

TORNADO 15 AND TORNADO 15 PTO



PARTS MANUAL

S/N 24267

MANUFACTURED BY:
MORBARK, INC.

07/05

CALIFORNIA

Proposition 65 Warning

Diesel engine exhaust and some of its constituents are known to the state of California to cause cancer, birth defects, and other reproductive harm.



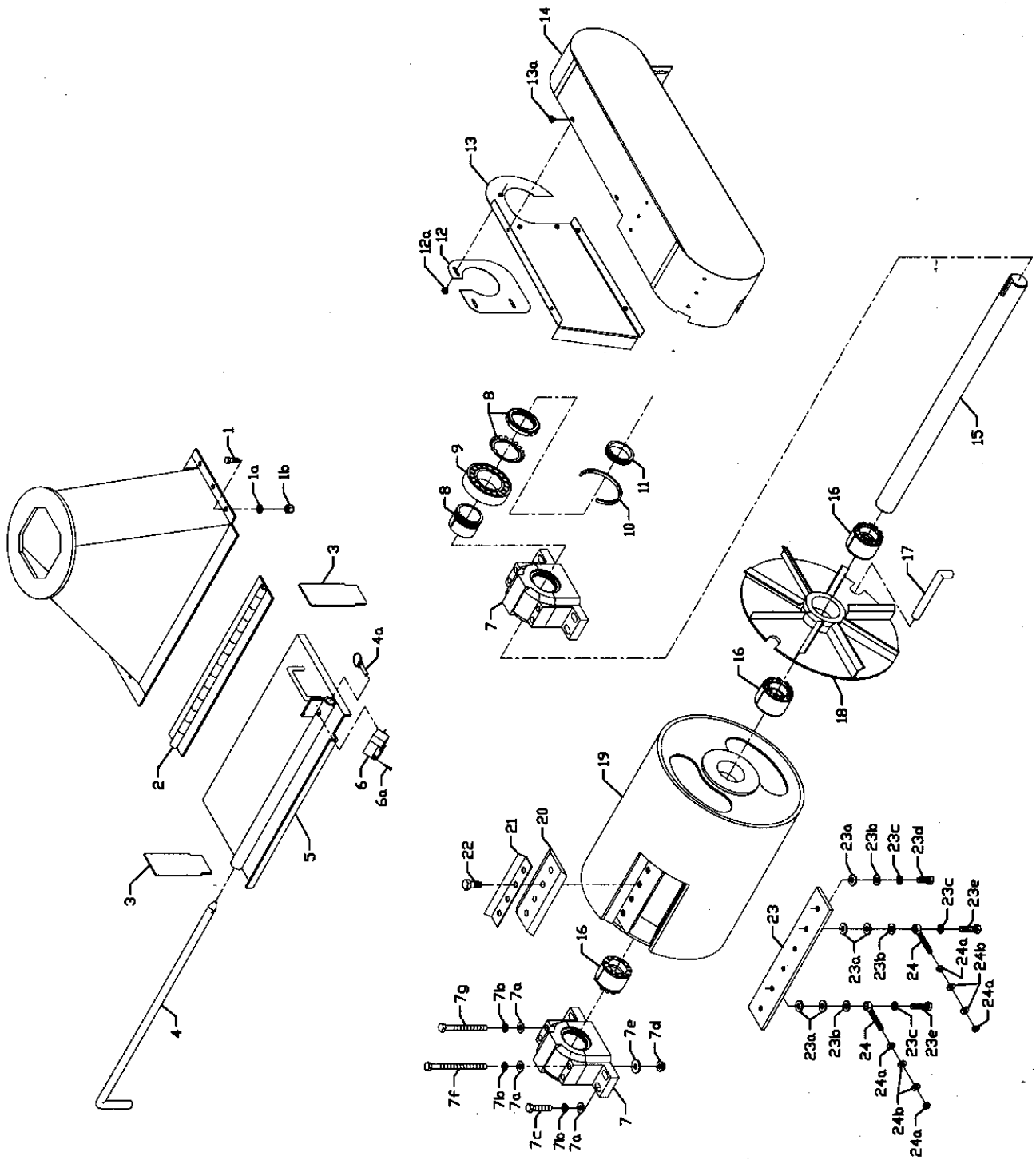
WARNING

The engine exhaust from this product contains chemicals known to the state of California to cause cancer, birth defects or other reproductive harm.

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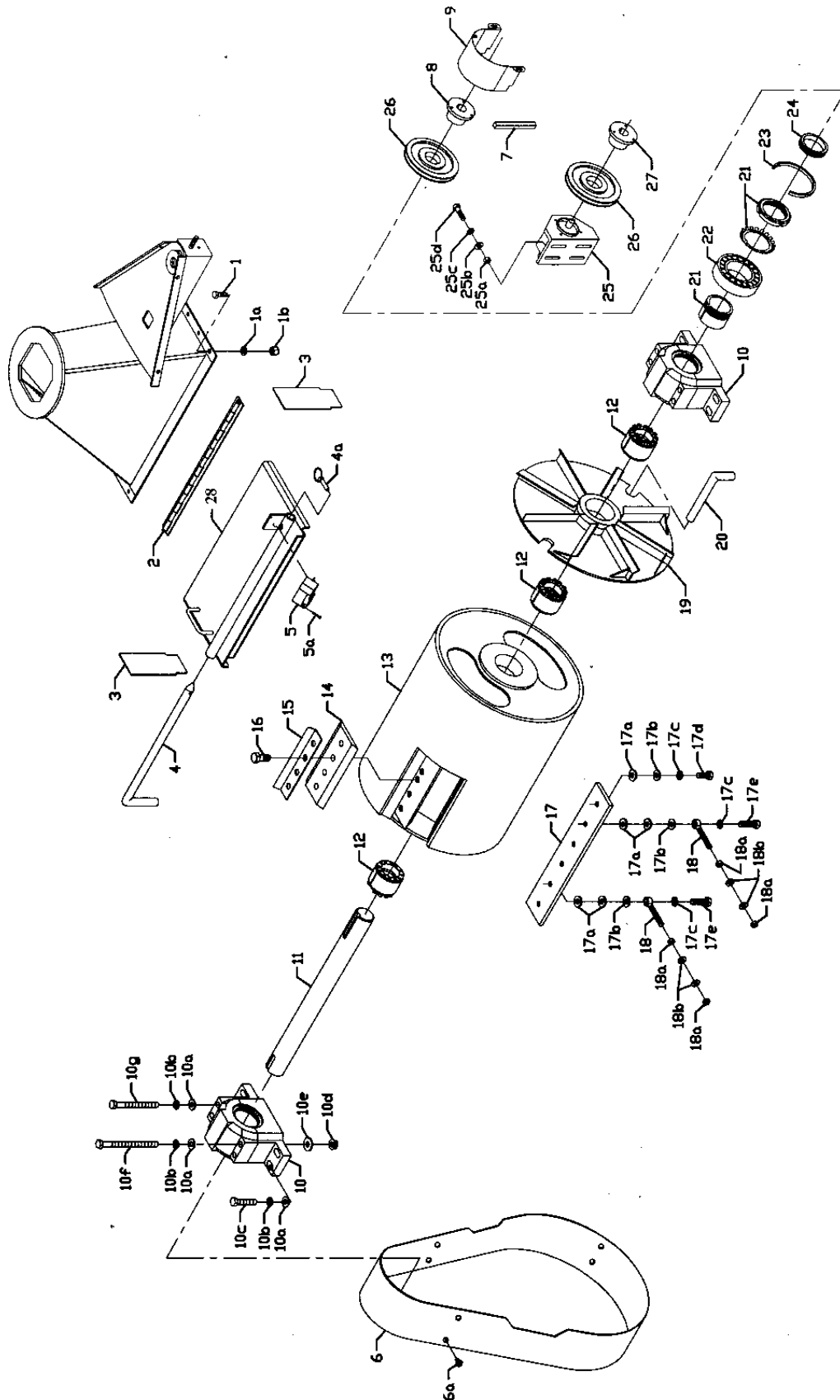
CHIPPER COMPONENTS



CHIPPER COMPONENTS

ITEM	QTY.	PART NO	DESCRIPTION
1	6	21624-255	1/2 - 13 X 1 1/2 GR 8 BOLTS
1A	6	21161-044	1/2 HARDENED FLAT WASHERS
1B	6	21733-305	1/2 - 13 NYLOC NUTS
2	1	31205-901	HINGE
3	2	30024-452	INSERTS
4	1	30438-452	HOOD PIN
4A	1	21129-054	LYNCH PIN
5	1	40220-452	DRUM BASE COVER
6	1	27413-566	SHUT OFF SWITCH
6A	2	21511-230	10-24 X 1 1/4 SCREWS
7	2	23973-645	BEARING HOUSINGS
7A	16	21161-046	5/8 HARDENED FLAT WASHERS
7B	16	21171-113	1/2 LOCK WASHERS
7C	8	21624-261	1/2 - 13 X 3 GR 8 BOLTS
7D	8	21733-409	1/2 - 13 STOVER NUTS
7E	8	21161-044	1/2 FLAT WASHERS
7F	4	21624-261	1/2 - 13 X 3 GR 8 BOLTS
7G	4	21624-273	1/2 - 13 X 8 GR 8 BOLTS
(NOTE: QUANTITIES ARE FOR BOTH BEARINGS)			
8	2	23962-255	SNW ASSEMBLIES
9	2	23661-360	BEARINGS
10	2	23973-687	STABILIZING RINGS
11	4	23973-226	OIL SLINGERS
12	1	30764-452	GAP COVER
12A	A/R	21620-103	3/8 - 16 X 3/4 BOLT/WASHERS
13	1	40481-452	BACK PLATE
13A	A/R	21620-103	3/8 - 16 X 3/4 BOLT/WASHERS
14	1	40480-452	FRONT SHIELD
	1	40482-452	COMPLETE SHIELD (INCLUDES 12 - 14)
15	1	30756-452	SHAFT
16	3	24114-607	LOCKING ASSEMBLIES
17	1	31030-462	DRUM LOCKING PIN
18	1	40304-452	FAN ASSY
19	1	40470-452	DRUM ASSY (comes with 20,21,22)
20	2	39233-692	KNIVES
21	2	30130-101	KNIFE CLAMPS
22	8	22424-403	3/4 - 16 X 1 1/2 GR 8 BOLTS
23	1	30412-462	ANVIL
23A	8	21161-359	5/8 FLAT WASHERS
23B	6	21161-046	5/8 HARDENED FLAT WASHERS
23C	6	21171-113	1/2 LOCK WASHERS
23D	4	22424-353	5/8 - 11 X 1 1/2 BOLTS
23E	2	22424-356	5/8 - 11 X 2 1/4 GR 8 BOLTS
24	2	21711-018	1/2 - 13 X 3 1/2 EYE BOLTS
24A	4	21731-068	1/2 - 13 GR 8 NUTS
24B	4	21161-044	1/2 HARDENED FLAT WASHERS

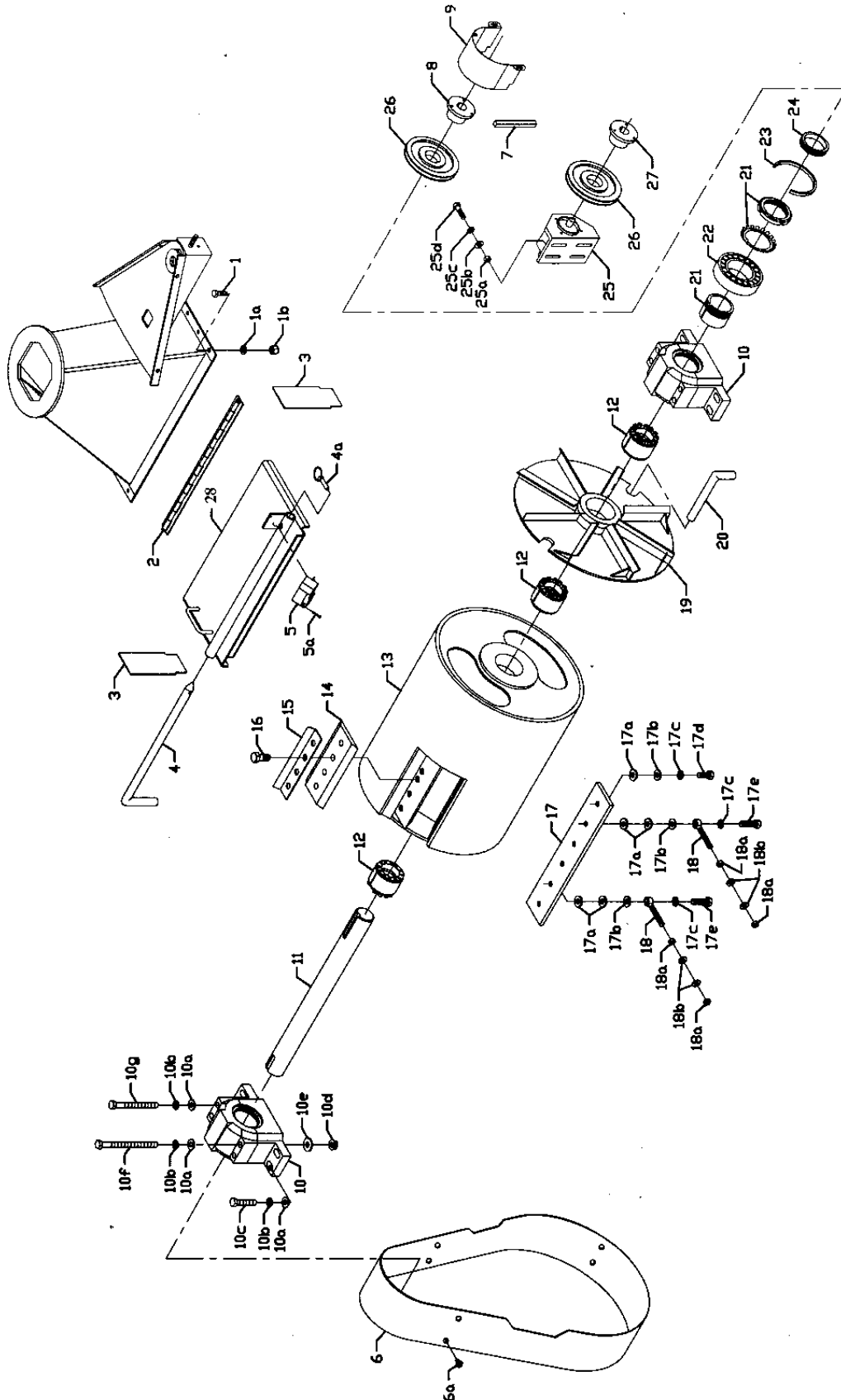
PTO CHIPPER COMPONENTS



PTO CHIPPER COMPONENTS

ITEM	QTY	PART NO	DESCRIPTION
1	6	21624-255	1/2 - 13 X 1 1/2 GR 8 BOLTS
1A	6	21161-044	1/2 HARDENED FLAT WASHERS
1B	6	21733-305	1/2 - 13 NYLOC NUTS
2	1	31205-901	HINGE
3	2	30024-452	INSERTS
4	1	30438-452	HOOD PIN
4A	1	21129-054	LYNCH PIN
5	1	27413-566	SHUT OFF SWITCH
5A	2	21511-230	10-24 X 1 1/4 SCREWS
6	1	40425-452	CHAIN GUARD
6A	4	21620-103	3/8 - 16 X 3/4 BOLT - WASHERS
7	1	24166-622	B-41 BELT
8	1	24132-938	2 7/16 BUSHING
9	1	30772-452	GUARD
10	2	23973-645	BEARING HOUSINGS
10A	16	21161-313	1/2 FLAT WASHERS
10B	16	21171-113	1/2 LOCK WASHERS
10C	8	21624-261	1/2 - 13 X 3 GR 8 BOLTS
10D	8	21733-412	7/8 - 9 STOVER NUTS
10E	8	21161-364	1/2 MOUNTING WASHERS
10F	4	21624-261	1/2 - 13 X 3 GR 8 BOLTS
10G	4	21624-273	1/2 - 13 X 8 GR 8 BOLTS
11	1	30776-452	SHAFT
12	3	24114-607	LOCKING ASSEMBLIES
13	1	40371-452	DRUM ASSY (COMPLETE)
14	2	39233-692	KNIVES

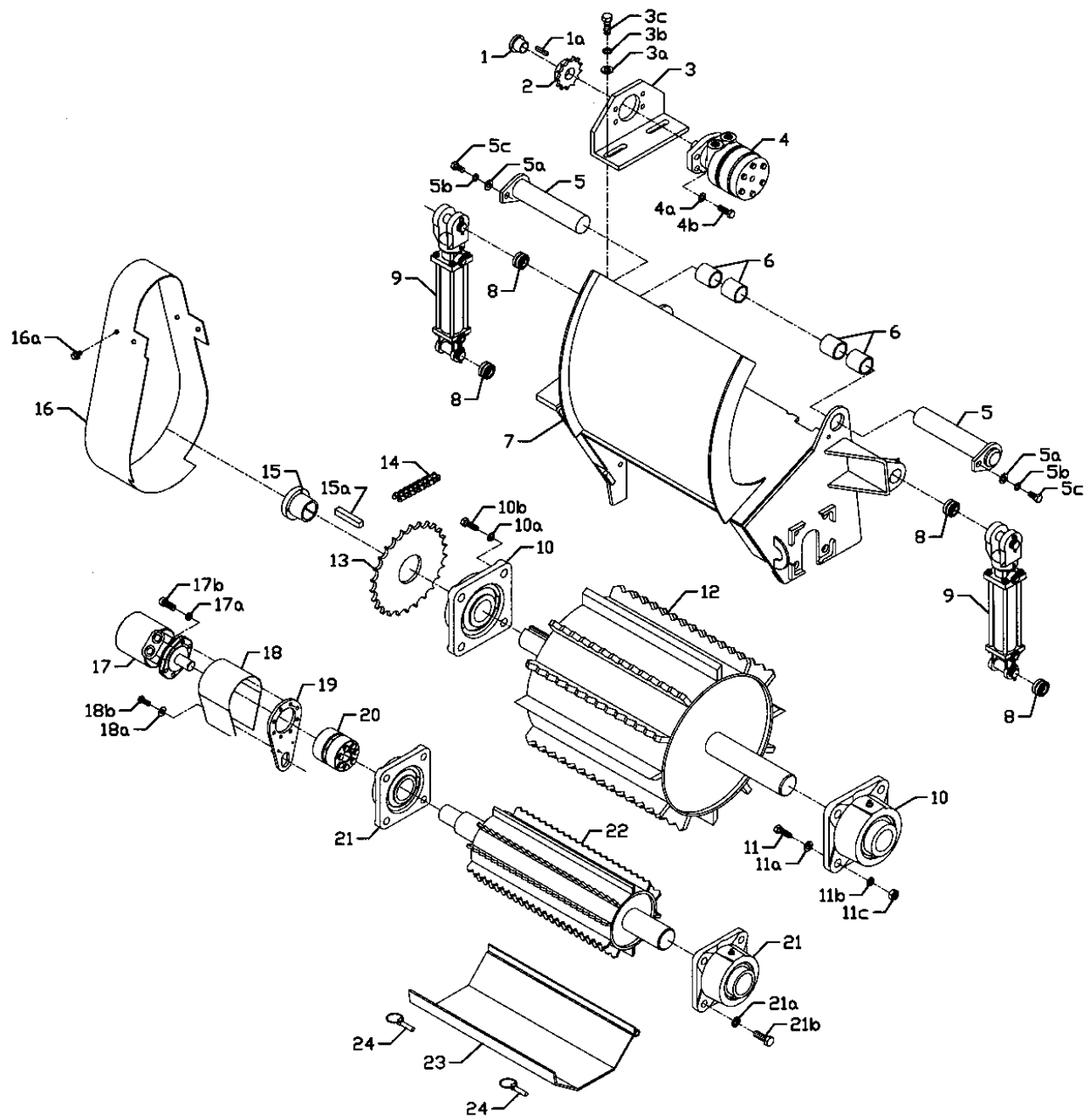
PTO CHIPPER COMPONENTS CON'T



PTO CHIPPER COMPONENTS CON'T

ITEM	QTY	PART NO	DESCRIPTION
15	2	30130-101	KNIFE CLAMPS
16	8	22424-404	3/4 - 16 X 1 3/4 GR 8 BOLTS
17	1	30412-462	ANVIL
17A	24	21161-359	5/8 FLAT WASHERS
17B	24	21161-046	5/8 HARDENED FLAT WASHERS
17C	12	21171-113	1/2 LOCK WASHERS
17D	8	22424-353	5/8 - 11 X 1 1/2 BOLT
17E	4	22424-356	5/8 - 11 X 2 1/4 GR 8 BOLTS
18	2	21711-018	1/2 - 11 X 3 1/2 EYE BOLTS
18A	8	21731-068	1/2 - 11 GR 8 NUTS
18B	4	21161-044	1/2 FLAT WASHERS
19	1	40304-452	FAN ASSY
20	1	31030-462	DRUM LOCKING PIN
21	2	23962-255	SNW ASSEMBLIES
22	2	23661-360	BEARINGS
23	2	23973-687	STABILIZING RINGS
24	4	23973-226	OIL SLINGERS
25	1	26726-503	PUMP
25A	4	21731-007	7/16 - 14 GRADE 2 NUTS
25B	4	21161-043	7/16 FLAT WASHERS
25C	4	21171-112	7/16 LOCK WASHERS
25D	4	21624-205	7/16 - 14 X 1 1/2 GR 8 BOLTS
26	2	24224-015	1B5V70 SHEAVES
27	1	24132-910	3/4 BUSHING
28	1	40220-452	DRUM BASE COVER
N.S.	1	40489-452	BASE ASSY

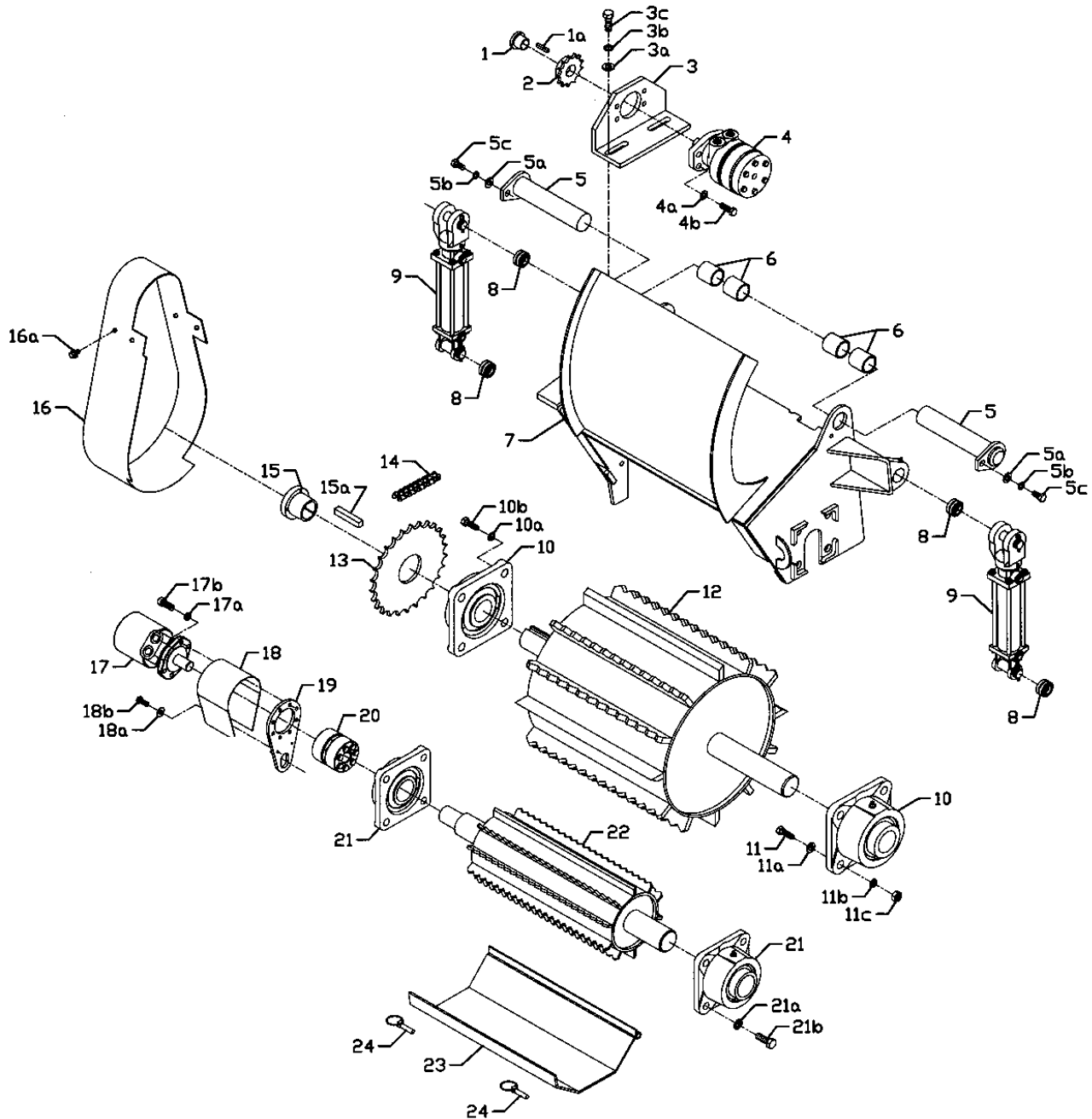
COMBO FEEDWHEEL COMPONENTS



COMBO FEEDWHEEL COMPONENTS

ITEM	QTY.	PART NO.	DESCRIPTION
1	1	24132-105	P1 1 1/4 DRIVE BUSHING
1A	1	30894-701	STEPKEY
2	1	24264-753	H60P15 DRIVE SPROCKET
3	1	30480-701	MOTOR MOUNT
3A	2	21161-359	5/8 HARDENED FLAT WASHERS
3B	2	21171-115	5/8 LOCK WASHERS
3C	2	21624-352	5/8 - 11 X 1 1/4 GR 8 BOLTS
4	1	26737-291	32 C.I. MOTOR
4A	4	21171-113	1/2 LOCK WASHERS
4B	4	21624-255	1/2 - 13 X 1 1/2 GR 8 BOLTS
5	2	40567-462	PIVOT PINS
5A	2	21161-044	1/2 HARDENED FLAT WASHERS
5B	2	21171-113	1/2 LOCK WASHERS
5C	2	21624-253	1/2 - 13 X 1 GR 8 BOLTS
6	4	23131-113	FIBER BUSHINGS
7	1	40447-452	YOKE ASSY
8	4	30784-901	10 SFV 16 BEARINGS
9	2	26816-812	2006 HYD CYLINDERS
10	2	23918-622	2" FLANGE BEARINGS
10A	4	21625-355	5/8 - 11 X 2 GR 8 BOLTS
10B	4	21171-115	5/8 LOCK WASHERS
11	4	21624-357	5/8 - 11 X 2 1/2 GR 8 BOLTS
11A	4	21161-046	5/8 HARDENED FLAT WASHERS
11B	4	21171-115	5/8 LOCK WASHERS
11C	4	21731-070	5/8 - 11 GR 8 NUTS

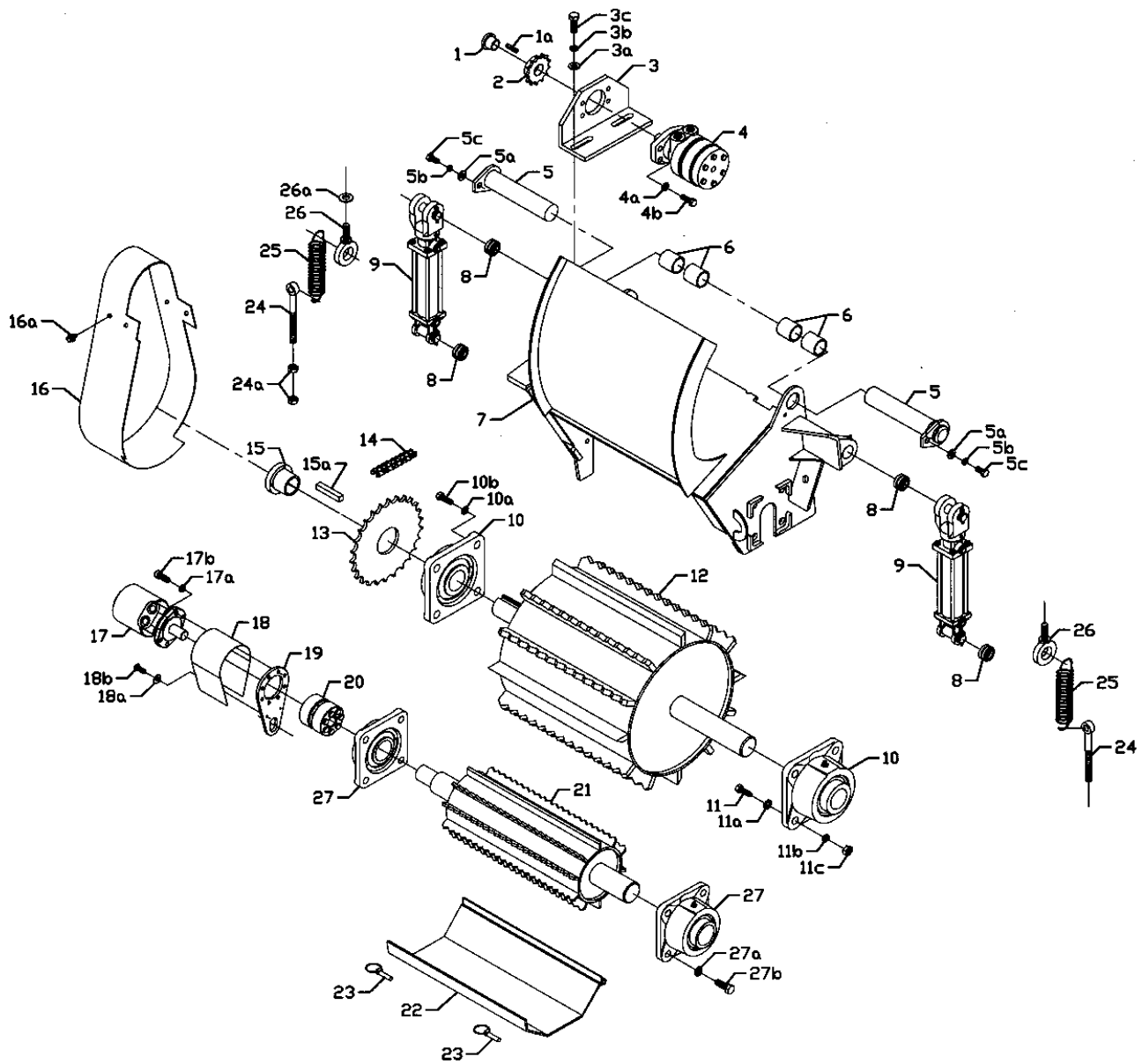
COMBO FEEDWHEEL COMPONENTS CON'T



COMBO FEEDWHEEL COMPONENTS

ITEM	QTY.	PART NO.	DESCRIPTION
12	1	40434-452	TOPFEED WHEEL ASSY
	1	40487-452	TOPFEED WHEEL ASSY (HARDENED)
13	1	24264-837	60Q45 DRIVEN SPROCKET
14	1	24251-025	H60 ROLLER CHAIN
(NOTE THE ABOVE NUMBER IS FOR 10 FOOT OF CHAIN)			
N.S.	1	24251-027	H60 MASTER LINK
N.S.	1	24251-028	H60 HALF LINK
15	1	24132-212	Q1 2" DRIVEN BUSHING
15A	1	36359-700	KEYWAY
16	1	40182-452	CHAIN GUARD
16A	4	21620-103	3/8 - 16 X 3/4 BOLT/WASHERS
17	1	26737-284	45 C.I. MOTOR
17A	4	21171-113	1/2 LOCK WASHERS
17B	4	21624-255	1/2 - 13 X 1 1/2 GR 8 BOLTS
18	1	30880-701	TORQUE ARM GUARD
18A	2	21161-041	5/16 HARDENED FLAT WASHERS
18B	2	21624-051	5/16 - 18 X 1/2 GR 8 BOLTS
19	1	30876-701	TORQUE ARM
20	1	24114-726	B-LOC BEARING
21	2	23918-629	2 7/16 FLANGE BEARINGS
21A	8	21625-355	5/8 - 11 X 2 GR 8 BOLTS
21B	8	21171-115	5/8 LOCK WASHERS
22	1	40471-452	BOTTOMFEED WHEEL ASSY
	1	40488-452	BOTTOMFEED WHEEL ASSY (HARDENED)
23	1	30430-452	CLEANOUT DOOR
24	2	21129-054	LYNCH PINS

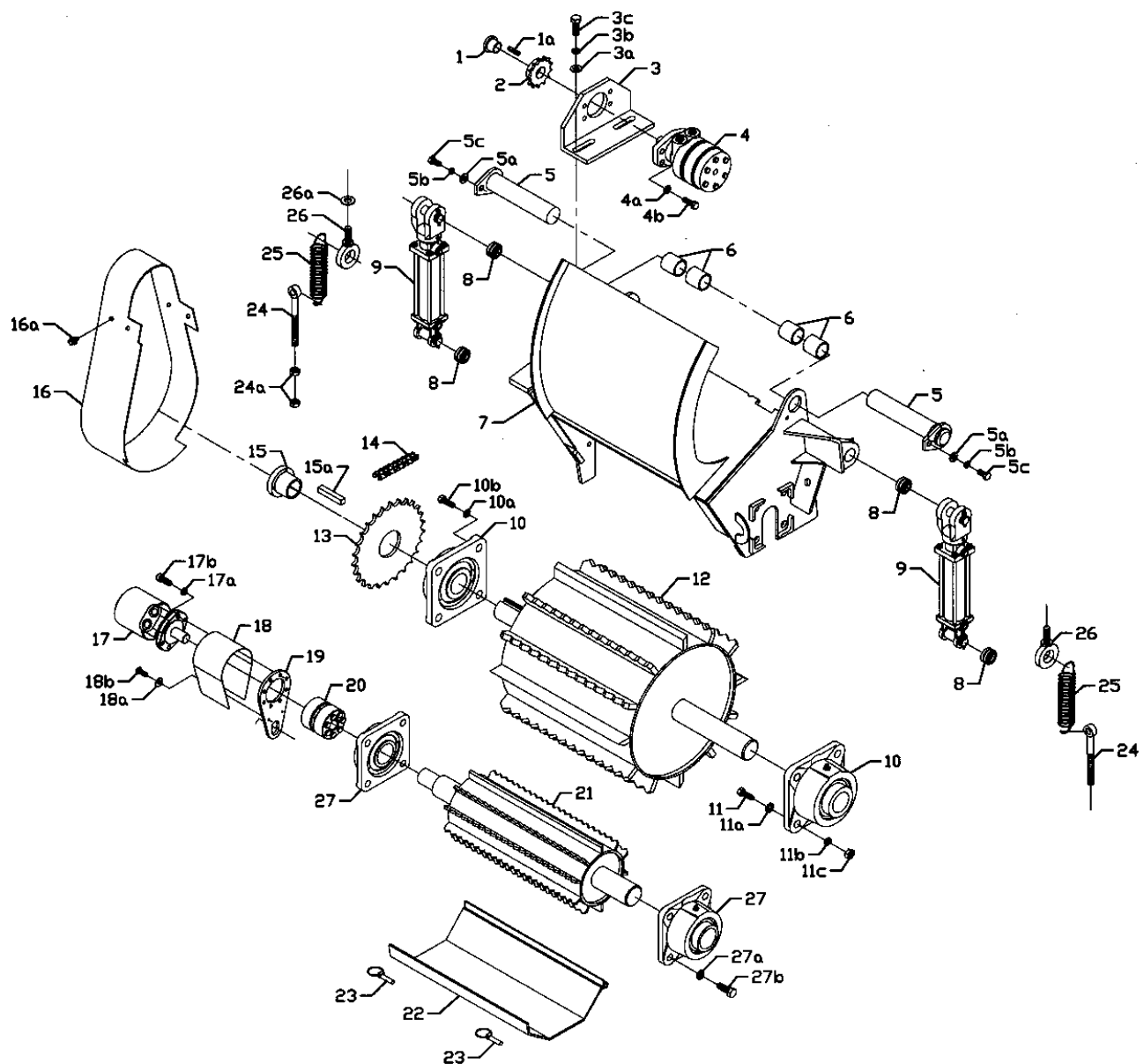
COMBO FEEDWHEEL COMPONENTS



COMBO FEEDWHEEL COMPONENTS

ITEM	QTY.	PART NO.	DESCRIPTION
1	1	24132-105	P1 1 1/4 DRIVE BUSHING
1A	1	30894-701	STEPKEY
2	1	24264-753	H60P15 DRIVE SPROCKET
3	1	30480-701	MOTOR MOUNT
3A	2	21161-359	5/8 HARDENED FLAT WASHERS
3B	2	21171-115	5/8 LOCK WASHERS
3C	2	21624-352	5/8 - 11 X 1 1/4 GR 8 BOLTS
4	1	26737-291	32 C.I. MOTOR
4A	4	21171-113	1/2 LOCK WASHERS
4B	4	21624-255	1/2 - 13 X 1 1/2 GR 8 BOLTS
5	2	40567-462	PIVOT PINS
5A	2	21161-044	1/2 HARDENED FLAT WASHERS
5B	2	21171-113	1/2 LOCK WASHERS
5C	2	21624-253	1/2 - 13 X 1 GR 8 BOLTS
6	4	23131-113	FIBER BUSHINGS
7	1	40458-452	YOKE ASSY
8	4	30784-901	10 SFV 16 BEARINGS
N.S.	2	26891-001	GREASE ZERKS
9	2	26816-812	2006 HYD CYLINDERS
10	2	23918-622	2" FLANGE BEARINGS
10A	4	21625-355	5/8 - 11 X 2 GR 8 BOLTS
10B	4	21171-115	5/8 LOCK WASHERS
11	4	21624-357	5/8 - 11 X 2 1/2 GR 8 BOLTS
11A	4	21161-046	5/8 HARDENED FLAT WASHERS
11B	4	21171-115	5/8 LOCK WASHERS
11C	4	21731-070	5/8 - 11 GR 8 NUTS
12	1	40434-452	TOP FEED WHEEL ASSY
	1	40474-452	TOP FEED WHEEL ASSY (EURO MODEL)

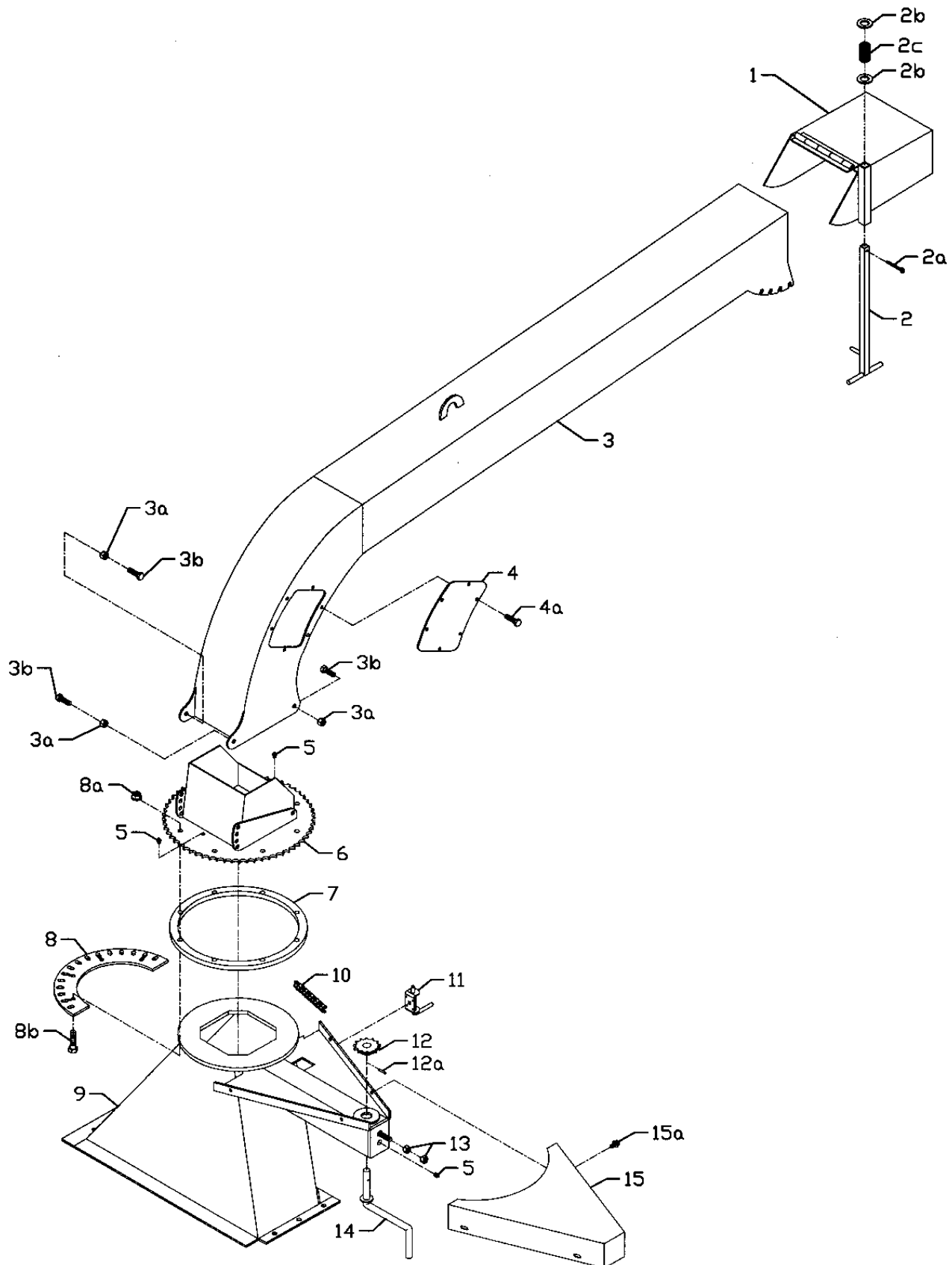
COMBO FEEDWHEEL COMPONENTS CON'T



COMBO FEEDWHEEL COMPONENTS

ITEM	QTY.	PART NO.	DESCRIPTION
13	1	24264-837	60Q45 DRIVEN SPROCKET
14	1	24251-025	H60 CHAIN – ROLLER
(NOTE THE ABOVE NUBER IS FOR 10 FOOT OF CHAIN)			
N.S.	1	24251-027	H60 MASTER LINK
N.S.	1	24251-028	H60 HALF LINK
15	1	24132-212	Q1 2” DRIVEN BUSHING
15A	1	36359-700	KEYWAY
16	1	40182-452	CHAIN GUARD
16A	4	21620-103	3/8 - 16 X 3/4 BOLT/WASHERS
17	1	26737-284	45 C.I. MOTOR
17A	4	21171-143	1/2 LOCK WASHERS
17B	4	21624-255	1/2 - 13 X 1 1/2 GR 8 BOLTS
18	1	30880-701	TORQUE ARM GUARD
18A	2	21161-041	5/16 HARDENED FLAT WASHERS
18B	2	21624-051	5/16 - 18 X 1/2 GR 8 BOLTS
19	1	30876-701	TORQUE ARM
20	1	24114-726	B-LOC
21	1	40471-452	BOTTOM FEED WHEEL ASSY
22	1	30430-452	CLEANOUT DOOR
23	2	21129-054	LYNCH PINS
24	2	21711-029	5/8 - 11 X 7 EYEBOLTS
24A	4	21731-070	5/8 - 11 GR 8 NUTS
25	2	24741-029	SPRINGS
26	2	22511-120	3/4 - 10 X 2 EYEBOLTS
26A	6	21161-047	3/4 HARDENED FLAT WASHERS
26B	2	21733-308	3/4 - 10 NYLOC NUTS
27	2	23918-629	2 7/16 FLANGE BEARINGS
27A	8	21625-355	5/8 - 11 X 2 GR 8 BOLTS
27B	8	21171-145	5/8 LOCK WASHERS

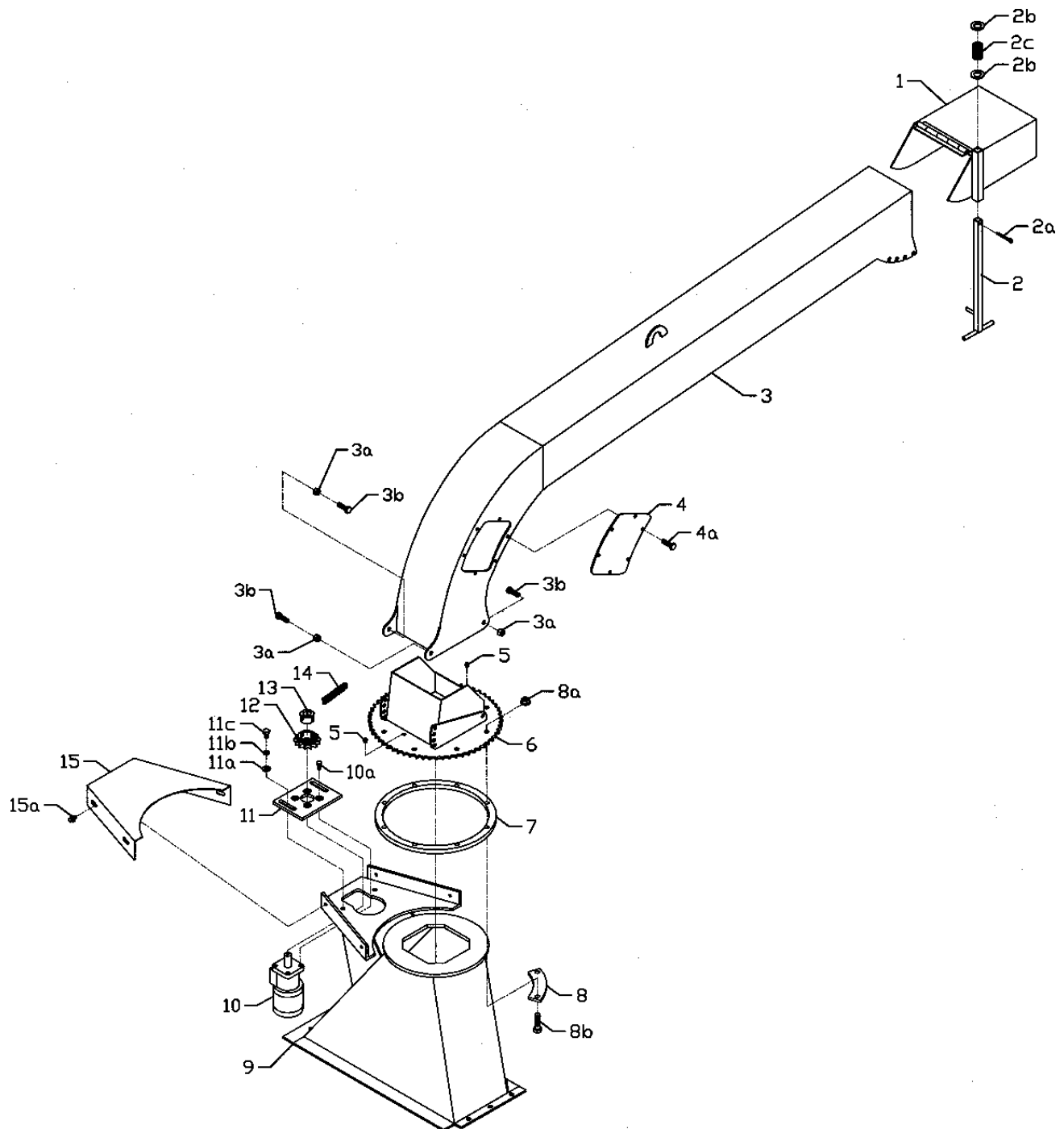
MAN DISCHARGE COMPONENTS



MAN DISCHARGE COMPONENTS

ITEM	QTY.	PART NO.	DESCRIPTION
1	1	40444-462	FLIPPER ASSY
2	1	40115-061	HANDLE ASSY
2A	1	21126-041	COTTER PIN
2B	2	21161-048	7/8 FLAT WASHERS
2C	1	26664-315	SPRING
3	1	40462-452	DISCHARGE ASSY
N.S.	1	40459-452	DISCHARGE ASSY W/O CLEANOUT
3A	4	21733-305	1/2 - 13 NYLOC NUTS
3B	4	21624-255	1/2 - 13 X 1 1/2 GR 8 BOLTS
4	1	31663-462	CLEAN OUT COVER (OPTIONAL)
4A	6	21620-103	3/8 - 16 X 3/4 BOLTS
5	3	26891-001	GREASE ZERKS
6	1	40461-452	SWIVEL/TILT ASSY
7	1	31056-462	SPACER RING
8	2	30759-452	CLAMP RINGS
8A	8	21733-409	1/2 - 13 STOVER NUTS
8B	8	21624-258	1/2 - 13 X 2 1/4 GR 8 BOLTS
9	1	40472-452	MANUAL CRANK ASSY
10	1	24251-025	H60 CHAIN
(NOTE THE ABOVE NUMBER IS FOR 10 FOOT OF CHAIN)			
N.S.	1	24251-027	H60 MASTER LINK
N.S.	1	24251-028	H60 HALF LINK
11	1	24717-273	PIN
12	1	24264-102	60B10 SPROCKET
12A	1	21133-151	PIN DOWEL
13	2	21731-068	1/2 - 13 GR 8 NUTS
14	1	40324-452	CRANK HANDLE ASSY
15	1	30595-452	COVER
15A	4	21620-103	3/8 - 16 X 3/4 BOLT/WASHERS

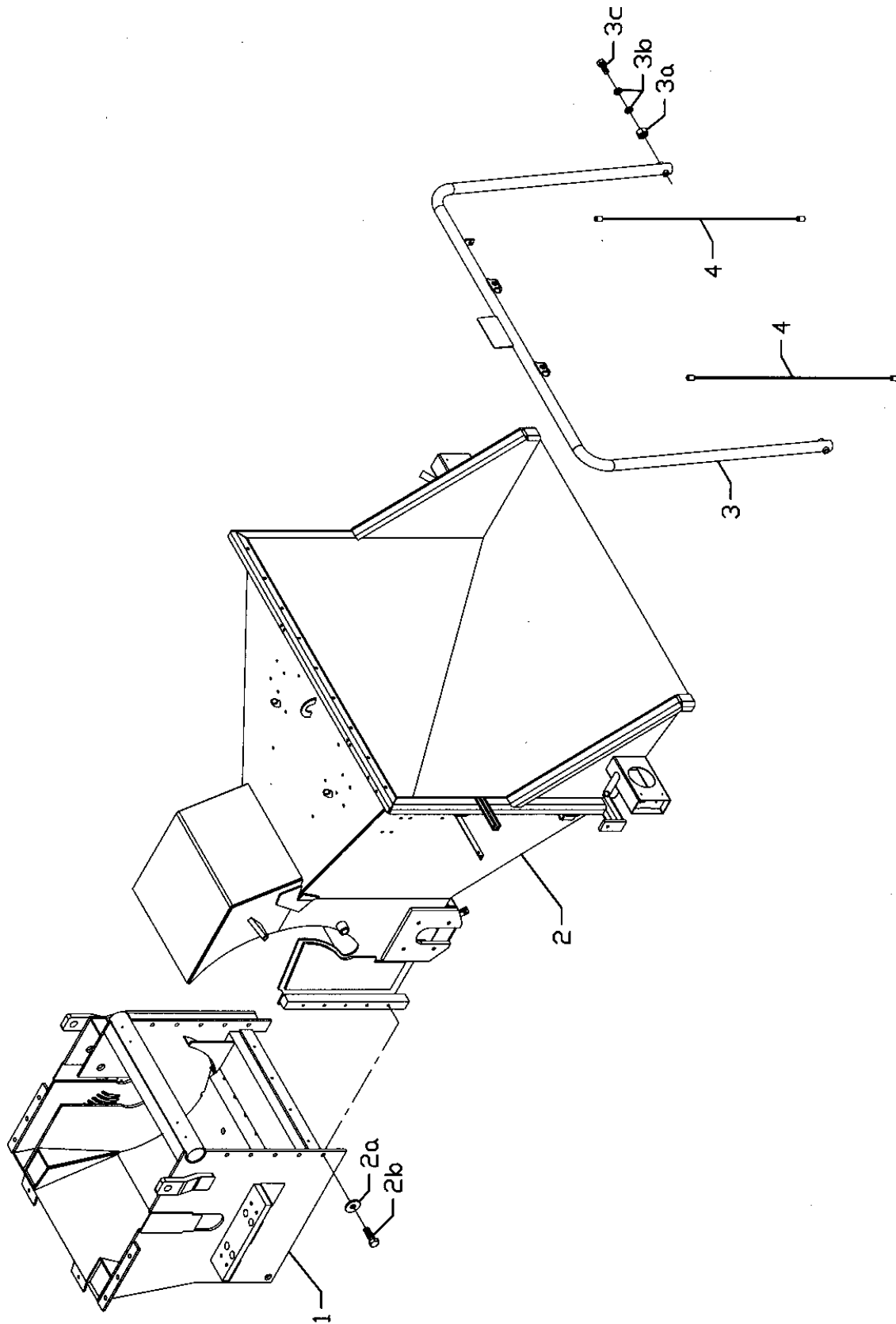
HYD DISCHARGE COMPONENTS



HYD DISCHARGE COMPONENTS

ITEM	QTY.	PART NO.	DESCRIPTION
1	1	40444-462	FLIPPER ASSY
2	1	40115-061	HANDLE ASSY
2A	1	21126-041	COTTER PIN
2B	2	21161-048	7/8 HARDENED FLAT WASHERS
2C	1	26664-315	SPRING
3	1	40735-462	DISCHARGE ASSY
N.S.	1	40443-462	DISCHARGE ASSY W/O CLEANOUT
3A	4	21733-305	1/2 - 13 NYLOC NUTS
3B	4	21624-255	1/2 - 13 X 1 1/2 GR 8 BOLTS
4	1	31663-462	CLEAN OUT COVER (OPTIONAL)
4A	6	21620-103	3/8 - 16 X 3/4 BOLTS
5	3	26891-001	GREASE ZERKS
6	1	40497-462	SWIVEL/TILT ASSY
7	1	31056-462	SPACER RING
8	4	31366-460	CLAMPS
8A	8	21733-409	1/2 - 13 STOVER NUTS
8B	8	21624-258	1/2 X 2 1/4 GR 8 BOLTS
9	8	40389-452	HYDRAULIC MOUNTING ASSY
10	1	26732-104	HYD MOTOR
10A	4	21624-105	3/8 - 16 X 1 GR 8 BOLTS
11	1	31388-462	MOTOR MOUNTING PLATE
11A	2	21161-044	1/2 HARDENED FLAT WASHERS
11B	2	21171-113	1/2 LOCK WASHERS
11C	2	21624-254	1/2 - 13 X 1 1/4 GR 8 BOLTS
12	1	24264-306	DRIVE SPROCKET
13	1	24131-143	DRIVE BUSHING
14	1	24251-025	H60 CHAIN
(NOTE THE ABOVE NUMBER IS FOR 10 FOOT OF CHAIN)			
N.S.	1	24251-027	H60 MASTER LINK
N.S.	1	24251-028	H60 HALF LINK
15	1	31390-462	COVER
15A	4	21620-103	3/8 - 16 X 3/4 BOLT/WASHERS

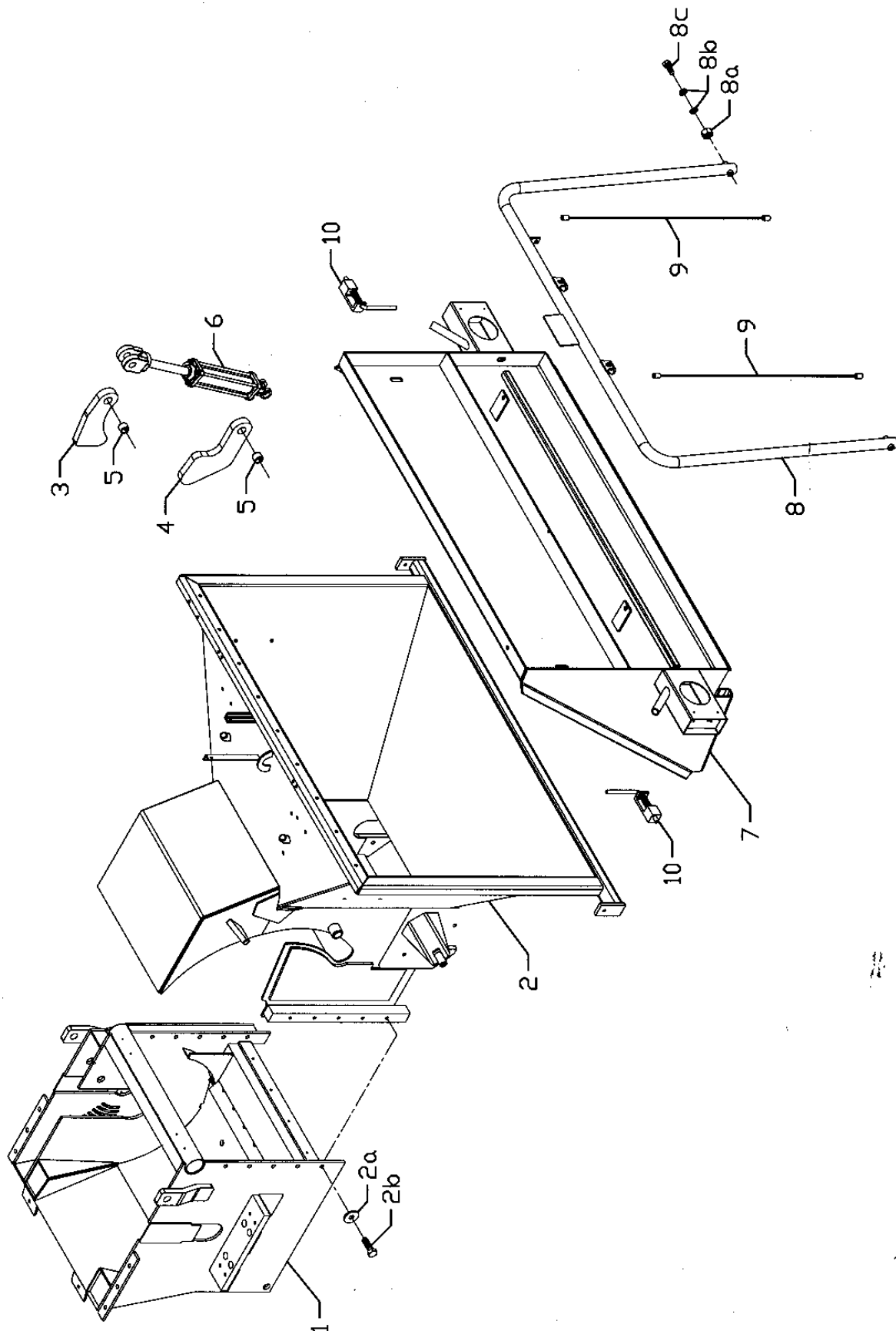
INFEED COMPONENTS



INFEED COMPONENTS

ITEM	QTY.	PART NO.	DESCRIPTION
1	1	40469-452	BASE
2	1	40453-452	INFEED
2A	10	21171-113	1/2 LOCKWASHERS
2B	10	21624-254	1/2 - 13 X 1 1/4 GR 8 BOLTS
3	1	40457-452	INFEED BAR
	1	40486-452	OBM INFEED BAR
3A	2	21733-305	1/2 - 13 NYLOC NUTS
3B	4	21161-044	1/2 HARDENED FLAT WASHERS
3C	2	21624-263	1/2 - 13 X 3 1/2 GR 8 BOLTS
4	2	24714-308	SAFETY CABLES
N.S.	1	40456-452	FRAME ASSY
N.S.	2	24717-270	LATCH PINS
N.S.	1	30460-452	RUBBER INFEED CURTAIN

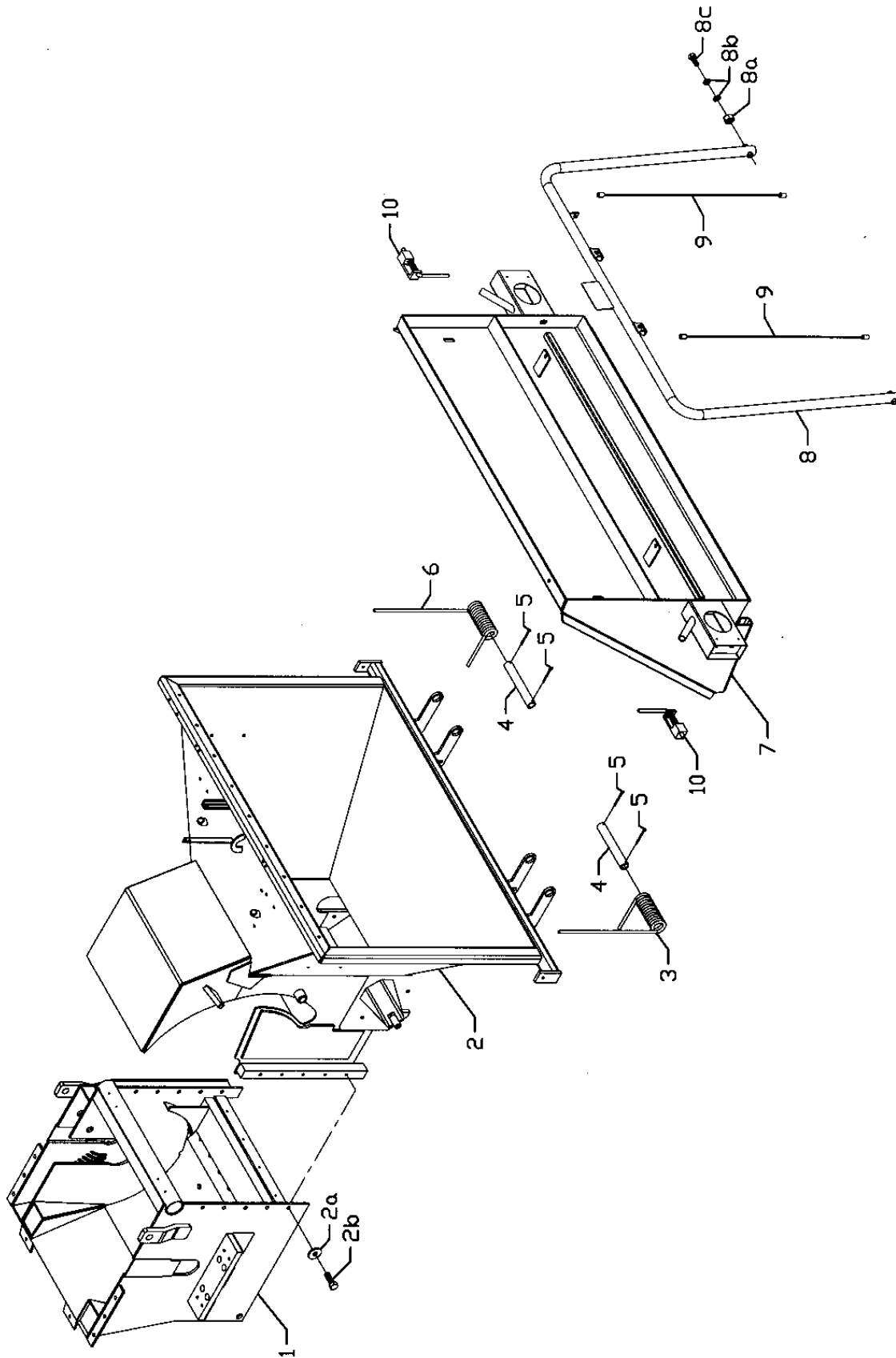
HYDRAULIC FOLDING INFEED COMPONENTS



HYDRAULIC FOLDING INFEED COMPONENTS

ITEM	QTY	PART NO	DESCRIPTION
1	1	40217-452	BASE ASSY
2	1	40454-452	INFEED ASSY
2A	10	21161-044	1/2 HARDENED FLAT WASHERS
2B	10	21624-256	1/2 - 13 X 1 3/4 GR 8 BOLTS
3	1	30779-452	INFEED TRAY LUG
4	1	30780-452	INFEED LUG
5	2	23128-005	BUSHINGS
6	1	26816-814	2008 HYDRAULIC CYLINDER
7	1	40455-452	FOLDING INFEED TRAY
	1	40492-452	FOLDING TRAY W/LIGHT (OPTIONAL)
8	1	40457-452	CONTROL BAR
8A	2	21733-305	1/2 - 13 NYLOC NUTS
8B	4	21161-044	1/2 HARDENED FLAT WASHERS
8C	2	21624-263	1/2 - 13 X 3 1/2 GR 8 BOLTS
9	2	24714-308	SAFETY CABLES
10	2	24717-270	LATCH PINS

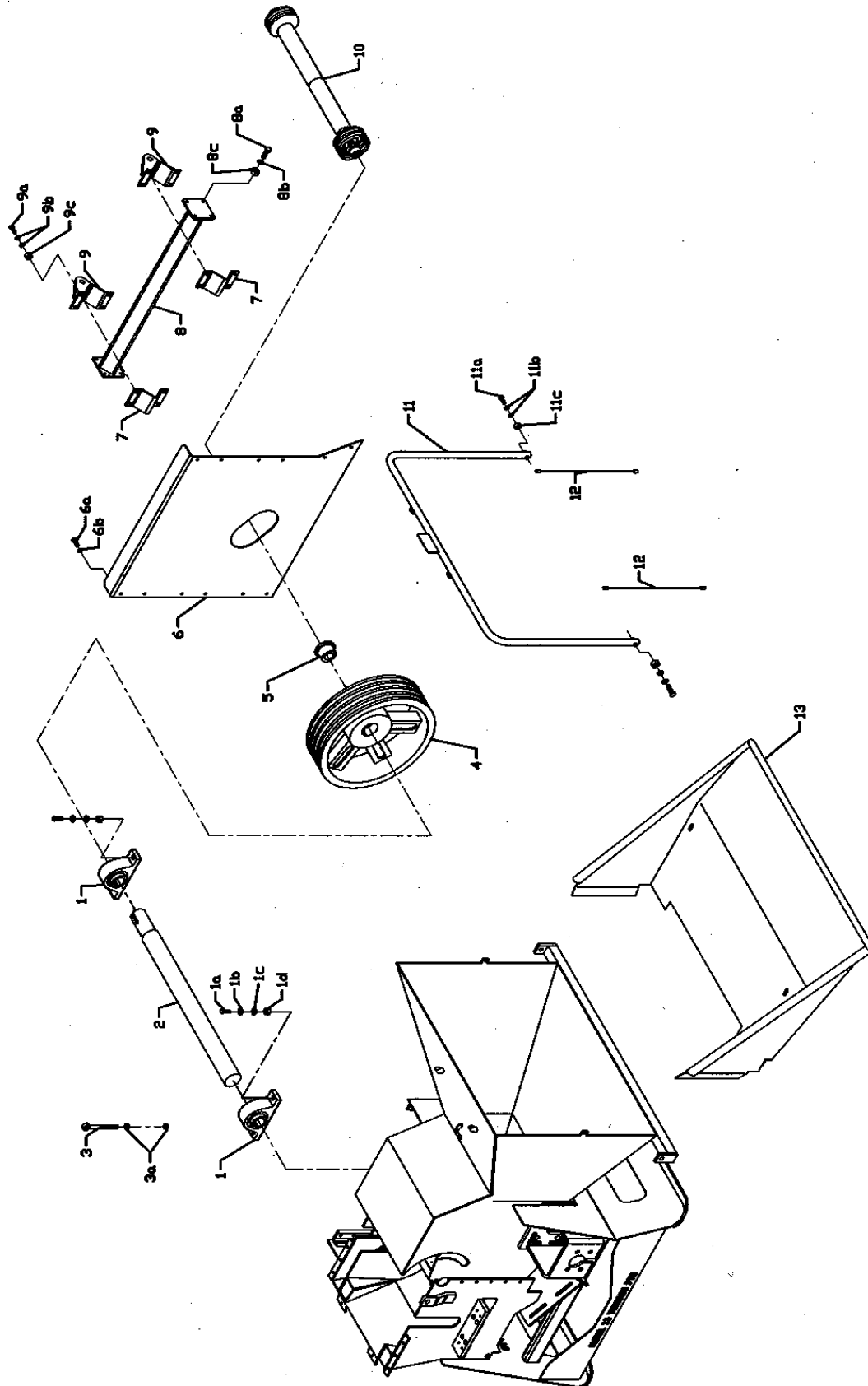
SPRING ASSIST INFEED COMPONENTS



SPRING ASSIST INFEED COMPONENTS

ITEM	QTY	PART NO	DESCRIPTION
1	1	40217-452	BASE ASSY
2	1	40454-452	INFEED ASSY
2A	10	21161-044	1/2 HARDENED FLAT WASHERS
2B	10	21624-256	1/2 - 13 X 1 3/4 GR 8 BOLTS
3	1	39299-108	LEFT SPRING
4	2	30723-452	ROLLERS
5	4	21126-042	PINS
6	1	39299-107	RIGHT SPRING
7	1	40455-452	FOLDING INFEED TRAY
	1	40492-452	FOLDING TRAY W/LIGHT (OPTIONAL)
8	1	40457-452	CONTROL BAR
8A	2	21733-305	1/2 - 13 NYLOC NUTS
8B	4	21161-044	1/2 HARDENED FLAT WASHERS
8C	2	21624-263	1/2 - 13 X 3 1/2 GR 8 BOLTS
9	2	24714-308	SAFETY CABLES
10	2	24717-270	LATCH PINS

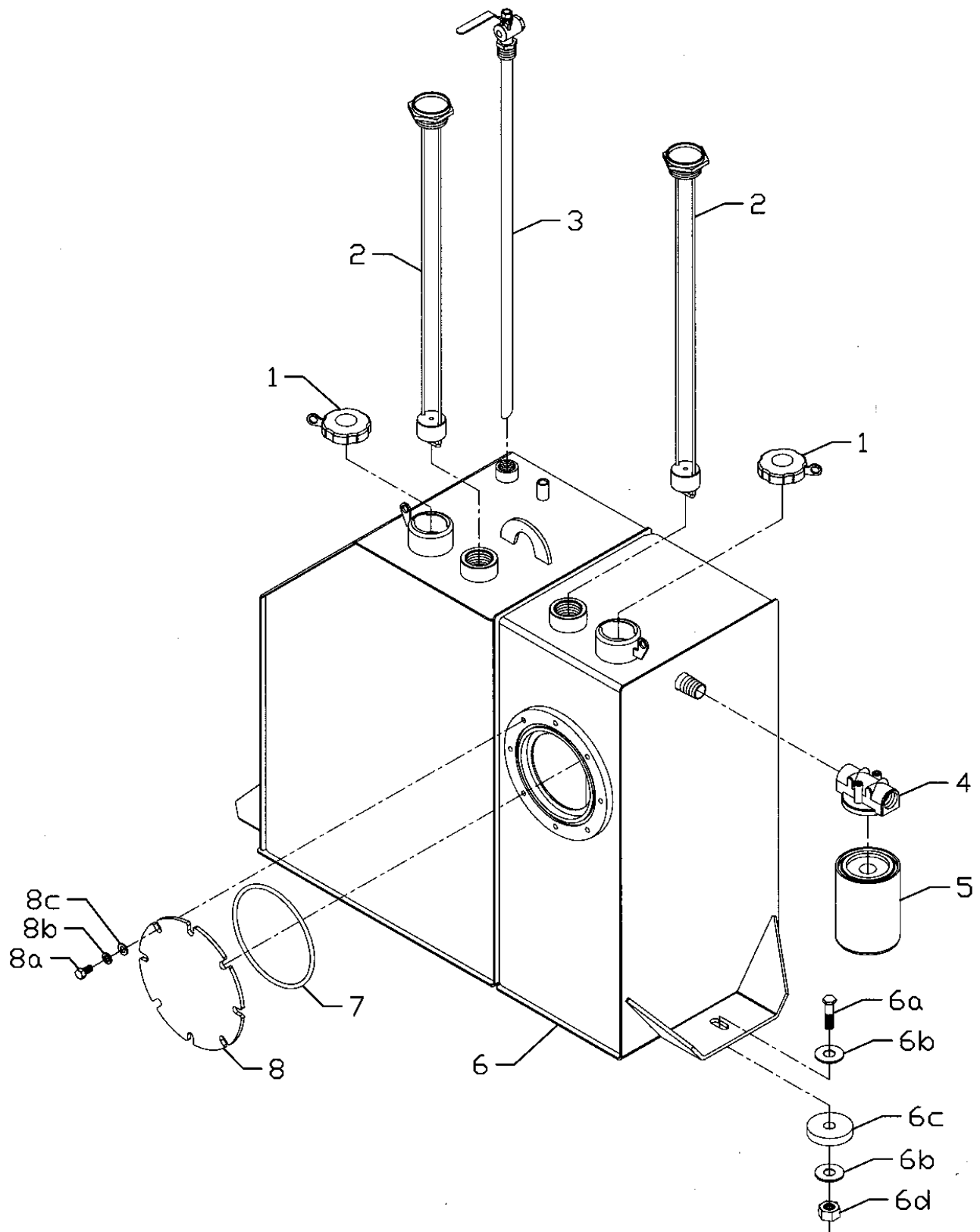
PTO INFEED COMPONENTS



PTO INFEED COMPONENTS

ITEM	QTY	PART NO	DESCRIPTION
1	2	23944-857	BEARINGS
1A	2	21624-361	5/8 - 11 X 3 1/2 GR 8 BOLTS
1B	2	21161-046	5/8 HARDENED FLAT WASHERS
1C	2	21171-115	5/8 LOCK WASHERS
1D	2	21731-070	5/8 - 11 GR 8 NUTS
2	1	30688-452	DRIVE SHAFT
3	1	21711-202	5/8 - 11 EYEBOLT
3A	2	21731-070	5/8 - 11 GR 8 NUTS
4	1	24217-673	5/5V21.2 SHEAVE
5	1	24133-630	F 2 7/16 BUSHING
6	1	40422-452	PTO 3-PT MOUNT
6A	4	21624-253	1/2 - 13 X 1 GR 8 BOLTS
6B	4	21731-113	1/2 LOCK WASHERS
7	2	30298-455	REAR PIVOT BAR MOUNTS
8	1	40423-452	PIVOT BAR
8A	8	21624-257	1/2 - 13 X 2 GR 8 BOLTS
8B	16	21161-044	1/2 HARDENED FLAT WASHERS
8C	8	21733-305	1/2 - 13 NYLOC NUTS
9	2	40236-455	FRONT PIVOT BAR MOUNTS
9A	8	21624-257	1/2 - 13 X 2 GR 8 BOLTS
9B	16	21161-044	1/2 HARDENED FLAT WASHERS
9C	8	21731-113	1/2 LOCK WASHERS
10	1	24112-705	DRIVE SHAFT
11	1	40159-452	CONTROL BAR
11A	2	21624-259	1/2 - 13 X 2 1/2 GR 8 BOLTS
11B	4	21161-044	1/2 HARDENED FLAT WASHERS
11C	2	21733-305	1/2 - 13 NYLOC NUTS
12	2	24714-308	SAFETY CABLES
13	1	40172-452	INFEED
N.S.	1	40421-452	SKID FRAME
N.S.	1	40465-452	COMPLETE INFEED ASSY
N.S.	1	40210-452	BOTTOM CLEAN OUT DOOR
N.S.	2	24717-270	LATCH PINS
N.S.	2	31030-462	PINS

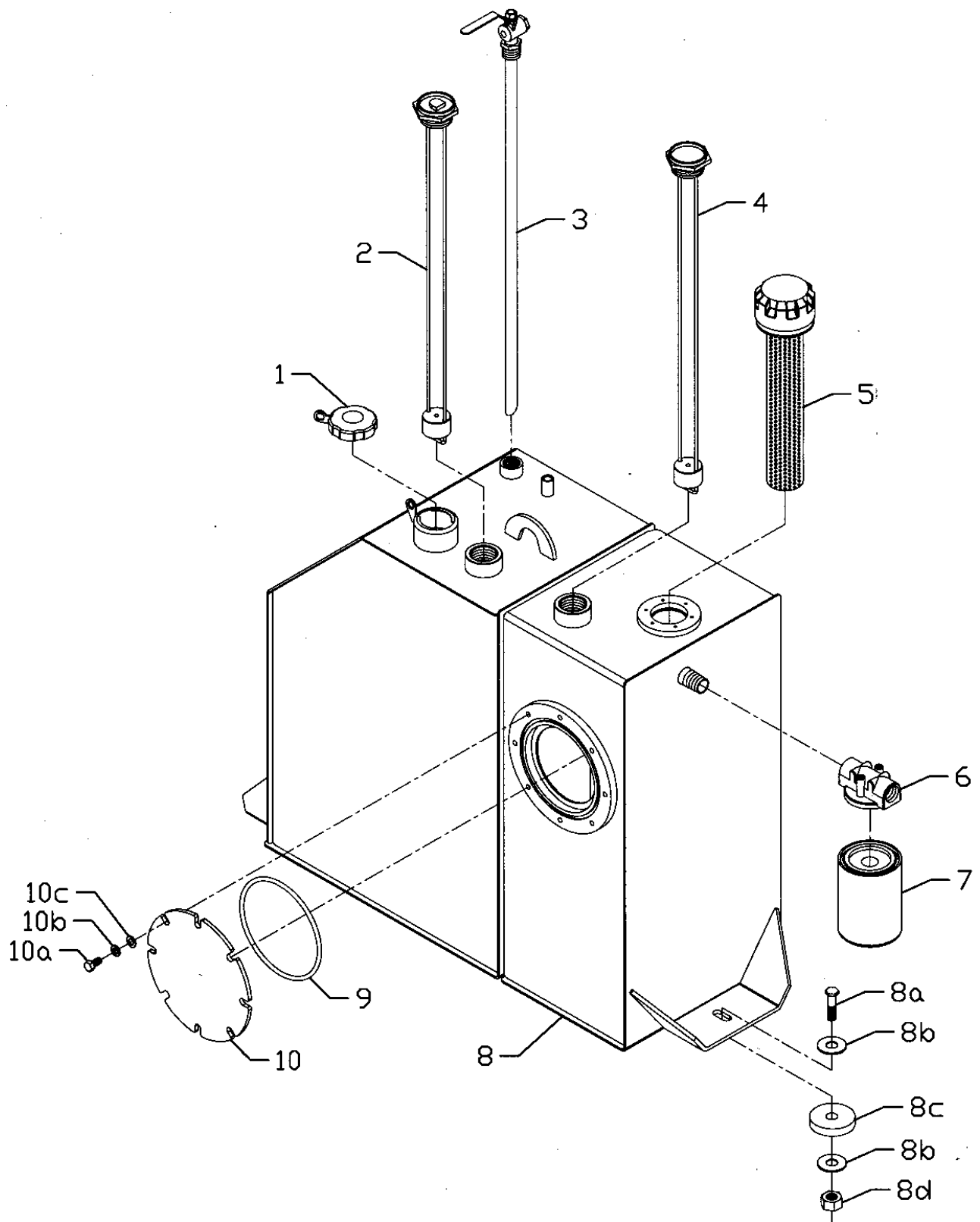
HYD/FUEL TANK COMPONENTS



HYD/FUEL TANK COMPONENTS

ITEM	QTY	PART NO	DESCRIPTION
1	2	26849-150	FILLER CAPS
2	2	26849-041	SIGHT GAUGES
3	1	40236-061	FUEL DRAW TUBE ASSEMBLY
4	1	26838-061	HYD FILTER HEAD
5	1	26838-071	HYD FILTER
6	1	40501-452	FUEL/HYD TANK
6A	3	21624-255	1/2 - 13 X 1 1/2 GR 8 BOLTS
6B	6	21161-364	1/2 FLAT WASHERS
6C	3	24721-635	RUBBER GROMMETS
6D	3	21733-305	1/2 - 13 NYLOC NUTS
7	1	25152-362	SEAL
8	1	30539-452	INSPECTION COVER
8A	8	21624-103	3/8 - 16 X 3/4 GR 8 BOLT
8B	8	21171-140	3/8 LOCK WASHER
8C	8	21161-042	CRUSH WASHER
N.S.	1	26849-125	MAGNETIC DRAIN PLUG

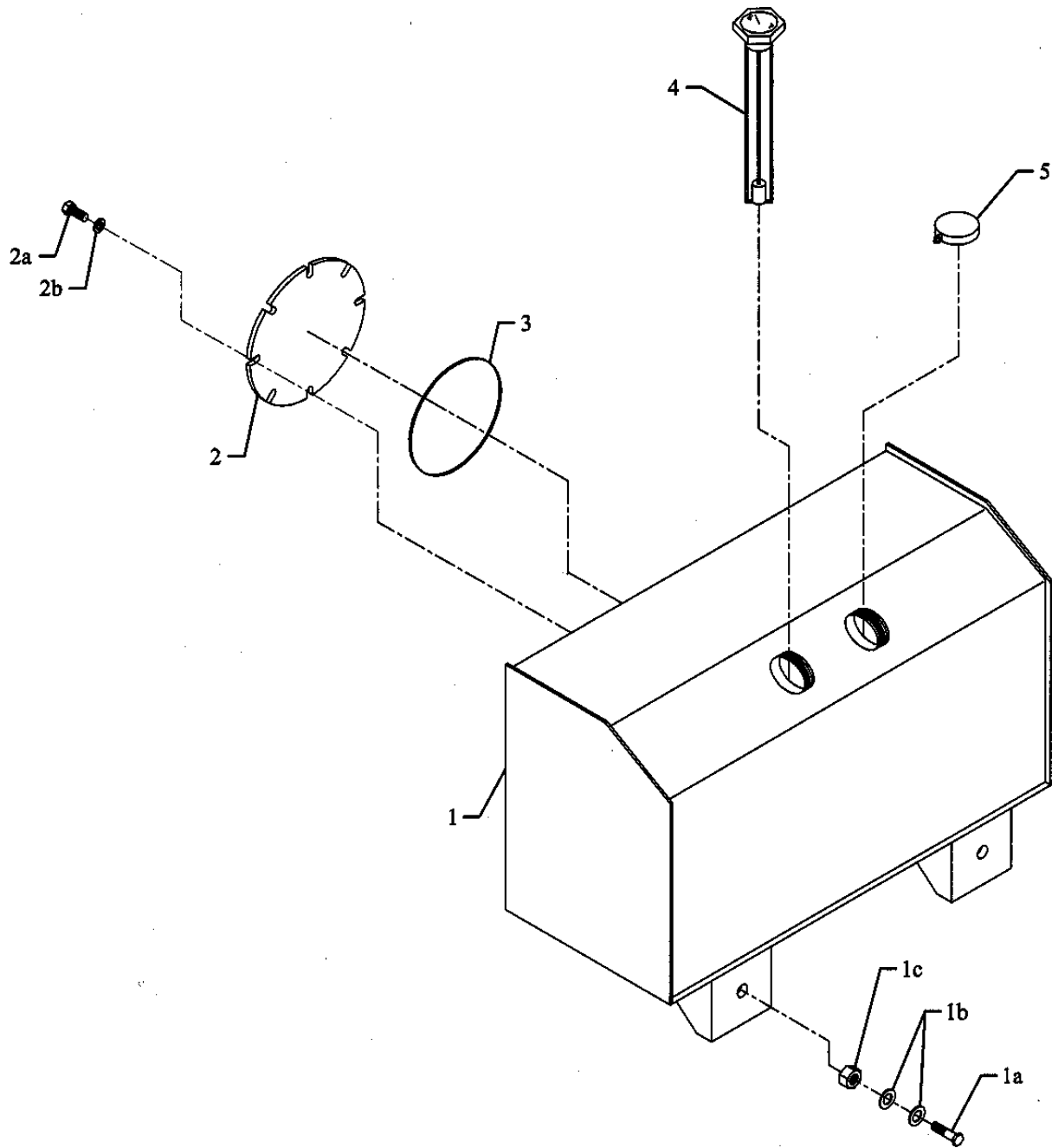
HYD/FUEL TANK COMPONENTS (CALIFORNIA)



HYD/FUEL TANK COMPONENTS

ITEM	QTY	PART NO	DESCRIPTION
1	1	26849-150	FILLER CAPS
2	1	26849-046	SIGHT GAUGE
3	1	40236-061	FUEL DRAW TUBE ASSEMBLY
4	1	26849-041	SIGHT GAUGE
5	1	26849-106	BREATHER CAP
6	1	26838-061	HYD FILTER HEAD
7	1	26838-071	HYD FILTER
8	1	40499-452	FUEL/HYD TANK
8A	3	21624-255	1/2 - 13 X 1 1/2 GR 8 BOLTS
8B	6	21161-364	1/2 FLAT WASHERS
8C	3	24721-635	RUBBER GROMMETS
8D	3	21733-305	1/2 - 13 NYLOC NUTS
9	1	25152-362	SEAL
10	1	30539-452	INSPECTION COVER
10A	8	21624-103	3/8 - 16 X 3/4 GR 8 BOLT
10B	8	21171-140	3/8 LOCK WASHER
10C	8	21161-042	CRUSH WASHER
N.S.	1	26849-125	MAGNETIC DRAIN PLUG

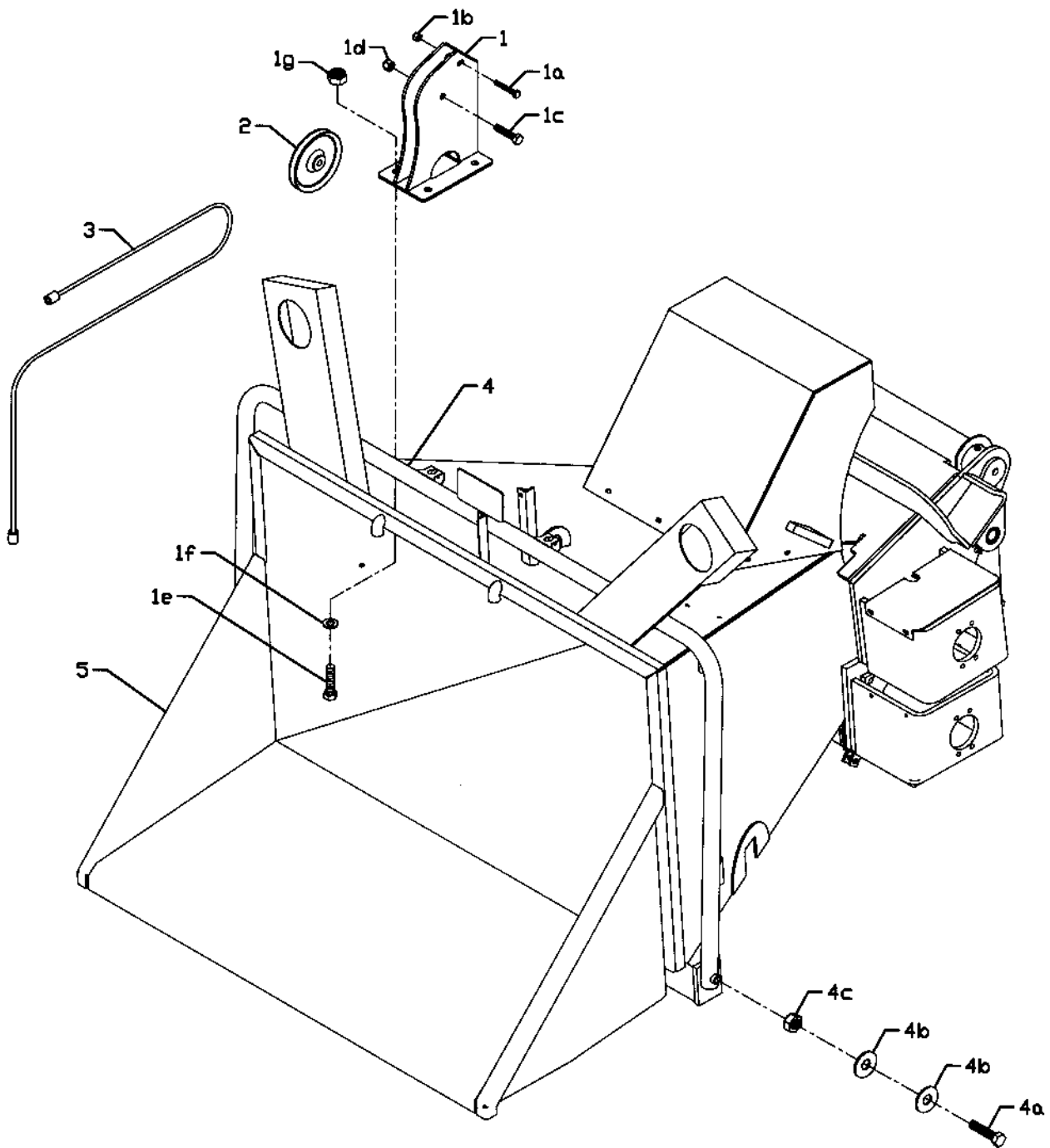
PTO TANK COMPONENTS



PTO TANK COMPONENTS

ITEM	QTY	PART NO	DESCRIPTION
1	1	40301-452	HYD TANK
1A	2	21624-257	1/2 - 13 X 2 GR 8 BOLTS
1B	4	21161-313	1/2 FLAT WASHERS
1C	2	21733-305	1/2 - 13 NYLOC NUTS
2	1	30539-452	CLEAN OUT COVER
2A	8	21624-103	3/8 - 16 X 3/4 GR 8 BOLTS
2B	8	21171-111	3/8 LOCK WASHERS
3	1	25152-362	GASKET
4	1	26849-042	FUEL GAUGE
5	1	26849-150	CAP
NS	1	26838-071	HYDRAULIC FILTER
NS	1	26838-061	HYDRAULIC FILTER HEAD
NS	1	26726-503	HYDRAULIC PUMP
NS	1	26671-506	HYDRAULIC VALVE

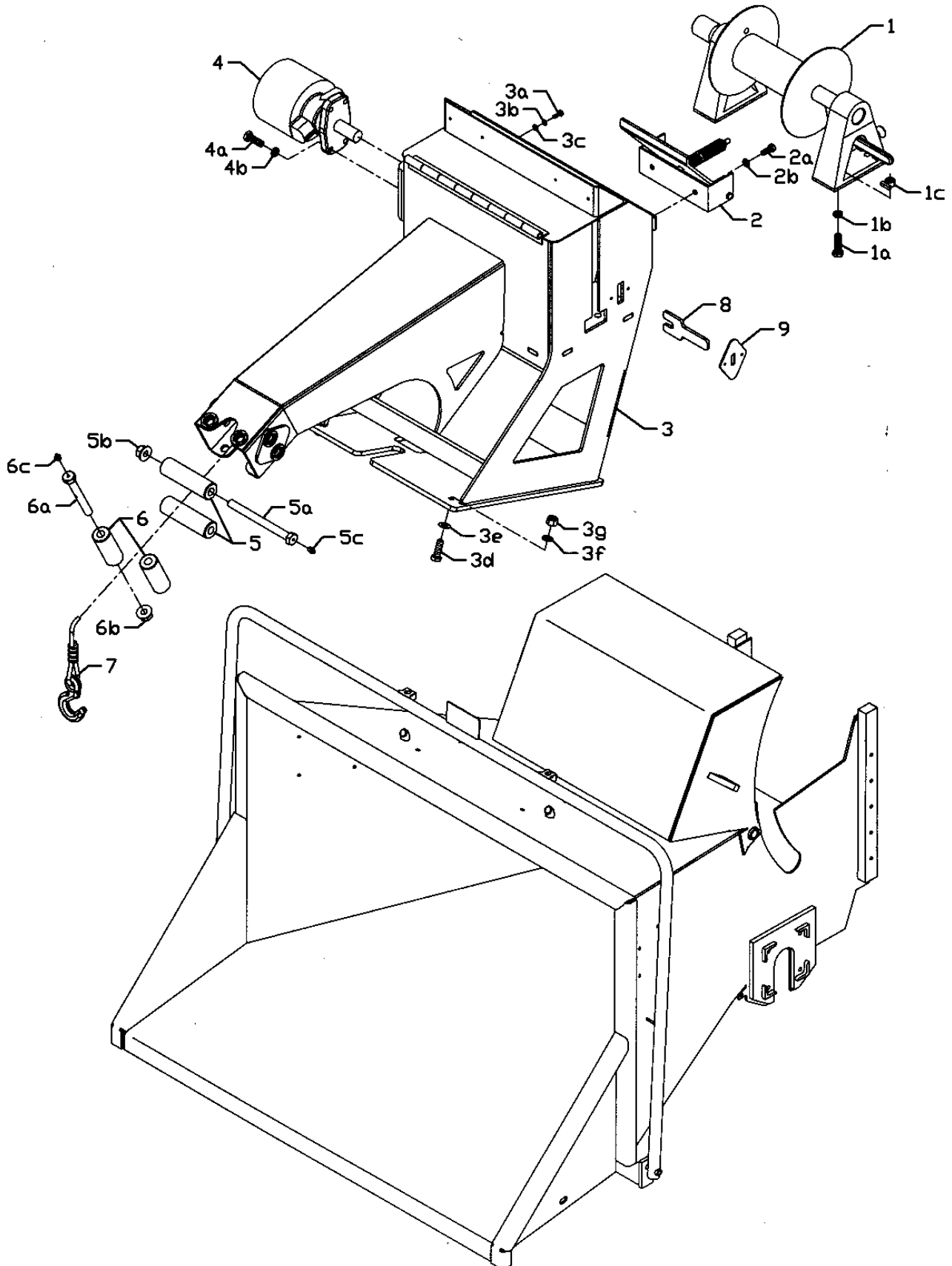
PULLEY SAFETY SYSTEM



PULLEY SAFETY SYSTEM

ITEM	QTY	PART NO	DESCRIPTION
1	1	40137-452	SAFETY CABLE BOX ASSY
1A	1	21624-008	1/4 - 20 X 1 3/4 GR 8 BOLT
1B	1	21733-301	1/4 - 20 NYLOC NUT
1C	1	21624-109	3/8 - 16 X 2 GR 8 BOLT
1D	1	21733-303	3/8 - 16 NYLOC NUT
1E	4	21624-107	3/8 - 16 X 1 1/2 GR 8 BOLTS
1F	4	21161-042	3/8 HARDENED FLAT WASHERS
1G	4	21733-303	3/8 - 16 NYLOC NUTS
2	1	24714-456	PULLEY
3	1	24714-313	CABLE
4	1	40412-452	CONTROL HANDLE
4A	2	21646-265	1/2 - 13 X 3 1/2 STAINLESS STEEL BOLTS
4B	4	21167-020	STAINLESS STEEL WASHERS
N.S.	2	23126-615	BUSHINGS
5	1	40455-452	FOLDING TRAY

WINCH COMPONENTS



WINCH COMPONENTS

ITEM	QTY	PART NO	DESCRIPTION
		40449-452	COMPLETE WINCH
1	1	24714-110	WINCH
4A	4	21624-256	1/2 - 13 X 1 3/4 GR 8 BOLTS
4B	4	21171-143	1/2 LOCK WASHERS
4C	4	40399-452	1/2 STOP NUT ASSEMBLIES
2	1	40503-452	TENSIONER PLATE
2A	2	21624-105	3/8 - 16 X 1 GR 8 BOLTS
2B	2	21171-140	3/8 LOCK WASHERS
3	1	40448-452	WINCH MOUNT
3A	2	21624-003	1/4 - 20 X 3/4 GR 8 BOLTS
3B	2	21171-137	1/4 LOCK WASHERS
3C	2	21161-007	1/4 HARDENED FLAT WASHERS
3D	6	21624-255	1/2 - 13 X 1 1/2 GR 8 BOLTS
3E	6	21161-044	1/2 HARDENED FLAT WASHERS
3F	6	21171-143	1/2 LOCK WASHERS
3G	6	21731-068	1/2 - 13 GR 8 NUTS
4	1	26737-207	22.9 CU. IN MOTOR
4A	4	21624-255	1/2 - 13 X 1 1/2 GR 8 BOLTS
4B	4	21171-143	1/2 LOCK WASHERS
5	2	30653-452	ROLLERS
5A	2	31312-901	REWORKED 5/8 - 11 X 7 GR 5 BOLTS
5B	2	21733-410	5/8 - 11 STOVER NUTS
5C	2	26891-001	GREASE ZERTS
6	2	31482-462	ROLLERS
6A	2	31311-901	REWORKED 5/8 - 11 X 5 GR 5 BOLTS
6B	2	21733-410	5/8 - 11 STOVER NUTS
6C	2	26891-001	GREASE ZERTS
7	75'	24714-311	5/16 WIRE ROPE
8	1	30803-452	WINCH LEVER RELEASE
9	1	30804-452	WINCH RELEASE COVER
N.S.		24714-501	WORM GEARS

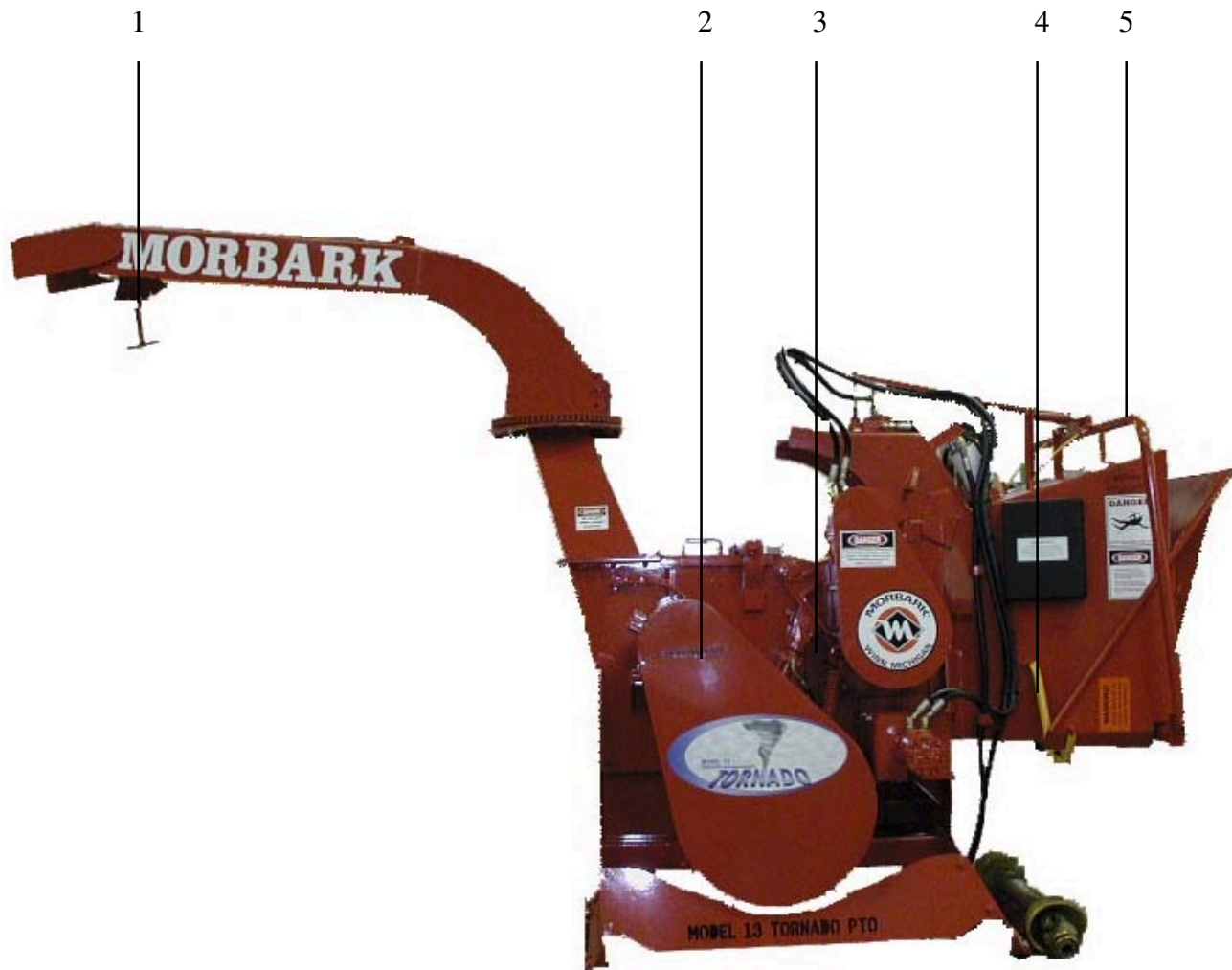
MISC. COMPONENTS



MISC. COMPONENTS

ITEM	QTY.	PART NO.	DESCRIPTION
1	1	40363-452	YOKE LOCKING PIN
2	2	29312-497	TIRE & RIMS
3	1	40436-452	RIGHT SIDE FENDER
N.S.	1	40437-452	LEFT SIDE FENDER
N.S.	1	40321-452	RIGHT DIAMOND PLATE FENDER
N.S.	1	40322-452	LEFT DIAMOND PLATE FENDER
4	1	40546-460	LOCKABLE BATTERY BOX
N.S.	1	29315-007	BATTERY BOX (PLASTIC)
5	1	29315-021	BATTERY (800 CCA)
	1	29315-020	BATTERY (1000 CCA)
N.S.	1	29315-009	BATTERY HOLD DOWN STRAP
6	1	29341-838	5,000 LB JACK
N.S.	1	29341-869	10,000 LB JACK (OPTIONAL)
7	1	29311-608	LUNET RING
N.S.	1	40208-460	2" BALL HITCH
N.S.	1	40636-462	2 5/16" BALL HITCH
N.S.	1	40490-452	RADIATOR GUARD (TIER 2 ENGINES)
N.S.	1	40485-452	TELESCOPING TONGUE
N.S.	1	40349-061	SHORT TELESCOPING TONGUE
N.S.	1	40930-462	TELESCOPING TONGUE W/HITCH PLATE
N.S.	1	40294-452	TELESCOPING SWING TONGUE
N.S.	1	40274-452	HYDRAULIC SWING TONGUE FRAME
N.S.	1	40292-452	SWING TONGUE PIVOT PIN ASSY
N.S.		30525-452	SWING TONGUE DURALITE PLATE
N.S.	1	29315-501	POSITIVE BATTERY CABLE
N.S.	1	29315-502	NEGATIVE BATTERY CABLE
N.S.	1	31168-462	LINKAGE ARM
N.S.	1	30592-452	LINKAGE ARM (OPTIONAL)
N.S.	1	30593-452	VALVE LINKAGE (OPTIONAL)
N.S.		40296-452	HD TAIL LIGHT HOUSING
N.S.	A/R	31549-462	LIGHT GUARDS
N.S.		52130-118	FENDER MOUNT TOOL BOX
N.S.	1	52130-128	DIAMOND PLATE TOOL BOX
N.S.		40458-462	EXTENDED GREASE LINE
N.S.		39234-208	PLASTIC PAPER HOLDER
N.S.		29313-515	28' SAFETY CHAIN
N.S.	1	59501-003	FIRE EXTINGUISHER (OPTIONAL)
N.S.	1	59501-014	FIRE EXTINGUISHER MOUNT (OPTIONAL)
N.S.	1	30460-452	RUBBER INFEED CURTAIN
N.S.	1	40268-901	BREAKAWAY SWITCH
N.S.	1	29310-546	AXLE

MISC. PTO COMPONENTS



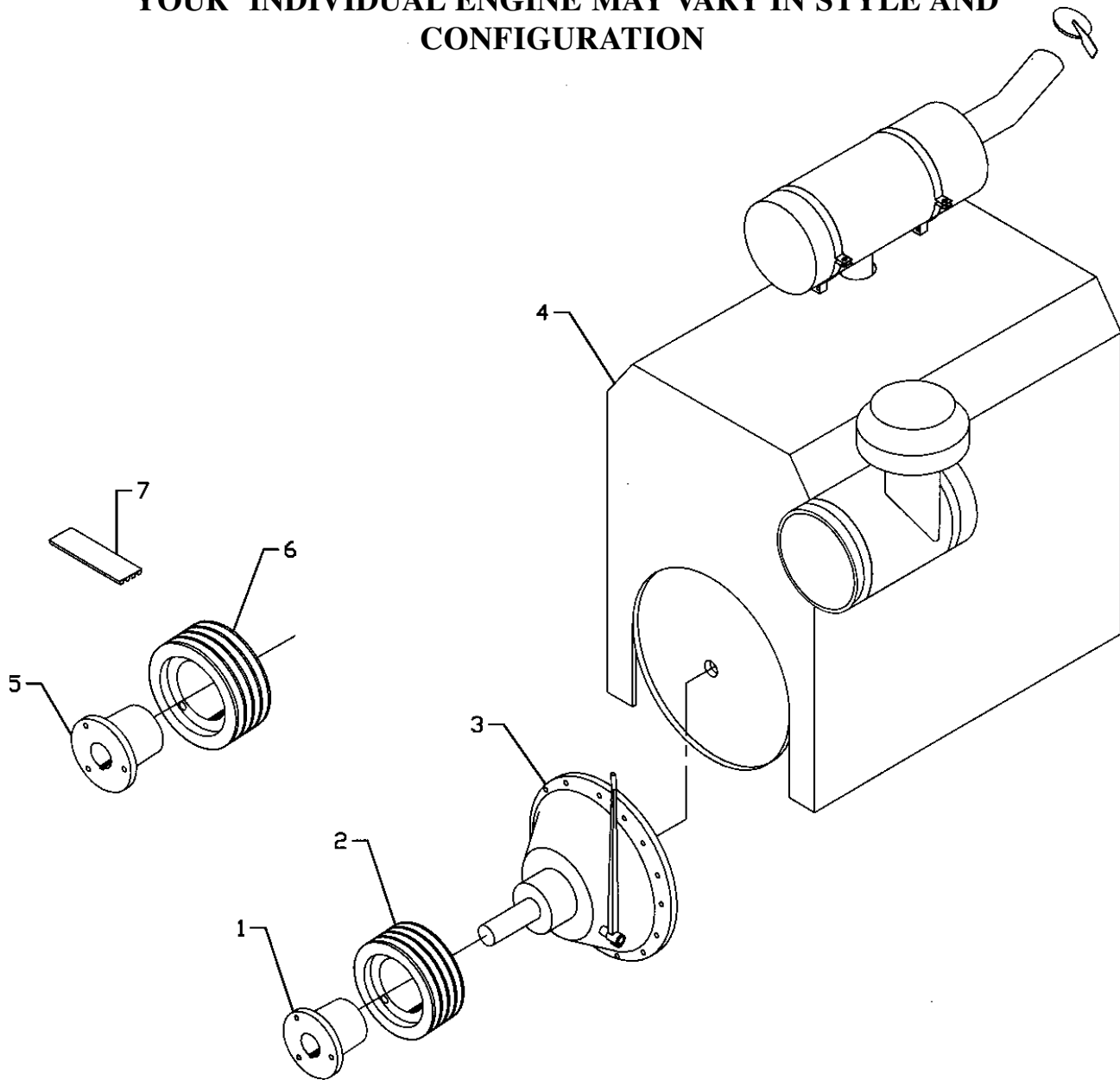
MISC. PTO COMPONENTS

ITEM	QTY.	PART NO.	DESCRIPTION
1	1	40444-462	FLIPPER HANDLE ASSY
2	1	40425-452	DRUM GUARD
NS	1	40182-452	FEED WHEEL GUARD
NS	1	40363-452	YOKE LOCKING PIN
3	2	26816-812	FEED WHEEL CYLINDERS
4	2	31817-901	FOLDING TRAY CHAIN
5	1	40159-452	CONTROL HANDLE
NS	1	40300-452	PUMP SHIELD

ENG COMPONENTS

NOTE: THE ENGINE DISPLAYED IN THIS BOOK IS FOR DISPLAY PURPOSES ONLY.

YOUR INDIVIDUAL ENGINE MAY VARY IN STYLE AND CONFIGURATION

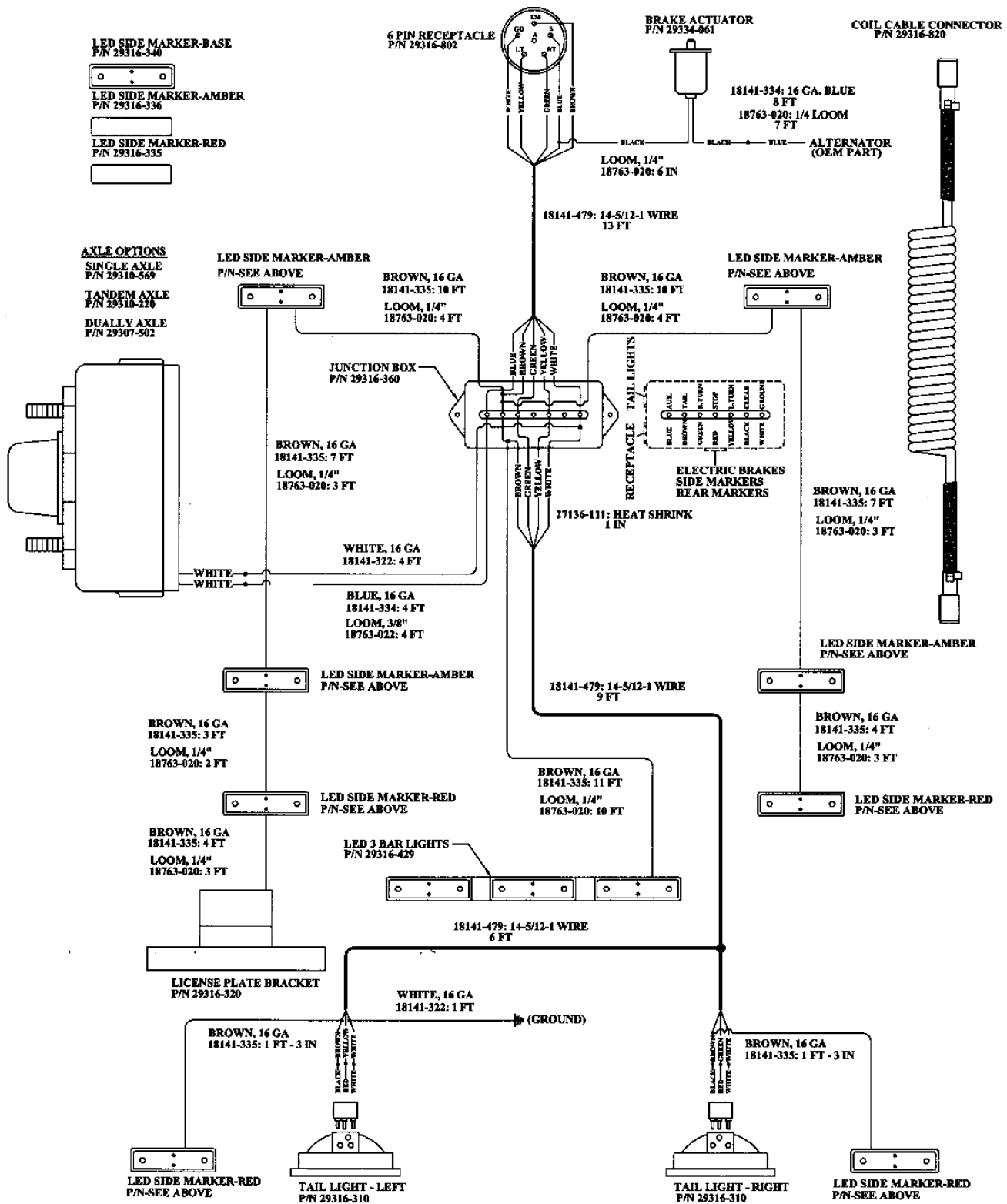


ITEM	QTY	PART NO	DESCRIPTION
1	1	SEENEXTPAGE	DRIVEBUSHING
2	1	SEENEXTPAGE	DRIVESHEAVE
3	1	SEENEXTPAGE	CLUTCH
4	1	SEENEXTPAGE	ENGINE
5	1	SEENEXTPAGE	DRIVENBUSHING
6	1	SEENEXTPAGE	DRIVENSHEAVE
7	1	SEENEXTPAGE	DRIVEBELTS

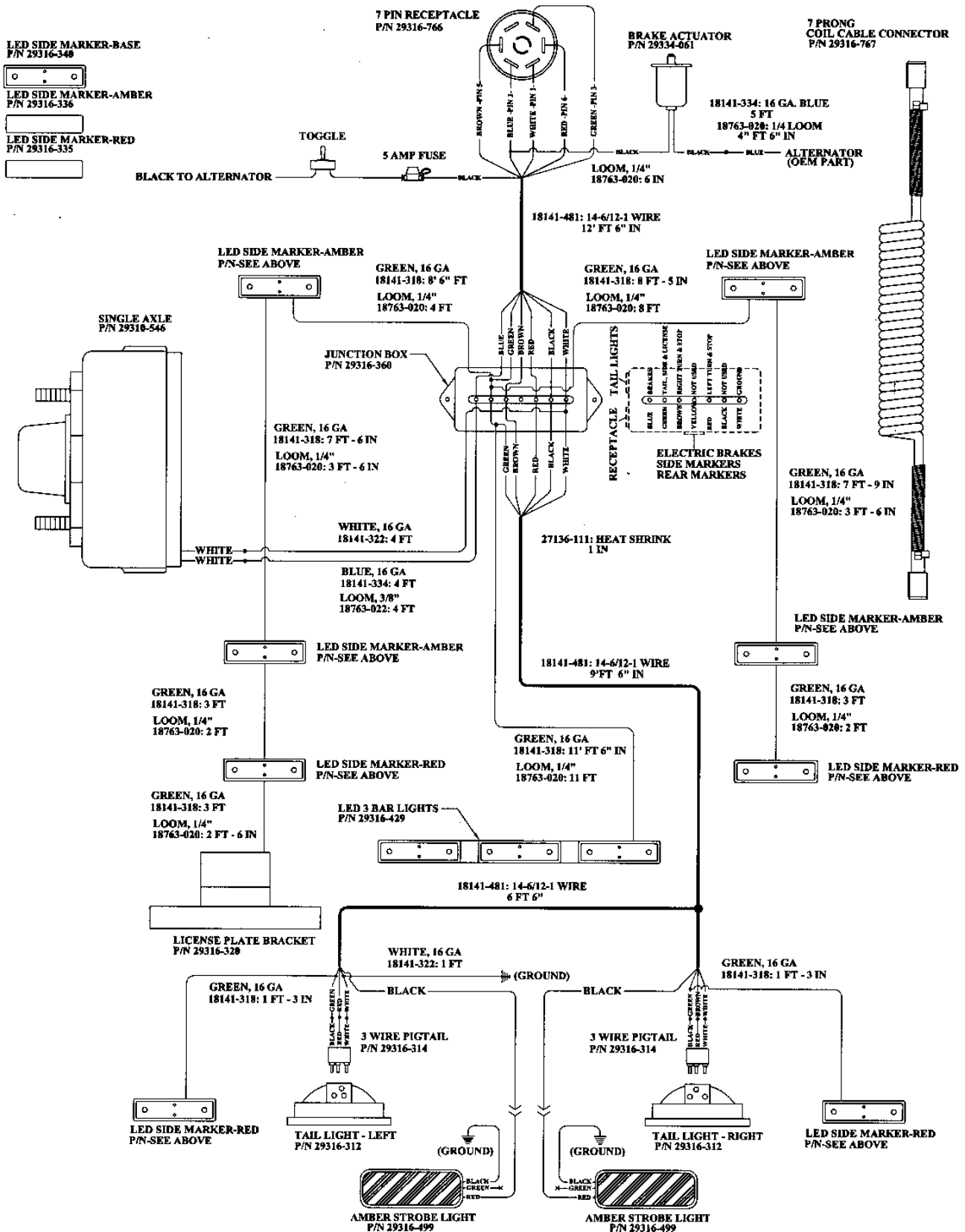
ENG DRIVE COMPONENTS

MODEL 13	ENGINE NUMBER	ENGINE BELT	DRIVE SHEAVE	DRIVE BUSHING	DRIVEN SHEAVE	DRIVEN BUSHING
T2 CAT 130 HP	29247-452	24181-659	24217-668	24133-592	24217-679	24133-591
T2 CAT 115 HP	29247-451	24181-659	24217-667	24133-587	24217-669	24133-591
T2 CAT 140 HP	29247-463	24181-659	24217-668	24133-592	24217-679	24133-591
T2 CUM 110 HP	29217-188	24181-659	24217-668	24133-587	24217-669	24133-591
T2 CUM 125 HP	29217-189	24181-659	24217-668	24133-587	24217-669	24133-591
T2 JD 115 HP	29228-555	24181-659	24217-668	24133-587	24217-669	24133-591
T2 JD 125 HP	29228-554	24181-659	24217-667	24133-592	24217-669	24133-591
T2 JD 140 HP	29228-513	24181-659	24217-667	24133-592	24217-669	24133-591
T2 PER 115 HP	29233-524	24181-659	24217-667	24133-587	24217-669	24133-591
T2 PER 130 HP	29233-525	24181-659	24217-668	24133-592	24217-679	24133-591
T2 PER 140 HP	29233-528	24181-659	24217-668	24133-592	24217-679	24133-591

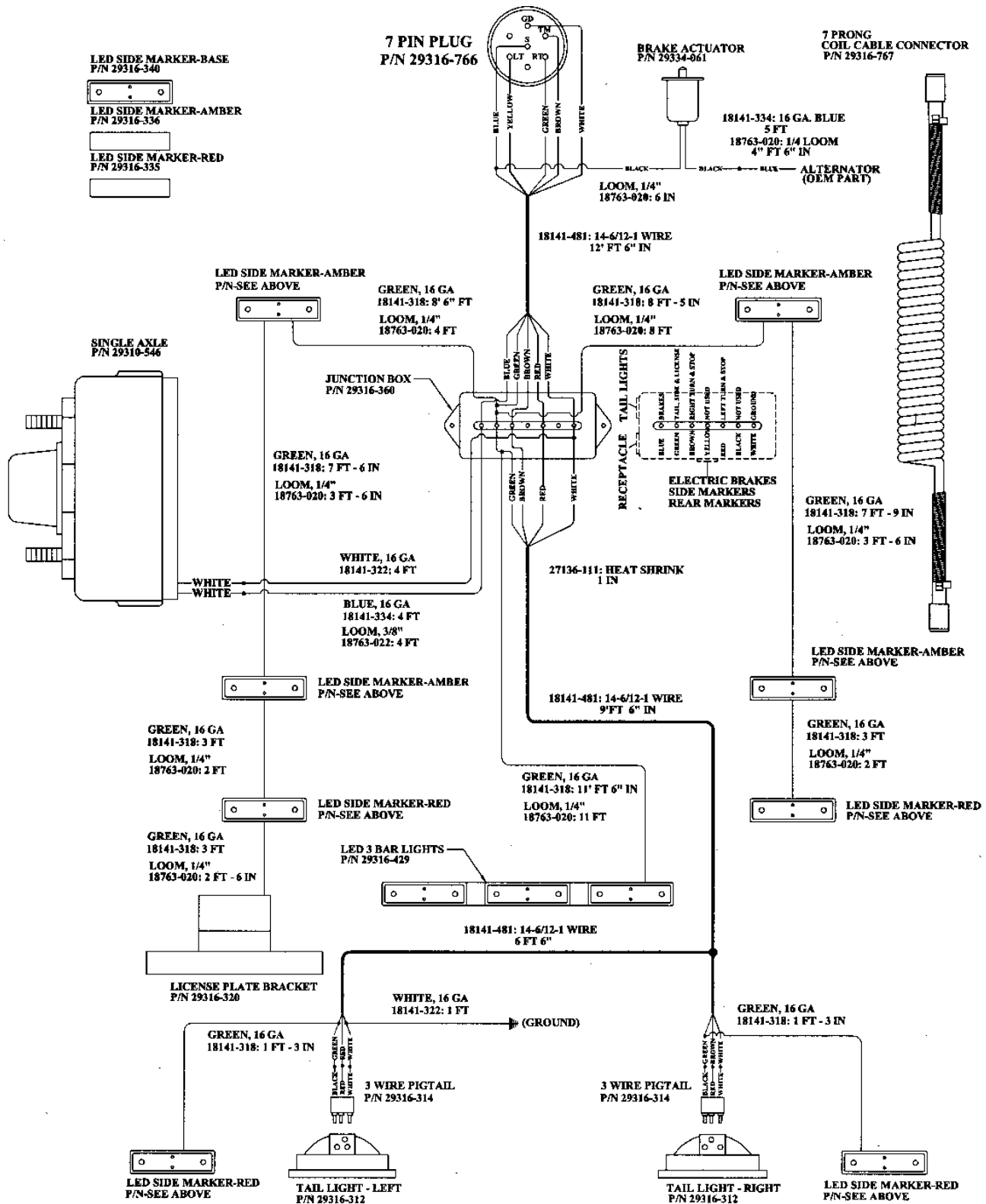
ELECTRICAL DIAGRAM



ELECTRICAL DIAGRAM

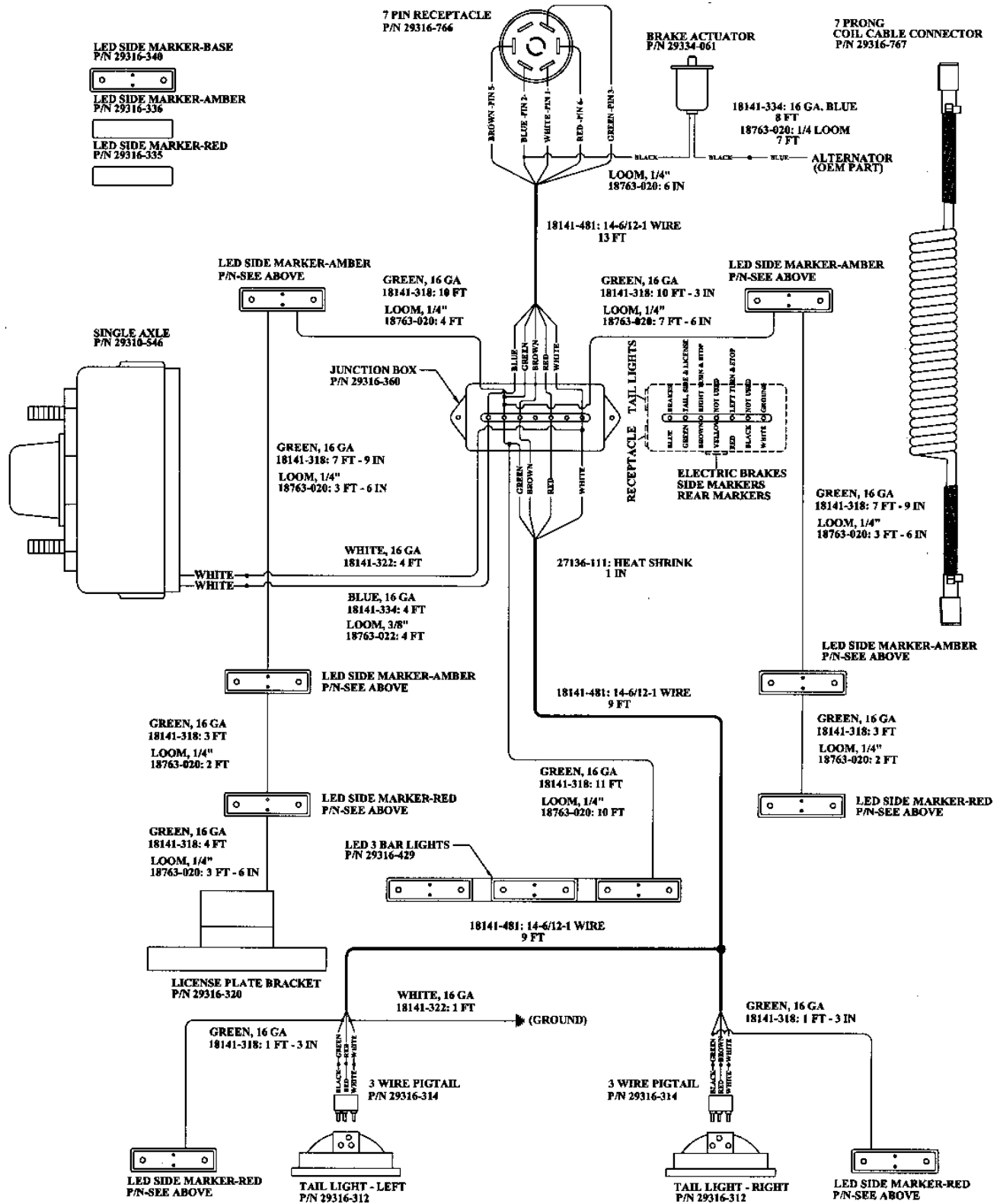


DAVEY TREE ELECTRICAL DIAGRAM

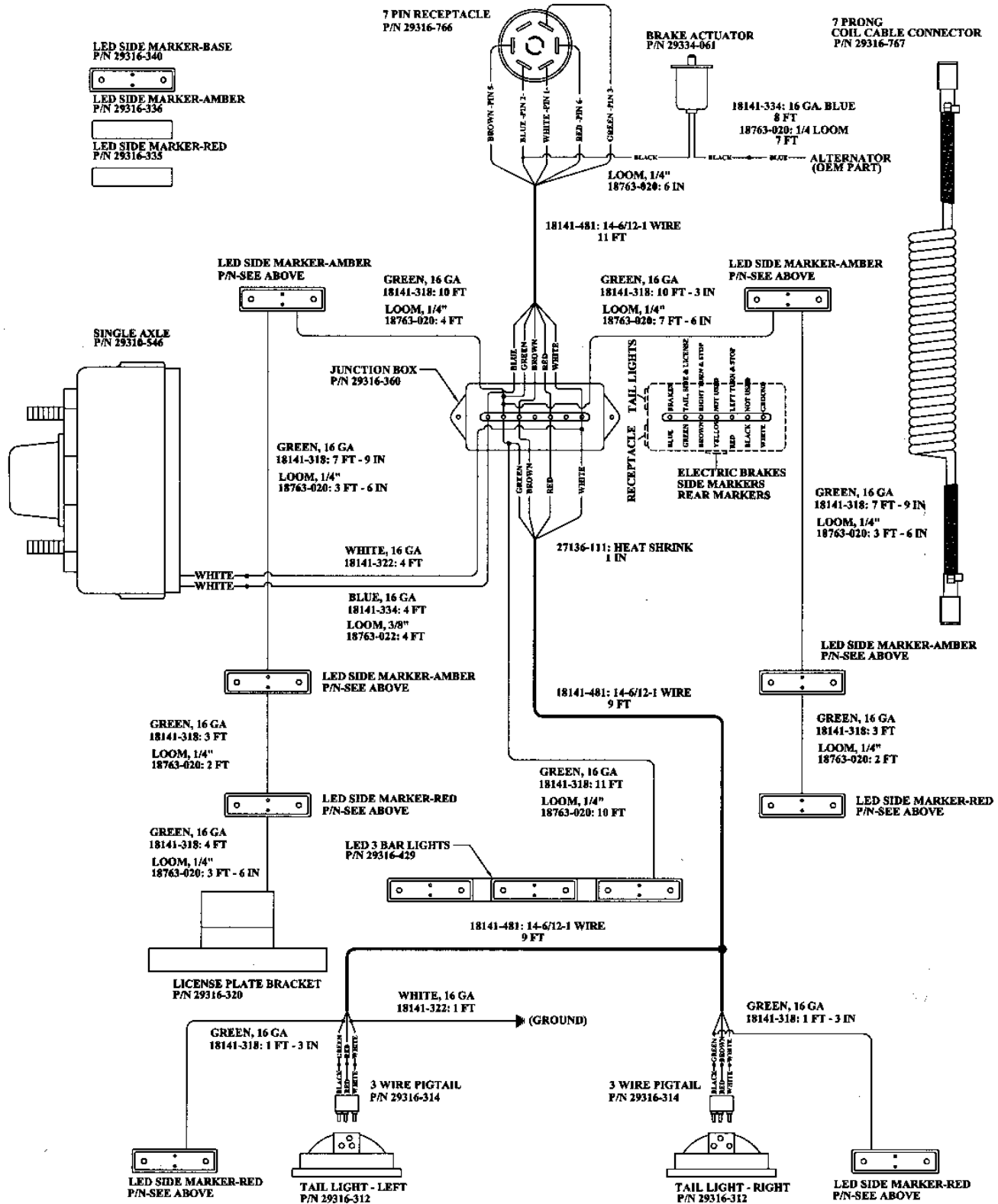


ELECTRICAL DIAGRAM

7-PRONG FLAT RECEPTACLE

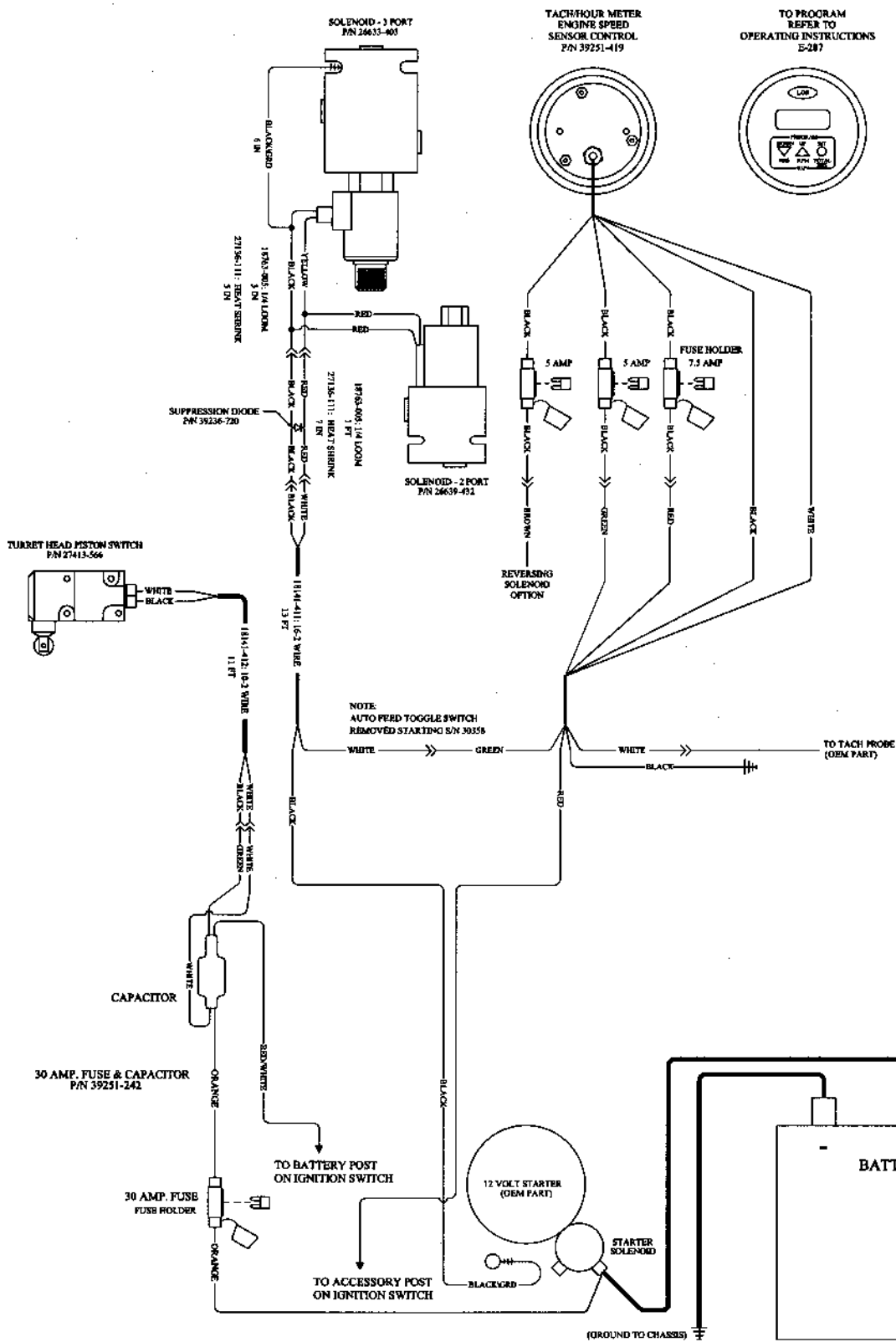


ELECTRICAL DIAGRAM SWING TONGUE



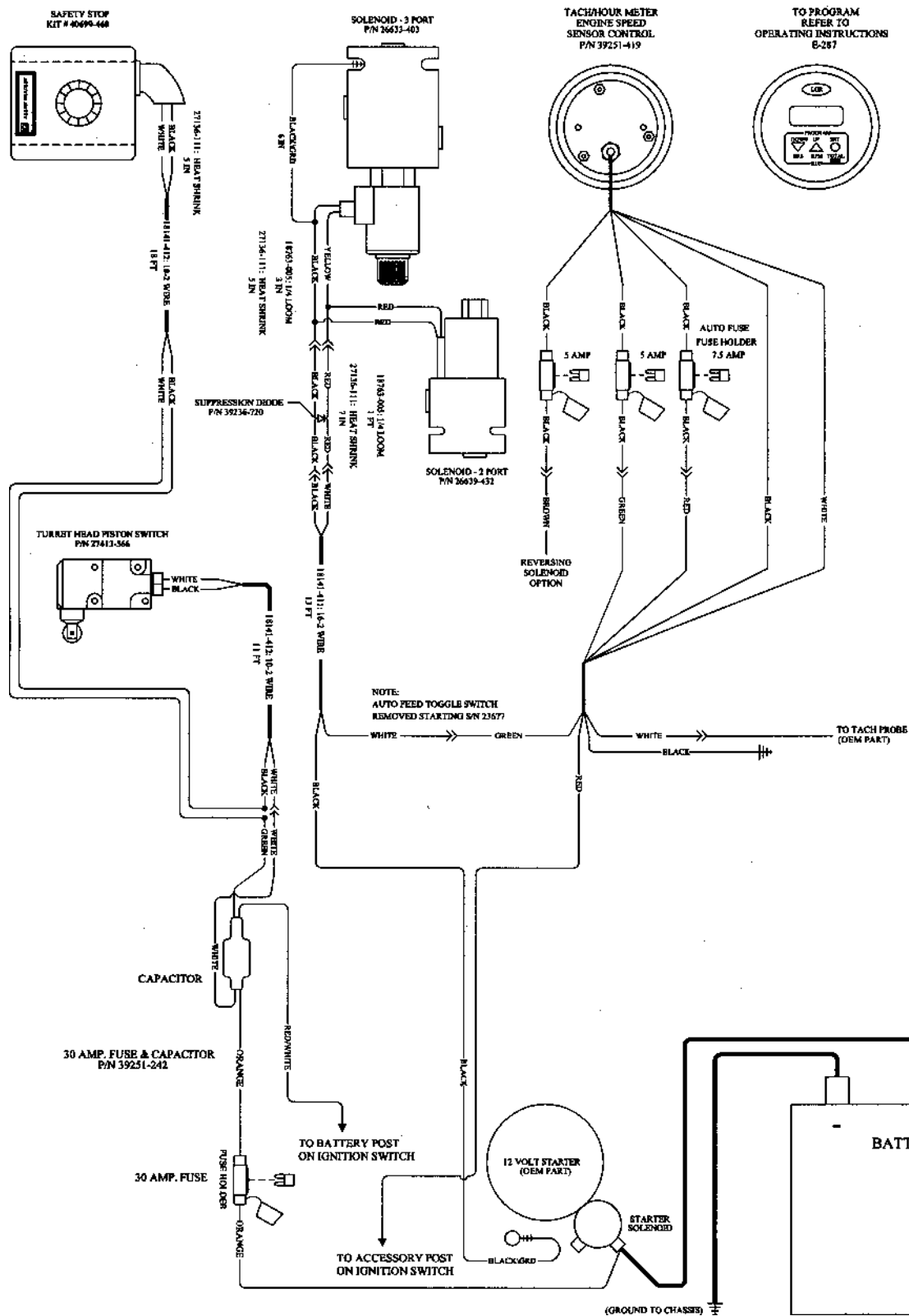
ELECTRICAL DIAGRAM

CATERPILLAR, CUMMINS, JOHN DEERE, PERKINS



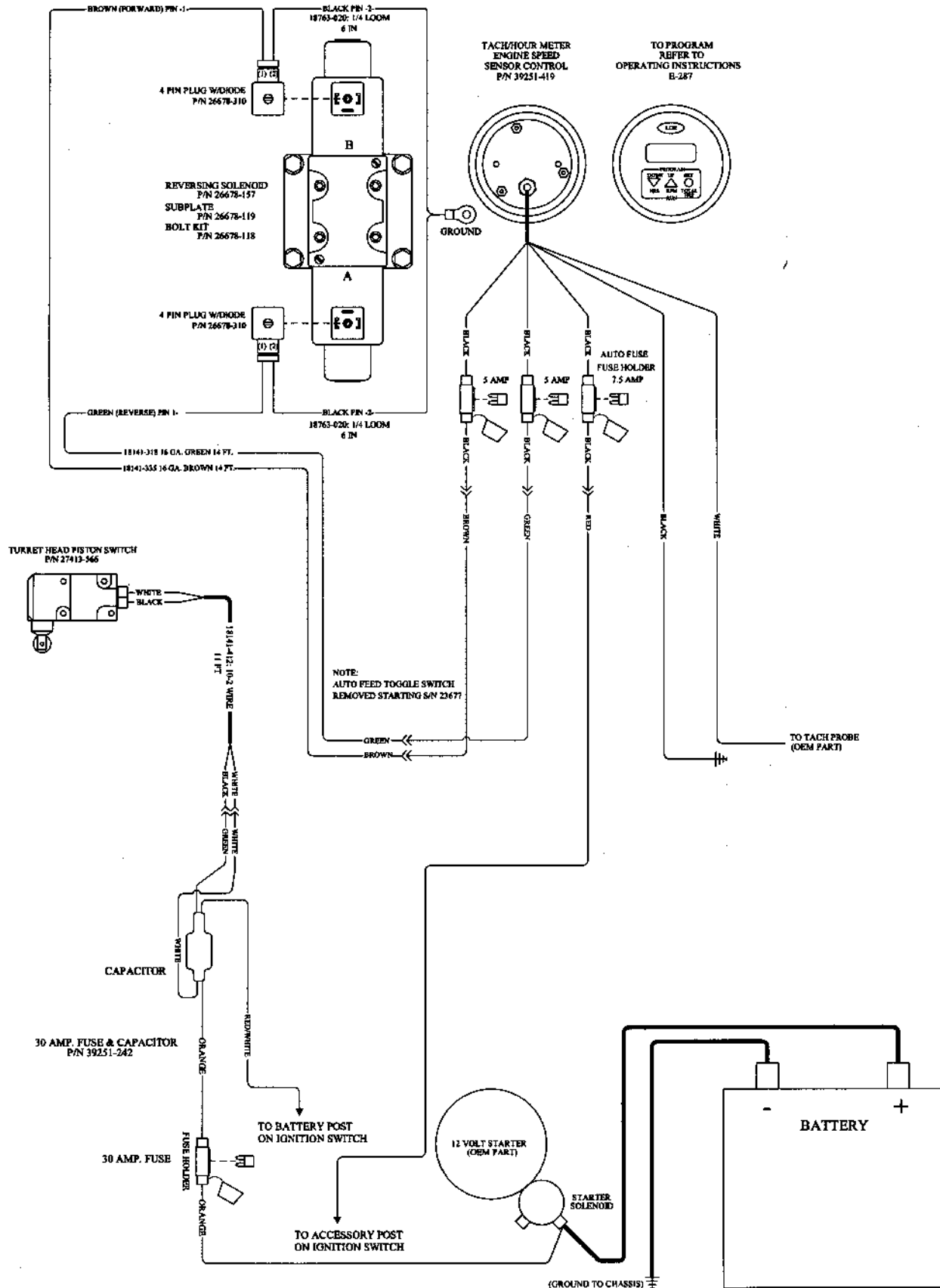
ELECTRICAL DIAGRAM

CATERPILLAR, CUMMINS, JOHN DEERE, PERKNS



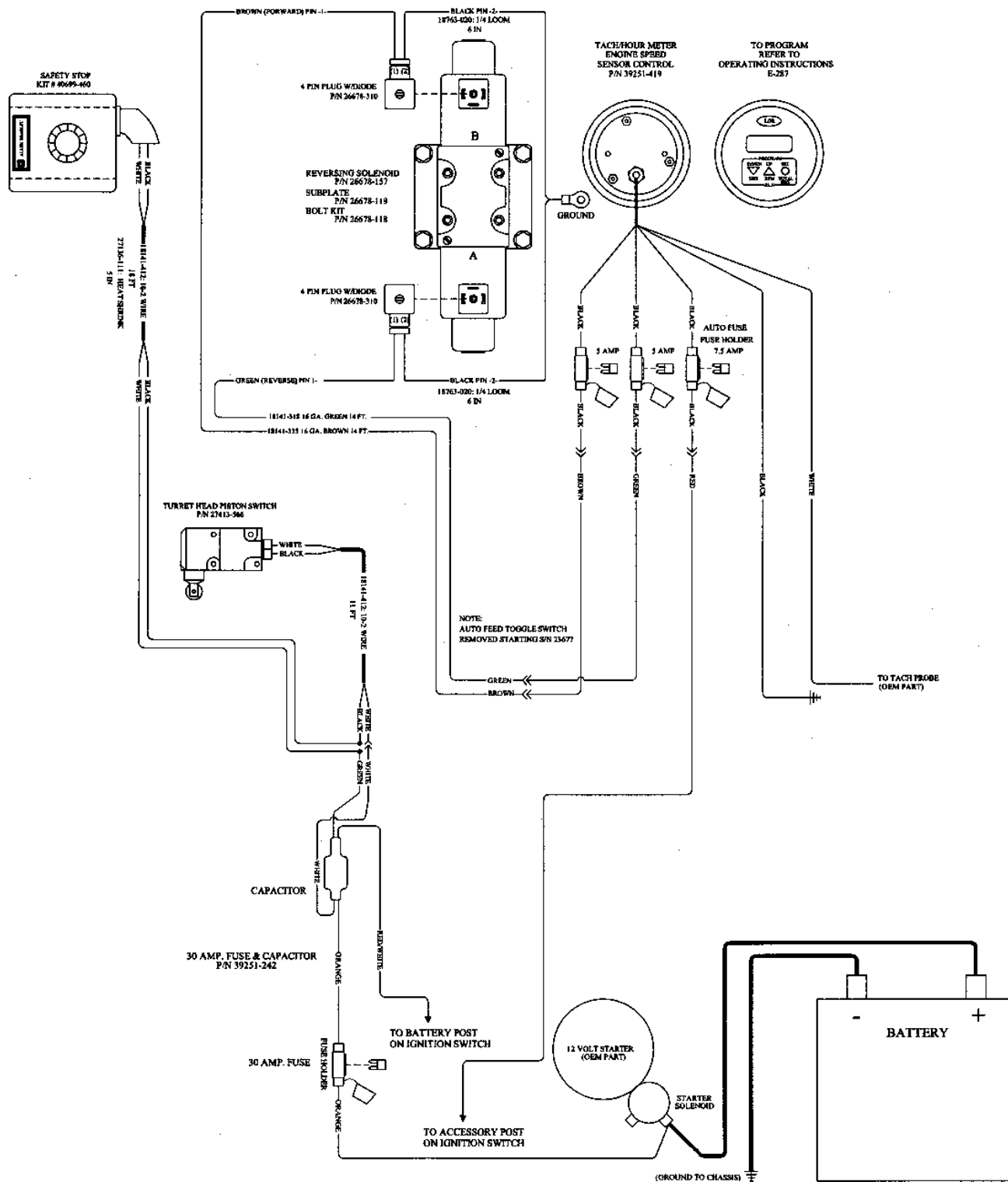
AUTO REVERSE ELECTRICAL DIAGRAM

CATERPILLAR, CUMMINS, JOHN DEERE, PERKNS



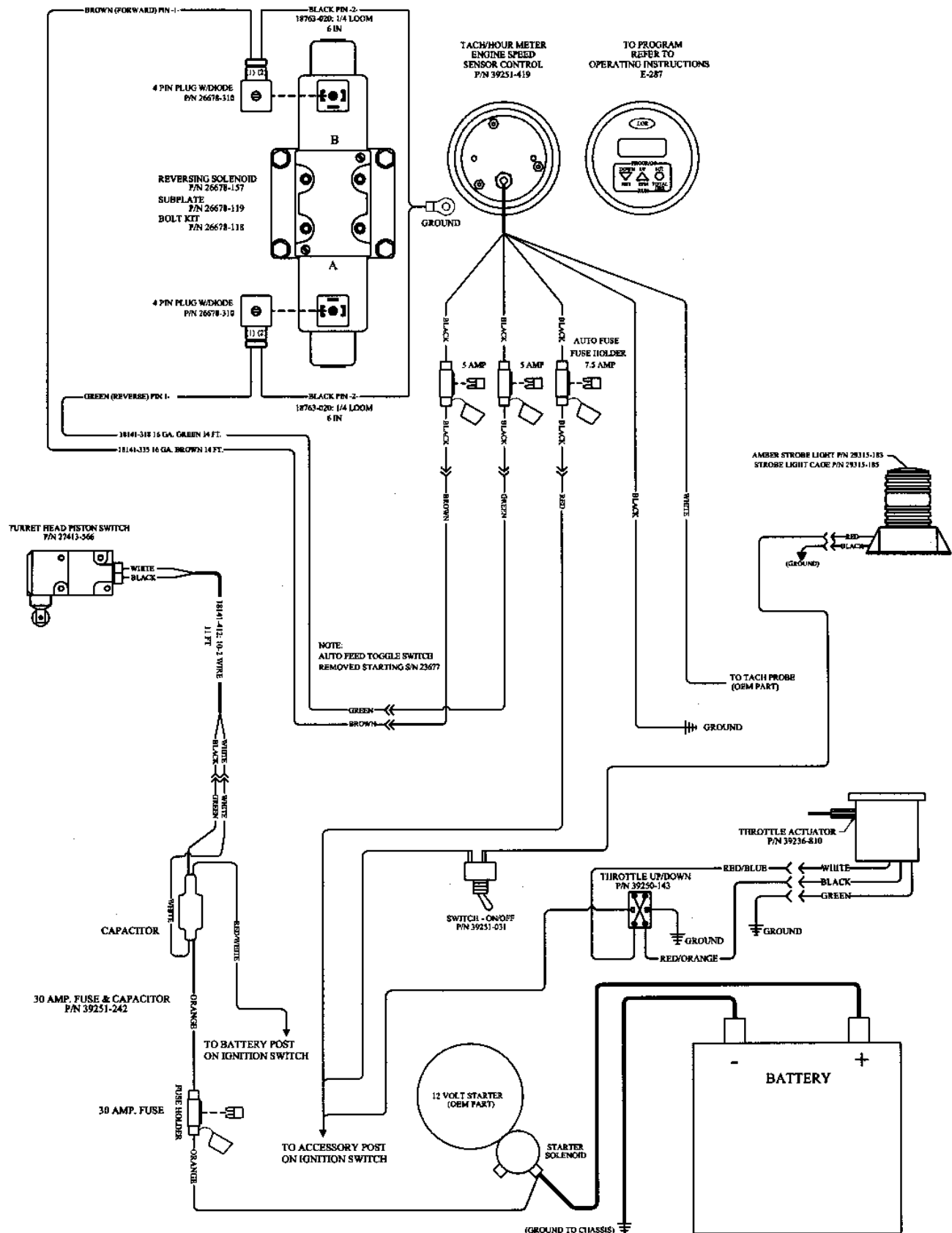
AUTO REVERSE W/SAFETY STOP DIAGRAM

CATERPILLAR, CUMMINS, JOHN DEERE, PERKNS



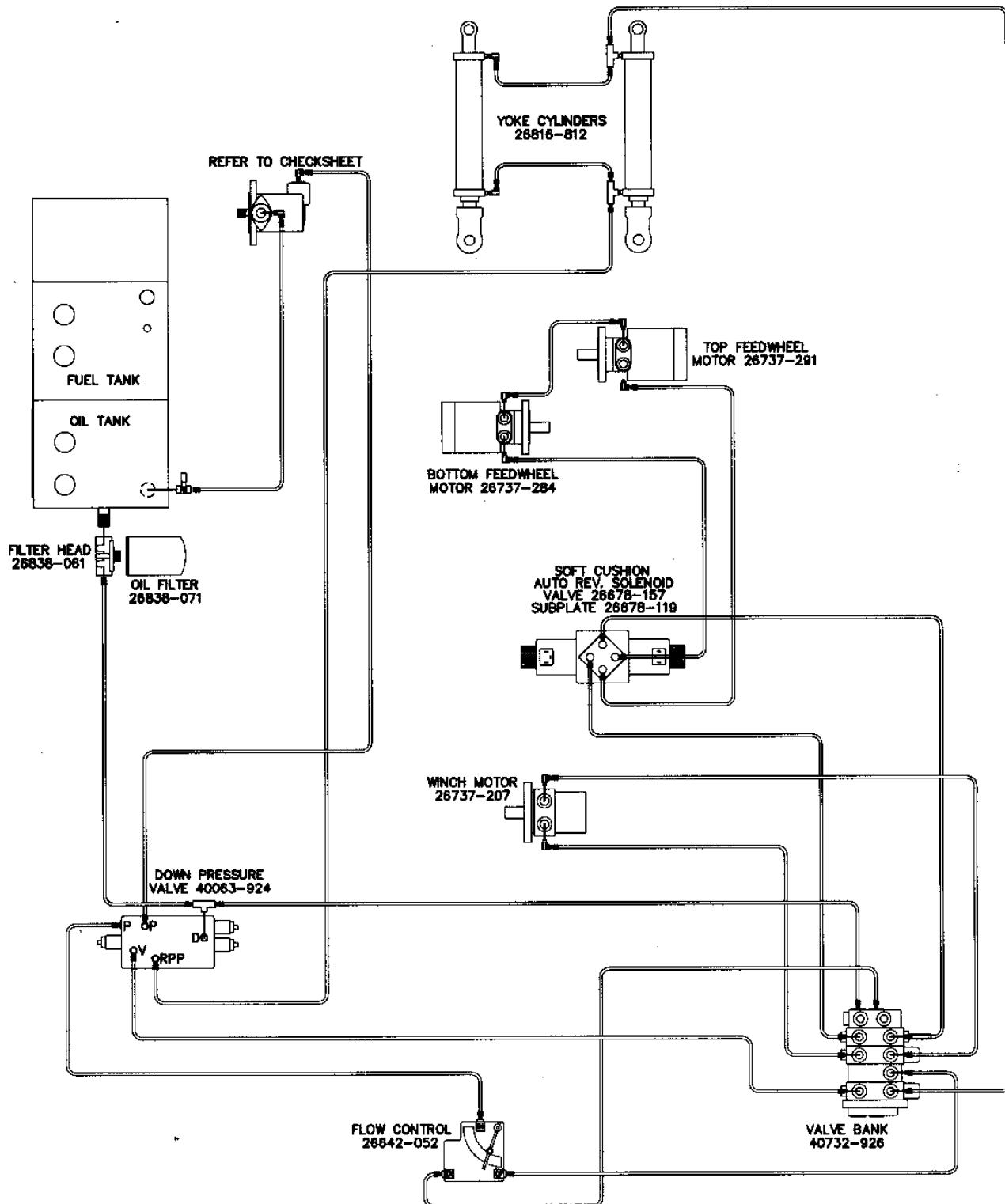
AUTO REVERSE W/THROTTLE ACTUATOR DIAGRAM

CATERPILLAR, CUMMINS, JOHN DEERE, PERKNS



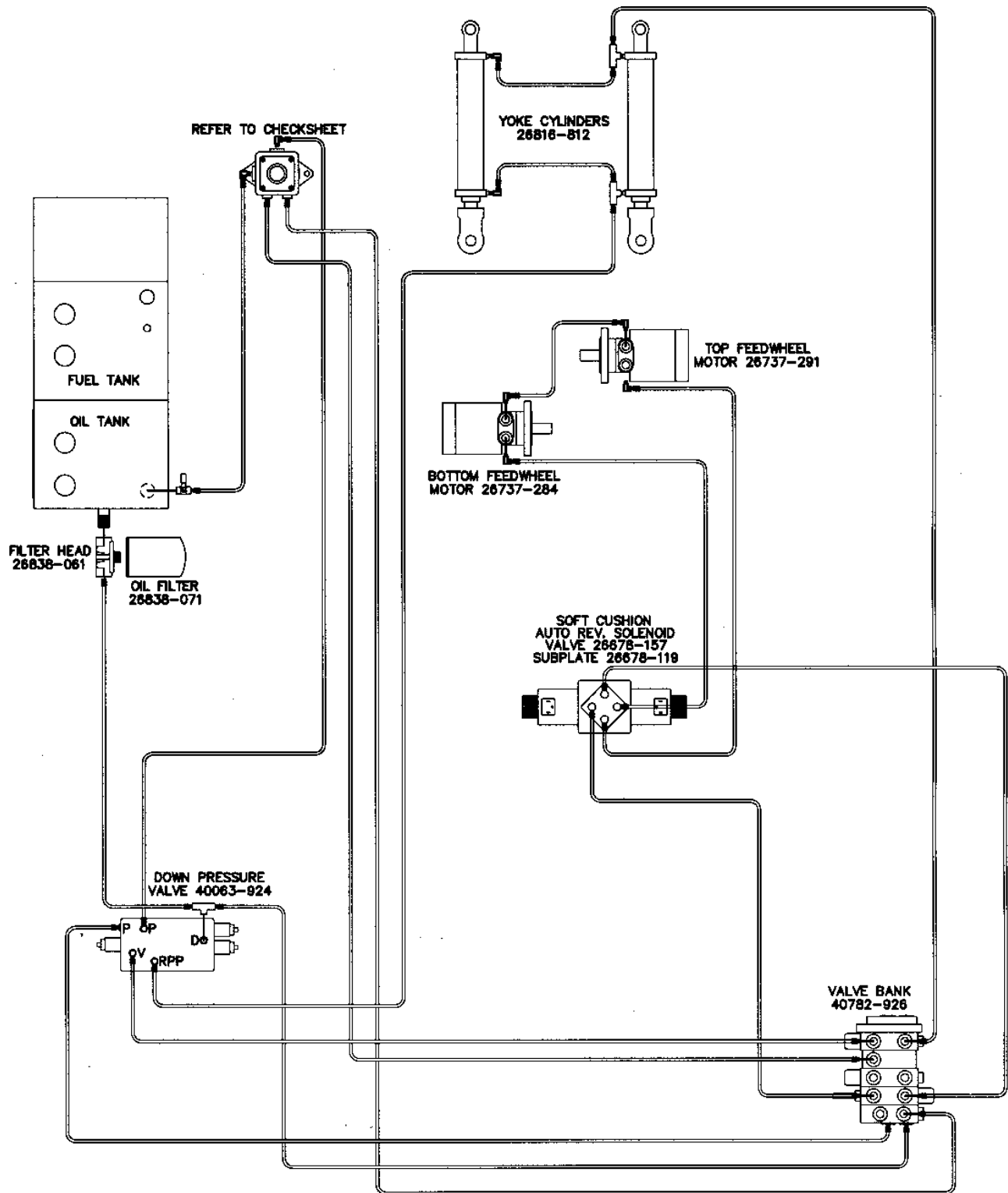
HYDRAULIC SCHEMATIC

(CAT HYD CONTROLS ON OPPOSITE SIDE)



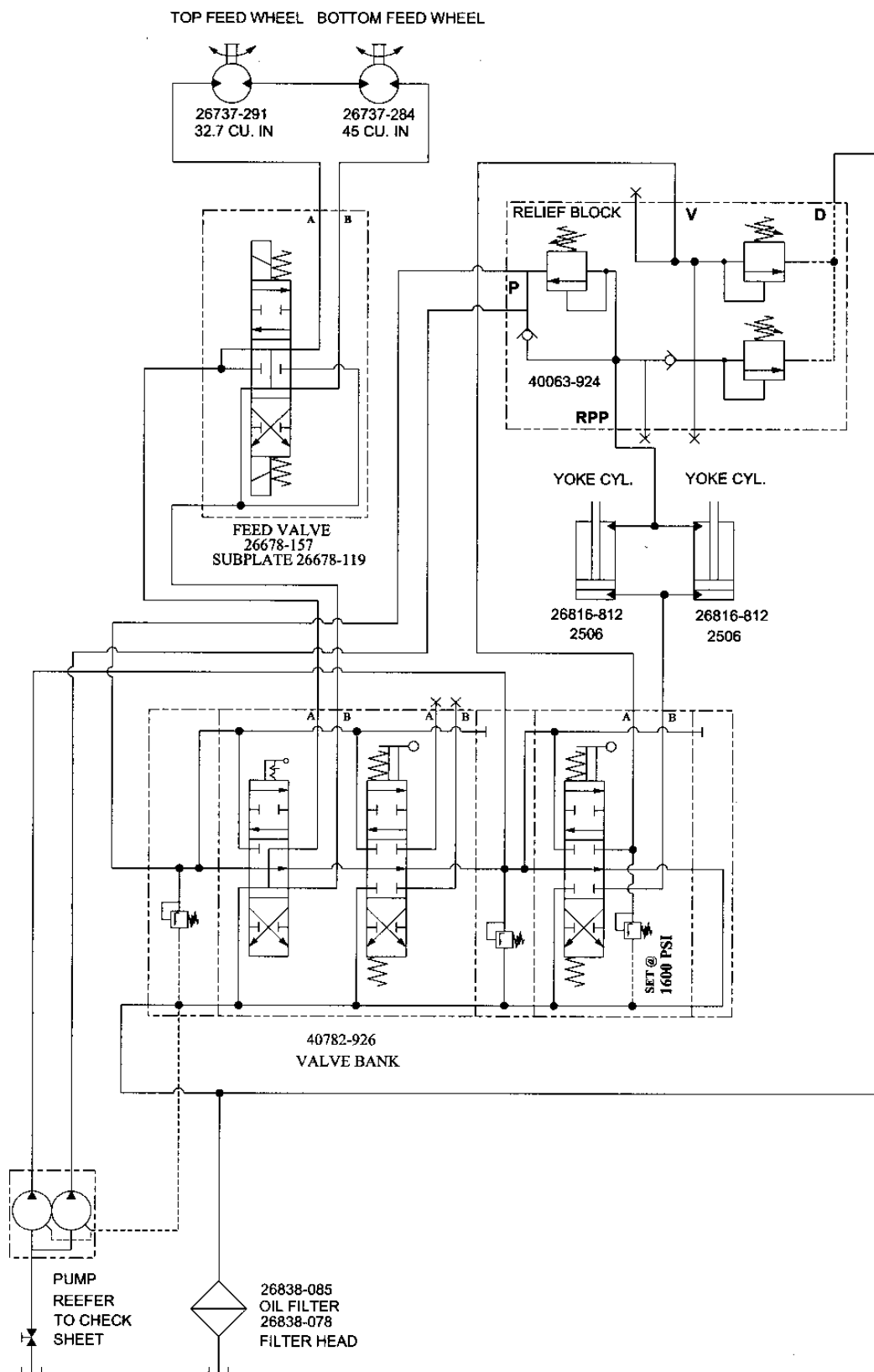
HYDRAULIC SCHEMATIC

ENGINE OPTIONS - PERKINS, CUM, CAT AND JD
(AUTOFEED)



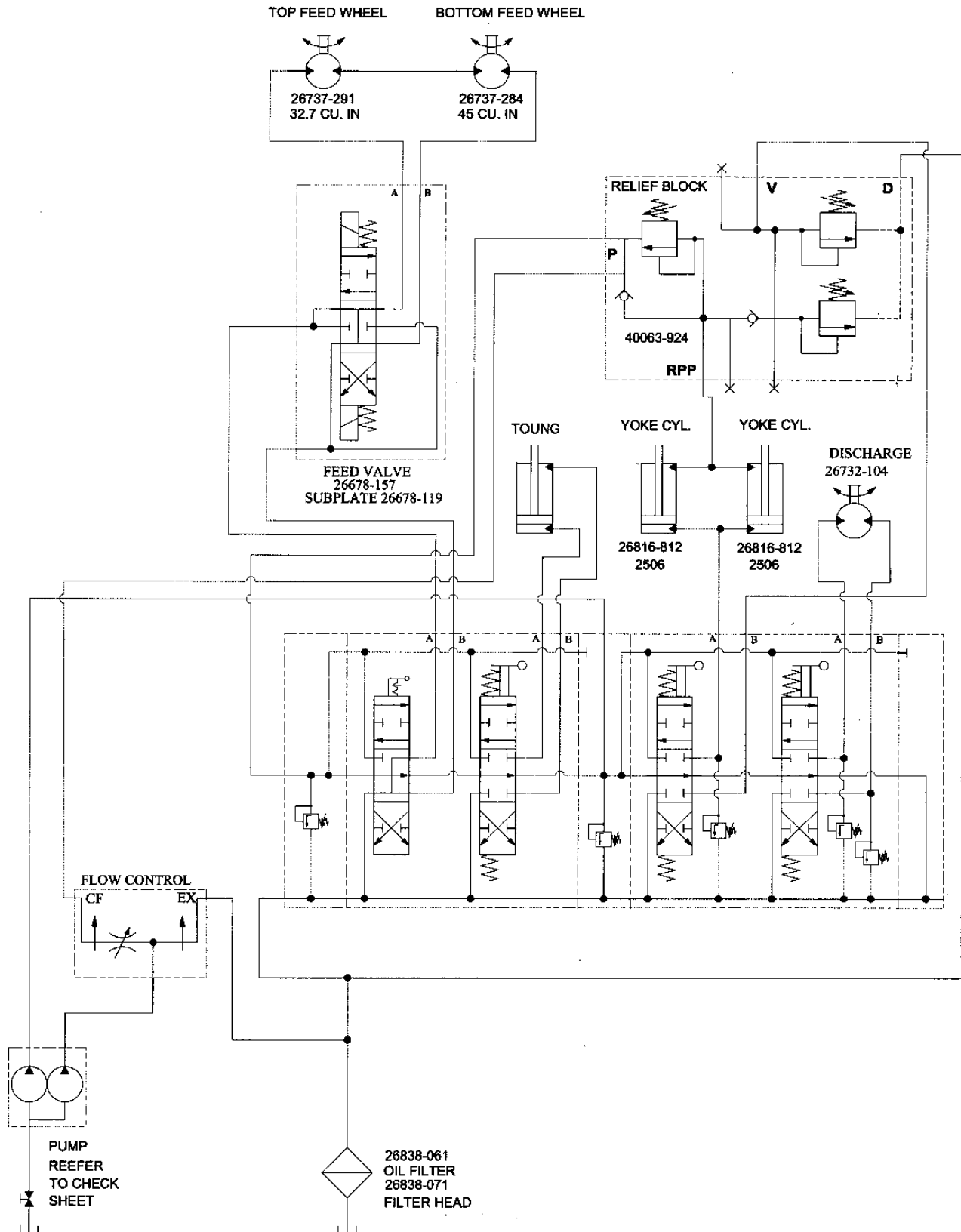
HYDRAULIC SCHEMATIC

ENGINE OPTIONS - PERKINS, CUM, CAT AND JD
(AUTOFEED & FLOW CONTROL)



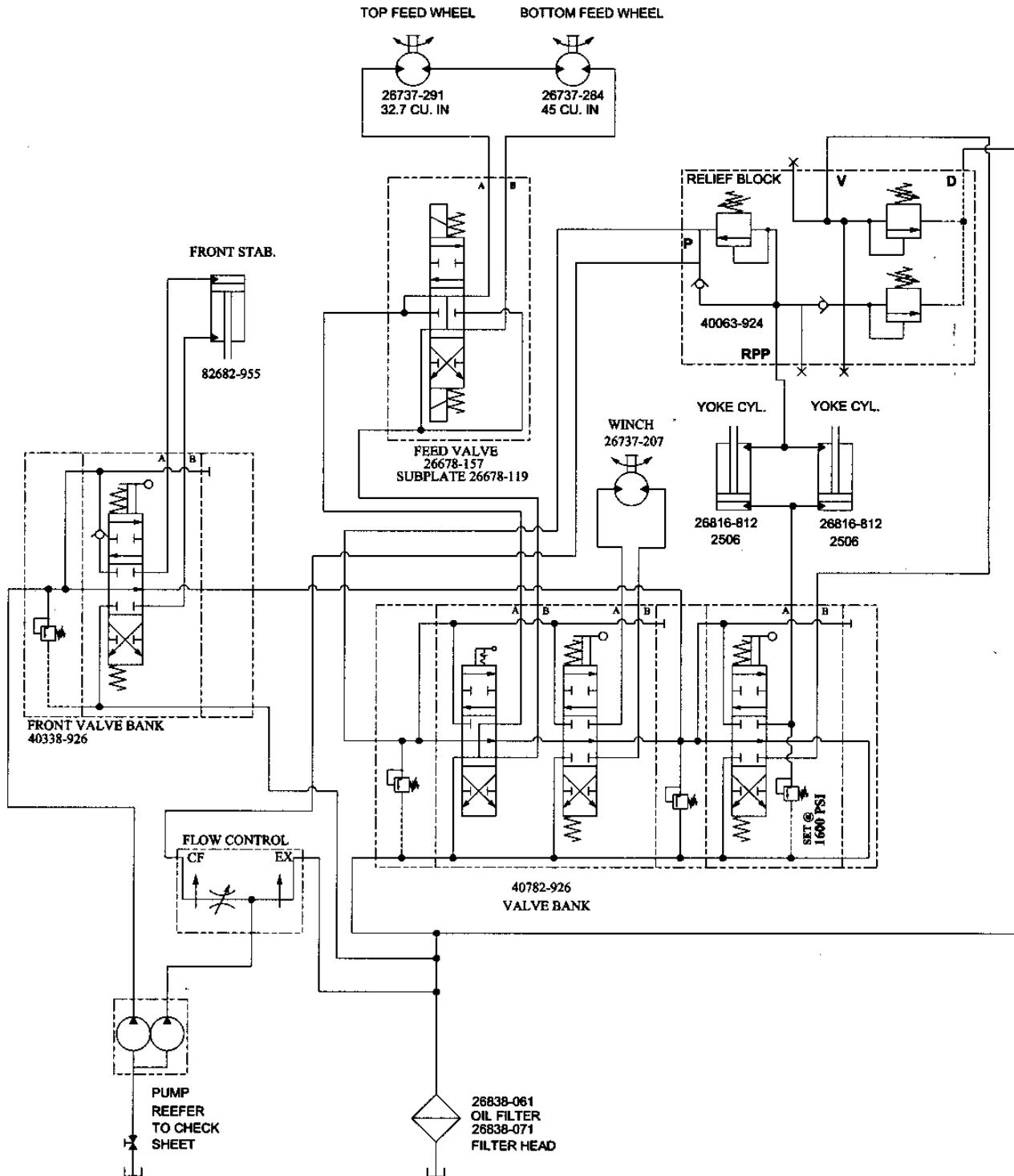
HYDRAULIC SCHEMATIC

ENGINE OPTIONS - PERKINS, CUM, CAT AND JD
(AUTOFEED, SWING TONGUE & FLOW CONTROL)



HYDRAULIC SCHEMATIC

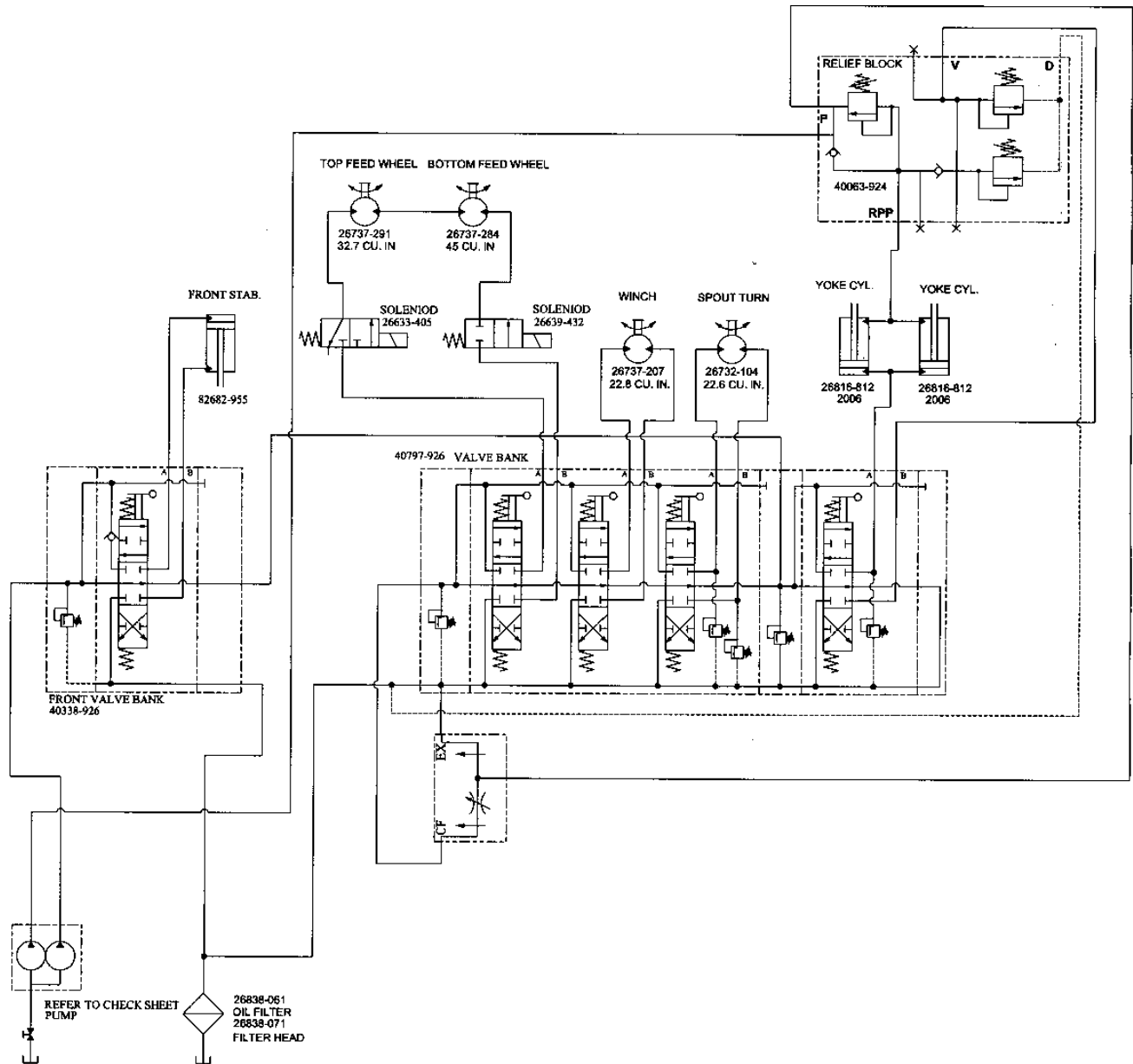
ENGINE OPTIONS - PERKINS, CUM, CAT AND JD
(AUTOFD, FLOW CNTRL, FNT STAB & WINCH)



HYDRAULIC SCHEMATIC

ENGINE OPTIONS - PERKINS, CUM, CAT AND JD

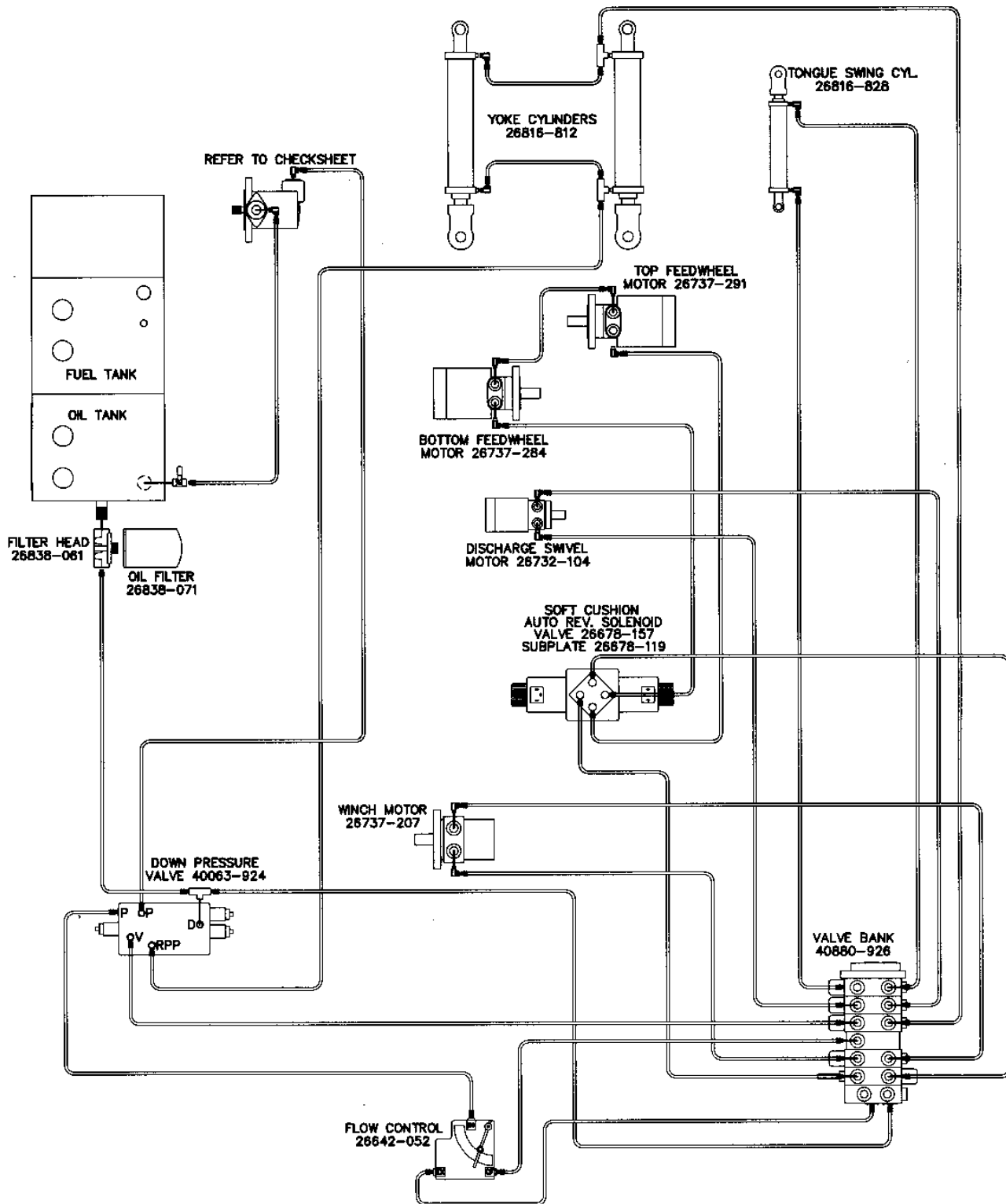
(Autofd, Flow Cntrl, Fnt Stab, Hyd Sw & Winch)



HYDRAULIC SCHEMATIC

ENGINE OPTION - CUMMINS

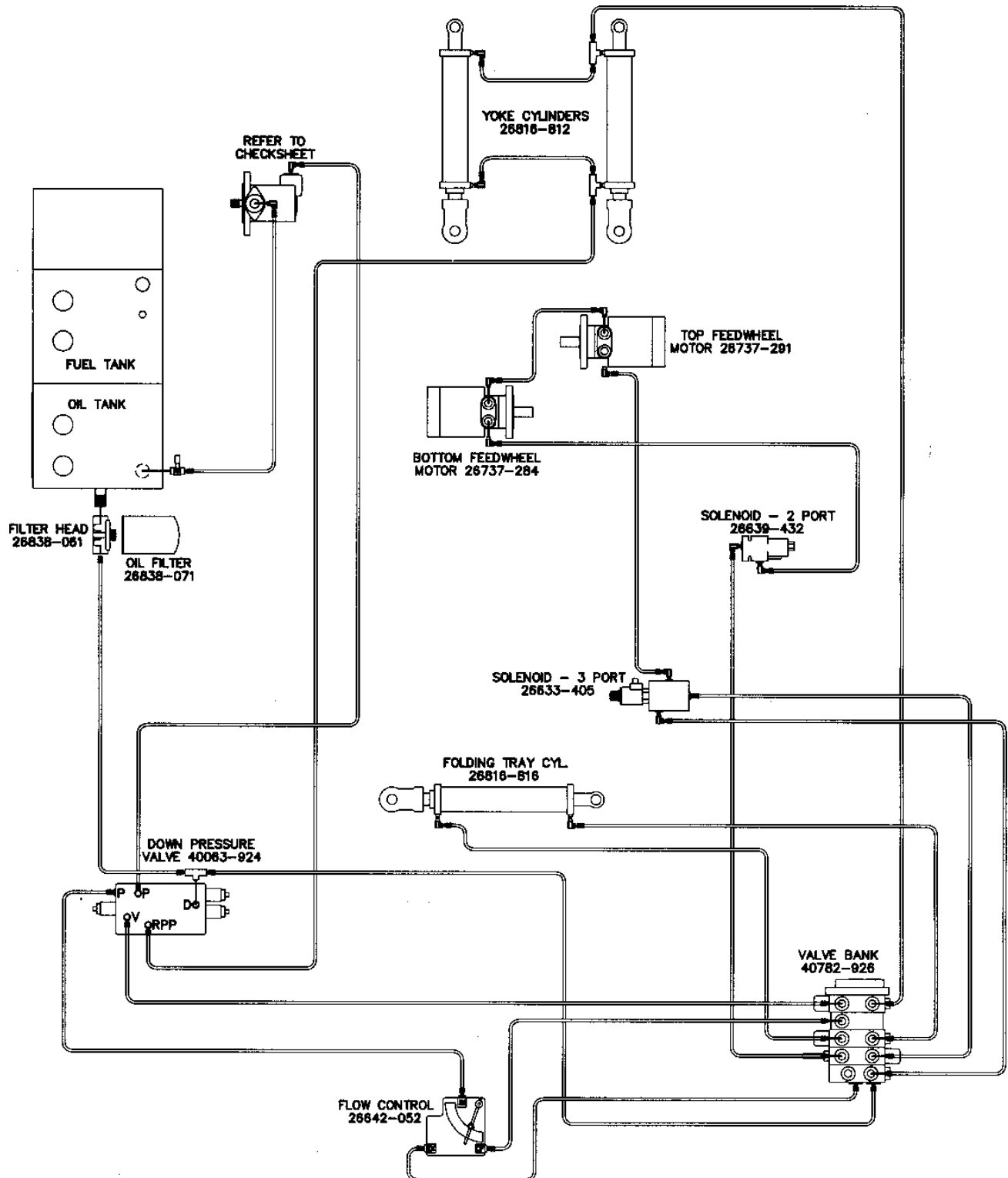
(Winch, Hyd Swivel & Hyd Swing Tongue)



HYDRAULIC SCHEMATIC

ENGINE OPTION - CUMMINS

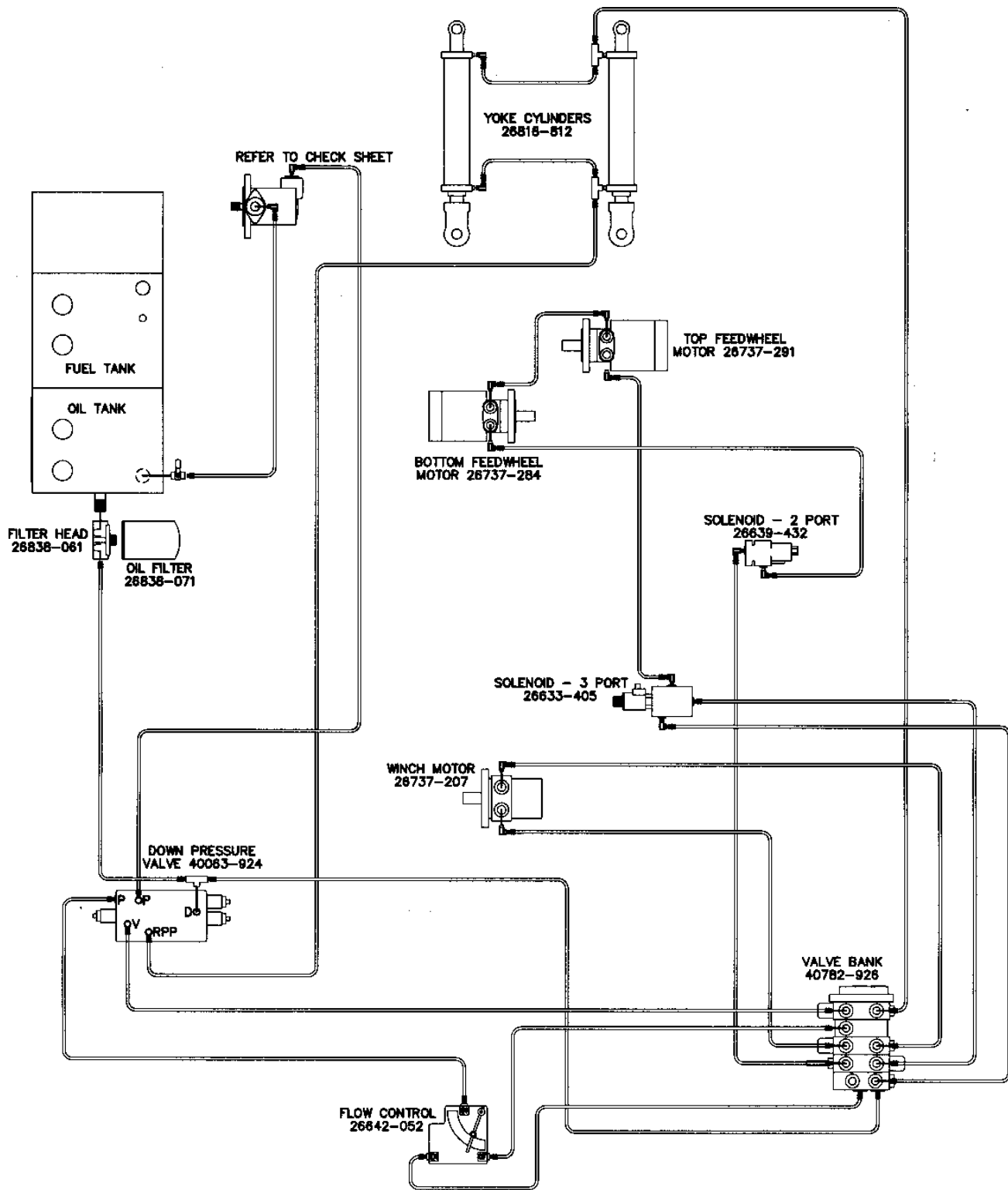
(Down Pressure, Hyd Assist)



HYDRAULIC SCHEMATIC

ENGINE OPTION - CAT, JOHN DEERE & PERKINS

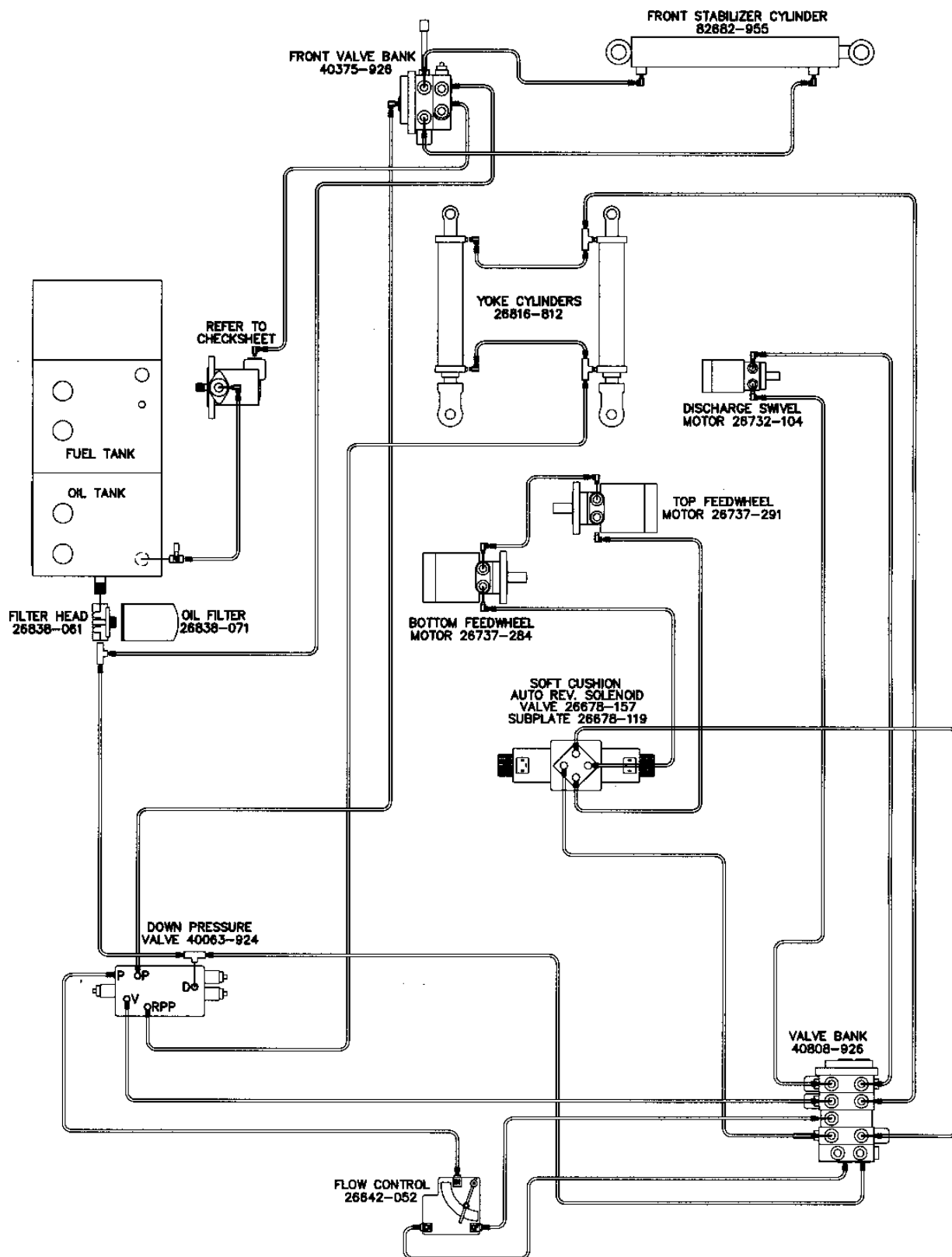
(Down Pressure - Winch)



HYDRAULIC SCHEMATIC

ENGINE OPTION - JOHN DEERE, CAT & PERKINS

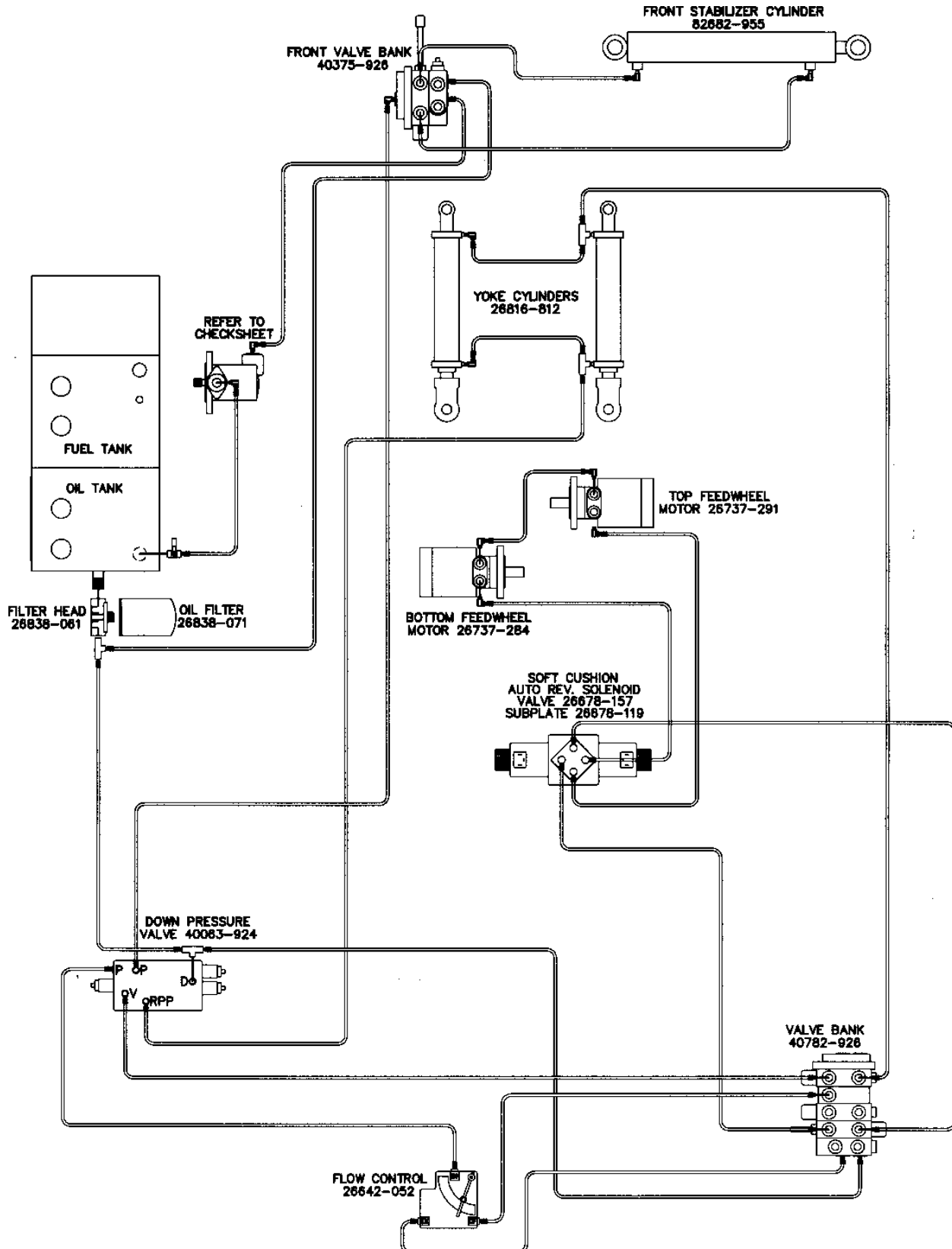
(auto reverse, hyd swivel and front stabilizer)



HYDRAULIC SCHEMATIC

ENGINE OPTION - JOHN DEERE, CAT & PERKINS

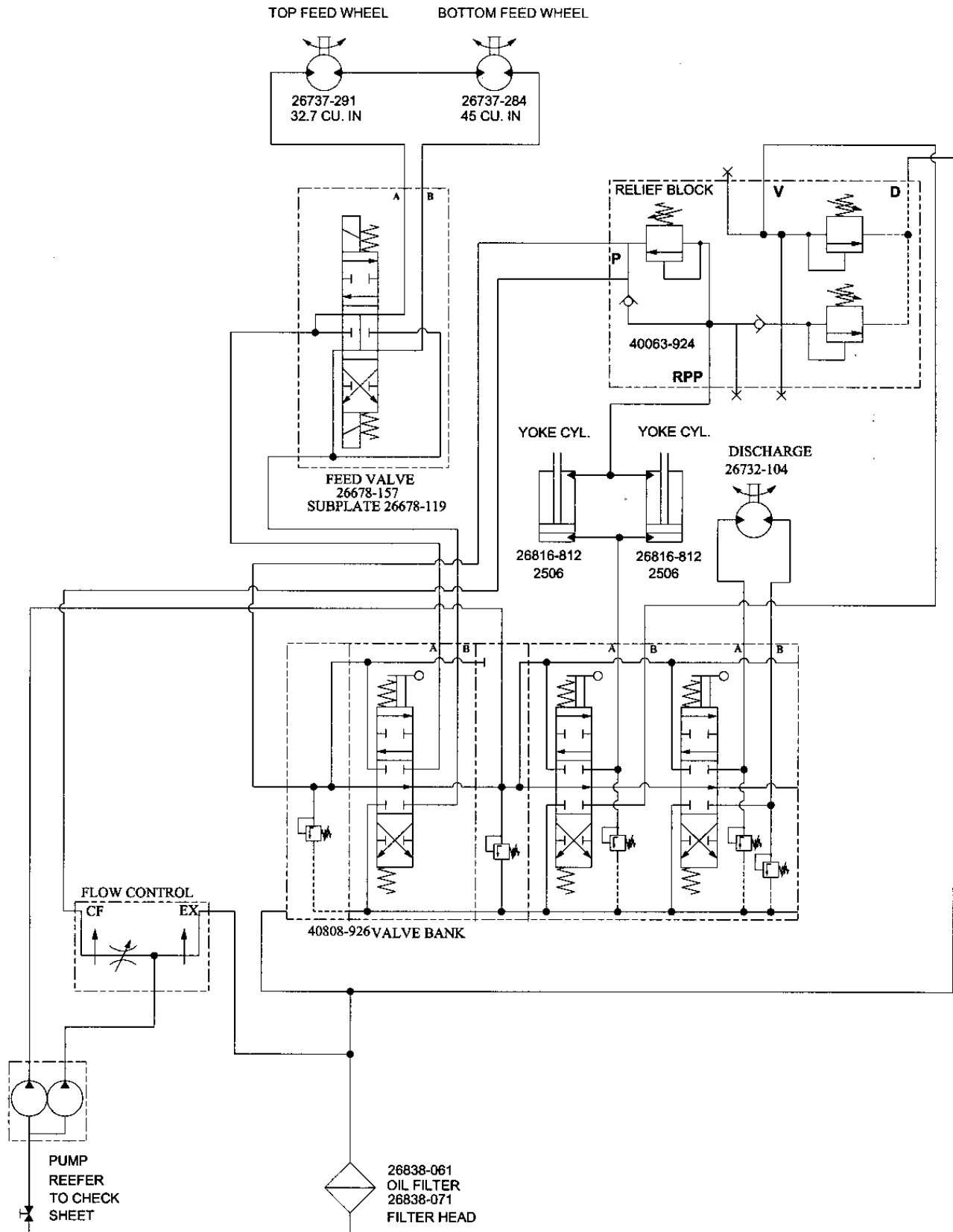
(Auto-feed - Hyd front stabilizer)



HYDRAULIC SCHEMATIC

ENGINE OPTION - JOHN DEERE, CAT & PERKINS

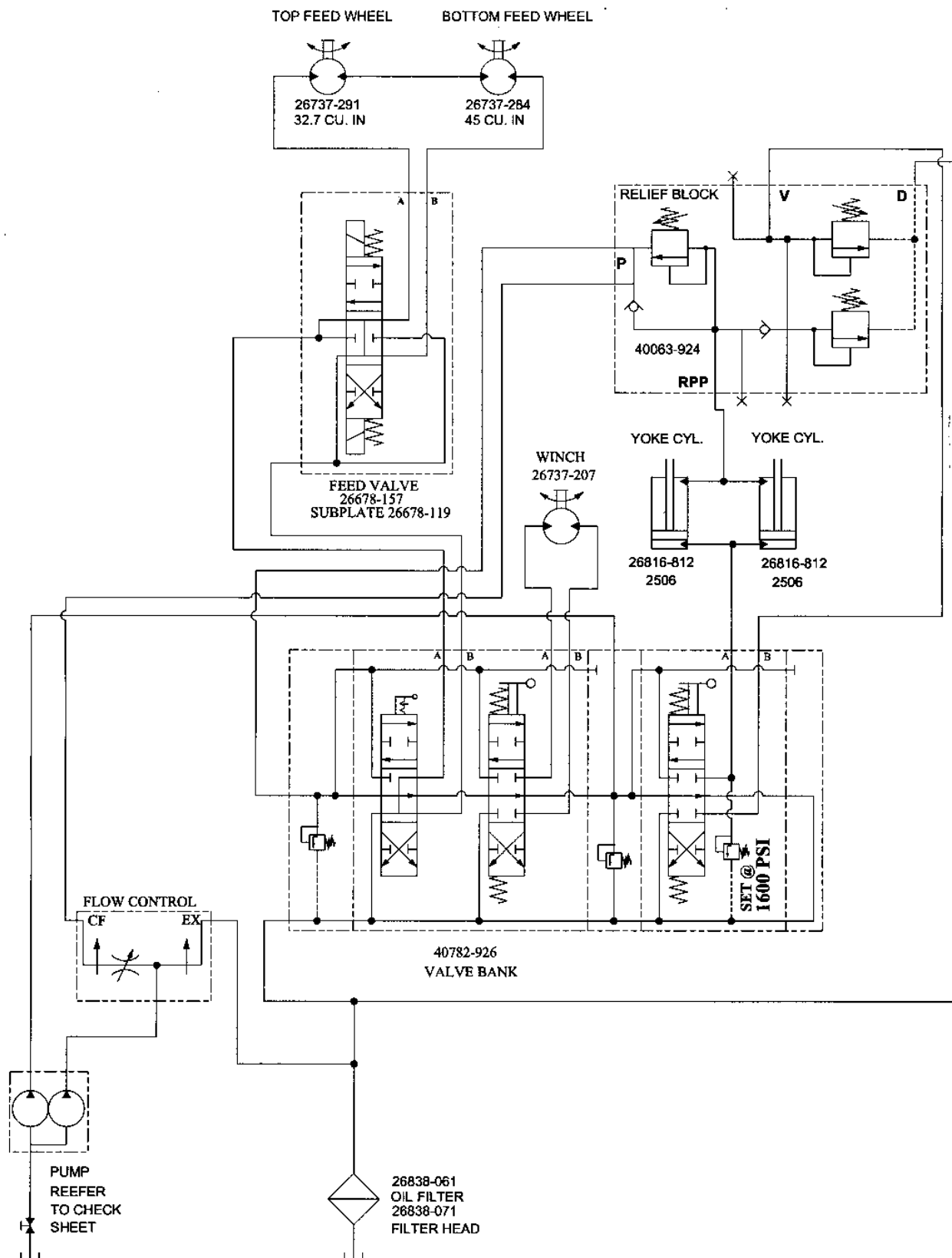
(Auto-feed - Hyd Swivel)



HYDRAULIC SCHEMATIC

ENGINE OPTION - JOHN DEERE, CAT & PERKINS

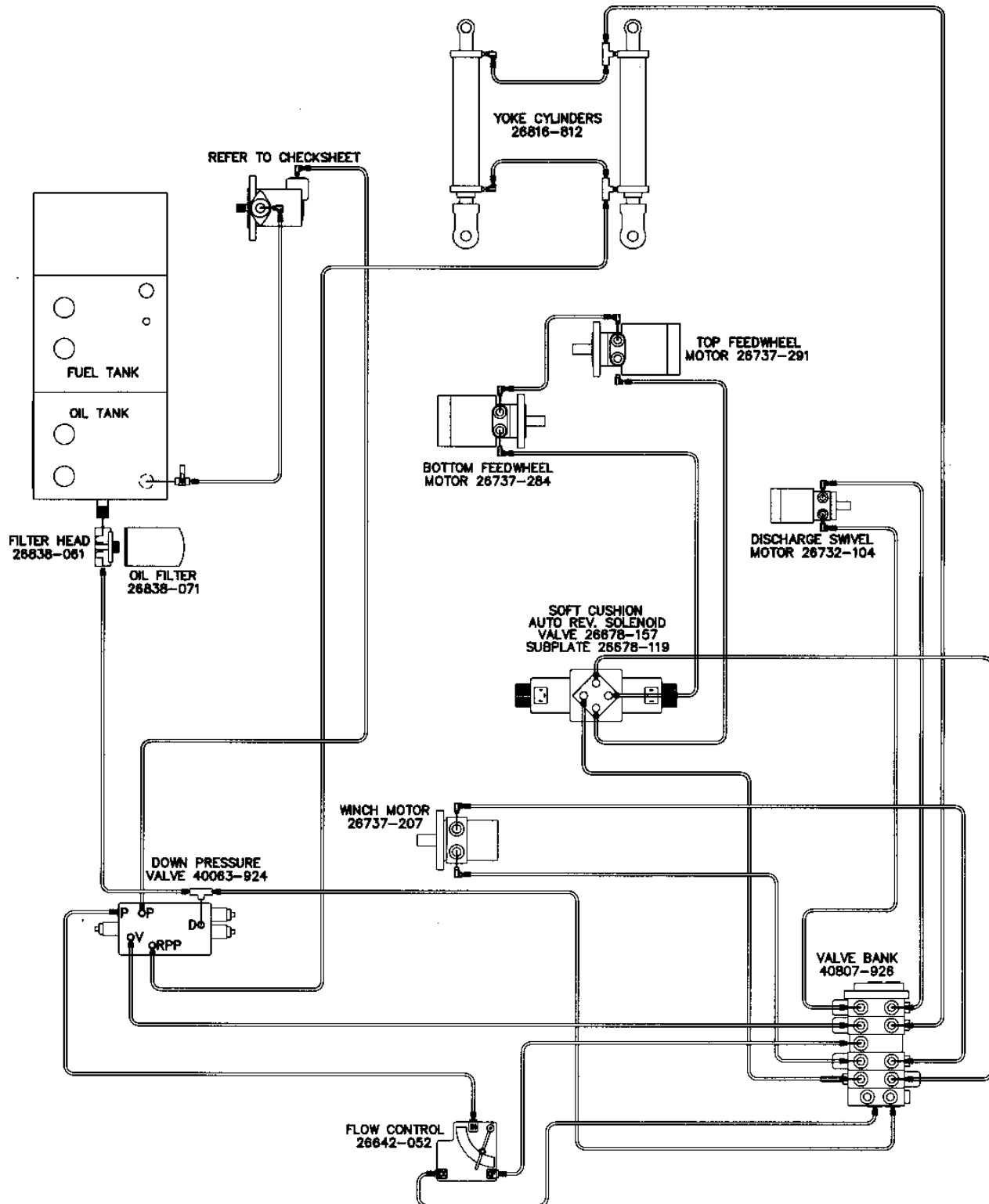
(Auto-feed - Winch and Flow Cntrl)



HYDRAULIC SCHEMATIC

ENGINE OPTION - JOHN DEERE, CAT & PERKINS

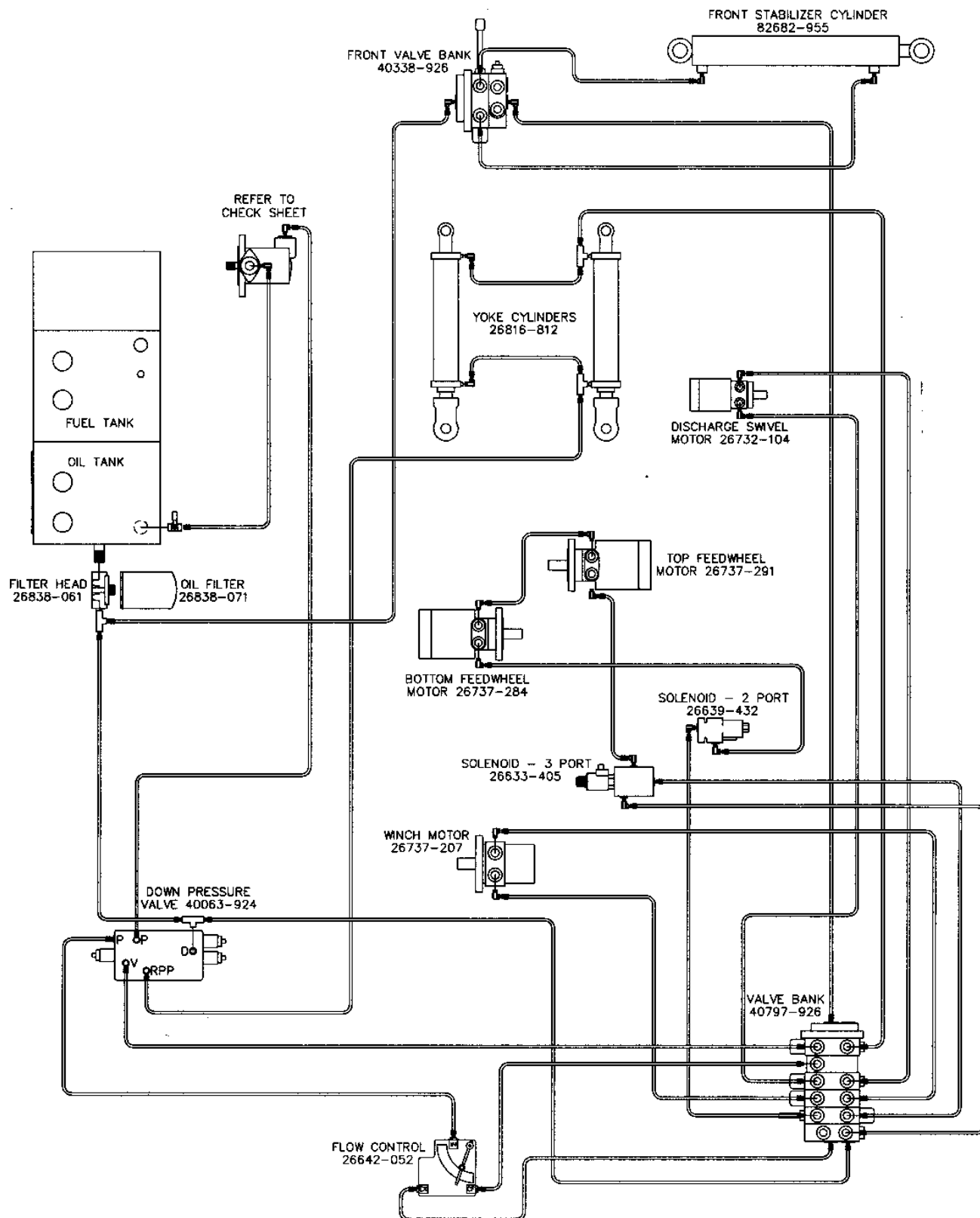
(Auto-feed - Swivel Dschg and Winch)



HYDRAULIC SCHEMATIC

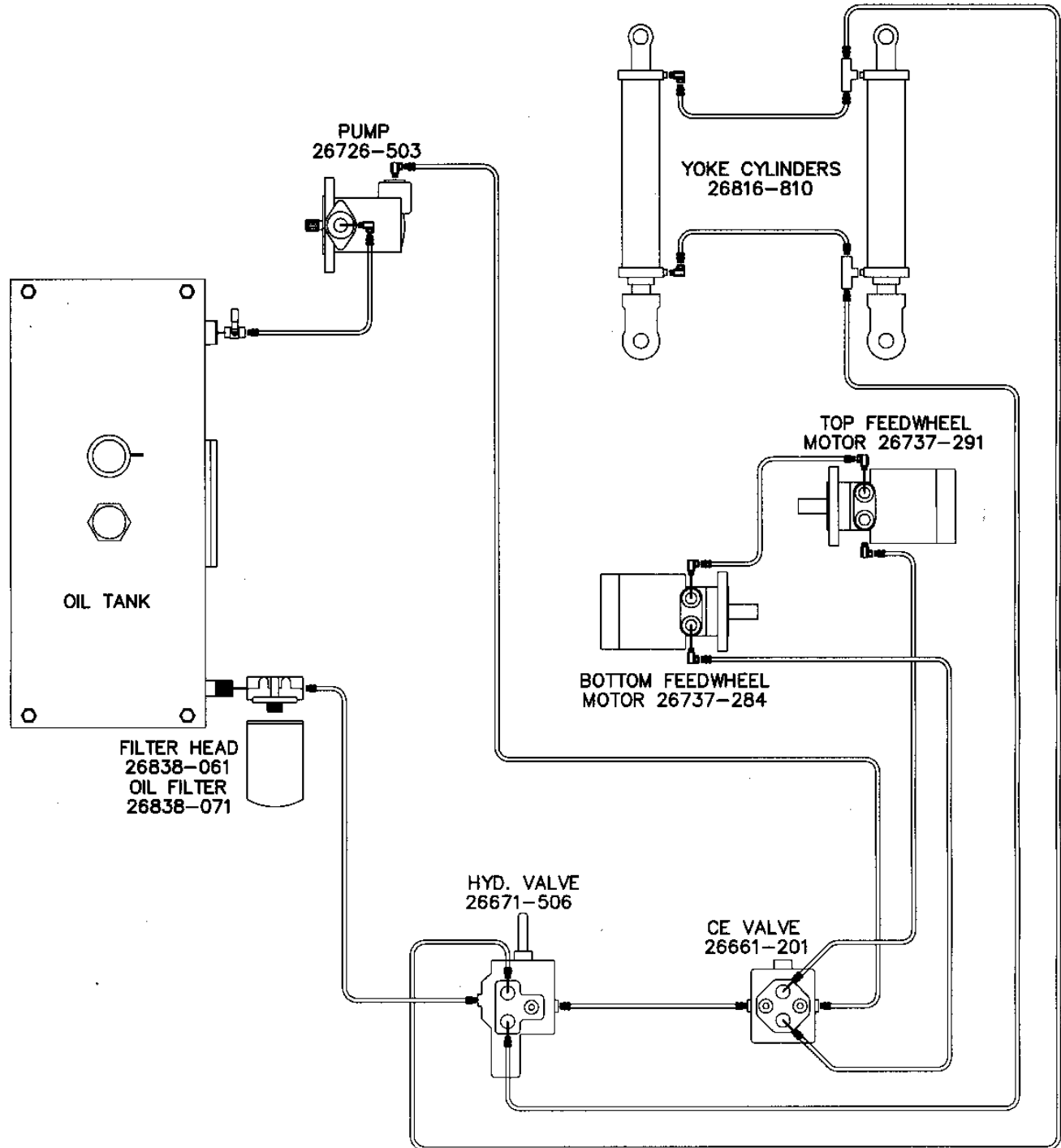
ENGINE OPTION - JOHN DEERE

(Down Pressure - Winch - Hyd Swivel - Hyd Fnt Stab)



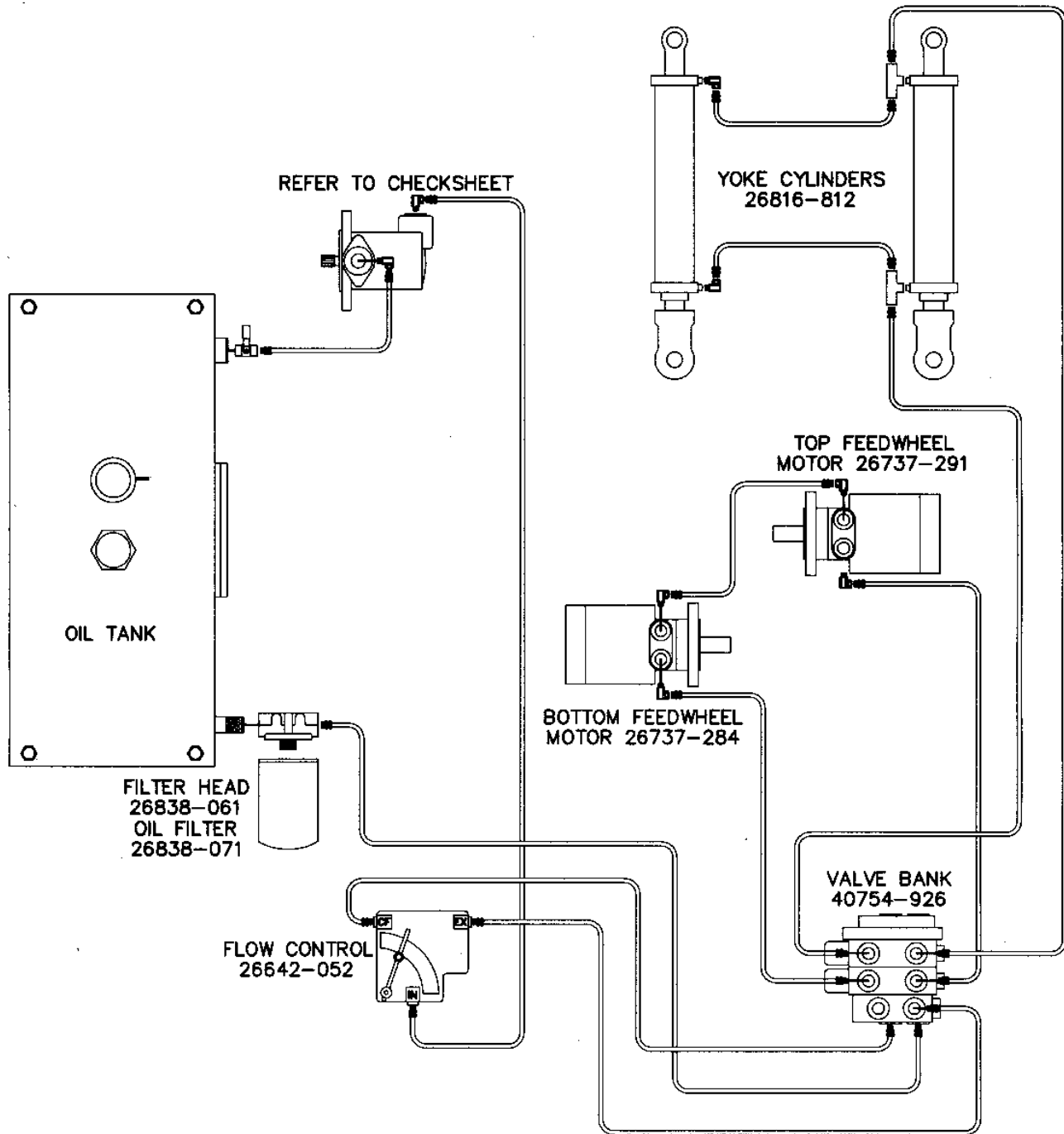
PTO HYDRAULIC SCHEMATIC

PTO Machine



PTO HYDRAULIC SCHEMATIC

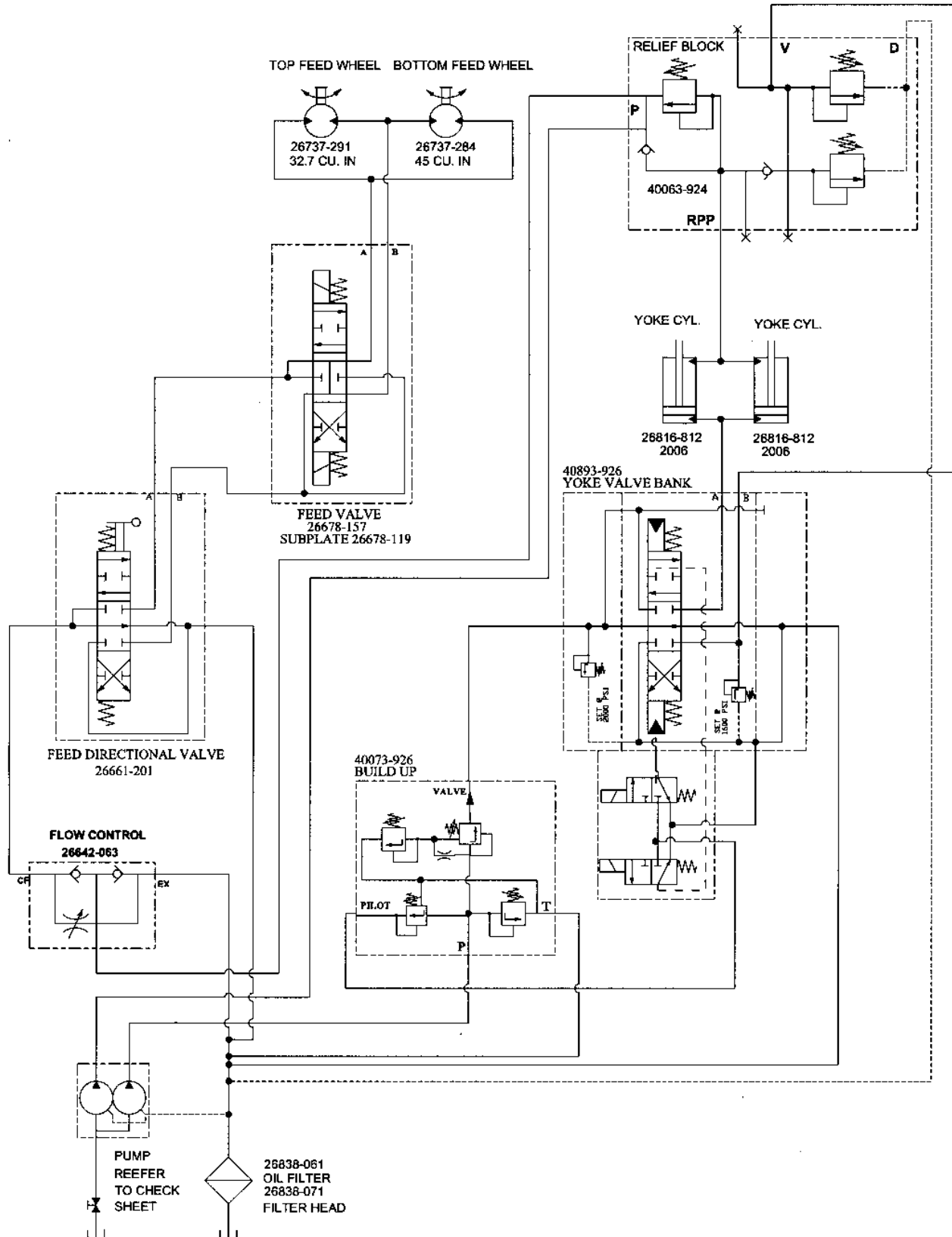
PTO w/Flow Control Machine



HYDRAULIC SCHEMATIC

ENGINE OPTION - JOHN DEERE

(OBM TECH)



REPLACEMENT PARTS ORDER RECORD

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