



Parts Manual

HydroCut Series

Walk-Behind Mower



Models:

5900604

HC32KAV13

HC36KAV13E

Ferris Industries

5375 North Main Street
Munnsville, NY 13409 USA
800-933-6175

5022949
Revision 08
Rev. Date: 4/2005

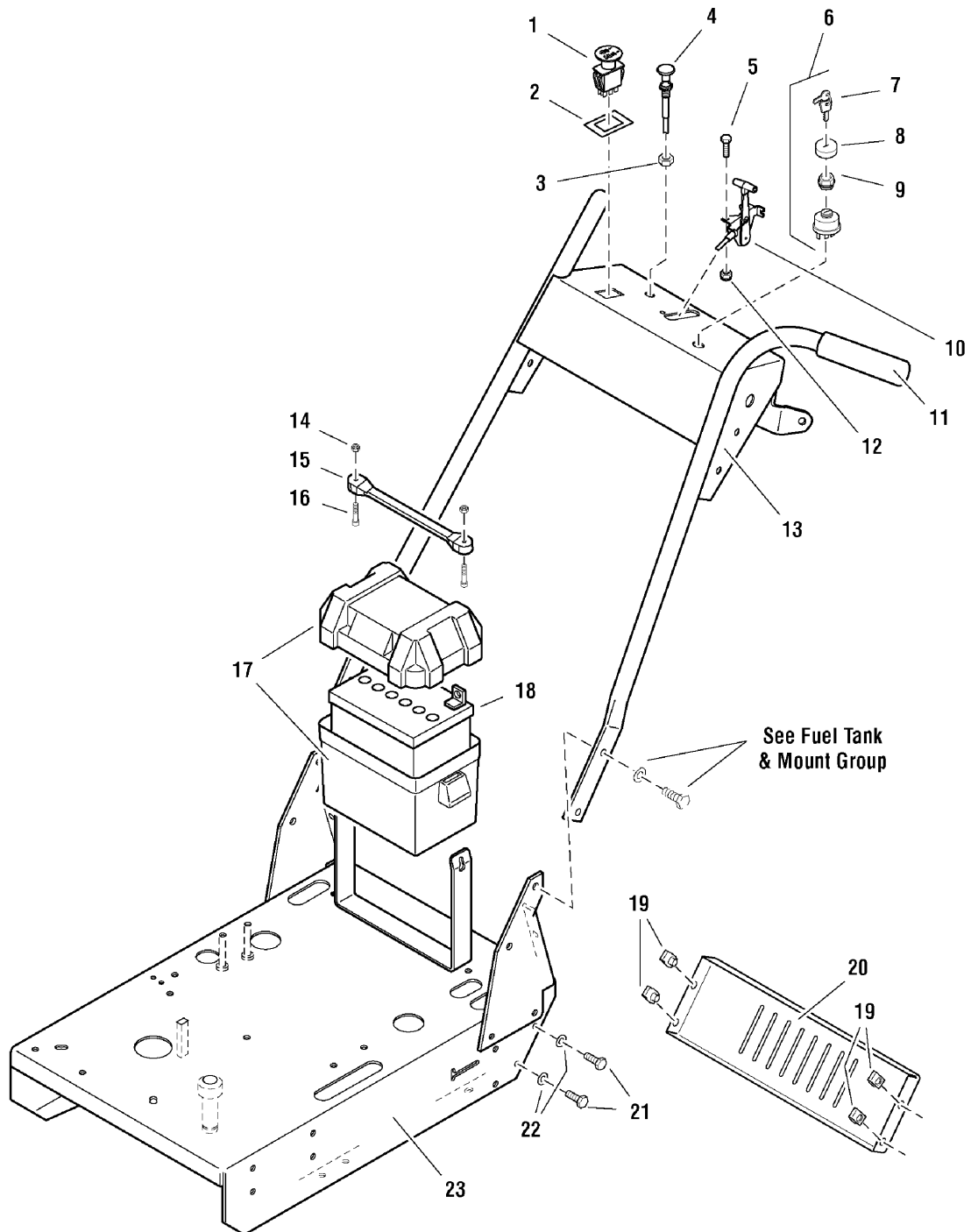
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MODEL COMPONENTS	PAGE
Engine Frame & Handle Bars Group - Electric Start	4
Engine Frame & Handle Bars Group - Manual Start	6
Fuel Supply Hose & Tank Replacement Parts Group - Electric Start	8
Fuel Supply Hose & Tank Replacement Parts Group - Manual Start	10
Fuel Tank & Mount Group	12
Engine, PTO & Deck Drive Idler Group - Manual Start	14
Engine, PTO & Deck Drive Idler Group - Electric Start	16
Motion Control, Parking Brake & Operator Presence Group - Electric Start	18
Motion Control, Parking Brake & Operator Presence Group - Manual Start	20
Transaxle & Mount Group	22
Transaxle - SERVICE PARTS	24
Tire & Wheel Group	26
Decals - Brand & Model	28
Decals - Safety & Instruction	30
32" Mower Deck - Frame, Caster & Shield	32
32" Mower Deck - Height Adjustment	34
32" Mower Deck - Housing, Spindles, Blades & Pulleys	36
36" Mower Deck - Frame, Caster & Shield	38
36" Mower Deck - Height Adjustment	40
36" Mower Deck - Housing, Spindles, Blades & Pulleys	42
Electrical Group - Electric Start	46
Electrical Group - Manual Start	48
Electrical Schematic - Manual Start	50
Torque Specification Chart	Inside Back Cover

Engine Frame & Handle Bars Group - Electric Start

077hbre0

NOTE: Unless noted otherwise,
use the standard hardware torque
specification chart.



The above parts group applies to the following Mfg. Nos.:

5900604
HC36KAV13E

Engine Frame & Handle Bars Group - Electric Start

REF NO.	PART NO.	QTY.	DESCRIPTION
1	22180	1	SWITCH, PTO
2	22222	1	SWITCH RETAINER RING
3	25035	1	NUT, 3/8-24 Hex
4	46501	1	CABLE, Choke Control, 47"
5	25010-6	2	BOLT, 1/4-20 x 3/4
6	20927	1	SWITCH, Ignition, Complete (Includes Ref No. 7 - 9)
7	22789	1	KEY, Ignition, Molded Set
8	22790	1	COVER
9	22791	1	PLASTIC NUT
10	47629	1	CABLE, Throttle Control, 46"
11	21841	2	GRIP, Foam
12	25095	2	NUT, 1/4-20 Hex Nylon Lock
13	61279	1	HANDLE BAR ASSEMBLY
14	25271	2	NUT, #10-24 Hex Nylon Lock
15	21670	1	RUBBER STRAP
16	25270	2	SCREW, #10-24 x 1
17	46188	1	BATTERY BOX
18	-	1	BATTERY, Lawn & Garden, 12V (BCIU1, 340 CCA)
19	22308	4	BODY CLIP, 5/16-18
20	47735	1	REAR SHIELD
21	25011-6	4	BOLT, 5/16-18 x 3/4
22	25155	4	WASHER, 5/16" SAE
23	49229	1	ENGINE DECK ASSEMBLY

Footnotes

The above parts group applies to the following Mfg. Nos.:

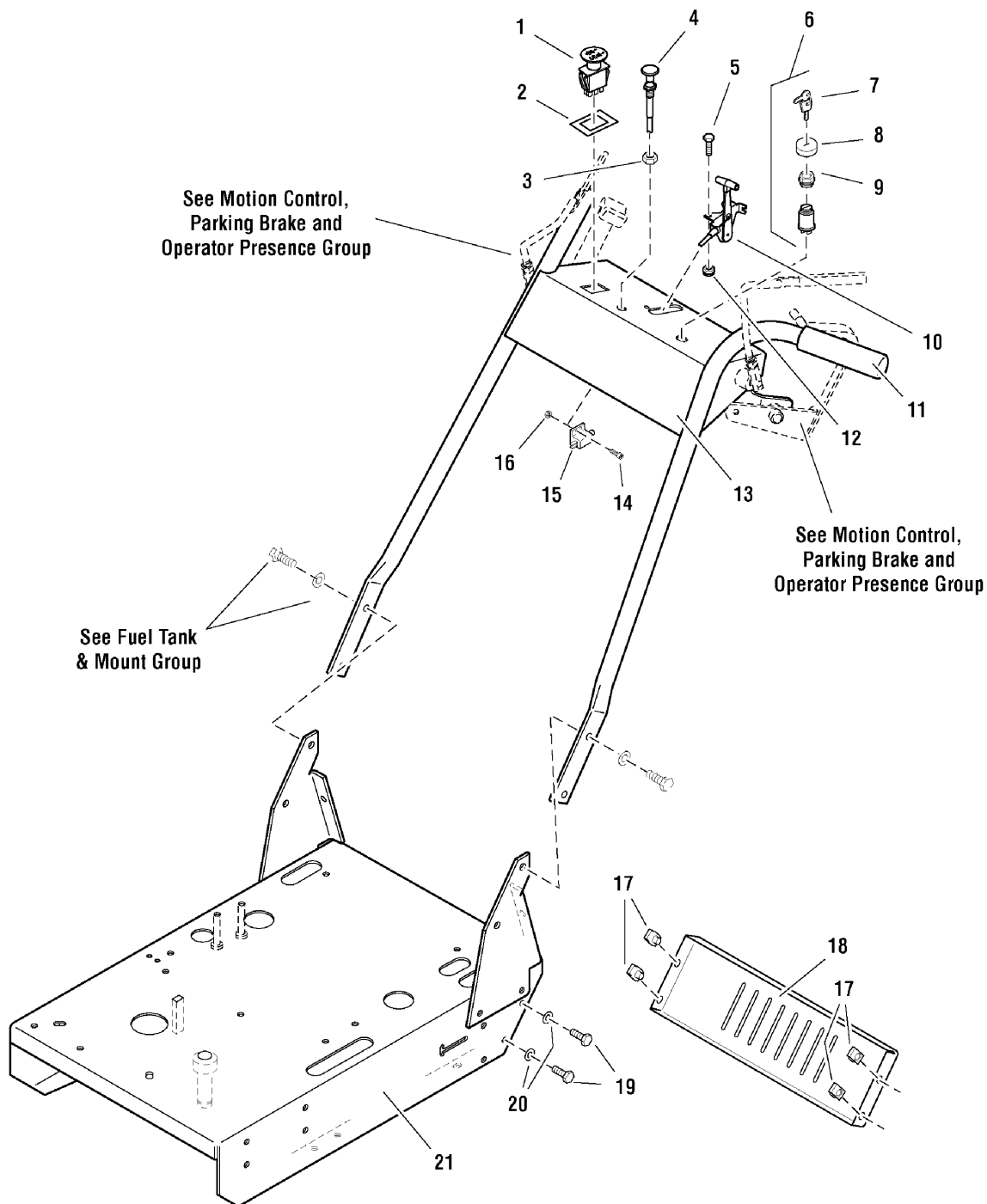
5900604

HC36KAV13E

Engine Frame & Handle Bars Group - Manual Start

077HBRM0

NOTE: Unless noted otherwise,
use the standard hardware torque
specification chart.



The above parts group applies to the following Mfg. Nos.:

HC32KAV13

Engine Frame & Handle Bars Group - Manual Start

REF NO.	PART NO.	QTY.	DESCRIPTION
1	22180	1	SWITCH, PTO
2	22222	1	SWITCH RETAINER RING
3	25035	1	NUT, 3/8-24 Hex
4	46501	1	CABLE, Choke Control, 47"
5	25010-6	2	BOLT, 1/4-20 x 3/4
6	21842	1	SWITCH, Ignition, Complete (Includes Ref No. 7 - 9)
7	22789	1	KEY, Ignition, Molded Set
8	22790	1	COVER
9	22791	1	PLASTIC NUT
10	47629	1	CABLE, Throttle Control, 46"
11	21841	2	GRIP, Foam
12	25095	2	NUT, 1/4-20 Hex Nylon Lock
13	47905	1	HANDLE BAR ASSEMBLY
14	25179-4	2	SCREW, #10-24 x 1/2
15	21769	1	SWITCH, Plunger, NC
16	25029	2	NUT, #10-24 Hex
17	22308	4	BODY CLIP, 5/16-18
18	47735	1	REAR SHIELD
19	25011-6	4	BOLT, 5/16-18 x 3/4
20	25155	4	WASHER, 5/16" SAE
21	48230	1	ENGINE DECK ASSEMBLY

Footnotes

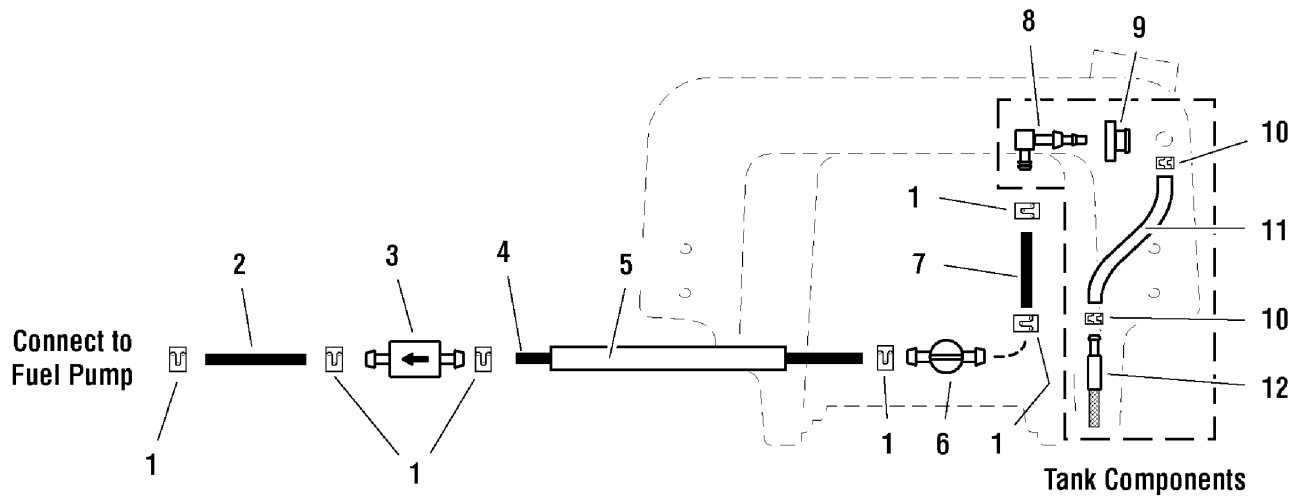
The above parts group applies to the following Mfg. Nos.:

HC32KAV13

Fuel Supply Hose & Tank Replacement Parts Group - Electric Start

077fshe0

NOTE: Unless noted otherwise,
use the standard hardware torque
specification chart.



The above parts group applies to the following Mfg. Nos.:

5900604
HC36KAV13E

Fuel Supply Hose & Tank Replacement Parts Group - Electric Start

REF NO.	PART NO.	QTY.	DESCRIPTION
1	20835	6	CLAMP, Hose
2	50831-7	1	1/4" Fuel Line, 7" Long (supplied with engine)
3	21178-3	1	FUEL FILTER
4	50831-35	1	1/4" Fuel Line, 35" Long
5	50833-22	1	WIRE LOOM, 22"
6	21235	1	VALVE, Fuel Shut-Off
7	50831-4	1	1/4" Fuel Line, 4" Long
8	23061	1	ELBOW FITTING
9	1726400	1	GROMMET
10	23069	2	HOSE CLAMP
11	50925-20	1	HOSE, 20"
12	23067	1	SCREEN FITTING

Footnotes

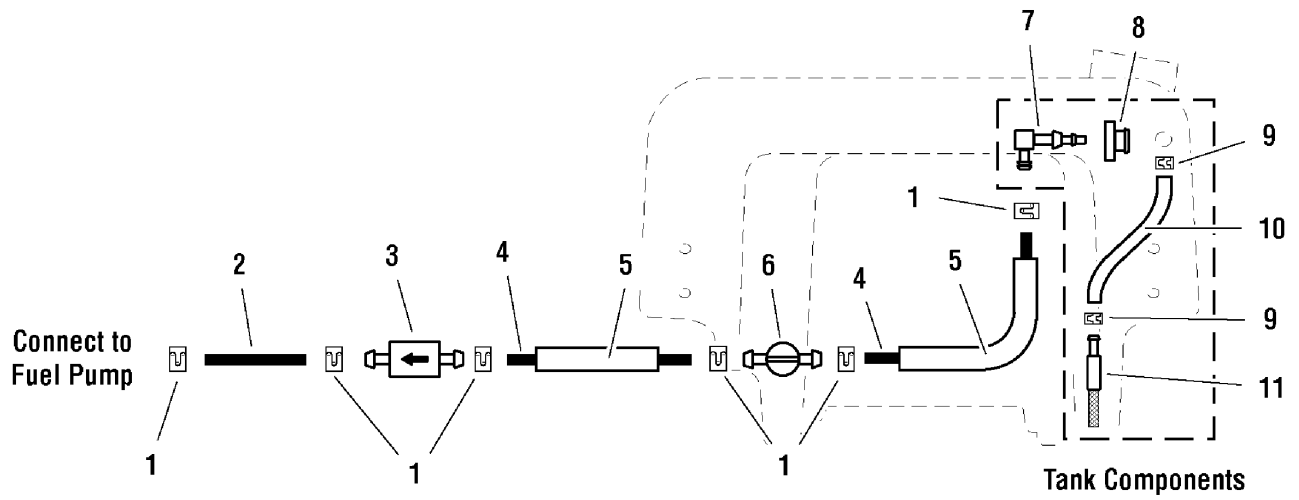
The above parts group applies to the following Mfg. Nos.:

5900604
HC36KAV13E

Fuel Supply Hose & Tank Replacement Parts Group - Manual Start

077FSHM0

NOTE: Unless noted otherwise,
use the standard hardware torque
specification chart.



The above parts group applies to the following Mfg. Nos.:

HC32KAV13

Fuel Supply Hose & Tank Replacement Parts Group - Manual Start

REF NO.	PART NO.	QTY.	DESCRIPTION
1	20835	6	CLAMP, Hose
2	50831-7	1	1/4" Fuel Line, 7" Long (supplied with engine)
3	21178-3	1	FUEL FILTER
4	50831-19.5	2	1/4" Fuel Line, 19-1/2" Long
5	50833-18	2	WIRE LOOM, 18"
6	21235	1	VALVE, Fuel Shut-Off
7	23061	1	ELBOW FITTING
8	1726400	1	GROMMET
9	23069	2	HOSE CLAMP
10	50925-20	1	HOSE, 20"
11	23067	1	SCREEN FITTING

Footnotes

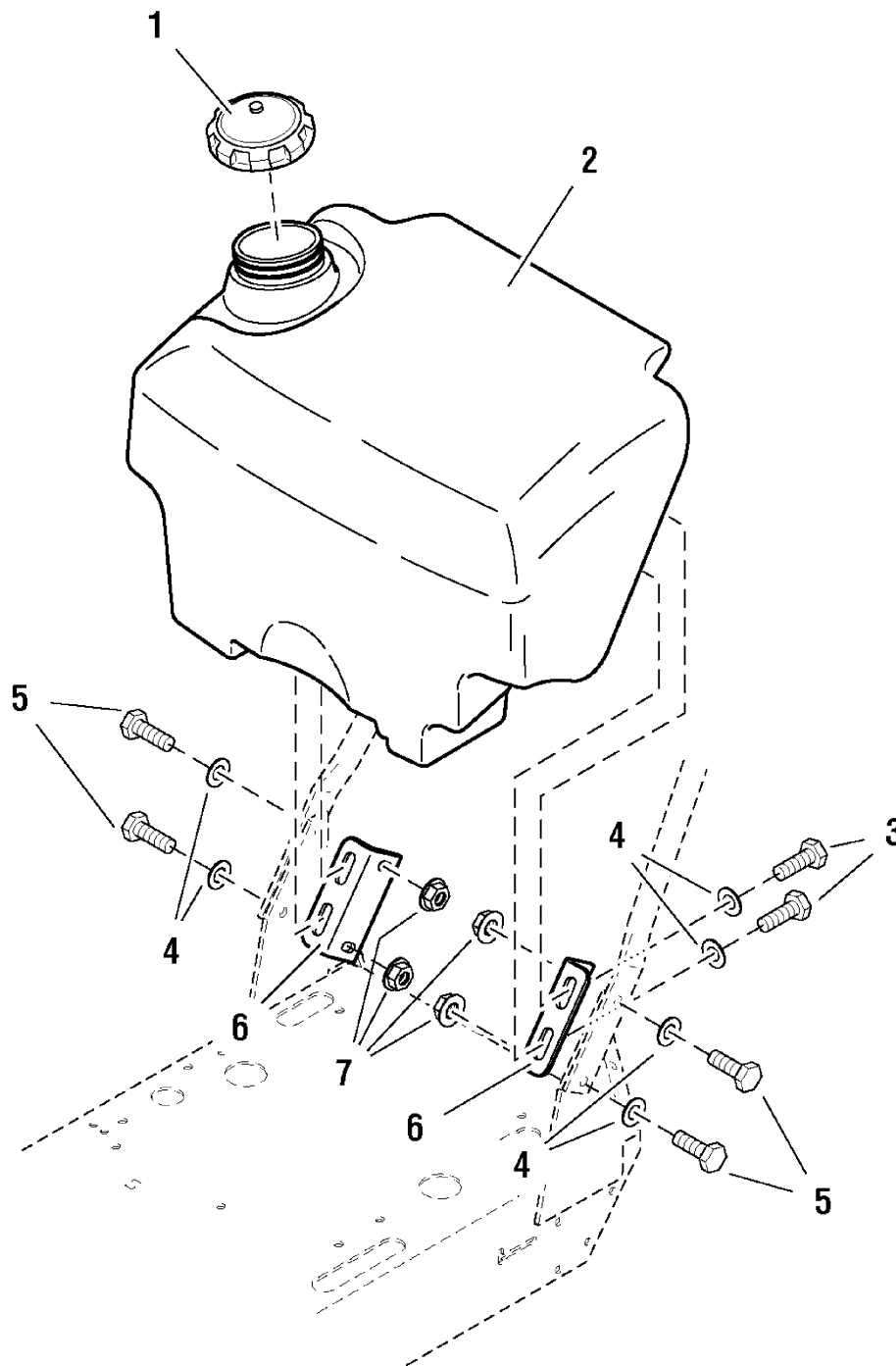
The above parts group applies to the following Mfg. Nos.:

HC32KAV13

Fuel Tank & Mount Group

077TNK0

NOTE: Unless noted otherwise,
use the standard hardware torque
specification chart.



The above parts group applies to the following Mfg. Nos.:

HC36KAV13E

5900604

HC32KAV13

Fuel Tank & Mount Group

REF NO.	PART NO.	QTY.	DESCRIPTION
1	22158	1	FUEL TANK CAP
2	48149	1	FUEL TANK
3	25013-6	4	BOLT, 3/8-16 x 3/4
4	25156	8	WASHER, 3/8" SAE
5	25013-10	4	BOLT, 3/8-16 x 1-1/4
6	49228	2	FUEL TANK MOUNT
7	25128	4	NUT, 3/8-16 Hex Serrated Flange

Footnotes

The above parts group applies to the following Mfg. Nos.:

HC36KAV13E

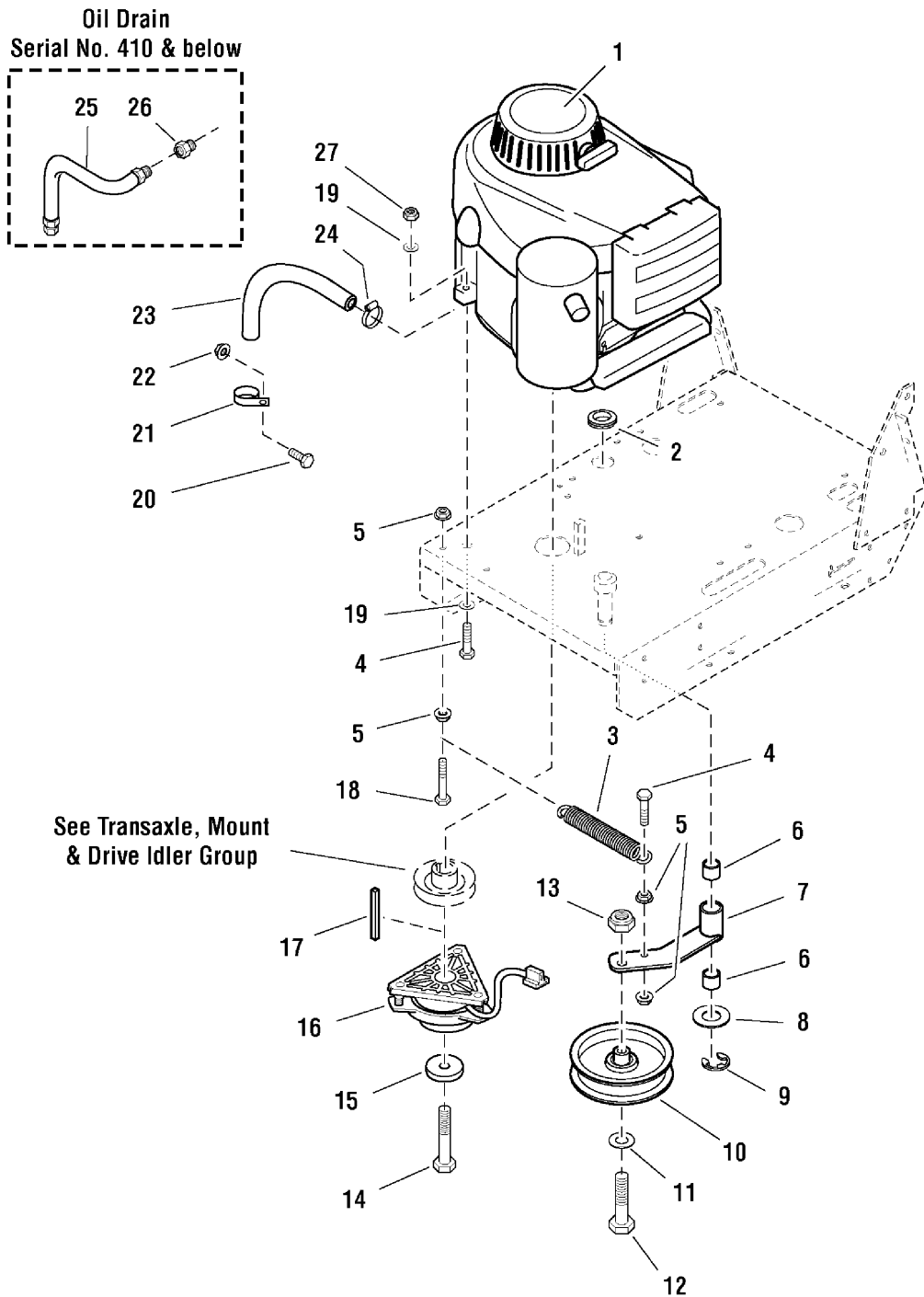
5900604

HC32KAV13

Engine, PTO & Deck Drive Idler Group - Manual Start

077ENGW0

NOTE: Unless noted otherwise,
use the standard hardware torque
specification chart.



The above parts group applies to the following Mfg. Nos.:

HC32KAV13

Engine, PTO & Deck Drive Idler Group - Manual Start

REF NO.	PART NO.	QTY.	DESCRIPTION
1	22907	1	ENGINE, 13HP Kawasaki (Model FH381V)
1	21178-3	1	FUEL FILTER
1	21334-1	1	OIL FILTER (49065-2078)
1	-	1	PRE-CLEANER (11013-7016)
1	-	1	AIR FILTER (11013-7017)
1	-	1	MUFFLER (49070-7002)
1	-	1	EXHAUST MANIFOLD (18088-7001)
1	-	1	MANIFOLD HEAT SHIELD (13271-7022)
1	-	2	EXHAUST MANIFOLD GASKET (11060-7021)
1	-	1	RECOIL ASSEMBLY, Complete (49088-7001)
2	21379	1	GROMMET, 7/8"
3	21103	1	SPRING, Extension
4	25011-12	5	BOLT, 5/16-18 x 1-1/2
5	25139	4	NUT, 5/16-18 Hex Large Serrated Flange
6	20876B	2	BUSHING, Brass
7	47661	1	DECK DRIVE IDLER ARM
8	25160	1	WASHER, 3/4" SAE
9	20863	1	C-CLIP
10	21369	1	IDLER PULLEY
11	25158	1	WASHER, 1/2" SAE
12	25018-20	1	BOLT, 1/2-20 x 2-1/2
13	25098	1	NUT, 1/2-20 Hex Nylon Lock
14	47632	1	CRANKSHAFT BOLT, 7/16 x 2-3/4
15	42132	1	SPACER, .45 x 1.62 x .37
16	1717664	1	ELECTRIC CLUTCH
17	50407-3	1	KEY, 1/4 SQ. X 2
18	25011-18	1	BOLT, 5/16-18 x 2-1/4
19	25155	5	WASHER, 5/16" SAE
20	25011-6	1	BOLT, 5/16-18 x 3/4
21	23173	1	CLAMP
22	25127	1	NUT, 5/16-18 Hex Small Serrated Flange
23	50857-10.5	1	HOSE, 10-1/2"
24	21392	1	CLAMP, #6 Hose
25	48681	1	OIL DRAIN HOSE (S/N: 101-410)
26	22234	1	ADAPTER, Oil Drain (S/N: 101-410)
27	25057	4	NUT, 5/16-18 Hex Nylon Lock

Footnotes

- See your local Kawasaki engine dealer for parts & service.

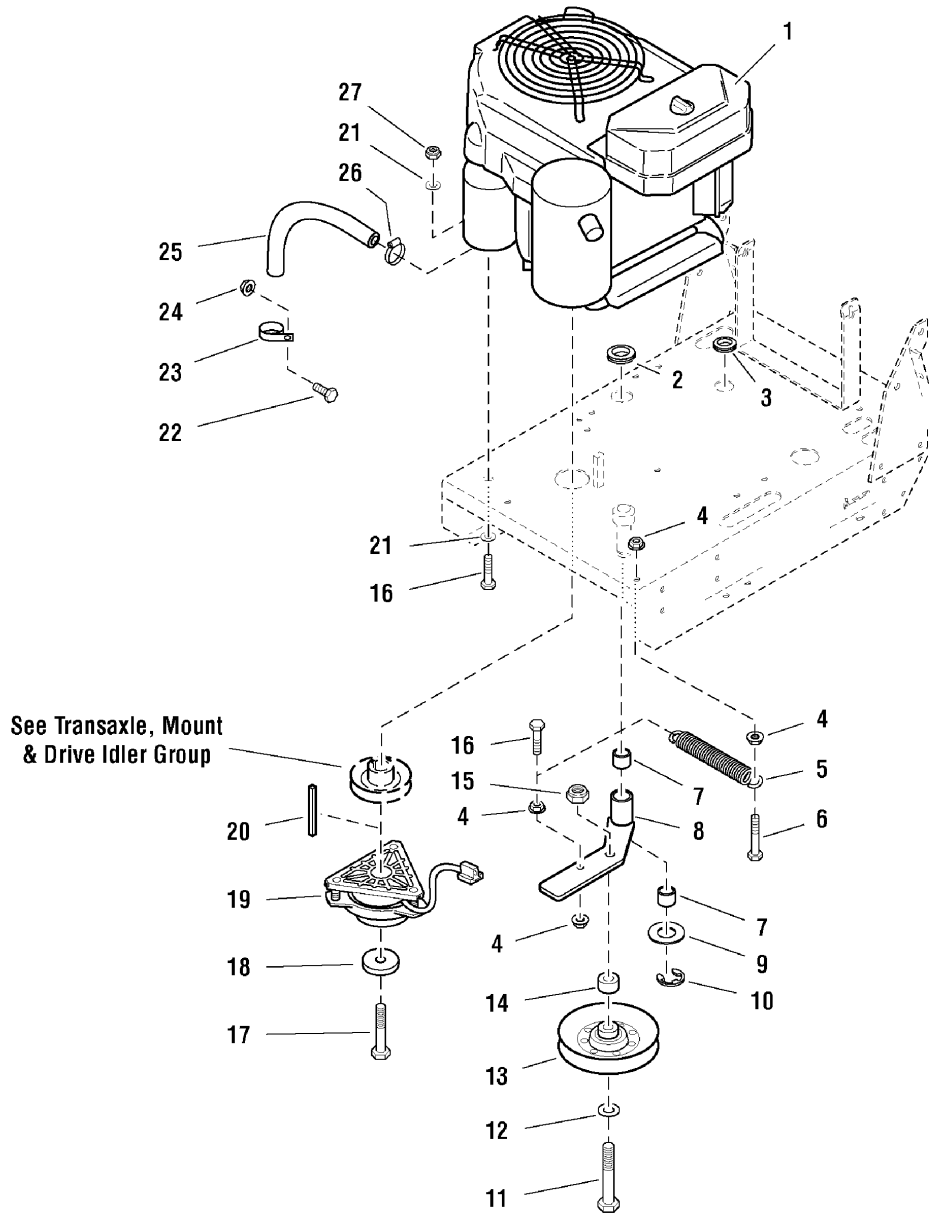
The above parts group applies to the following Mfg. Nos.:

HC32KAV13

Engine, PTO & Deck Drive Idler Group - Electric Start

077engw1

NOTE: Unless noted otherwise,
use the standard hardware torque
specification chart.



The above parts group applies to the following Mfg. Nos.:

HC36KAV13E
5900604

Engine, PTO & Deck Drive Idler Group - Electric Start

REF NO.	PART NO.	QTY.	DESCRIPTION
1	23399	1	ENGINE, 13HP Kawasaki (Model FH381V)
2	21379	1	GROMMET, 7/8"
3	21077	1	GROMMET, 1/2"
4	25139	4	NUT, 5/16-18 Hex Large Serrated Flange
5	23400	1	SPRING, Extension
6	25011-18	1	BOLT, 5/16-18 x 2-1/4
7	20876B	2	BUSHING, Brass
8	49208	1	DECK DRIVE IDLER ARM
9	25160	1	WASHER, 3/4" SAE
10	20863	1	C-CLIP
11	25017-22	1	BOLT, 1/2-13 x 2-3/4
12	25158	1	WASHER, 1/2" SAE
13	21097	1	PULLEY, V-Idler
14	49220	1	SPACER, .52 x 1.00 x .38
15	25056	1	NUT, 1/2-13 Hex Nylon Lock
16	25011-12	5	BOLT, 5/16-18 x 1-1/2
17	47632	1	CRANKSHAFT BOLT, 7/16 x 2-3/4
18	42132	1	SPACER, .45 x 1.62 x .37
19	1717664	1	ELECTRIC CLUTCH
20	50407-3	1	KEY, 1/4 SQ. X 2
21	25155	5	WASHER, 5/16" SAE
22	25011-6	1	BOLT, 5/16-18 x 3/4
23	23173	1	CLAMP
24	25127	1	NUT, 5/16-18 Hex Small Serrated Flange
25	50857-10.5	1	HOSE, 10-1/2"
26	21392	1	CLAMP, #6 Hose
27	25057	4	NUT, 5/16-18 Hex Nylon Lock

Footnotes

- See your local Kawasaki engine dealer for parts & service.

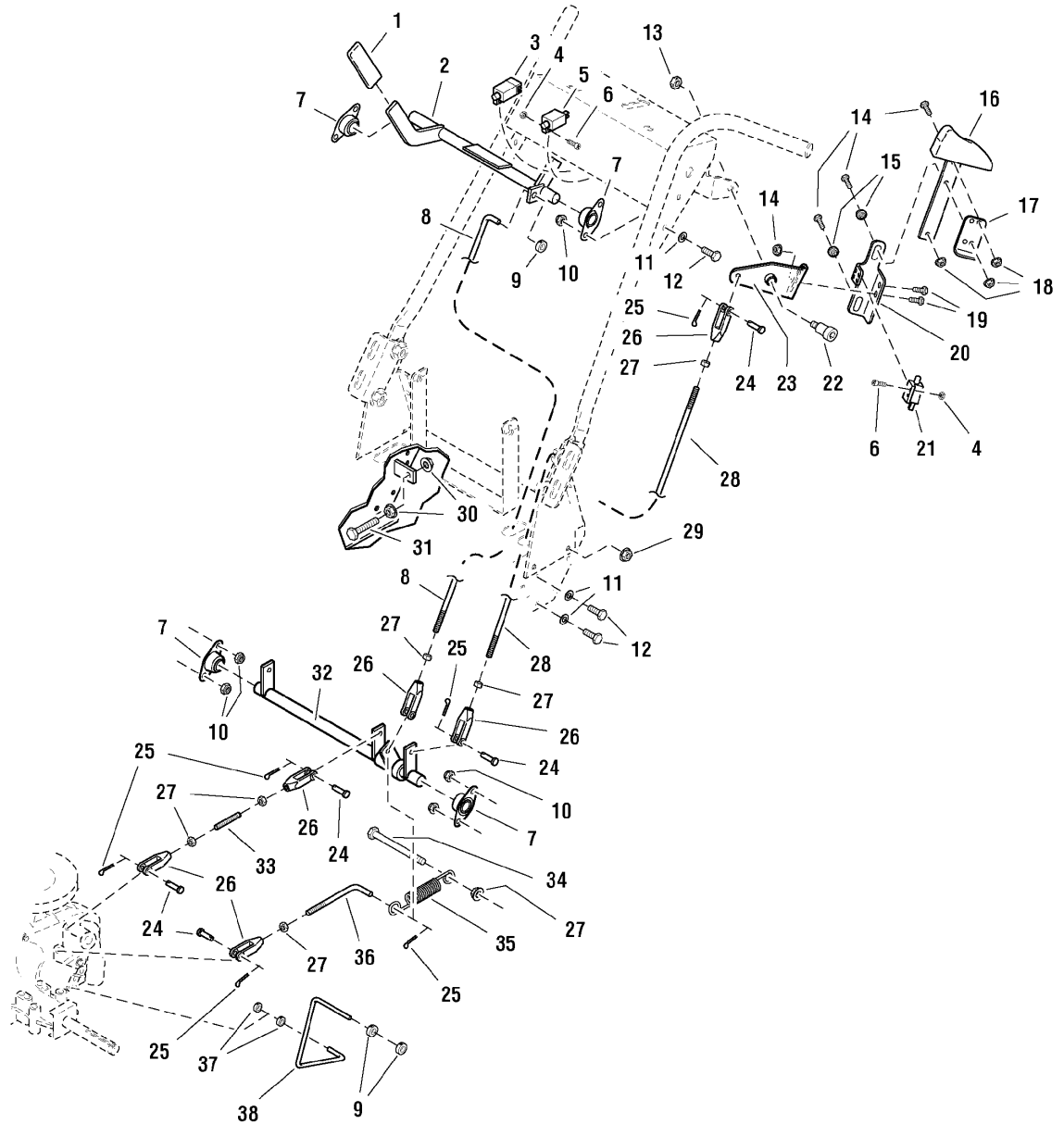
The above parts group applies to the following Mfg. Nos.:

HC36KAV13E
5900604

Motion Control, Parking Brake & Operator Presence Group - Electric Start

077mcge0

NOTE: Unless noted otherwise,
use the standard hardware torque
specification chart.



The above parts group applies to the following Mfg. Nos.:

HC36KAV13E

5900604

Motion Control, Parking Brake & Operator Presence Group - Electric Start

REF NO.	PART NO.	QTY.	DESCRIPTION
1	25510	1	FOAM GRIP
2	61278	1	BRAKE HANDLE SHAFT ASSEMBLY
3	22438	1	SWITCH, Plunger, NO/NO
4	25029	8	NUT, #10-24 Hex
5	21769	1	SWITCH, Plunger, NC
6	25179-4	8	SCREW, #10-24 x 1/2
7	21098	4	BEARING, Flange
8	61495	1	BRAKE ROD
9	20047	3	COLLAR, 5/16" Set
10	25057	8	NUT, 5/16-18 Hex Nylon Lock
11	25155	8	WASHER, 5/16" SAE
12	25011-6	8	BOLT, 5/16-18 x 3/4
13	25100	2	NUT, 3/8-16 Hex Side Lock
14	25010-8	6	BOLT, 1/4-20 x 1
15	61693	4	SLIDE SPACER
16	61691	1	CONTROL HANDLE, LH
16	61702	1	CONTROL HANDLE, RH (Not Shown)
17	61713	2	SWITCH ACTUATOR
18	25126	10	NUT, 1/4-20 Hex Serrated Flange
19	25010-6	4	BOLT, 1/4-20 x 3/4
20	61689	1	HANDLE MOUNT, LH
20	61692	1	HANDLE MOUNT, RH (Not Shown)
21	21769	2	SWITCH, Plunger, NC
22	25223	2	SHOULDER BOLT, 1/2 x 1
23	61683	1	PIVOT CONTROL, LH
23	61685	1	PIVOT CONTROL, RH (Not Shown)
24	25213-8	7	CLEVIS PIN, 5/16 x 1
25	25201-6	8	COTTER PIN, 3/32" x 3/4"
26	20979	8	CLEVIS, 5/16-24, Plastic
27	25033	8	NUT, 5/16-24 Hex
28	47642	2	THUMB CONTROL ROD
29	25128	2	NUT, 3/8-16 Hex Serrated Flange
30	25127	2	NUT, 5/16-18 Hex Small Serrated Flange
31	25055-14	1	BOLT, 5/16-18 x 1-3/4 TFL
32	47697	1	CONTROL SHAFT ASSEMBLY
33	47740	1	LINK STUD
34	25013-32	1	BOLT, 3/8-16 x 4
35	49352	1	SPRING, Extension
36	48328	1	BRAKE LINKAGE ROD
37	22481	2	COLLAR, Set, 1/4"
38	47732	1	DUMP VALVE ROD

Footnotes

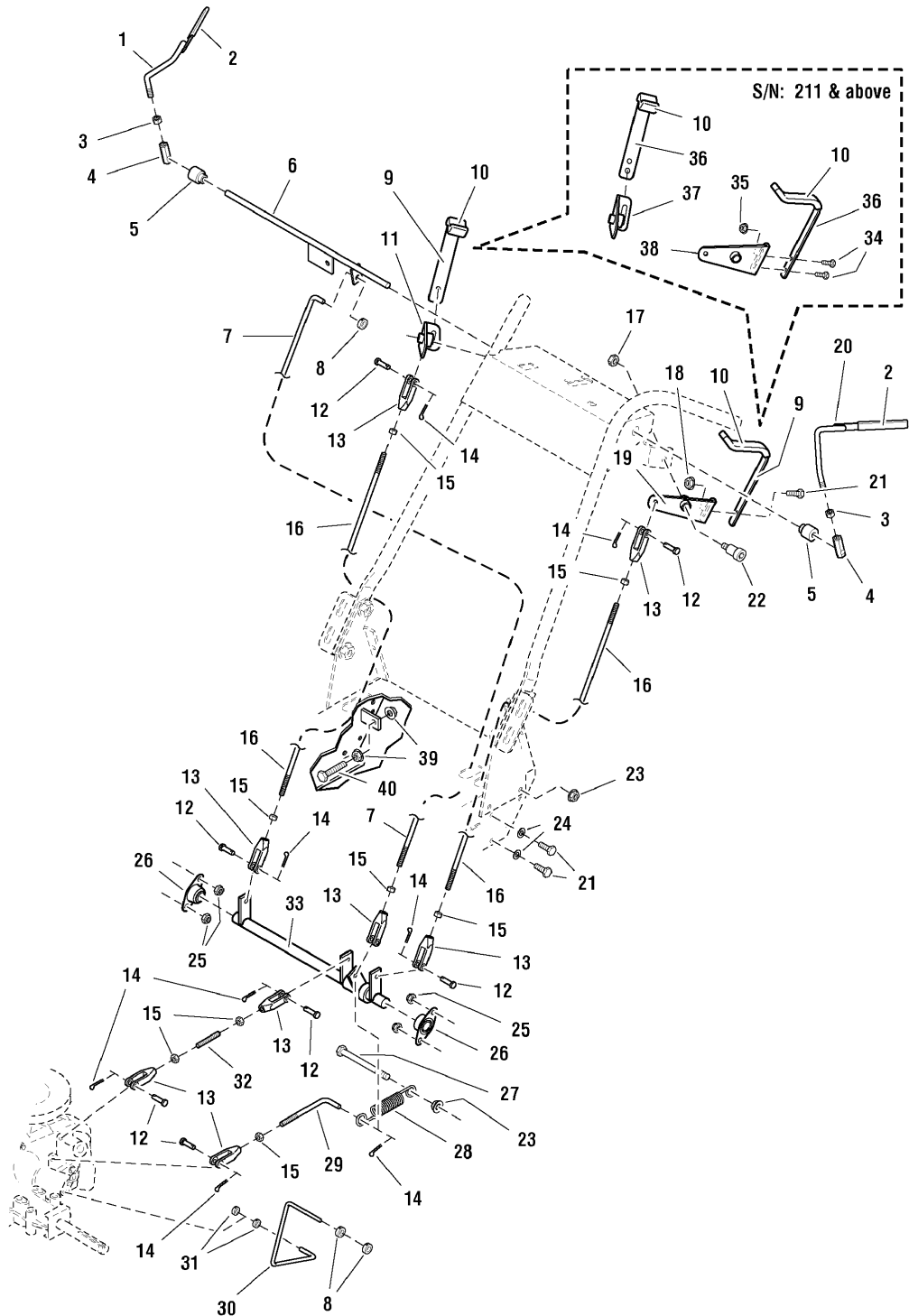
The above parts group applies to the following Mfg. Nos.:

HC36KAV13E
5900604

Motion Control, Parking Brake & Operator Presence Group - Manual Start

077MCGM0

NOTE: Unless noted otherwise,
use the standard hardware torque
specification chart.



The above parts group applies to the following Mfg. Nos.:
HC32KAV13

Motion Control, Parking Brake & Operator Presence Group - Manual Start

REF NO.	PART NO.	QTY.	DESCRIPTION
1	49175	1	OPERATOR PRESENCE HANDLE - RH
2	21490	2	GRIP, Vinyl
3	25034	2	NUT, 3/8-16 Hex
4	43417	2	HEX ADJUSTER
5	45943	2	SHOULDER SPACER
6	47723	1	SWITCH ROD
7	48327	1	BRAKE ROD
8	20047	3	COLLAR, 5/16" Set
9	42614	2	THUMB CONTROL LEVER, Complete (Includes Ref No. 10 - S/N: 210 & below)
10	25510	2	FOAM GRIP
11	42542	1	PIVOT CONTROL - RH (S/N: 210 & below)
12	25213-8	7	CLEVIS PIN, 5/16 x 1
13	20979	8	CLEVIS, 5/16-24, Plastic
14	25201-6	8	COTTER PIN, 3/32" x 3/4"
15	25033	8	NUT, 5/16-24 Hex
16	47642	2	THUMB CONTROL ROD
17	25100	2	NUT, 3/8-16 Hex Side Lock
18	25139	2	NUT, 5/16-18 Hex Large Serrated Flange
19	42541	1	PIVOT CONTROL - LH (S/N: 210 & below)
20	49176	1	OPERATOR PRESENCE HANDLE - LH
21	25011-6	6	BOLT, 5/16-18 x 3/4
22	25223	2	SHOULDER BOLT, 1/2 x 1
23	25128	2	NUT, 3/8-16 Hex Serrated Flange
24	25155	4	WASHER, 5/16" SAE
25	25057	4	NUT, 5/16-18 Hex Nylon Lock
26	21098	2	BEARING, Flange
27	25013-32	1	BOLT, 3/8-16 x 4
28	49352	1	SPRING, Extension
29	48328	1	BRAKE LINKAGE ROD
30	47732	1	DUMP VALVE ROD
31	22481	2	COLLAR, Set, 1/4"
32	47740	1	LINK STUD
33	47697	1	CONTROL SHAFT ASSEMBLY
34	25010-6	4	BOLT, 1/4-20 x 3/4
35	25126	4	NUT, 1/4-20 Hex Serrated Flange
36	48547	2	THUMB CONTROL LEVER, Complete (Includes Ref No. 10 - S/N: 211 & above)
37	48544	1	PIVOT CONTROL - RH (S/N: 211 & above)
38	48545	1	PIVOT CONTROL - LH (S/N: 211 & above)
39	25127	2	NUT, 5/16-18 Hex Small Serrated Flange (S/N: 1039 & above)
40	25055-14	1	BOLT, 5/16-18 x 1-3/4 TFL (S/N: 1039 & above)

Footnotes

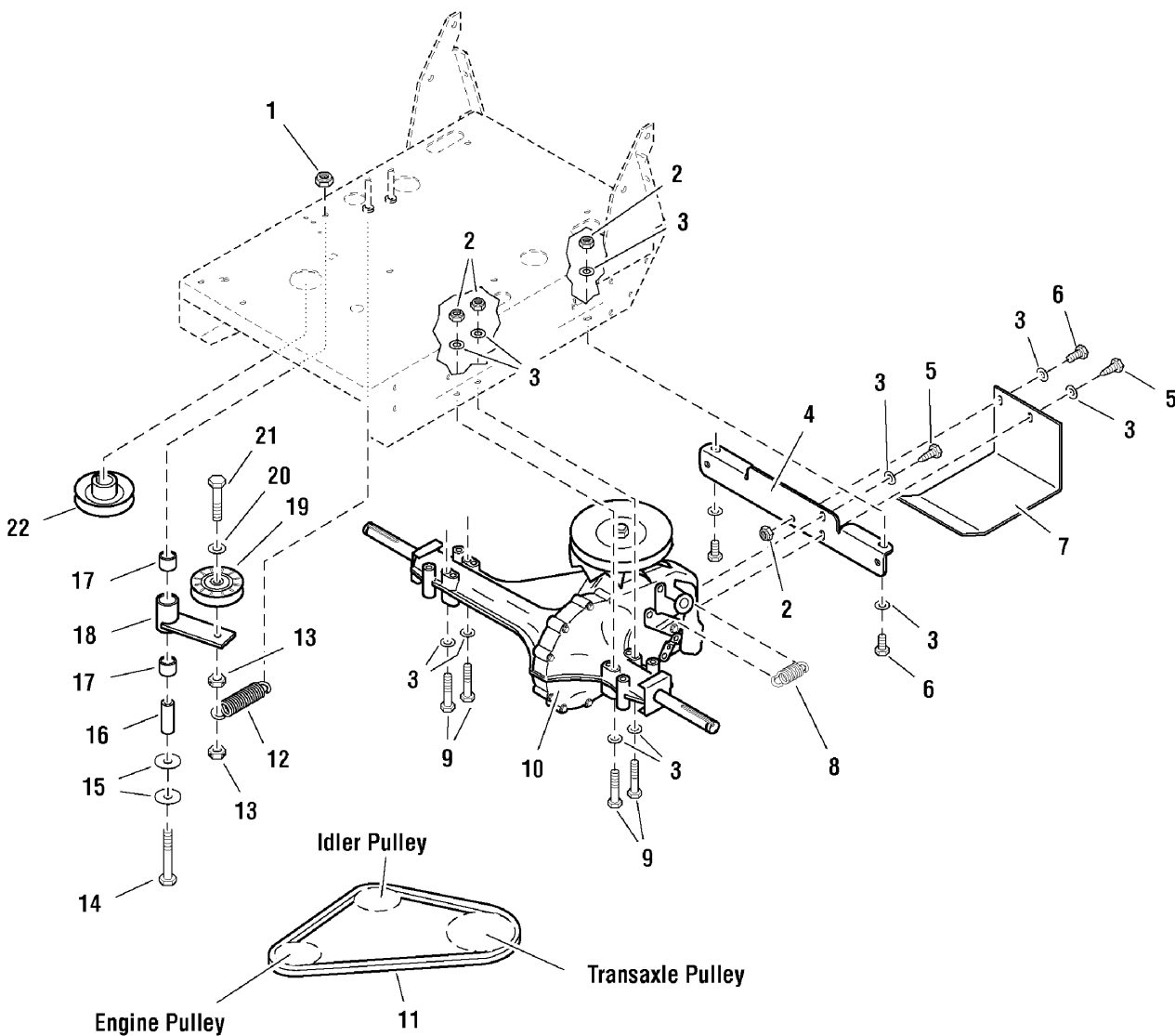
The above parts group applies to the following Mfg. Nos.:

HC32KAV13

Transaxle & Mount Group

NOTE: Unless noted otherwise,
use the standard hardware torque
specification chart.

077TRN0



The above parts group applies to the following Mfg. Nos.:

5900604
HC36KAV13E
HC32KAV13

Transaxle & Mount Group

REF NO.	PART NO.	QTY.	DESCRIPTION
1	25096	1	NUT, 3/8-16 Hex Nylon Lock
2	25057	7	NUT, 5/16-18 Hex Nylon Lock
3	25155	12	WASHER, 5/16" SAE
4	47582	1	TRANSAXLE BRACE
5	25059-6	2	BOLT, Self-Tapping, 5/16-18 x 3/4
6	25011-6	3	BOLT, 5/16-18 x 3/4
7	48312	1	SKID PLATE
8	22967	1	HYDRO RETURN SPRING
9	25011-24	4	BOLT, 5/16-18 x 3
10	22905	1	HYDROSTATIC TRANSAXLE
11	23058	1	BELT
12	20807	1	SPRING, Extension
13	25100	2	NUT, 3/8-16 Hex Side Lock
14	25013-24	1	BOLT, 3/8-16 x 3
15	25165	2	WASHER, 3/8" Fender
16	47716	1	SPACER, .41 x .75 x 2.06
17	20876B	2	BUSHING, Brass
18	47717	1	TRANSAXLE IDLER ARM
19	43627	1	IDLER PULLEY
20	25156	1	WASHER, 3/8" SAE
21	25013-16	1	BOLT, 3/8-16 x 2
22	47914	1	TRANSAXLE DRIVE PULLEY

Footnotes

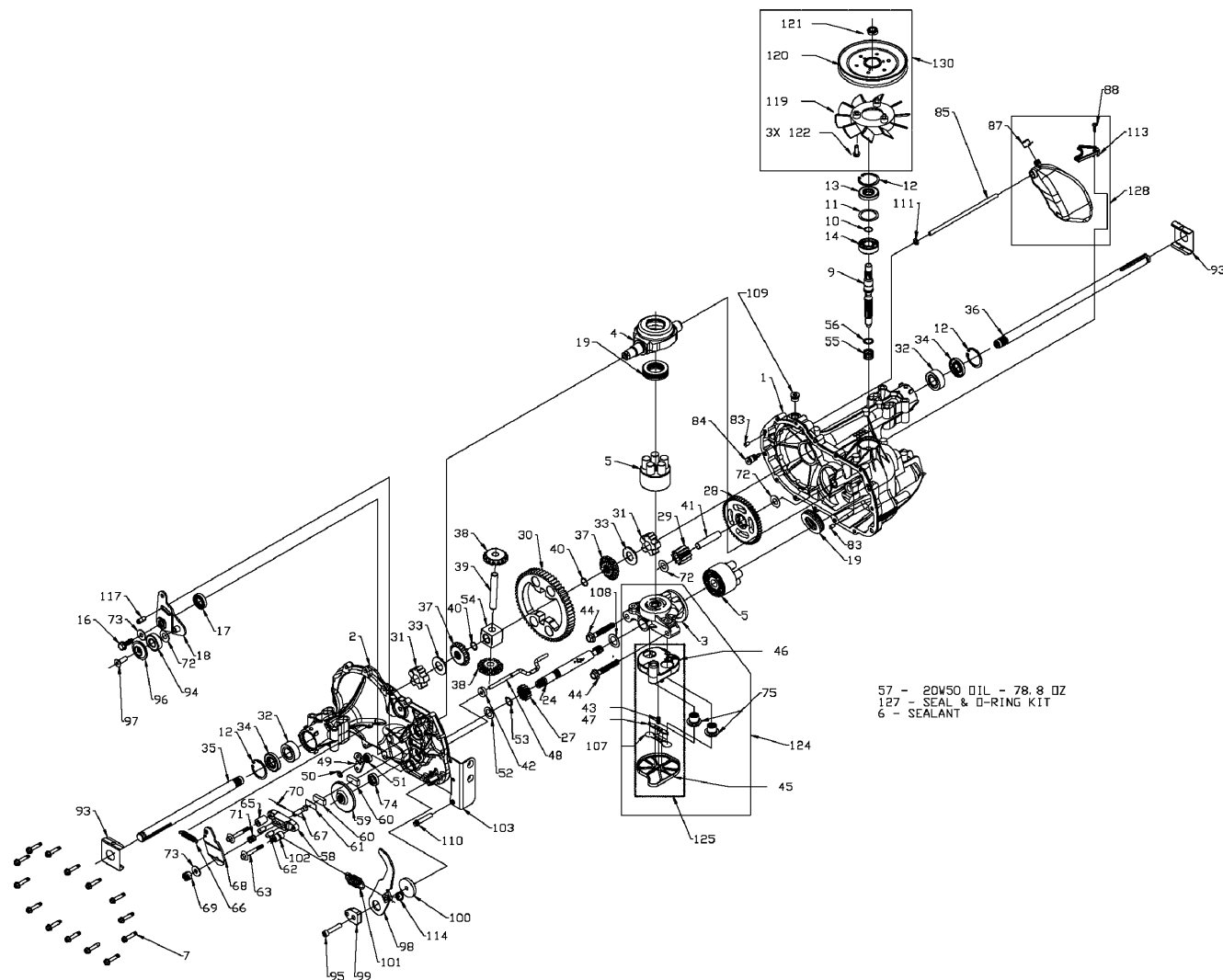
The above parts group applies to the following Mfg. Nos.:

5900604
HC36KAV13E
HC32KAV13

Transaxle - SERVICE PARTS

NOTE: Unless noted otherwise,
use the standard hardware torque
specification chart.

077TSP0



The above parts group applies to the following Mfg. Nos.:

- HC36KAV13E
- 5900604
- HC32KAV13

Transaxle - SERVICE PARTS

REF NO.	PART NO.	QTY.	DESCRIPTION
6	22905-1	10.5	SEALANT
9	22905-2	1	SHAFT, INPUT
10	22905-3	1	RING - RETAINING
11	22905-4	1	SPACER
12	22905-5	3	RING - RETAINING
13	22905-16	1	SEAL, Lip, .67 x 1.58 x .276
14	22905-6	1	BALL BEARING
32	22905-7	2	OUTBOARD SLEEVE BEARING
34	22905-17	2	LIP SEAL, Axle Seal
35	22905-8	1	AXLE SHAFT - RH
36	22905-9	1	AXLE SHAFT - LH
55	22905-10	1	SPRING - HELICAL COMPRESSION
56	22905-11	1	WASHER
57	22905-12	78.8	20W-50 OIL
101	22967	1	HYDRO RETURN SPRING
119	22905-13	1	FAN, 6", 10 BLADE
128	22905-14	1	EXPANSION TANK KIT
130	22905-15	1	FAN/PULLEY KIT (Includes Ref. No. 119)

Footnotes

The above parts group applies to the following Mfg. Nos.:

HC36KAV13E

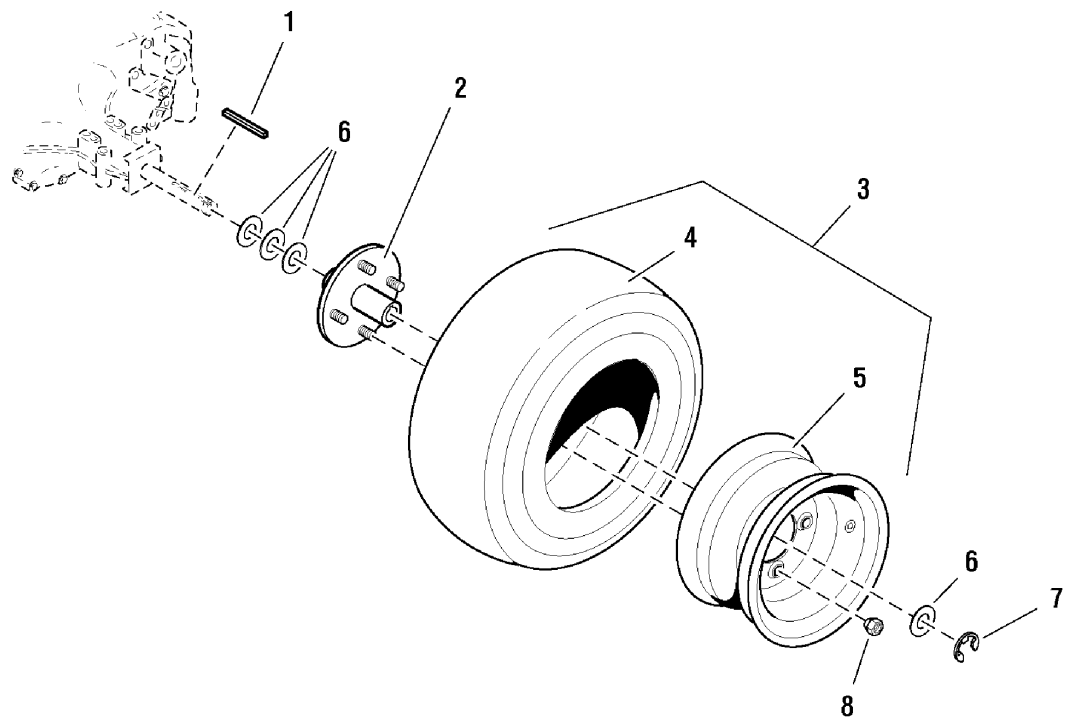
5900604

HC32KAV13

Tire & Wheel Group

NOTE: Unless noted otherwise,
use the standard hardware torque
specification chart.

077WHL0



The above parts group applies to the following Mfg. Nos.:

HC32KAV13
HC36KAV13E
5900604

Tire & Wheel Group

REF NO.	PART NO.	QTY.	DESCRIPTION
1	48409	2	KEY, 3/16 SQ. X 2-1/2
2	20792S	2	DRIVE HUB
3	23104	2	WHEEL & TIRE ASSEMBLY, 16 x 6.5 x 8, Complete (Includes Ref No. 4 & 5)
4	23104-2	2	TIRE, 16. x 6.5 x 8
5	23104-1	2	WHEEL ASSEMBLY, 8 x 5.38
6	25520-3	8	SHIM
7	20863	2	C-CLIP
8	20601	8	LUG NUT, 1/2-20

Footnotes

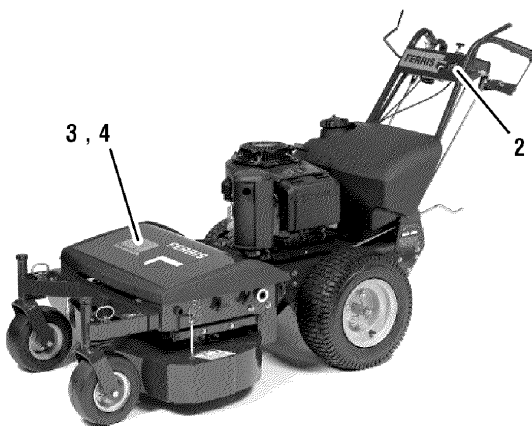
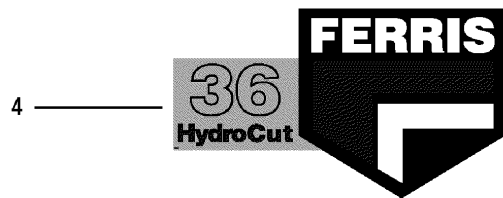
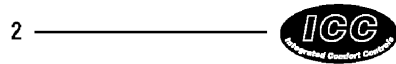
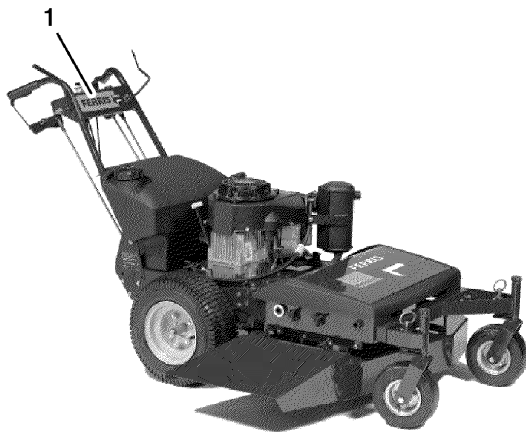
The above parts group applies to the following Mfg. Nos.:

HC32KAV13
HC36KAV13E
5900604

Decals - Brand & Model

077dc1b0

NOTE: Unless noted otherwise,
use the standard hardware torque
specification chart.



The above parts group applies to the following Mfg. Nos.:

HC32KAV13
HC36KAV13E
5900604

Decals - Brand & Model

REF NO.	PART NO.	QTY.	DESCRIPTION
1	22560	1	DECAL, Ferris Text Logo
2	48228	1	DECAL, ICC
3	48229	1	DECAL, HydroCut 32
4	49065	1	DECAL, HydroCut 36

Footnotes

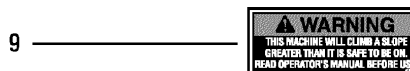
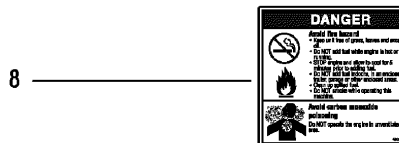
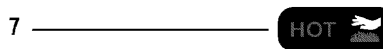
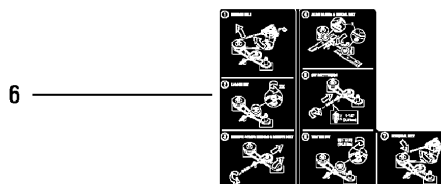
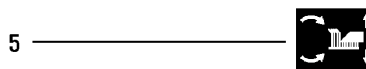
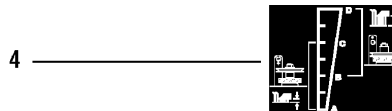
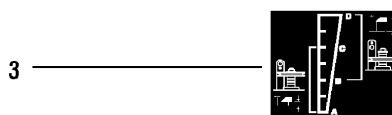
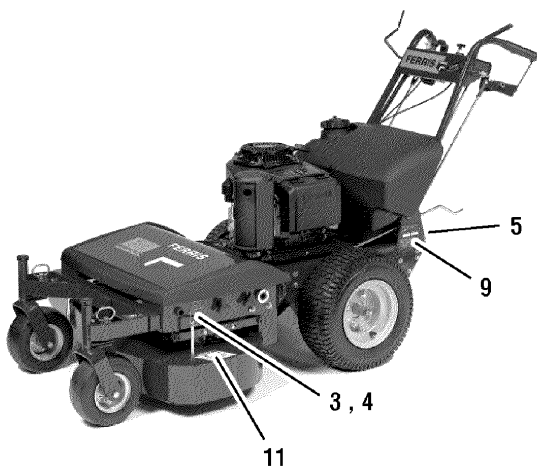
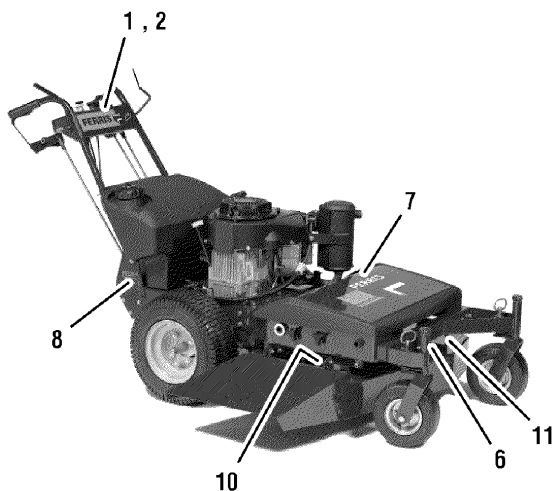
The above parts group applies to the following Mfg. Nos.:

HC32KAV13
HC36KAV13E
5900604

Decals - Safety & Instruction

077dcls0

NOTE: Unless noted otherwise, use the standard hardware torque specification chart.



The above parts group applies to the following Mfg. Nos.:

- HC32KAV13
- HC36KAV13E
- 5900604

Decals - Safety & Instruction

REF NO.	PART NO.	QTY.	DESCRIPTION
1	48321	1	DECAL, Control Panel (Manual Start)
2	61465	1	DECAL, Control Panel (Electric Start)
3	49318	1	DECAL, Height Of Cut (32" model)
4	49021	1	DECAL, Height Of Cut (36" model)
5	47778	1	DECAL, Cut Height Adjust
6	61537	1	DECAL, Belt R&R (36" model)
7	1704473	1	DECAL, Hot Surface
8	49658	1	DECAL, Danger
9	21818	1	DECAL, Warning, Machine Will Climb
10	1704277	1	DECAL, Danger (Chute In Place)
11	1704276	2	DECAL, Danger (Hand Under Deck)

Footnotes

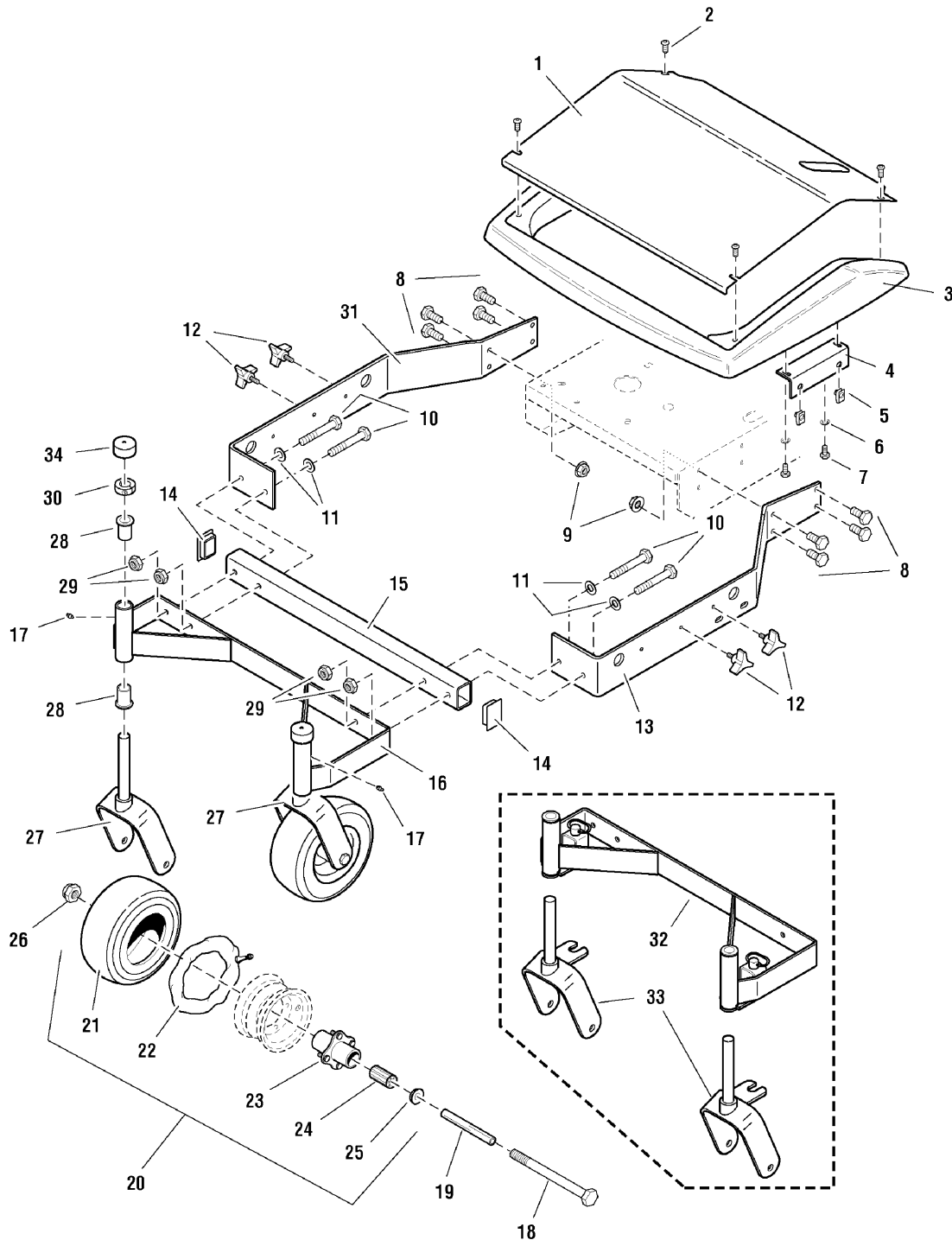
The above parts group applies to the following Mfg. Nos.:

HC32KAV13
HC36KAV13E
5900604

32" Mower Deck - Frame, Caster & Shield

NOTE: Unless noted otherwise,
use the standard hardware torque
specification chart.

0772FR0



The above parts group applies to the following Mfg. Nos.:

HC32KAV13
5900604

32" Mower Deck - Frame, Caster & Shield

REF NO.	PART NO.	QTY.	DESCRIPTION
1	48145	1	SHIELD INSERT
2	25299-4	4	SCREW, Allen Head, 1/4-20 x 1/2
3	48150	1	GUARD, MOWER HOUSING
4	48353	2	SHIELD MOUNT BRACKET
5	22308	4	BODY CLIP, 5/16-18
6	25169	4	WASHER, 1/4" Lock
7	25010-6	4	BOLT, 1/4-20 x 3/4
8	25013-8	8	BOLT, 3/8-16 x 1
9	25128	8	NUT, 3/8-16 Hex Serrated Flange
10	25013-20	4	BOLT, 3/8-16 x 2-1/2
11	25156	4	WASHER, 3/8" SAE
12	22319	4	KNOB
13	47648	1	FRAME RAIL - LH
14	22098	2	CAP, Plastic
15	48194	1	CROSS TUBE
16	48969	1	CASTER MOUNT FRAME, Complete (Includes Ref No. 17 & 28)
17	20095	2	GREASE FITTING
18	25017-44	2	BOLT, 1/2-13 x 5-1/2
19	41657	2	AXLE, Caster Wheel
20	21181S	2	WHEEL & TIRE ASSEMBLY, Silver, 9 x 3.5 x 4, Complete (Includes Ref No. 21 - 25)
21	21181-1	2	TIRE, Front, 9 x 3.5 x 4
22	21181-2	2	TUBE
23	21181S-3	2	HUB & BEARING ASSEMBLY, Complete, Silver (Includes Ref No. 24 & 25)
24	21182	2	BEARING, Roller (1 per tire)
25	21043	4	RETAINER, Bearing (2 per tire)
26	25056	2	NUT, 1/2-13 Hex Nylon Lock
27	48172	2	CASTER YOKE (Use with Ref No. 16, part no. 48969)
28	20823	4	BUSHING, Flange
29	25096	4	NUT, 3/8-16 Hex Nylon Lock
30	10114	2	COLLAR, 3/4" Split
31	47649	1	FRAME RAIL - RH
32	48968	1	CASTER MOUNT FRAME W/ LOCKS, Complete (Includes Ref No. 17 & 28)
33	48965	2	CASTER YOKE (Use with Ref No. 32, part no. 48968)
34	23274	2	VINYL CAP

Footnotes

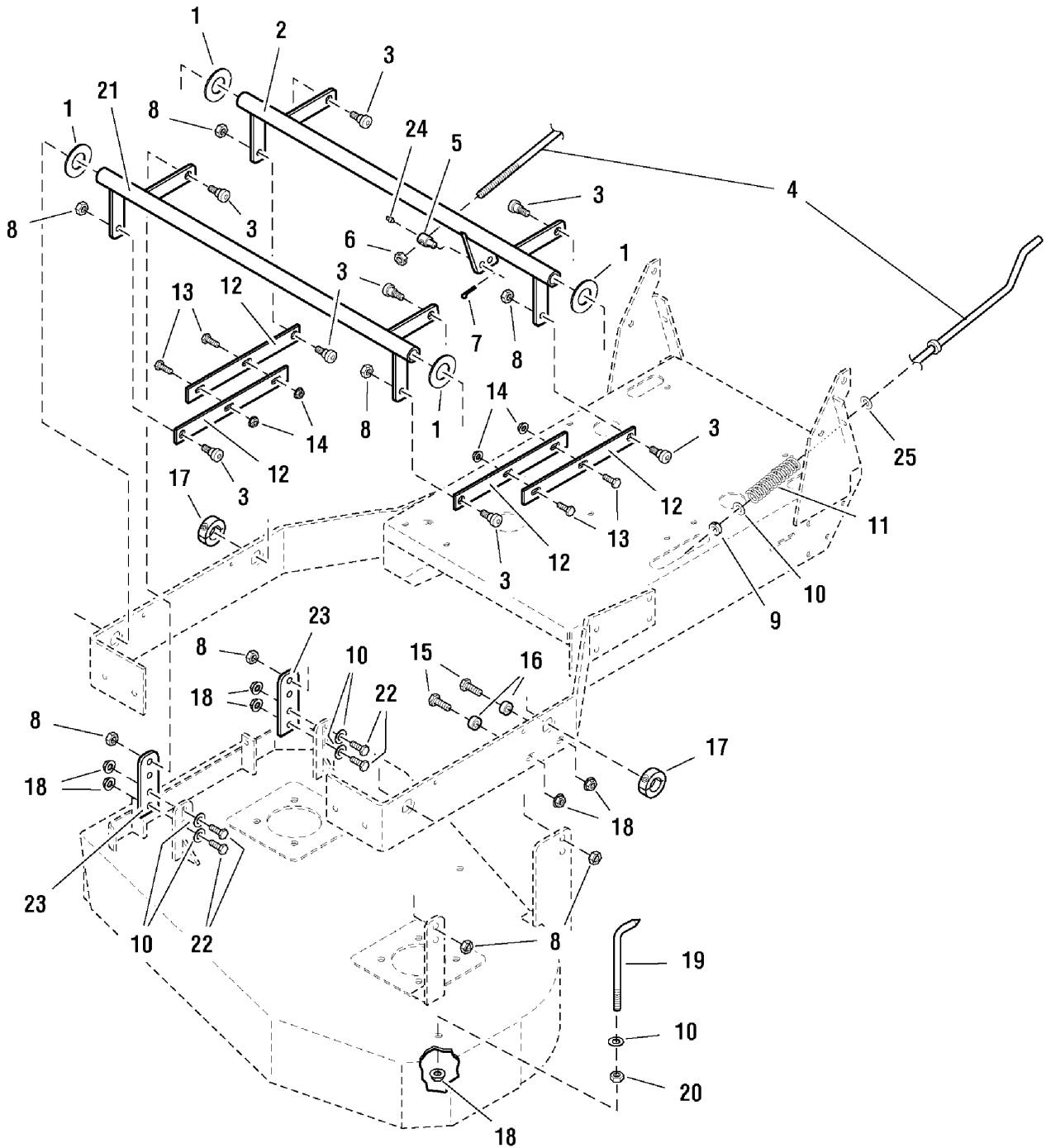
The above parts group applies to the following Mfg. Nos.:

HC32KAV13
5900604

32" Mower Deck - Height Adjustment

0772HA0

NOTE: Unless noted otherwise,
use the standard hardware torque
specification chart.



The above parts group applies to the following Mfg. Nos.:

HC32KAV13
5900604

32" Mower Deck - Height Adjustment

REF NO.	PART NO.	QTY.	DESCRIPTION
1	25162	4	WASHER, 1" SAE
2	47682	1	DECK LIFT PIVOT - REAR
3	25356	8	SHOULDER BOLT, 1/2 x 3/8
4	47655	1	HEIGHT ADJUST ROD
5	48526	1	LINKAGE ADJUSTER
6	25100	1	NUT, 3/8-16 Hex Side Lock
7	25201-6	1	COTTER PIN, 3/32" x 3/4"
8	25046	8	NUT, 3/8-16 Hex Top Lock
9	10546	1	COLLAR, 3/8" Set
10	25156	6	WASHER, 3/8" SAE
11	22645	1	SPRING, Compression
12	47710	4	DECK ADJUST LINK
13	25011-8	4	BOLT, 5/16-18 x 1
14	25139	4	NUT, 5/16-18 Hex Large Serrated Flange
15	25013-10	2	BOLT, 3/8-16 x 1-1/4
16	44933	2	SPACER, .39 x .75 x .38
17	48549	2	COLLAR, Double Split, 1"
18	25128	7	NUT, 3/8-16 Hex Serrated Flange
19	47737	1	CUT HEIGHT INDICATOR
20	25034	1	NUT, 3/8-16 Hex
21	47681	1	DECK LIFT PIVOT - FRONT
22	25013-6	4	BOLT, 3/8-16 x 3/4
23	48439	2	HANGER PLATE
24	20095	1	GREASE FITTING
25	48548	1	WASHER, Nylon, 3/8

Footnotes

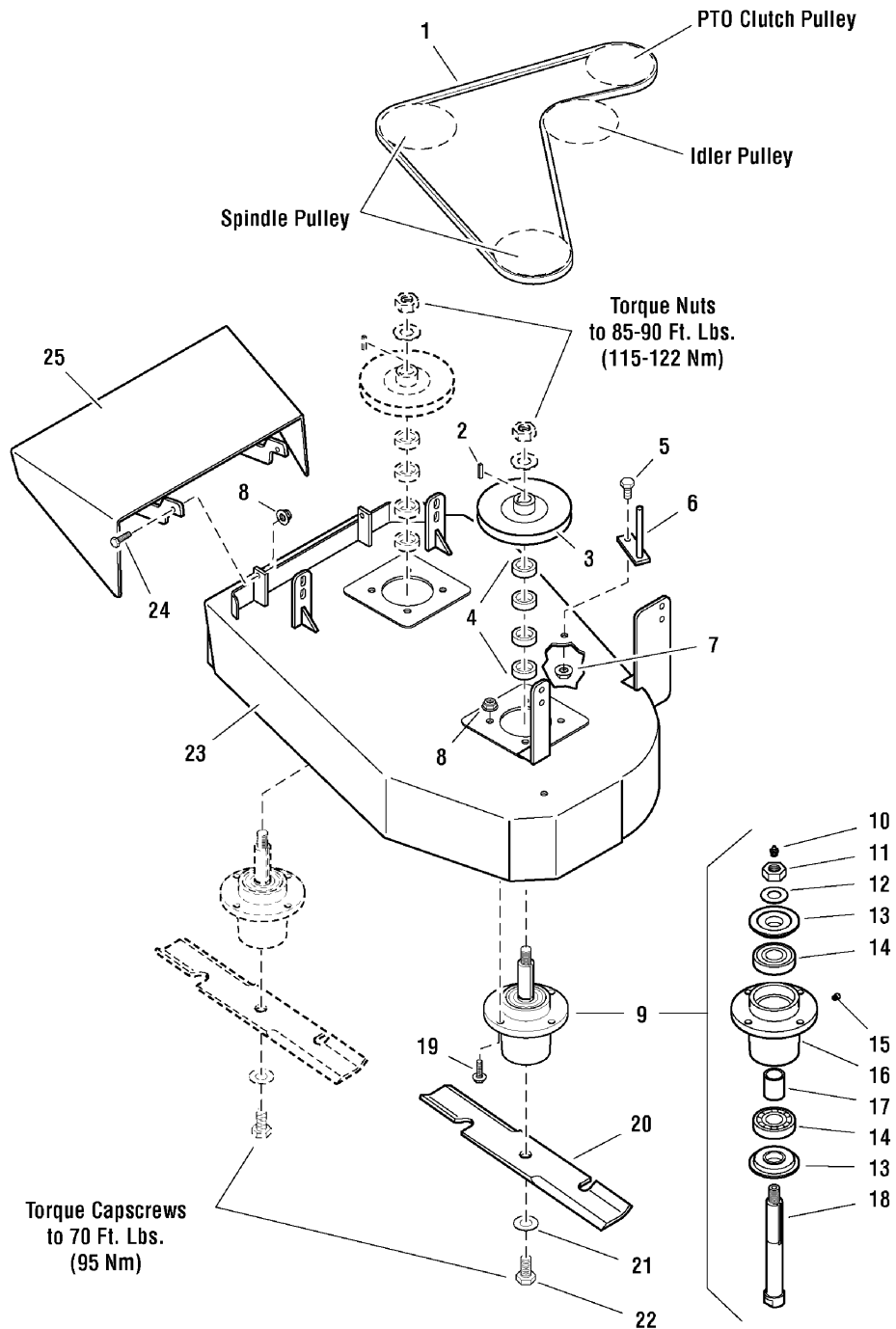
The above parts group applies to the following Mfg. Nos.:

HC32KAV13
5900604

32" Mower Deck - Housing, Spindles, Blades & Pulleys

0772HC0

NOTE: Unless noted otherwise,
use the standard hardware torque
specification chart.



The above parts group applies to the following Mfg. Nos.:

HC32KAV13
5900604

32" Mower Deck - Housing, Spindles, Blades & Pulleys

REF NO.	PART NO.	QTY.	DESCRIPTION
1	22918	1	BELT
2	50407-1	2	KEY, 1/4 SQ. X 1
3	47638	2	SPINDLE PULLEY
4	47725	8	SPACER
5	25013-8	1	BOLT, 3/8-16 x 1
6	47777	1	BELT GUIDE
7	25126	1	NUT, 1/4-20 Hex Serrated Flange
8	25392	10	NUT, 5/16-18 Hex Nylock Flange
9	61096	2	SPINDLE ASSEMBLY, Complete (Includes Ref No. 10 - 18)
10	23329	2	GREASE FITTING
11	25405	2	NUT, 3/4-16 Hex
12	25406	2	WASHER, 3/4" Belleville
13	49793	4	TRASH SHIELD
14	23330	4	BEARING
15	23296	2	RELIEF VALVE
16	61097	2	SPINDLE HOUSING
17	61099	2	SPACER, 1.00 x 1.25 x 1.75
18	61100	2	SPINDLE SHAFT
19	23156	8	BOLT, Flange Head, 5/16-18 x 1-1/4
20	20843	2	MOWER BLADE, 16-1/4"
21	25159	2	WASHER, 5/8" USS
22	25320-14	2	BOLT, 5/8-11 x 1-3/4
23	6647576	1	32" MOWER HOUSING ASSEMBLY (Includes safety decals)
24	25011-8	2	BOLT, 5/16-18 x 1
25	47724	1	DISCHARGE CHUTE

Footnotes

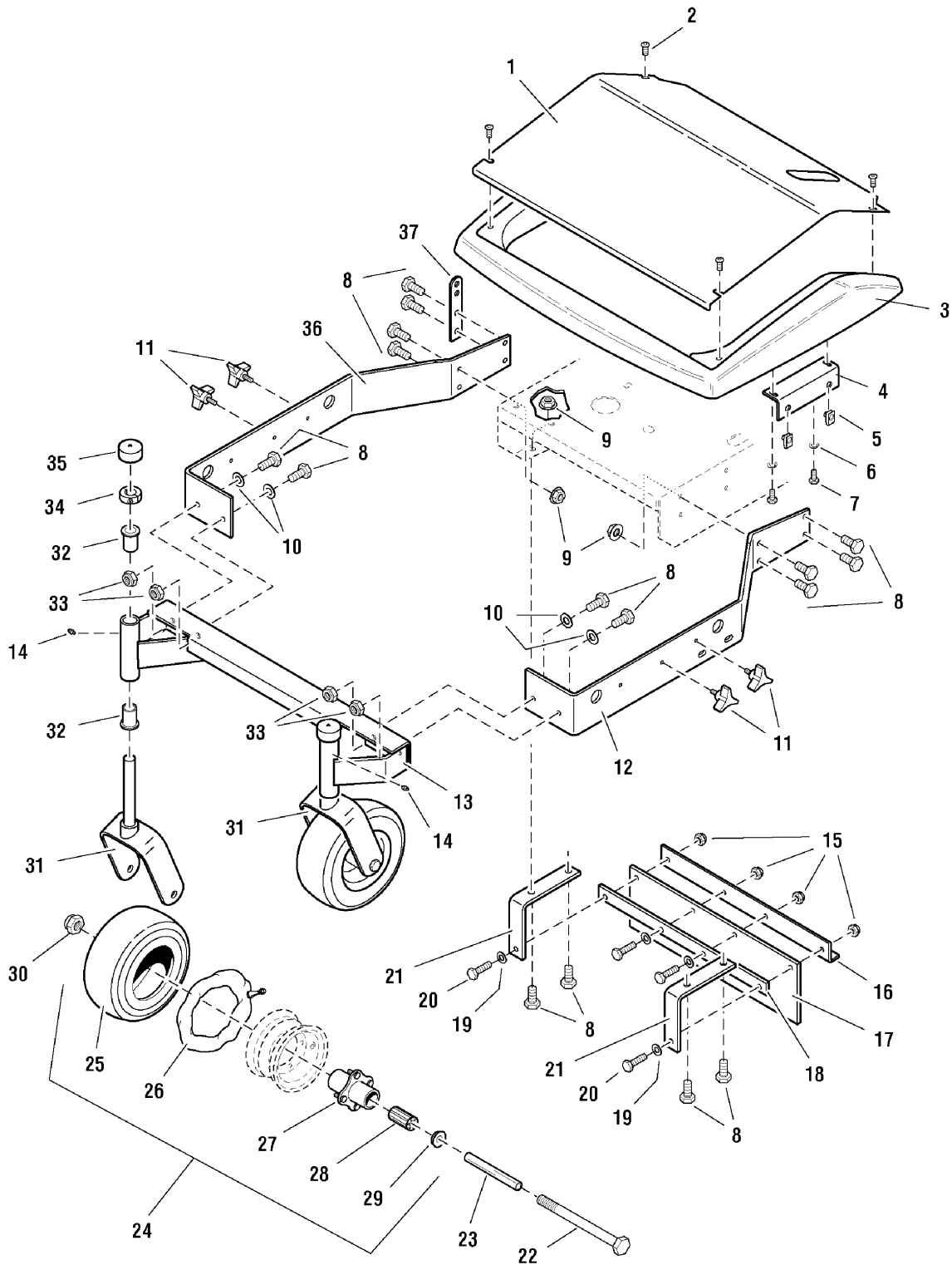
The above parts group applies to the following Mfg. Nos.:

HC32KAV13
5900604

36" Mower Deck - Frame, Caster & Shield

0773fr0

NOTE: Unless noted otherwise,
use the standard hardware torque
specification chart.



The above parts group applies to the following Mfg. Nos.:
HC36KAV13E

36" Mower Deck - Frame, Caster & Shield

REF NO.	PART NO.	QTY.	DESCRIPTION
1	48145	1	SHIELD INSERT
2	25299-4	4	SCREW, Allen Head, 1/4-20 x 1/2
3	48150	1	GUARD, Mower Deck
4	48353	2	SHIELD MOUNT BRACKET
5	22308	4	BODY CLIP, 5/16-18
6	25169	4	WASHER, 1/4" Lock
7	25010-6	4	BOLT, 1/4-20 x 3/4
8	25013-10	12	BOLT, 3/8-16 x 1-1/4
9	25128	8	NUT, 3/8-16 Hex Serrated Flange
10	25156	4	WASHER, 3/8" SAE
11	22319	4	KNOB
12	47648	1	FRAME RAIL - LH
13	49262	1	CASTER MOUNT FRAME, Complete (Includes Ref No. 14 & 32)
14	20095	2	GREASE FITTING
15	25095	4	NUT, 1/4-20 Hex Nylon Lock
16	49214	1	SHIELD MOUNT ANGLE
17	49217	1	RUBBER SHIELD
18	49216	1	SHIELD MOUNT BAR
19	25154	4	WASHER, 1/4" SAE
20	25010-10	4	BOLT, 1/4-20 X 1
21	49215	2	SHIELD MOUNT BRACKET
22	25017-44	2	BOLT, 1/2-13 x 5-1/2
23	41657	2	AXLE, Caster Wheel
24	21181S	2	WHEEL & TIRE ASSEMBLY, Silver, 9 x 3.5 x 4, Complete (Includes Ref No. 25 - 29)
25	21181-1	2	TIRE, Front, 9 x 3.5 x 4
26	21181-2	2	TUBE
27	21181S-3	2	HUB & BEARING ASSEMBLY, Complete, Silver (Includes Ref No. 28 & 29)
28	21182	2	BEARING, Roller (1 per tire)
29	21043	4	RETAINER, Bearing (2 per tire)
30	25056	2	NUT, 1/2-13 Hex Nylon Lock
31	48172	2	CASTER YOKE
32	20823	4	BUSHING, Flange
33	25096	4	NUT, 3/8-16 Hex Nylon Lock
34	10114	2	COLLAR, 3/4" Split
35	23274	2	VINYL CAP
36	47649	1	FRAME RAIL - RH
37	61717	1	WIRE GUARD

Footnotes

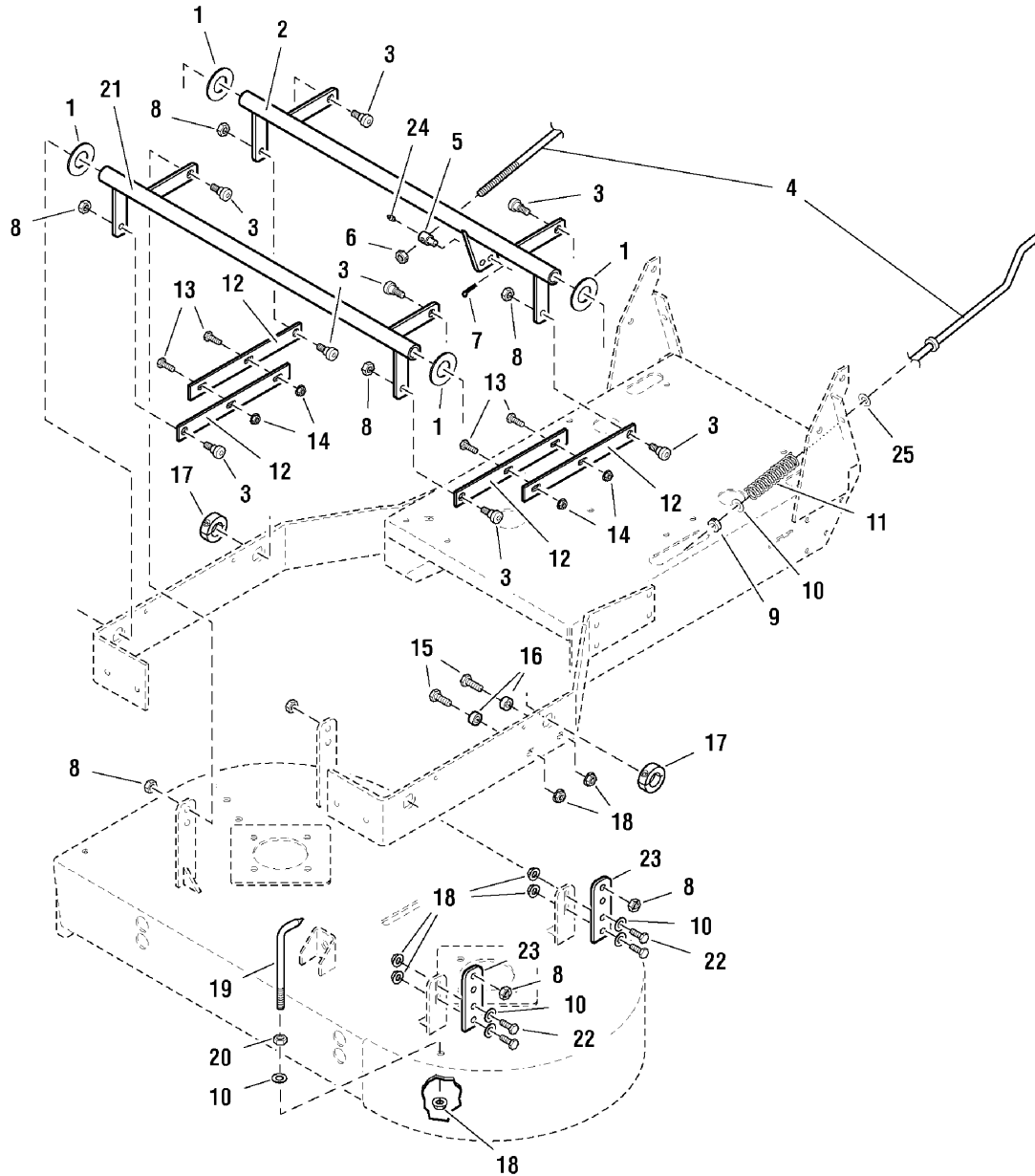
The above parts group applies to the following Mfg. Nos.:

HC36KAV13E

36" Mower Deck - Height Adjustment

NOTE: Unless noted otherwise,
use the standard hardware torque
specification chart.

0773ha0



The above parts group applies to the following Mfg. Nos.:
HC36KAV13E

36" Mower Deck - Height Adjustment

REF NO.	PART NO.	QTY.	DESCRIPTION
1	25162	4	WASHER, 1" SAE
2	47682	1	DECK LIFT PIVOT - REAR
3	25356	8	SHOULDER BOLT, 1/2 x 3/8
4	47655	1	HEIGHT ADJUST ROD
5	48526	1	LINKAGE ADJUSTER
6	25100	1	NUT, 3/8-16 Hex Side Lock
7	25201-6	1	COTTER PIN, 3/32" x 3/4"
8	25046	8	NUT, 3/8-16 Hex Top Lock
9	10546	1	COLLAR, 3/8" Set
10	25156	6	WASHER, 3/8" SAE
11	22645	1	SPRING, Compression
12	47710	4	DECK ADJUST LINK
13	25011-8	4	BOLT, 5/16-18 x 1
14	25139	4	NUT, 5/16-18 Hex Large Serrated Flange
15	25013-10	2	BOLT, 3/8-16 x 1-1/4
16	44933	2	SPACER, .39 x .75 x .38
17	48549	2	COLLAR, Double Split, 1"
18	25128	7	NUT, 3/8-16 Hex Serrated Flange
19	47737	1	CUT HEIGHT INDICATOR
20	25034	1	NUT, 3/8-16 Hex
21	47681	1	DECK LIFT PIVOT - FRONT
22	25013-8	4	BOLT, 3/8-16 x 1
23	48439	2	HANGER PLATE
24	20095	1	GREASE FITTING
25	48548	1	WASHER, Nylon, 3/8

Footnotes

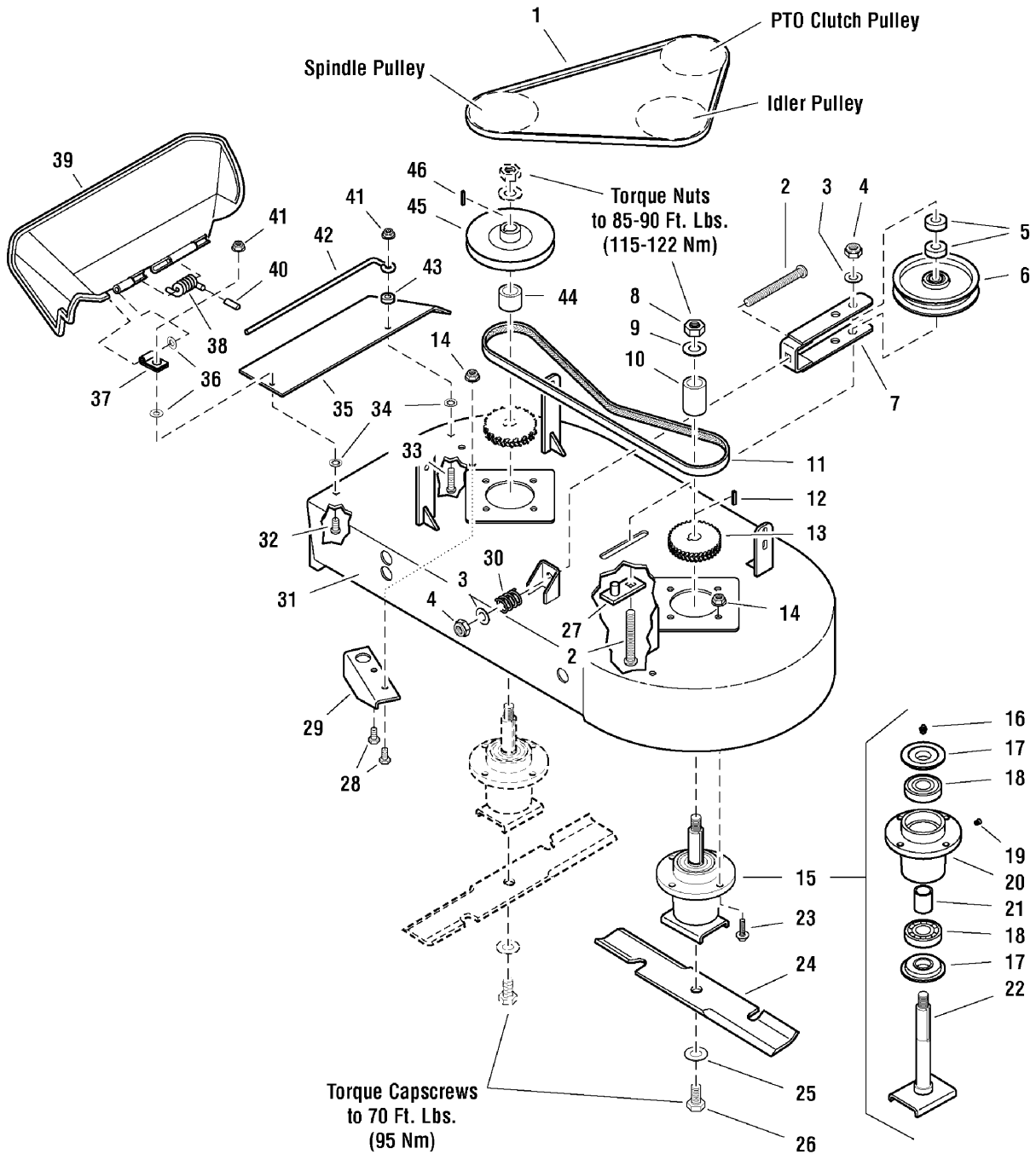
The above parts group applies to the following Mfg. Nos.:

HC36KAV13E

36" Mower Deck - Housing, Spindles, Blades & Pulleys

NOTE: Unless noted otherwise, use the standard hardware torque specification chart.

0773hc0



The above parts group applies to the following Mfg. Nos.:

HC36KAV13E

36" Mower Deck - Housing, Spindles, Blades & Pulleys

REF NO.	PART NO.	QTY.	DESCRIPTION
1	23262	1	BELT
2	25324-32	2	CARRIAGE BOLT, 1/2-13 x 4
3	25158	2	WASHER, 1/2" SAE
4	25056	2	NUT, 1/2-13 Hex Nylon Lock
5	45023	2	SPACER, .52 x 1.00 x .44
6	23264	1	IDLER PULLEY
7	48994	1	IDLER MOUNT
8	25405	2	NUT, 3/4-16 Hex
9	25406	2	WASHER, 3/4" Belleville
10	49218	1	SPACER, 1.00 x 1.57 x .69
11	49238	1	BELT, Chevron
12	25389	2	KEY, 1/4 SQ. X 3/4
13	48977	2	SPROCKET, Chevron
14	25392	8	NUT, 5/16-18 Hex Nylock Flange
15	61175	2	SPINDLE ASSEMBLY, Complete (Includes Ref No. 16 - 22)
16	23329	2	GREASE FITTING
17	49793	4	TRASH SHIELD
18	23330	4	BEARING
19	23296	2	RELIEF VALVE
20	61097	2	SPINDLE HOUSING
21	61099	2	SPACER, 1.00 x 1.25 x 1.75
22	61137	2	SPINDLE SHAFT w/ SADDLE
23	23156	8	BOLT, Flange Head, 5/16-18 x 1-1/4
24	21227	2	MOWER BLADE, 18"
25	25159	2	WASHER, 5/8" USS
26	25320-14	2	BOLT, 5/8-11 x 1-3/4
27	61727	1	PULLEY RETAINER
28	25011-6	2	BOLT, 5/16-18 x 3/4
29	48954	1	BAFFLE
30	22788	1	SPRING, Compression
31	48735	1	MOWER DECK HOUSING
32	25144-6	1	CARRIAGE BOLT, 1/4-20 x 3/4
33	25144	1	CARRIAGE BOLT, 1/4-20 x 1-1/4
34	1960518	2	PUSH NUT, 1/4, Black
35	61511	1	CHUTE SUPPORT PLATE
36	25154	2	WASHER, 1/4" SAE
37	1704873	1	CLAMP
38	1723938	1	SPRING, Torsion
39	1705449	1	DEFLECTOR
40	1723323	1	SPRING END CAP
41	25391	2	NUT, 1/4-20 Hex Nylock Flange

Footnotes

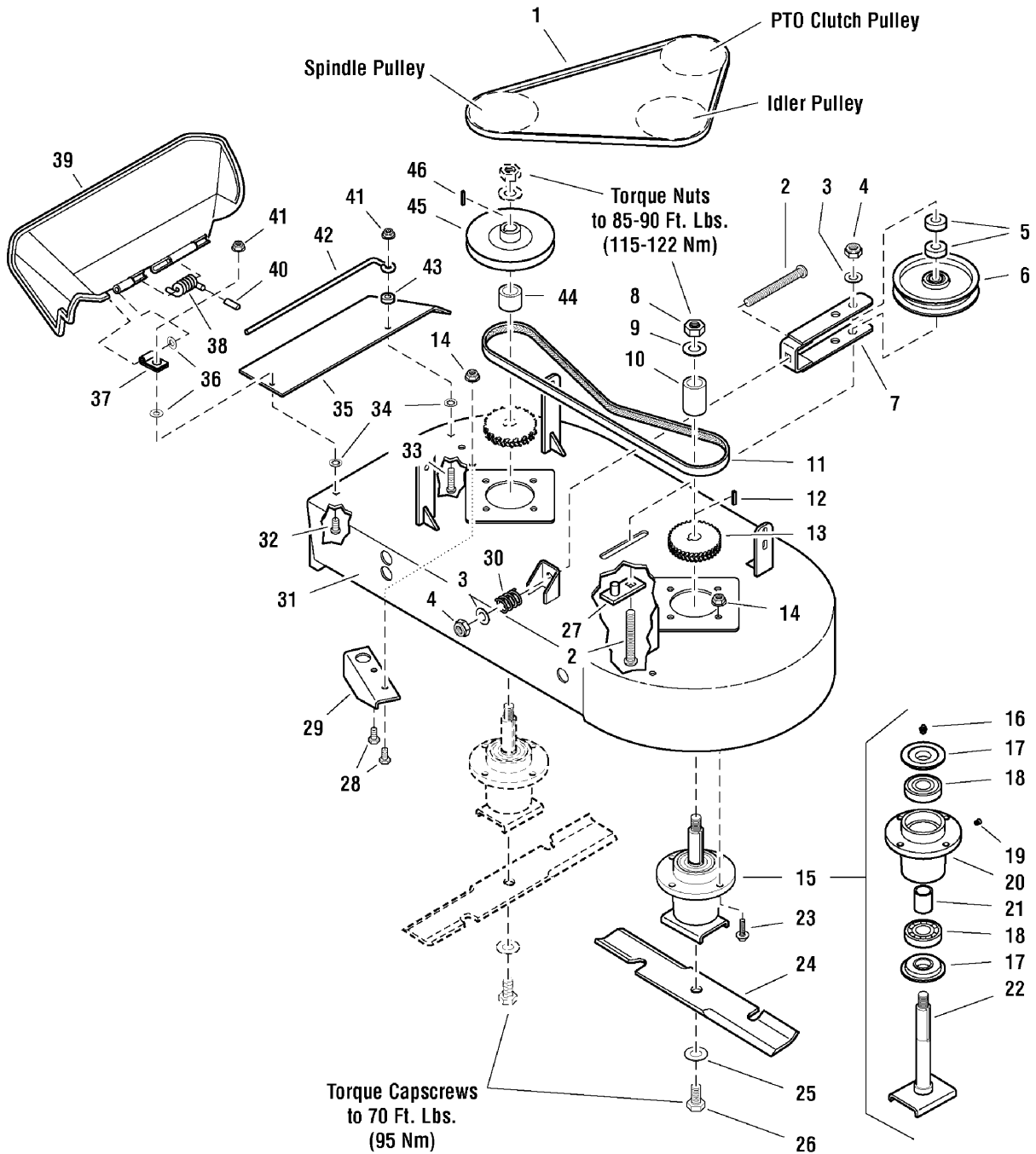
The above parts group applies to the following Mfg. Nos.:

HC36KAV13E

36" Mower Deck - Housing, Spindles, Blades & Pulleys

NOTE: Unless noted otherwise, use the standard hardware torque specification chart.

0773hc0



The above parts group applies to the following Mfg. Nos.:

HC36KAV13E

36" Mower Deck - Housing, Spindles, Blades & Pulleys

REF NO.	PART NO.	QTY.	DESCRIPTION
42	61807	1	CHUTE SUPPORT ROD
43	44933	1	SPACER, .39 x .75 x .38
44	49221	1	SPACER, 1.00 x 1.57 x 1.19
45	47638	1	SPINDLE PULLEY
46	50407-1	1	KEY, 1/4 SQ. X 1

Footnotes

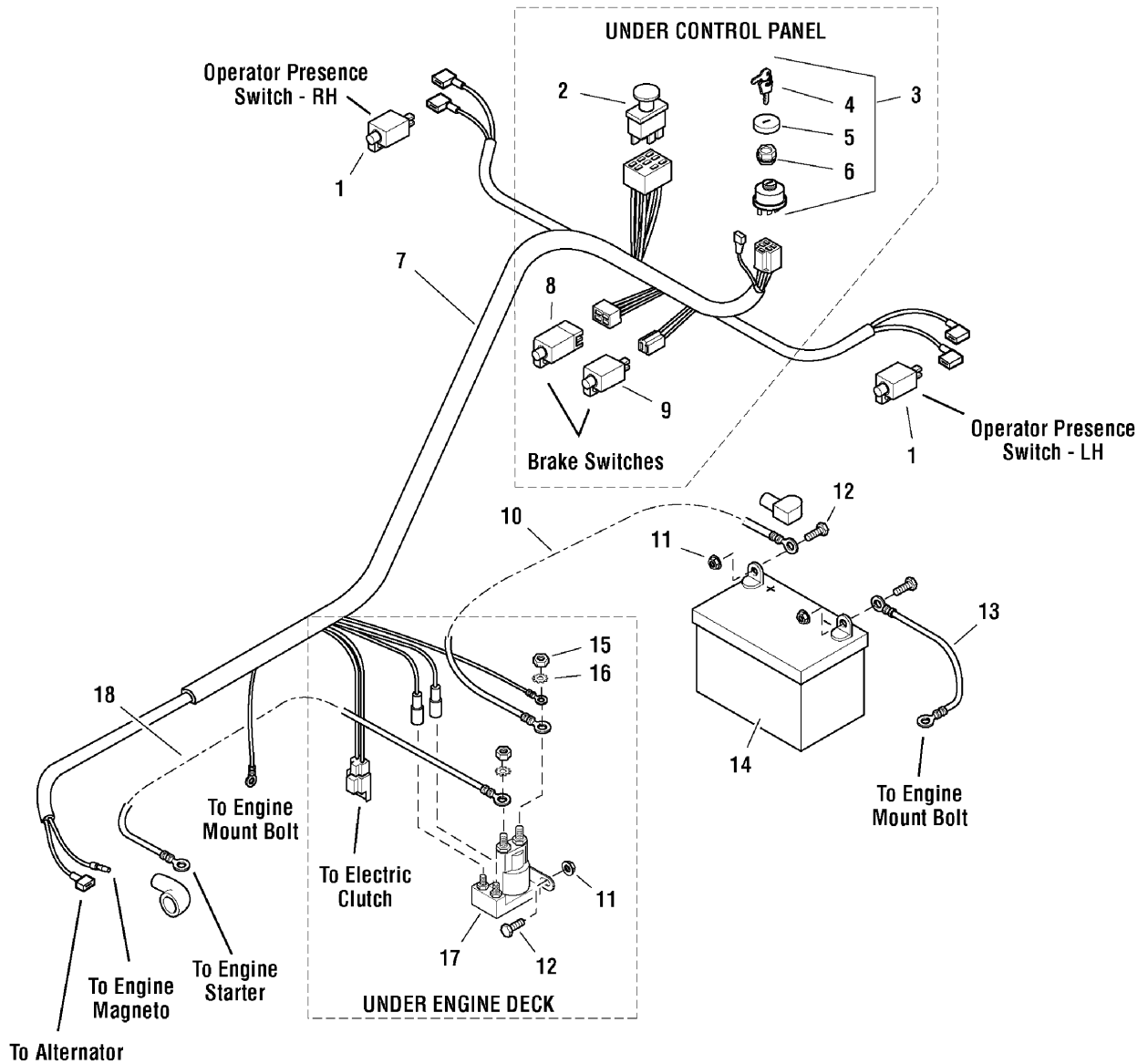
The above parts group applies to the following Mfg. Nos.:

HC36KAV13E

Electrical Group - Electric Start

077egwe0

NOTE: Unless noted otherwise,
use the standard hardware torque
specification chart.



The above parts group applies to the following Mfg. Nos.:

5900604
HC36KAV13E

Electrical Group - Electric Start

REF NO.	PART NO.	QTY.	DESCRIPTION
1	61675	2	SWITCH, NC
2	22180	1	SWITCH, PTO
3	20927	1	SWITCH, Ignition, Complete (Includes Ref No. 4 - 6)
4	22789	1	KEY, Ignition, Molded Set
5	22790	1	COVER
6	22791	1	PLASTIC NUT
7	61470	1	WIRE HARNESS
8	22438	1	SWITCH, Plunger, NO/NO
9	21769	1	SWITCH, Plunger, NC
10	21405	1	POSITIVE (+) BATTERY CABLE, 22"
11	25126	4	NUT, 1/4-20 Hex Serrated Flange
12	25010-6	4	BOLT, 1/4-20 x 3/4
13	21406	1	NEGATIVE (-) BATTERY CABLE, 22"
14	-	1	BATTERY, Lawn & Garden, 12V (BCIU1, 340 CCA)
15	23216	2	NUT, Hex Jam, 5/16-24
16	23217	2	WASHER, Light Lock, 5/16
17	1724815	1	SOLENOID
18	21542	1	POSITIVE (+) BATTERY CABLE, 30"

Footnotes

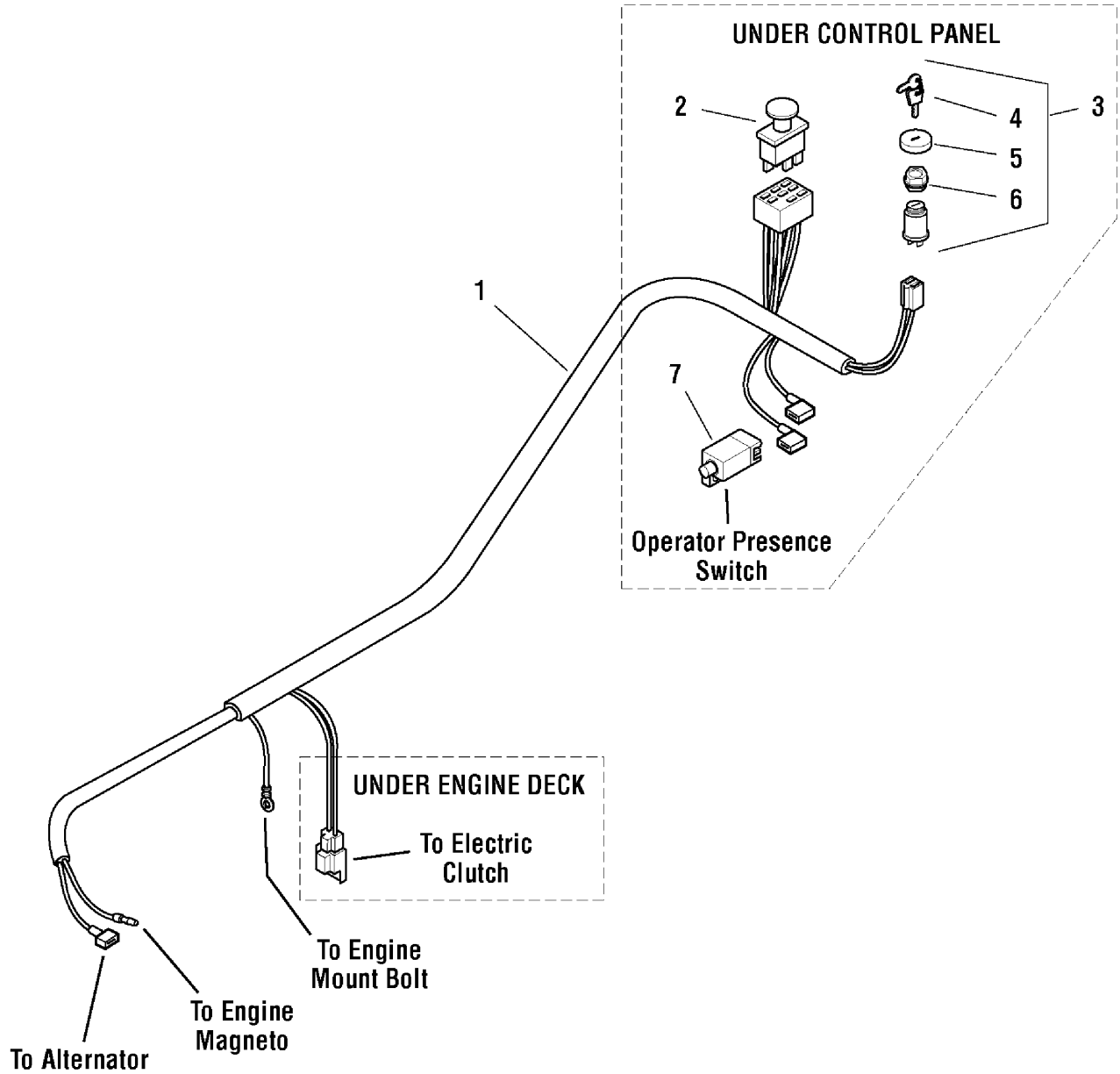
The above parts group applies to the following Mfg. Nos.:

5900604
HC36KAV13E

Electrical Group - Manual Start

077EGWM0

NOTE: Unless noted otherwise,
use the standard hardware torque
specification chart.



The above parts group applies to the following Mfg. Nos.:

HC32KAV13

Electrical Group - Manual Start

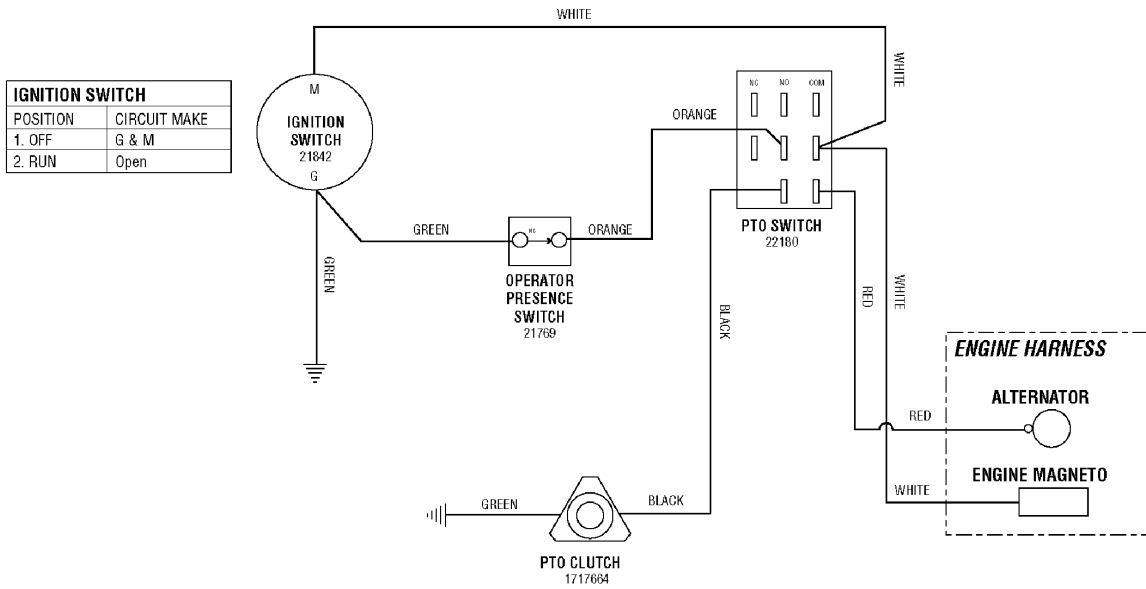
REF NO.	PART NO.	QTY.	DESCRIPTION
1	47772	1	WIRE HARNESS
2	22180	1	SWITCH, PTO
3	21842	1	SWITCH, Ignition, Complete (Includes Ref No. 4 - 6)
4	22789	1	KEY, Ignition, Molded Set
5	22790	1	COVER
6	22791	1	PLASTIC NUT
7	21769	1	SWITCH, Plunger, NC

Footnotes

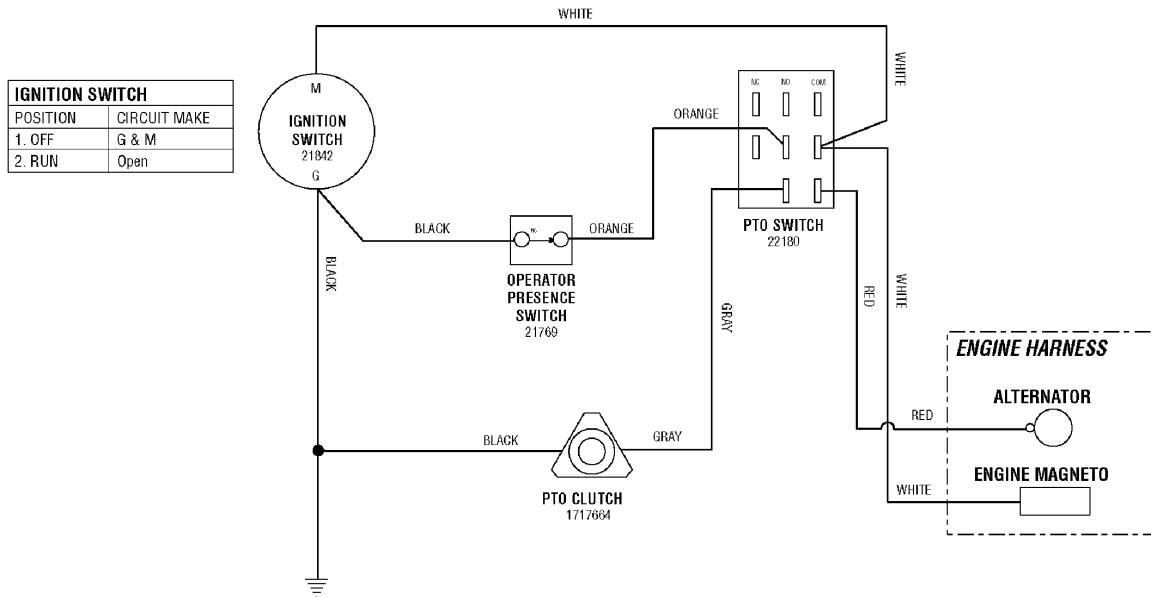
The above parts group applies to the following Mfg. Nos.:

HC32KAV13

Serial No. 1038 & below

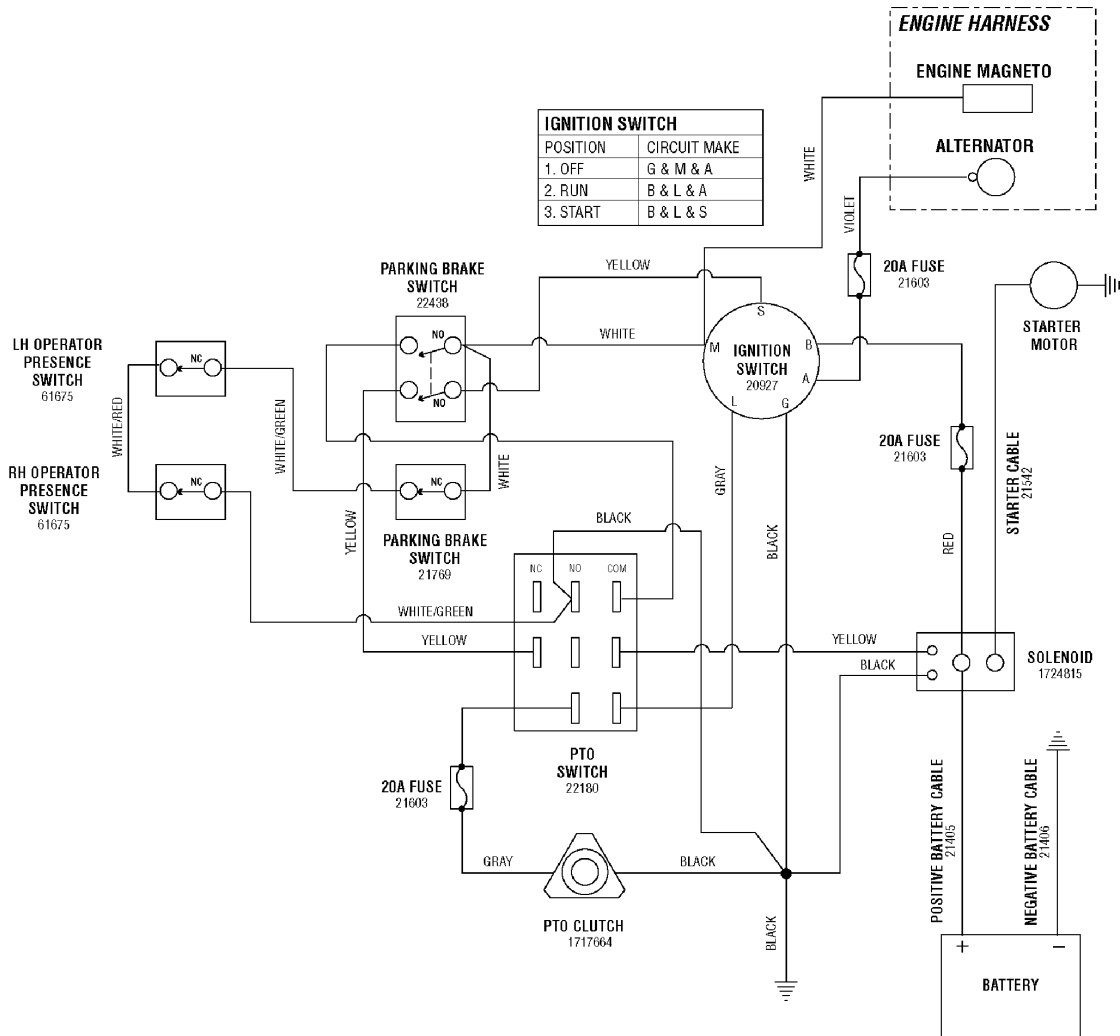


Serial No. 1039 & above



The above parts group applies to the following Mfg. Nos.:

HC32KAV13



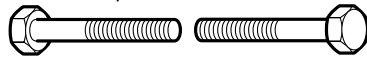
The above parts group applies to the following Mfg. Nos.:

HC36KAV13E
5900604

Hardware Identification & Torque Specifications

Common Hardware Types

Hex Head Capscrew



Washer



Lockwasher



Carriage Bolt



Hex Nut

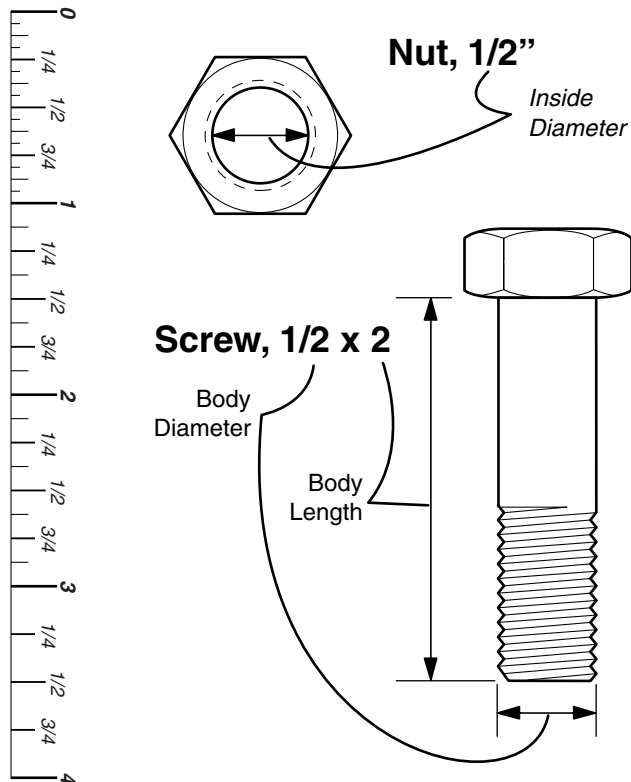


Standard Hardware Sizing

When a washer or nut is identified as $1/2''$, this is the *Nominal size*, meaning the *inside diameter* is $1/2$ inch; if a second number is present it represents the *threads per inch*

When bolt or capscrew is identified as $1/2 - 16 \times 2''$, this means the *Nominal size*, or *body diameter* is $1/2$ inch; the second number represents the *threads per inch* (16 in this example, and the final number is the *body length* of the bolt or screw (in this example 2 inches long).

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



Torque Specification Chart

FOR STANDARD MACHINE HARDWARE (Tolerance $\pm 20\%$)

Hardware Grade	No Marks SAE Grade 2		SAE Grade 5		SAE Grade 8	
	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	27	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

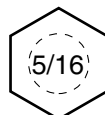
NOTES

- 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.

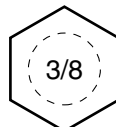
Wrench & Fastener Size Guide



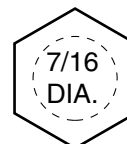
$1/4''$ Bolt or Nut
Wrench— $7/16''$



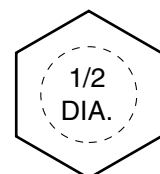
$5/16''$ Bolt or Nut
Wrench— $1/2''$



$3/8''$ 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— $3/4''$

Parts Manual HydroCut Series Walk-Behind Mower

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