



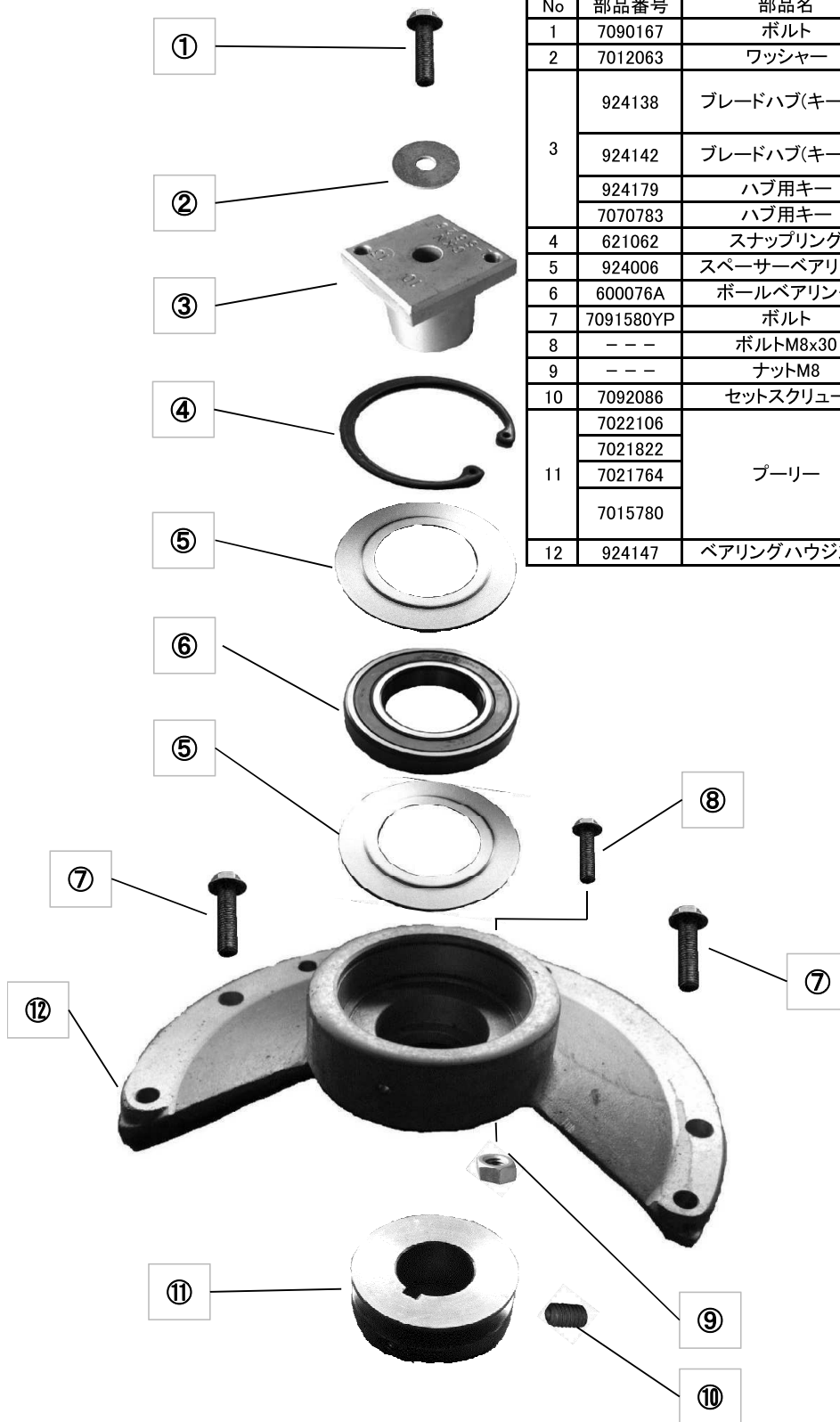
Parts Manual

Mfg. No: 7800194
CP216019KWV, 21" 6 TP Steel Deck

Model Components	Page
CUTTING DECK, BLADE.....	4
DECALS.....	8
DRIVE SYSTEM SELF-PROPELLED.....	10
GRASS BAG & ACCESSORIES.....	14
HANDLES & CONTROLS - Lower End.....	16
HANDLES & CONTROLS - Upper End.....	18
SIDE CHUTE ADAPTER.....	22
TRANSMISSION - DIFFERENTIAL.....	24
WHEEL BRACKETS, LATCHES.....	26
WHEELS, FRONT & REAR.....	28
Torque Specification Chart.....	30

Not For
Reproduction

クランクシャフトプロテクター部品表



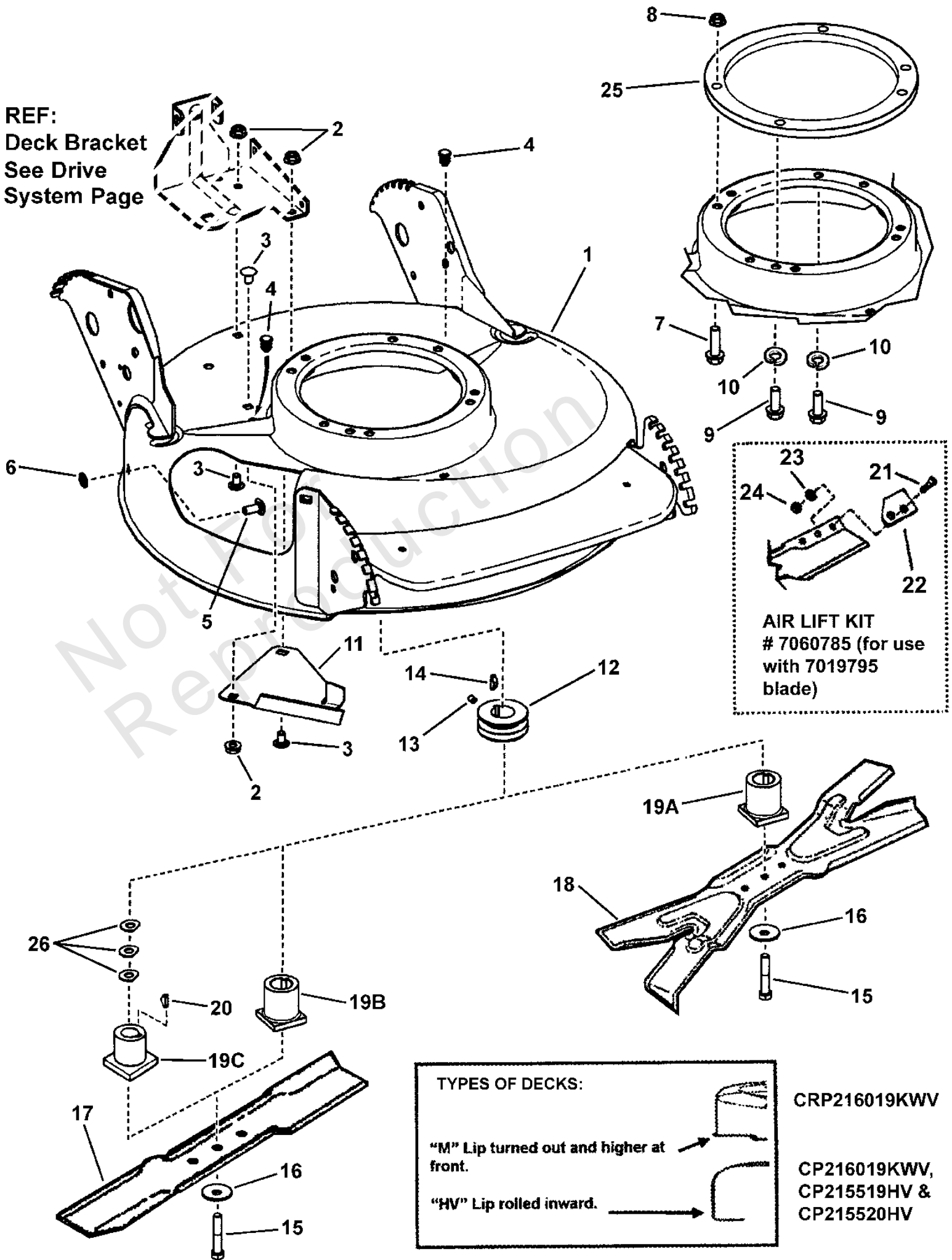
No	部品番号	部品名	個数	備考
1	7090167	ボルト	1	
2	7012063	ワッシャー	1	
3	924138	ブレードハブ(キー付)	1	ブリッグス 122Q Kawasaki FJ180V Robin EC13V EH18V
	924142	ブレードハブ(キー無)	1	Honda GXV160 Kawasaki FC150
	924179	ハブ用キー	1	Honda-GXV160用
	7070783	ハブ用キー	1	Kawasaki-FC150用
4	621062	スナップリング	1	
5	924006	スペーサーベアリング	2	
6	600076A	ボールベアリング	1	
7	7091580YP	ボルト	2	
8	---	ボルトM8x30	1	市販品を利用ください。
9	---	ナットM8	1	市販品を利用ください。
10	7092086	セットスクリュー	1	
11	7022106	プーリー	1	ロビン EC13/EH18用
	7021822		1	ホンダ GXV160用
	7021764		1	カワサキ FC150用
	7015780		1	カワサキ FJ180用
	7015780		1	ブリッグス 122Q用
12	924147	ベアリングハウジング	1	

CUTTING DECK, BLADE

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 7800194

REF:
Deck Bracket
See Drive
System Page



CUTTING DECK, BLADE

REF NO	PART NO	QTY	DESCRIPTION
1	7500081	1	* WELDMENT, Deck, 21" Non-Adjust Air -was 7400026, used on CRP216019KWV
1	7400027	1	* WELDMENT, Deck, 21", S.P., Hi-Vac -used on CP216019KWV, CP215519HV & CP215520HV
2	7091601	3	NUT, 5/16-18 Hex Flange Lock GR 5 -was 7091070
3	7090731	3	BOLT, 5/16-18 x 1/2", Short Neck Carriage, GR 5 -or 7092061
4	7046780	2	PLUG, Hole, Polyethylene
5	7090001	1	BOLT, 5/16-18 x 3/4" Short Neck Carriage GR 5 -or 7091508
6	7011791	1	RETAINER, 5/16" Bolt
7	7090700	1	BOLT, 5/16-18 x 1-1/2" Hex Flange Lock, GR5 -engine mount bolts (Honda)
8	7091601	1	NUT, 5/16-18 Hex Flange Lock, GR 5 -was 7091070 or 7090585
9	7090238	2	SCREW, 5/16-24 x 1" Hex Head Cap GR 5 -engine mount bolts (Honda)
10	7091315	2	WASHER, .32 x .58 x .08 Split Lock -on engine mount bolts (Honda)
11	7074568	1	COVER, Belt
12	7015780	1	PULLEY- Engine (25mm I.D. x 2-1/8" O.D.) -used on Kawasaki engines
12	7021822	1	PULLEY- Engine (1.085 I.D. x 2-1/8" O.D.) -used on Honda engines
13	7090201	1	SCREW, 5/16-18 x 5/16" Hex Socket Head -used with 7015780
13	7092086	1	SCREW, 5/16-18 x 1/2" Hex Socket Head -used with 7021822
14	7091214	1	KEY, Woodruff #HP-506 Hi-Pro
15	7090167	1	SCREW, 3/8-24 x 2" Hex Head Cap, GR 5
16	7012063	2	WASHER, Cone
17	7026691	1	BLADE, Cutter (Standard Lift)
18	7026407	1	BLADE, 21" Ninja (Quad Edge)
19A	7101414	1	** HUB, Blade Drive, 25mm I.D. RD 2 Position -used on CRP216019KWV
19B	7015626	1	** HUB, Blade Drive, 25mm I.D. -used on CP216019KWV
19C	7012927	1	** HUB, Blade Drive, 7/8" I.D. -used on CP215519HV & CP215520HV
20	7010783	2	KEY, #505 Hi-Pro
21	7090228	4	SCREW, 5/16-24 x 21/32" Oval Head Machine
22	7032558	2	AIR LIFT
23	7090391	4	WASHER, 5/16" Internal Tooth Lock
24	7090223	4	NUT, 5/16-24 Hex, GR 5
25	7300969A	1	RING, Engine Spacer -used on CP215520HV model
26	7044770	3	SPACER, .06 Blade Hub -used on CP215520HV model
	-----	1	*** ENGINE, 6 HP Kawasaki w/side recoil Model FJ180V-DS13-R (not shown)

Footnotes:

NOTE: *** Purchase engine parts from engine manufacturer dealer.

NOTE: ** Part number is inscribed on hub.

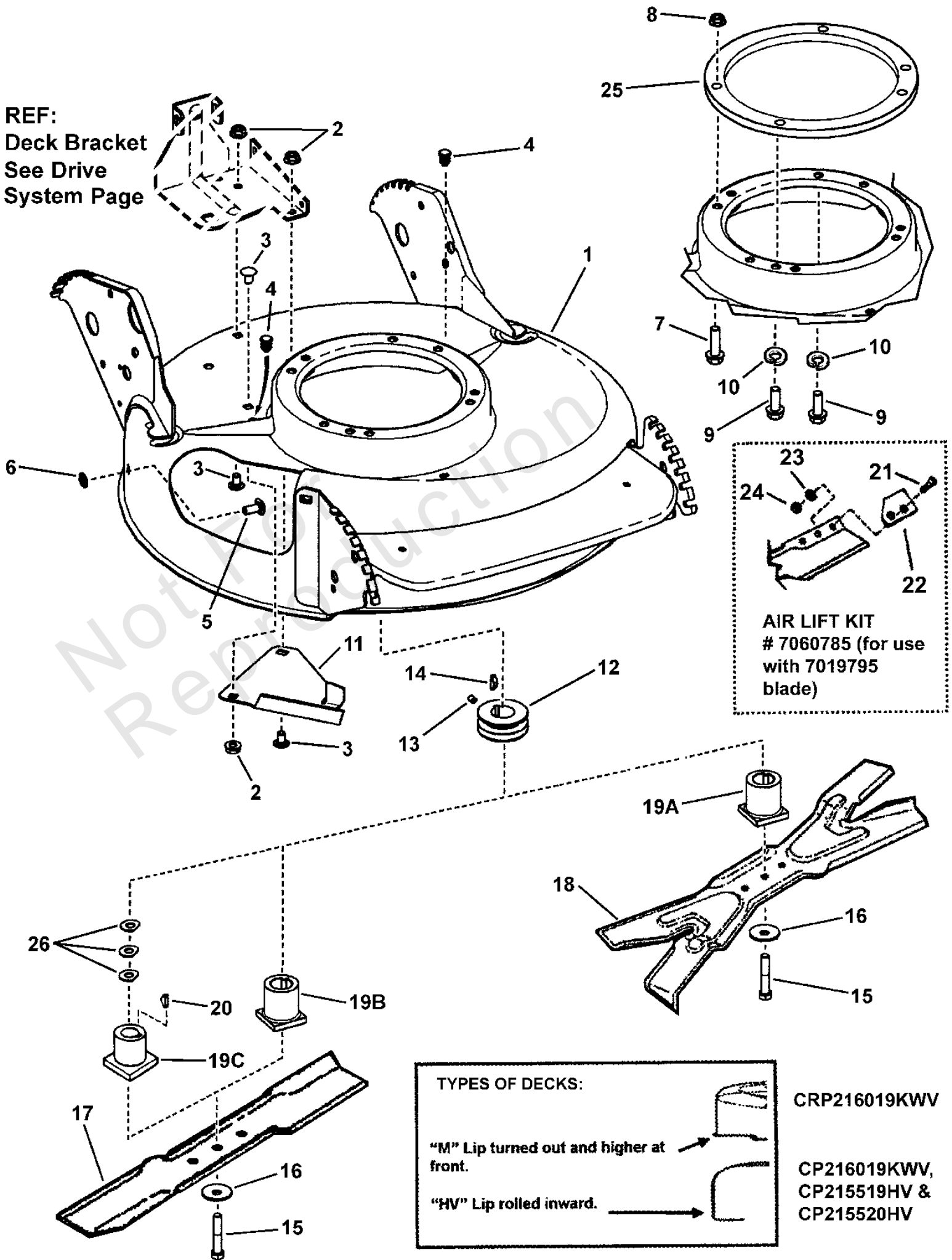
NOTE: * FINISH: red painted but w/o decals

CUTTING DECK, BLADE

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 7800194

REF:
Deck Bracket
See Drive
System Page



CUTTING DECK, BLADE

REF NO	PART NO	QTY	DESCRIPTION
	-----	1	*** ENGINE, 6 HP Kawasaki w/side recoil Model FJ180V-BS23-R (not shown)
	-----	1	*** ENGINE, 5.5 HP Honda Model GXV160, Type K1A1AS (not shown) -used on CP215519HV
	-----	1	*** ENGINE, 5.5 HP Honda Model GXV160, Type UH2A1AS (not shown) -used on CP215520HV model

Not For
Reproduction

Footnotes:

NOTE: *** Purchase engine parts from engine manufacturer dealer.

NOTE: ** Part number is inscribed on hub.

NOTE: * FINISH: red painted but w/o decals

DECALS

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 7800194



DECALS

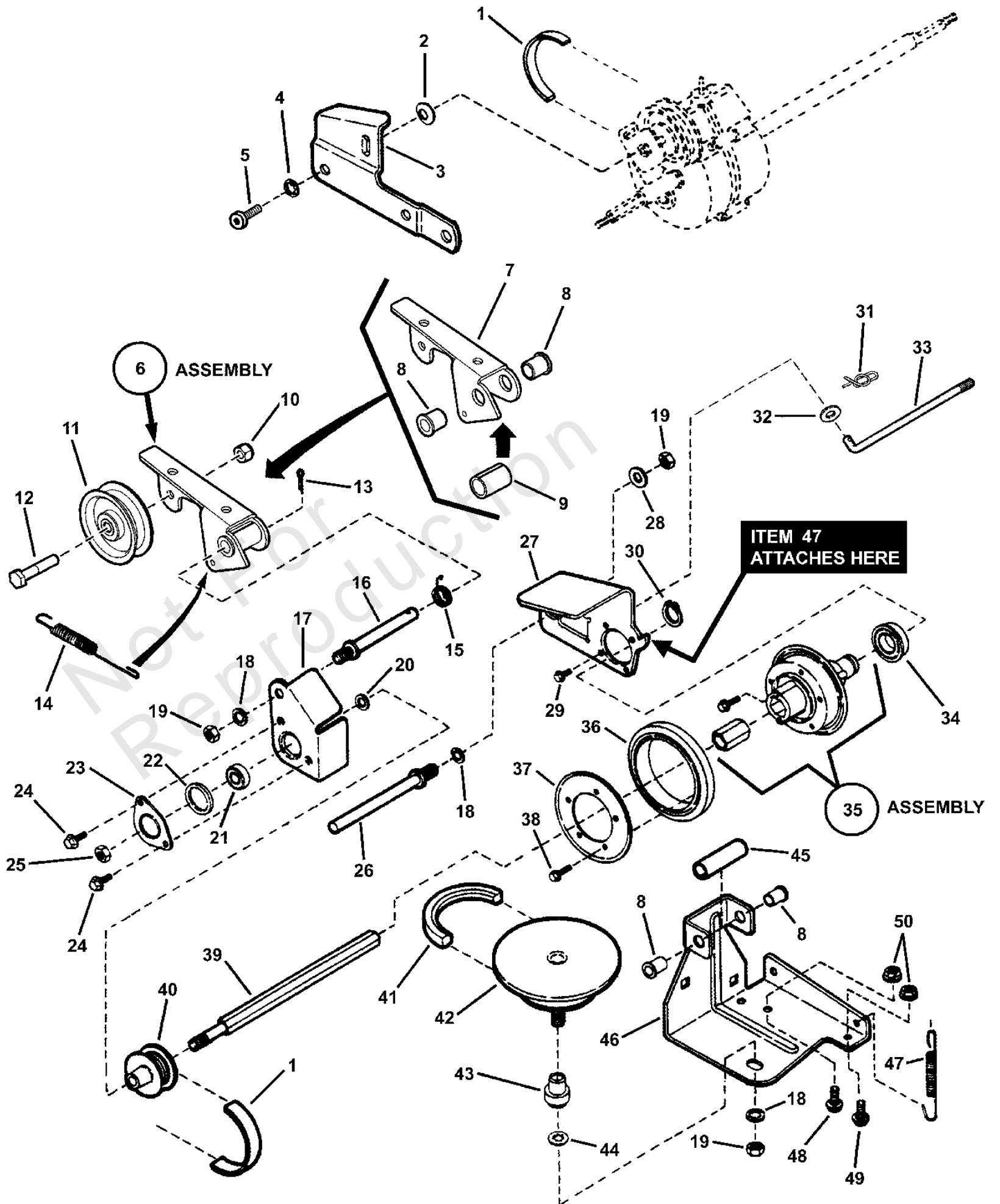
REF NO	PART NO	QTY	DESCRIPTION
1	7100181	1	DECAL, Commercial, Control Panel
2	7100185	1	DECAL, SNAPPER, Steel Decks
3	7100398	1	DECAL, Hi Vac, Cutting Deck
4	7100410	1	DECAL, Ninja, Mulching System
5	7072921	1	DECAL, Warning (Deck)
6	7029782	1	DECAL, OPC Bail (International Symbol)
7	7046720	1	DECAL, Chute/Deflector
8	7013010	1	DECAL, Danger, Cut Finger
9	7075471	1	DECAL, Speed Shift
10	7075524	1	DECAL, Throttle Control, KWV
11	7100984	1	DECAL, Warning/Danger WBM
12	7046357	1	DECAL, Warning
13	7102286	1	DECAL, CPSC Blade

Not For
Reproduction

DRIVE SYSTEM SELF-PROPELLED

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 7800194



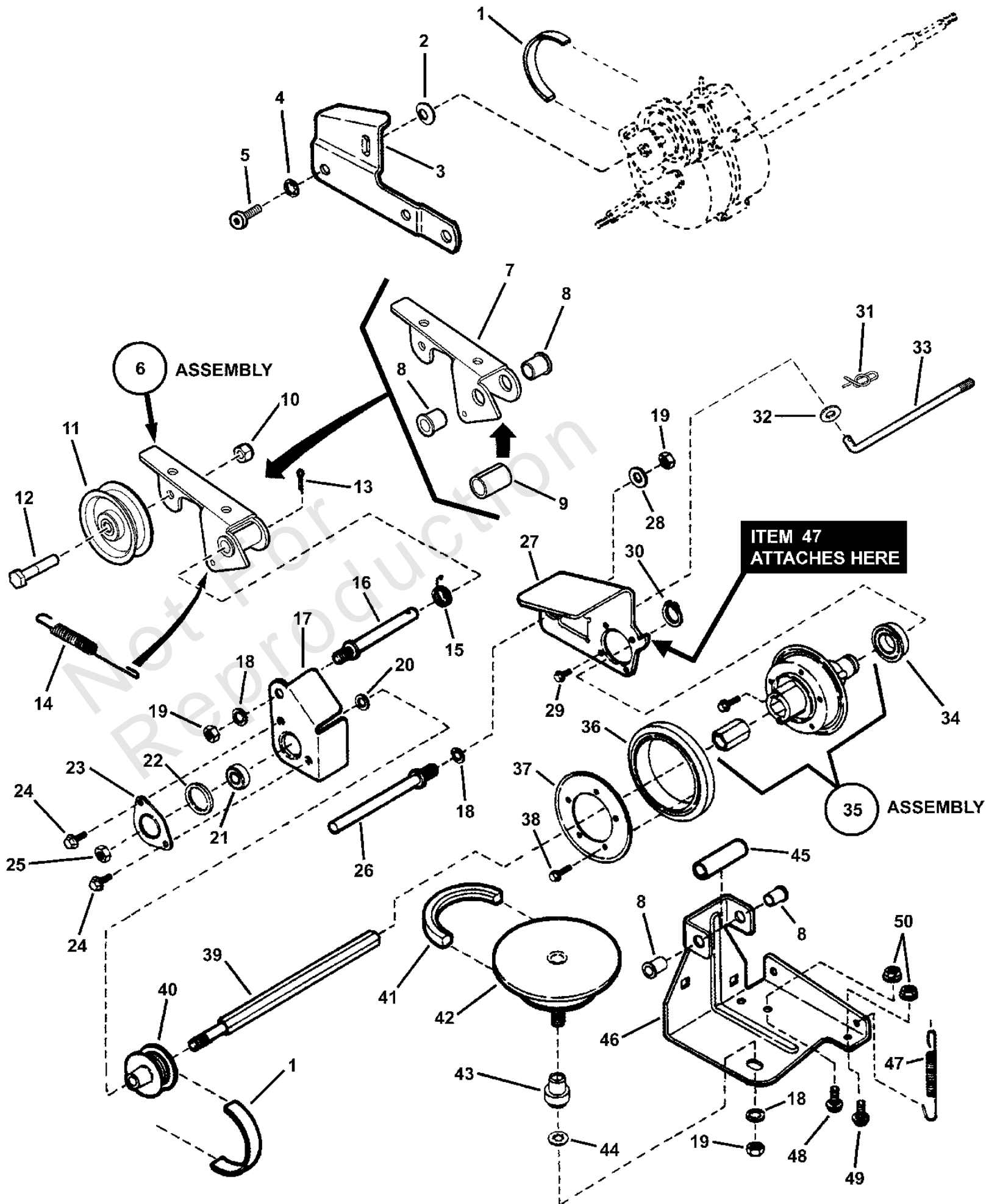
DRIVE SYSTEM SELF-PROPELLED

REF NO	PART NO	QTY	DESCRIPTION
1	7012354	1	BELT, Poly-V
2	7011724	1	WASHER, 44 x .78 x .025 Curved
	7051913	1	ASSEMBLY, Clutch Idler (incl. items 3 thru 6)
3	7034179	1	LINK, Differential
4	7090391	1	WASHER, 5/16" Internal Tooth Lock
5	7091542	1	SCREW, 5/16-18 x 1/2" Pan Head Self-Tap (Torx)
6	7500154	1	ASSEMBLY, Idler Arm, Bushing & Spacer
7	7032832	1	ARM, Clutch Idler
8	7012306	4	BUSHING, Flange (Powdered Metal)
9	7100447	1	SPACER, Idler Arm
10	7090303	1	NUT, 1/4-28 Hex Top Lock
11	7012124	1	PULLEY, Idler
12	7091025	1	SCREW, 1/4-28 x 1-3/8" Hex Head Cap, GR 5
13	7091597	1	COTTER PIN, 3/32 x 1/2" -was 7090555
14	7012122	1	SPRING, Clutch- 21S
15	7012126	1	SPRING, Idler- Torsion
16	7012111	1	STUD, Idler (3/8-24 thread)
17	7031873	1	HOLDER, Bearing (Inner Half)
18	7090390	3	WASHER, 3/8" Internal Tooth Lock
19	7091630	3	NUT, 3/8-24 Hex
20	7012316	1	WASHER, 3/8" Flat
21	7028014	1	BALL BEARING, Spherical O.D., .38 I.D.
22	7011025	1	O-RING
23	7031809	1	HOLDER, Bearing (Outer Half)
24	7091122	2	SCREW, 1/4-20 x 1/2" Hex Flange Self-Tap -was 7090539
25	7090289	1	NUT, 3/8-24 Hex Center Lock, GR 5
26	7012125	1	GUIDE, Thrust Plate (3/8-24 thread)
27	7300977A	1	THRUST PLATE, Short -was 7034281
28	7090122	1	WASHER, 3/8" Flat
29	7090981	4	SCREW, #10-32 x 1/4" Self-Tap Machine
30	7010746	1	RETAINING RING, .625 External
31	7090673	1	COTTER PIN, .06 x .50 -was 7091629
32	7091294	1	WASHER, .28 x .63 x .06 Flat
33	7074145	1	LINK, Transfer (1/4-28 thread)
34	7029027	1	BALL BEARING, 3/4" Bore- Commercial
--	7501000		ASSEMBLY, DRIVEN DISC (includes items 18, 19, 26-29, 30, 32, & 34-38)
35	7061276	1	* ASSEMBLY, Bushing & Hub -was 7053217, Incl. Hub (7017073), Bushing (7014678), Hex, Drive Bushing (7011108) & 2 #10-24 x 1/2" Hex Self-Tap Screws (7090913)
36	7023364	1	DRIVEN RING, 21P -was 7010927
37	7031013	1	PLATE, Ring Retaining
38	7090913	2	SCREW, #10-24 x 1/2" Self-Tap Machine
39	7072284	1	SHAFT, Hex (3/8-24 thread, one end)
40	7019383	1	PULLEY, Poly-V (2.00" O. D.)
41	7046784	1	BELT, Engine Drive (Stretch)
42	7073528	1	ASSEMBLY, Steel Drive Disc
43	7017696	1	BUSHING, Powdered Metal

DRIVE SYSTEM SELF-PROPELLED

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 7800194



DRIVE SYSTEM SELF-PROPELLED

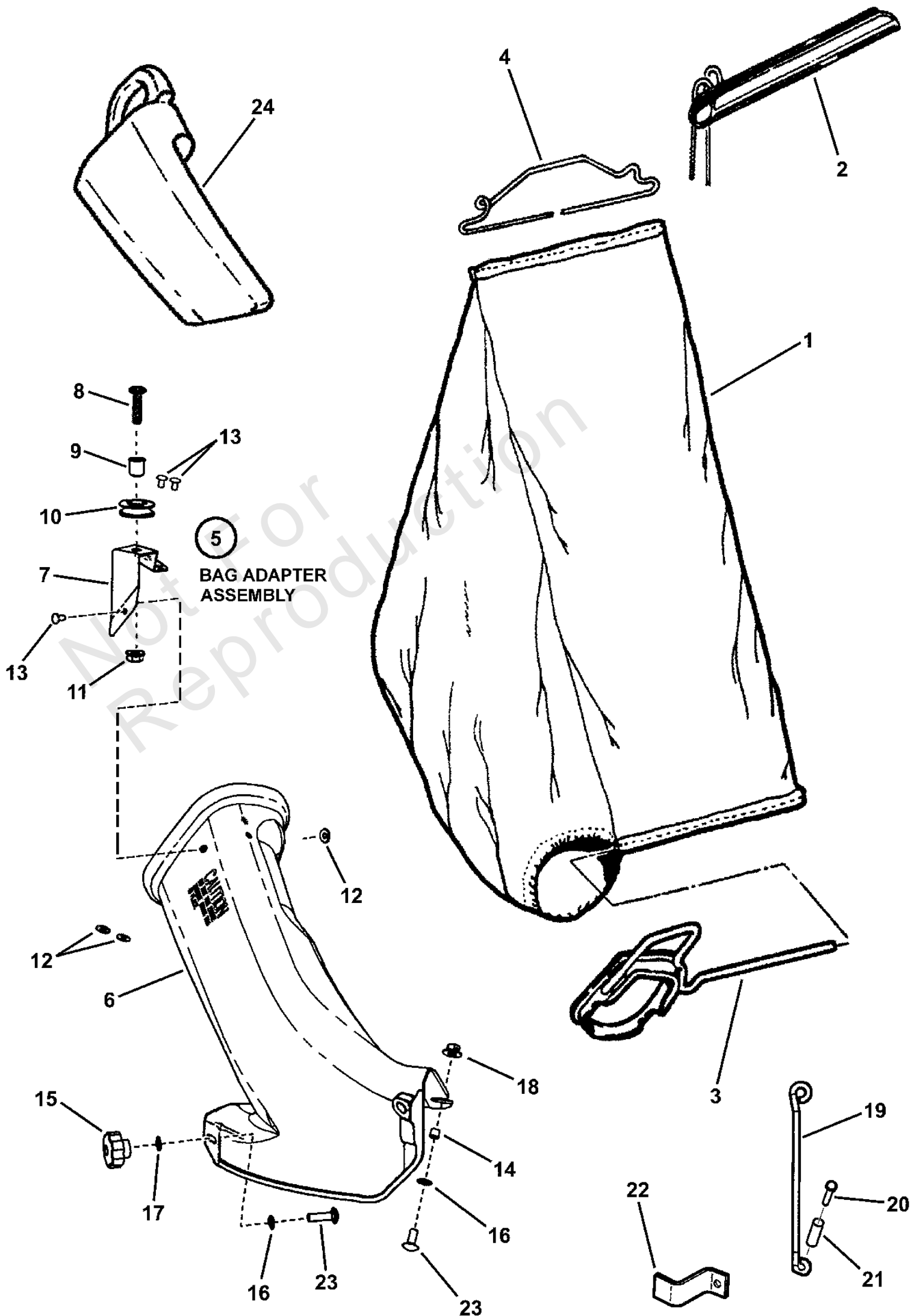
REF NO	PART NO	QTY	DESCRIPTION
44	7011791	1	RETAINER, 5/16" Bolt
	7052987	1	ASSEMBLY, Deck Bracket (Incl. items 8, 45 & 46)
45	7021758	1	SPACER, .500 x .65 x 1.75
46	7033774	1	BRACKET, Deck, P21S
47	7029025	1	SPRING, Wheel Drive
48	7090731	1	BOLT, 5/16-18 x 1/2", Short Neck Carriage, GR 5 -was 7090261
49	7090799	2	BOLT, 5/16-18 x 5/8" Short Neck Carriage, GR 5 -was 7091026
50	7091070	2	NUT, 5/16-18 Hex Flange Lock GR 5

Not For
Reproduction

GRASS BAG & ACCESSORIES

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 7800194



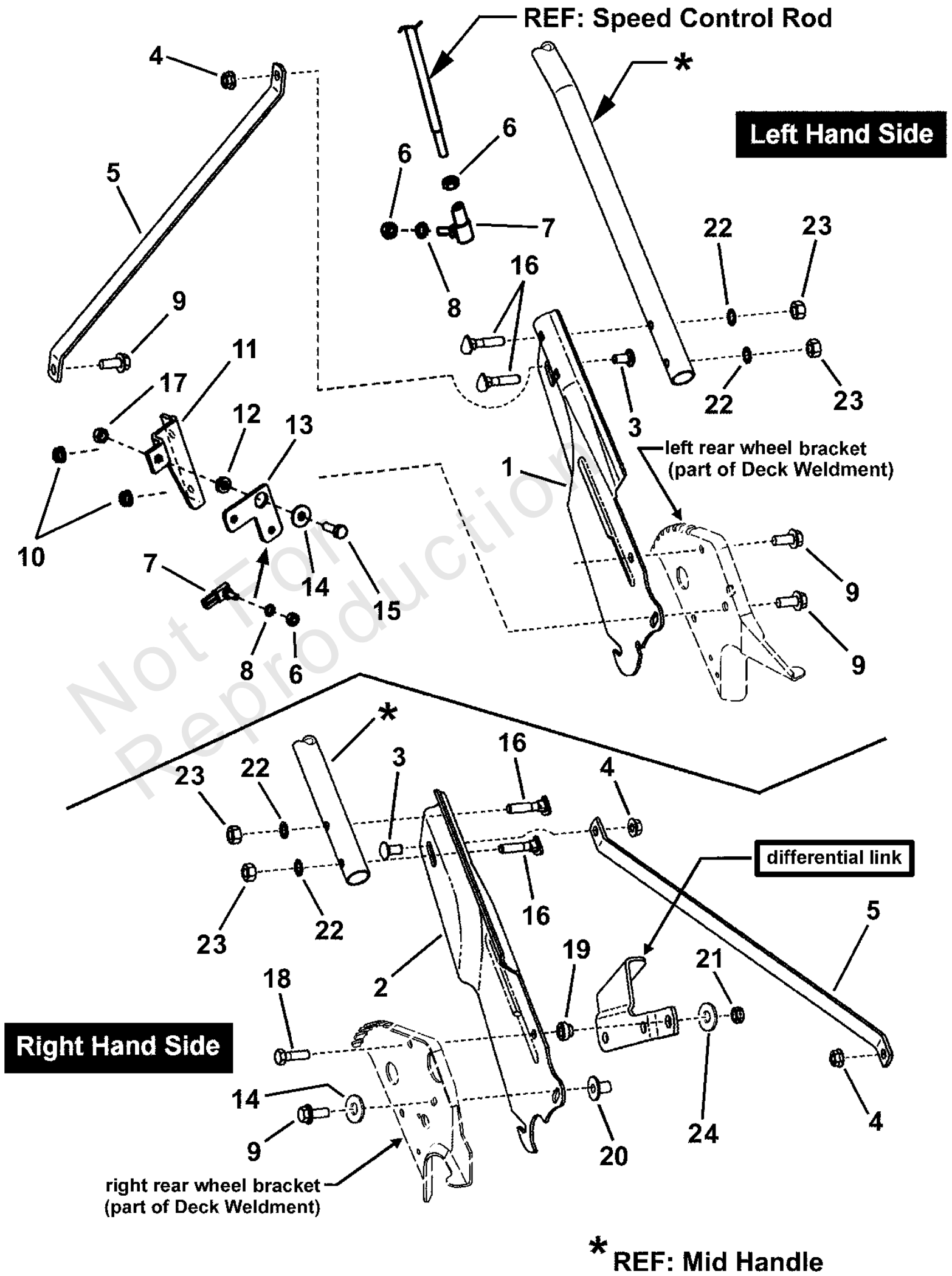
GRASS BAG & ACCESSORIES

REF NO	PART NO	QTY	DESCRIPTION
	7058572	1	ASSEMBLY, Grass Bag (Slider type) -Includes items 1 through 4
1	7075766	1	GRASS BAG, Slider Type (Black w/Gray Letters)
2	7050711	1	ASSEMBLY, Slider
3	7042489	1	CONNECTOR, Grass Bag
4	7019247	1	WIRE, Bag Connector (12" Wide)
5	7058037	1	ASSY, Grass Bag Adapter (Incl. items 6 thru 13) -CP215519HV, CP215520HV & CP216019KWV
6	7047081	1	ADAPTER, Grass Bag
7	7047082	1	BRACKET, Rope Pulley
8	7091984	1	SCREW, 5/16-18 x 1-1/4" Pan Head Machine
9	7012306	1	BUSHING, Flange (Powdered Metal)
10	7024228	1	PULLEY, Plastic
11	7091070	1	NUT, 5/16-18 Hex Flange Lock GR 5
12	7072107	3	WASHER, 15/32" Flat
13	7013860	3	RIVET, 3/16 x .344
14	7024340	1	SPACER, .316 I.D. x .375 O.D. x .310 thick
15	7100516	2	KNOB, Fluted, 5/16-18 x .633
16	7011791	4	RETAINER, 5/16" Bolt
17	7091076	1	WASHER, 5/16" Flat
18	7090951	1	NUT, 5/16-18 Hex Large Flange Center Lock
19	7043327	1	BRACE, Bag Adapter, KWV
20	7078102	1	SCREW, M6 x 1.0 x 30MM Hex Head Cap
21	7078101	1	SLEEVE, .237/.242 I.D. x .3135/.3185 O.D. x .748
22	7075306	1	STANDOFF -used on CP215519HV & CP215520HV
23	7090001	2	BOLT, 5/16-18 x 3/4" Short Neck Carriage GR 5 -or 7091508
24	7016814	1	PLUG, Chute Adapter
	7060440		KIT, Snapperizer (21" Hi-Vac Steel Deck Models) (other accessories not shown)
	7063041		KIT, Snapperizer (21" F & M Outlip Steel Deck Models) (other accessories not shown)
	7061200		KIT, Recycling Cover (other accessories not shown) -for 4HP & above engines
	7061201		KIT, Recycling Plug (Quad Blade) (other accessories not shown) -for 4HP & above engines
	7061256		KIT, Thatcherizer (other accessories not shown)

HANDLES & CONTROLS - Lower End

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 7800194



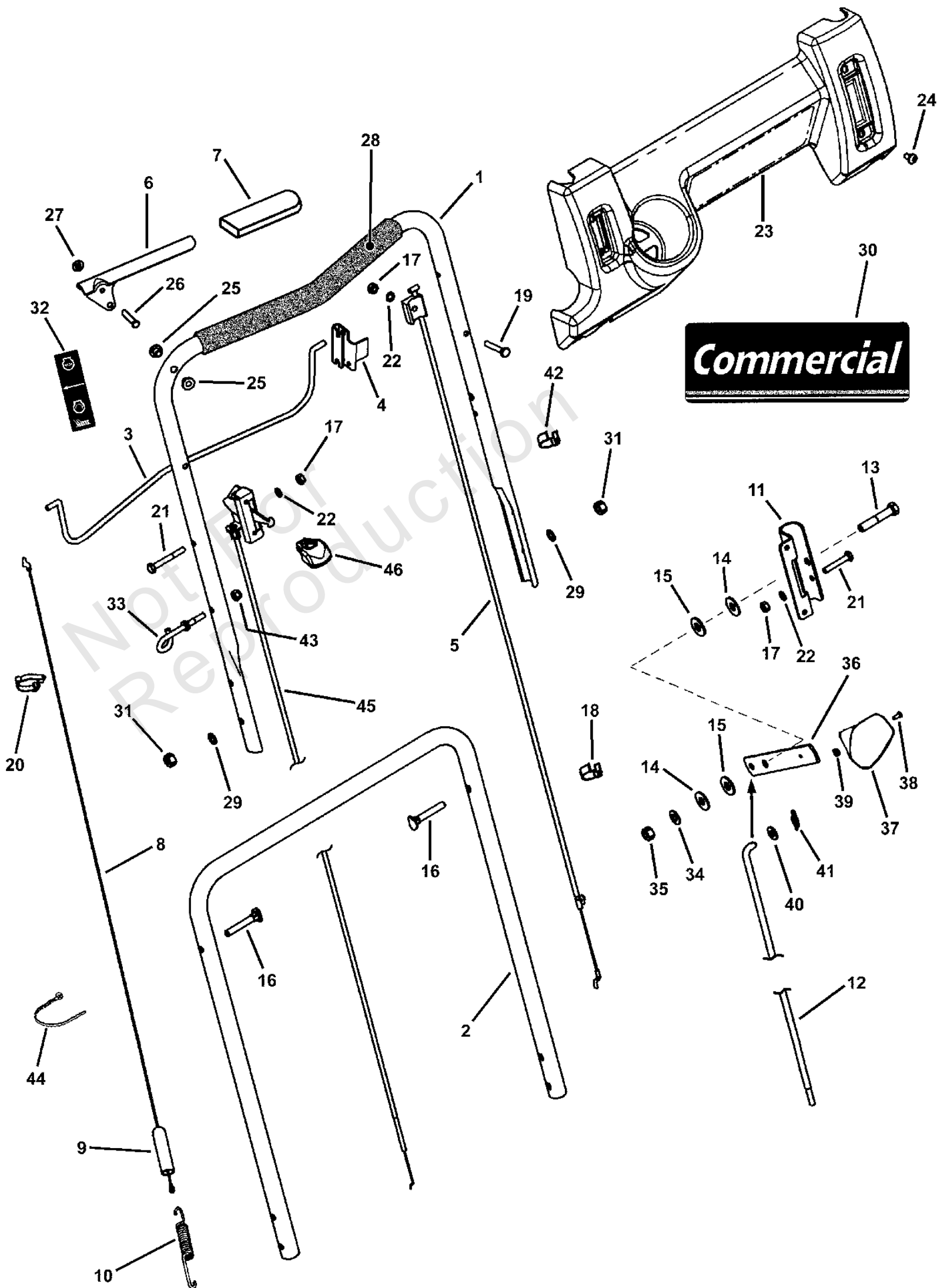
HANDLES & CONTROLS - Lower End

REF NO	PART NO	QTY	DESCRIPTION
1	7033985	1	HANDLE, Lower LH (Adjustable)
2	7033986	1	HANDLE, Lower RH (Adjustable)
3	7091026	2	BOLT, 5/16-18 x 5/8" Short Neck Carriage GR 5
4	7091601	3	NUT, 5/16-18 Hex Flange Lock GR 5 -was 7091070
5	7046707	2	STRAP, Handle
6	7090095	4	NUT, 1/4-28 Hex, GR 5
7	7015753	2	BALL JOINT, 1/4-28
8	7090053	4	WASHER, 1/4" Internal Tooth Lock
9	7090595	5	BOLT, 5/16-18 x 3/4" Hex Flange Lock GR 5
10	7090585	10	NUT, 5/16-18 Hex Flange Lock, GR 5
11	7073822	1	BRACKET, Bell Crank
12	7013849	1	SPACER, .33 x .63 x .156
13	7073913	1	BELL CRANK
14	7091130	2	WASHER, .33 x .88 x .09 Flat
15	7091904	1	SCREW, 5/16-18 x 7/8" Hex Head Cap, GR 5
16	7091190	4	BOLT, 5/16-18 x 1-1/2" Curved Head
17	7091575	1	NUT, 5/16-18 Hex Center Lock -was 7091067
18	7090238	1	SCREW, 5/16-24 x 1" Hex Head Cap GR5
19	7012114	1	BUSHING, Differential
20	7090895	1	NUT, 5/16-18 Tee
21	7091606	1	NUT, 5/16-24 Hex Center Lock, GR 5 -was 7091074
22	7090391	4	WASHER, 5/16" Internal Tooth Lock
23	7091511	4	NUT, 5/16-18 Hex, GR 5 -was 7091069
24	7090188	1	WASHER, 3/8" Flat

HANDLES & CONTROLS - Upper End

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 7800194



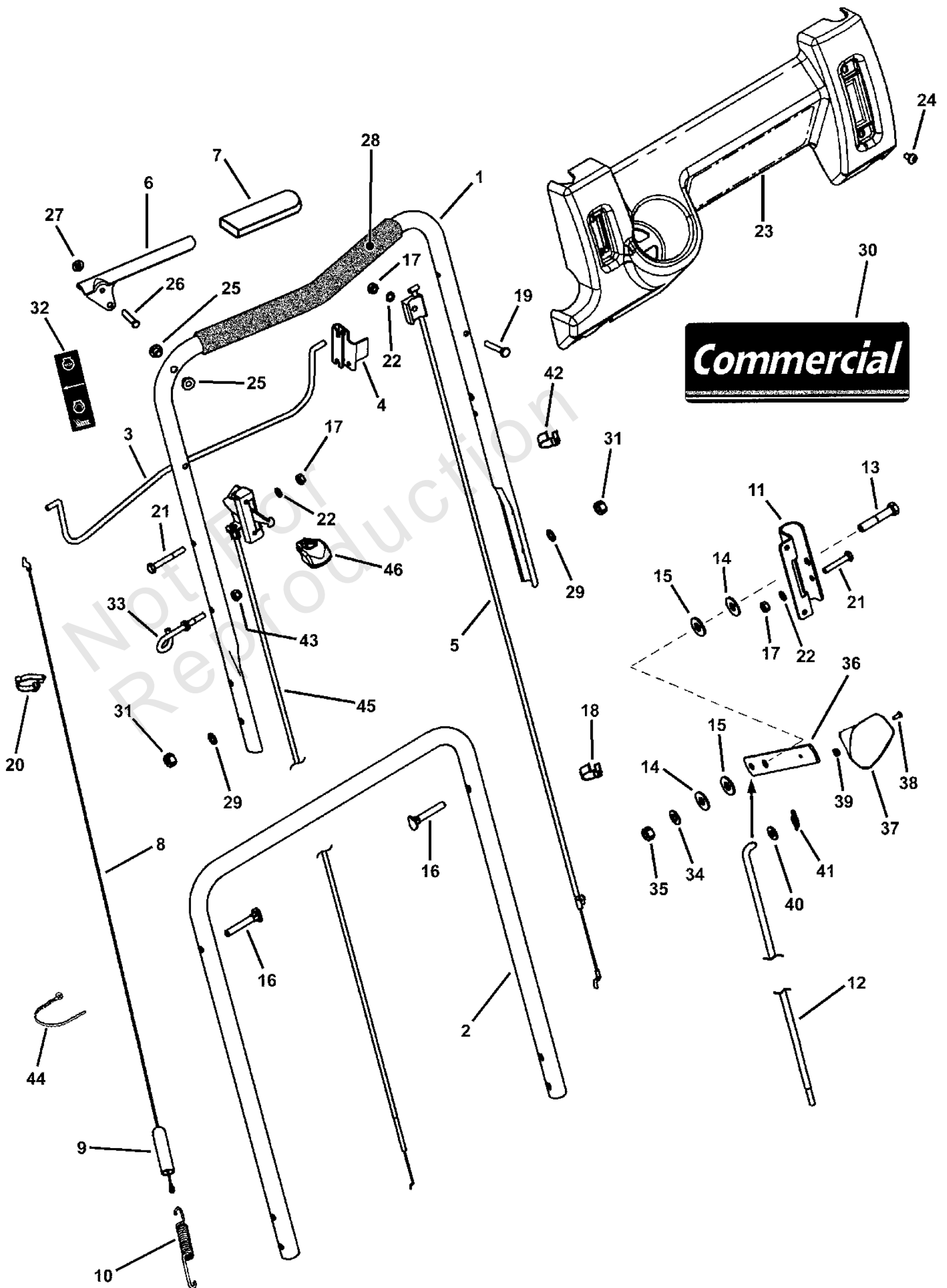
HANDLES & CONTROLS - Upper End

REF NO	PART NO	QTY	DESCRIPTION
1	7074411	1	HANDLE, Upper
2	7074156	1	HANDLE, Middle
3	7074418	1	BAIL, OPC Control
4	7034872	1	CLIP, Zone Control
5	7074141	1	CABLE, Zone Control (56-5/16" Long) -used on CP216019KWV & CRP216019KWV
5	7029344	1	CABLE, Zone Control (49.98" Long) -used on CP215519HV
5	7102235	1	CABLE, Zone Control (60.3" Long) -used on CP215520HV
6	7074473	1	HANDLE, Clutch
7	7075305	1	COVER, Grip, Black 1.125" -used on CP215519HV & CP215520HV
7	7028407	1	GRIP, International Symbol, Black 4.6"
8	7034604	1	CABLE, Clutch Control (41-1/4" Long)
9	7012121	1	COVER, Vinyl
10	7012122	1	SPRING, Clutch- 21S
11	7074003	1	BRACKET, Shift
12	7074133	1	ROD, Speed Control (1/4-28 thread)
13	7091305	1	SCREW, 3/8-16 x 2" Hex Head Cap, GR 5
14	7031961	2	WASHER, 7/16" Flat
15	7028465	2	WASHER, Nylon
16	7091190	2	BOLT, 5/16-18 x 1-1/2" Curved Head
17	7091576	2	NUT, 1/4-20 Hex -was 7091100
18	7023813	3	CLIP, Wiring Harness
19	7079577	2	SCREW, 1/4-20 x 1-1/2" Hex Head Cap GR5
20	7026219	1	CLAMP, 7/8" Double Cable
21	7090505	2	SCREW, 1/4-20 x 2" Hex Head Cap, GR 5
22	7090053	2	WASHER, 1/4" Internal Tooth Lock -was 7091023
23	7074140	1	CONTROL PANEL (w/o Electrical Switch Hole)
24	7091200	4	SCREW, 1/4-20 x 1/2" Pan Head Self-Tap (Torx)
25	7014343	2	BUSHING, .27 x .35 x .4 Flange
26	7023792	1	PIN, 1/4 x 1-1/2"
27	7091020	1	PUSH-NUT, 1/4"
28	7023810	1	FOAM GRIP, 18.75" long
29	7090391	2	WASHER, 5/16" Internal Tooth Lock
30	7100181	1	DECAL, Commercial, Control Panel
31	7091069	2	NUT, 5/16-18 Hex, GR 5 -or 7091511
32	7029782	1	DECAL, OPC Bail (International Symbol)
33	7028488	1	GUIDE, Rope (1/4-20 thread)
34	7028568	1	WASHER, Belleville
35	7091585	1	NUT, 3/8-16 Hex Center Lock
36	7074113	1	LEVER, Shift
37	7075182	1	KNOB, Shift
38	7091167	1	SCREW, #8-32 x 1/2" Cross Recess Filister Head Machine
39	7091018	1	NUT, #8-32 Hex
40	7090188	3	WASHER, 3/8" Flat
41	7034162	1	COTTER PIN, 5/16 Self Lock
42	7024641	1	TIE, Wire, 1.29 long, black
43	7076978	1	NUT, 1/4-28 Hex Nyloc

HANDLES & CONTROLS - Upper End

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 7800194



HANDLES & CONTROLS - Upper End

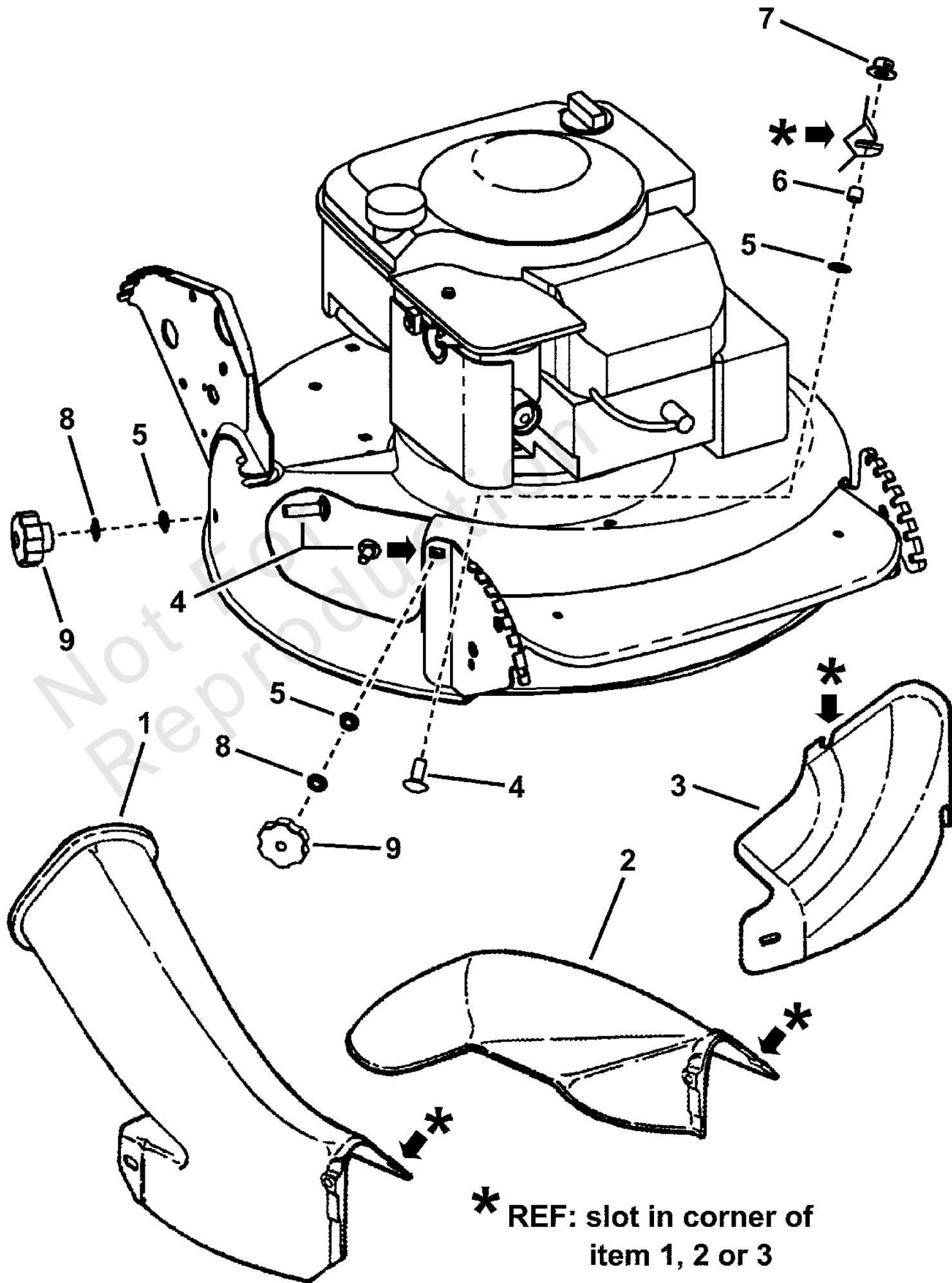
REF NO	PART NO	QTY	DESCRIPTION
44	7012080	2	CABLE-TIE, 7"
45	7078026	1	THROTTLE CONTROL, 5.5 HP, Honda (50.81" long) -used on CP215519HV & CP215520HV
45	7074138	1	THROTTLE CONTROL, 6.0 HP Kawasaki (53.25" long) -used on CP216019KWV & CRP216019KWV
46	7075308	1	THROTTLE KNOB

Not For
Reproduction

SIDE CHUTE ADAPTER

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 7800194



SIDE CHUTE ADAPTER

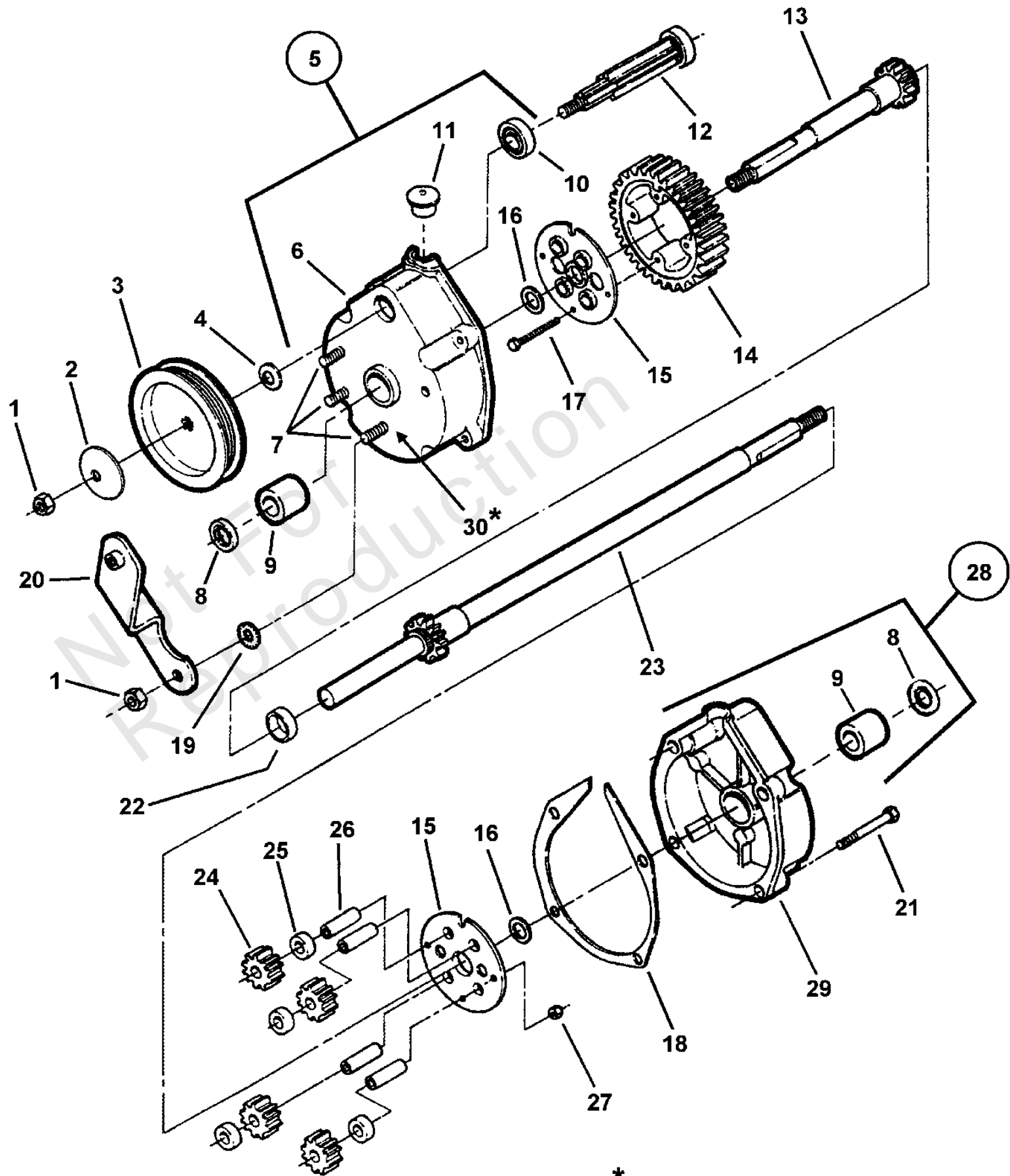
REF NO	PART NO	QTY	DESCRIPTION
1	7047081	1	ADAPTER, Grass Bag
2	7042965	1	CHUTE, 21" Side
3	7029149	1	COVER, 21" Deck
4	7091508	1	BOLT, 5/16-18 x 3/4" Short Neck Carriage GR 5 -was 7090001
5	7011791	1	RETAINER, 5/16" Bolt
6	7024340	1	SPACER, .316 I.D. x .375 O.D. x .310 thick
7	7090951	2	NUT, 5/16-18 Hex Large Flange Center Lock
8	7090189	2	WASHER, 5/16" Internal/External Tooth Lock
9	7100516	2	KNOB, Fluted, 5/16-18 x .633

Not For
Reproduction

TRANSMISSION - DIFFERENTIAL

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 7800194



* UNDER HEAD OF SCREW, ITEM 7

TRANSMISSION - DIFFERENTIAL

REF NO	PART NO	QTY	DESCRIPTION
	7053943	1	ASSEMBLY, Transmission (Incl. items 1 thru 30) -was 7059070
1	7092062	4	NUT, 5/16-18 Hex Lock
2	7092063	1	WASHER, Cone
3	7019213	1	PULLEY, Poly-V Belt (3.5 O.D.)
4	7091720	1	WASHER, Spring
5	7053942	1	ASSEMBLY, Right Housing (Incl. items 6, 7, 8, 9, 10 & 30)
6	7029034	1	HOUSING, Right Side
7	7014155	3	SCREW, 5/16-24 x 1-1/8" Rib Neck, GR 5
8	7012314	1	SEAL, 5/8" Internal Diameter
9	7029035	1	BEARING, Tapered- (Differential Housing)
10	7073963	1	BALL BEARING, 7/16 I.D., 1/1/8" O.D.
11	7016544	1	PLUG, Transmission Housing
12	7050767	1	GEAR, Input
13	7050830	1	ASSEMBLY, Short Axle -was 7051932 & includes items 13, 22 & 23.
14	7012495	1	** GEAR, Differential (46 Tooth)
15	7031970	2	PLATE, 46T Gear
16	7031965	2	WASHER, Thrust, 3/4" I.D.
17	7090557	4	SCREW, #10-32 x 1-1/2" Hex Head Cap GR5
18	7011774	1	GASKET, Housing
19	7090189	3	WASHER, 5/16" Internal/External Tooth Lock
20	7051903	1	WELDMENT, Differential Bracket
21	7091825	4	SCREW, 1/4-20 x 1" Hex Washer Self-Tap -was 7092064
22	7012543	1	SPACER, Axle Gear
23	7050831	1	ASSEMBLY, Long Axle -was 7051933
24	7021115	4	GEAR, Pinion (12 tooth)
25	7012500	4	SPACER, Pinion Gear
26	7011110	4	SHAFT, Pinion
27	7090376	4	NUT, #10-32 Hex Nyloc
28	7053939	1	ASSY, Left Housing
29	7029033	1	HOUSING, Left
30	7024442	3	GASKET, 5/8" O. D.
	7061017	32oz.	* "00" Grease -not shown

Footnotes:

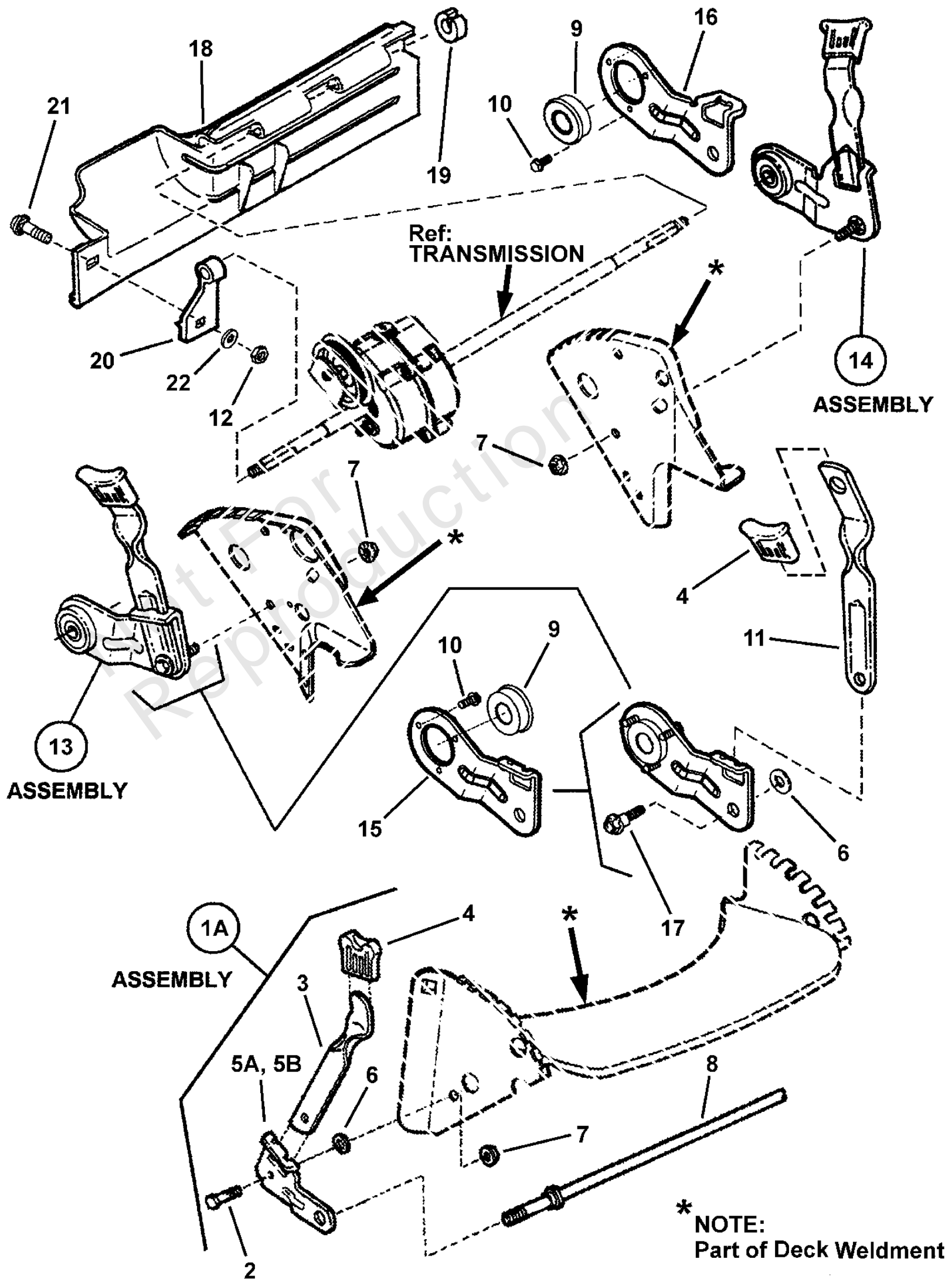
NOTE: * Use 4 oz maximum.

NOTE: ** 7060337 KIT, Transmission Gear (Incl. items 14-17, 22 & 24-27).

WHEEL BRACKETS, LATCHES

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 7800194



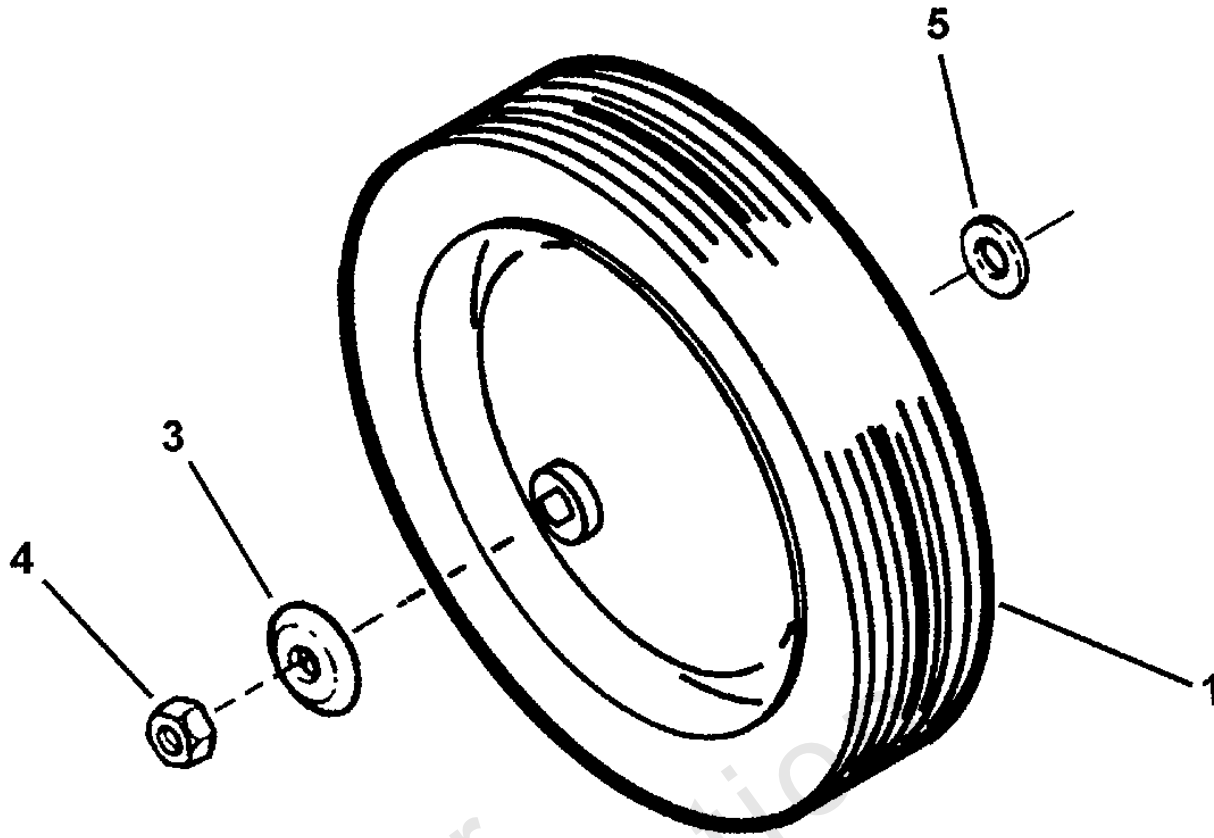
WHEEL BRACKETS, LATCHES

REF NO	PART NO	QTY	DESCRIPTION
1A	7051886	1	ASSEMBLY, Right Wheel Arm
1B	7051885	1	ASSEMBLY, Left Wheel Arm -not shown
2	7015761	1	BOLT, 5/16-18 x 3/4" Hex Washer Face Shoulder -per wheel arm assembly
3	7012325	1	LATCH, Height -per wheel arm assembly
4	7100633	1	GRIP, Height Latch -replaces 7027702
5A	7031017	1	WHEEL ARM, R.H. Front (Round Hole)
5B	7031016	1	WHEEL ARM, L.H. Front (Square Hole) -not shown
6	7011791	4	RETAINER, 5/16" Bolt
7	7091070	2	NUT, 5/16-18 Hex Flange Lock, GR 5 -or 7091601 or 7090585
8	7021119	1	AXLE, 21"
9	7012312	1	BEARING, 9/16" I.D. -per Rear Wheel Arm
10	7091012	3	SCREW, #10-32 x 3/8" Hex washer Self-Tap -per Rear Wheel Arm
11	7035717	1	LATCH, Height Adjusting (long) -per Rear Wheel Arm
12	7091576	1	NUT, 1/4-20 Hex, GR 5 or B -was 7090063
13	7054246	1	ASSY, Wheel Arm, Right Rear (S.P.) -was 7054230, Incl. 4, 6, 9, 10, 11, 15 & 17
14	7054247	1	ASSY, Wheel Arm Left Rear Long (S.P.) -was 7054231, Incl. 4, 6, 9, 10, 11, 16 & 17
15	7032722	1	ARM, Wheel, Right Rear
16	7032723	1	ARM, Wheel, Left Rear
17	7011078	1	BOLT, 5/16-18 x 1" Hex Washer Face Shoulder -per wheel arm assembly
18	7029008	1	FOOT GUARD, Rear
19	7023791	1	RING, Split (Black)
20	7012616	1	SUPPORT, Foot Guard
21	7091604	1	BOLT, 1/4-20 x 1/2" Short Neck Carriage GR 5 -was 7090005
22	7090053	1	WASHER, 1/4" Internal Tooth Lock -was 7091023

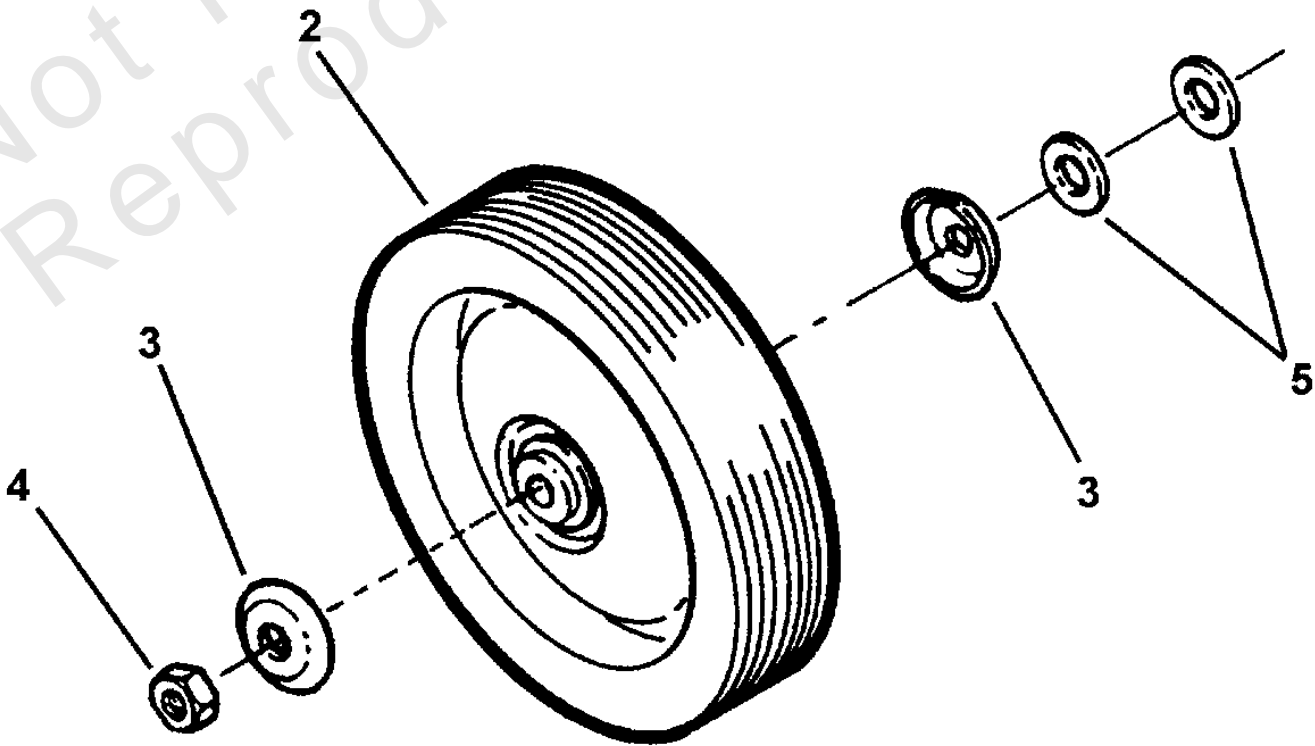
WHEELS, FRONT & REAR

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 7800194



REAR WHEEL



FRONT WHEEL

WHEELS, FRONT & REAR

REF NO	PART NO	QTY	DESCRIPTION
1	7035726	2	WHEEL, Rear 10.0 x 1.75 Diamond Grey
2	7035727	2	WHEEL, Front 8.0 x 1.75 Diamond Black
3	7031121	4	HUB-CAP (Front Wheels)
3	7031960	2	HUB-CAP (Rear Wheels)
4	7090377	4	NUT, 7/16-20 Hex Center Lock Jam
5	7031961	6	WASHER, 7/16" Flat

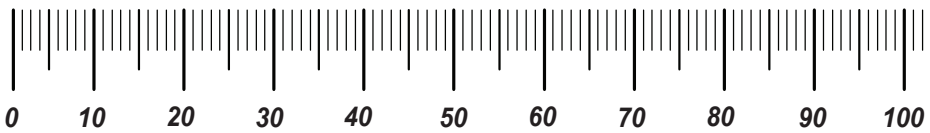
Not For
Reproduction

Hardware Identification & Torque Specifications

Torque Specification Chart								
FOR STANDARD METRIC MACHINE HARDWARE (Tolerance ± 20%)								
Property Class	5.6		8.8		10.9		12.9	
	Class 5.6		Class 8.8		Class 10.9		Class 12.9	
Size Of Hardware	in/lbs	Nm.	in/lbs	Nm.	in/lbs	Nm.	in/lbs	Nm.
	ft/lbs		ft/lbs		ft/lbs		ft/lbs	
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

Torque Specification Chart						
FOR STANDARD MACHINE HARDWARE (Tolerance ± 20%)						
Hardware Grade	No Marks		SAE Grade 5		SAE Grade 8	
	SAE Grade 2		SAE Grade 5		SAE Grade 8	
Size Of Hardware	in/lbs	Nm.	in/lbs	Nm.	in/lbs	Nm.
	ft/lbs		ft/lbs		ft/lbs	
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

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

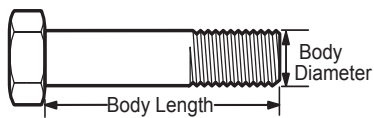


Nut, M8

Thread Diameter (mm)

Inside Diameter (in) Threads per inch

Nut, 1/2-16



Screw, M8- 1.25 x 25

Thread Diameter (mm) Distance between threads (mm) Body Length (mm)

Body Diameter Threads per inch Body Length (in)

Screw, 1/2- 16 x 2



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).

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

Hex Head Capscrew



Washer



Carriage Bolt



Hex Nut

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

