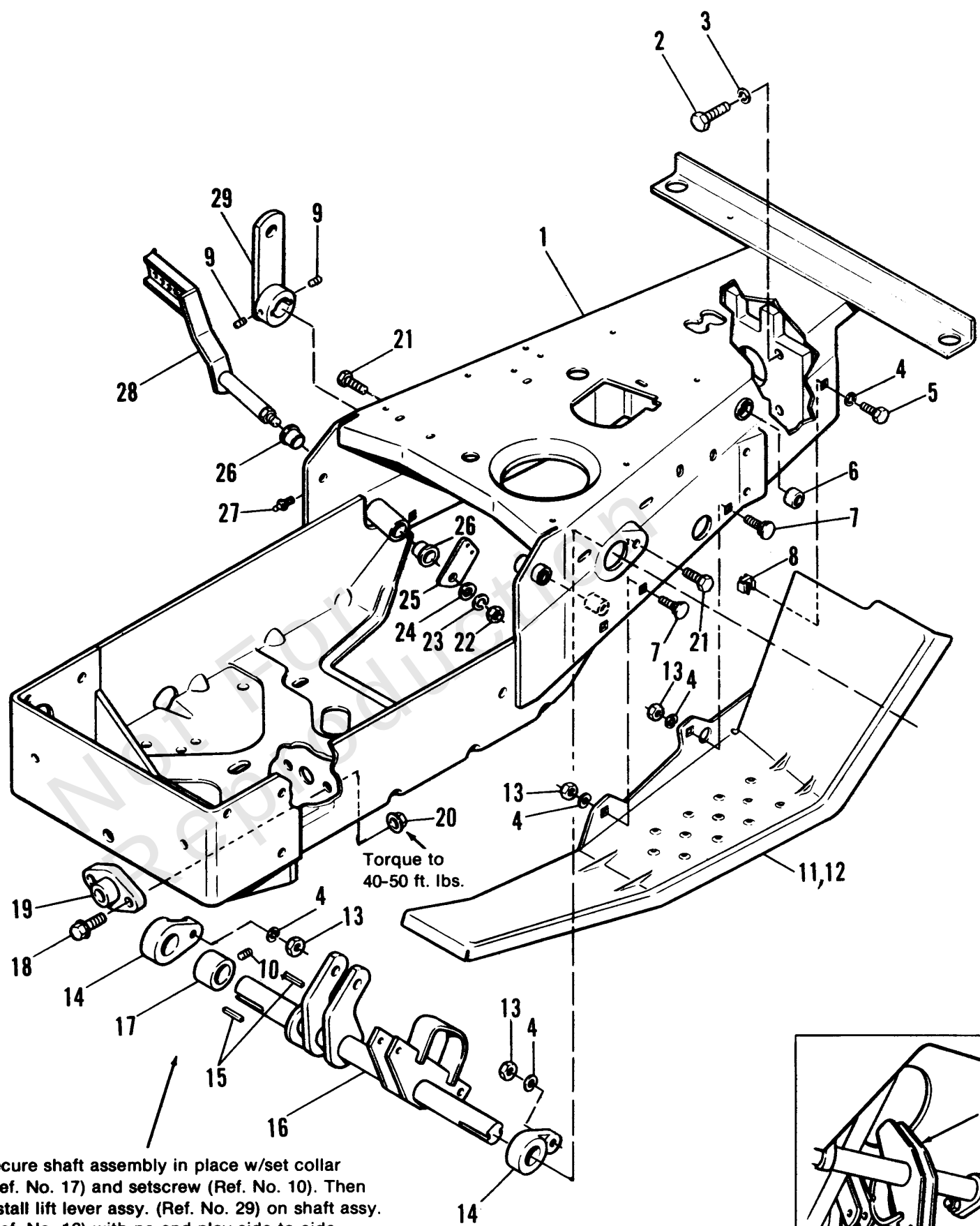
Note:* See your local Kohler Distributor for engine parts and service.

Note:* Not serviced separately, order complete tank assembly.

Frame & Footrest Group

Note: Unless noted otherwise, use the standard torque specifications

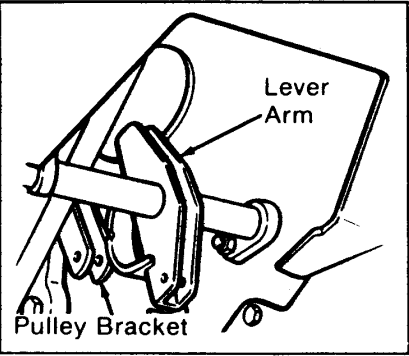
Mfg. No: 1690663



Secure shaft assembly in place w/set collar (Ref. No. 17) and setscrew (Ref. No. 10). Then install lift lever assy. (Ref. No. 29) on shaft assy. (Ref. No. 16) with no end play side-to-side.

NOTE: Use standard hardware torque spec. chart unless otherwise noted,

Position shaft assy. (Ref. No. 16) by aligning lever arm with center of lift cable pulley bracket on left hand side of frame. (See reference drawing.)



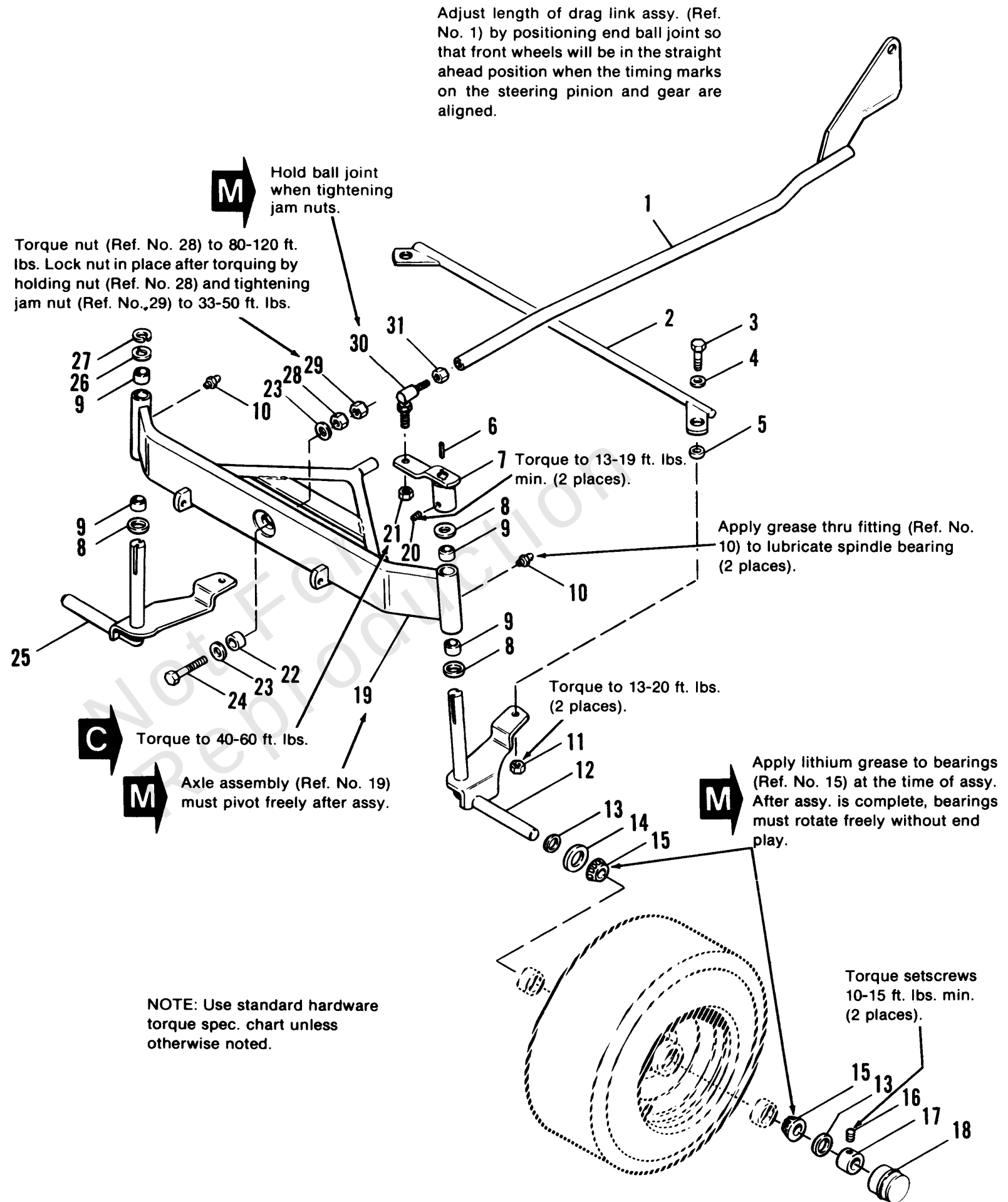
Frame & Footrest Group

REF NO	PART NO	QTY	DESCRIPTION
1	1671419	1	FRAME ASSY., w/Bushings (7112 only) -Ref. No. 1 includes Ref. Nos. 6 & 27.
1	1671380	1	FRAME ASSY., w/Bushings (7117 only)
2	2821212	4	CAPSCREW, Hex Hd., 7/16-14 x 1-1/2
3	2818199	4	LOCKWASHER, 7/16
4	1917356SM	8	LOCKWASHERS, 5/16
5	2821332	2	CAPSCREW, Hex Hd., 5/16-18 x 3/4
6	2174662SM	1	BUSHING
7	2820562	4	BOLT, Carriage, 5/16-18 x 3/4
8	2820470	2	NUT, Speed, 5/16-18
9	2828734	2	SETSCREW, 5/16-18 x 1/4
10	2828709	1	SETSCREW, 5/16-18 x 3/8
11	1665908SM	1	FOOTREST, LH
12	1665909SM	1	FOOTREST, RH
13	1917372SM	6	NUT, Hex, Full, 5/16-18
14	2170975SM	2	BEARING, Lift Lever
15	2157652	2	KEY
16	1667271SM	1	SHAFT ASSY., Lift
16	1663168	1	SHAFT ASSY., Lift (7112 only)
17	2157624	1	COLLAR, Set
18	2828727	2	SCREW, Hex, Whiz, Flange, 3/8-16 x 1-1/4
19	1653876SM	1	BEARING, Pivot
20	2828352	2	LOCKNUT, Hex, Flange, 3/8-16
21	2821977	2	CAPSCREW, Hex Hd., 5/16-18 x 1-3/4
22	2816950SM	1	NUT, Hex, Full, 3/8-16
23	1916965SM	1	LOCKWASHER, 3/8
24	1924940SM	1	WASHER, Plain, 3/8
25	2157300SM	1	ARM, Foot Pedal
26	2108419	2	BUSHING
27	2821133SM	1	FITTING, Grease
28	1674137SM	1	PEDAL ASSY., Foot
29	2157625SM	1	LEVER ASSY., RH

Front Axle Group

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 1690663



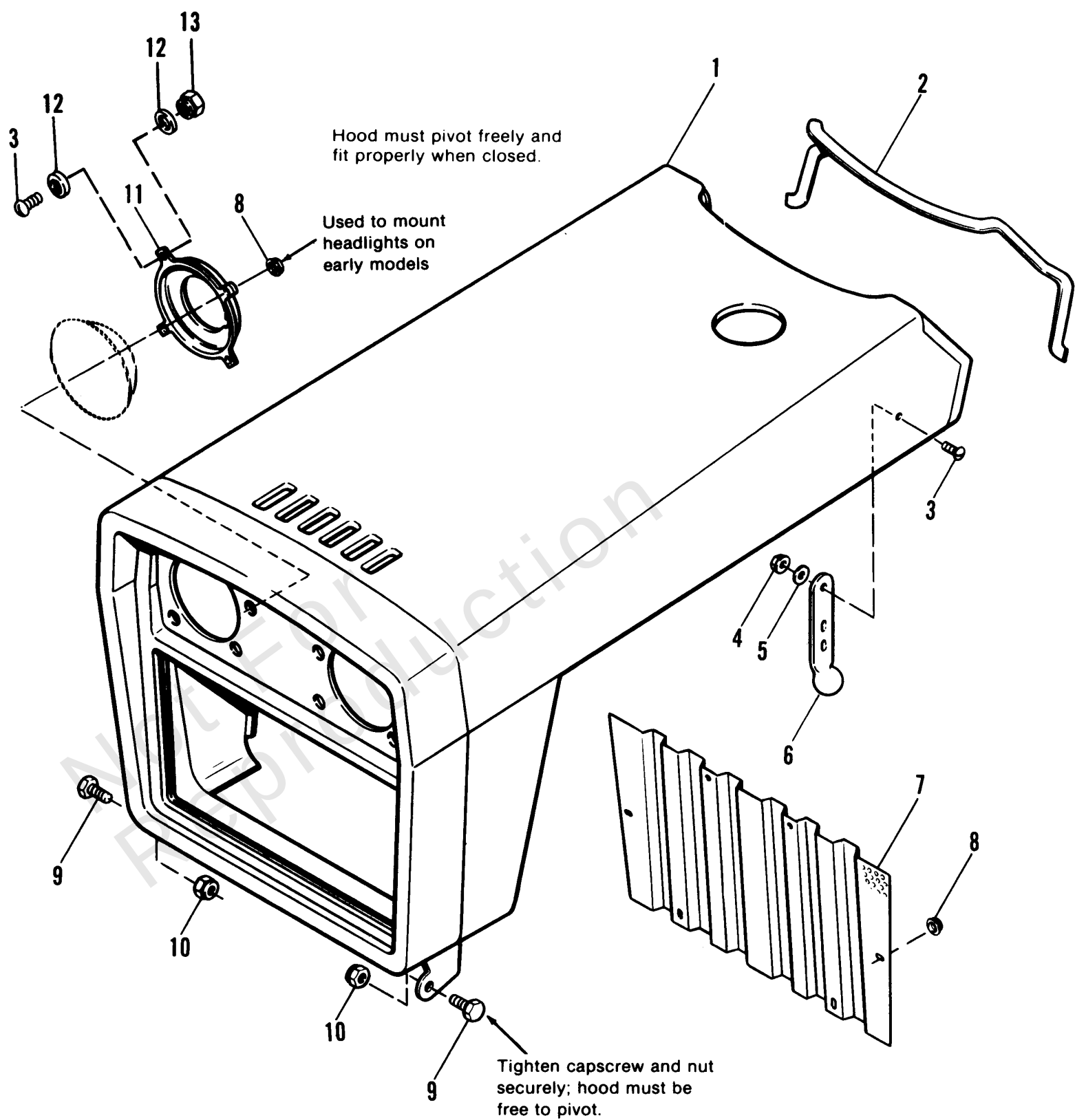
Front Axle Group

REF NO	PART NO	QTY	DESCRIPTION
1	1666648SM	1	LINK ASSY., Drag
2	2157499SM	1	ROD ASSY., Tie
3	2821210	2	CAPSCREW, Hex Hd., 3/8-16 x 1
4	1924940SM	2	WASHER, Plain, 3/8
5	2154177SM	2	SPACER
6	2157427SM	2	KEY, Square
7	2170998SM	1	ARM ASSY., Steering
8	2108181	3	WASHER
9	2154289SM	4	BUSHING
10	2814687	2	FITTING, Grease
11	1930645SM	2	LOCKNUT, Hex, 3/8-16
12	2171774ASM	1	SPINDLE ASSY., LH
13	2171375SM	4	SPACER
14	2170168SM	2	SEAL
15	2154486SM	4	CONE, Bearing
16	2828691	2	SETSCREW, 5/16-18 x 5/16
17	1729254SM	2	COLLAR, Set
18	2154487SM	2	CAP, Hub
19	1650553SM	1	AXLE ASSY., Front
20	2828721	2	SETSCREW, 5/16-18 x 1/2
21	2830245	1	LOCKNUT, Hex, 1/2-20
22	2157618SM	1	SPACER
23	2818431	2	WASHER, Plain, 1/2
24	2827496	1	CAPSCREW, Hex Hd., 1/2-13 x 2-1/4
25	2157494SM	1	SPINDLE ASSY., RH
26	1729259SM	1	WASHER
27	2827794SM	1	KLIPRING, .75 Dia Shaft
28	2830648	1	LOCKNUT, Hex, 1/2-13
29	2813744	1	LOCKNUT, Hex, Jam, 1/2-13
30	2164272SM	1	BALL, Joint
31	2819262	1	LOCKNUT, Hex, Jam, 1/2-20

Hood & Grill Group

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 1690663



NOTE: Use standard hardware torque spec. chart unless otherwise noted.

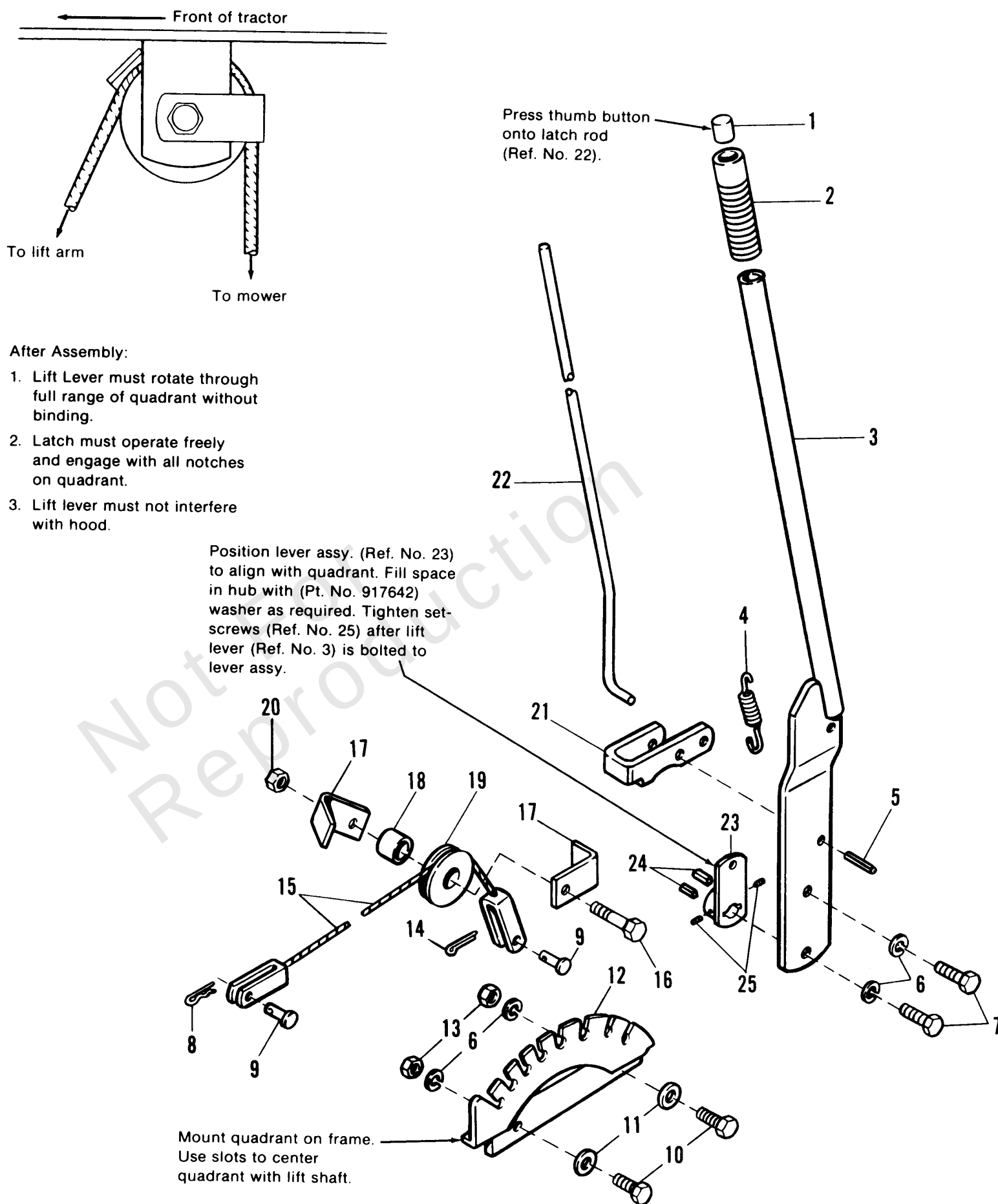
Hood & Grill Group

REF NO	PART NO	QTY	DESCRIPTION
1	1669399	1	HOOD & GRILLE ASSY. -Used on later model tractors where attaching hardware is separate from the hood.
1	1665945	1	HOOD & GRILLE ASSY. -Used on early model tractors. Hood is equipped with weld studs to mount headlights. Qty. 14, required of Ref. No. 8 for this style.
2	1666163SM	1	MOULDING, Hood
3	2830531	6	SCREW, Truss Hd., #10-32 x 1/2 (Qty. 2 used on early models) -Used on later model tractors where attaching hardware is separate from the hood.
4	2830627	2	LOCKNUT, Hex, #10-32
5	2171804	2	WASHER, Special
6	2171600SM	2	STRAP, Hood
7	1666148SM	1	SCREEN
8	1960517SM	6	LOCKNUT, Pal
9	2821210	2	CAPSCREW, Hex Hd., 3/8-16 x 1
10	1930645SM	2	LOCKNUT, Hex, 3/8-16
11	1665813SM	2	BRACKET, Headlight
12	2817380	8	WASHER, Flat, 3/16 -Used on later model tractors where attaching hardware is separate from the hood.
13	2828919	4	NUT & WASHER, #10-32 -Used on later model tractors where attaching hardware is separate from the hood.

Lift Lever & Cable Group

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 1690663



NOTE: Use standard hardware torque spec. chart unless otherwise noted.

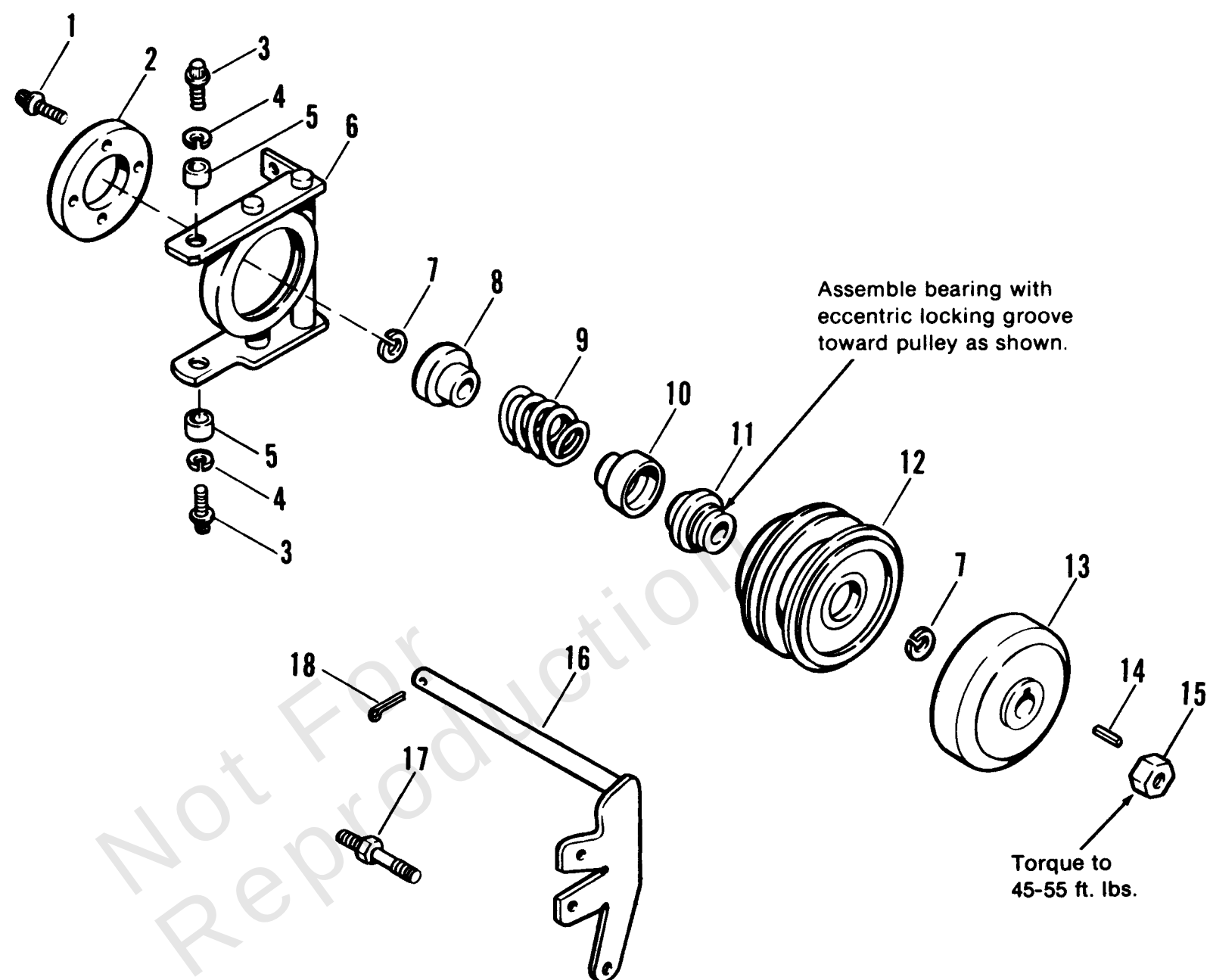
Lift Lever & Cable Group

REF NO	PART NO	QTY	DESCRIPTION
1	1650157SM	1	BUTTON
2	2156209	1	GRIP
3	1666257SM	1	LEVER ASSY., Lift
4	1650155SM	1	SPRING
5	918390	1	PIN, Spring, 3/8 x 1-1/4
6	1916965SM	4	LOCKWASHER, 3/8
7	2823490	2	CAPSCREW, Hex Hd., 3/8-16 x 1
8	1918196SM	1	CLIP, Spring
9	1708298SM	2	PIN
10	2821966	2	CAPSCREW, Hex Hd., 3/8-16 x 7/8
11	2817642	2	WASHER, Plain, 5/16
12	171599	1	QUADRANT
13	2816950SM	2	NUT, Hex, Full, 3/8-16
14	2818448	1	PIN, Cotter, 3/32 x 1
15	1673700SM	1	CABLE ASSY., Lift
16	2108418	1	SCREW, Special
17	2174723SM	2	GUARD, Cable
18	2157081SM	1	SPACER
19	2172725SM	1	PULLEY
20	2828731	1	LOCKNUT, Hex, Jam, 3/8-16
21	173039	1	LATCH, Lift Lever
22	1666663	1	ROD, Latch
23	171593	1	LEVER ASSY., Lift
24	2157652	2	KEY
25	2828734	2	SETSCREW, 5/16-18 x 1/4

PTO Cone Clutch Group

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 1690663



NOTE: Use standard hardware torque spec. chart unless otherwise noted.

PTO Cone Clutch Group

REF NO	PART NO	QTY	DESCRIPTION
1	2820036SM	4	CAPSCREW, Socket Hd., 1/4-20 x 5/8
2	2173957SM	1	BRAKE, Disc
3	1960086SM	2	SCREW, TRUSS HD TORX
4	1917356SM	2	LOCKWASHER, 5/16
5	2171371SM	2	SPACER
6	1650906SM	1	PIVOT ASSY.
7	2172206SM	2	RING, Retaining
8	1671339SM	1	GUIDE, Spring
9	2171772SM	1	SPRING
10	1671339SM	1	GUIDE, Spring
11	1650254SM	1	BEARING ASSY.
12	1650304SM	1	PULLEY
13	2174862SM	1	PLATE ASSY., Clutch
14	2805123SM	1	KEY
15	2822133	1	LOCKNUT, Hex, 3/4-16
16	1666781SM	1	ARM ASSY., Pivot
17	2157273SM	1	STUD
18	2818459	1	PIN, Cotter, 3/16 x 1-1/2

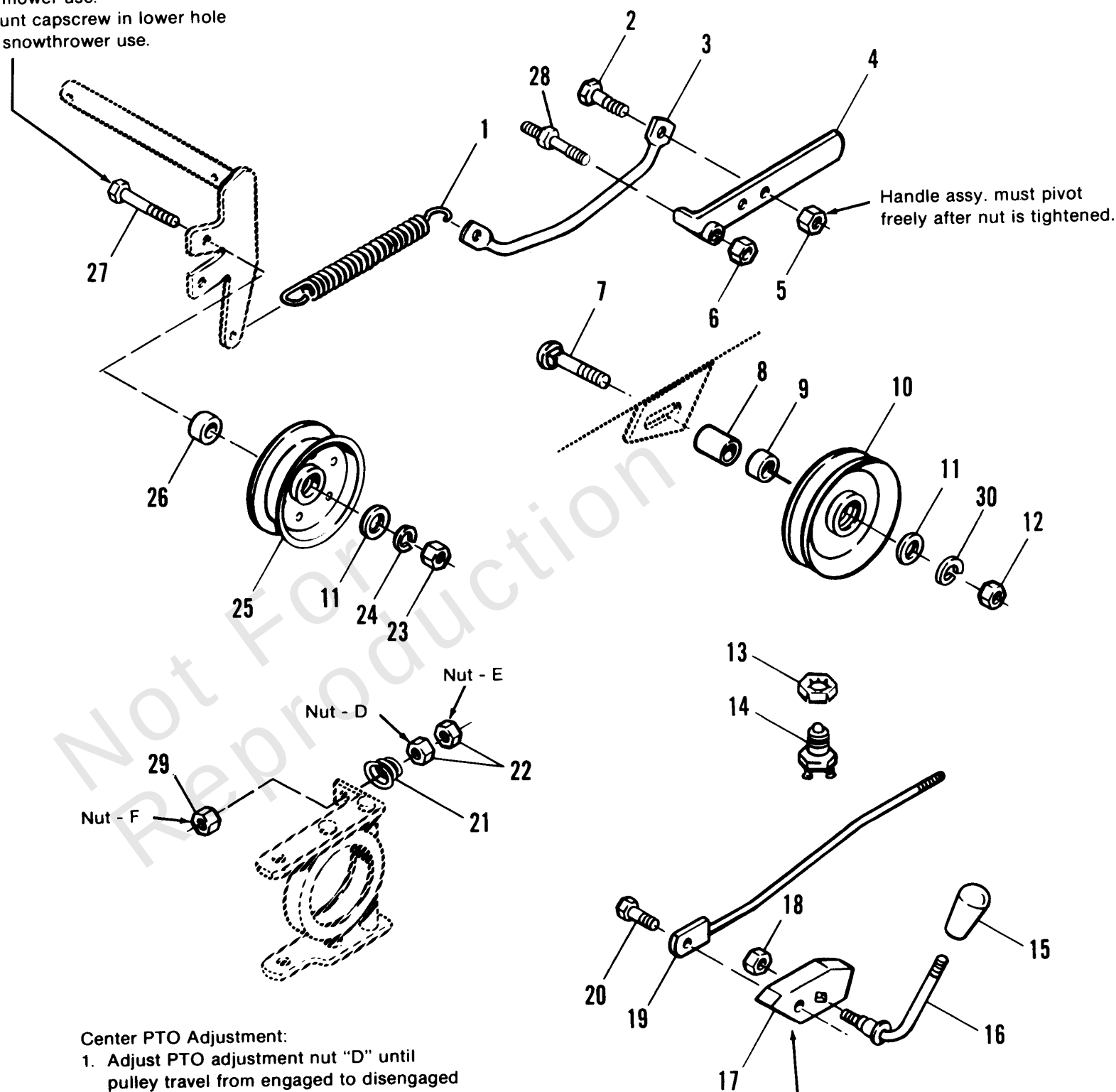
PTO Control Group

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 1690663

Mount capscrew in upper hole
for mower use.

Mount capscrew in lower hole
for snowthrower use.



Center PTO Adjustment:

1. Adjust PTO adjustment nut "D" until pulley travel from engaged to disengaged position equals $1/16 + 1/32$ ".
2. Secure adjustment by locking nuts "D" and "E" together.
3. Check clutch for proper disengagement.
4. Adjust locknut "F" for $1/8$ " between pivot arm and face of locknut "F" when clutch is disengaged.

Adjust PTO interlock switch (Ref. No. 14) to make contact when lever (Ref. No. 17) is resting against top of frame.

NOTE: Use standard hardware torque spec. chart unless otherwise noted.

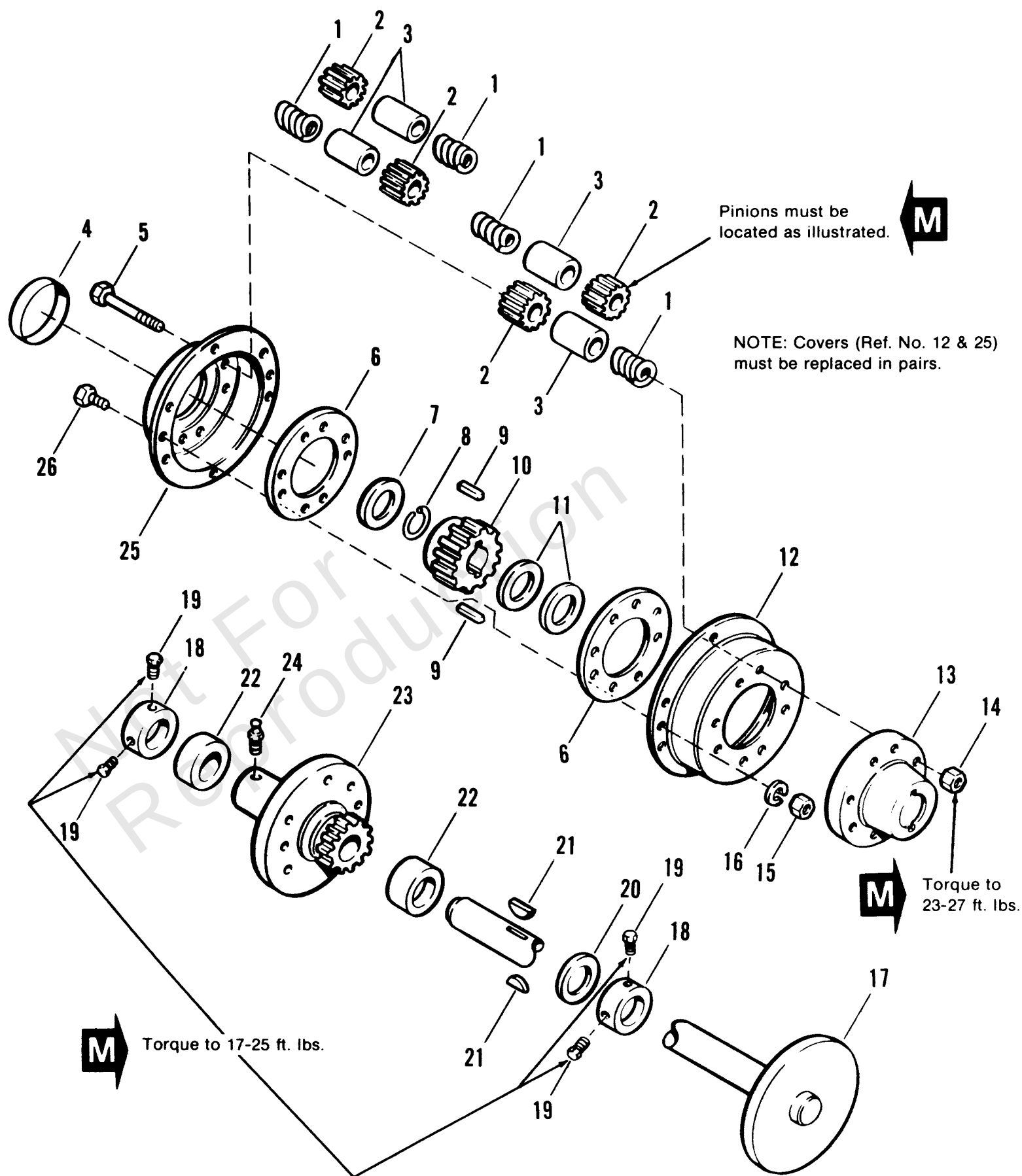
PTO Control Group

REF NO	PART NO	QTY	DESCRIPTION
1	1715435SM	1	SPRING, EXTENSION, 1.
2	2821332	1	CAPSCREW, Hex Hd., 5/16-18 x 3/4
3	2164047	1	ROD, Tension
4	2164155SM	1	HANDLE ASSY.
5	2823362	1	LOCKNUT, Hex, 5/16-18
6	2824058	1	LOCKNUT, Hex, 7/16-14
7	2831352	1	BOLT, Carriage, 3/8-16 x 1-3/4
8	1667811SM	1	SPACER
9	1666294SM	1	SPACER
10	1665440SM	1	PULLEY ASSY., w/Bearings
11	1924940SM	2	WASHER, Plain, 3/8
12	2816950SM	1	LOCKNUT, Hex, Flange, 3/8-16
13	1930647	1	NUT, Pal
14	2177522SM	1	SWITCH, Interlock
15	2172038SM	1	KNOB
16	174644	1	HANDLE, PTO, Clutch
17	2173991SM	1	LEVER
18	1930645SM	1	LOCKNUT, Hex, 3/8-16
19	1671323SM	1	ROD ASSY., Control
20	2174686	1	CAPSCREW, Special
21	2157127SM	1	SPRING
22	1917372SM	2	NUT, Hex, Full, 5/16-18
23	2816950SM	1	NUT, Hex, Full, 3/8-16;
24	1916965SM	1	LOCKWASHER, 3/8
25	1606554SM	1	PULLEY, Idler
26	1667812SM	1	SPACER
28	2157273SM	1	STUD
29	2828698	1	LOCKNUT, Hex, Jam, Cntr., 5/16-18
30	1916965SM	1	LOCKWASHER, 3/8

Rear Axle & Differential Group

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 1690663



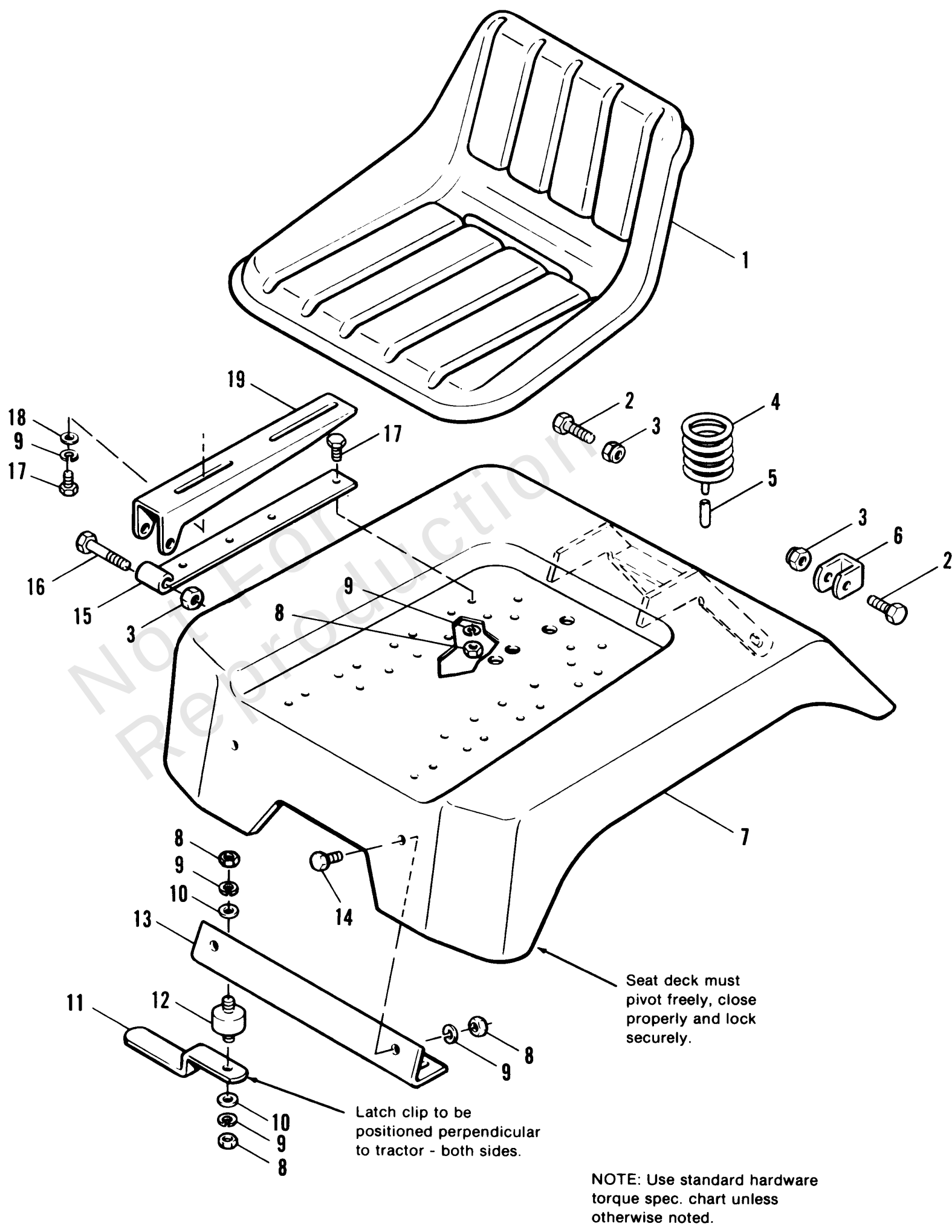
Rear Axle & Differential Group

REF NO	PART NO	QTY	DESCRIPTION
1	2162085SM	8	SPRING -Differential Assy. (#1650519) includes Ref. Nos. 1, 2, 3, 4, 5, 6, 12, 13, 14, 15, 16, 25 & 26.
2	2158579SM	8	PINION, Differential -Differential Assy. (#1650519) includes Ref. Nos. 1, 2, 3, 4, 5, 6, 12, 13, 14, 15, 16, 25 & 26.
3	2121083SM	8	SPINDLE, Differential -Differential Assy. (#1650519) includes Ref. Nos. 1, 2, 3, 4, 5, 6, 12, 13, 14, 15, 16, 25 & 26.
4	2121190SM	1	SEAL, Cover -Differential Assy. (#1650519) includes Ref. Nos. 1, 2, 3, 4, 5, 6, 12, 13, 14, 15, 16, 25 & 26.
5	2821972	8	CAPSCREW, Hex Hd., 3/8-16 x 2-1/2 -Differential Assy. (#1650519) includes Ref. Nos. 1, 2, 3, 4, 5, 6, 12, 13, 14, 15, 16, 25 & 26.
6	2171517SM	2	RING, Spacer -Differential Assy. (#1650519) includes Ref. Nos. 1, 2, 3, 4, 5, 6, 12, 13, 14, 15, 16, 25 & 26.
7	2154277	1	WASHER
8	2154291SM	1	RING, Retaining
9	2830671SM	2	KEY, Hi-Pro
10	2177041SM	1	GEAR-2.470OD 1.127ID
11	2171515	2	WASHER
12	2171853SM	1	COVER, Differential -Differential Assy. (#1650519) includes Ref. Nos. 1, 2, 3, 4, 5, 6, 12, 13, 14, 15, 16, 25 & 26.
13	2164217SM	1	CARRIER, Differential -Differential Assy. (#1650519) includes Ref. Nos. 1, 2, 3, 4, 5, 6, 12, 13, 14, 15, 16, 25 & 26.
14	1930645SM	8	LOCKNUT, Hex, 3/8-16 -Differential Assy. (#1650519) includes Ref. Nos. 1, 2, 3, 4, 5, 6, 12, 13, 14, 15, 16, 25 & 26.
15	9216622	6	NUT, Hex, Full, 1/4-20 -Differential Assy. (#1650519) includes Ref. Nos. 1, 2, 3, 4, 5, 6, 12, 13, 14, 15, 16, 25 & 26.
16	2816964SM	6	LOCKWASHER, 1/4 -Differential Assy. (#1650519) includes Ref. Nos. 1, 2, 3, 4, 5, 6, 12, 13, 14, 15, 16, 25 & 26.
17	2177900ASM	1	AXLE ASSY., Rear
18	2154065SM	2	COLLAR, Set
19	2828721	4	SETSCREW, 5/16-18 x 1/2
20	2105050	1	WASHER
21	2157120SM	2	KEY, Drive
22	2153068SM	2	BEARING
23	2176945SM	1	HUB ASSY., Wheel, RH
24	2815019SM	1	FITTING, Grease
25	2103189SM	1	COVER, Differential -Differential Assy. (#1650519) includes Ref. Nos. 1, 2, 3, 4, 5, 6, 12, 13, 14, 15, 16, 25 & 26.
26	2821959	6	CAPSCREW, Hex Hd., 1/4-20 x 5/8 -Differential Assy. (#1650519) includes Ref. Nos. 1, 2, 3, 4, 5, 6, 12, 13, 14, 15, 16, 25 & 26.
26	1650519SM	1	DIFFERENTIAL SUB ASSY.

Seat & Deck Group

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 1690663



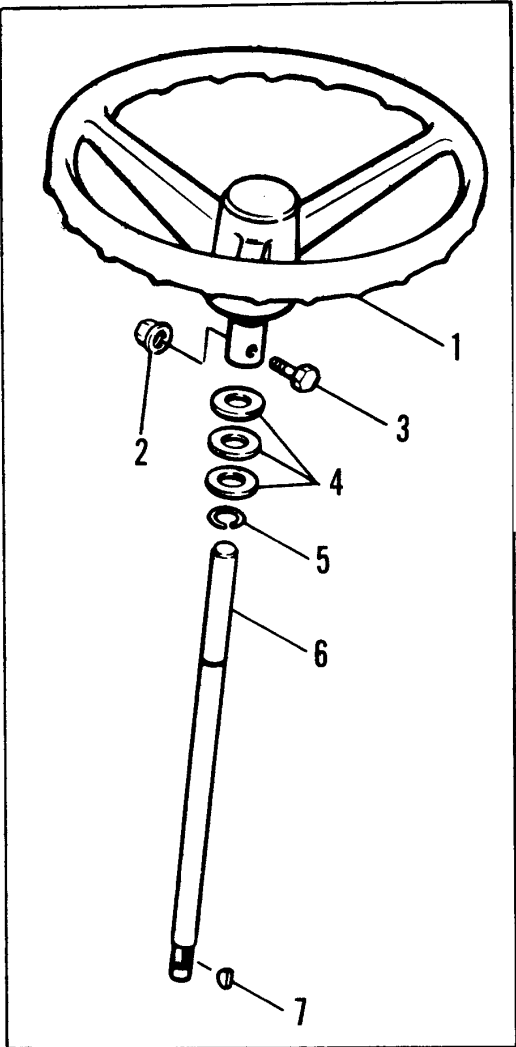
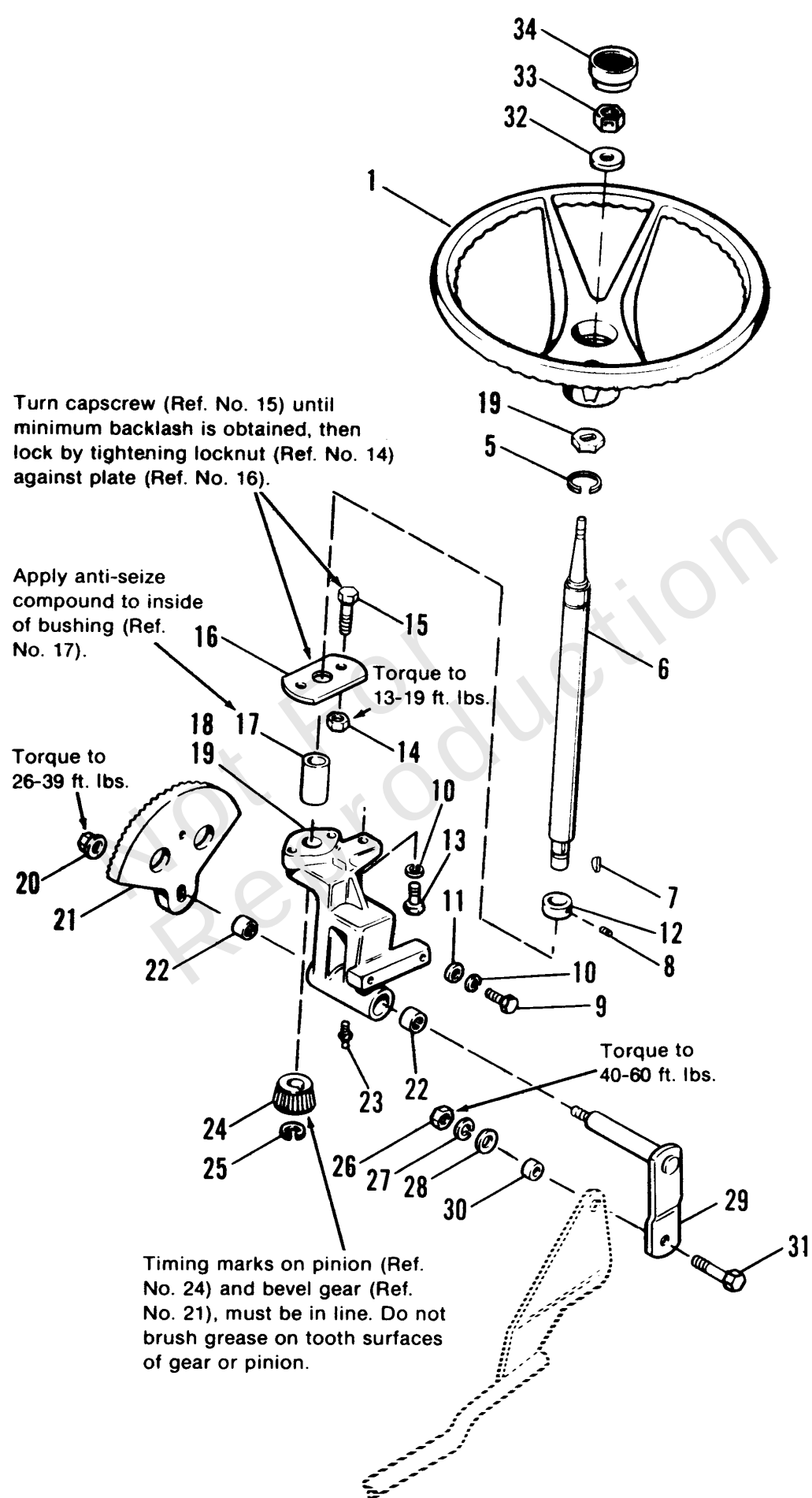
Seat & Deck Group

REF NO	PART NO	QTY	DESCRIPTION
1	1686712SM	1	SEAT ASSY., Contour
2	1920415SM	2	CAPSCREW, Hex Hd., 3/8-16 x 1-1/4
3	1930645SM	4	LOCKNUT, Hex, 3/8-16
4	1666690SM	2	SPRING, Seat
5	1666691SM	2	COVER, Wire
6	1607870SM	1	STOP, Seat Deck
7	1715769SM	1	DECK ASSY., Seat
8	1917372SM	12	NUT, Hex, Full, 5/16-18
9	1917356SM	16	LOCKWASHER, 5/16
10	2817377	4	WASHER, Plain, 1/4
11	1606823SM	2	CLIP
12	1666744SM	2	CONNECTOR, Cushion
13	2164029SM	1	BRACKET, Seat Deck, Front
14	2825205	2	CAPSCREW, Hex Hd., 5/16-18 x 5/8
15	1666737SM	2	HINGE, Lower
16	2823701	2	CAPSCREW, Hex Hd., 3/8-16 x 2
17	2821332	10	CAPSCREW, Hex Hd., 5/16-18 x 3/4
18	2817642	4	WASHER, Plain, 5/16
19	1701559SM	2	HINGE, Upper

Steering Group

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 1690663



Used on earlier models. Refer to parts list for serial number information.

NOTE: Use standard hardware torque spec. chart unless otherwise noted.

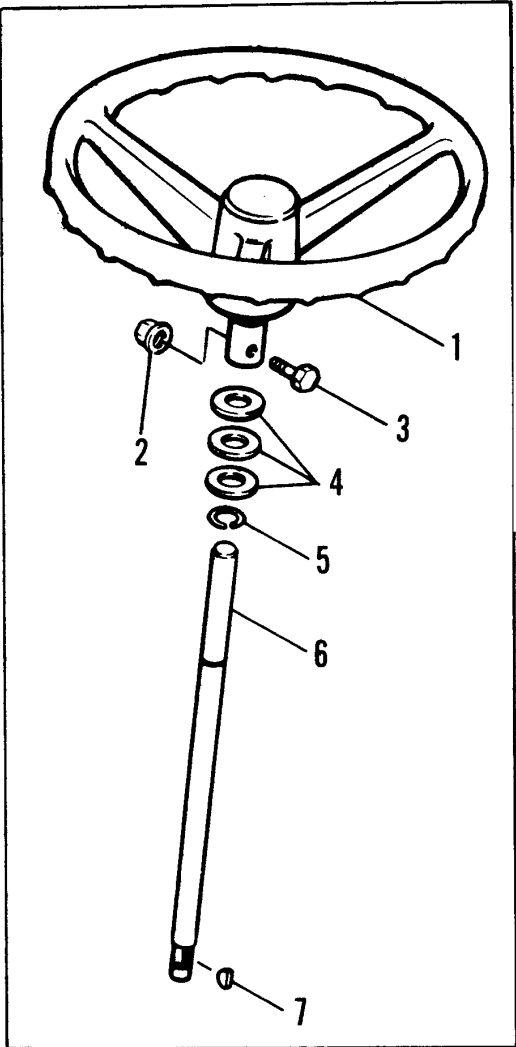
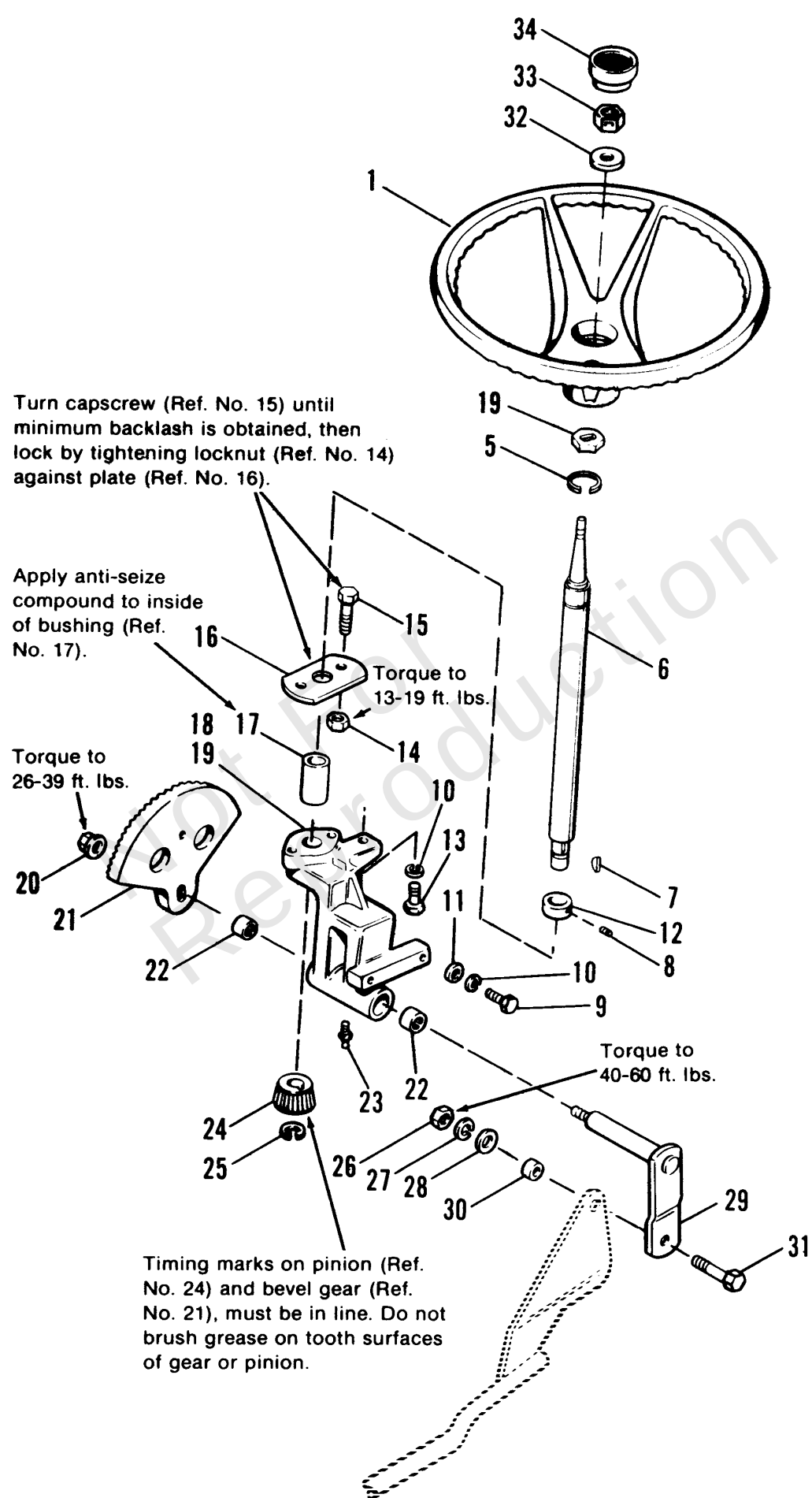
Steering Group

REF NO	PART NO	QTY	DESCRIPTION
1	1685187SM	1	WHEEL, Steering -LATER MODELS Mfg. No. 1690644 -used after serial no. 1185 Mfg. No. 1690646 -used after serial no. 1119 Mfg. No. 1690648 -used after serial no. 1018
1	1606342SM	1	WHEEL, Steering -EARLY MODELS Mfg. No. 1690644 -used before serial no. 1186 Mfg. No. 1690646 -used before serial no. 1120 Mfg. No. 1690648 -used before serial no. 1019 Mfg. No. 1690644 () -Used before serial no. 1386)
2	2835048	1	LOCKNUT, Hex, Flange, 5/16-18 -EARLY MODELS Mfg. No. 1690644 -used before serial no. 1186 Mfg. No. 1690646 -used before serial no. 1120 Mfg. No. 1690648 -used before serial no. 1019 Mfg. No. 1690644 () -Used before serial no. 1386)
3	2821977	1	CAPSCREW, Hex Hd., 5/16-18 x 1-1/4 -EARLY MODELS Mfg. No. 1690644 -used before serial no. 1186 Mfg. No. 1690646 -used before serial no. 1120 Mfg. No. 1690648 -used before serial no. 1019 Mfg. No. 1690644 () -Used before serial no. 1386)
4	158223	3	WASHER -EARLY MODELS Mfg. No. 1690644 -used before serial no. 1186 Mfg. No. 1690646 -used before serial no. 1120 Mfg. No. 1690648 -used before serial no. 1019 Mfg. No. 1690644 () -Used before serial no. 1386)
5	2154264SM	1	RING, Retaining
6	1667691SM	1	SHAFT, Steering -LATER MODELS Mfg. No. 1690644 -used after serial no. 1185 Mfg. No. 1690646 -used after serial no. 1119 Mfg. No. 1690648 -used after serial no. 1018
6	171020	1	SHAFT, Steering -EARLY MODELS Mfg. No. 1690644 -used before serial no. 1186 Mfg. No. 1690646 -used before serial no. 1120 Mfg. No. 1690648 -used before serial no. 1019 Mfg. No. 1690644 () -Used before serial no. 1386)
7	2810224SM	1	KEY, Woodruff, #6
8	2828734	1	SETSCREW, 5/16-18 x 1/4
9	2821966	2	CAPSCREW, Hex Hd., 3/8-16 x 7/8
10	1916965SM	3	LOCKWASHER, 3/8
11	1924940SM	2	WASHER, Plain, 3/8
12	1729254SM	1	COLLAR, Set
13	2821965	1	CAPSCREW, Hex Hd., 3/8-16 x 3/4
14	2828731	2	LOCKNUT, Hex, Jam, 3/8-16
15	1920415SM	2	CAPSCREW, Hex Hd., 3/8-16 x 1-1/4
16	2171000SM	1	PLATE, Steering
17	2170992SM	1	BUSHING
18	1668625SM	1	HOUSING ASSY., Steering (Incl. Ref. Nos. 17 & 22)(Used with Steering Shaft 1667691) -LATER MODELS Mfg. No. 1690644 -used after serial no. 1185 Mfg. No. 1690646 -used after serial no. 1119 Mfg. No. 1690648 -used after serial no. 1018
18	2171832	1	HOUSING ASSY., Steering (Incl. Ref. Nos. 17 & 22)(Used with Steering Shaft 171020) -EARLY MODELS Mfg. No. 1690644 -used before serial no. 1186 Mfg. No. 1690646 -used before serial no. 1120 Mfg. No. 1690648 -used before serial no. 1019 Mfg. No. 1690644 () -Used before serial no. 1386)

Steering Group

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 1690663



Used on earlier models. Refer to parts list for serial number information.

NOTE: Use standard hardware torque spec. chart unless otherwise noted.

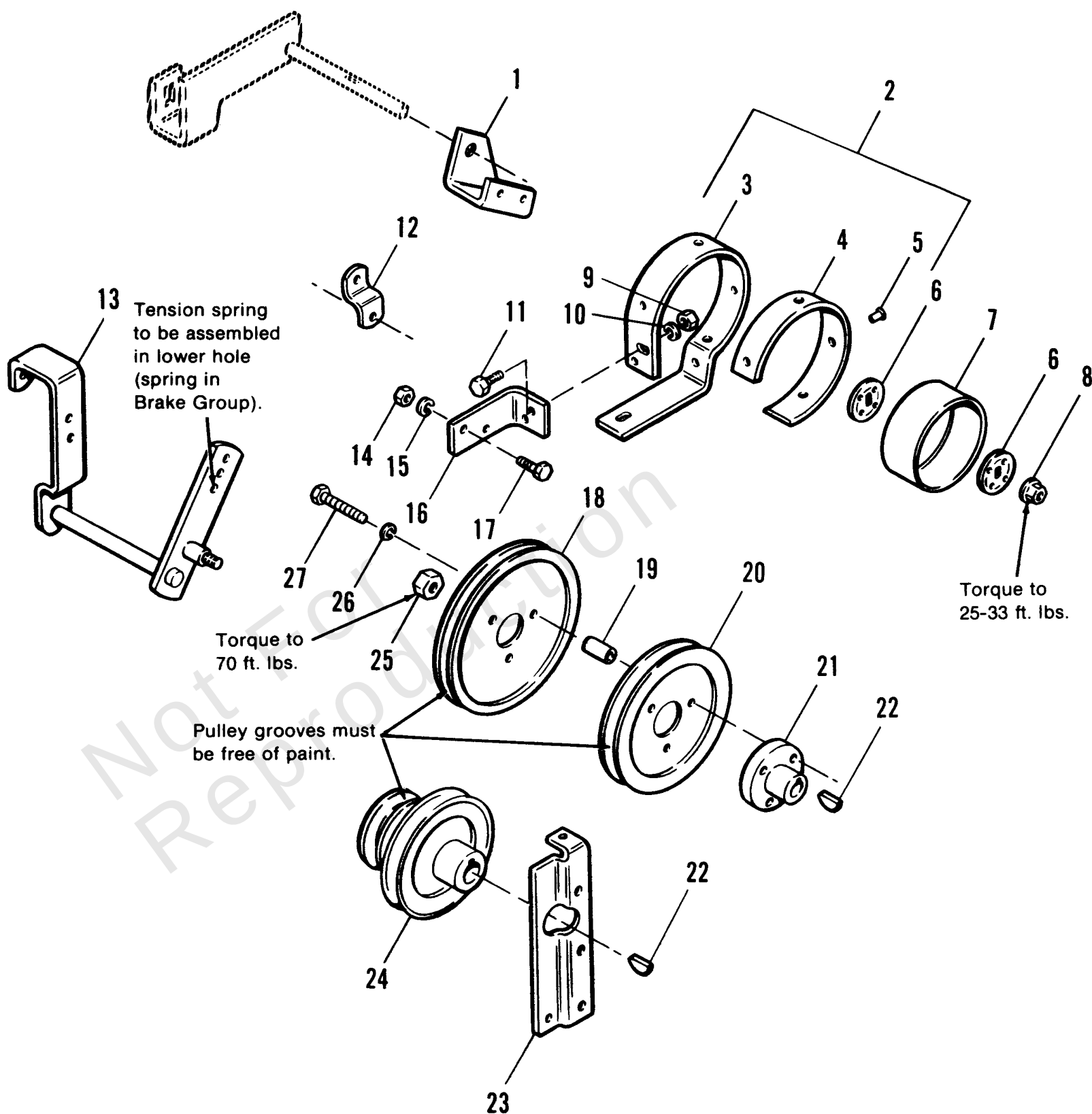
Steering Group

REF NO	PART NO	QTY	DESCRIPTION
19	1667574SM	1	WASHER, Hex -LATER MODELS Mfg. No. 1690644 -used after serial no. 1185 Mfg. No. 1690646 -used after serial no. 1119 Mfg. No. 1690648 -used after serial no. 1018
20	2830650	1	LOCKNUT, Hex, Flange, 7/16-14
21	2170987SM	1	GEAR, Bevel
22	2154258SM	2	BEARING, Needle
23	2814687	1	FITTING, Grease
24	2170988SM	1	PINION, Bevel
25	2827793SM	1	E-RING
26	2816951	1	NUT, Hex, Full, 1/2-13
27	2816966	1	LOCKWASHER, 1/2
28	2818431	1	WASHER, Plain, 1/2
29	1666204SM	1	ARM ASSY., Steering
30	2105051	1	SPACER
31	2820328	1	CAPSCREW, Hex Hd., 1/2-13 x 1-1/2
32	2177649SM	1	WASHER, Compression -LATER MODELS Mfg. No. 1690644 -used after serial no. 1185 Mfg. No. 1690646 -used after serial no. 1119 Mfg. No. 1690648 -used after serial no. 1018
33	2823362	2	LOCKNUT, Hex, Cntr., 5/16-18 -LATER MODELS Mfg. No. 1690644 -used after serial no. 1185 Mfg. No. 1690646 -used after serial no. 1119 Mfg. No. 1690648 -used after serial no. 1018
34	1657017SM	1	CAP, Steering Wheel -LATER MODELS Mfg. No. 1690644 -used after serial no. 1185 Mfg. No. 1690646 -used after serial no. 1119 Mfg. No. 1690648 -used after serial no. 1018

Transmission Brake, Drive & Control Group

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 1690663



NOTE: Use standard hardware torque spec. chart unless otherwise noted.

Transmission Brake, Drive & Control Group

REF NO	PART NO	QTY	DESCRIPTION
1	1607027	1	BEARING, Idler
2	2171497	1	BAND ASSY., Brake
3	-----	1	BAND, Brake (See Ref. No. 2)
4	2154133	1	LINING, Brake
5	928308	4	RIVET, Tubular, 3/16 x 5/16
6	2158196SM	2	WASHER, Special
7	2157282	1	DRUM, Brake
8	2830650	1	LOCKNUT, Hex, Flange, 7/16-14
9	2816622SM	2	NUT, Hex, Full, 1/4-20
10	2816964SM	2	LOCKWASHER, 1/4
11	2823341SM	2	CAPSCREW, Hex Hd., 1/4-20 x 3/4
12	174893	1	CLIP, Spring
13	1656459	1	LEVER ASSY., Pivot
14	2816950SM	2	NUT, Hex, Full, 3/8-16
15	1916965SM	2	LOCKWASHER, 3/8
16	164113	1	BRACKET, Brake Rod
17	1920415SM	2	CAPSCREW, Hex Hd., 3/8-16 x 1-1/4
18	174420	1	PULLEY
19	1608310SM	3	SPACER
20	1608122	1	SHEAVE
21	1608309	1	HUB, Pulley
22	2805123SM	2	KEY, Woodruff, #9
23	1608304	1	SUPPORT, Belt Retainer
24	1608322SM	1	PULLEY ASSY., Front
25	2822133	1	LOCKNUT, Hex, Jam, 3/4-16
26	1917356SM	3	LOCKWASHER, 5/16
27	2821978	3	CAPSCREW, Hex Hd., 5/16-18 x 2

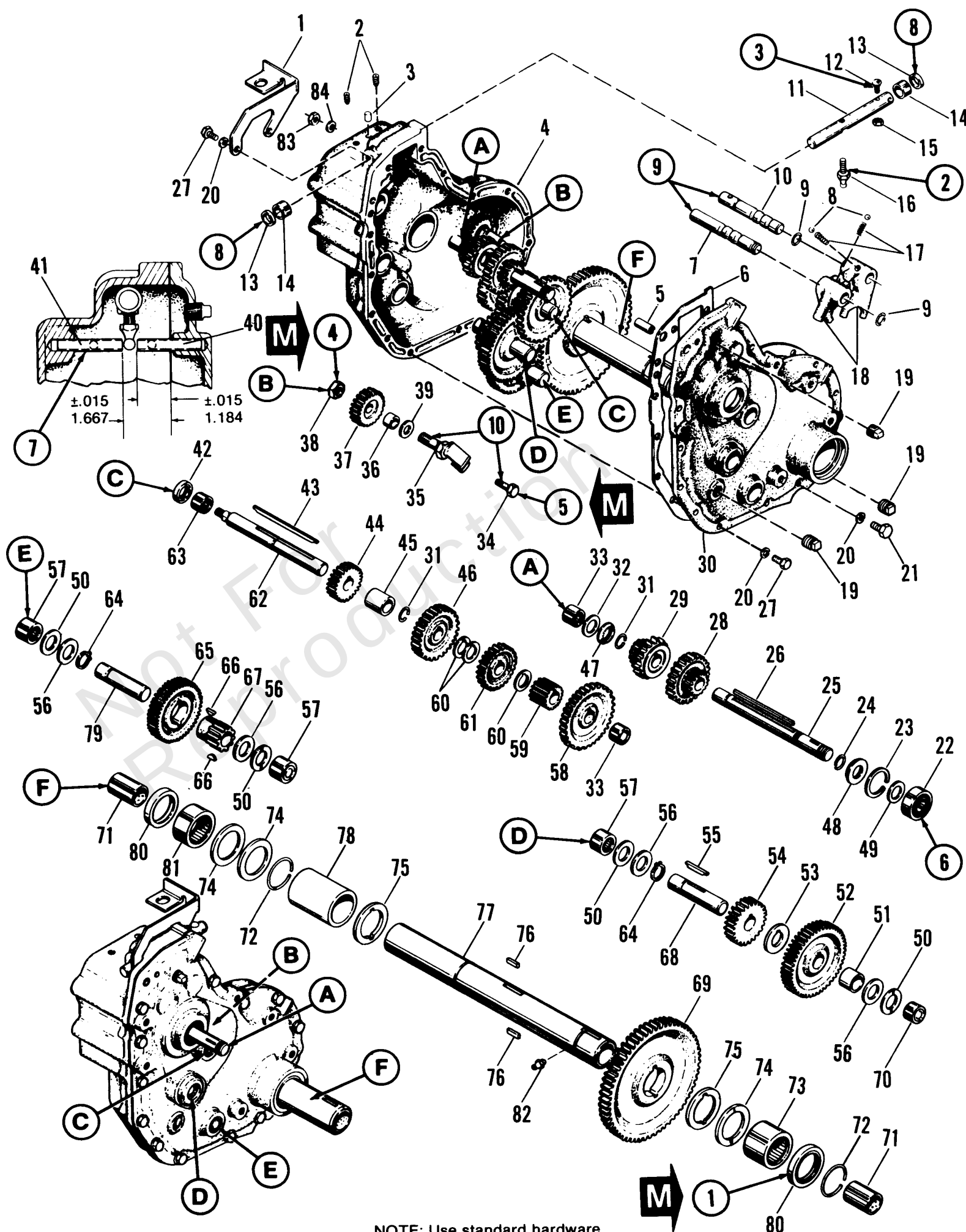
Footnotes:

Note:* Not serviced separately.

Transmission Group

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 1690663



NOTE: Use standard hardware torque spec. chart unless otherwise noted.

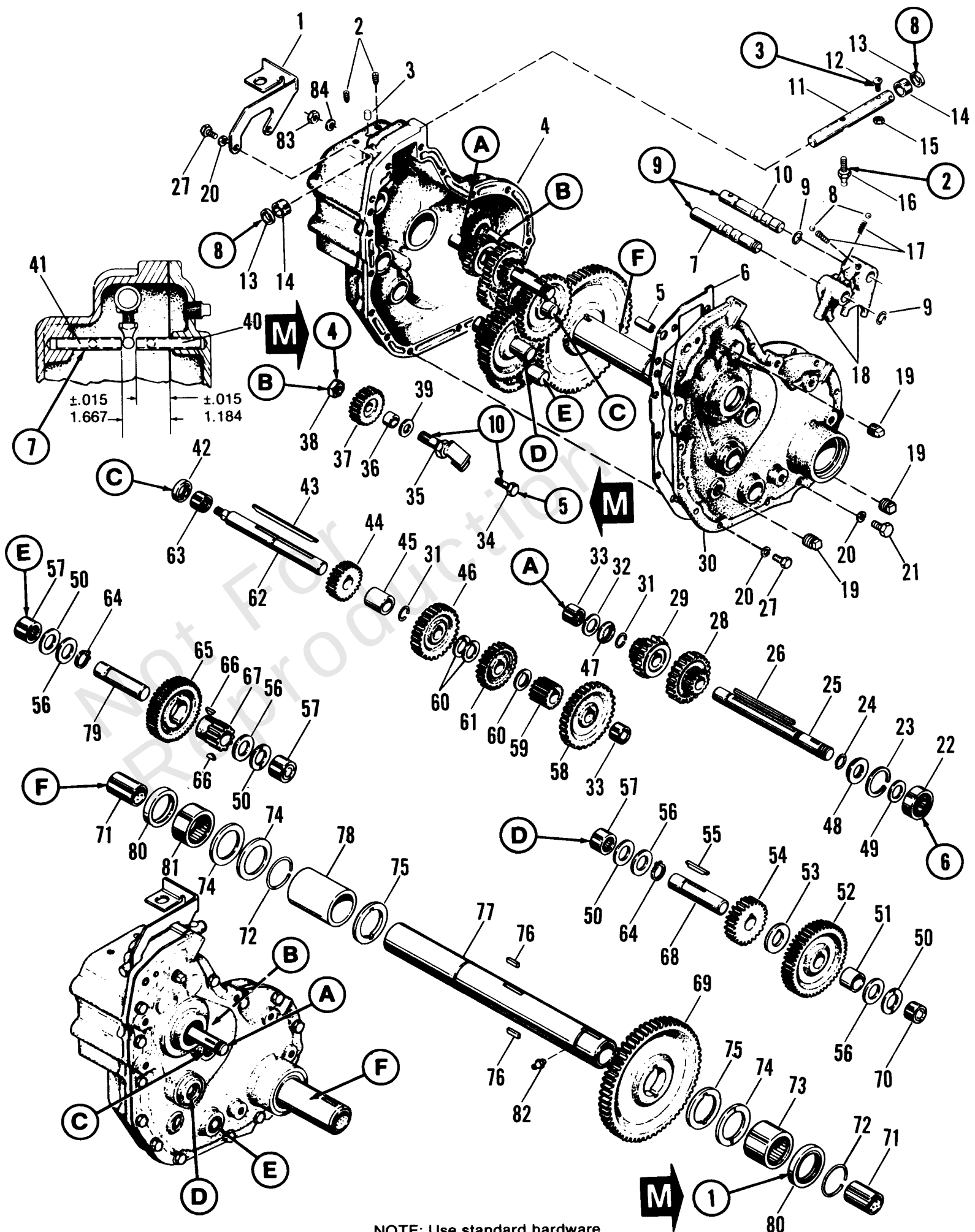
Transmission Group

REF NO	PART NO	QTY	DESCRIPTION
1	164251	1	SUPPORT, Switch
2	917231	2	SETSCREW, 5/16-18 x 1/2
3	2118462SM	1	PLUG, Vent
4	157516	1	CASE ASSY., Gear
5	2827609	2	PIN, Roll, 3/8 x 1
6	2164234SM	1	GASKET, Gear Case
7	1667233	1	SHAFT, Shifter, Reverse, Med.
8	2805359	2	BALL, Shiftlock
9	1729260SM	2	RING, Retaining
10	1667234	1	SHAFT, Shifter, Hi-Lo
11	1665525	1	ROD, Shift
12	172241	1	BOLT, Carriage, Special, 5/16-18 x 1-1/4
13	2157619SM	2	SEAL, Oil
14	2121084SM	2	SPACER, Diff.
15	2820161	1	LOCKNUT, Hex, Jam, 5/16-18
16	2172779SM	1	STEM, Shift
17	2154323SM	2	SPRING
18	2154069SM	2	FORK, Shift
19	2801653	3	PLUG, Pipe, 3/8
20	1917356SM	16	LOCKWASHER, 5/16
21	2821221	1	CAPSCREW, Hex Hd., 5/16-18 x 1-1/2
22	2108202SM	2	BEARING, BALL
23	164064	1	RING, Retaining
24	2118134SM	1	RING, Retaining
25	174338	1	SHAFT, Pulley
26	2164294SM	1	KEY
27	2821333	15	CAPSCREW, Hex Hd., 5/16-18 x 1
28	1667231SM	1	GEAR ASSY.
29	1667230SM	1	GEAR ASSY.
30	164226	1	COVER ASSY., Gear Case
31	2154264SM	2	RING, Retaining
32	2172982SM	1	WASHER
33	2154257SM	2	BEARING, Needle
34	2828727	1	SCREW, Hex, Whizlock Flange, 3/8-16 x 1-1/4
35	154352	1	PIN ASSY., Rev. Gear
36	154084	1	SPACER
37	2154087SM	1	GEAR, Reverse
38	2830245	1	LOCKNUT, Hex, 1/2-20
39	2154325	1	WASHER
40	154537	1	PIN ASSY., Roll
41	154538	1	PIN ASSY., Roll
42	1612093SM	1	SEAL, Oil
43	2154354SM	1	KEY
44	1670874SM	1	PINION, Reverse & II
45	1670872SM	1	SPACER
46	154081	1	GEAR, Driven II
47	172981	1	WASHER
48	154462	1	WASHER
49	1700230SM	1	WASHER
50	2172979	4	WASHER
51	154090	1	SPACER

Transmission Group

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 1690663



NOTE: Use standard hardware torque spec. chart unless otherwise noted.

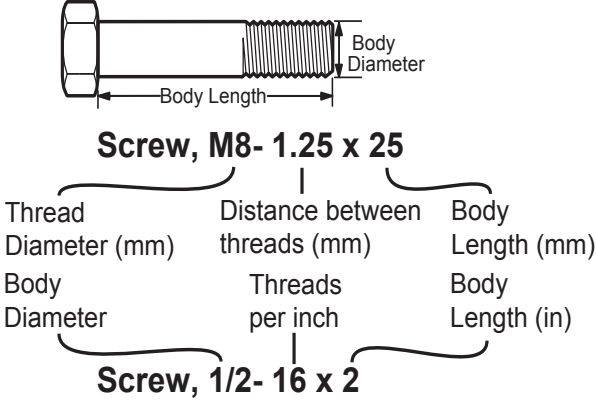
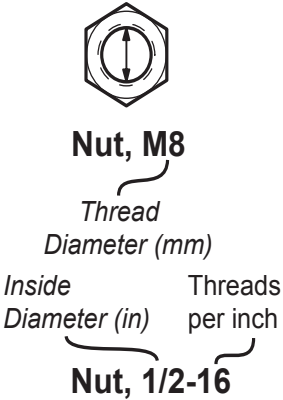
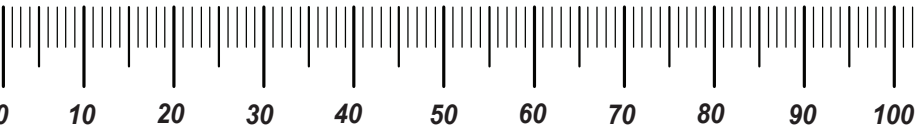
Transmission Group

REF NO	PART NO	QTY	DESCRIPTION
52	154089	1	GEAR, 2nd Intermediate
53	2154038SM	1	WASHER
54	164062	1	PINION, 2nd Intermediate
55	2154267SM	1	KEY
56	2172978	4	WASHER
57	154259	3	BEARING, Needle
58	154078	1	GEAR, Driven I
59	154079	1	PINION, Driven 1st Intermediate
60	1729259SM	3	WASHER
61	2154080SM	1	PINION, Driven III
62	2157290	1	SHAFT, 1st Intermediate
63	2154258SM	1	BEARING, Needle
64	154266	2	RING, Retaining
65	164051	1	GEAR, 3rd Intermediate
66	2810224SM	2	KEY, Woodruff, #6
67	2154092SM	1	PINION, 3rd Intermediate
68	154086	1	SHAFT, 2nd Intermediate
69	154095	1	GEAR, Drive
70	2154271SM	1	BEARING, Needle
71	1653120SM	2	BUSHING
72	2154268SM	2	RING, Snap
73	2157520SM	1	BEARING, Needle
74	2154097SM	3	WASHER, Axle Tube
75	2154130SM	2	WASHER, Axle Tube
76	2154096SM	2	KEY
77	2164222SM	1	TUBE & BUSHING ASSY.
78	154098	1	SPACER
79	154091	1	SHAFT, 3rd Intermediate
80	2154269SM	2	SEAL
81	2157519SM	1	BEARING, Needle
82	2814687	1	FITTING, Grease
83	2816950SM	1	NUT, Hex, 3/4-16
84	1916965SM	1	LOCKWASHER, 3/4

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).

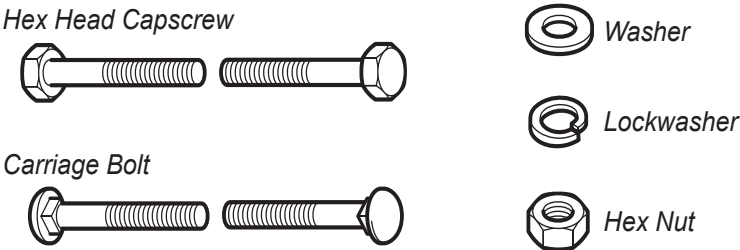
When bolt or capscrew is identified as 1/2 - 16 x 2" (M8 - 1.25 x 50), this means the *Nominal size*, or body diameter is 1/2 inch (8mm metric thread diameter), the second number, 16, represents the *threads per inch*, (*distance between threads*). The final number is the body length of the bolt or screw,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

