



Parts Catalog 8-3112

COMPACT TRACTORS
WITH **VANGUARD** ENGINES

3012 - PIN 14145700 AND AFTER

3014 - PIN 14146700 AND AFTER

3016 - PIN 14147800 AND AFTER

3018 - ALL

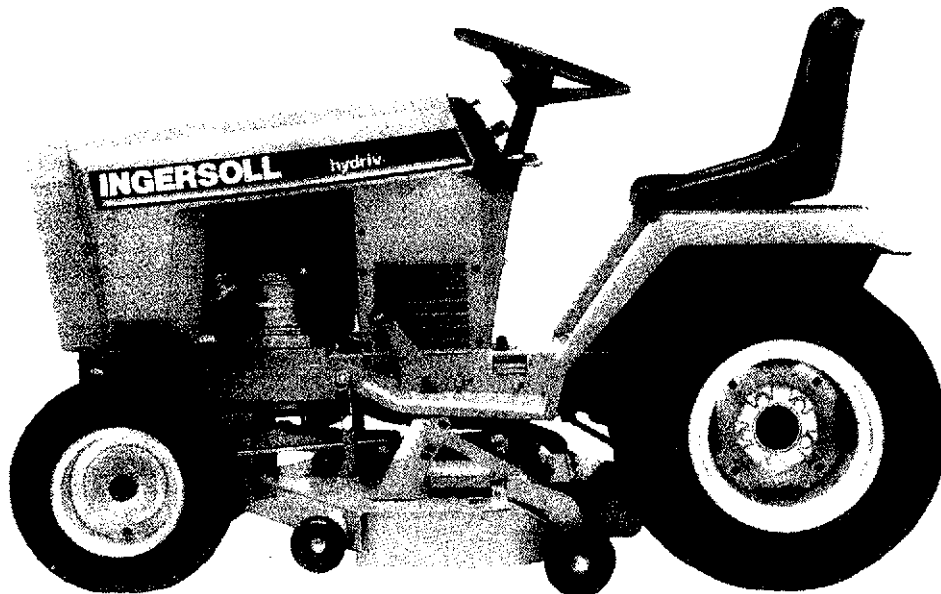
4016 - PIN 14170800 AND AFTER

[INDEX](#)

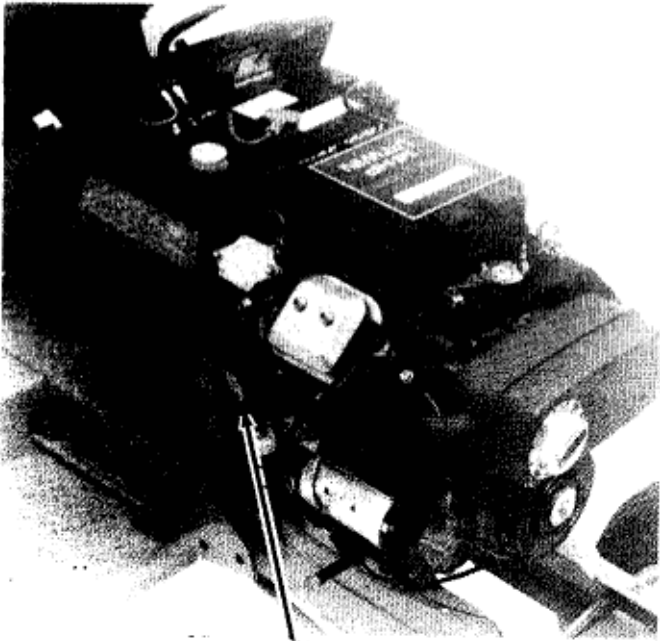
[PAINT](#)

[ENGINES](#)

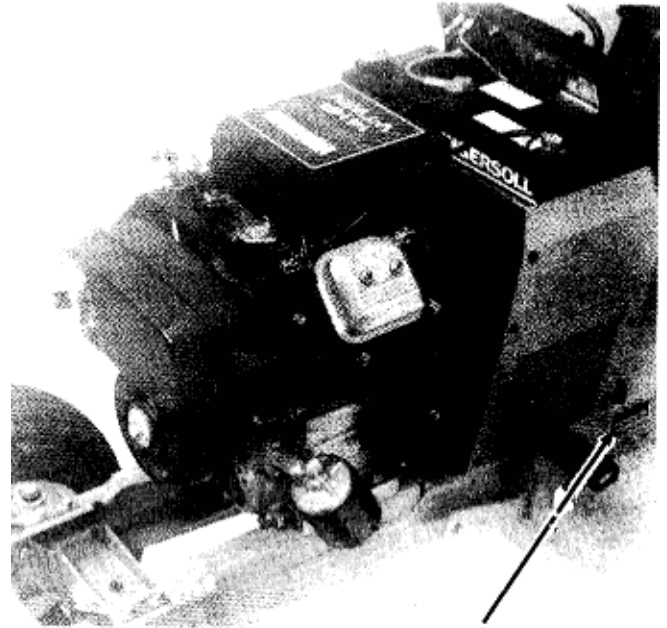
[GENERAL INFO](#)



**PRODUCT IDENTIFICATION NUMBERS (P.I.N.)
OR SERIAL NUMBERS (S/N)**



ENGINE MODEL, SERIAL AND
SPECIFICATION NUMBERS



TRACTOR MODEL AND P.I.N.
OR SERIAL NUMBERS

ENGINE IDENTIFICATION

TRACTOR MODEL

ENGINE MODEL

3012

C33454
BRIGGS & STRATTON
VANGUARD 12 HP
MODEL 290447
TYPE 0411

3014

C43283
BRIGGS & STRATTON
VANGUARD 14 HP
MODEL 294447
TYPE 0412 AND 0445

3016, 4016

C43249
BRIGGS & STRATTON
VANGUARD 16 HP
MODEL 303447
TYPE 0414 AND 0447

3018

C44853
BRIGGS & STRATTON
VANGUARD 18 HP
MODEL 350447
TYPE 0139

NOTE: In this catalog there are references to serial numbers. To order the correct part use these serial numbers as a guide.

INDEX

There is an index at the front and rear of this catalog. The front index is an alphabetical index of the major groups or assemblies.

The rear index is a numerical index of the part numbers and pages on which these numbers are shown.

ILLUSTRATION

Each illustration in this catalog shows a group of parts or components. These parts and components are aligned approximately as the parts and components on your machine. Each part and component in an illustration has a reference number. These reference numbers are in a list on the page opposite of the illustration. Next to the reference number is the part number, description and required quantity of the part shown in the illustration.

UAR - "Use as required" indicates that the part quantity is variable.

NSS - "Not sold separately" indicates that the part is only available as component of an assembly or the part must be purchased locally. If the part is an assembly component, the description will be indented under the assembly description in the parts list.

O/L - "Obtain locally"

- "Footnotes" are added to a part number when more information is needed for identification. They only relate to the part numbers indicated. All orders must include the following information:

PARTS ORDERS

1. Correct part number.
2. Complete description of part or component.
3. Total quantity of each part or component.
4. Product model number.
5. All necessary product identification numbers.
6. Method for sending the parts.
7. Complete and correct address.

CATALOG REVISIONS

As the product changes, new pages will be available for your catalog. A notice will be issued.

IMPORTANT: Put all revisions into the catalog as soon as possible.

RIGHT HAND AND LEFT HAND IDENTIFICATION

The words right hand (RH) and left hand (LH) as used in this catalog indicate the direction while you are in the operator's seat in the normal operating position.

INDENTED DESCRIPTIONS

An assembly can have many components. The components of an assembly are indicated by an indented description. The quantity for an indented part is the total needed for that complete assembly. See the example.

REF.	PART NO.	DESCRIPTION	REQ'D
	C 55159	CYLINDER ASSY - rear steering	1
28	C 56208	SOCKET ASSY - rear cylinder	1
29	C 55956	PLUG - adjusting, socket assy	1
30	C 55957	SEAT- socket, ball.....	2
31	C 56210	SPRING-socket	1
32	C 56209	SEAT - socket spring	1
33	G 45175	CLAMP ASSY - socket assy	1
	16- 836	BOLT-1/2"x2-1/4" N.F. hex.....	1
34	132- 104	PIN-cotter, 3/16"x3".....	1
35	C 55889	STUD - ball, socket & cylinder	2
36	13- 410	BOLT-1/4"x5/8"N.C.,hex	4
37	92- 4	LOCK WASHER - 1/4"SAE	4

Alphabetical Index

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Crankcase Cover	9	Shields	15
Crankshaft	5	Piston	5
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Ingersoll

Paint & Oil

INDEX

PAINT

Power Red Gloss

16-ounce Aerosol Can..... C28484
Quart C28485

Power White

16-ounce Aerosol Can..... C28812
Quart C28845

Power Yellow (Older 600 Series)

16-ounce Aerosol Can..... C28847
Quart C28848

Power Tan (6000 Series)

16-ounce Aerosol Can..... C28853
Quart C28854

Desert Sunset (Older 400 Series)

16-ounce Aerosol Can..... C28846
Quart C28852

Black, Semi Gloss

16-ounce Aerosol Can..... C28849
Quart C28850

Black, High Heat

16-ounce Aerosol Can..... C28851

Silver

16-ounce Aerosol Can..... C30870

M & W Plum

16-ounce Aerosol Can..... 10-5688

Grazer Grey

16-ounce Aerosol Can..... C38444
Quart C38982

Odyssey Charcoal Grey

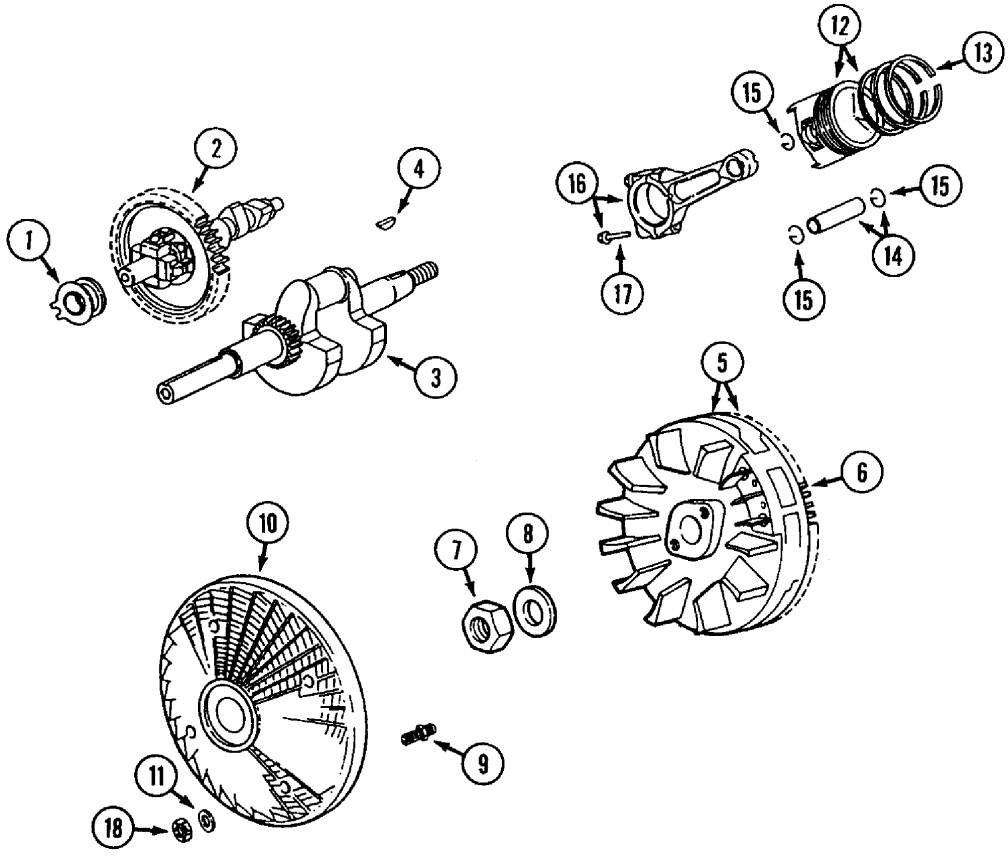
16-ounce Aerosol Can..... C47171

HYDRAULIC OIL

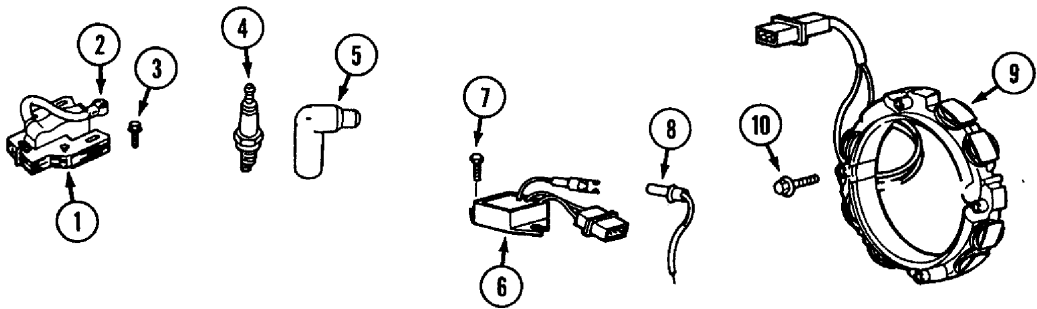
20W40, Use 32 Degrees and above.
12-Quart Case..... C32778

5W20, Use Below 32 Degrees.
12-Quart Case..... C32777

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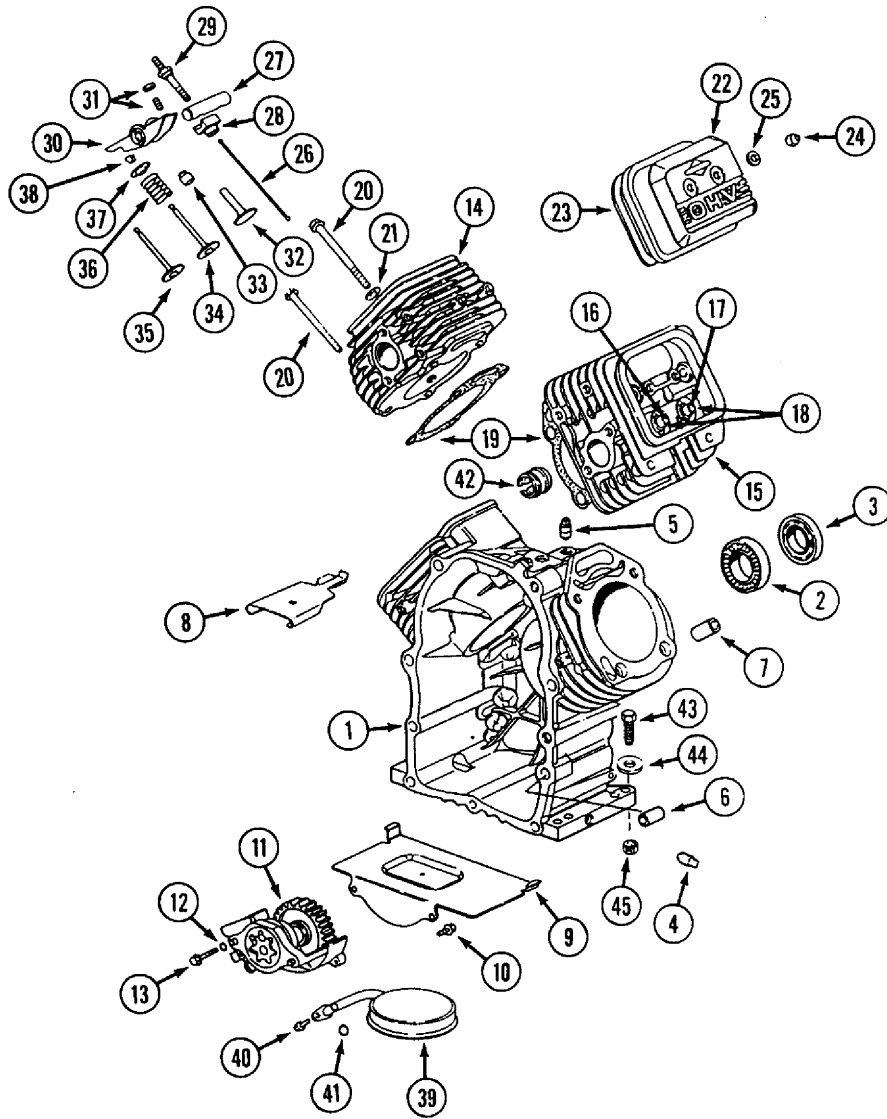
INDEX**MODEL 3012, 3014, 3016 AND 4016 COMPACT TRACTORS****FLYWHEEL, CRANKSHAFT, CAMSHAFT AND PISTONS**

REF.	PART NO.	DESCRIPTION	REQ'D
1	C34371	SLIDER - governor.....	1
2	C34231	CAMSHAFT	1
3	C34204	CRANKSHAFT.....	1
4	C34211	KEY - flywheel.....	1
5	C34210	FLYWHEEL - includes ring gear.....	1
6	C34331	GEAR - ring.....	1
7	C34288	NUT - flywheel	1
8	C34237	WASHER - flywheel	1
9	C33504	STUD - screen mounting.....	4
10	C33503	SCREEN - flywheel	1
11	195-518	WASHER-1/4"	4
12	C34212	PISTON ASSEMBLY - standard (includes rings).....	2
12	C34213	PISTON ASSEMBLY - .010" oversize (includes rings)	2
12	C34214	PISTON ASSEMBLY - .020" oversize (includes rings)	2
12	C34215	PISTON ASSEMBLY - .030" oversize (includes rings)	2
13	C34216	RING SET - piston, standard.....	1
13	C34217	RING SET - piston, .010", oversize	1
13	C34218	RING SET - piston, .020" oversize	1
13	C34219	RING SET - piston, .030" oversize	1
14	C34221	PIN - piston, standard.....	2
15	C34220	LOCK - piston pin	2
16	C34222	ROD - connecting.....	2
17	C34223	BOLT - connecting rod	2
18	131-1102	NUT - 1/4" - 20 lock	4

INDEX**IGNITION AND CHARGING SYSTEMS**

1	C34289	ARMATURE - magneto.....	2
2	BR221798	TERMINAL - ignition cable	1
3	C34290	SCREW - mounting.....	4
4	C34291	SPARK PLUG	2
5	C34324	BOOT - spark plug	2
6	C34304	REGULATOR - alternator	1
7	C34310	SCREW - mounting.....	2
8	C29866	CONNECTOR - harness.....	1
9	C34303	STATOR - alternator	1
10	C34290	SCREW - mounting.....	4

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MODEL 3012, 3014, 3016 AND 4016, COMPACT TRACTORS

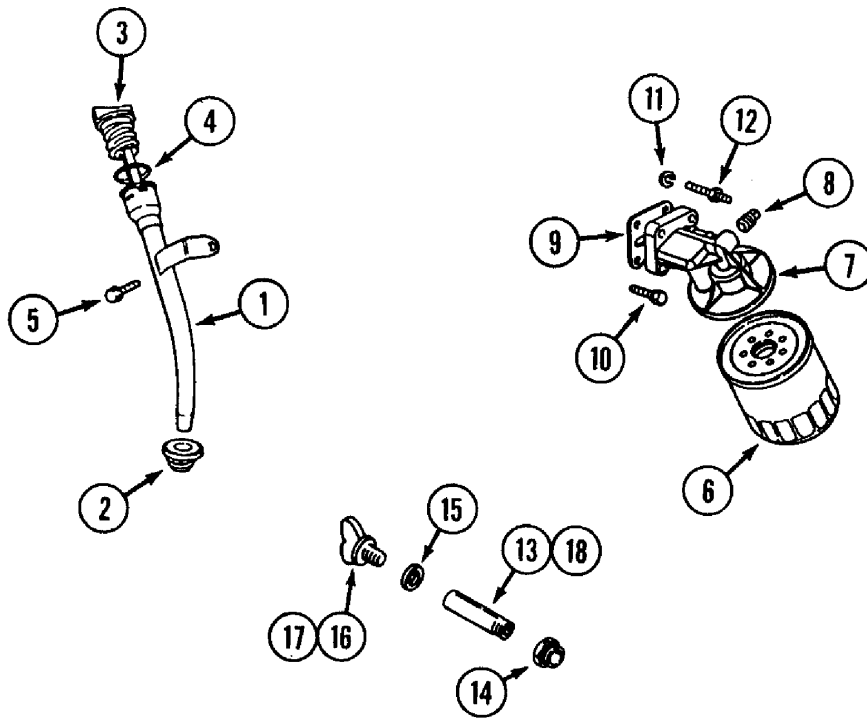
CYLINDER BLOCK AND CYLINDER HEADS

REF.	PART NO.	DESCRIPTION	REQ'D
1	C34190	BLOCK - cylinder	1
2	C34191	BEARING - main	1
3	C34192	SEAL-oil	1
4	C34203	PLUG-pipe	1
5	C34239	PLUG-pipe	1
6	C34327	DOWEL - crankcase	UAR
7	C34328 *	DOWEL - cylinder head	UAR
8	C34317	BAFFLE - breather	1
9	C34227	PLATE - windage	1
10	C34279	SCREW - sem	2
11	C34370	PUMP-oil	1
12	C34246	"0" RING - pump	2
13	C34338	SCREW - pump mounting	2
14	C34193 *	HEAD - cylinder R.H., No. 1	1
14	C40932 **	HEAD - cylinder R.H., No. 1	1
15	C34194 *	HEAD - cylinder L.H., No. 2	1
15	C40933 **	HEAD - cylinder L.H., No. 2	1
16	C34348	SEAT - exhaust valve	2
17	C34347	SEAT - intake valve	2
18	C34349	GUIDE - valve	4
19	C34196 *	GASKET - head	2
19	C40934 **	GASKET - head	2
20	C34202	BOLT - head	8
21	C34195	WASHER - head bolt	8
22	C34368	COVER - valve (No. 2 cylinder) L.H.	1
22	C34369	COVER - valve (No. 1 cylinder) R.H.	1
23	C34367	GASKET - valve cover	2
24	C34262	NUT - lock, valve cover	4
25	C34261	WASHER	4
26	C34372	ROD - push, intake	2
26	C34373	ROD - push, exhaust	2
27	C34377	SHAFT - rocker arm	2
28	C34378	SUPPORT - rocker arm	4
29	C34259	STUD - rocker arm	4
30	C34376	ARM - rocker	4
31	C34265	SCREW AND NUT - valve adjust	4
32	C34230	TAPPET - valve	4
33	C34346	SEAL - valve guide	4
34	C34224	VALVE - exhaust	2
35	C34225	VALVE - intake	2
36	C34226	SPRING - valve	4
37	C34228	RETAINER - valve spring	4
38	C34229	RETAINER - valve	4
39	C34272	SCREEN - oil pick-up	1
40	C34339	SCREW - mounting	1
41	C34248	"0" RING - pick-up tube	1
42	C34342	LINER - exhaust port	2
43	113-120	BOLT - 5/16"-18x1-3/4"	4
44	195-521	WASHER - .34" x .69"	4
45	131-69	NUT - lock 5/16" - 18	4

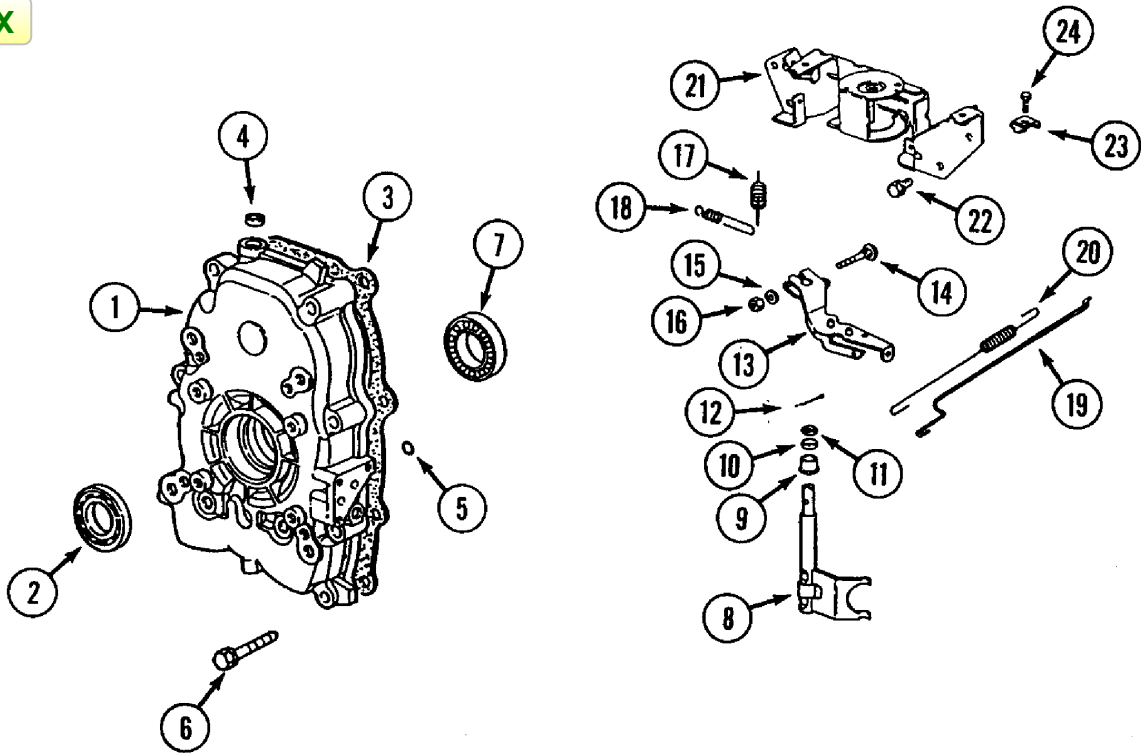
**Use after Engine
Date Code
3016 - 90091000
4016 - 90091000

* Use before Engine
Date Code
3012 - all
3014 - all
3016 - 90091100
4016 - 90091100

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MODEL 3012, 3014, 3016 AND 4016 COMPACT TRACTORS

OIL DRAIN, OIL FILTER AND FILLER TUBE

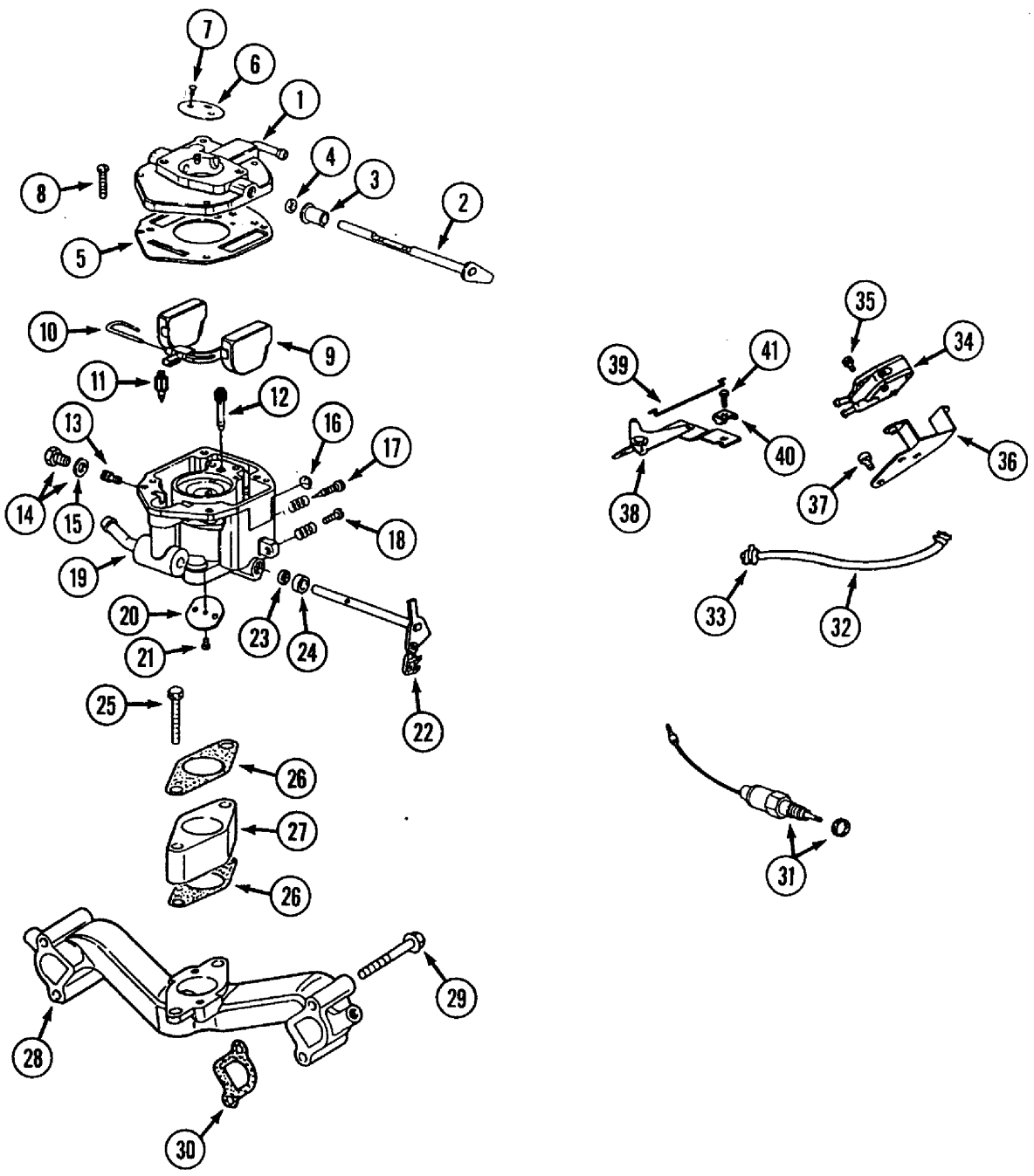
REF.	PART NO.	DESCRIPTION	REQ'D
1	C34309 +	TUBE - oil filler	1
1	C40931 ++	TUBE - oil filler	1
2	C34308	SEAL - filler tube	1
3	C34307 +	DIPSTICK.....	1
3	C40930 ++	DIPSTICK.....	1
4	C34340	"O" RING - filler tube	1
5	C34276	SCREW	1
6	C34374 +	FILTER - oil	1
6	C34544 ++	FILTER - oil	1
7	C34375	ADAPTER - oil filter.....	1
8	C34239	PLUG-pipe.....	1
9	C34361	GASKET - adapter	1
10	C34362	SCREW - adapter	3
11	C34264	LOCKWASHER.....	1
12	C34260	STUD - adapter	1
13	C33450 *	NIPPLE - oil drain.....	1
14	221-86 *	REDUCER - pipe 3/8" - 14	1
15	C14906 *	GASKET - oil drain.....	1
16	C14399 *	PLUG - oil drain (shown).....	1
17	218-5154 **	PLUG -oil drain.....	1
18	C37148 **	NIPPLE - pipe 2" long.....	1

* Use before PIN:	+ Use before PIN:
** Use PIN and after:	++ Use PIN and after:
3012 - 14167800	3012 - all before
3014 - 14168800	3014 - all before
3016 - 14169500	3016 - 14169725
4016 - all after	4016 - 1417045

CRANKCASE COVER AND GOVERNOR

1	C34207	COVER - crankcase.....	1
2	C34208	SEAL - oil	1
3	C34201	GASKET - crankcase cover	1
4	C34323	WASHER - governor shaft.....	1
5	C34247	"O" RING - crankcase cover	1
6	C34209	BOLT - crankcase cover	8
7	C34206	BEARING - crankcase cover	1
8	C34322	SHAFT - governor	1
9	C34314	BUSHING - governor shaft	1
10	C34315	BUSHING - governor shaft	1
11	C34240	SEAL - governor shaft.....	1
12	C34321	PIN - cotter.....	1
13	C34270	LEVER ASSEMBLY - governor	1
14	C34316	BOLT - lever.....	1
15	C34275	WASHER - lever	1
16	C34319	NUT - lever.....	1
17	C34267	SPRING - governor.....	1
18	C34397	SPRING - governed idle	1
19	C34266	LINK - governor.....	1
20	C34271	SPRING - governor link	1
21	C34269	BRACKET - governor control.....	1
22	C34281	SCREW - bracket.....	4
23	BR221535	CLAMP - casing	1
24	C34292	SCREW - clamp.....	1

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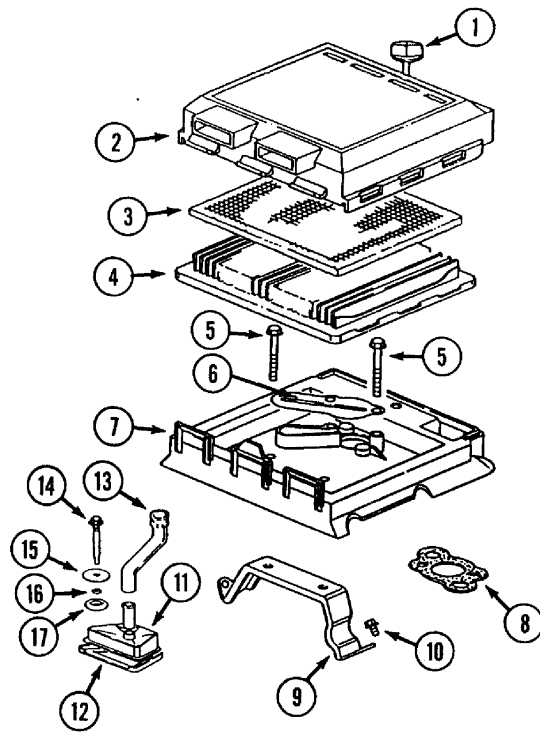


MODEL 3012, 3014, 3016 AND 4016 COMPACT TRACTORS

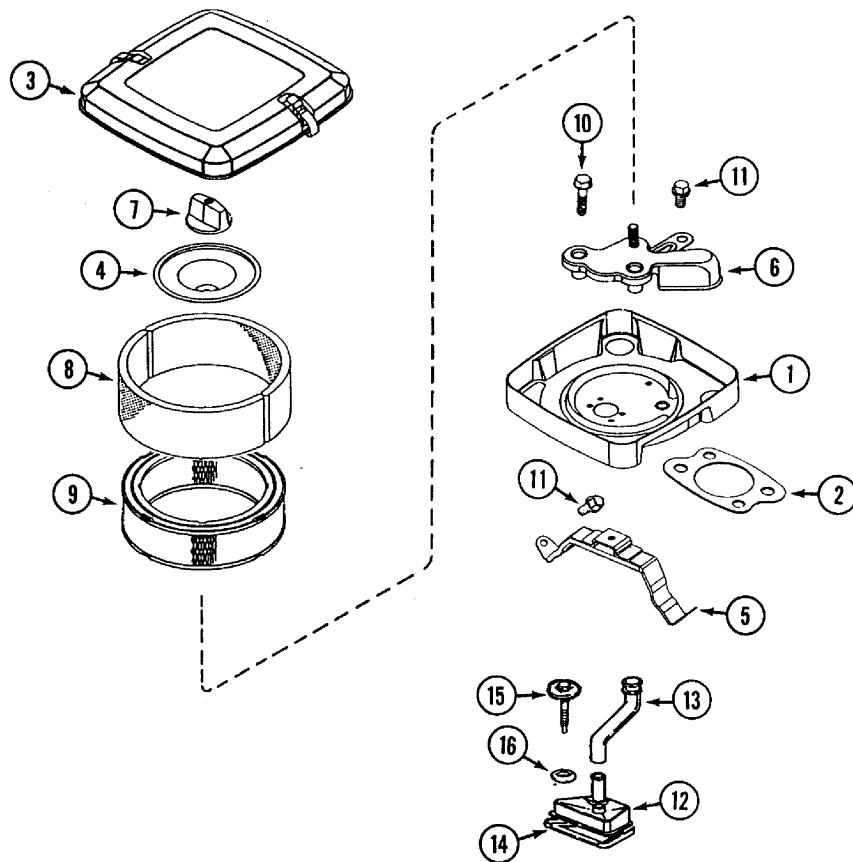
CARBURETOR, MANIFOLD AND FUEL PUMP

REF.	PART NO.	DESCRIPTION	REQ'D
	C34254	CARBURETOR - 3012, 3014.....	1
	C34255	CARBURETOR - 3016 (used with square air filter).....	1
1	C40919	BODY - upper (used with round air filter).....	1
1	C34241	BODY - upper (used with square air filter).....	1
2	C34258	SHAFT - choke.....	1
3	NSS	COLLAR - choke (use overhaul kit).....	1
4	NSS	SEAL - shaft (use overhaul kit).....	1
5	NSS	GASKET - body (use overhaul kit).....	1
6	C34245	VALVE - choke.....	1
7	C34242	SCREW - valve.....	2
8	C34250	SCREW - body.....	4
9	C34244	FLOAT - fuel.....	1
10	NSS	PIN - float hinge (use overhaul kit).....	1
11	NSS	VALVE - fuel inlet (use overhaul kit).....	1
12	NSS	JET - slow speed (use overhaul kit).....	1
13	NSS	JET - main 3012, 3014 (use overhaul kit).....	1
13	NSS	JET - main 3016 (use over haul kit).....	1
14	C34355	PLUG-jet.....	1
15	NSS	GASKET - plug.....	1
16	NSS	PLUG - welch (use overhaul kit).....	1
17	NSS	VALVE - idle adjust (use overhaul kit).....	1
18	C34243	SCREW AND SPRING - throttle adjust.....	1
19	NSS	BODY - lower (use complete carburetor).....	1
20	C34256	VALVE - throttle.....	1
21	C34242	SCREW - valve.....	2
22	C34257	SHAFT - throttle.....	1
23	NSS	SEAL - shaft (use overhaul kit).....	1
24	NSS	COLLAR - throttle.....	1
25	C34235	BOLT - mounting.....	2
26	C34233	GASKET - mounting.....	2
27	C34253	SPACER - carburetor.....	1
28	C34232	MANIFOLD intake.....	1
29	C34236	BOLT - manifold.....	4
30	C34234	GASKET - manifold.....	2
31	C34354	SOLENOID - fuel shut off.....	1
32	NSS	HOSE - vacuum (use C28937 cut to length).....	1
33	214 -251	CLAMP-hose.....	UAR
34	C34300	PUMP - fuel.....	1
35	C34339	SCREW - mounting.....	2
36	C34333	BRACKET - fuel pump (3012, 3014).....	1
36	C34334	BRACKET - fuel pump (3016).....	1
37	C34279	SCREW - bracket.....	2
38	C34274	BRACKET - choke control.....	1
39	C34268	LINK - choke.....	1
40	BR221535	CLAMP - casing.....	1
41	C34292	SCREW - clamp.....	1
	C34251	KIT - carburetor overhaul (3012, 3014).....	1
	C34252	KIT - carburetor overhaul (3016).....	1
	C40920	CARBURETOR - 3016 (used with round air filter).....	1

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MODEL 3012, 3014, 3016 AND 4016 COMPACT TRACTORS

AIR CLEANER AND CRANKCASE BREATHER

(Square Air Filter Style)

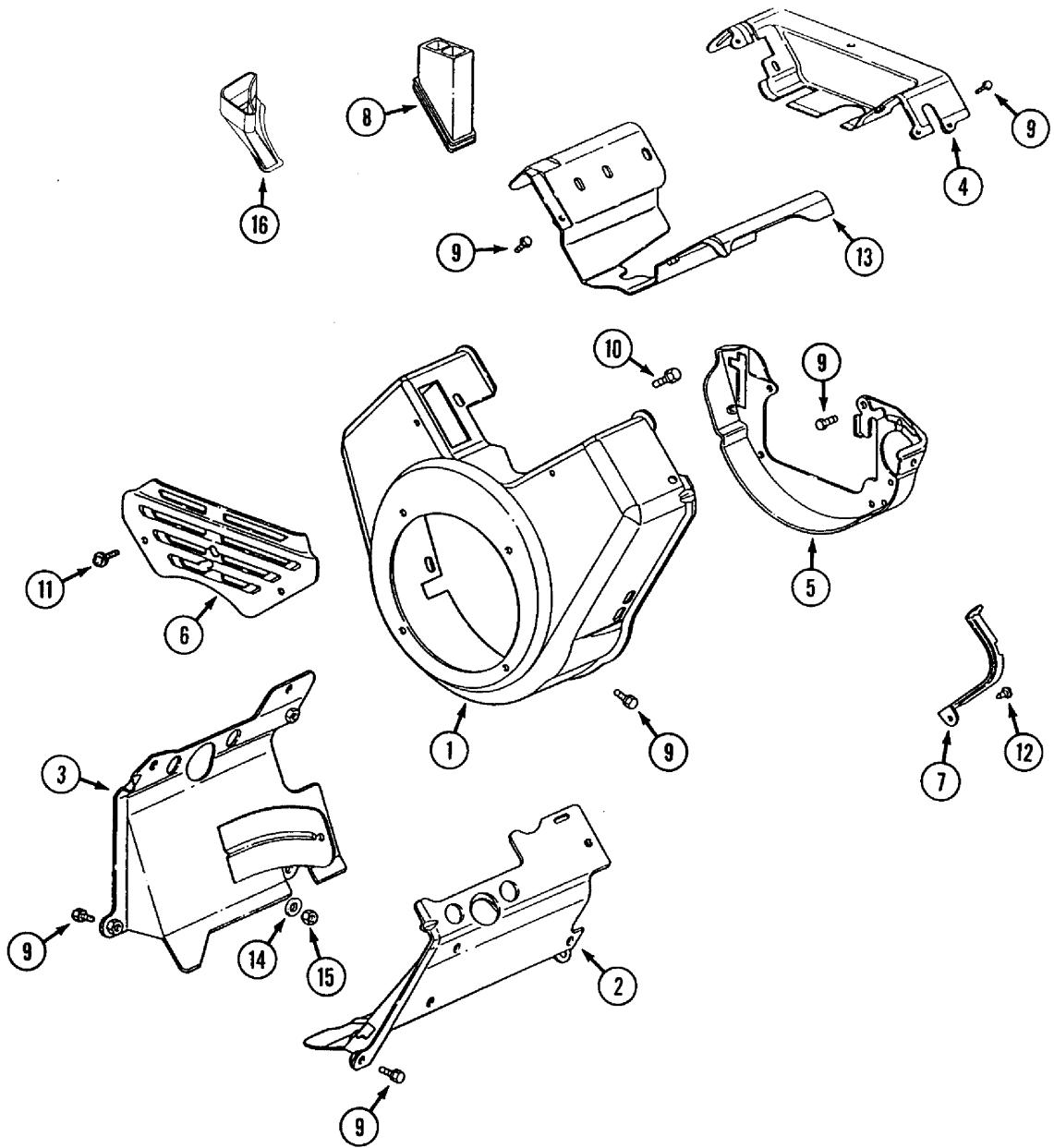
REF.	PART NO.	DESCRIPTION	REQ'D
1	C34359	SCREW - mounting.....	1
2	C34358	COVER - air cleaner.....	1
3	C34363	PRECLEANER.....	1
4	C34357	FILTER - air.....	1
5	C34360	BOLT - mounting.....	2
6	C34366	DEFLECTOR - breather.....	1
7	C34356	BASE - air cleaner.....	1
8	C34312	GASKET - air cleaner.....	1
9	C34341	BRACKET - air cleaner.....	1
10	C34279	SCREW - bracket.....	2
11	C34197	BREATHER ASSEMBLY.....	1
12	C34198	GASKET - breather.....	1
13	C34200	TUBE - breather.....	1
14	C34190	SCREW - mounting.....	1
15	C34298	WASHER.....	1
16	C34329	SEAL - breather screw.....	1
17	C34330	SEAL - breather screw.....	1

AIR CLEANER AND CRANKCASE BREATHER

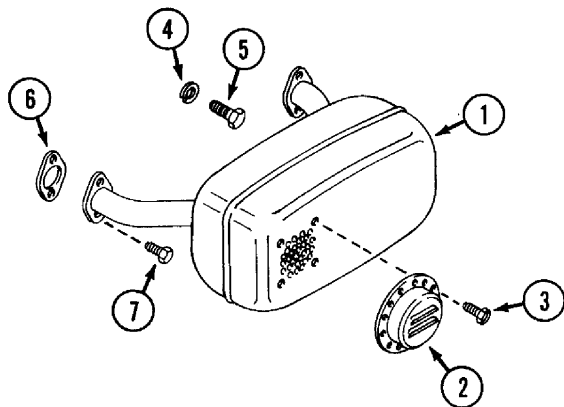
(Round Air Filter Style)

REF.	PART NO.	DESCRIPTION	REQ'D
1	C40921	BASE - air cleaner.....	1
2	C40923	GASKET - air cleaner.....	1
3	C40924	COVER - air cleaner.....	1
4	C40925	PLATE - air cleaner.....	1
5	C40926	BRACKET - air cleaner.....	1
6	C40927	SHIELD - carburetor inlet.....	1
7	C34680	KNOB - air cleaner.....	1
8	C37543	PRECLEANER.....	1
9	C37544	FILTER - air.....	1
10	C34338	BOLT.....	2
11	C34279	BOLT.....	3
12	C34381	BREATHER ASSEMBLY.....	1
13	C34200	TUBE - breather.....	1
14	C34198	GASKET - breather.....	1
15	C34382	SCREW - mounting.....	1
16	C34330	SEAL - breather screw.....	1

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INDEX**BLOWER HOUSING AND ENGINE AIR GUIDES**

REF.	PART NO.	DESCRIPTION	REQ'D
1	C40922	HOUSING - blower.....	1
2	C34343 +	COVER - air guide (cyl. No.1).....	1
2	C40936 ++	COVER - air guide (cyl. No.1).....	1
3	C34344 +	COVER - air guide (cyl. No.2).....	1
3	C40937 ++	COVER - air guide (cyl. No.2).....	1
4	C34280 *	COVER - valley extension.....	1
4	C40935 **	COVER - valley extension.....	1
5	C34318	PLATE - back.....	1
6	C34350	COVER - carburetor.....	1
7	C34332	SHIELD - starter.....	1
8	C34365	TUBE - air inlet.....	1
9	C34279	SCREW - mounting.....	UAR
10	C34281	SCREW - blower housing.....	UAR
11	C34325	SCREW - carburetor cover.....	2
12	C34301	SCREW - shield, starter.....	2
13	C34345	COVER - valley.....	1
14	C34264	LOCKWASHER.....	1
15	C34299	NUT - hex.....	1
16	C43441	TUBE - air inlet.....	1

+ Use before Engine
Date Code
3012 - all
3014 - all
3016 - 90111700
4016 - 90111700

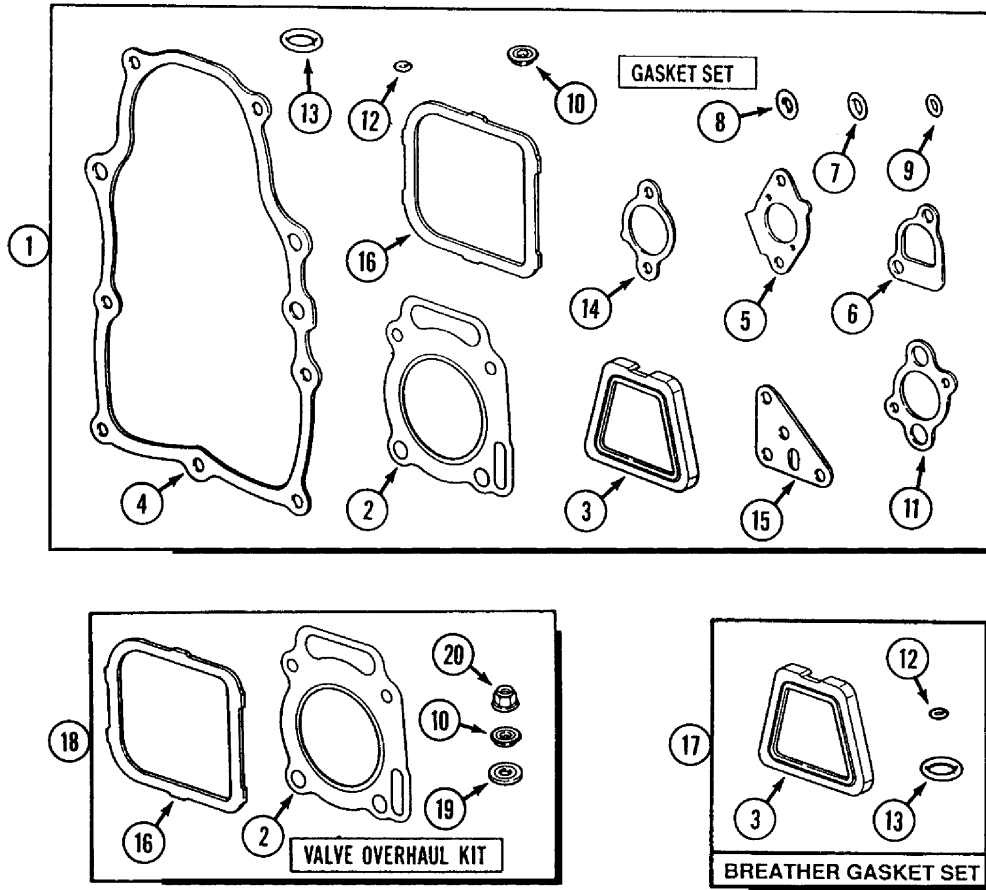
* Use PIN and after:
** Use before PIN:
3012 - all before
3014 - all before
3016 - 14169725
4016 - 14171045

++ Use after Engine
Date Code
3016 - 90111600
4016 - 90111600

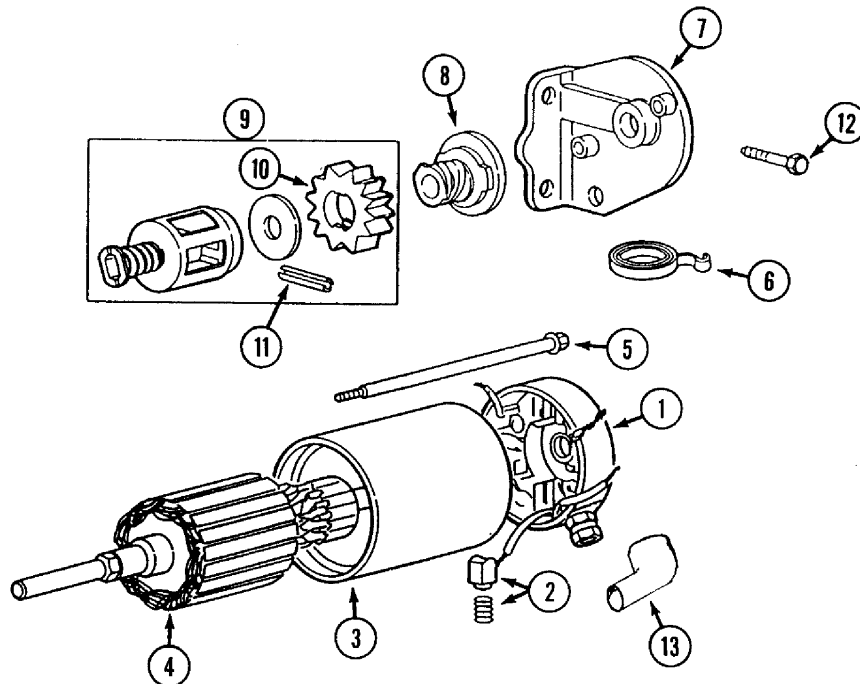
INDEX**MUFFLER AND ATTACHING PARTS**

1	C33469	MUFFLER.....	1
2	C33444	DEFLECTOR - exhaust.....	1
3	187-1041	SCREW - #8 - 32 x 3/8.....	4
4	192-21	LOCKWASHER - 3/8.....	1
5	113-208	BOLT - 3/8" - 16 X 1-1/4.....	1
6	C34351	GASKET - exhaust.....	2
7	C34320	BOLT - exhaust flange.....	4

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INDEX**MODEL 3012, 3014, 3016 AND 4016 COMPACT TRACTORS
GASKET SETS**

REF.	PART NO.	DESCRIPTION	REQ'D
1	C34297 *	GASKET SET - complete.....	1
1	C40938 **	GASKET SET - complete.....	1
2	C34196 *	GASKET - cylinder head.....	2
2	C40934 **	GASKET - head.....	2
3	C34198	GASKET - breather.....	1
4	C34201	GASKET - crankcase.....	1
5	C34233	GASKET - carburetor mounting.....	2
6	C34234	GASKET - intake manifold.....	2
7	C34246	"O" RING - oil pump.....	UAR
8	C34247	"O" RING - crankcase cover.....	UAR
9	C34248	"O" RING - oil pick-up tube.....	1
10	C34261	WASHER - valve cover.....	4
11	C40923	GASKET - air cleaner.....	1
12	C34329	SEAL - breather screw (early production).....	1
13	C34330	SEAL - breather screw.....	1
14	C34351	GASKET - exhaust.....	2
15	C34361	GASKET - oil filter adapter.....	1
16	C34367	GASKET - valve cover.....	2
17	C34249	BREATHER GASKET SET - includes Ref. 3, 12, 13.....	1
18	C34379 *	VALVE OVERHAUL GASKET KIT - includes Ref. 2, 10,16, 19, 20.....	1
18	C40939	VALVE OVERHAUL GASKET KIT - includes Ref. 2, 10,16, 19, 20.....	1
19	C34195	WASHER - cylinder head bolt.....	8
20	C34262	NUT - lock, valve cover.....	4

*Use before Engine

** Use after Engine Date Code

Date Code

3016 - 90091000

3012 - all

4016 - 90091000

3014 - all

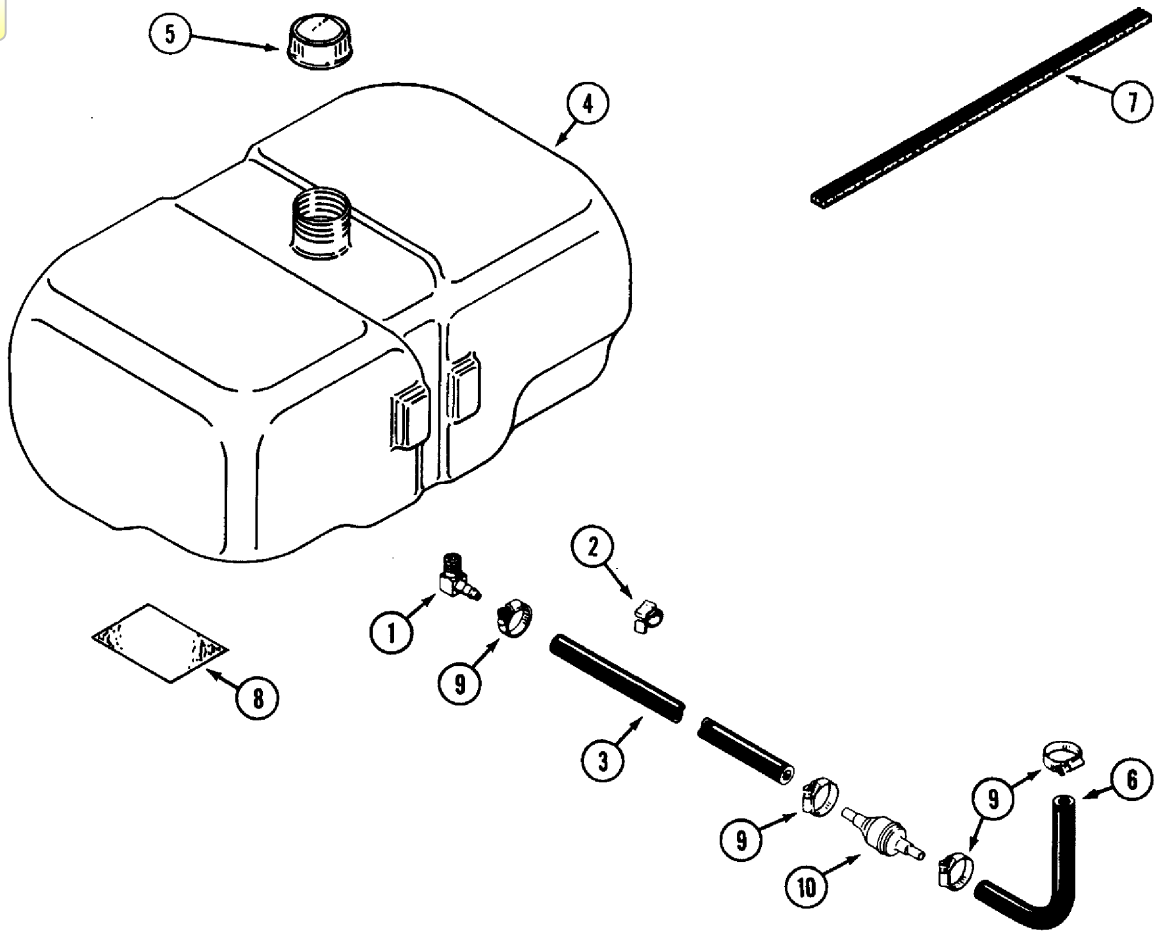
4016 - 90091100

3016 - 90091100

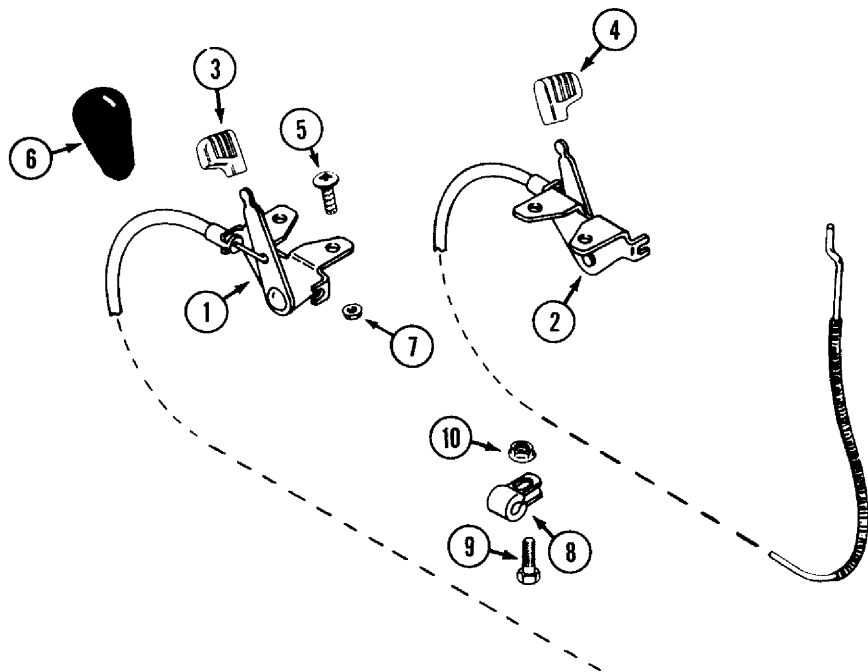
INDEX**STARTER**

	C34284	STARTER - 12 volt.....	1
1	C34336	CAP ASSEMBLY - commutator end.....	1
2	C34286	BRUSH ASSEMBLY.....	4
3	C34405	HOUSING - starter.....	1
4	C34313	ARMATURE - starter.....	1
5	C34285	BOLT - thru.....	2
6	C34364	SPRING - brush.....	4
7	C30444	CAP ASSEMBLY - drive end (3012, 3014).....	1
7	C34335	CAP ASSEMBLY - drive end (3016).....	1
8	C30406	CLUTCH - drive.....	1
9	C27424	KIT - retainer.....	1
10	C27422	GEAR - drive.....	1
11	C34353	PIN - roll.....	1
12	C34263	BOLT - starter mounting.....	2
13	C31618	COVER - terminal.....	1

INDEX



INDEX



INDEX**FUEL SYSTEM (TRACTOR)**

REF.	PART NO.	DESCRIPTION	REQ'D
1	C10678	ELBOW - hose 90	1
2	C28962	RETAINER - fuel line	1
3	NSS	HOSE - fuel line (1270 mm) (use C28937 cut to length)	1
4	C28940 *	TANK - fuel - 1.50" Threads	1
4	C44818 *	TANK - fuel - 1.75" Threads	1
5	C37094 *	CAP - fuel tank - 1.50" Threads.....	1
5	C44819 *	CAP - fuel tank - 1.75" Threads.....	1
6	NSS	HOSE - fuel line (use C28937 cut to length).....	1
7	C23527	LINER - tank.....	1
8	C14690	CUSHION - fuel tank.....	2
9	C32376	CLAMP - hose 1/2".....	4
10	C31978	FILTER - fuel.....	1

* Measure threads on the cap or filler neck on tank for correct part.

INDEX**CHOKE AND THROTTLE CONTROLS**

1	C33468 *	CONTROL - throttle	1
1	C37149 * *	CONTROL - throttle	1
1	C46393 +	CONTROL - throttle	1
2	C33438 *	CONTROL - choke.....	1
2	C37150 * *	CONTROL - choke.....	1
2	C46394 +	CONTROL - choke.....	1
3	C30073 *	HANDLE - throttle	1
4	C30074 *	HANDLE - choke	1
5	182-559	BOLT - No. 10-24 x 3/4.....	2
6	C35291	KNOB - control.....	2
7	C34117	NUT - No. 10-24 flange lock	2
8	C31977	CLIP - cable	3
8	C27233	CLAMP - double	1
9	113-1	BOLT - 1/4" - 20 x 1/2" (clip to frame)	1
9	C37200	SCREW - 6 mm (clip to engine).....	1
10	131-934	NUT - 1/4"-20	1

* Use before PIN:

3012 - 14167800

3014 - 14168800

3016 - 14169500

** Use PIN and after:

3012 - 14167801

3014 - 14168800 to 14190501

3016 - 14169501

3018 - Prior To 14190546

4016 - Prior to 14190534

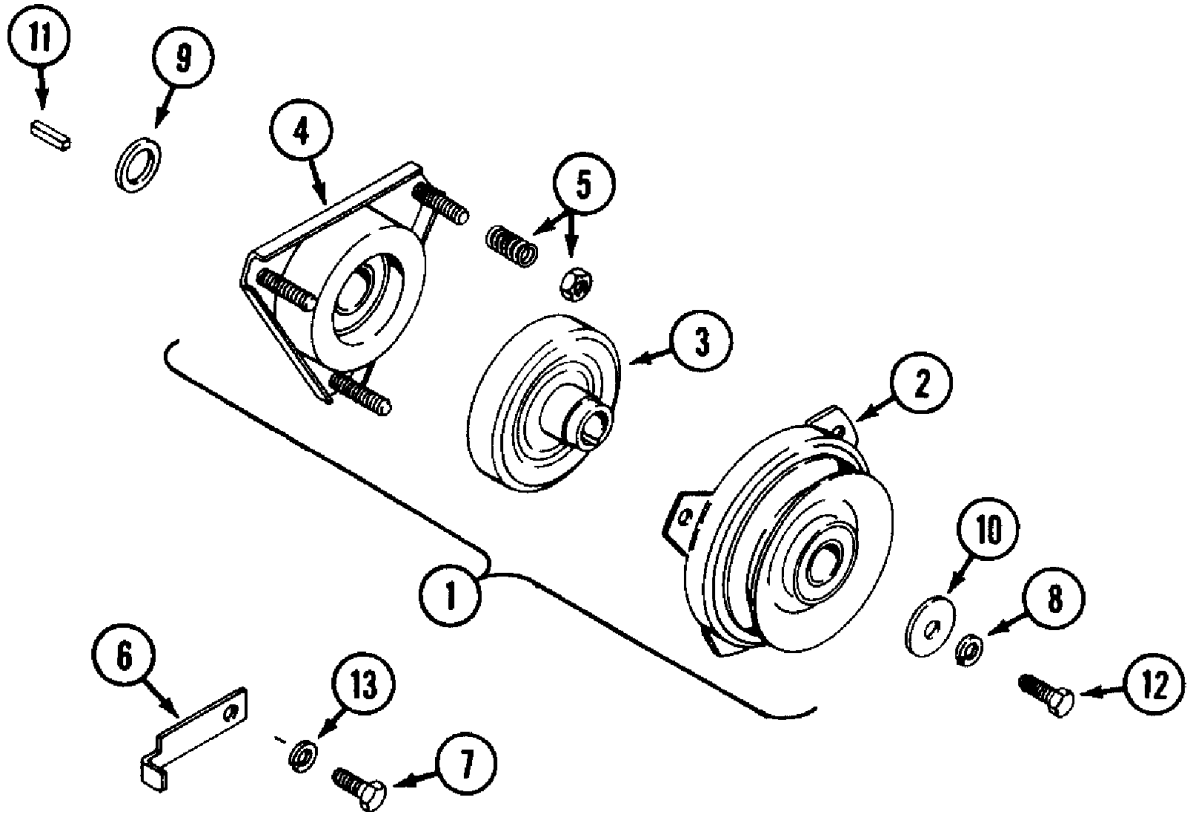
+ Use After PIN:

3014 - 14190502

3018 - 14190546

4016 - 14190534

INDEX

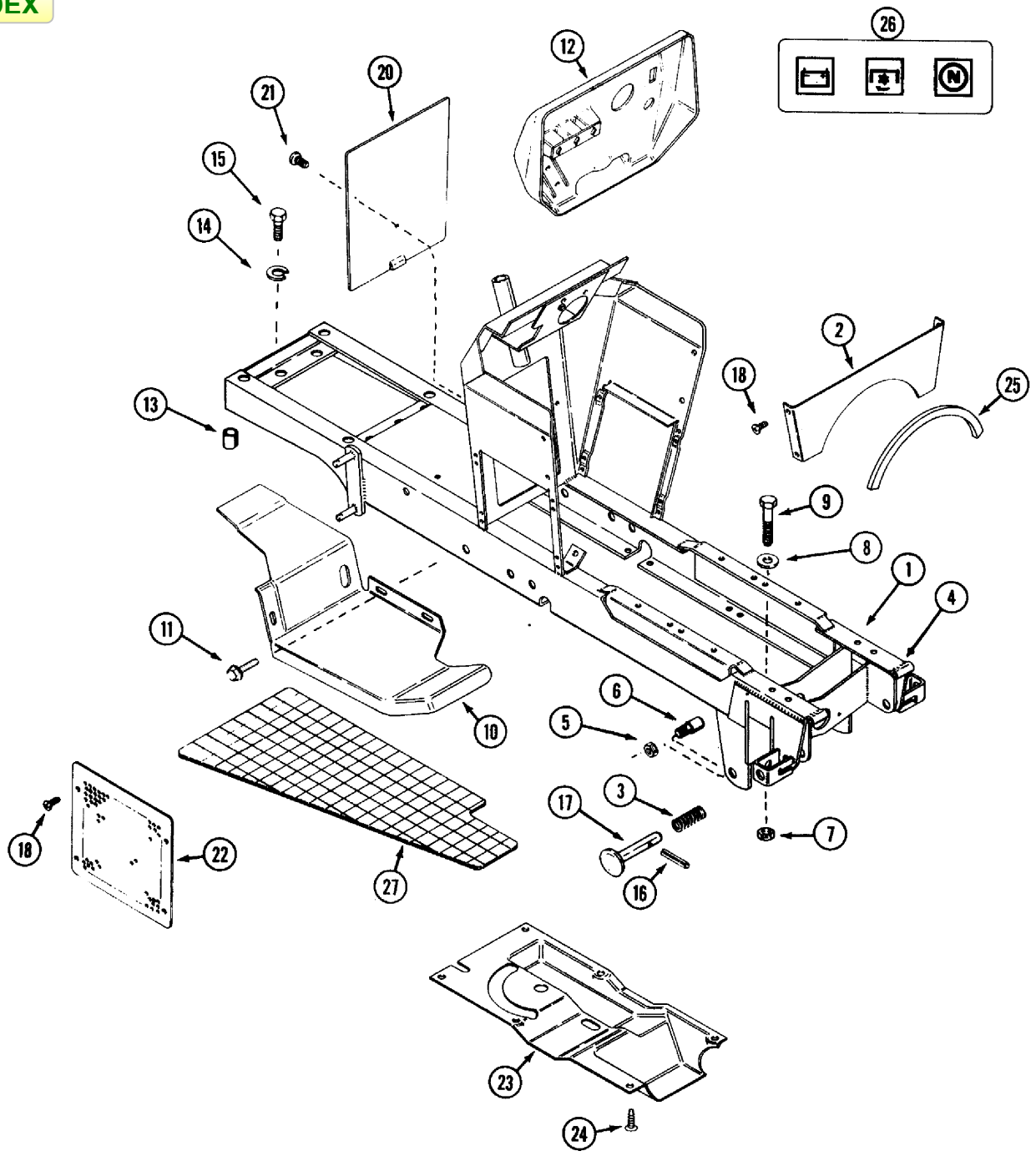


PTO ELECTRIC CLUTCH

REF.	PART NO.	DESCRIPTION	REQ'D
1	C46992 *	CLUTCH - PTO	1
1	C33197 * *	CLUTCH - PTO	1
2	C32378	ARMATURE - clutch	1
3	C32379	ROTOR - clutch.....	1
4	C32380	FIELD - clutch	1
5	C32381	KIT - spring and nut.....	1
6	C33507	BRACKET - anti-rotation	1
7	113-335	BOLT - 7/16" - 14 x 3/4"	1
8	192-21	LOCKWASHER - 3/8"	1
9	C31614	SPACER - clutch.....	1
10	C31615	WASHER - clamping.....	1
11	C31976	KEY - 1/4" x 1/4" x 1-1/4"	1
12	114-203	BOLT - 3/8" - 24 x 1-1/2" (use 31 ft. lbs. torque).....	1
13	192-22	LOCKWASHER - 7/16"	1

* Use Serial Number 17192163 and After
* * Use before Serial Number 17192163

INDEX



INDEX

FRAME, FOOTPADS AND BELLY PAN

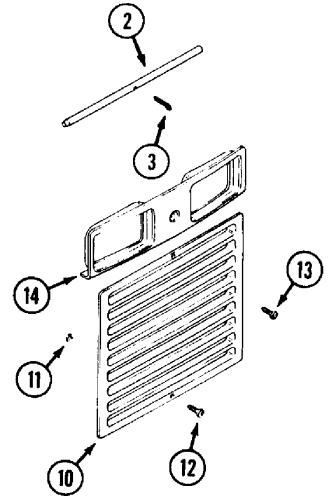
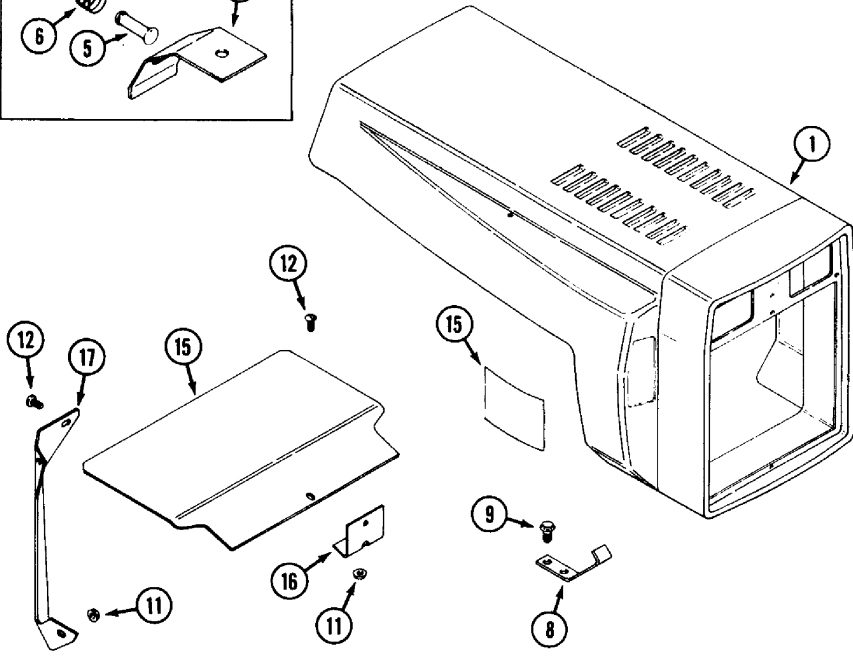
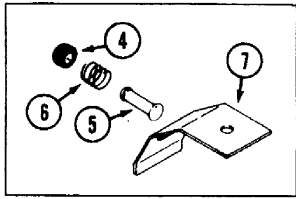
REF.	PART NO.	DESCRIPTION	REQ'D
1	C37127	FRAME - main (4016)	1
1	C37260 **	FRAME - main (3012, 3014, 3016)	1
1	C34167 ***	FRAME - main (3012,3014,3016)	1
1	NSS +	FRAME - main (3012, 3014, 3016) (use C34167, C33940, C33945)	1
2	C31610	SHIELD - oil tank.....	1
3	C24137	SPRING - latch.....	1
4	C22023	HINGE - frame	2
5	131-1318	NUT - lock 1/2" N.F	2
6	C27508	PIN - attachment	2
7	131-69	NUT - lock 5/16" - 18 lock	2
8	195-521	WASHER - 5/16" (over engine foot pad).....	4
9	113-120	BOLT - 5/16" - 18 x 1-3/4"	4
10	C37132 **	FOOT REST - L.H. (3012, 3014, 3016)	1
10	C37134 **	FOOT REST - R.H. (3012, 3014, 3016).....	1
10	C37136	FOOT REST - L.H. (4016)	1
10	C37138	FOOT REST - R.H. (4016).....	1
10	C30458 *	FOOT REST - L.H. (3012, 3014, 3016)	1
10	C30460 *	FOOT REST - R.H. (3012, 3014, 3016).....	1
11	121-106	BOLT - 5/16" x 1/2" NC. flange lock.....	4
12	C31368 *	CAP - instrument panel.....	4
12	C37167 **	CAP - instrument panel.....	1
	C37166 **	INSERT - cap.....	1
13	C14730	SPACER - rear, frame.....	2
14	192-23	LOCKWASHER - 1/2"	4
15	113-424	BOLT - 1/2" - 13 x 1" transaxle mounting.....	UAR
15	166-86	BOLT - 1/2" - 13 x 1-1/4" 12 pt. flange (4016).....	1
16	138-2073	PIN - roll 3/16" x 1-1/4"	2
17	C16373	PIN-latch.....	2
18	C31597	SCREW - 1/4" - 20 x 1/2" black.....	UAR
18	C33576	SCREW - 1/4" x 5/16" black	UAR
20	C33548	COVER - access	1
21	C33576	SCREW - 1/4" - 20 x 5/16"	2
22	C33550	SCREEN - tower side R.H. (shown)	2
22	C33549	SCREEN - tower side L.H.	1
23	C31369	PAN - belly	1
24	C31603	RETAINER - belly pan	6
25	C33472	SEAL - engine air	1
26	C30274 *	LENS - display	1
27	C37140 **	PAD - foot rest L.H	1
27	C37141 **	PAD - foot rest R.H	1

+ Use before PIN:
 3012 - 14145818
 3014 - 14146794
 3016 - 14147979

* Use before PIN:
 ** Use PIN and after:
 3012 -14167800
 3014 - 14168800
 3016 - 14169500
 4016 - all after

*** Use PIN to PIN:
 3012 -14145818 to 14167800
 3014 - 14146794 to 14168800
 3016 -14147979 to 14169500

INDEX



HOOD AND GRILL

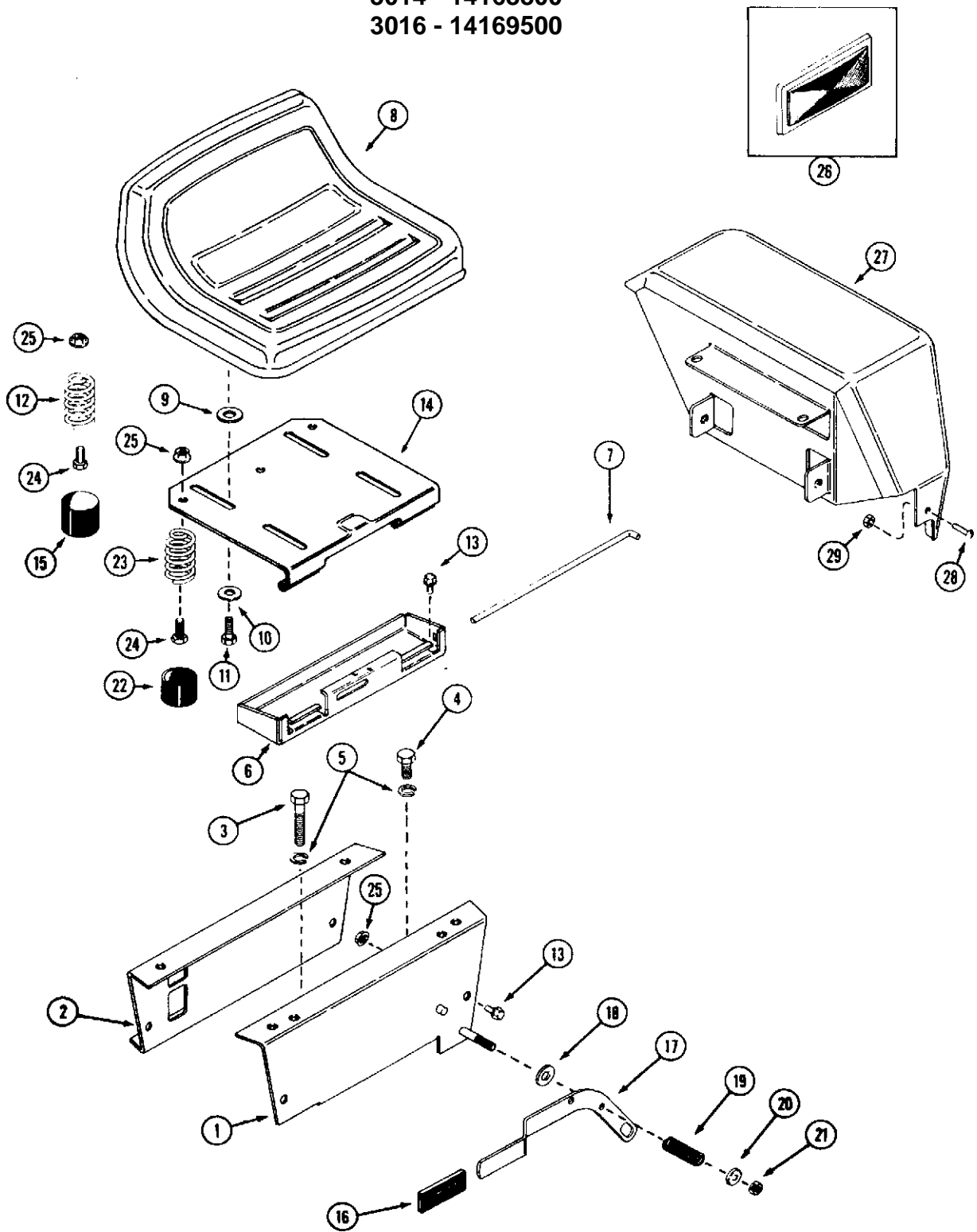
REF.	PART NO.	DESCRIPTION	REQ'D
1	C33547	HOOD.....	1
	C31357	HINGE - hood (not shown) is welded to hood	1
2	C16362	ROD - hood hinge	1
3	132-334	PIN - cotter 1/8" x 3/4".....	1
4	C29314	BUTTON - push, hood release	1
5	C30126	ROD - push, hood release	1
6	C30004	SPRING - release	1
7	C33467	LATCH - hood	1
8	C31611	BRACKET - hood stop	2
9	121-106	BOLT - 5/16" - 18 x 1/2" flange lock.....	4
10	C31365	GRILLE.....	1
11	131-934	NUT - 1/4" - 20 flange lock	9
12	C31597	SCREW - 1/4" - 20 x 1/2" black.....	7
13	187-1328	SCREW - #8 - 18 x 3/8"	1
14	C31366	SHROUD - headlight.....	1
15	C33567	SHIELD - heat.....	1
16	C33568	BRACKET - heat shield.....	1
17	C33569	EXTENDER - hood L.H.....	1
17	C33570	EXTENDER - hood R.H. (shown)	1

INDEX

SEAT, FENDER AND TOOL TRAY

Use Before PIN:
3012 - 14167800
3014 - 14168800
3016 - 14169500

AFTER THESE PIN'S



INDEX**SEAT, FENDER AND TOOL TRAY**

**Use Before PIN:
3012 - 14167800
3014 - 14168800
3016 - 14169500**

AFTER THESE PIN'S

REF.	PART NO.	DESCRIPTION	REQ'D
1	C31020	SUPPORT - seat, front.....	1
2	C26827	SUPPORT - seat, rear	1
3	113-427	BOLT - 1/2" x 3-1/4"	2
4	113-424	BOLT - 1/2" x 1" N.C. hex	1
4	113-118	BOLT - 5/16" x 5/8"	1
5	192-20	LOCKWASHER - 5/16"	1
5	192-23	LOCKWASHER - 1/2"	4
6	C31004	TRAY - tool.....	1
7	C16429	PIN - seat hinge	1
8	C30067	SEAT - shown	1
9	C29812	WASHER.....	4
10	195-2175	WASHER - 5/16" x 1-1/4" OD, zinc	4
11	113-122	BOLT - 5/16" x 1-1/2"	4
12	C31006	SPRING - seat switch	1
13	121-106	BOLT - 5/16" x 1 1/2" flange lock	10
14	C33474	HINGE ASSEMBLY - seat	1
15	C26526	CAP - spring.....	1
16	C14728	GRIP - shift lever	1
17	C27594	LEVER - shift.....	1
18	195-525	WASHER - 7/16" x 1-1/4" 0.0.....	1
19	C17216	SPRING - shift lever.....	1
20	C30489	WASHER.....	1
21	131-1216	NUT - lock 3/8" N.C. hex	1
22	C29305	CAP - spring	2
23	C29306	SPRING - seat	2
24	113-102	BOLT - 5/16" - 18 x 3/4"	3
25	131-911	NUT - 5/16" - 18 flange lock	7
26	C30942	REFLECTOR - red, rear fender	2
27	C32386	FENDER - R.H	1
27	C32385	FENDER - L.H. shown	1
28	182-547	SCREW - 1/4" - 20 x 1/2	2
29	131-934	NUT - 1/4"	2

SEAT, FENDER AND TOOL TRAY

Use PIN and AFTER:

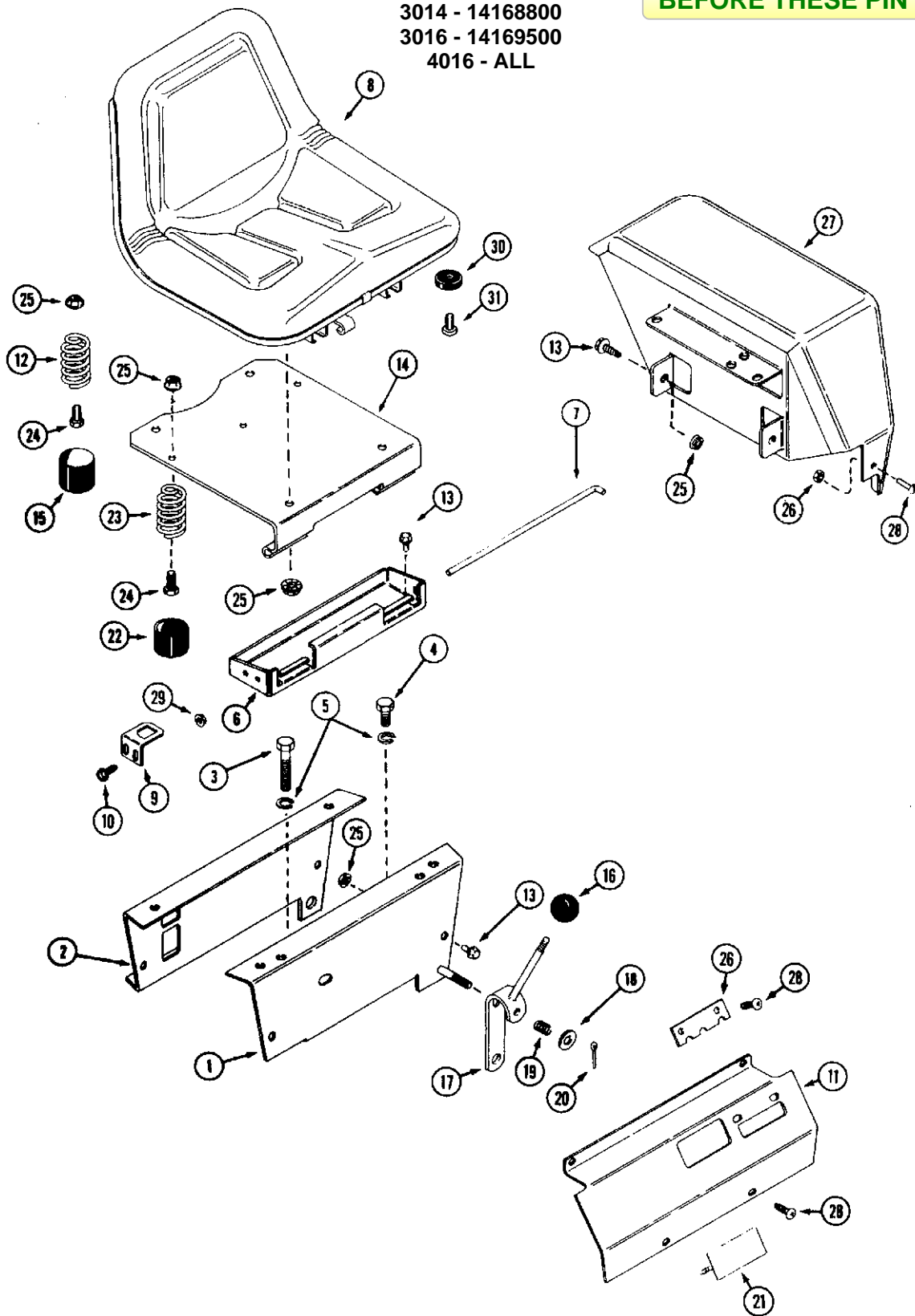
3012 - 14167800

3014 - 14168800

3016 - 14169500

4016 - ALL

BEFORE THESE PIN'S



MODEL 3012, 3014, 3016 AND 4016 COMPACT TRACTORS

SEAT, FENDER AND TOOL TRAY

Use PIN and AFTER:

3012 - 14167800

3014 - 14168800

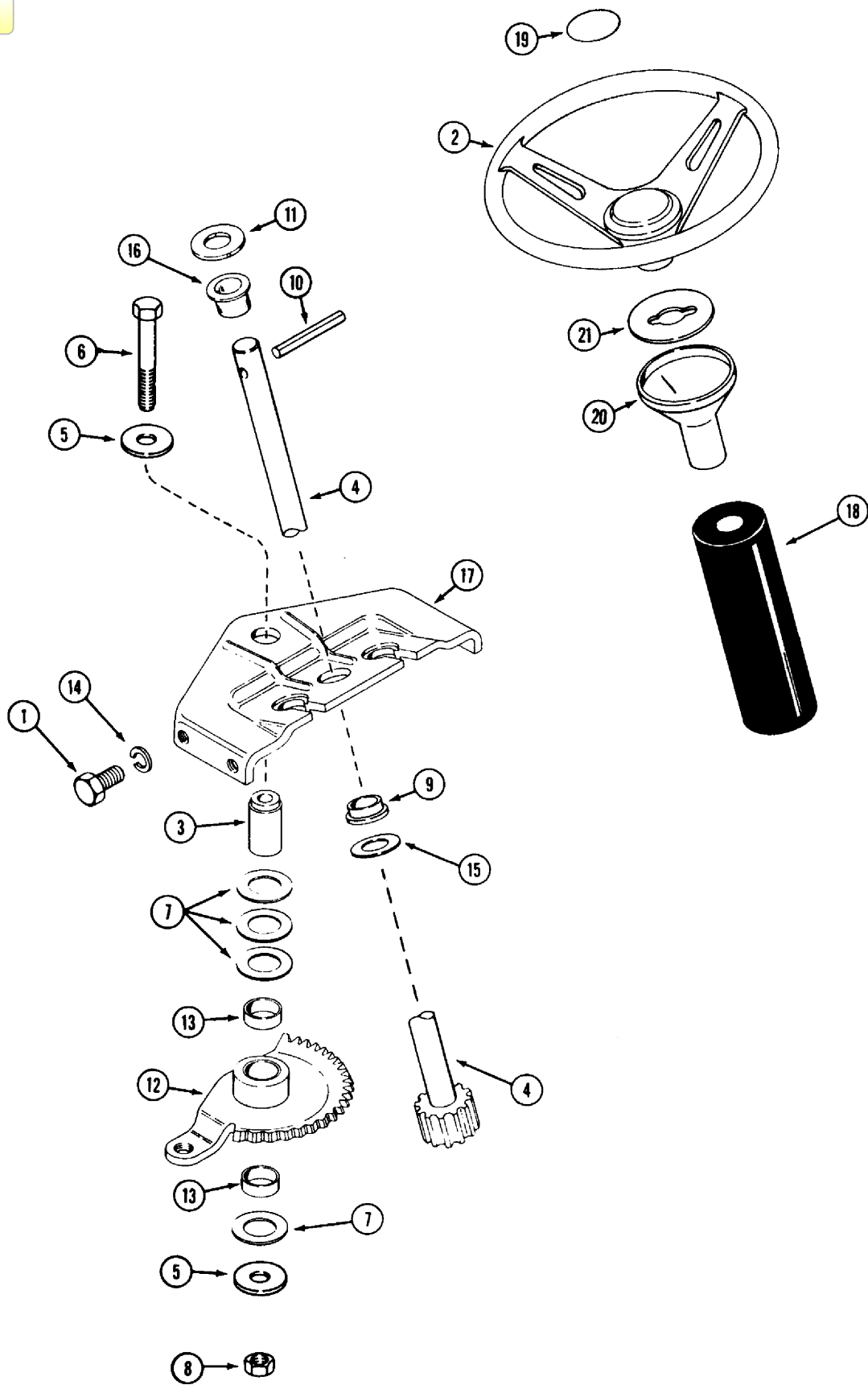
3016 - 14169500

4016 - ALL

BEFORE THESE PIN'S

REF.	PART NO.	DESCRIPTION	REQ'D
1	C37261	SUPPORT - seat, front (3012, 3014, 3016)	1
1	C37262	SUPPORT - seat, front (4016)	1
2	C37266	SUPPORT - seat, rear (4016)	1
2	C37265	SUPPORT - seat, rear (3012, 3014, 3016)	2
3	113-427	BOLT - 1/2" x 3-1/4" (3012, 3014, 3016)	2
3	113-441	BOLT - 1/2" x 2-1/4" (4016)	2
4	113-424	BOLT - 1/2" x 1" N.C. hex	1
4	113-118	BOLT - 5/16" x 5/8"	1
5	192-20	LOCKWASHER - 5/16"	1
5	192-23	LOCKWASHER - 1/2"	4
6	C37017	TRAY - tool	1
7	C16429	PIN - seat hinge	1
8	C44982	SEAT - operator's	1
	C37848	KIT - Rail Set	1
9	C37060	BRACKET - switch mounting	1
10	113-2	BOLT - 1/4" - 20 x 5/8"	2
11	C37409	COVER - shift lever (3012, 3014, 3016)	1
11	C37411	COVER - shift lever (4016)	1
12	C37462	SPRING - seat switch	1
13	121-106	BOLT - 5/16" x 1/2" flange lock	10
14	C37152	HINGE ASSEMBLY - seat	1
15	C26526	CAP - spring	1
16	C10487	KNOB - shift lever	1
17	C37244	LEVER - shift (3012, 3014, 3016)	1
17	C37247	LEVER - shift (4016)	1
18	195-525	WASHER - 7/16" x 1-1/4" O.D	1
19	C10482	SPRING - shift lever	1
20	132-310	PIN - cotter 1/8" x 1"	1
21	C37460	COVER - plate	1
22	C29305	CAP - spring	2
23	C29306	SPRING - seat	2
24	113-102	BOLT - 5/16" - 18 x 3/4"	3
25	131-911	NUT - 5/16" - 18 flange lock	11
26	C37428	PLATE - shift pattern (3012, 3014, 3016) (shown)	1
26	C37430	PLATE - shift pattern (4016)	1
27	C37154	FENDER - R.H. (3012, 3014, 3016)	1
27	C37153	FENDER - L.H. shown (3012, 3014, 3016)	1
27	C37156	FENDER - RH. (4016)	1
27	C37155	FENDER - L.H. (4016)	1
28	C31597	SCREW - 1/4" - 20 x 1/2"	6
29	131-934	NUT - 1/4"	6
30	C37850	CUSHION - Seat Rail to Seat	4
31	C42056	SCREW - Seat Rail Mounting	4

INDEX



INDEX

STEERING GEAR

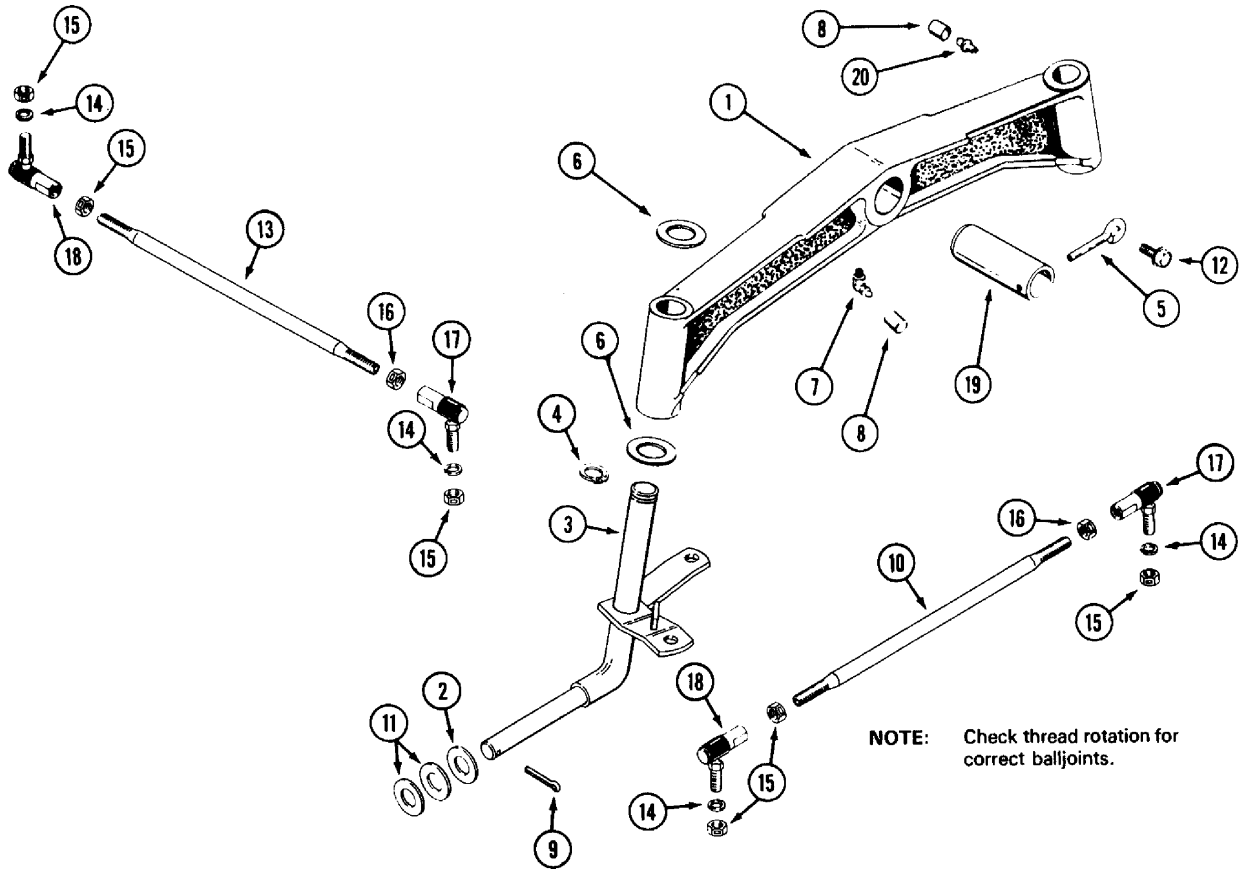
REF.	PART NO.	DESCRIPTION	REQ'D
1	113- 206	BOLT - 3/8" x 3/4" N.C. hex	4
2	C26325 +	WHEEL - steering	1
2	C37131 ++	WHEEL - steering (shown).....	1
	C42894	INSERT – Steering wheel, (snaps in with two retainer tabs)	1
	C42591	INSERT – Steering wheel, (also order a C42592 screw to secure).....	1
3	C29044	PIN-pivot.....	1
4	C26326 *	SHAFT - steering	1
4	C33940 **	SHAFT - steering	1
5	C29812	WASHER - 3/8" x 1.4"	2
6	113-241	BOLT - 3/8" - 16 x 3"	1
7	C14201	WASHER - shim.....	4
8	131-1352	NUT - 3/8" - 16 hex lock (torque 40-45 ft. lbs.)	1
9	C27501	BUSHING	1
10	138-143	PIN - roll 1/4" x 2-1/4".....	1
11	195 541	WASHER - 5/8"	UAR
11	195-2206	WASHER - 5/8" x 1-1/4" x .06" thick	UAR
12	C33309	GEAR - steering	1
13	C33308	BUSHING - sleeve	2
14	192-21	LOCK WASHER - 3/8"	4
15	195-2069	WASHER - 5/8" zinc plated.....	1
16	C15096	BUSHING - flanged nylon	1
17	C30019	SUPPORT - steering gear (includes item 9).....	1
18	C30127 *	TUBE - steering.....	1
18	C37479 ++	TUBE - steering.....	1
18	C33945 ***	TUBE - steering.....	1
19	C37197 ++	INSERT - steering wheel.....	1
20	C39504 +	BOOT - steering column	1
21	C39507 +	INSERT - boot.....	1

*** Use PIN to PIN
 3012 - 14145818 to 14167800
 3014 - 14146794 to 14168800
 3016 - 14147979 to 14169500

* Use before PIN:
 ** Use Pin and After:
 3012 - 14145818
 3014 - 14146794
 3016 - 14146794
 4016 - all after

+ Use before PIN:
 ++ Use PIN and after:
 3012 - 14167800
 3014 - 14168800
 3016 - 14169500
 4016 - all after

INDEX



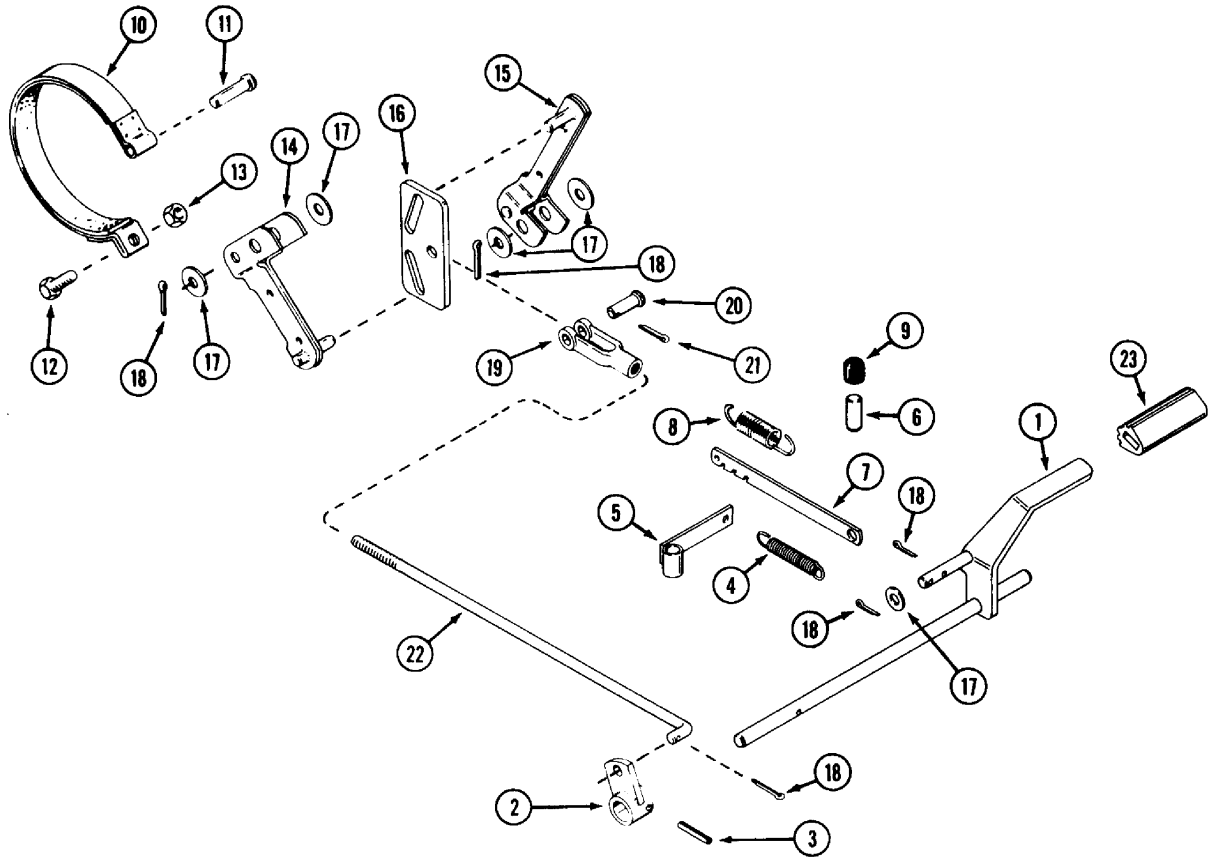
INDEX**MODEL 3012, 3014, 3016 AND 4016 COMPACT TRACTORS****FRONT AXLE
(3012, 3014, 3016)**

REF.	PART NO.	DESCRIPTION	REQ'D
1	C18812	AXLE - front.....	1
2	C27597	WASHER - spacer	2
3	C31338	SPINDLE - R.H	1
3	C31337	SPINDLE - L.H.....	1
4	C28232	RING - retaining, spindle.....	2
5	C22278	PIN - retaining, axle pivot.....	1
6	C11906	WASHER - thrust	4
7	219-404	FITTING - lubrication.....	3
8	C13106	COVER - lubrication fitting	3
9	132-311	PIN - cotter 5/32" x 1-1/4".....	2
10	C25856	TIE ROD.....	1
11	C28226	WASHER - wheel spacer	UAR
12	187-1910	BOLT - 3/8" - 16 x 3/4" N.C. hex head	1
13	C25857	LINK - drag.....	1
14	192-23	LOCK WASHER - 1/2" zinc.....	4
15	129-165	NUT - 1/2" N.F. R.H. thread, lock.....	6
16	129-365	NUT - 1/2" N.F. L.H. thread, lock	2
17	C13605	BALL JOINT - 1/2" L.H. thread.....	2
18	C12102	BALL JOINT - 1/2" R.H. thread	2
19	C22568	PIN - axle pivot.....	1
20	219-17	FITTING - lubrication.....	2

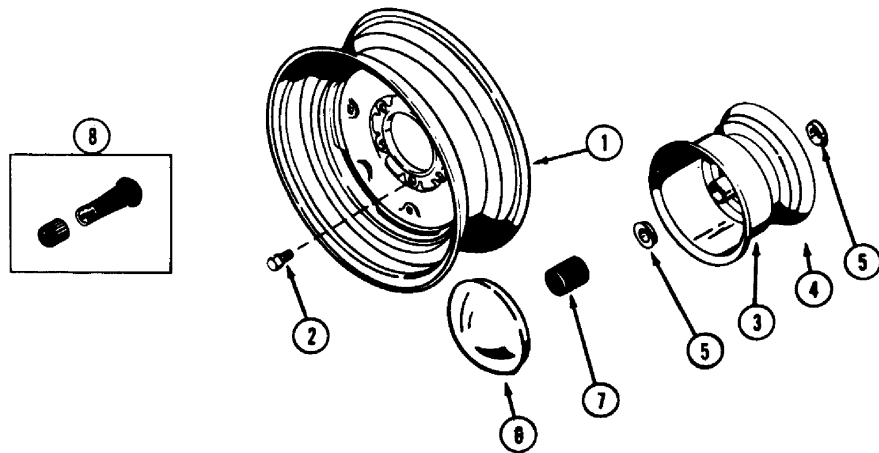
INDEX**FRONT AXLE
(4016)**

REF.	PART NO.	DESCRIPTION	REQ'D
1	C18813	AXLE - front.....	1
2	C27597	WASHER - spacer	2
3	C31341	SPINDLE - R.H	1
3	C31340	SPINDLE - LH.....	1
4	C27902	RING - retaining, spindle.....	2
5	C22278	PIN - retaining, axle pivot.....	1
6	C13716	WASHER - thrust	4
7	219-404	FITTING - lubrication.....	3
8	C13106	COVER - lubrication fitting	3
9	132-311	PIN - cotter 5/32" x 1-1/4".....	2
10	C25855	TIE ROD.....	1
11	C28226	WASHER - wheel spacer	UAR
12	187-1910	BOLT - 3/8" - 16 x 3/4" N.C. hex head	1
13	C25857	LINK - drag.....	1
14	192-23	LOCKWASHER - 1/2" zinc.....	4
15	129-165	NUT - 1/2" N.F. R.H. thread, lock.....	6
16	129-365	NUT - 1/2" N.F. L.H. thread, lock	2
17	C13605	BALL JOINT - 1/2" L.H. thread.....	2
18	C12102	BALL JOINT - 1/2" R.H. thread	2
19	C22568	PIN - axle pivot.....	1
20	219-17	FITTING - lubrication.....	2

INDEX



INDEX



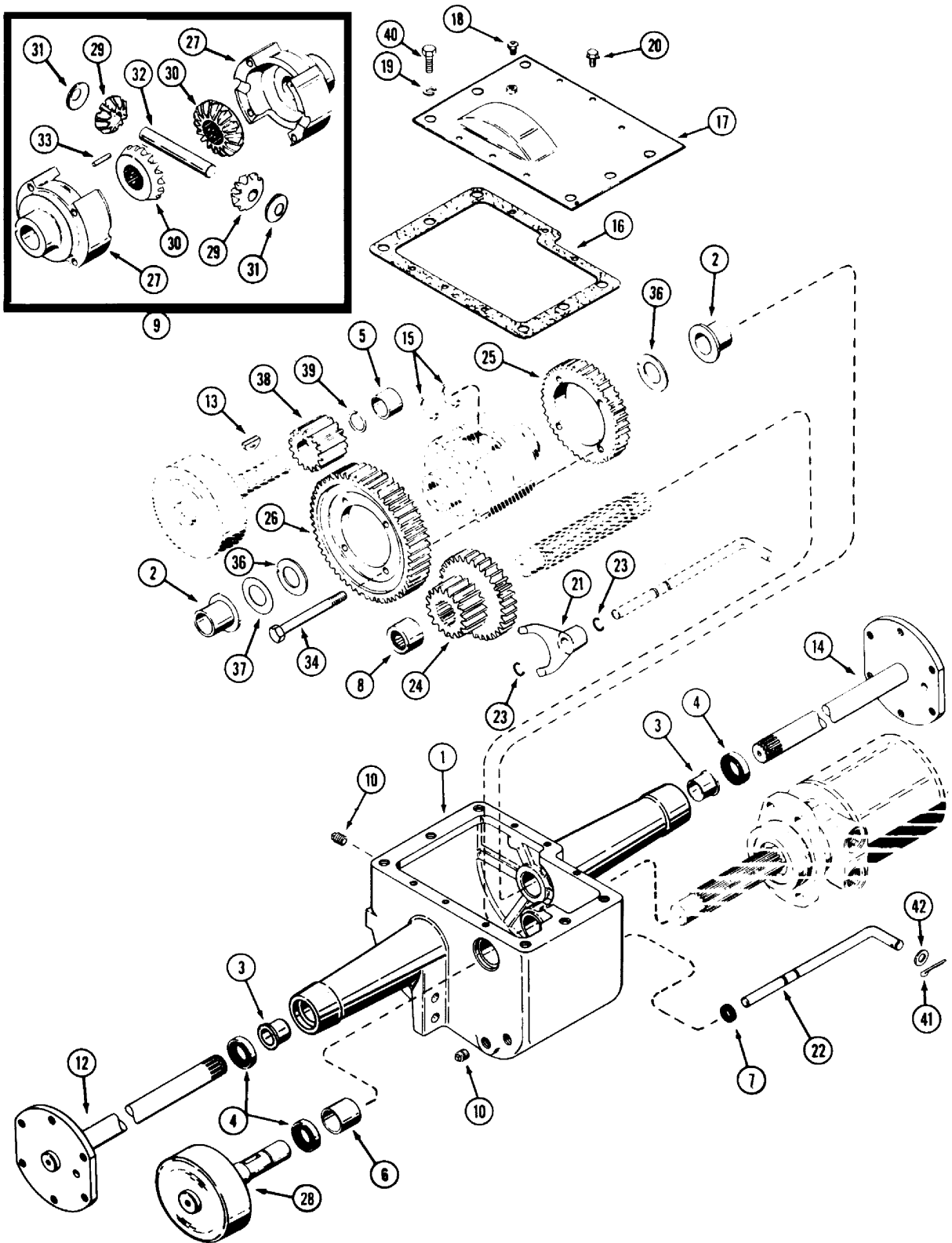
INDEX**MODEL 3012, 3014, 3016 AND 4016 COMPACT TRACTORS****BRAKE ASSEMBLY**

REF.	PART NO.	DESCRIPTION	REQ'D
1	C33942	PEDAL - brake actuating.....	1
2	C26381	ARM - brake pedal	1
3	138-2073	PIN - roll 3116" x 1-1/4".....	1
4	C31660	SPRING - return.....	1
5	C31662	GUIDE - neutral return	1
6	C31604	ACCUATOR - parking brake.....	1
7	C31661	LEVER - brake lock.....	1
8	C21942	SPRING - brake lock.....	1
9	C31605	CAP - actuator.....	1
10	C33427	BAND - brake	1
11	C23910	PIN - clevis	1
12	113-2262	BOLT - 3/8" - 16 x 1-1/2" hex.....	1
13	129-143	NUT - 3/8" -16	1
14	C23899	ARM-brake	1
15	C24761	ARM - brake (includes adjustment nut).....	1
16	C40646	GUIDE - brake actuator.....	1
17	195-533	WASHER - .531" I.D.	5
18	132-310	PIN - cotter 1/8" x 1 "	5
19	C28978	CLEVIS.....	1
20	141-4	PIN - clevis	1
21	132-321	PIN - cotter	1
22	C31992	ROD - brake (3012, 3014, 3016)	1
22	C31993	ROD - brake (4016).....	1
23	C31975	PAD - brake pedal.....	1

INDEX**FRONT AND REAR WHEELS**

REF.	PART NO.	DESCRIPTION	REQ'D
1	C30913	WHEEL - rear, 5 bolt for 23 x 8.50 - 12 tire (3012, 3014, 3016).....	2
1	C30922	WHEEL - rear, 5 bolt for 23 x 10.50 - 12 tire (3012, 3014, 3016).....	2
1	C30917	WHEEL - rear, 6 bolt (4016).....	2
2	C10314	BOLT - rear wheel (3012, 3014, 3016)	10
2	C27763	BOLT - rear wheel (4016)	12
3	C30912	WHEEL - front (includes bearings)	2
4	219-403	FITTING - lubrication.....	2
5	C12110	BEARING - wheel	2
6	C28965	CAP - hub, front wheel (optional).....	2
7	C26021	CAP - plastic, front	2
8	C28236	STEM - valve.....	4
	C13106	COVER - lubrication fitting	2

INDEX



3000 and 4000 Series With Vanguard Engines

TRANSMISSION AND FINAL DRIVE

REF.	PART NO.	DESCRIPTION	REQ'D
	C47668 +	CASE ASSEMBLY – transmission, ribs are notched for frame.....	1
	C47666 + +	CASE ASSEMBLY – transmission, ribbed.....	1
1	NSS	CASE - transmission (see above).....	1
2	C12713	BEARING - flange.....	2
3	C24804	BEARING - flange.....	2
4	C24803	SEAL - shaft	3
5	C13241	BEARING - sleeve.....	1
6	C13385	BEARING - sleeve.....	1
7	C13266	SEAL - shift rod.....	1
8	C28281	BEARING - roller	1
9	C30029 *	DIFFERENTIAL ASSEMBLY, 20° PA gears (assemblies include items 25, 34, & 26).....	1
9	C36902 **	DIFFERENTIAL ASSEMBLY, 20° PA gears	1
9	C46929 ***	DIFFERENTIAL ASSEMBLY, 25° PA gears.....	1
10	221-3	PLUG - filler and drain 3/8" (square head).....	3
10	221-1842	PLUG - pipe 3/8" socket	1
12	C22638	SHAFT - axle, short R.H. (4000 Series).....	1
12	C16699	SHAFT - axle, short R.H. (3000 Series).....	1
13	126-128	KEY - woodruff, brake idler #18, 1/4" x 1-1/8".....	2
14	C22637	SHAFT - axle, long L.H. (4000 Series)	1
14	C16700	SHAFT - axle, long L.H. (3000 Series)	1
15	C26342	RING - retainer, axle.....	2
16	C13196	GASKET - transmission cover	1
17	C36935	COVER - transmission.....	1
18	C28241	BREATHER - transmission.....	1
19	192-23	LOCKWASHER - 1/2".....	4
20	121-21	BOLT - 1/4" x 1/2" N.C. hex lock.....	6
21	C12725	FORK - shift.....	1
22	C32486 *	ROD - gear shift.....	1
22	C37222 **	ROD - gear shift.....	1
23	C14168	RING - retaining.....	2
24	C14644 *	GEAR - cluster input, 20° PA gears	1
24	C36901 **	GEAR - cluster input, 20° PA gears.....	1
24	C46928 ***	GEAR - cluster input, 25° PA gears.....	1
25	C30030 *	GEAR - high 41 tooth.....	1
25	C36903 **	GEAR - high range	1
26	C12552 * & **	GEAR - low 55 tooth, 20° PA gear – 25° gear is not available, order C46929 (and items C46927 and C46928 if needed to match pressure angle gears)	1
27	NSS	DIFFERENTIAL CASE	1
28	C33305	BRAKE DRUM.....	1
29	NSS	GEAR - differential pinion	2
30	NSS	GEAR - differential.....	2
31	NSS	WASHER - pinion thrust	2
32	NSS	PIN - differential.....	1
33	NSS	PIN - differential pin lock.....	1
34	C30031	KIT - screw (set of four)	1
36	C12718	WASHER - differential	2
37	C14223	WASHER - spacer	UAR
38	C33417	GEAR - brake idler, 20° PA gear	1
38	C46927 ***	GEAR - brake idler, 25° PA gear	1
39	C14222	RING - retainer, brake idler.....	1
40	113-424	BOLT - 1/2" - 13 x 1" hex	UAR
40	166-85	BOLT 1/2" - 13 x 1" 12 pt. flange	UAR
41	132-310	PIN - cotter 1/8" x 1"	1
42	195-541	WASHER - .656" ID x 1.312 OD.....	1
43	138-2073	PIN - spiral 3/16" x 1-1/4".....	1

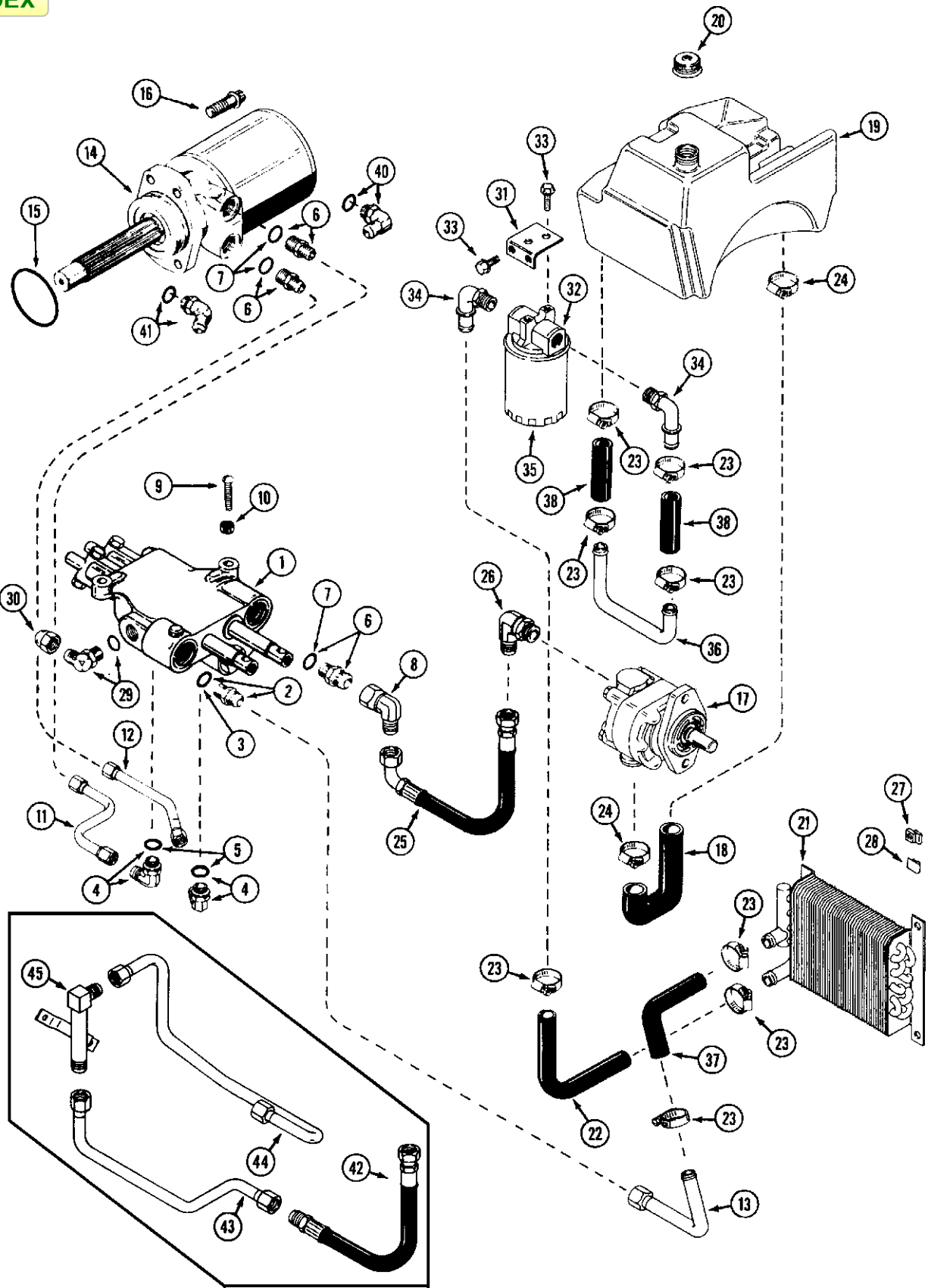
* Use before PIN:
 3012 - All
 3014 - 14168800
 3016 - 14169500

** Use PIN:
 3014 – 14168800 to 17192470
 3016 – 14169500 to 17192390
 3018 – Prior to 17192389
 4016 – Prior to 17192386
 4018 – Prior to 17192405
 These are 20° Pressure Angle gears and must not be used with 25° PA gears

*** Use PIN and After:
 3014 – 17192471
 3016 – 17192391
 3018 – 17192390
 4016 – 17192387
 4018 – 17192406
 These are 25° Pressure Angle gears and must not be used with 20° PA gears

+ Use Before PIN:
 + + Use PIN and After:
 All units -17193395

INDEX



MODEL 3012, 3014, 3016 AND 4016 COMPACT TRACTORS

HYDRAULIC SYSTEM

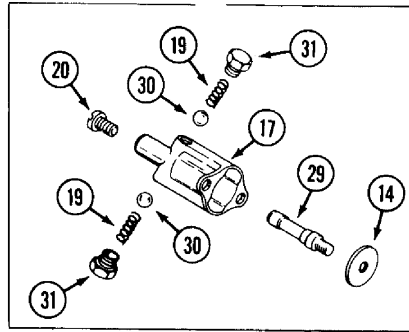
REF.	PART NO.	DESCRIPTION	REQ'D
1	C33473	VALVE control (repairs page 41)	1
2	218-5065	FITTING - 3/4" x 7/8" "O" ring	1
3	218-5007	"O" RING	1
4	218-5107	FITTING - 90° elbow	2
5	218-5007	"O" RING	1
6	218-5062	FITTING - 5/8" x 7/8" "O" ring	3
7	218-5007	"O" RING	1
8	218-5232	FITTING - 90° elbow	1
9	C27764	SCREW - 5/16" - 18 x 1-1/4" round head	2
10	131-351	NUT - lock 5/16"	2
11	C37220 **	TUBE - valve to upper motor port (3012, 3014, 3016)	1
11	C37309 **	TUBE - valve to upper motor port (4016) shown	1
11	C29655 *	TUBE - valve to upper motor port (3012, 3014, 3016)	1
11	C29657 *	TUBE - valve to upper motor port (4016)	1
12	C29656 *	TUBE - valve to lower motor port (3012, 3014, 3016)	1
12	C29658 *	TUBE - valve to lower motor port (4016)	1
12	C37310 **	TUBE - valve to lower motor port (4016) shown	1
12	C37221 **	TUBE - valve to lower motor port (3012, 3014, 3016)	1
13	C31435	TUBE - valve "out" to heat exchanger	1
14	C30939	MOTOR - hydraulic (repairs page 43) (3012, 3014, 3016)	1
14	C33234	MOTOR - hydraulic (repairs page 43) (4016)	1
15	C28949	SEAL - motor to transmission	1
16	166-86	SCREW - 1/2" - 18 x 1-1/4" 12 pt. flange	4
17	C31958	PUMP - hydraulic 1/2" shaft (repairs page 45)	1
18	C33423	HOSE - pump inlet	1
19	C33180	RESERVOIR - oil	1
20	C37093	CAP - reservoir	1
21	C31295	EXCHANGER - heat	1
22	C33555	HOSE - formed 90° 6-1/4" x 5"	1
23	214-254	CLAMP - hose 1-1/4"	8
24	214-14	CLAMP - hose 1-3/8"	2
25	C31966	HOSE - pump to valve	2
26	218-5117	FITTING - 90° elbow	1
27	C31973	"J" NUT - 1/4" -20	4
28	C31974	"U" Clip - retainer	4
29	C37425	FITTING - 90° 3/8" tube x 1/2" - 20	1
30	218-754	CAP - 3/8" tube	1
31	C33577	BRACKET - oil filter	1
32	C33446	HEAD - oil filter	1
33	121-21	BOLT - 1/4" - 20 x 1/2"	1
34	217-333	FITTING - 90° 3/8" NPTF x 3/4" hose	2
	C44911	FITTING - "T" for case drain hose return.	1
35	C33445	FILTER - oil	1
36	C33544	TUBE - filter to tank	1
37	C33556	HOSE - formed 90° 3-1/2" x 3-1/2"	1
38	C14619	HOSE - 3/4" x 4"	2
39	192-23	LOCKWASHER - 1/2"	4
40	218-5107	FITTING - 90° male 7/8" - 14	1
41	218-5137	FITTING - 45° male 7/8" - 14 x 5/8" tube	1
42	C44924	HOSE - Pump to PTO Ready Tube	1
43	C44918	TUBE - Hose to PTO Valve 3000 Series	1
43	C44919	TUBE - Hose to PTO Valve 4000 Series	1
44	C44922	TUBE - PTO Valve to Travel Valve, 3000 Series	1
44	C44923	TUBE - PTO Valve to Travel Valve, 4000 Series	1
45	C44908	BRACKET - stand, tube support	1

* Use before PIN:

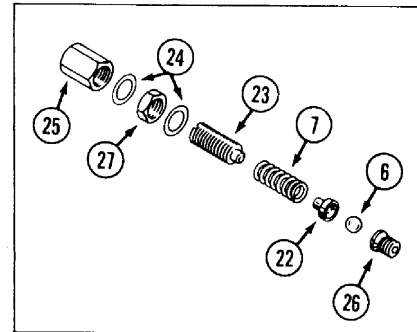
** Use PIN and After:

3012 - 14167922 3016 - 14169637

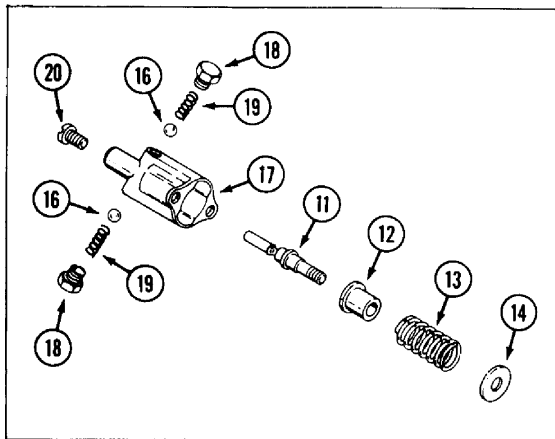
3014 - 14168927 4016 - 14170969



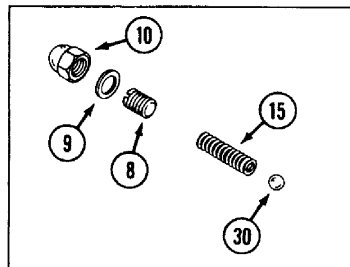
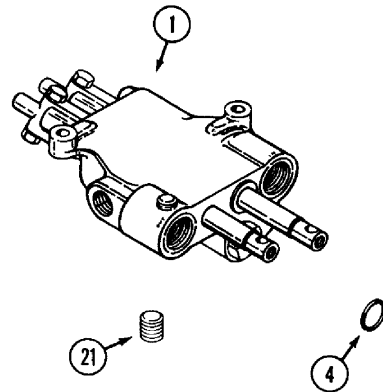
TRAVEL SECTION DETENT GROUP



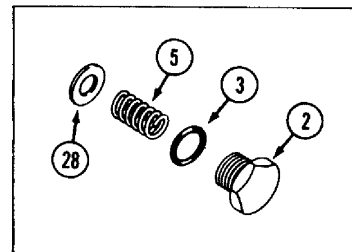
TRAVEL SECTION RELIEF GROUP



LIFT SECTION DETENT GROUP



LIFT SECTION RELIEF GROUP

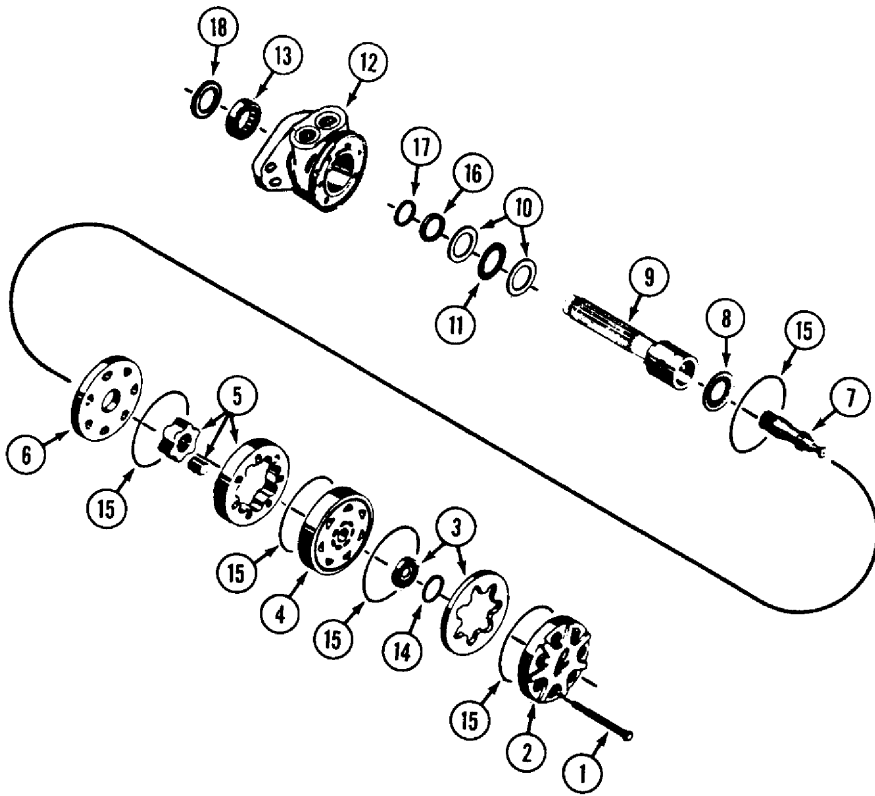


HOLDING SECTION GROUP

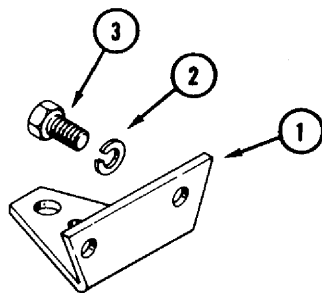
**MODEL 3012, 3014, 3016 AND 4016 COMPACT TRACTORS
HYDRAULIC CONTROL VALVE**

REF.	PART NO.	DESCRIPTION	REQ'D
1	C33473	VALVE - control, two spool	1
2	C29956	CAP-end	2
3	C28217	"O" RING - end cap.....	1
4	C28856	SEAL - spool.....	4
5	C29951	SPRING - centering.....	2
6	211-208	BALL - steel 5/16" (7.94mm)	1
7	C21507	SPRING - relief	2
8	C17433	SCREW - relief adjust.....	1
9	C17435	GASKET - relief adjust cap.....	1
10	129-531	CAP - adjust screw	2
11	C26668	DETENT - spool.....	1
12	C28707	SPACER - detent.....	1
13	C28706	SPRING - detent return	1
14	C28705	WASHER - return	2
15	NSS	SPRING - relief (order C21511 relief kit, use spring only).....	1
16	211-5	BALL - steel 3/16" (4.76 mm)	2
17	C17438	COVER - detent.....	1
18	C28708	SCREW - detent	4
19	C17444	SPRING - detent.....	4
20	169-114	SCREW - cover	4
21	221-841	PLUG - pipe	1
22	C21506	RETAINER - ball seat	1
23	C26665	SCREW - adjust, relief.....	1
24	C26664	GASKET - adjust cap.....	1
25	C26666	CAP - adjust screw	1
26	C26663	SEAT - relief ball.....	1
27	129-166	NUT - lock.....	1
28	C29950	WASHER - spring retaining	2
29	C29958	DETENT - spool.....	1
30	211-7	BALL - steel 1/4" (6.35 mm).....	2
31	C17443	SCREW - detent	2
	C30002	KIT - seal	1

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MODEL 3012, 3014, 3016 AND 4016 COMPACT TRACTORS

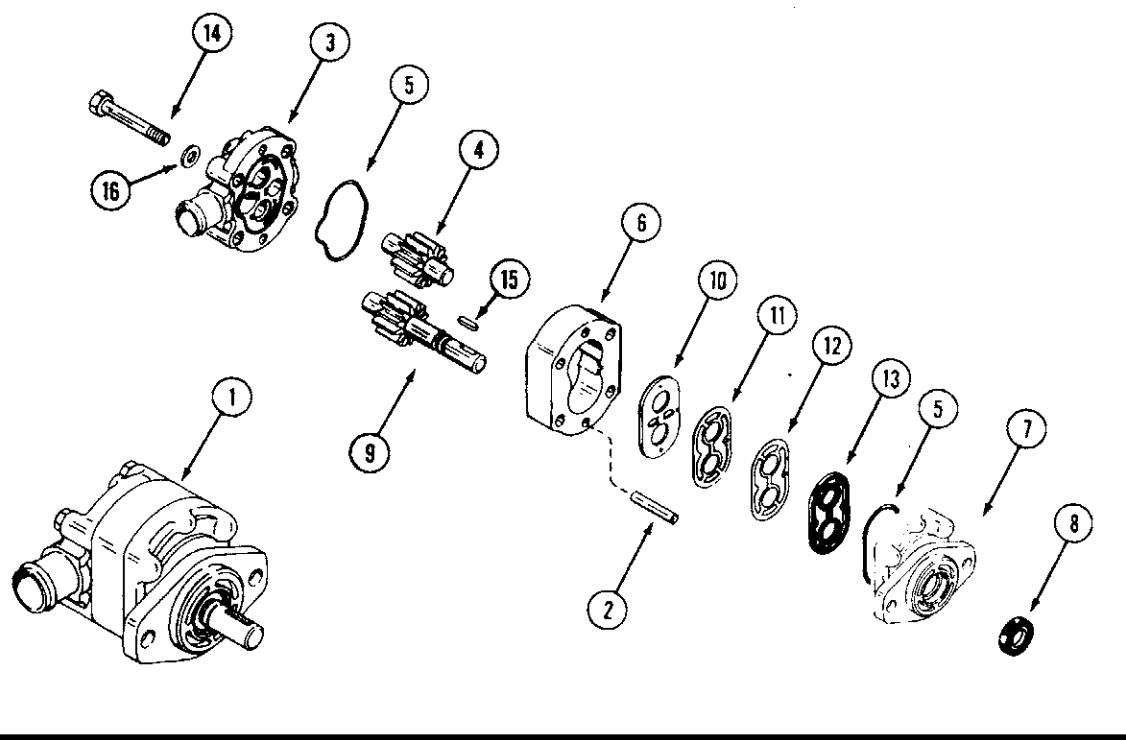
HYDRAULIC DRIVE MOTOR

REF.	PART NO.	DESCRIPTION	REQ'D
	C30939	MOTOR - hydraulic	1
1	28-668	BOLT - 3/8" - 24 x 4-1/4".....	7
2	C31309	COVER - end.....	1
3	C31310	COMMUTATOR AND RING SET	1
4	C31311	MANIFOLD	1
5	C31312	ROTOR ASSEMBLY	1
6	C31314	PLATE - wear	1
7	C31315	LINK - drive.....	1
8	C31317	BEARING - thrust	1
9	C31318	SHAFT - coupling	7
10	C31319	WASHER - thrust.....	2
11	C31320	BEARING -thrust	1
12	C31321	HOUSING - drive end	1
13	C31322	BEARING - outer	1
	C31323	KIT - seal	1
14	NSS	SEAL - commutator ring	1
15	NSS	SEAL - ring	5
16	NSS	SEAL - ring	1
17	NSS	WASHER - backup	1
18	NSS	SEAL - dirt (not used)	1

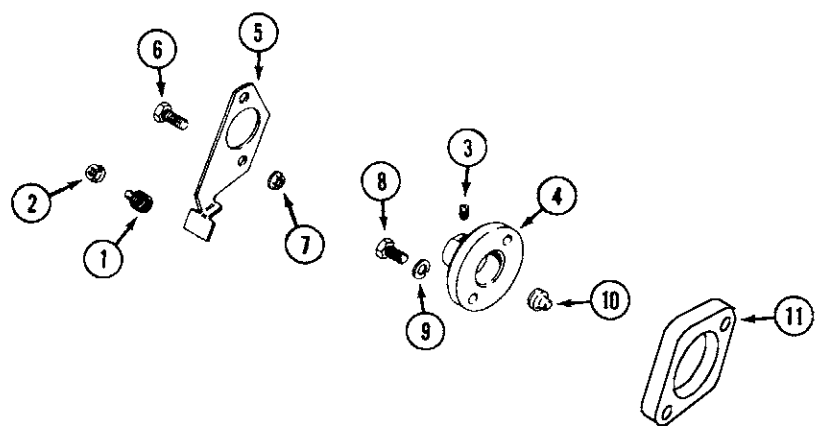
DRAWBAR AND TOW HITCH

1	C13360	DRAWBAR	1
2	192-23	LOCKWASHER - 1/2"	2
3	113-424	BOLT - 1/2" x 1" N.C. hex	2

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INDEX



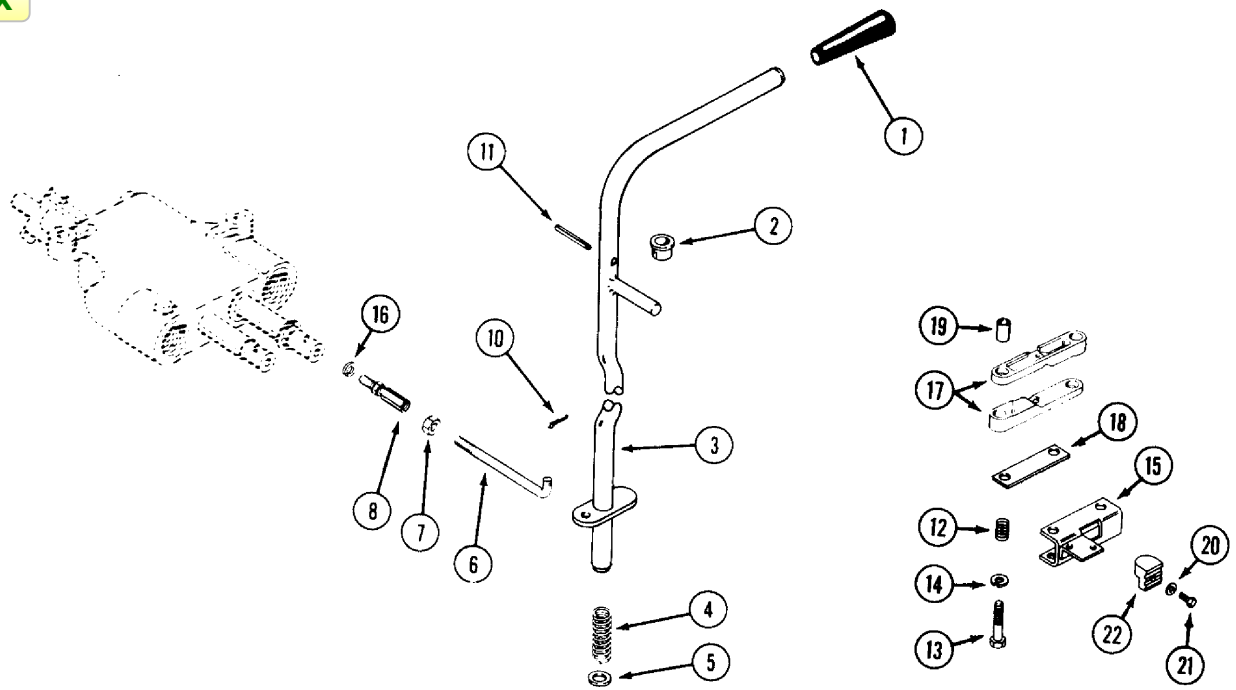
INDEX**MODEL 3012, 3014, 3016 AND 4016 COMPACT TRACTORS****HYDRAULIC PUMP (PARKER-HANNIFIN)**

REF.	PART NO.	DESCRIPTION	REQ'D
1	C31958	PUMP - hydraulic 1/2" shaft	1
2	F53109	PIN - dowel	2
3	C31987	COVER - rear	1
4	C15731	GEAR ASSEMBLY - driven	1
5	C15732	"O" RING - cover	2
6	C15733	BODY - pump	1
7	C15734	COVER - front.....	1
8	C15735	SEAL - shaft.....	1
9	NSS	GEAR ASSEMBLY - drive (1/2" shaft) (use C31 958).....	1
10	C15737	PLATE - wear	1
11	C15738	SHIELD - heat.....	1
12	C15739	GASKET	1
13	C15740	SEAL.....	1
14	113-111	BOLT.....	4
15	C31988	KEY - 1/8" square x 3/4" long (1.587 mm x 19.05 mm).....	4
16	C19115	WASHER.....	4

INDEX**PUMP MOUNTING COMPONENTS**

1	C32437	MOUNT - rubber	1
2	131-911	NUT - 5/16" - 18 flange lock.....	1
3	83-55	SCREW - set 5/16" - 18 x 5/16" socket.....	2
4	C33441	ADAPTER - drive	1
5	C33506	PLATE - pump torque arm	1
6	113-208	BOLT - 3/8" - 16 x 1-1/4" hex.....	2
7	131-1352	NUT - 3/8" - 16 flange lock.....	2
8	113-103	BOLT - 5/16"-18 x 1" hex	2
9	192-20	LOCKWASHER - 5/16"	2
10	C33505	PILOT - pump adapter	1

INDEX

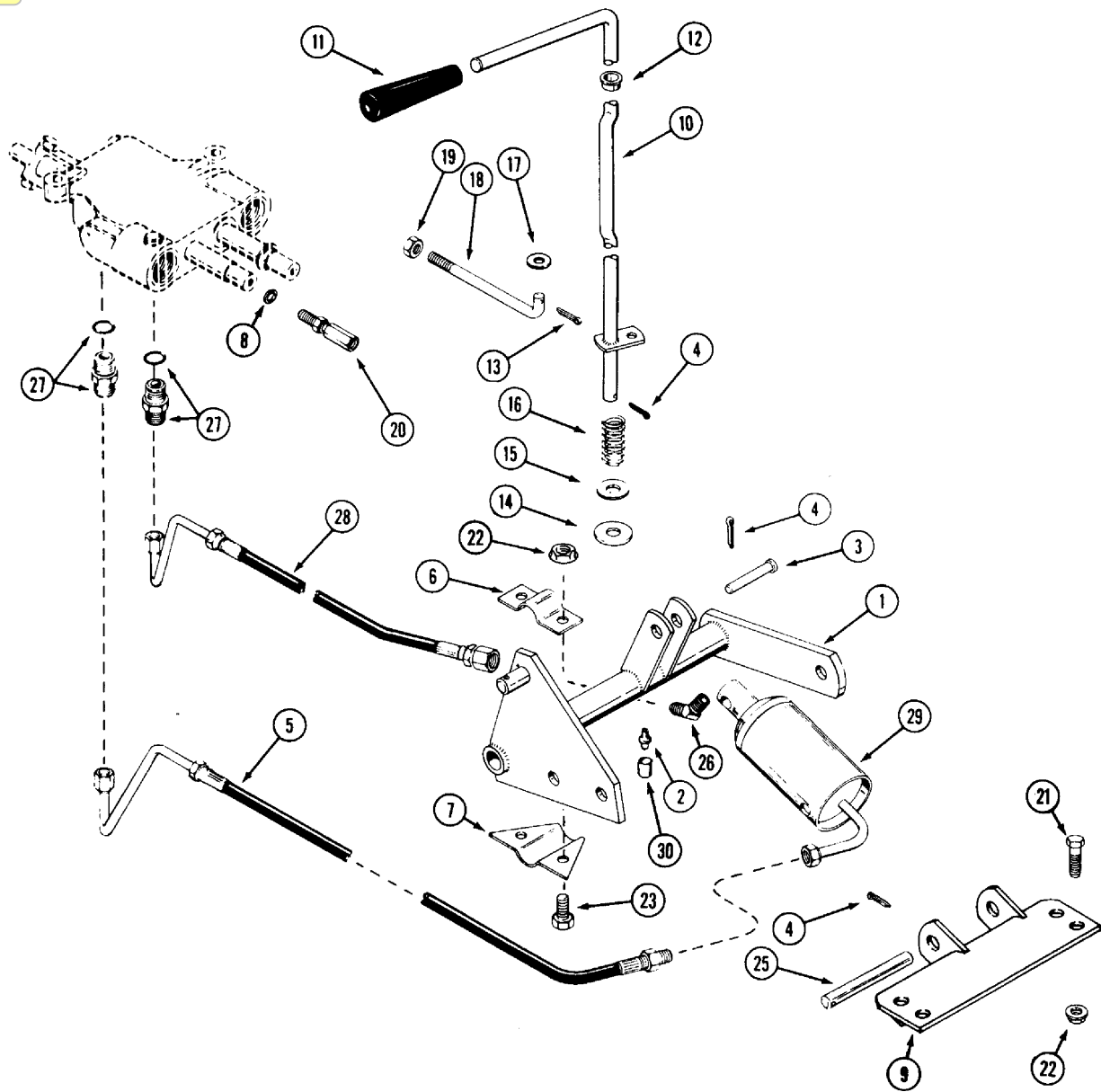


SPEED CONTROL

REF.	PART NO.	DESCRIPTION	REQ'D
1	C28237	KNOB - speed control (Plastic)	1
1	C28237	GRIP - speed control (Soft rubber)	1
2	C29636	BUSHING - lever	1
3	C37250	LEVER - speed control.....	1
4	C10482	SPRING - compression.....	1
5	C21518	WASHER - nylon.....	1
6	C31670	ROD - control	1
7	129-122	NUT - 5/16" N.F. hex zinc plated	1
8	C19025	JOINT - ball	1
10	132-320	PIN - cotter 3/32" x 3/4"	1
11	138-2072	PIN - roll 1/8" x 1-3/4"	1
12	C30827	SPRING - locator	2
13	113-14	BOLT - 1/4" 20 x 2"	2
14	192-19	LOCKWASHER - 1/4"	2
15	C37255 **	CARRIER - locator (shown)	1
15	C31678 *	CARRIER - locator	1
16	192-20	LOCKWASHER - 5/16"	1
17	C32362	LOCATOR - half	2
18	C31674 *	ACTUATOR - switch	1
18	C37254 **	SUPPORT - locator (shown)	1
19	C29653	SPACER - tube	2
20	195-513	WASHER.....	1
21	187-1328	SCREW - #8 - 18 x 3/8"	1
22	C37198 **	CAM - switch	1

* Use before PIN:
 ** Use PIN and After:
 3012- 14167800
 3014 - 14168800
 3016 - 14169500
 4016 - all after

INDEX



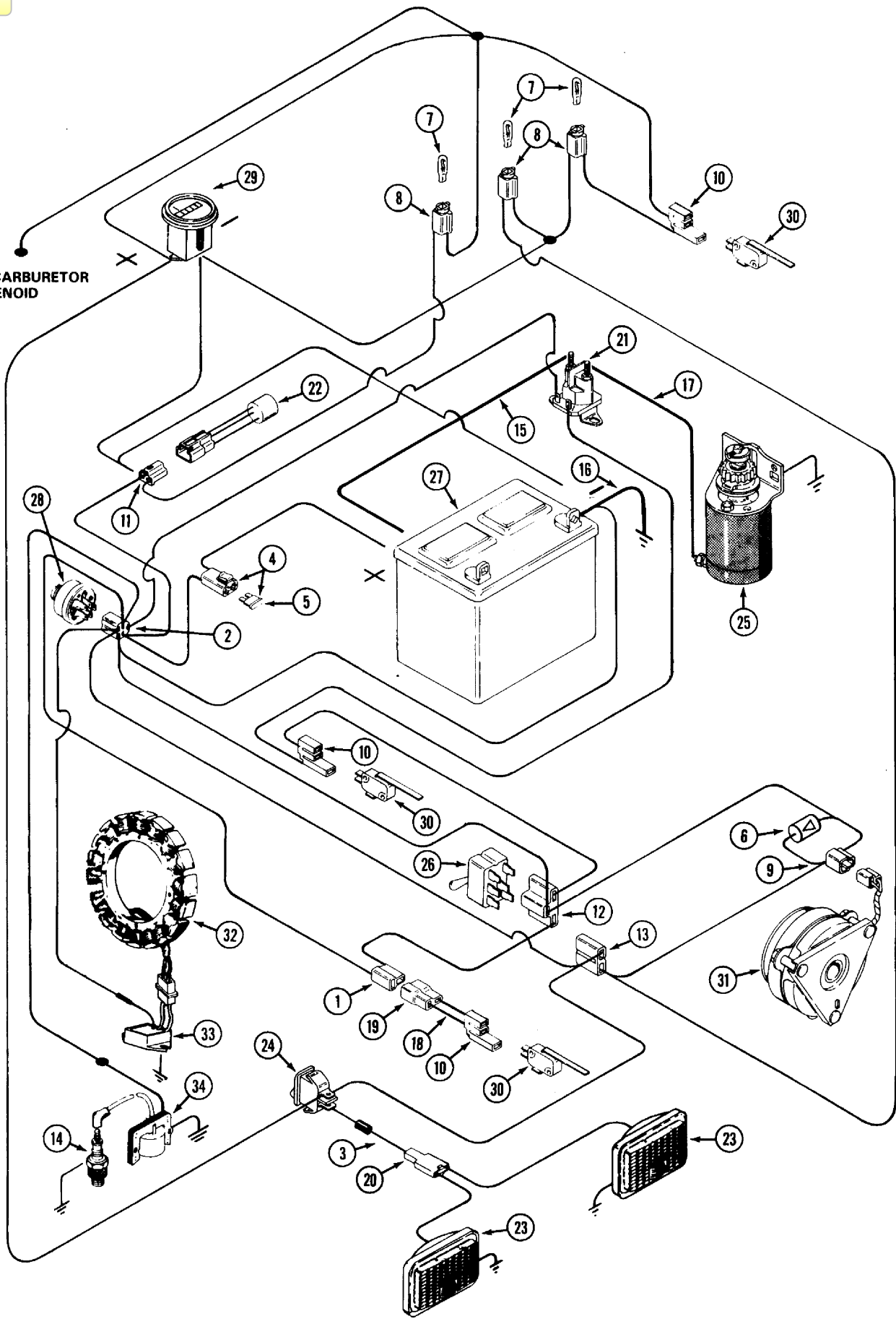
MODEL 3012, 3014, 3016 AND 4016 COMPACT TRACTORS

HYDRAULIC LIFT

REF.	PART NO.	DESCRIPTION	REQ'D
1	C32259	SHAFT ASSEMBLY - lift	1
2	219-17	FITTING - lubrication.....	1
3	C29693	PIN - cylinder to lever, clevis.....	1
4	132-310	PIN - cotter 1/8" x 1".....	5
5	C17734	HOSE - long.....	1
6	C17249	BRACKET - mounting, top.....	2
7	C17250	BRACKET - mounting, bottom.....	2
8	192-20	LOCKWASHER - 5/16".....	1
9	C33136	BRACKET - cylinder.....	1
10	C33956	LEVER - lift control.....	1
11	C28237	KNOB - control lever (plastic).....	1
	C46481	GRIP - control lever (soft rubber).....	1
12	C29636	BUSHING - lift lever.....	1
13	132-320	PIN - cotter 3/32" x 3/4".....	1
14	195-533	WASHER - 1/2".....	1
15	C21518	WASHER - nylon.....	1
16	C31681	SPRING - control lever.....	1
17	195-521	WASHER - 5/16".....	1
18	C31670	ROD - control.....	1
19	129-122	NUT - 5/16" N.F. hex.....	1
20	C19025	BALL JOINT.....	1
21	113-209	BOLT - 3/8" x 1-1/2" N.C. hex.....	8
22	131-938	NUT - lock 3/8" N.C. hex.....	8
23	113-208	BOLT - 3/8" - 16 x 1-1/4".....	4
25	C26188	PIN - cylinder base.....	1
26	218-1093	FITTING - hydraulic 45 elbow.....	1
27	218-5056	FITTING - valve (includes 218-5004 "O" ring).....	2
28	C31682	HOSE - short.....	1
29	C27590	CYLINDER - lift.....	1
	C30054	KIT - seal.....	1
30	C13106	COVER - lubrication fitting.....	1

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TO CARBURETOR
SOLENOID



MODEL 3012, 3014, 3016 AND 4016 COMPACT TRACTORS

ELECTRICAL SYSTEM

Use before PIN:

3012 - 14167800

3014 - 14168800

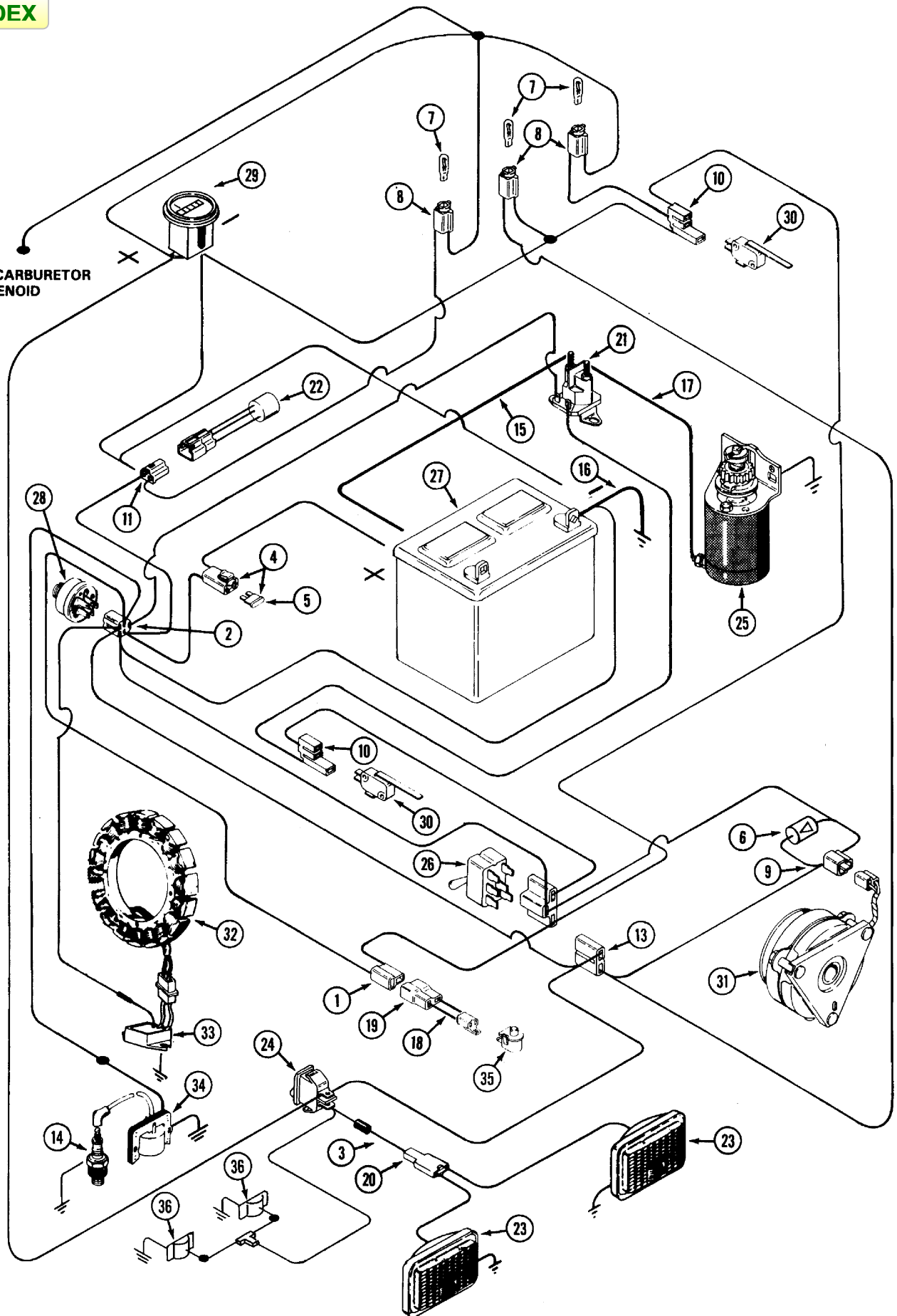
3016 - 14169500

AFTER THESE PIN'S

REF.	PART NO.	DESCRIPTION	REQ'D
	C33436	HARNESS - wire	1
1	C25338	CONNECTOR - seat harness, male	1
2	C24460	CONNECTOR - ignition switch	1
3	C34181	WIRE - lights	1
4	C31947	KIT - fuse holder.....	1
5	C30260	FUSE - 30 amp	1
6	C31986	KIT - diode, 6 amp, 15 volt.....	1
7	C30262	BULB - indicator light (not included with harness)	3
8	C30263	SOCKET - bulb	3
9	C31948	CONNECTOR - PTO male.....	3
10	C30279	CONNECTOR - switch.....	3
11	C25486	CONNECTOR - sensor	1
12	C31950	CONNECTOR - 3 terminal.....	1
13	C31951	CONNECTOR - PTO switch, 2 terminal	1
14	C34291	SPARK PLUG - includes gasket	2
15	C33022	CABLE - battery positive to solenoid	1
16	C31943	CABLE - battery negative to ground	1
17	C33088	CABLE - solenoid to starter.....	1
18	C31945	HARNESS - seat switch (includes ref. 10 and 19).....	1
19	C24813	CONNECTOR - seat harness, female	1
20	C14537	CONNECTOR - headlights	1
21	C33024	SOLENOID - start, 12 volt.....	1
22	C31617	SENSOR - voltage (includes connector).....	1
23	C32178	HEADLIGHT - 12 volt (see page 55 for repairs)	2
24	C43044	SWITCH - headlight	1
25	C34284	STARTER - 12 volt (see page 17 for repairs)	1
26	C31937	SWITCH - PTO	1
27	C31213	BATTERY - 12 volt, 32 amps, 230 CCA	1
28	C30267	SWITCH - ignition (includes key and hardware).....	1
	C32407	KEY - ignition	2
29	C42929	HOURLY METER	1
30	C30275	SWITCH - inter - lock	3
31	C33197	CLUTCH - PTO (see page 21 for repairs)	1
32	C34303	STATOR - charging.....	1
33	C34304	RECTIFIER - voltage, 12 volts	1
34	C34289	ARMATURE - magneto (3012, 3014)	2
34	C34294	ARMATURE - magneto (3016)	2

INDEX

TO CARBURETOR
SOLENOID



MODEL 3012, 3014, 3016 AND 4016 COMPACT TRACTORS

ELECTRICAL SYSTEM

Use PIN and After:

3012 - 14167800

3014 - 14168800

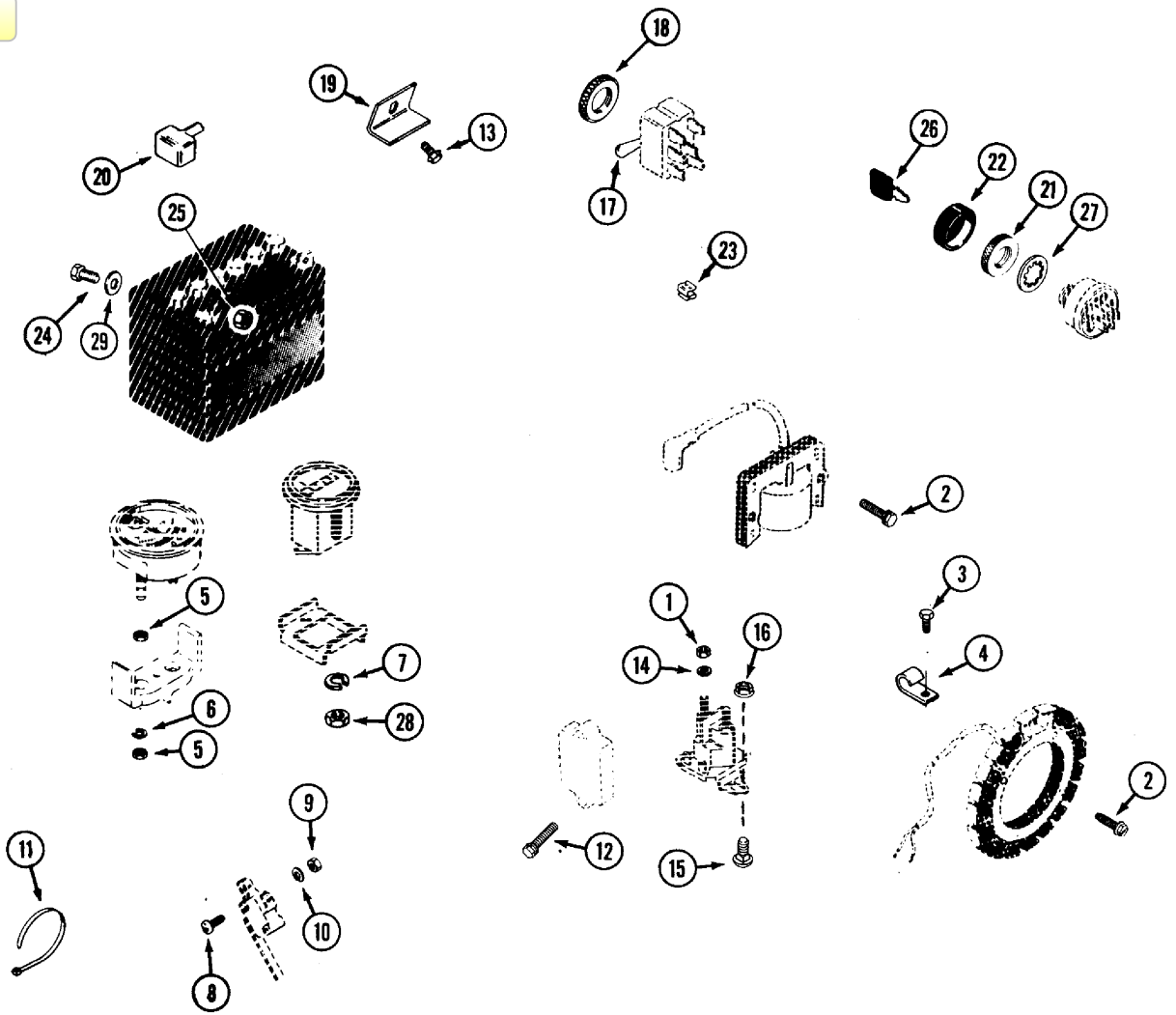
3016 - 14169500

4016 – All

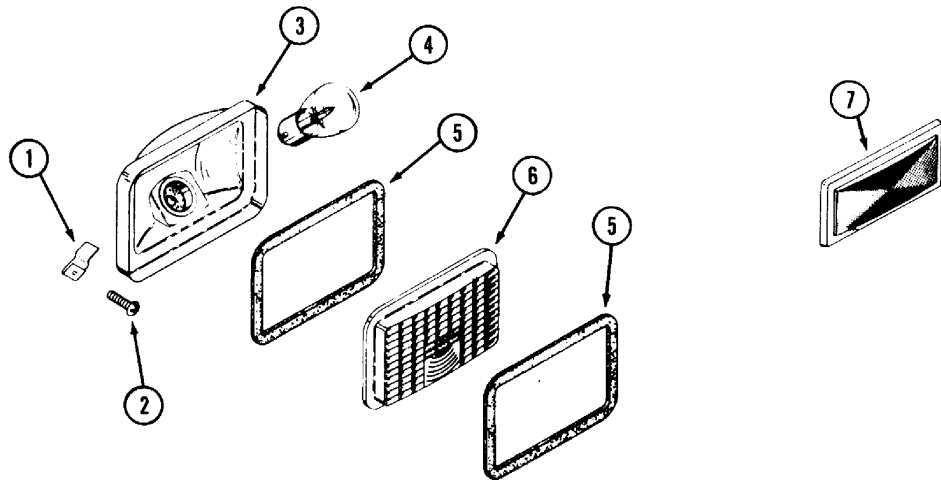
BEFORE THESE PINS

REF.	PART NO.	DESCRIPTION	REQ'D
	C46800	HARNESS – wire, rear (seat, switch, etc).....	1
	C44935	HARNESS – wire, main	1
1	C25338	CONNECTOR - seat harness, male.....	1
2	C24460	CONNECTOR - ignition switch.....	1
3	C34181	WIRE - lights.....	1
4	C31947	KIT - fuse holder.....	1
5	C30260	FUSE - 30 amp.....	1
6	C31986	KIT - diode, 6 amp, 15 volt	1
7	C30262	BULB - indicator light (not included with harness)	3
8	C30263	SOCKET - bulb.....	3
9	C31948	CONNECTOR - PTO male.....	1
10	C30279	CONNECTOR - switch	3
11	C25486	CONNECTOR - sensor	1
12	C31950	CONNECTOR - 3 terminal	1
13	C31951	CONNECTOR - PTO switch, 2 terminal.....	1
14	C34291	SPARK PLUG - includes gasket.....	2
15	C33022	CABLE - battery positive to solenoid	1
16	C31943	CABLE - battery negative to ground	1
17	C37272	CABLE - solenoid to starter.....	1
18	C37270	HARNESS - seat switch and taillights.....	1
19	C24813	CONNECTOR - seat harness, female	1
20	C14537	CONNECTOR - headlights	1
21	C33024	SOLENOID - start, 12 volt.....	1
22	C31617	SENSOR - voltage (includes connector).....	1
23	C32178	HEADLIGHT - 12 volt (see page 55 for repairs)	2
24	C29322	SWITCH - headlight	1
25	C34284	STARTER - 12 volt (see page 17 for repairs)	1
26	C31937	SWITCH - PTO	1
27	C41010	BATTERY - 12 volt	1
28	C30267	SWITCH - ignition (includes key and hardware)	1
	C32407	KEY - ignition.....	2
29	C33756	HOURLY METER	1
30	C30275	SWITCH - inter - lock	2
31	C33197	CLUTCH - PTO (see page 21 for repairs)	1
32	C34303	STATOR - charging.....	1
33	C34304	RECTIFIER - voltage, 12 volts.....	1
34	C34289	ARMATURE - magneto (3012, 3014)	2
34	C34294	ARMATURE - magneto (3016, 4016)	2
35	C33744	SWITCH – seat, gray (shown)	1
35	C45537	SWITCH – seat strip style, inserted into the seat	1
36	C37165	LIGHTS - tail	2

INDEX



INDEX



INDEX**MODEL 3012, 3014, 3016 AND 4016 COMPACT TRACTORS****ELECTRICAL SYSTEM HARDWARE**

REF.	PART NO.	DESCRIPTION	REQ'D
1	129-101	NUT - 1/4"-20	2
2	C34290	SCREW - sems	6
3	C37200	SCREW - 6mm.....	1
4	C32455	CLIP - wire.....	2
5	129-27	NUT - #10.....	4
6	193-99	LOCKWASHER - #10	2
7	192-16	LOCKWASHER - #8	2
8	C33696	SCREW - #4 - 40 x 1-1/8"	2
9	C33697	NUT - # 4 - 40	2
10	192-13	LOCKWASHER - #4	2
11	C22947	TIE - nylon.....	UAR
12	C34310	SCREW - rectifier mounting	2
13	121-21	BOLT - 1/4" - 20 x 1/2" flange lock.....	1
14	192-19	LOCKWASHER - 1/4"	2
15	111-101	BOLT - 1/4" - 20 x 5/8" carriage	2
16	131-934	NUT - 1/4" - 20 flange	2
17	C31619	CAP - PTO switch	1
18	C31620	NUT - knurled 1/2" - 27	1
19	C33475	RETAINER - battery.....	1
20	C24069	COVER - terminal	1
21	C32396	NUT - switch 5/8" - 32	1
22	C32397	CAP - nut.....	1
23	C19521	CLIP - wire.....	3
24	113-3	BOLT - 1/4" - 20 x 3/4"	2
25	129-102	NUT - 1/4" - 20	2
26	C32407	KEY - ignition	1
27	C23012	LOCKWASHER.....	1
28	129-36	NUT - #8 - 36	2
29	195-518	WASHER - 1/4"	2

INDEX**HEADLIGHT ASSEMBLY AND REAR REFLECTOR**

REF.	PART NO.	DESCRIPTION	REQ'D
1	C29637	RETAINER - head light.....	4
2	187-1328	SCREW - No. 8 x 3/8"	4
	C32178	HEADLIGHT ASSEMBLY	2
3	NSS	RECEPTACLE - headlight (order C32178).....	1
4	C28932	BULB - headlight.....	1
5	C14304	GASKET - headlight.....	2
6	C22573	LENS - headlight.....	1
7	C30942	REFLECTOR - red, rear fender	2

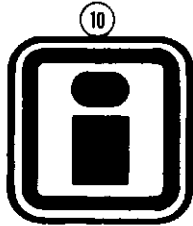
① **INGERSOLL 3012**

⑦ **INGERSOLL 3014**

⑧ **INGERSOLL 3016**

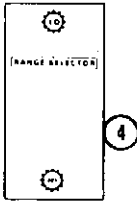
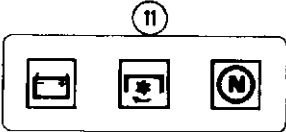
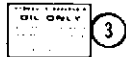
⑰ **INGERSOLL 3018**

⑫ **INGERSOLL 4016**



⑤

BRAKE - PEDAL IS ON LEFT SIDE OF TRACTOR
PARKING BRAKE LOCK
 TO ENGAGE - PULL BRAKE AND PUSH LOCK DOWN
 TO RELEASE - PUSH BRAKE PEDAL DOWN



②

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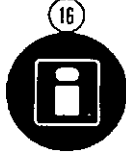
⑨

CAUTION

READ OPERATOR'S MANUAL
 KNOW LOCATION AND FUNCTION OF ALL CONTROLS
 KEEP ALL SWITCHES AND SAFETY SWITCHES FUNCTIONAL
 BEFORE STARTING ENGINE. DIMM HEADS ATTACHMENT
 SHADES AND PLACE TRACTOR CONTROL IN NEUTRAL.
 REMOVE OBJECTS FROM THE TERRAIN THAT COULD
 BE INJURED BY THE ATTACHMENT
 KEEP PEOPLE AND PETS A SAFE DISTANCE AWAY
 WHEN CLARK PALLETS
 ALWAYS LOCK WRENCH TRACTOR BEFORE BACKING
 OR ANY WHEELS THAT THE TRACTOR CAN BE SAFELY
 OPERATED LOW RANGE GEAR.
 FRONT END TIP OVER CAN OCCUR WHEN OPERATING ON
 LOADING RAMPS OR HILLS. BACK UP RAMPS OR HILLS
 DRIVE FORWARD SLOWLY DOWN RAMPS OR HILLS
 TO LEAVE TRACTOR. PLACE TRACTOR CONTROL IN
 NEUTRAL, SET PARKING BRAKE, DISMOUNT
 ATTACHMENT DRIVE, REMOVE KEY AND REMOVE KEY
 FROM TRACTOR BEFORE SERVICING OR MAKING
 ADJUSTMENTS TO TRACTOR OR ATTACHMENTS.
 FAILURE TO OBSERVE THESE PRECAUTIONS
 COULD RESULT IN INJURY.



⑧ **INGERSOLL**



DECALS

REF.	PART NO.	DESCRIPTION	REQ'D
1	C33429 *	DECAL - "3012" hood L.H.....	1
1	C32002 *	DECAL - "3012" hood R.H.....	1
1	C36918 **	DECAL - "3012" hood L.H. (shown).....	1
1	C36919 **	DECAL - "3012" hood R.H.....	1
2	C33588	DECAL - fuel gauge.....	1
3	321-4767	DECAL - hydraulic reservoir.....	1
4	321-1788 *	DECAL - shift range.....	1
5	C33590	DECAL - brake.....	1
6	C32004 *	DECAL - "3016" hood L.H.....	1
6	C32005 *	DECAL - "3016" hood R.H.....	1
6	C36922 **	DECAL - "3016" hood L.H. (shown).....	1
6	C36923 **	DECAL - "3016" hood R.H.....	1
7	C36920 **	DECAL - "3014" hood L.H. (shown).....	1
7	C36921 **	DECAL - "3014" hood R.H.....	1
7	C33430 *	DECAL - "3014" hood L.H.....	1
7	C32003 *	DECAL - "3014" hood R.H.....	1
8	C32093 *	DECAL - seat back "Ingersoll".....	1
9	321-6659	DECAL - "Caution".....	1
10	C30539	MEDALLION.....	1
11	C30274 **	LENS - display.....	1
12	C37071	DECAL - "4016" hood L.H. (shown).....	1
12	C37072	DECAL - "4016" hood R.H.....	1
13	C34184 **	DECAL - flag.....	1
14	C37274 **	DECAL - shift range.....	1
15	C37275 **	DECAL - PTO.....	1
16	C37197 **	DECAL - steering wheel.....	1
17	C45425	DECAL - "3018" hood R.H.....	1
17	C45424	DECAL - "3018" hood L.H.....	1

* Use before PIN:
 ** Use PIN and after:
 3012 - 14167800
 3014 - 14168800
 3016 - 14169500