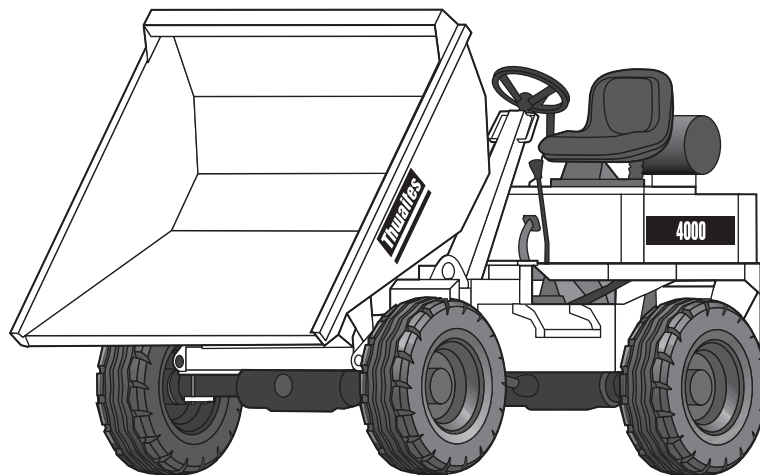


**Thwaites**

# 415 - 4000D FORWARD TIP

**allparts**



**Thwaites**  
**allparts**

Thwaites Ltd  
Leamington Spa  
Warwickshire  
CV32 7NQ  
Tel +44 (0)1926 422471  
Fax +44 (0)1926 450458  
[www.thwaitesdumpers.co.uk](http://www.thwaitesdumpers.co.uk)

<b>FROM SERIAL No.</b>	101653
<b>DATED</b>	19th DEC 2014
<b>SERIAL No.</b>	
<b>ENGINE BUILD No.</b>	
<b>PAYLOAD</b>	2 TONNE
<b>SKIP</b>	FORWARD TIP
<b>TRANSMISSION</b>	MANUAL
<b>TYPE</b>	MACH 415
<b>PREFIX No.</b>	04

### MACHINE IDENTIFICATION

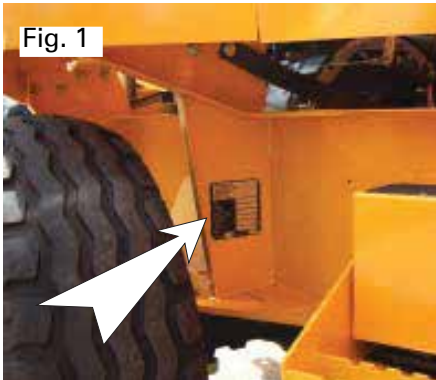


Fig. 1

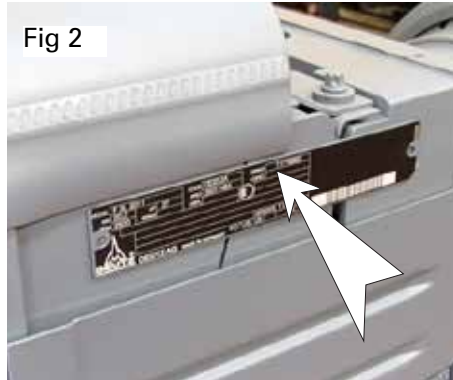


Fig 2

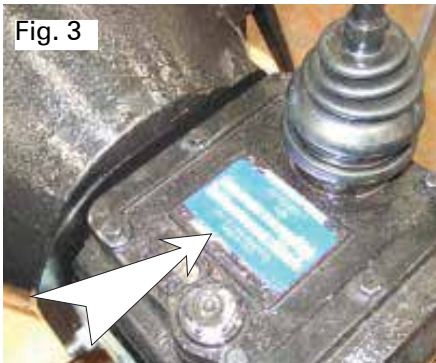


Fig. 3



Fig. 4

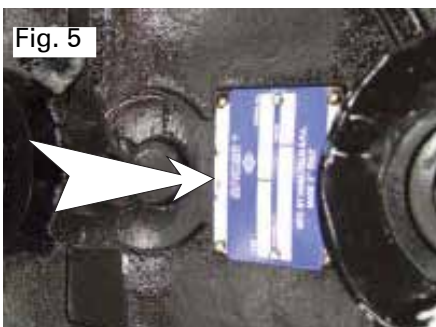


Fig. 5

#### Serial Numbers

Please quote machine serial numbers when in communication with your Thwaites distributor.

#### Model Type (Fig 1.)

#### Serial N° (Fig 1.)

#### Engine Serial N° (Fig 2.)

#### Gearbox Serial N° (Fig 3.)

#### Axle Serial N° (Fig 4.)

#### Transfer Box Serial N° (Fig 5.)

**SERIAL NUMBER IDENTIFICATION**



Thwaites Ltd Leamington Spa Warwickshire England CV32 7NQ	
Type Typ. Modelle	① MACH 415
Serial No. Fz. - Ident. - Nr No. de Serie	② 1-101653
Year of Manufacture Baujahr. Année de Fabrication	③ 19/12/2014
Mass Unladen Leergewicht Poids à vide	kg
Payload Nutzlast Charge utile	kg
Engine Power Mötor. Puissance du Moteur	kW
Drawbar Pull	kg
Vertical Drawbar Load	kg

**Important note:** *Do not use this parts manual to order replacement spares if the prefix level of your machine is higher than the number quoted at the front of this parts manual.*

- 1) When ordering replacement spares it is important that the model or MACH number is used to identify the correct parts manual.
- 2) The Machine Parts Manual issue level denoted by the single digit Prefix Number and followed by the unique machine serial number.
- 3) The year of manufacture.

Please ensure that these numbers are quoted in all correspondence with your Thwaites distributor.

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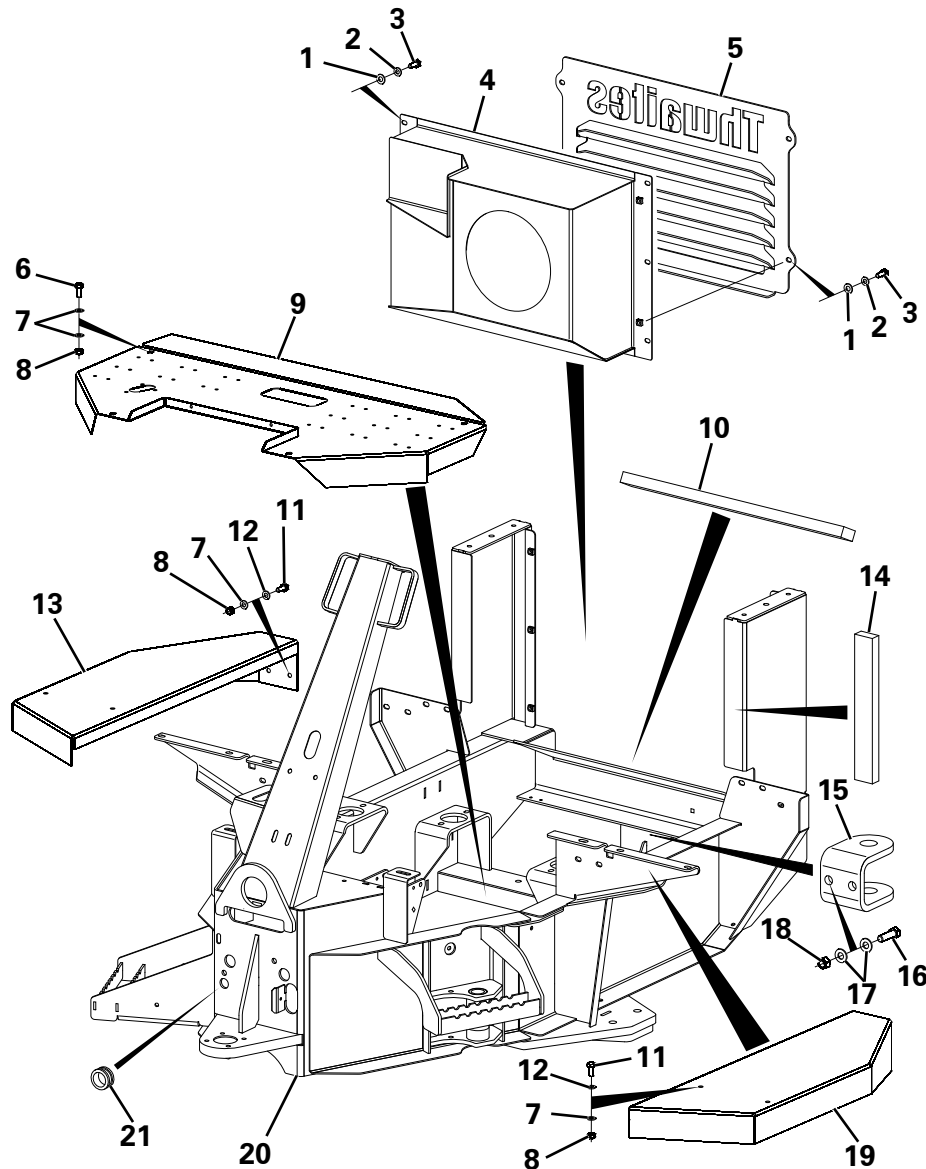
**\*DENOTES MODIFICATION - SEE MODIFICATION & ADDITIONS PAGES**

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ENGINE COVER ASSEMBLY	2
SEAT ASSEMBLY	3
SKIP & FRONT CHASSIS	4
KINGLINK ASSEMBLY	5
CLUTCH PEDAL ASSEMBLY	6
BRAKE PEDAL ASSEMBLY	7
BRAKE SYSTEM ASSEMBLY	8
THROTTLE ASSEMBLY	9
BATTERY BOX ASSEMBLY	10
ELECTRICAL ASSEMBLY	11
STEERING ASSEMBLY	12
TIPPING VALVE ASSEMBLY	13
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TPPING RAM ASSEMBLY	16
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**\*DENOTES MODIFICATION - SEE MODIFICATION & ADDITIONS PAGES**

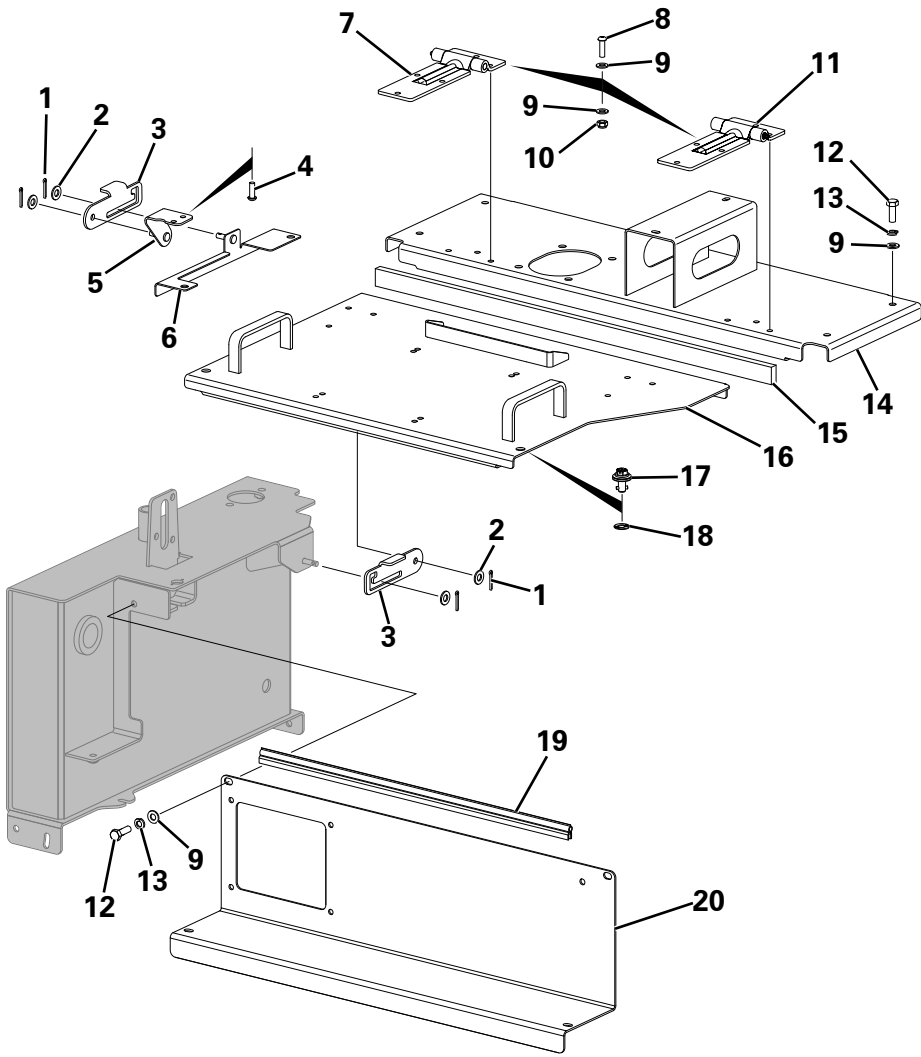
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**REAR CHASSIS & FIXINGS**

Item	Part No.	Description	Qty	U/M
1	T12973	WASHER	10.0	EA
2	T12972	SPRING WASHER	10.0	EA
3	T7465	SET SCREW	10.0	EA
4	T104748	REAR PLENUM ASSEMBLY	1.0	EA
5	T104799	REAR GRILL	1.0	EA
6	T7466	SET SCREW	12.0	EA
7	T10734	HEAVY DUTY WASHER	16.0	EA
8	T104724	NYLOC NUT	12.0	EA
9	T103428	FLOORPLATE ASSEMBLY	1.0	EA
10	T104738	FOAM SEAL	1.0	EA
11	T20618	SET SCREW	8.0	EA
12	T15819	WASHER	8.0	EA
13	T11094	MUDGUARD RH (REAR)	1.0	EA
14	T104832	FOAM SEAL	2.0	EA
15	T8183	TOWING BRACKET	1.0	EA
16	T11315	BOLT	2.0	EA
17	T100867	WASHER	4.0	EA
18	T14910	STOVER NUT	2.0	EA
19	T11095	MUDGUARD LH (REAR)	1.0	EA
20	T104737	REAR CHASSIS	1.0	EA
21	T9538	GROMMET	1.0	EA

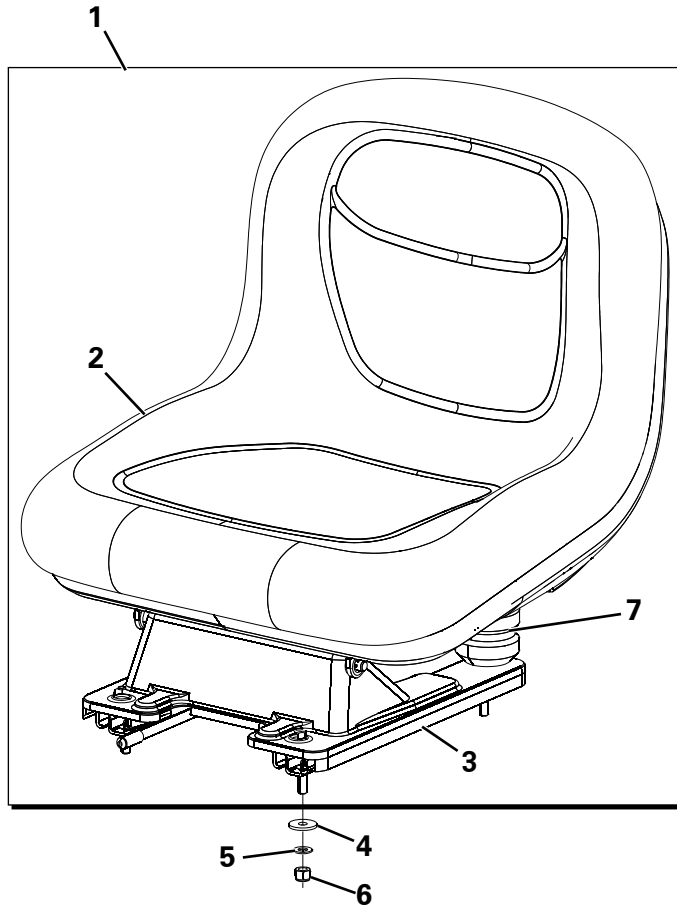
**ENGINE COVER ASSEMBLY**

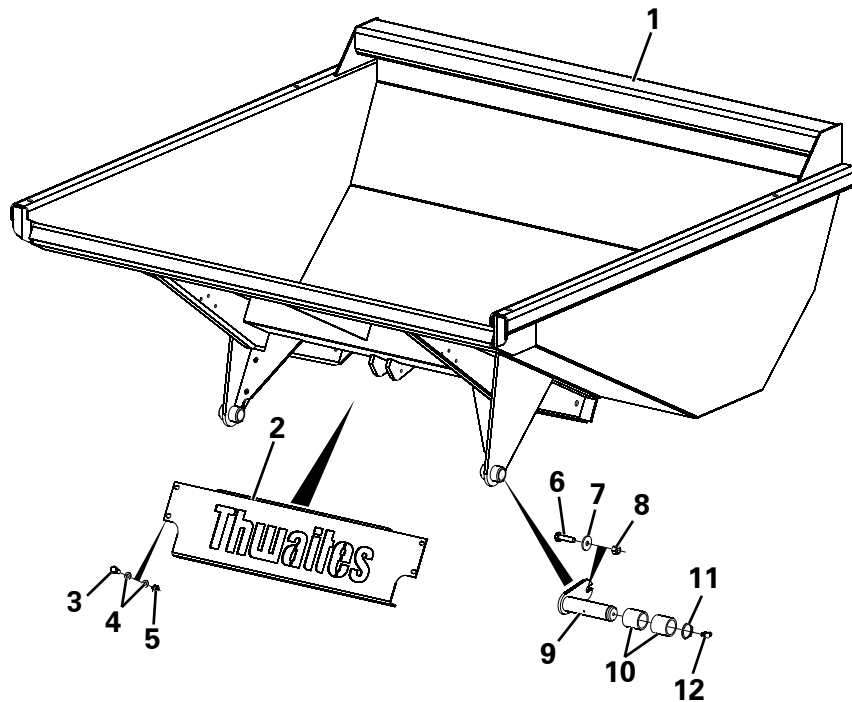


Item	Part No.	Description	Qty	U/M
1	T102540	SPLIT PIN	4.0	EA
2	T9345	HEAVY DUTY WASHER	4.0	EA
3	T104813	ENGINE COVER STAY	2.0	EA
4	T12971	DOME HEAD SOCKET SCREW	2.0	EA
5	T104816	SEAT STAY BRACKET	1.0	EA
6	T104815	SEAT STAY BRACKET	1.0	EA
7	T101779	HINGE LH	1.0	EA
8	T19209	DOME HEAD SOCKET SCREW	12.0	EA
9	T12973	WASHER	32.0	EA
10	T13457	NYLOC NUT	12.0	EA
11	T101780	HINGE RH	1.0	EA
12	T7465	SET SCREW	8.0	EA
13	T12972	SPRING WASHER	8.0	EA
14	T104808	TOP PANEL COVER	1.0	EA
15	T104351	SEAL	1.0	EA
16	T104809	ENGINE COVER	1.0	EA
17	T13996	CAMLOCK HEX HEAD SLOTTED STUD	2.0	EA
18	T12778	CAMLOCK RETAINING WASHER	2.0	EA
19	T104740	ENGINE COVER SEAL	1.0	EA
20	T104743	FRONT COVER PLATE	1.0	EA

**SEAT ASSEMBLY**

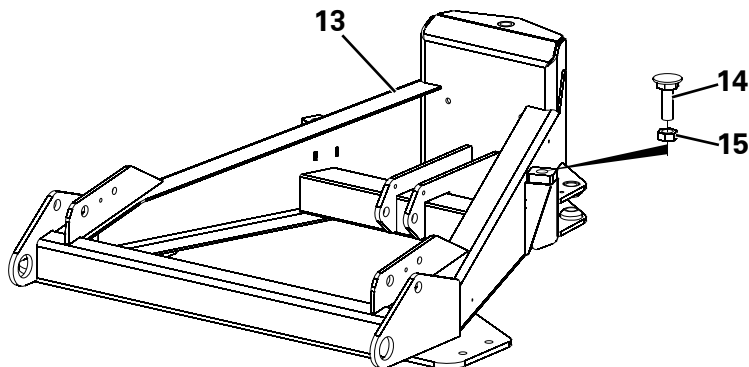
Item	Part No.	Description	Qty	U/M
1	T103426	SEAT ASSEMBLY	1.0	EA
2	T54106	SEAT	1.0	EA
3	T54105	ADJUSTER SEAT	1.0	EA
4	T9345	HEAVY DUTY WASHER	4.0	EA
5	T12973	WASHER	4.0	EA
6	T13457	NYLOC NUT	4.0	EA
7	T54503	MOUNTING	2.0	EA

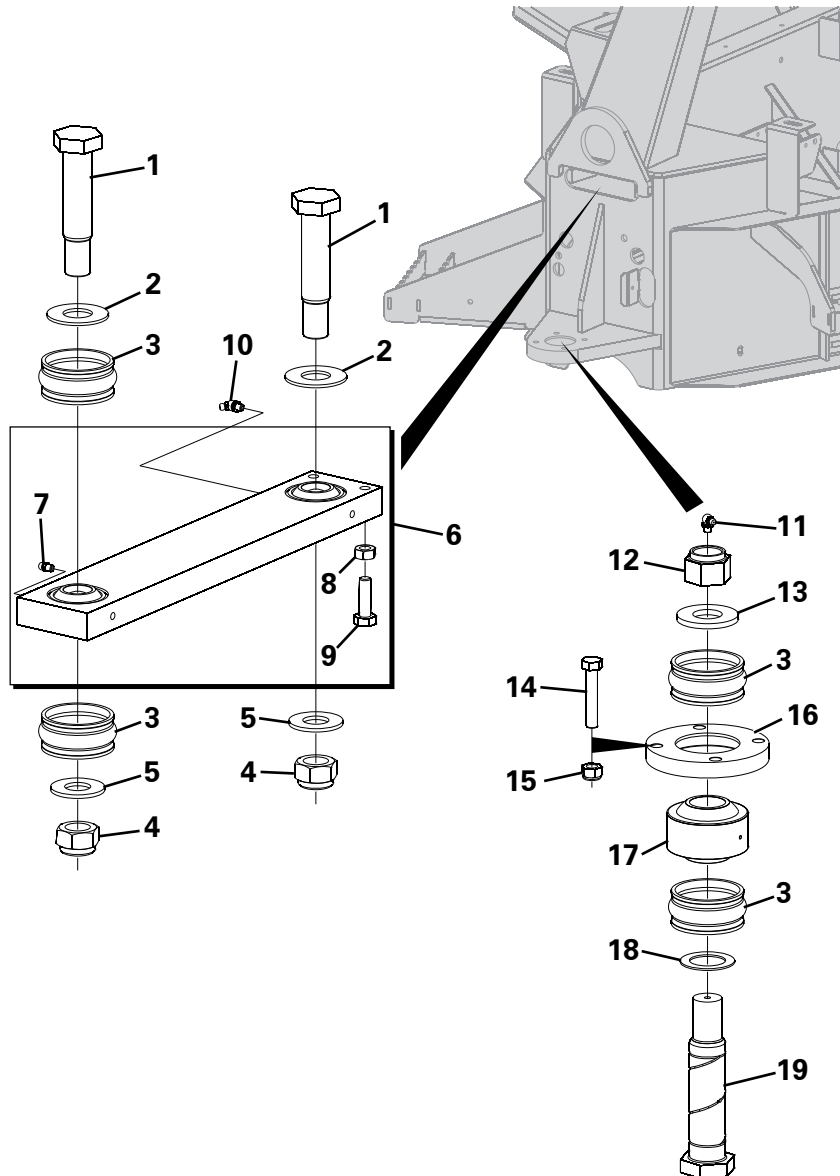




**SKIP & FRONT CHASSIS**

Item	Part No.	Description	Qty	U/M
1	T103601	SKIP	1.0	EA
2	T100153	NAMEPLATE	1.0	EA
3	T7466	SET SCREW	4.0	EA
4	T10734	HEAVY DUTY WASHER	8.0	EA
5	T101724	NYLOC NUT	4.0	EA
6	T14152	SET SCREW	2.0	EA
7	T9345	HEAVY DUTY WASHER	2.0	EA
8	T13457	NYLOC NUT	2.0	EA
9	T11355	PIVOT PIN	2.0	EA
10	T8397	BUSH	4.0	EA
11	T8219	CIRCLIP	2.0	EA
12	T5020	GREASE NIPPLE	2.0	EA
13	T103709	FRONT CHASSIS	1.0	EA
14	T11420	SKIP PAD	2.0	EA
15	T11419	NUT	2.0	EA

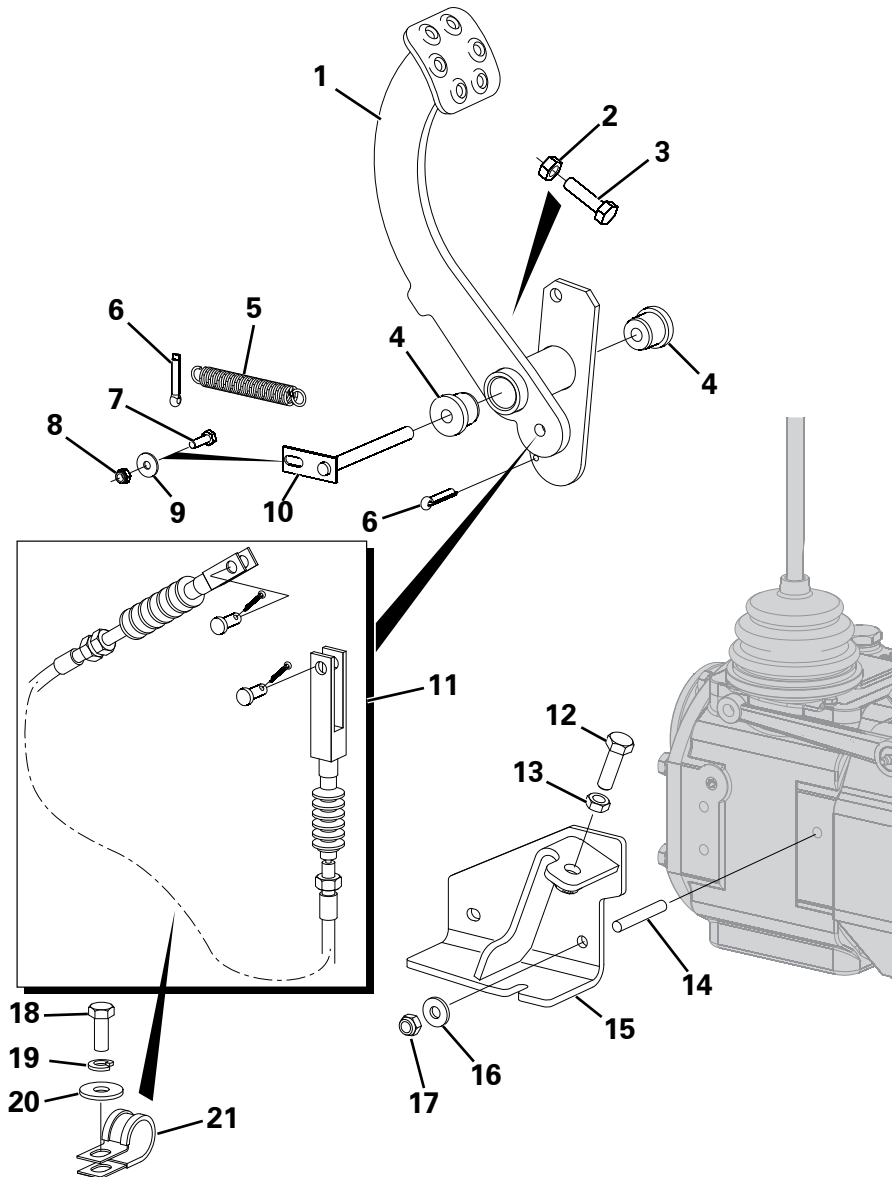




**KINGLINK ASSEMBLY**

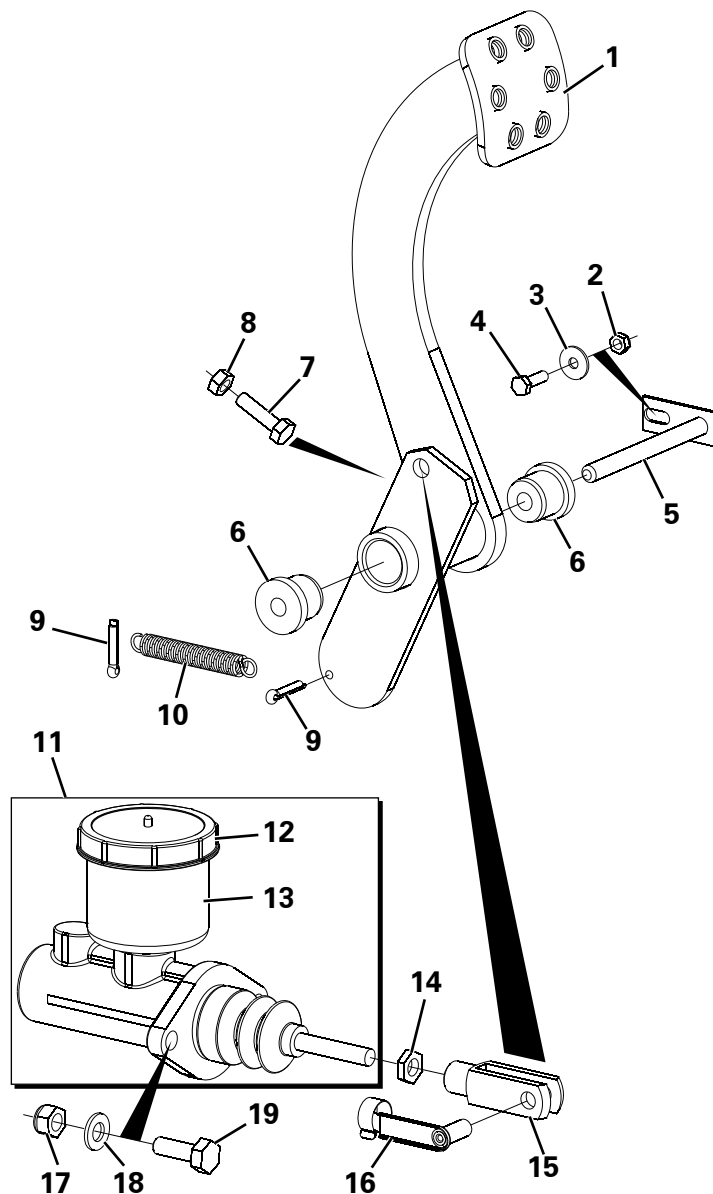
Item	Part No.	Description	Qty	U/M
1	T100593	PIVOT BOLT	2.0	EA
2	T6768	WASHER	2.0	EA
3	T10160	RUBBER DUST SEAL	4.0	EA
4	T10143	NUT	2.0	EA
5	T11811	HEAVY DUTY WASHER	2.0	EA
*	T52796	KINGLINK ASSEMBLY	1.0	EA
7	T16586	GREASE NIPPLE	1.0	EA
8	T12509	NUT	2.0	EA
9	T16505	SET SCREW	2.0	EA
10	T19702	GREASE NIPPLE	1.0	EA
11	T5020	GREASE NIPPLE	1.0	EA
12	T10331	PHILIDAS NUT	1.0	EA
13	T7695	HEAVY DUTY WASHER	1.0	EA
14	T16501	BOLT	4.0	EA
15	T102886	NYLOC NUT	4.0	EA
16	T10325	BEARING CAP	1.0	EA
17	T100268	SPHERICAL BEARING	1.0	EA
18	T8327	WASHER	1.0	EA
19	T10324	PIVOT BOLT	1.0	EA

**CLUTCH PEDAL ASSEMBLY**



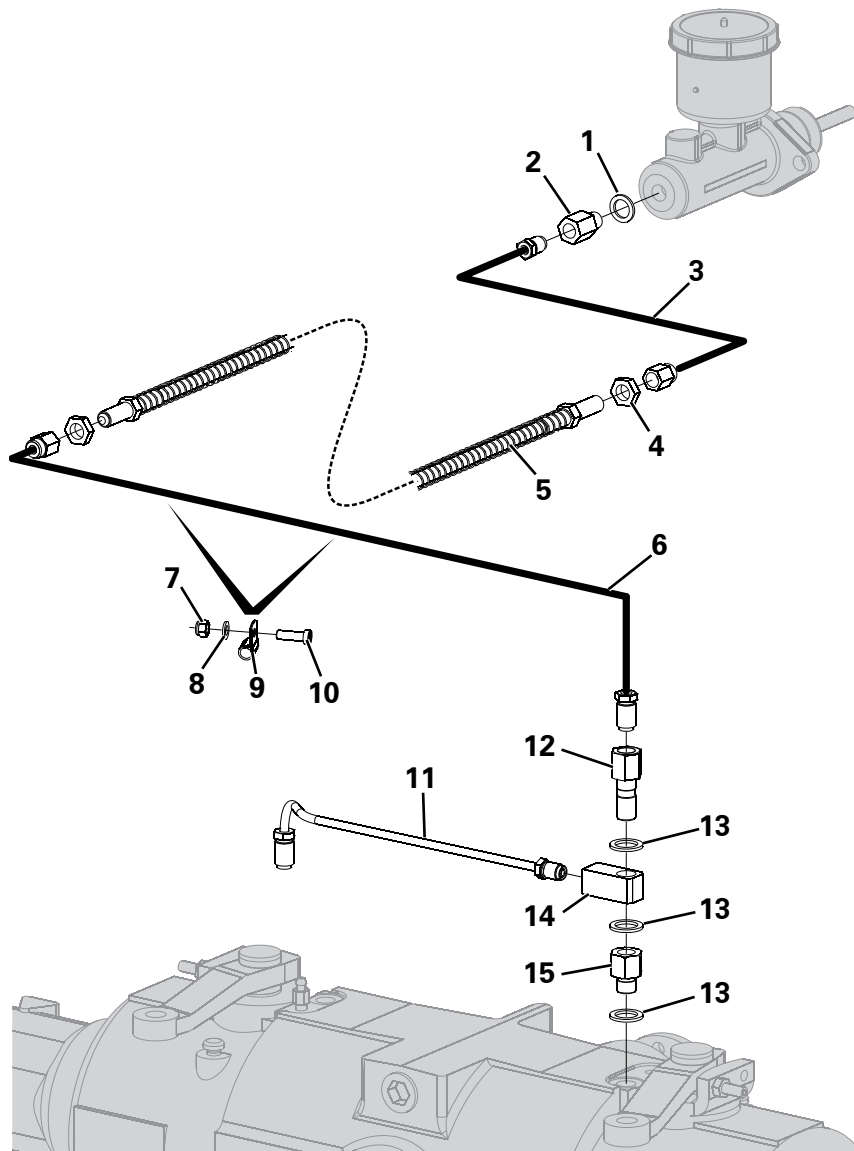
Item	Part No.	Description	Qty	U/M
1	T104753	CLUTCH PEDAL	1.0	EA
2	T9775	NUT	1.0	EA
3	T14152	SET SCREW	1.0	EA
4	T13858	BUSH	2.0	EA
5	T7089	SPRING	1.0	EA
6	T6702	SPLIT PIN	2.0	EA
7	T16477	SET SCREW	1.0	EA
8	T16481	NYLOC NUT	1.0	EA
9	T15830	HEAVY DUTY WASHER	1.0	EA
10	T9869	PEDAL SHAFT	1.0	EA
11	T104755	CLUTCH CABLE	1.0	EA
12	T14078	SET SCREW	1.0	EA
13	T14098	NUT	1.0	EA
14	T14459	GEARBOX STUD	2.0	EA
15	T104754	CLUTCH CABLE BRACKET	1.0	EA
16	T10734	HEAVY DUTY WASHER	2.0	EA
17	T7631	PHILIDAS NUT	2.0	EA
18	T7465	SET SCREW	1.0	EA
19	T12972	SPRING WASHER	1.0	EA
20	T9345	HEAVY DUTY WASHER	1.0	EA
21	T11515	P CLIP	1.0	EA

**BRAKE PEDAL ASSEMBLY**



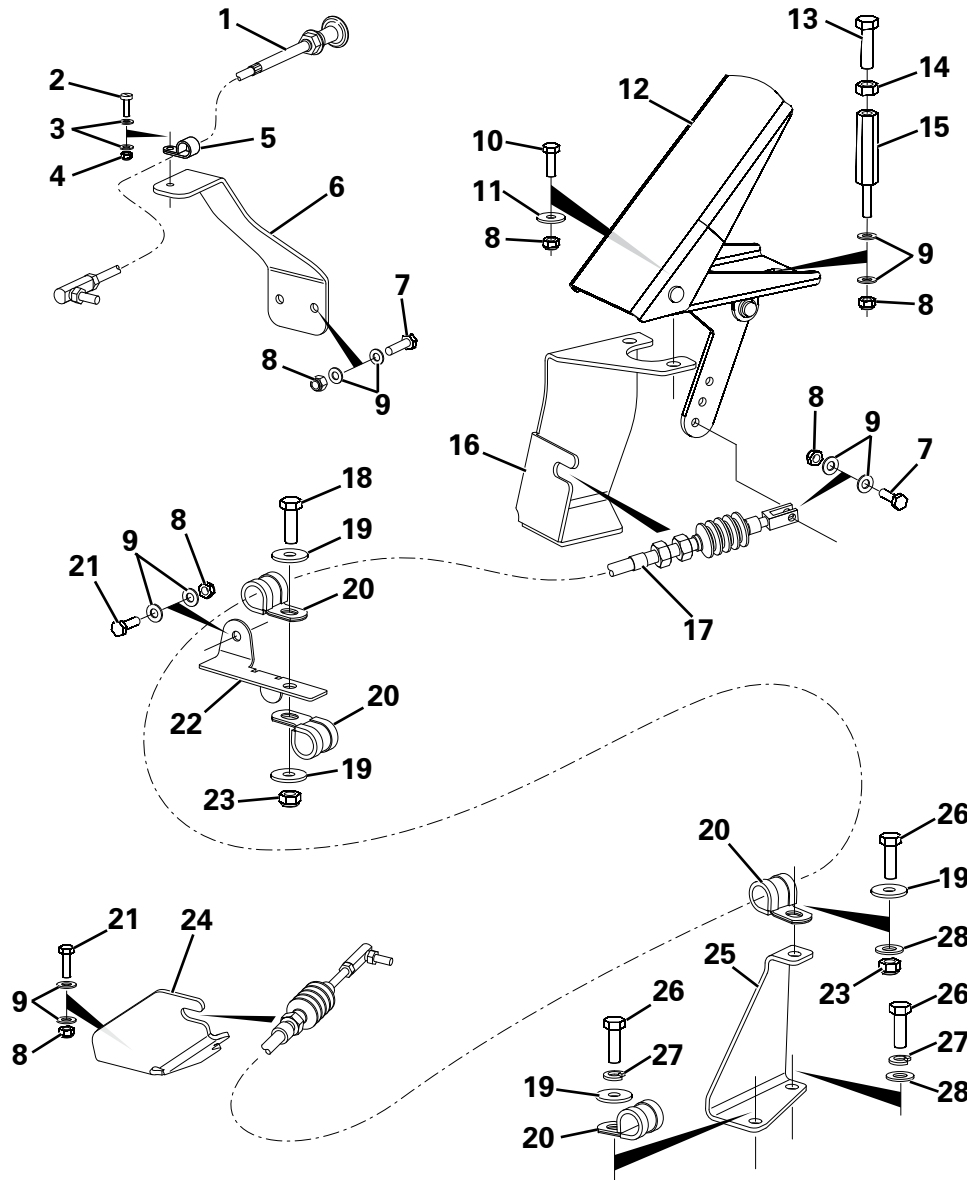
Item	Part No.	Description	Qty	U/M
1	T103423	BRAKE PEDAL	1.0	EA
2	T16481	NYLOC NUT	1.0	EA
3	T15830	HEAVY DUTY WASHER	1.0	EA
4	T16477	SET SCREW	1.0	EA
5	T9869	PEDAL SHAFT	1.0	EA
6	T13858	BUSH	2.0	EA
7	T14152	SET SCREW	1.0	EA
8	T9775	NUT	1.0	EA
9	T7987	SPLIT PIN	2.0	EA
10	T7089	SPRING	1.0	EA
11	T103430	MASTER CYLINDER	1.0	EA
	T54103	MAJOR REPAIR KIT	1.0	EA
12	T54104	RESERVOIR CAP	1.0	EA
13	T50540	RESERVOIR	1.0	EA
14	T19015	LOCK NUT	1.0	EA
15	T102365	FORK END	1.0	EA
16	T102374	SPRING CLEVIS PIN	1.0	EA
17	T101724	NYLOC NUT	2.0	EA
18	T15819	WASHER	2.0	EA
19	T20618	SET SCREW	2.0	EA

**BRAKE SYSTEM ASSEMBLY**



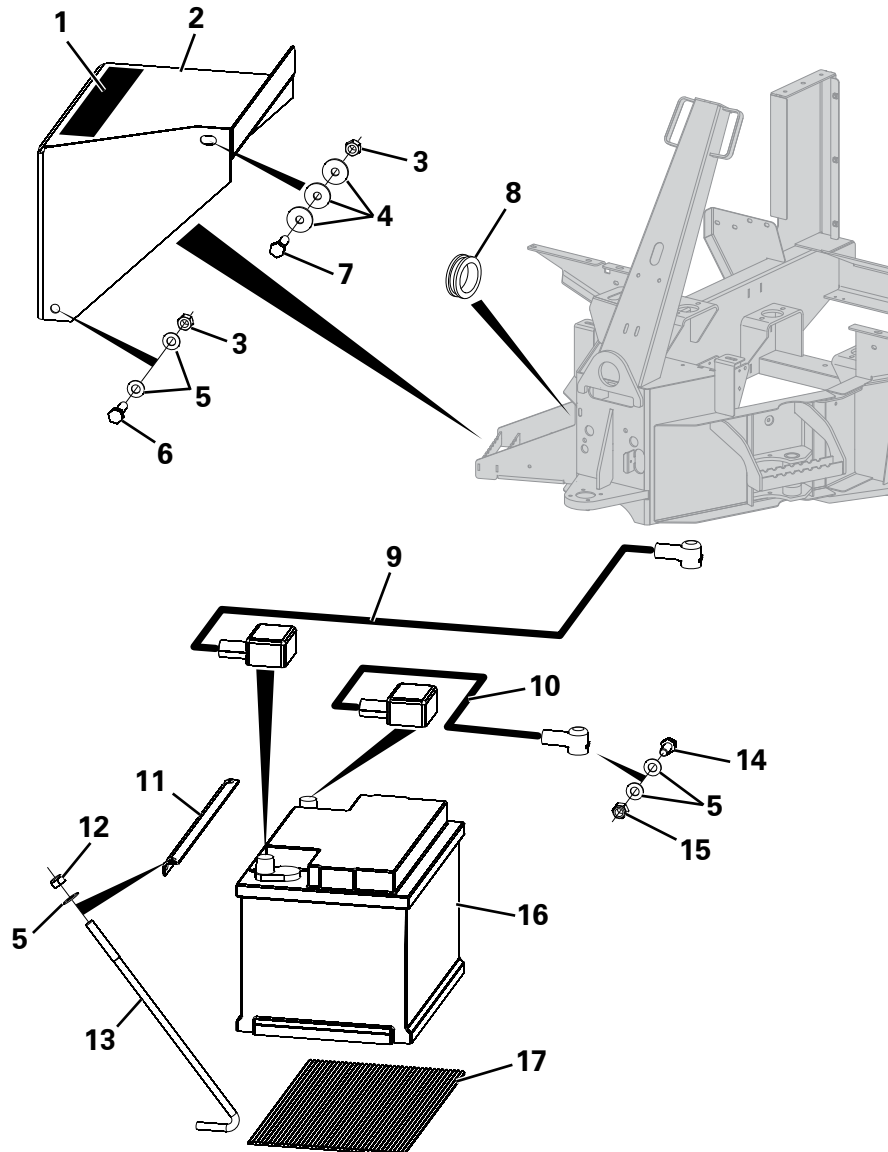
Item	Part No.	Description	Qty	U/M
1	T10940	DOWTY WASHER	1.0	EA
2	T100701	BRAKEPIPE/MCYL ADAPTOR	1.0	EA
3	T103433	BRAKE PIPE	1.0	EA
4	T8942	LOCK NUT	2.0	EA
5	T11243	FLEXIBLE BRAKE HOSE	1.0	EA
6	T103434	BRAKE PIPE	1.0	EA
7	T16613	NYLOC NUT	2.0	EA
8	T16612	WASHER	2.0	EA
9	T11452	P CLIP	2.0	EA
10	T16610	CHEESE HEAD SCREW	2.0	EA
11	T102731	BRAKE PIPE	1.0	EA
12	T102514	BRAKE TEE BANJO BOLT	1.0	EA
13	T15176	DOWTY WASHER	3.0	EA
14	T102513	BRAKE PIPE TEE	1.0	EA
15	T102868	MALE/FEMALE ADAPTOR	1.0	EA

**THROTTLE ASSEMBLY**

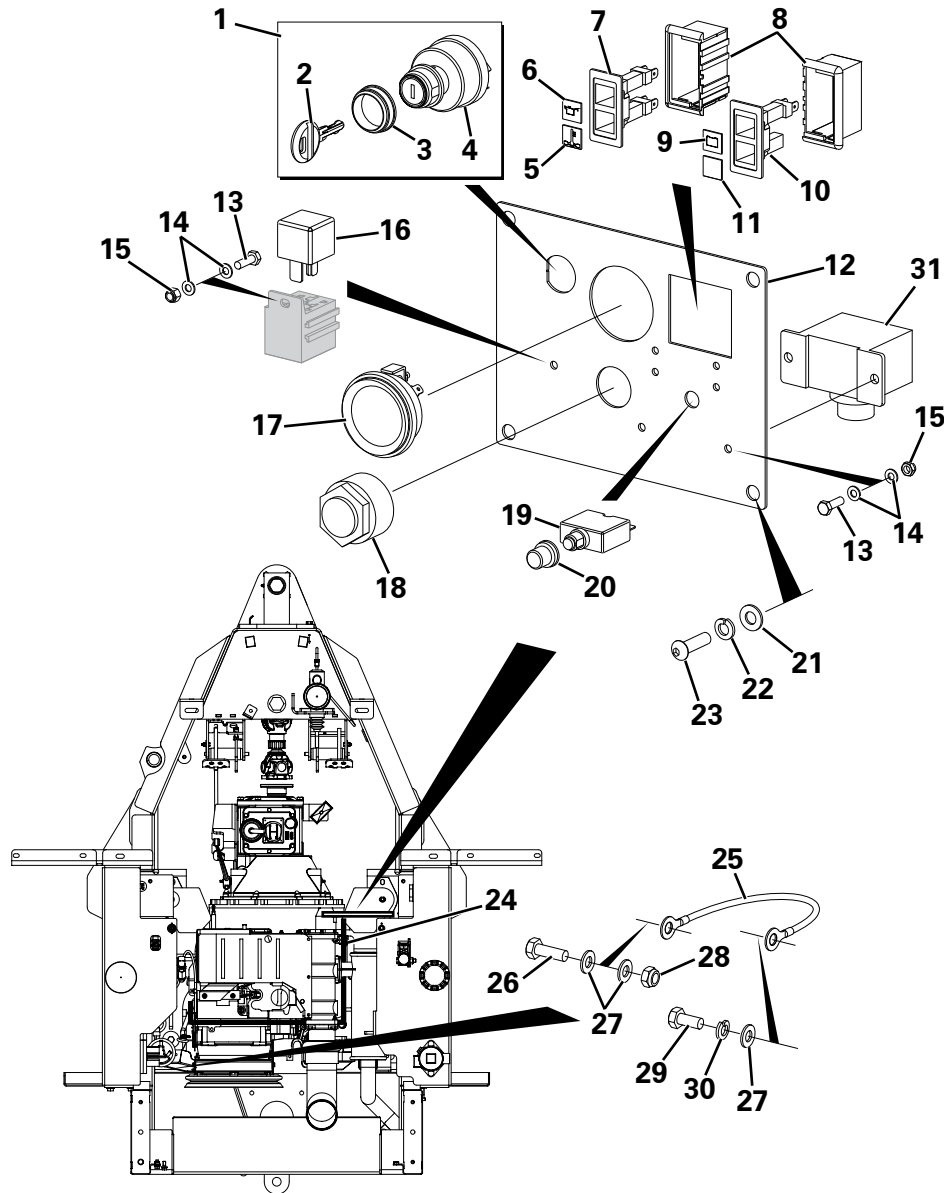


Item	Part No.	Description	Qty	U/M
1	T104797	PULL STOP CABLE	1.0	EA
2	T16611	CHEESE HEAD SCREW	1.0	EA
3	T16612	WASHER	2.0	EA
4	T16613	NYLOC NUT	1.0	EA
5	T11452	P CLIP	1.0	EA
6	T104789	PULL STOP CABLE BRACKET	1.0	EA
7	T16476	SET SCREW	3.0	EA
8	T16481	NYLOC NUT	9.0	EA
9	T13911	WASHER	14.0	EA
10	T16477	SET SCREW	2.0	EA
11	T15830	HEAVY DUTY WASHER	2.0	EA
12	T101965	THROTTLE PEDAL	1.0	EA
13	T14152	BOLT	1.0	EA
14	T9775	NUT	1.0	EA
15	T101032	THROTTLE STOP	1.0	EA
16	T104786	THROTTLE PEDAL CABLE BRACKET	1.0	EA
17	T104795	THROTTLE CABLE	1.0	EA
18	T12694	SET SCREW	1.0	EA
19	T9345	HEAVY DUTY WASHER	4.0	EA
20	T11514	P CLIP	4.0	EA
21	T11433	SET SCREW	2.0	EA
22	T104811	THROTTLE CABLE GUIDE BRACKET	1.0	EA
23	T13457	NYLOC NUT	2.0	EA
24	T104796	THROTTLE CABLE BRACKET REAR	1.0	EA
25	T104794	THROTTLE CABLE SUPPORT BRACKET	1.0	EA
26	T7465	SET SCREW	3.0	EA
27	T12972	SPRING WASHER	2.0	EA
28	T12973	WASHER	2.0	EA

**BATTERY BOX ASSEMBLY**

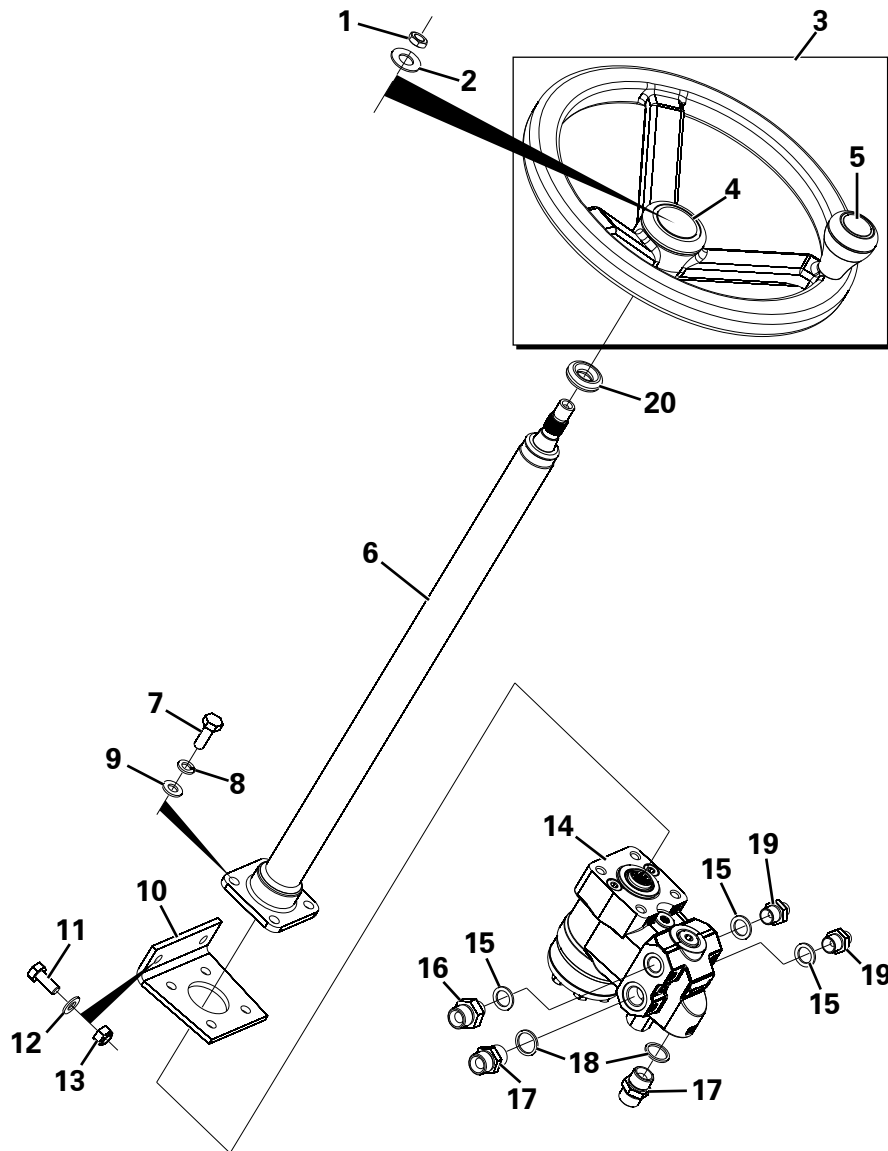


Item	Part No.	Description	Qty	U/M
1	T101567	ANTI SLIP PAD	1.0	EA
2	T16910	BATTERY COVER	1.0	EA
3	T19007	STOVER NUT	3.0	EA
4	T9345	HEAVY DUTY WASHER	3.0	EA
5	T12973	WASHER	8.0	EA
6	T12694	SET SCREW	2.0	EA
7	T14277	BOLT	1.0	EA
8	T9538	GROMMET	1.0	EA
9	T104769	BATTERY POSITIVE CABLE	1.0	EA
10	T104770	BATTERY NEGATIVE CABLE	1.0	EA
11	T14351	BATTERY CLAMP	1.0	EA
12	T7630	STOVER NUT	2.0	EA
13	T12213	BATTERY COVER ROD	2.0	EA
14	T7465	SET SCREW	1.0	EA
15	T13457	NYLOC NUT	1.0	EA
16	T100967	BATTERY	1.0	EA
17	T14286	BATTERY PACKING	1.0	EA



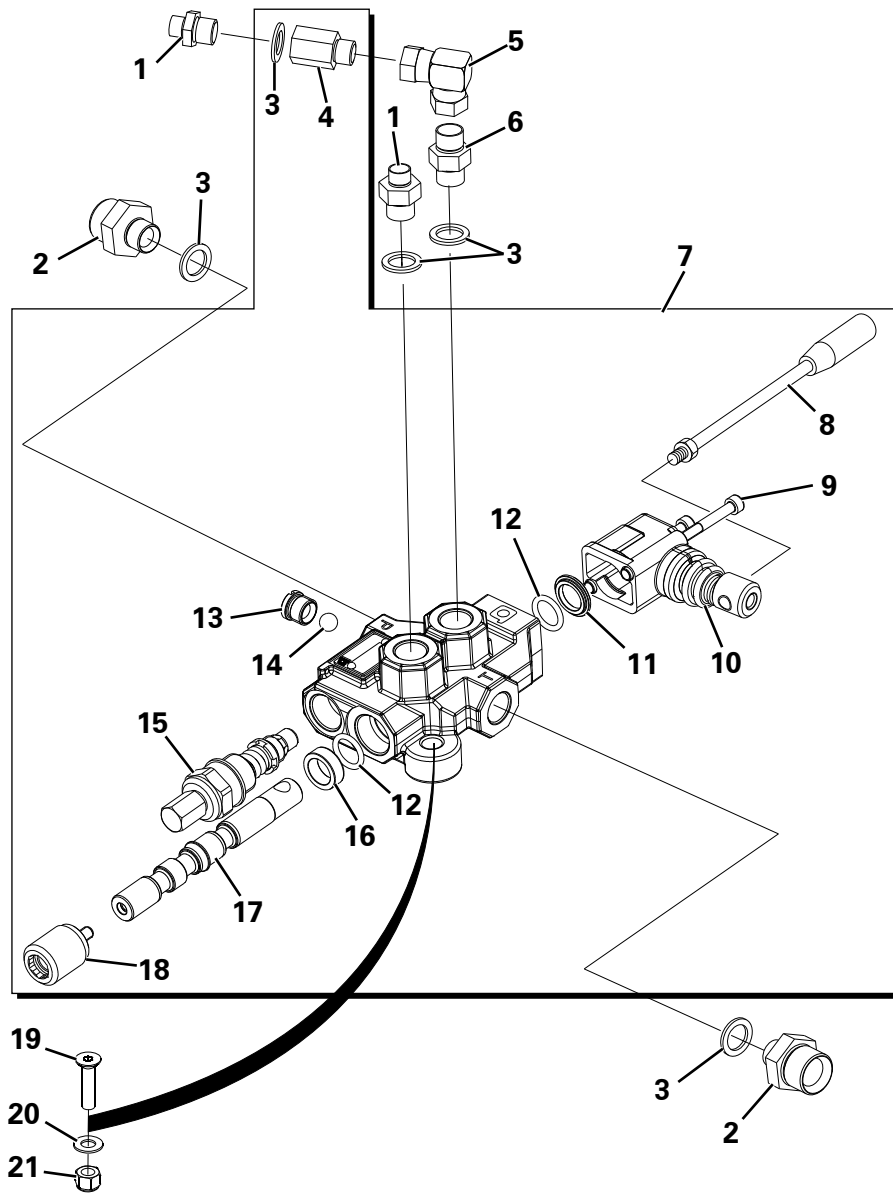
**ELECTRICAL ASSEMBLY**

Item	Part No.	Description	Qty	U/M
1	T104633	IGNITION SWITCH	1.0	EA
2	T104634	STARTER SWITCH KEY	1.0	EA
3	T104703	KEY CYLINDER NUT (IGNITION)	1.0	EA
4	T104702	KEY CYLINDER (IGNITION)	1.0	EA
5	T104806	SWITCH LIGHT - TEMPERATURE	1.0	EA
6	T104804	SWITCH LIGHT - OIL	1.0	EA
7	T104802	PILOT LAMP	1.0	EA
8	T104803	END PIECE	2.0	EA
9	T104805	SWITCH LIGHT - BATTERY	1.0	EA
10	T104830	PILOT LAMP	1.0	EA
11	T104807	SWITCH LIGHT - BLANK	1.0	EA
12	T104749	CONTROL PANEL PLATE	1.0	EA
* 13	T102918	SET SCREW	3.0	EA
* 14	T16612	WASHER	6.0	EA
* 15	T16613	NYLOC NUT	3.0	EA
16	T101993	RELAY	1.0	EA
17	T16538	HOURLMETER	1.0	EA
18	T100902	BUZZER	1.0	EA
19	T102844	CIRCUIT BREAKER	1.0	EA
20	T102846	CIRCUIT BREAKER SPLASHGUARD	1.0	EA
21	T12973	WASHER	4.0	EA
22	T12972	SPRING WASHER	4.0	EA
23	T12832	DOME HEAD SOCKET SCREW	4.0	EA
* 24	T105360	MAIN HARNESS	1.0	EA
25	T100665	EARTH LEAD	1.0	EA
26	T12694	SET SCREW	1.0	EA
27	T12973	WASHER	3.0	EA
28	T13457	NYLOC NUT	1.0	EA
29	T11673	SET SCREW	1.0	EA
30	T12972	SPRING WASHER	1.0	EA
* 31	T105354	STARTER BLOCKING RELAY	1.0	EA



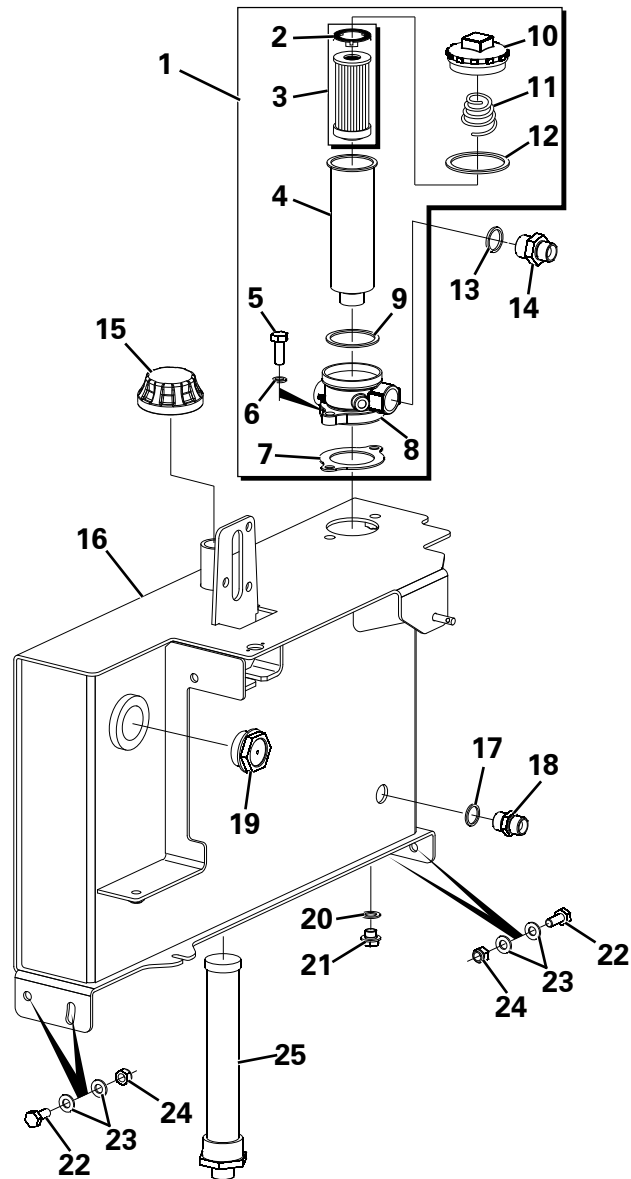
**STEERING ASSEMBLY**

Item	Part No.	Description	Qty	U/M
1	T53853	HALF NUT	1.0	EA
2	T6765	WASHER	1.0	EA
3	T100496	STEERING WHEEL & CAP	1.0	EA
4	T50541	CENTRE CAP	1.0	EA
5	T52520	SPINNER KNOB	1.0	EA
6	T103521	STEERING COLUMN	1.0	EA
7	T7466	SET SCREW	4.0	EA
8	T13362	SPRING WASHER	4.0	EA
9	T15819	WASHER	4.0	EA
10	T9873	STEERING VALVE BRACKET	1.0	EA
11	T7466	SET SCREW	2.0	EA
12	T10734	HEAVY DUTY WASHER	2.0	EA
13	T13064	STOVER NUT	2.0	EA
14	T102911	STEERING PRIORITY VALVE	1.0	EA
	T53880	SEAL KIT	1.0	EA
15	T5637	DOWTY WASHER	3.0	EA
16	T11165	ADAPTOR	1.0	EA
17	T13936	ADAPTOR	2.0	EA
18	T5596	DOWTY WASHER	2.0	EA
19	T12118	ADAPTOR	2.0	EA
20	T10306	GROMMET	1.0	EA



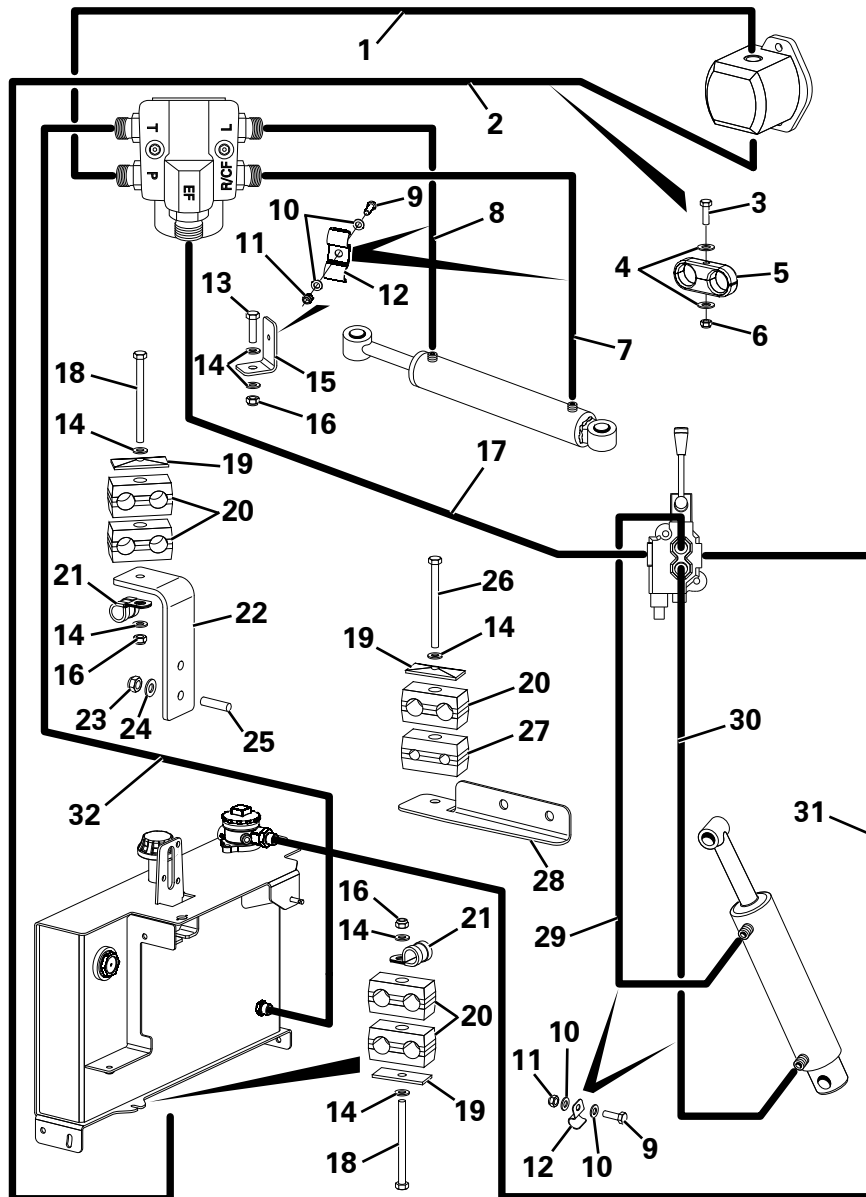
**TIPPING VALVE ASSEMBLY**

Item	Part No.	Description	Qty	U/M
1	T12118	ADAPTOR	2.0	EA
2	T11165	ADAPTOR	2.0	EA
3	T5637	DOWTY WASHER	5.0	EA
4	T54107	RESTRICTOR ADAPTOR	1.0	EA
5	T104828	ELBOW	1.0	EA
6	T13606	ADAPTOR	1.0	EA
7	T104800	TIPPING VALVE	1.0	EA
8	T53313	LEVER	1.0	EA
9	T53312	SOCKET SCREW	2.0	EA
10	T53311	LEVER ASSEMBLY	1.0	EA
11	T53306	FLANGED WASHER	1.0	EA
12	T53304	SEAL	2.0	EA
13	T53309	CHECK VALVE	1.0	EA
14	T53310	BALL	1.0	EA
15	T52674	VALVE	1.0	EA
16	T53305	SPACER	1.0	EA
17	T53307	SPOOL	1.0	EA
18	T53308	POSITIONER	1.0	EA
19	T17070	SOCKET C/SUNK HEAD SCREW	2.0	EA
20	T12973	WASHER	2.0	EA
21	T13457	NYLOC NUT	2.0	EA



**HYDRAULIC TANK ASSEMBLY**

Item	Part No.	Description	Qty	U/M
1	T104130	RETURN FILTER	1.0	EA
2	T52627	FILTER CLIP	1.0	EA
3	T52286	HYDRAULIC ELEMENT	1.0	EA
4	T54202	LOWER CASING	1.0	EA
5	T7466	SET SCREW	2.0	EA
6	T100798	DOWTY WASHER	2.0	EA
7	T54204	GASKET	1.0	EA
8	T53135	FILTER HEAD	1.0	EA
9	T54203	SEAL	1.0	EA
10	T54200	CAP	1.0	EA
11	T52625	SPRING	1.0	EA
12	T54201	SEAL	1.0	EA
13	T5637	DOWTY WASHER	1.0	EA
14	T5593	ADAPTOR	1.0	EA
15	T104124	FILLER / BREATHER	1.0	EA
16	T104739	HYDRAULIC TANK ASSEMBLY	1.0	EA
17	T103673	COPPER WASHER	1.0	EA
18	T13936	ADAPTOR	1.0	EA
19	T101085	LEVEL INDICATOR	1.0	EA
20	T5695	FIBRE WASHER	1.0	EA
21	T7262	BLANKING PLUG	1.0	EA
22	T16505	SET SCREW	4.0	EA
23	T10734	HEAVY DUTY WASHER	8.0	EA
24	T102886	NYLOC NUT	4.0	EA
25	T101240	SUCTION STRAINER	1.0	EA

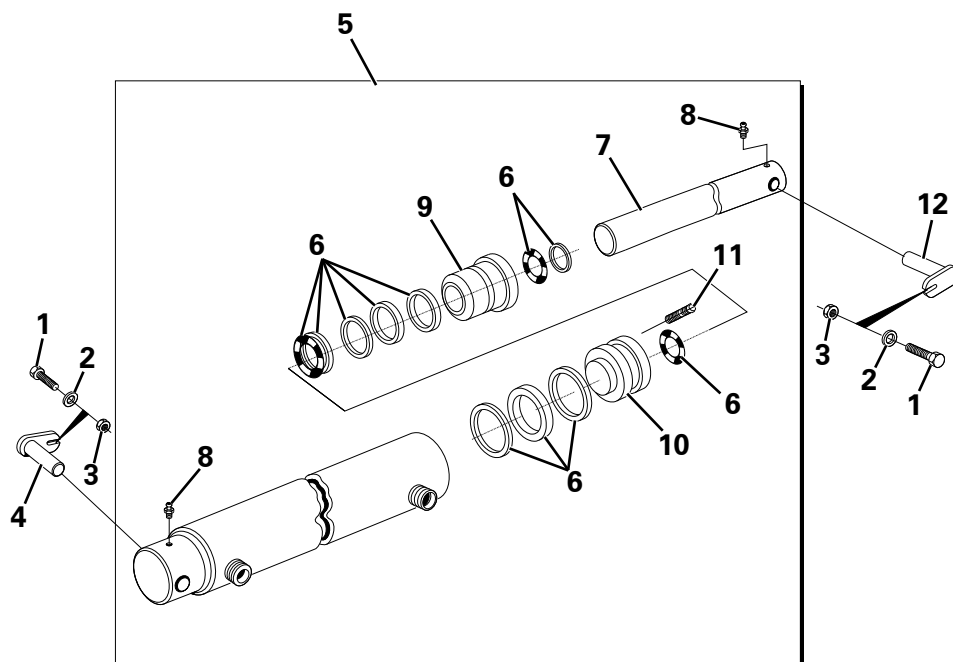


**HYDRAULIC CIRCUIT**

Item	Part No.	Description	Qty	U/M
1	T104817	HOSE	1.0	EA
2	T103492	HOSE	1.0	EA
3	T16506	BOLT	2.0	EA
4	T13911	WASHER	4.0	EA
5	T101040	PIPE CLAMP	2.0	EA
6	T16481	NYLOC NUT	2.0	EA
7	T103491	HOSE	1.0	EA
8	T103490	HOSE	1.0	EA
9	T16611	CHEESE HEAD SCREW	4.0	EA
10	T16612	WASHER	8.0	EA
11	T16613	NYLOC NUT	4.0	EA
12	T12335	CABLE CLIP	6.0	EA
13	T14152	BOLT	1.0	EA
14	T12973	WASHER	7.0	EA
15	T104792	PIPE CLAMP BRACKET	1.0	EA
16	T13457	NYLOC NUT	3.0	EA
17	T104818	HOSE	1.0	EA
18	T15658	BOLT	2.0	EA
19	T102170	CLAMP COVER PLATE	3.0	EA
20	T104555	CLAMP	5.0	EA
21	T11514	P CLIP	2.0	EA
22	T104759	PIPE BRACKET	1.0	EA
23	T7631	PHILIDAS NUT	2.0	EA
24	T10734	HEAVY DUTY WASHER	2.0	EA
25	T14459	GEARBOX STUD	2.0	EA
26	T16496	BOLT	1.0	EA
27	T102277	CLAMP	1.0	EA
28	T104814	HOSE RETAINER BRACKET	1.0	EA
29	T103494	HOSE	1.0	EA
30	T103493	HOSE	1.0	EA
31	T104820	HOSE	1.0	EA
32	T104882	HOSE	1.0	EA

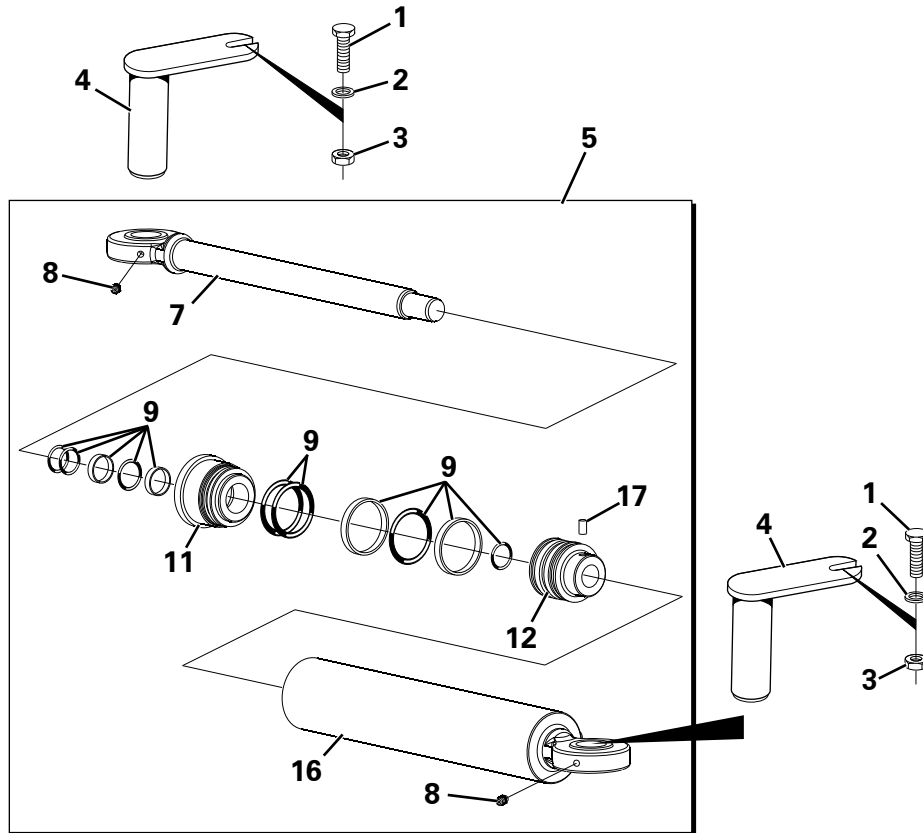
**TIPPING RAM ASSEMBLY**

Item	Part No.	Description	Qty	U/M
1	T14152	BOLT	2.0	EA
2	T9345	HEAVY DUTY WASHER	2.0	EA
3	T13457	NYLOC NUT	2.0	EA
4	T11245	RAM PIN	1.0	EA
5	T103576	TIPPING RAM	1.0	EA
6	T54166	SEAL KIT	1.0	EA
7	T54174	PISTON ROD	1.0	EA
8	T53477	GREASE NIPPLE	2.0	EA
9	T54167	SCREWED GLAND	1.0	EA
10	T54168	PISTON HEAD	1.0	EA
11	T54179	SOCKET SET SCREW	1.0	EA
12	T11246	RAM PIN	1.0	EA

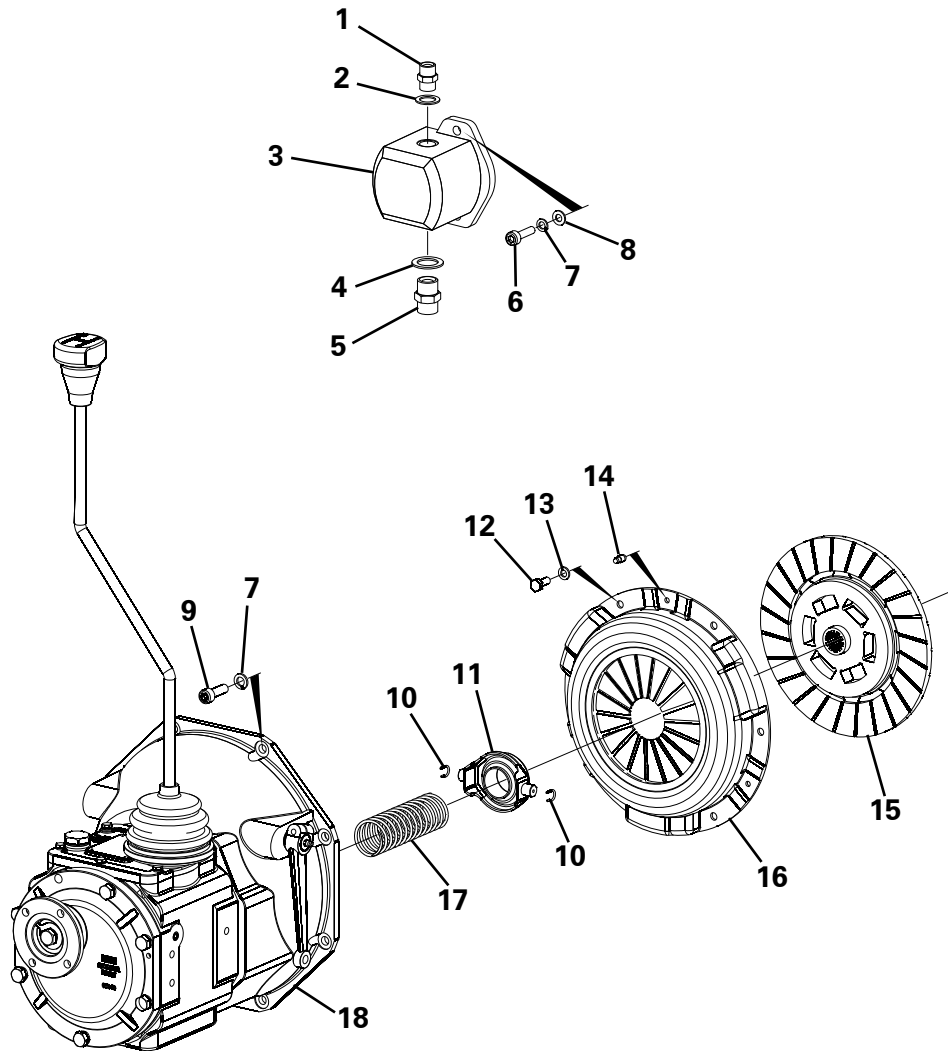


**STEERING RAM ASSEMBLY**

Item	Part No.	Description	Qty	U/M
1	T14152	BOLT	2.0	EA
2	T9345	HEAVY DUTY WASHER	2.0	EA
3	T13457	NYLOC NUT	2.0	EA
4	T100361	RAM PIN	2.0	EA
5	T103578	STEERING RAM	1.0	EA
7	T54227	ROD ASSEMBLY	1.0	EA
8	T53406	GREASE NIPPLE	2.0	EA
9	T53478	SEAL KIT	1.0	EA
11	T53479	SCREW GLAND	1.0	EA
12	T53382	PISTON HEAD	1.0	EA
16	T54226	RAM BODY ASSEMBLY	1.0	EA
17	T54228	HEX SOCKET SCREW	1.0	EA

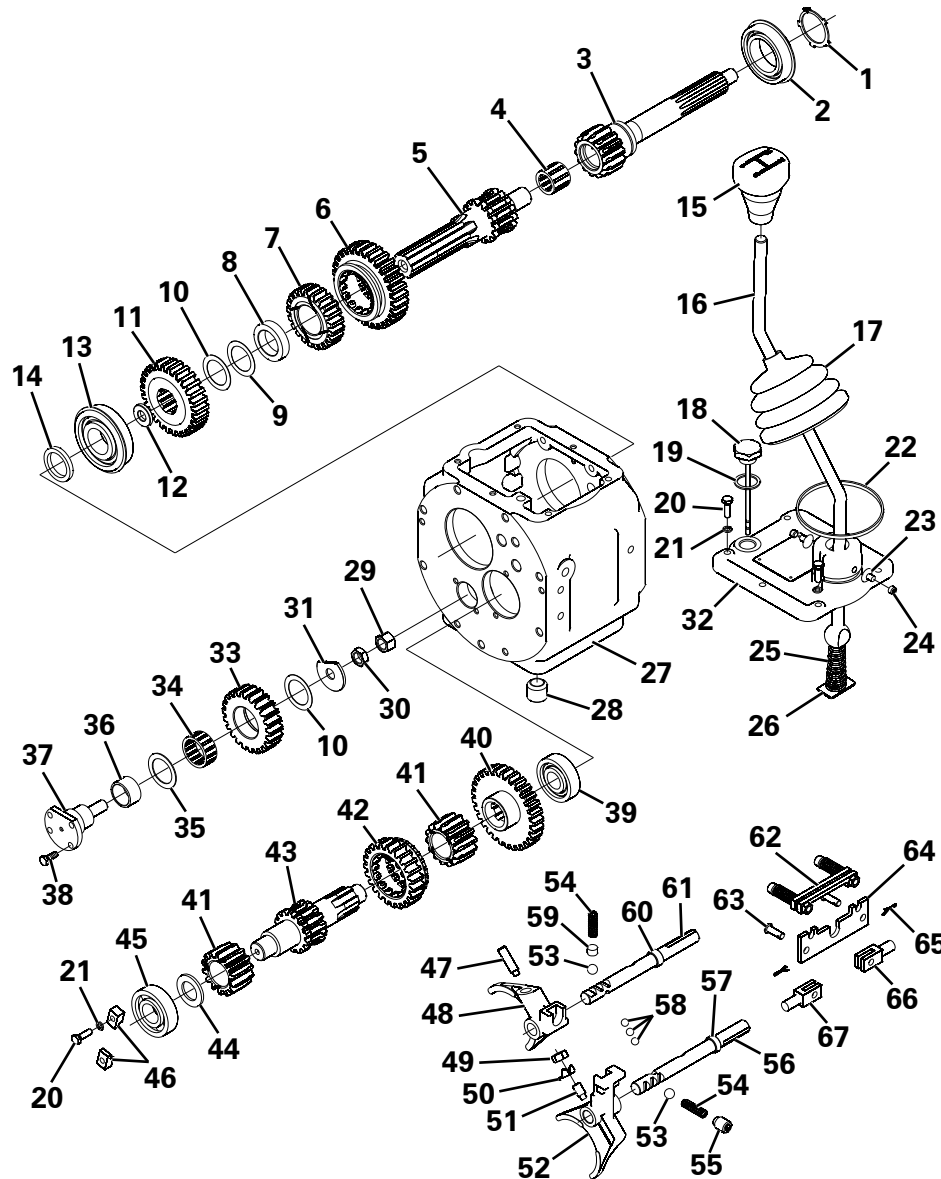


**CLUTCH ASSEMBLY & HYD. PUMP**

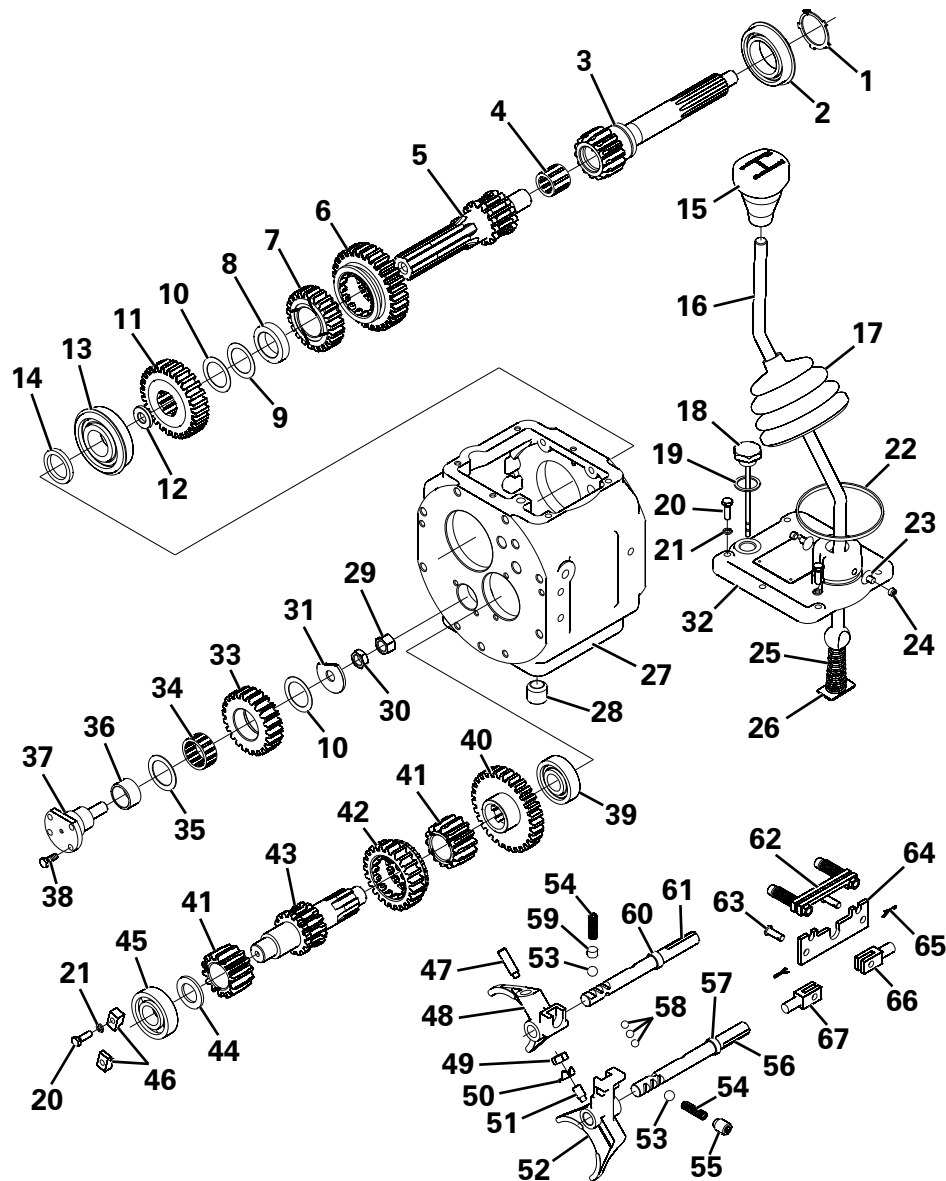


Item	Part No.	Description	Qty	U/M
1	T13936	ADAPTOR	1.0	EA
2	T5596	DOWTY WASHER	1.0	EA
3	T101512	GEAR PUMP	1.0	EA
	T54437	SEAL KIT	1.0	EA
4	T5594	DOWTY WASHER	1.0	EA
5	T8014	ADAPTOR	1.0	EA
6	T12820	CAPHEAD SCREW	2.0	EA
7	T13362	SPRING WASHER	10.0	EA
8	T10734	HEAVY DUTY WASHER	2.0	EA
9	T16770	CAPHEAD SCREW	8.0	EA
10	T102470	SPRING RETAINER	2.0	EA
11	T101969	RELEASE BEARING	1.0	EA
12	T7465	SET SCREW	6.0	EA
13	T12972	SPRING WASHER	6.0	EA
14	T54448	DOWEL	3.0	EA
15	T102468	DRIVEN PLATE	1.0	EA
16	T102467	CLUTCH COVER ASSY	1.0	EA
17	T101978	PRE-TENSIONER SPRING	1.0	EA
18	T103450	GEARBOX	1.0	EA

## GEARBOX - INTERNAL

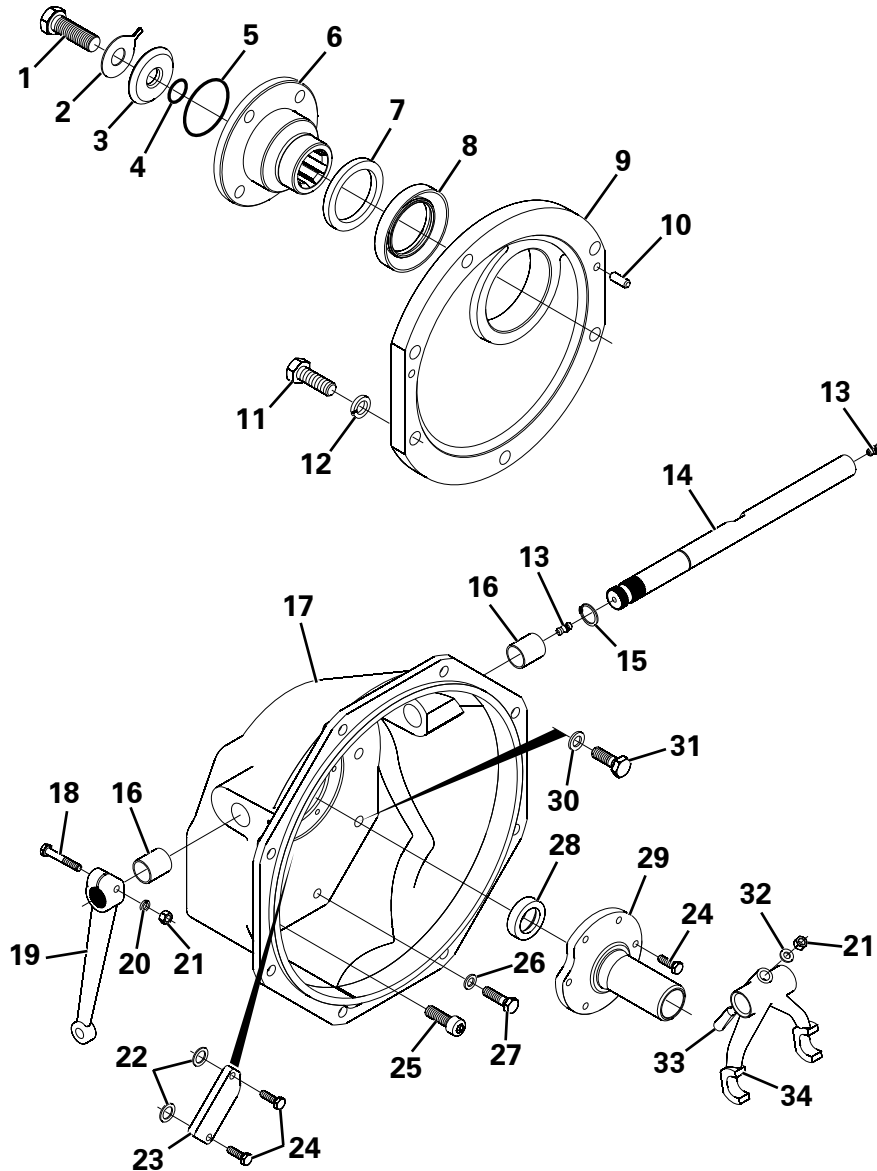


Item	Part No.	Description	Qty	U/M
1	T53992	CIRCLIP	1.0	EA
2	T53991	BEARING	1.0	EA
3	T53989	SHAFT	1.0	EA
4	T53988	NEEDLE BEARING	1.0	EA
5	T54000	SHAFT	1.0	EA
6	T53999	GEAR	1.0	EA
7	T53998	GEAR	1.0	EA
8	T53997	SPACER	1.0	EA
9	T53996	SHIM	1.0	EA
10	T53995	SHIM	2.0	EA
11	T53994	GEAR	1.0	EA
12	T53993	SPACER	1.0	EA
13	T54015	BALL BEARING	1.0	EA
14	T54025	SPACER	1.0	EA
15	T54001	KNOB	1.0	EA
16	T54550	LEVER	1.0	EA
17	T54035	RUBBER BOOT	1.0	EA
18	T54003	DIPSTICK	1.0	EA
19	T54004	SEAL WASHER	1.0	EA
20	T54005	HEXAGON BOLT	8.0	EA
21	T54006	SPRING WASHER	8.0	EA
22	T54008	CLIP	1.0	EA
23	T54009	PIN	2.0	EA
24	T54010	BOLT	2.0	EA
25	T54011	SPRING	1.0	EA
26	T54038	STOP	1.0	EA
27	T54032	HOUSING	1.0	EA
28	T54034	PLUG	1.0	EA
29	T54016	NUT	1.0	EA
30	T54017	NUT	1.0	EA
31	T54018	WASHER	1.0	EA
32	T54007	GEAR CHANGE COVER	1.0	EA
33	T54019	GEAR	1.0	EA
34	T54020	NEEDLE BEARING	1.0	EA



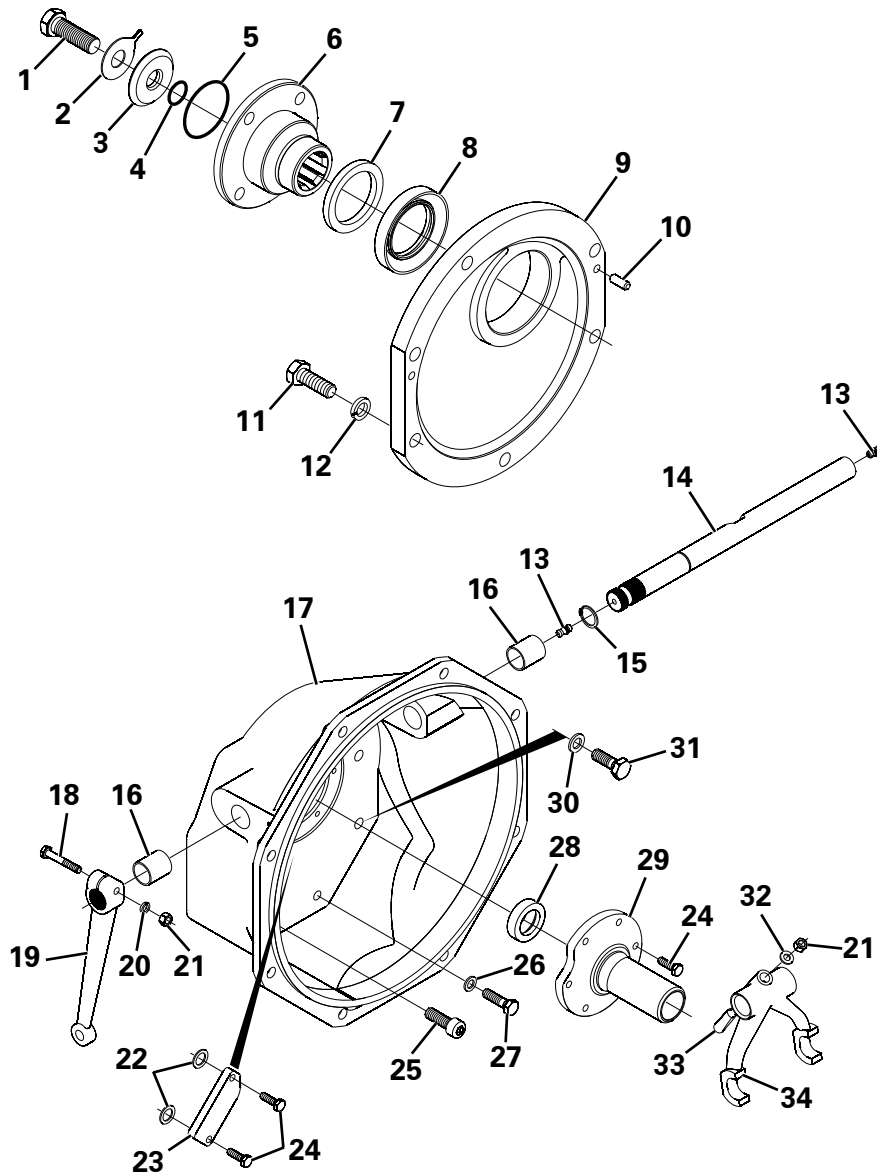
**GEARBOX - INTERNAL**

Item	Part No.	Description	Qty	U/M
35	T54021	WASHER	1.0	EA
36	T54024	BUSHING	1.0	EA
37	T54023	PIN	1.0	EA
38	T54022	HEXAGON BOLT	4.0	EA
39	T53990	BEARING	1.0	EA
40	T53974	GEAR	1.0	EA
41	T53975	GEAR	2.0	EA
42	T53976	GEAR	1.0	EA
43	T53977	SHAFT	1.0	EA
44	T53978	WASHER	1.0	EA
45	T54026	BALL BEARING	1.0	EA
46	T54033	PIN	1.0	EA
47	T54013	BOLT	1.0	EA
48	T54014	FORK	1.0	EA
49	T53939	NUT	1.0	EA
50	T54030	STOP	1.0	EA
51	T54036	BOLT	1.0	EA
52	T54031	FORK	1.0	EA
53	T53981	DETEND BALL	2.0	EA
54	T53980	SPRING	2.0	EA
55	T53979	BOLT	1.0	EA
56	T54028	BAR	1.0	EA
57	T54040	SPACER	1.0	EA
58	T54012	DETEND BALL	3.0	EA
59	T54037	PIN	1.0	EA
60	T54039	SPACER	1.0	EA
61	T54027	BAR	1.0	EA
62	T53986	FORK LEVER PLATE	1.0	EA
63	T53985	PIN	2.0	EA
64	T53984	SHEET	1.0	EA
65	T53983	SPLIT PIN	2.0	EA
66	T53982	FORK	1.0	EA
67	T53987	FORK	1.0	EA



**GEARBOX - INPUT & OUTPUT**

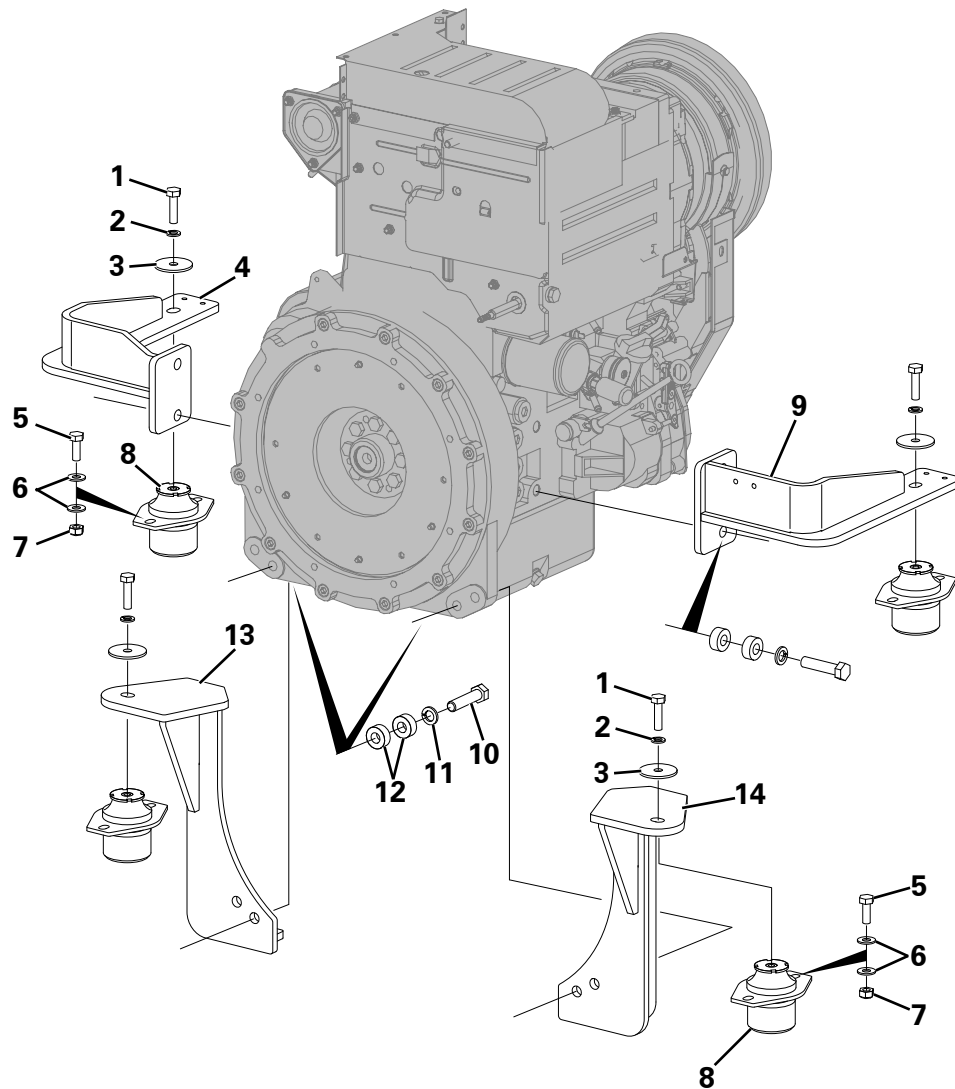
Item	Part No.	Description	Qty	U/M
1	T54069	HEXAGON BOLT	1.0	EA
2	T54068	STOP	1.0	EA
3	T54067	WASHER	1.0	EA
4	T54066	O-RING	1.0	EA
5	T54065	O-RING	1.0	EA
6	T54064	FLANGE	1.0	EA
7	T54063	COVER PLATE	1.0	EA
8	T54062	SEAL	1.0	EA
9	T54061	GEAR CHANGE COVER	1.0	EA
10	T54060	DOWEL	2.0	EA
11	T54070	BOLT	6.0	EA
12	T53568	SPRING WASHER	6.0	EA
13	T54056	GREASE FITTING	2.0	EA
14	T54059	BAR	1.0	EA
15	T54057	CIRCLIP	1.0	EA
16	T54055	BUSHING	2.0	EA
17	T54032	HOUSING	1.0	EA



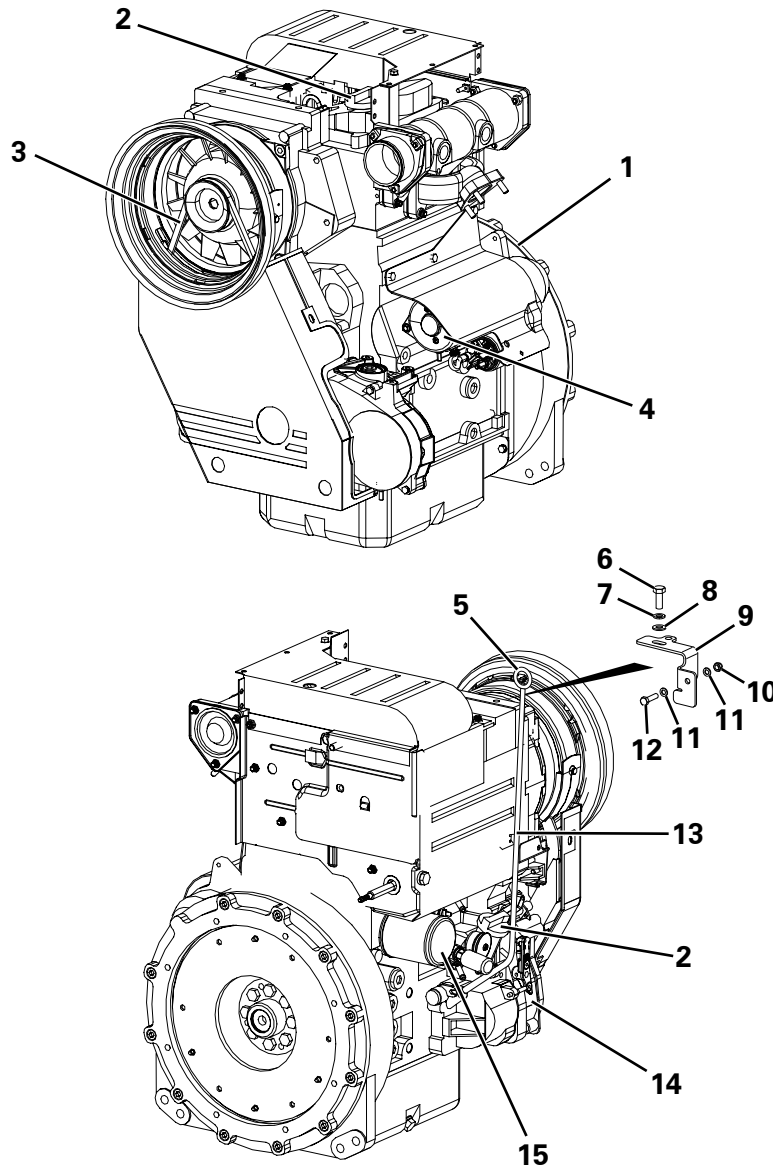
**GEARBOX - INPUT & OUTPUT**

Item	Part No.	Description	Qty	U/M
18	T54054	HEXAGON BOLT	1.0	EA
19	T54052	LEVER	1.0	EA
20	T54053	SPRING WASHER	1.0	EA
21	T54041	NUT	2.0	EA
22	T54050	WASHER	2.0	EA
23	T54049	SHEET	1.0	EA
24	T54005	HEXAGON BOLT	8.0	EA
25	T54045	CYLINDER BOLT	3.0	EA
26	T54047	LOCK WASHER	2.0	EA
27	T54046	BOLT	2.0	EA
28	T54051	SEAL	1.0	EA
29	T54048	SUPPORT	1.0	EA
30	T54058	LOCK WASHER	3.0	EA
31	T54044	HEXAGON BOLT	3.0	EA
32	T54042	LOCK WASHER	1.0	EA
33	T54043	PIN	1.0	EA
34	T54029	FORK	1.0	EA

**ENGINE MOUNTINGS**



Item	Part No.	Description	Qty	U/M
1	T16500	BOLT	4.0	EA
2	T13362	SPRING WASHER	4.0	EA
3	T102104	SPACER	4.0	EA
4	T104730	ENGINE MOUNT O/S REAR	1.0	EA
5	T20618	SET SCREW	8.0	EA
6	T10734	HEAVY DUTY WASHER	16.0	EA
7	T13064	STOVER NUT	8.0	EA
8	T104733	ENGINE MOUNT	4.0	EA
9	T104728	ENGINE MOUNT N/S REAR	1.0	EA
10	T104846	BOLT	8.0	EA
11	T14082	SPRING WASHER	8.0	EA
12	T104867	ENGINE MOUNT SPACER	16.0	EA
13	T104731	ENGINE MOUNT O/S FRONT	1.0	EA
14	T104729	ENGINE MOUNT N/S FRONT	1.0	EA

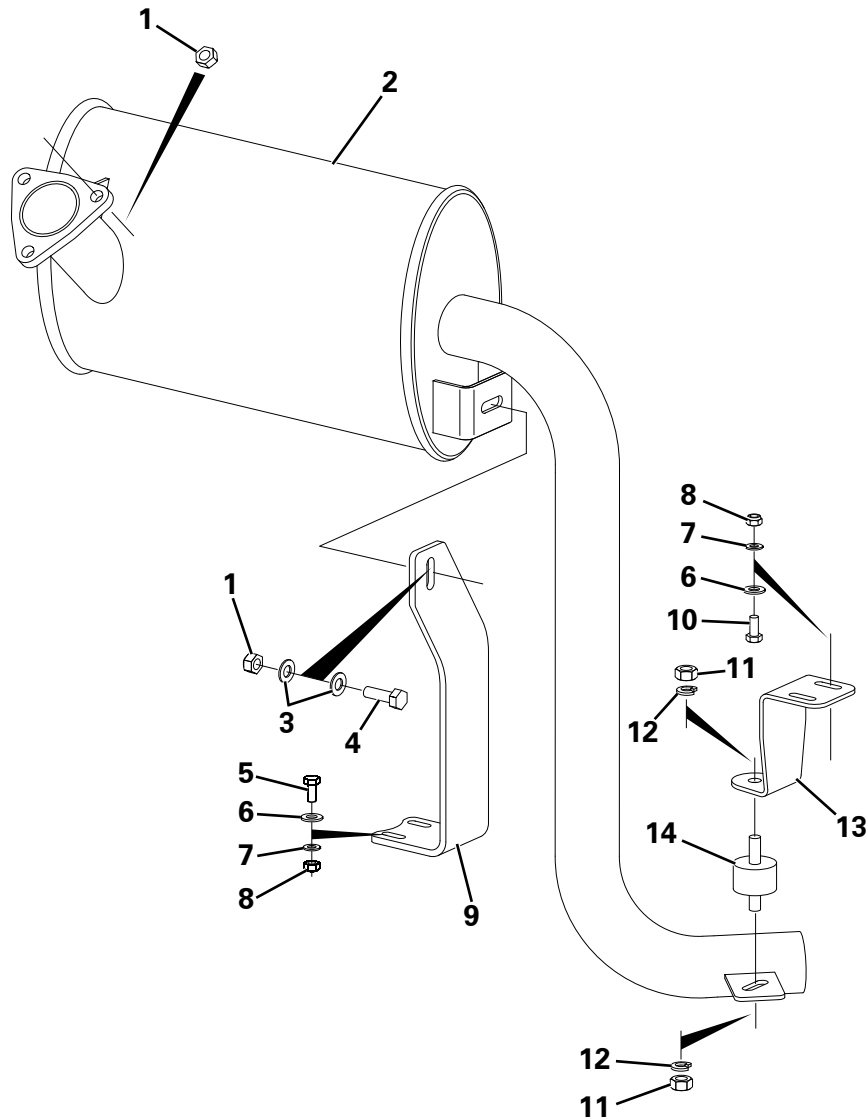


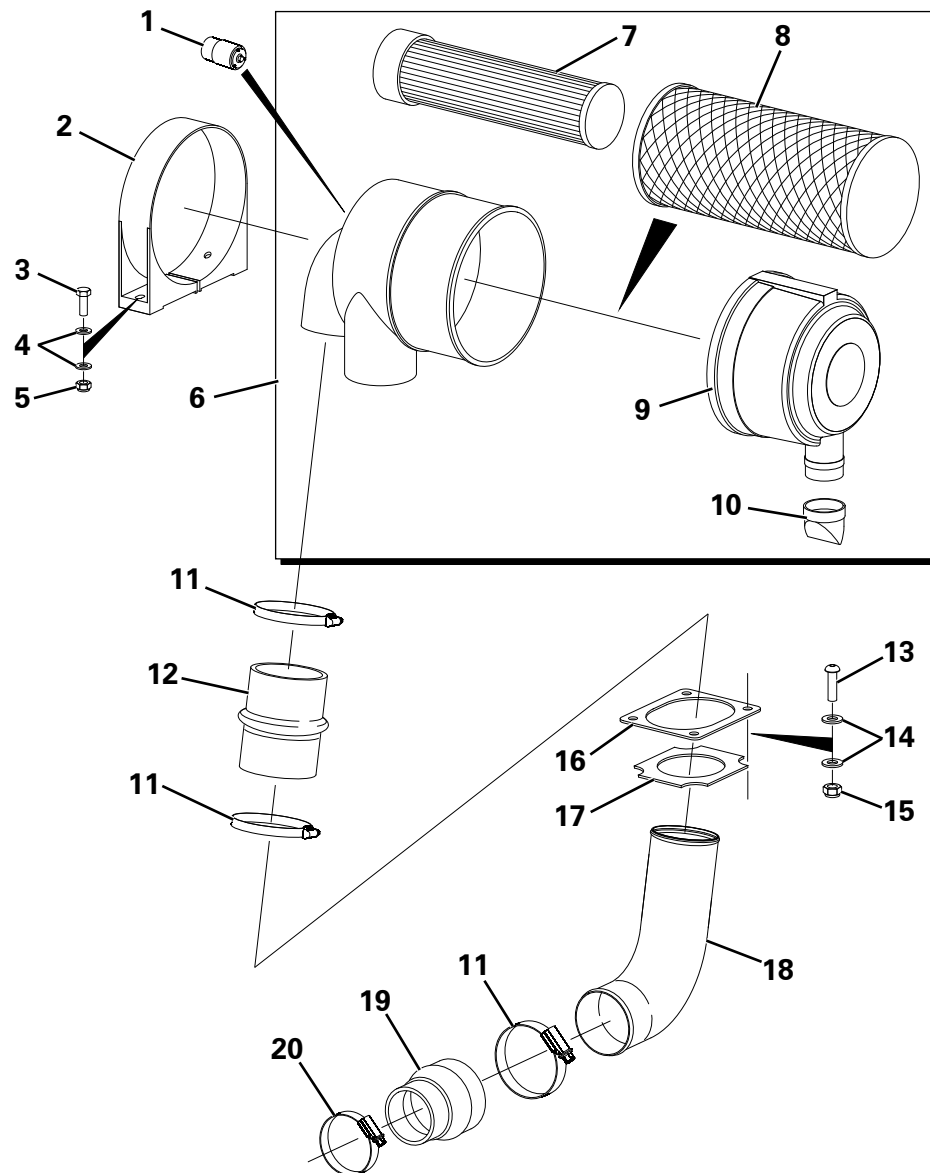
**ENGINE ACCESSORIES**

Item	Part No.	Description	Qty	U/M
1	T104765	ENGINE	1.0	EA
2	T54313	OIL CAP	2.0	EA
3	T54443	FANBELT	1.0	EA
4	T54444	STARTER MOTOR	1.0	EA
5	T54445	DIPSTICK	1.0	EA
6	T7465	SET SCREW	1.0	EA
7	T12972	SPRING WASHER	1.0	EA
8	T12973	WASHER	1.0	EA
9	T104833	DIPSTICK MOUNT BRACKET	1.0	EA
10	T16481	NYLOC NUT	1.0	EA
11	T13911	WASHER	2.0	EA
12	T16477	SET SCREW	1.0	EA
13	T54446	DIPSTICK TUBE	1.0	EA
14	T54447	ALTERNATOR	1.0	EA
15	T54314	OIL FILTER	1.0	EA

**EXHAUST SYSTEM**

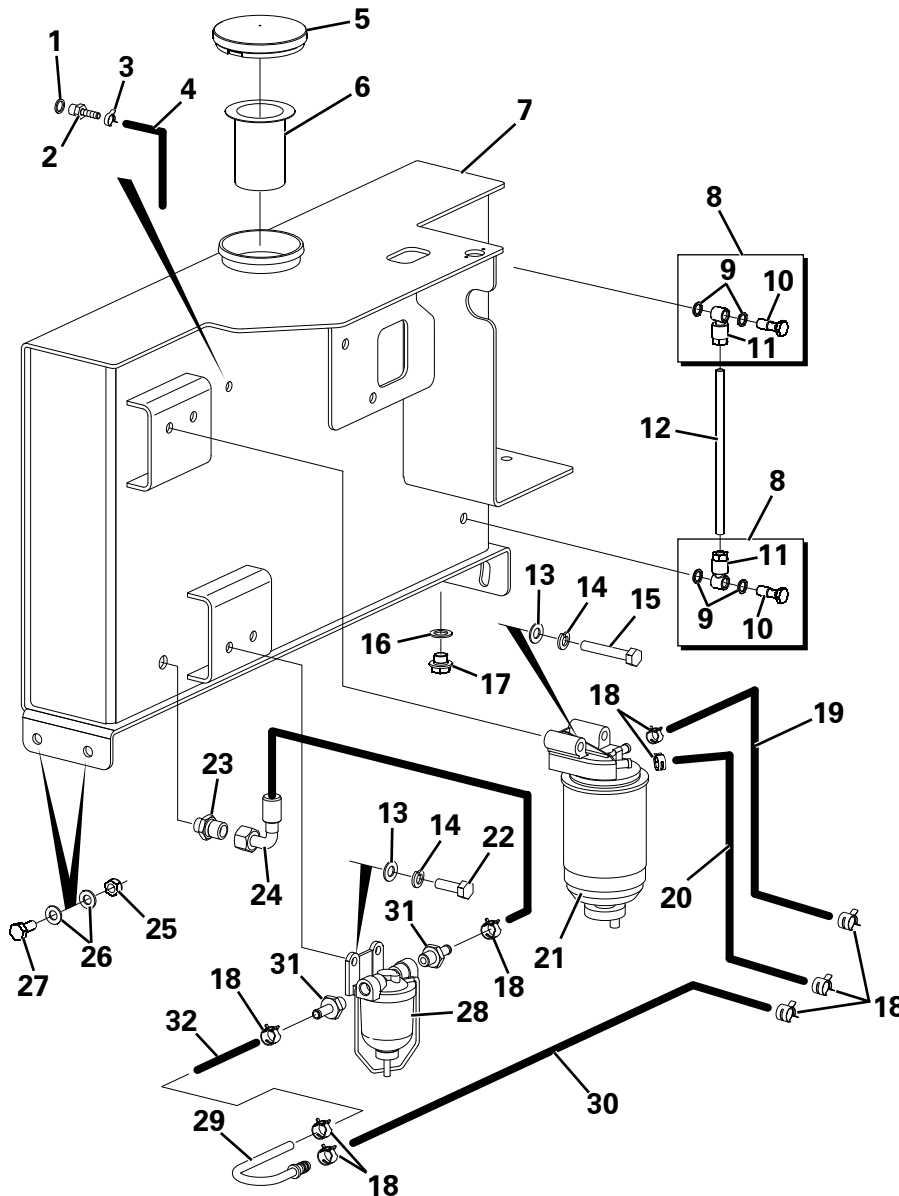
Item	Part No.	Description	Qty	U/M
1	T19007	STOVER NUT	4.0	EA
2	T104776	SILENCER	1.0	EA
3	T9345	HEAVY DUTY WASHER	4.0	EA
4	T12694	SET SCREW	1.0	EA
5	T11433	SET SCREW	2.0	EA
6	T15830	HEAVY DUTY WASHER	4.0	EA
7	T13911	WASHER	4.0	EA
8	T16481	NYLOC NUT	4.0	EA
9	T104785	EXHAUST REAR BRACKET	1.0	EA
10	T16477	SET SCREW	2.0	EA
11	T9775	NUT	2.0	EA
12	T12972	SPRING WASHER	2.0	EA
13	T104784	EXHAUST TAIL STEADY	1.0	EA
14	T100796	RUBBER BUFFER	1.0	EA





**AIR CLEANER ASSEMBLY**

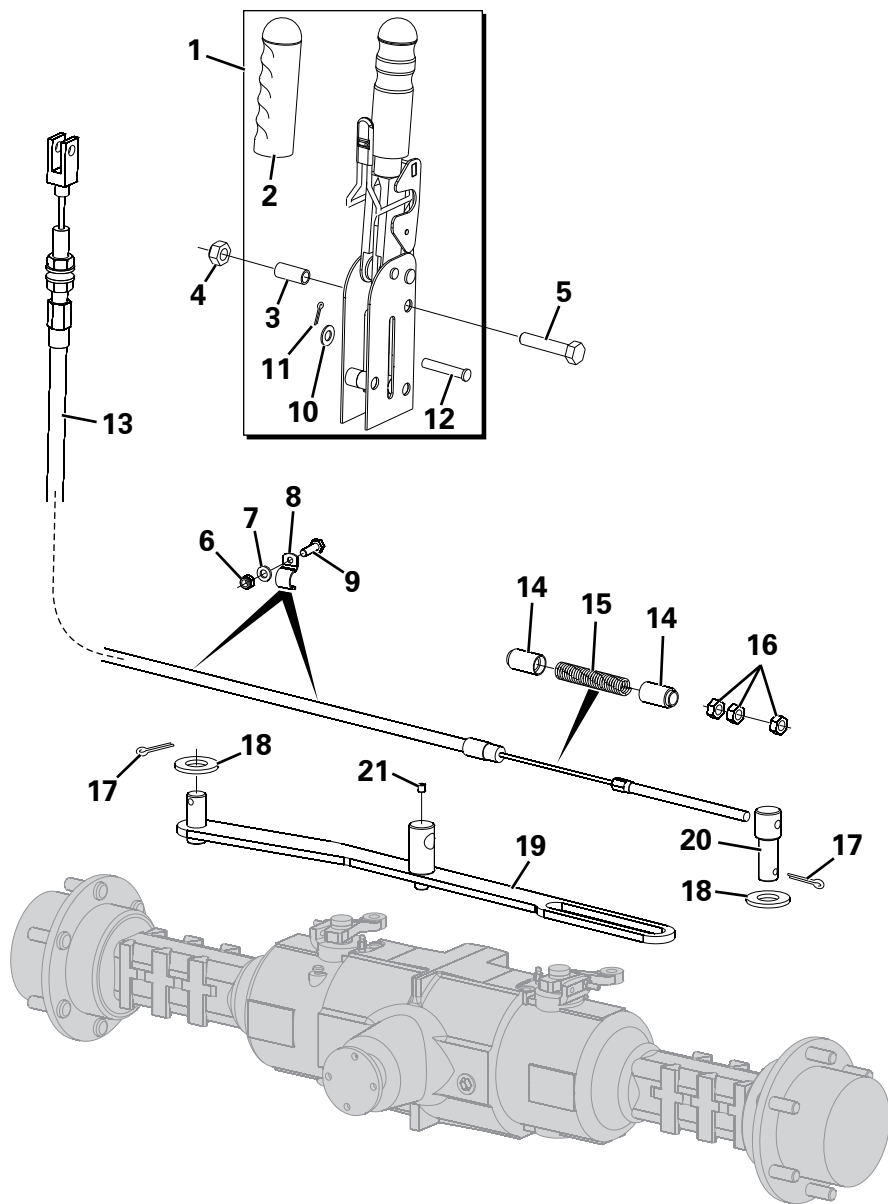
Item	Part No.	Description	Qty	U/M
1	T104879	RESTRICTION INDICATOR	1.0	EA
2	T100008	AIR CLEANER MOUNTING BRACKET	1.0	EA
3	T14152	BOLT	2.0	EA
4	T12973	WASHER	4.0	EA
5	T13457	NYLOC NUT	2.0	EA
6	T100007	AIR CLEANER	1.0	EA
7	T52557	INNER AIR ELEMENT	1.0	EA
8	T52556	OUTER AIR ELEMENT	1.0	EA
9	T52558	DUST BOWL	1.0	EA
10	T52559	VAC VALVE	1.0	EA
11	T10895	JUBILEE CLIP	3.0	EA
12	T104790	CUFF	1.0	EA
13	T16692	DOME HEAD SOCKET SCREW	4.0	EA
14	T15819	WASHER	8.0	EA
15	T101724	NYLOC NUT	4.0	EA
16	T104835	AIR INTAKE GASKET COVER	1.0	EA
17	T104842	AIR INTAKE GASKET	1.0	EA
18	T104751	AIR CLEANER EXTENSION	1.0	EA
19	T104791	CUFF	1.0	EA
20	T7669	JUBILEE CLIP	1.0	EA



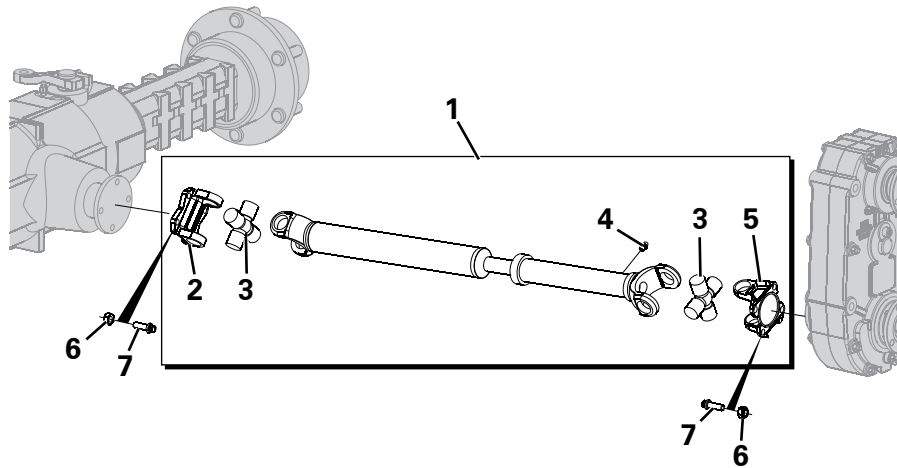
**FUEL TANK ASSEMBLY**

Item	Part No.	Description	Qty	U/M
1	T102103	COPPER WASHER	1.0	EA
2	T104829	HOSE TAIL ADAPTOR	1.0	EA
3	T104552	SPRING BAND CLAMP	1.0	EA
4	T54442	LEAK OFF PIPE	1.0	EA
5	T7150	FILLER CAP	1.0	EA
6	T7153	FILLER FILTER	1.0	EA
7	T104741	DIESEL TANK	1.0	EA
8	T103526	BANJO FITTING ASSEMBLY	2.0	EA
9	T103529	BANJO SEAL	4.0	EA
10	T103527	BANJO BOLT	2.0	EA
11	T103528	BANJO FITTING	2.0	EA
12	T16647	SIGHT LEVEL TUBE	1.0	EA
13	T12973	WASHER	4.0	EA
14	T12972	SPRING WASHER	4.0	EA
15	T15326	BOLT	2.0	EA
16	T5695	FIBRE WASHER	1.0	EA
17	T7262	BLANKING PLUG	1.0	EA
* 18	T100421	SPRING BAND CLAMP	9.0	EA
19	T104821	FUEL HOSE FILTER/INJECTORS	1.0	EA
20	T104822	FUEL HOSE FILTER/PUMP	1.0	EA
21	T54431	FUEL FILTER	1.0	EA
22	T12694	SET SCREW	2.0	EA
23	T12118	ADAPTOR	1.0	EA
* 24	T105210	FUEL PIPE	1.0	EA
25	T102886	NYLOC NUT	4.0	EA
26	T10734	HEAVY DUTY WASHER	4.0	EA
27	T16505	SET SCREW	4.0	EA
28	T8094	SEDIMENT FILTER	1.0	EA
29	T104853	FUEL PIPE	1.0	EA
30	T101819	FUEL HOSE SEDIMENTOR/PUMP	1.0	EA
* 31	T105199	HOSE TAIL SPIGOT	2.0	EA
* 32	T105209	FUEL HOSE	1.0	EA

**HANDBRAKE ASSEMBLY**

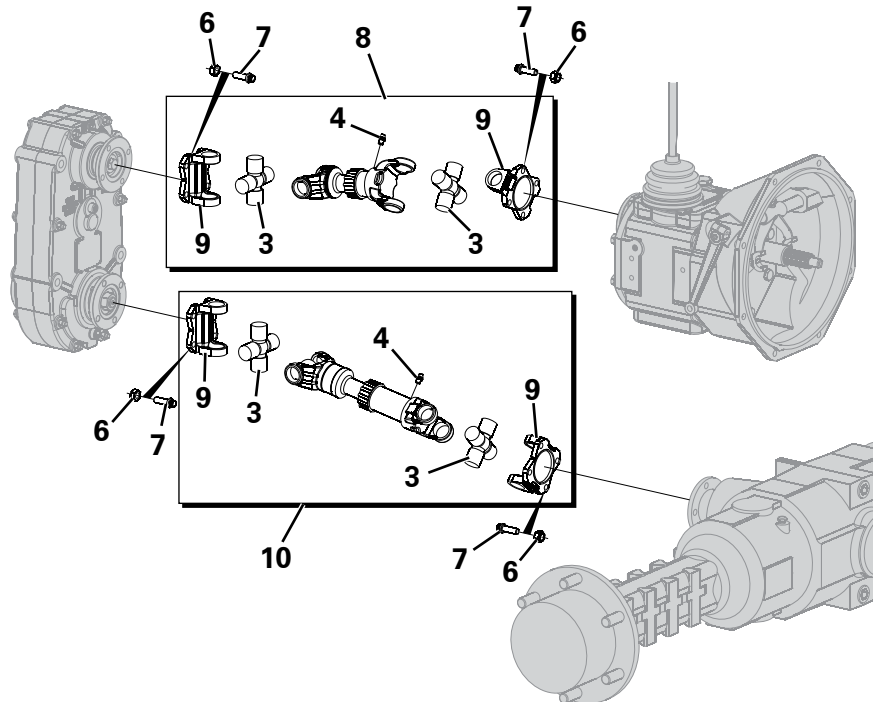


Item	Part No.	Description	Qty	U/M
1	T100893	OVERCENTRE HANDBRAKE	1.0	EA
2	T52947	GRIP	1.0	EA
3	T10869	SPACER	2.0	EA
4	T13064	PHILIDAS NUT	2.0	EA
5	T16501	BOLT	2.0	EA
6	T16481	NYLOC NUT	2.0	EA
7	T13911	WASHER	2.0	EA
8	T12335	CABLE CLIP	2.0	EA
9	T16477	SET SCREW	2.0	EA
10	T12973	WASHER	1.0	EA
11	T6744	SPLIT PIN	1.0	EA
12	T54440	CLEVIS PIN	1.0	EA
13	T103448	HANDBRAKE CABLE	1.0	EA
14	T100909	SPRING SUPPORT	2.0	EA
15	T102310	GALVANISED HANDBRAKE SPRING	1.0	EA
16	T6719	NUT	3.0	EA
17	T6751	SPLIT PIN	2.0	EA
18	T100867	WASHER	2.0	EA
19	T102854	HANDBRAKE CABLE LEVER	1.0	EA
20	T102853	HANDBRAKE CABLE GUIDE	1.0	EA
21	T103221	GRUB SCREW	1.0	EA



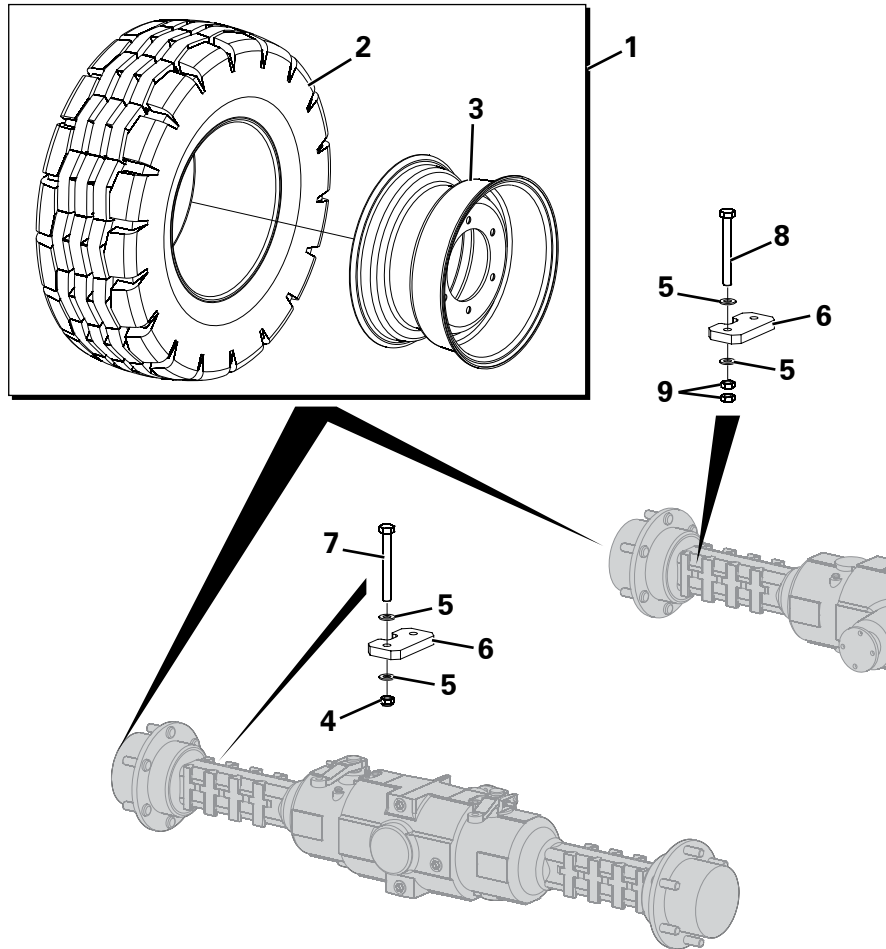
**PROPSHAFTS**

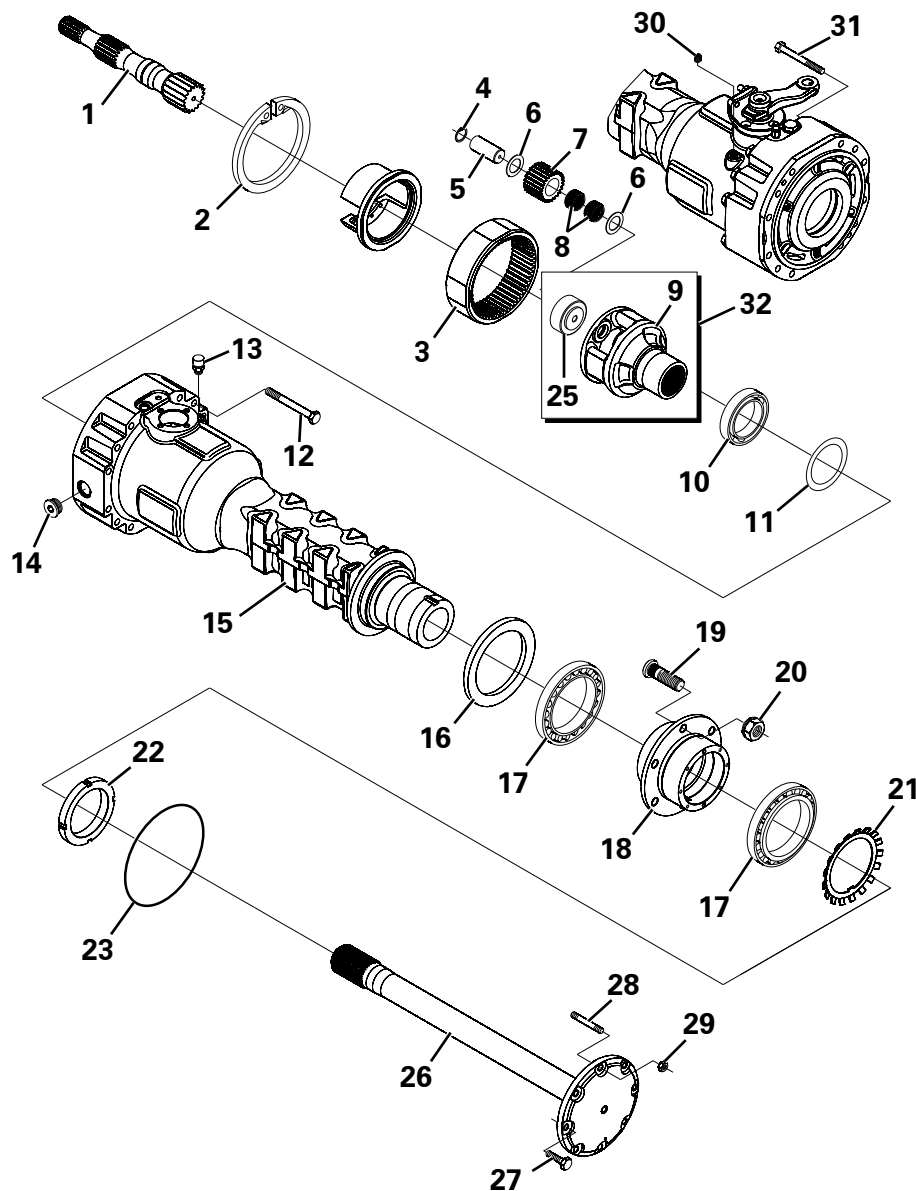
Item	Part No.	Description	Qty	U/M
1	T103418	PROPSHAFT FRONT	1.0	EA
2	T52321	FLANGE	1.0	EA
3	T52320	U.J.KIT	6.0	EA
4	T13454	GREASE NIPPLE	3.0	EA
5	T53182	COUPLING	1.0	EA
6	T102510	PHILIDAS NUT	24.0	EA
7	T102509	BOLT	24.0	EA
8	T103422	PROPSHAFT	1.0	EA
9	T53778	FLANGE	4.0	EA
10	T102450	PROPSHAFT REAR	1.0	EA



**WHEEL ASSEMBLY & AXLE FIXINGS**

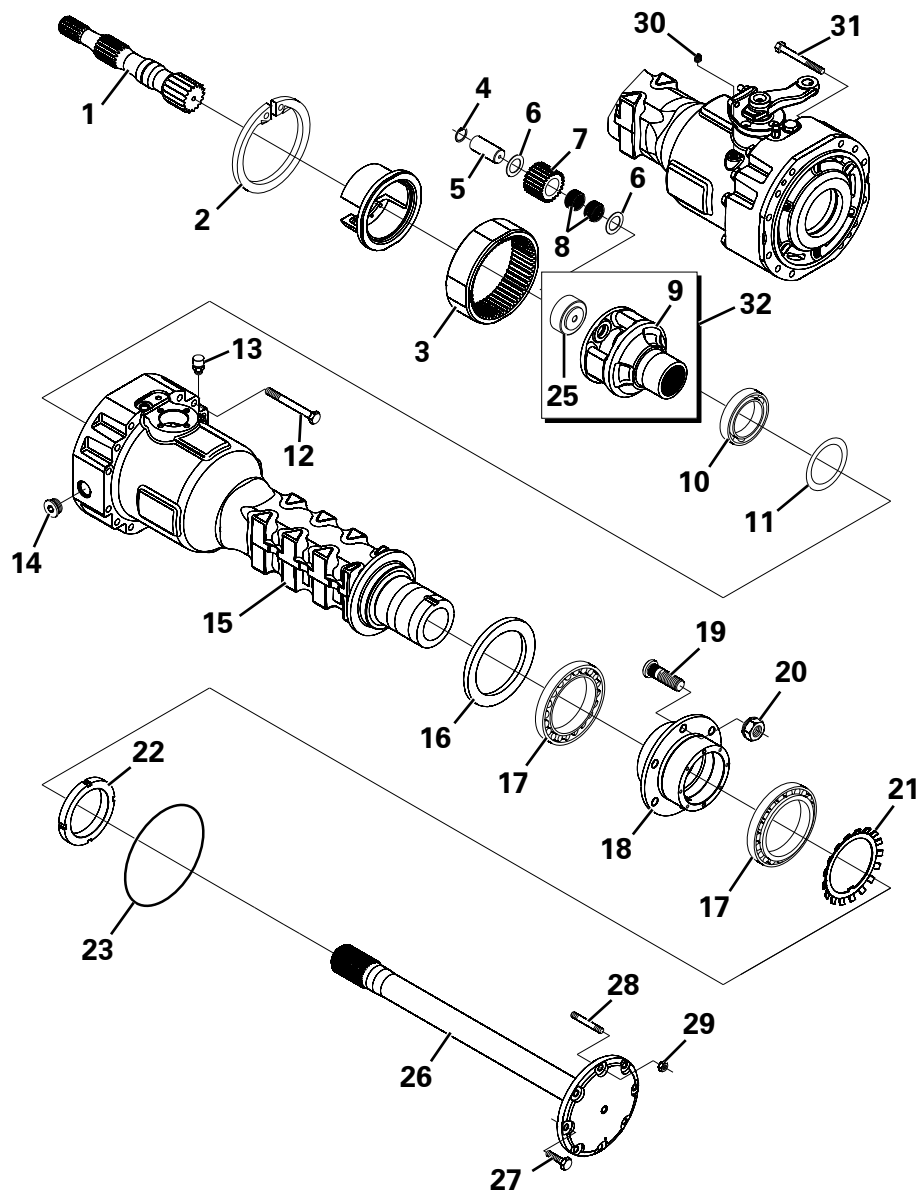
Item	Part No.	Description	Qty	U/M
1	T20999	WHEEL ASSY	4.0	EA
2	T21000	TYRE	1.0	EA
3	T100944	WHEEL RIM	1.0	EA
4	T14910	STOVER NUT	4.0	EA
5	T100867	WASHER	16.0	EA
6	T103488	AXLE CLAMP PLATE	4.0	EA
7	T102704	BOLT	4.0	EA
8	T100817	BOLT	4.0	EA
9	T100866	NUT	8.0	EA





**FRONT AXLE - HUB REDUCTION**

Item	Part No.	Description	Qty	U/M
* A	T105072	AXLE	1.0	EA
* 1	T54464	HALF SHAFT	2.0	EA
2	T53916	CIRCLIP	2.0	EA
3	T53917	RING GEAR	2.0	EA
4	T53544	CIRCLIP	6.0	EA
5	T53643	PIN	6.0	EA
6	T53644	FRICTION WASHER	12.0	EA
* 7	T54471	DIFFERENTIAL PINION	6.0	EA
8	T53562	NEEDLE ROLLER BEARING	12.0	EA
9	T54130	PLANET GEAR CARRIER	2.0	EA
10	T53919	BALL BEARING	2.0	EA
11	T53922	SHIM	A/R	EA
	T53576	SHIM	A/R	EA
	T53577	SHIM	A/R	EA
	T53582	SHIM	A/R	EA
	T53583	SHIM	A/R	EA
* 12	T53924	HEXAGON BOLT	12.0	EA
13	T53765	VENT	1.0	EA

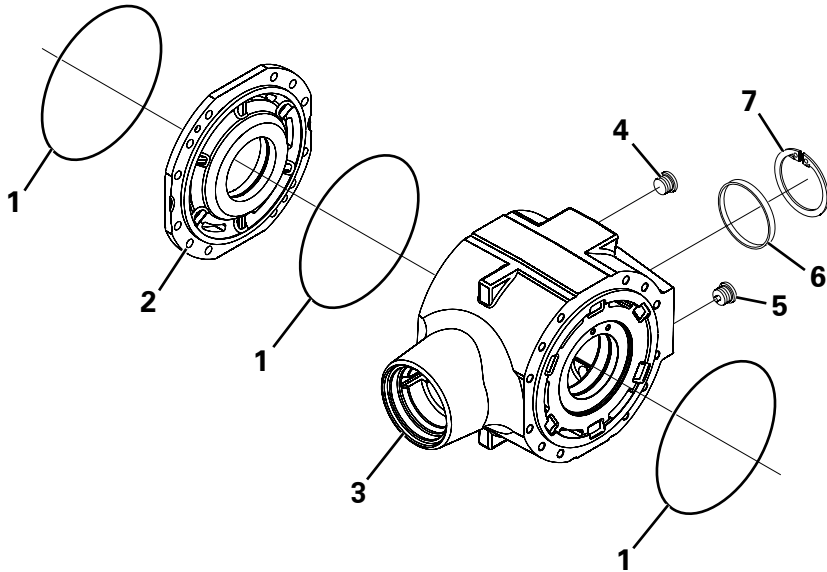


**FRONT AXLE - HUB REDUCTION**

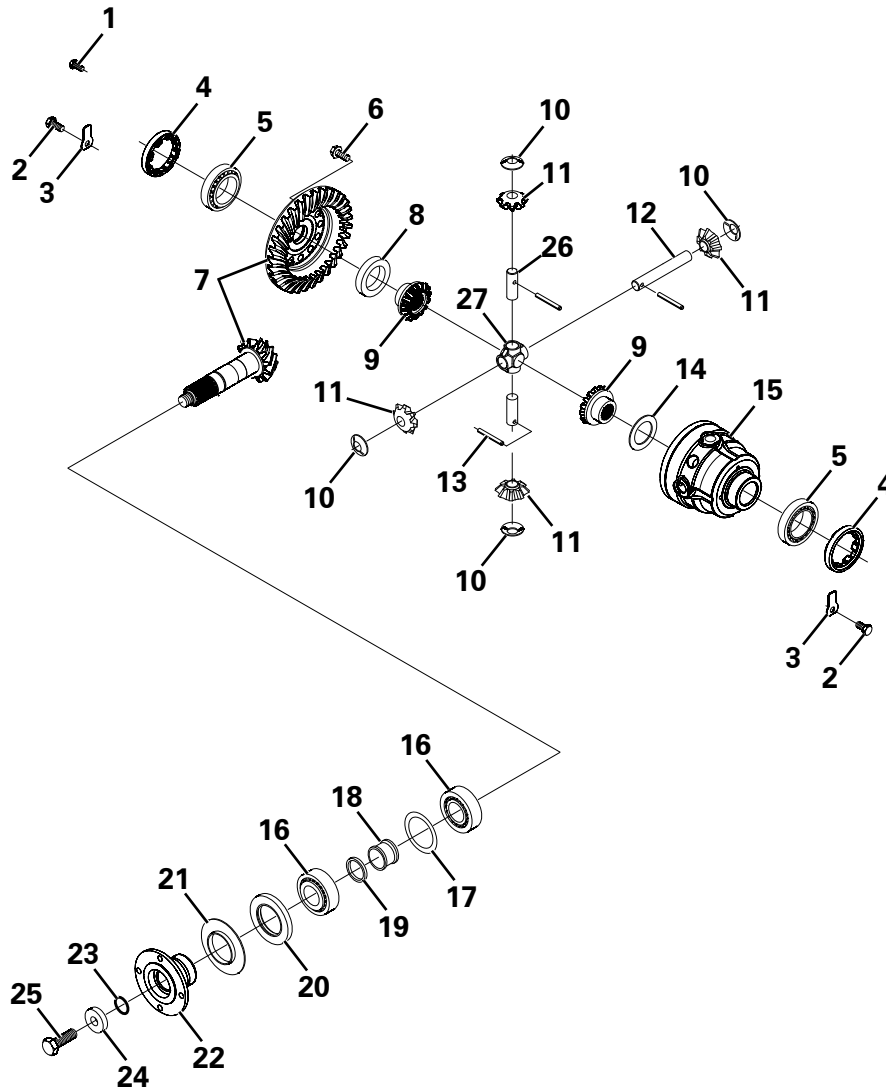
Item	Part No.	Description	Qty	U/M
	14	PLUG	2.0	EA
	* 15	AXLE CASE	2.0	EA
	16	HUB SEAL	2.0	EA
	17	TAPER ROLLER BEARING	4.0	EA
	18	WHEEL HUB	2.0	EA
	19	WHEEL STUD	12.0	EA
	20	WHEEL NUT	12.0	EA
	21	TAB WASHER	2.0	EA
	22	RING NUT	2.0	EA
	23	O RING	2.0	EA
	25	SPACER	2.0	EA
	26	HALF SHAFT	2.0	EA
	27	HEXAGON BOLT	12.0	EA
	28	STUD	4.0	EA
	29	NUT	4.0	EA
	30	PLUG	1.0	EA
	31	HEXAGON BOLT	12.0	EA
	32	PLANET CARRIER C/W SPACER	2.0	EA

**FRONT AXLE - CENTRAL HOUSING**

Item	Part No.	Description	Qty	U/M
1	T53873	O RING	3.0	EA
2	T53891	INTERMEDIATE COVER	1.0	EA
3	T54137	HOUSING	1.0	EA
4	T53663	PLUG	1.0	EA
5	T53664	MAGNET PLUG	1.0	EA
6	T53709	PLUG	1.0	EA
* 7	T54463	CIRCLIP	1.0	EA

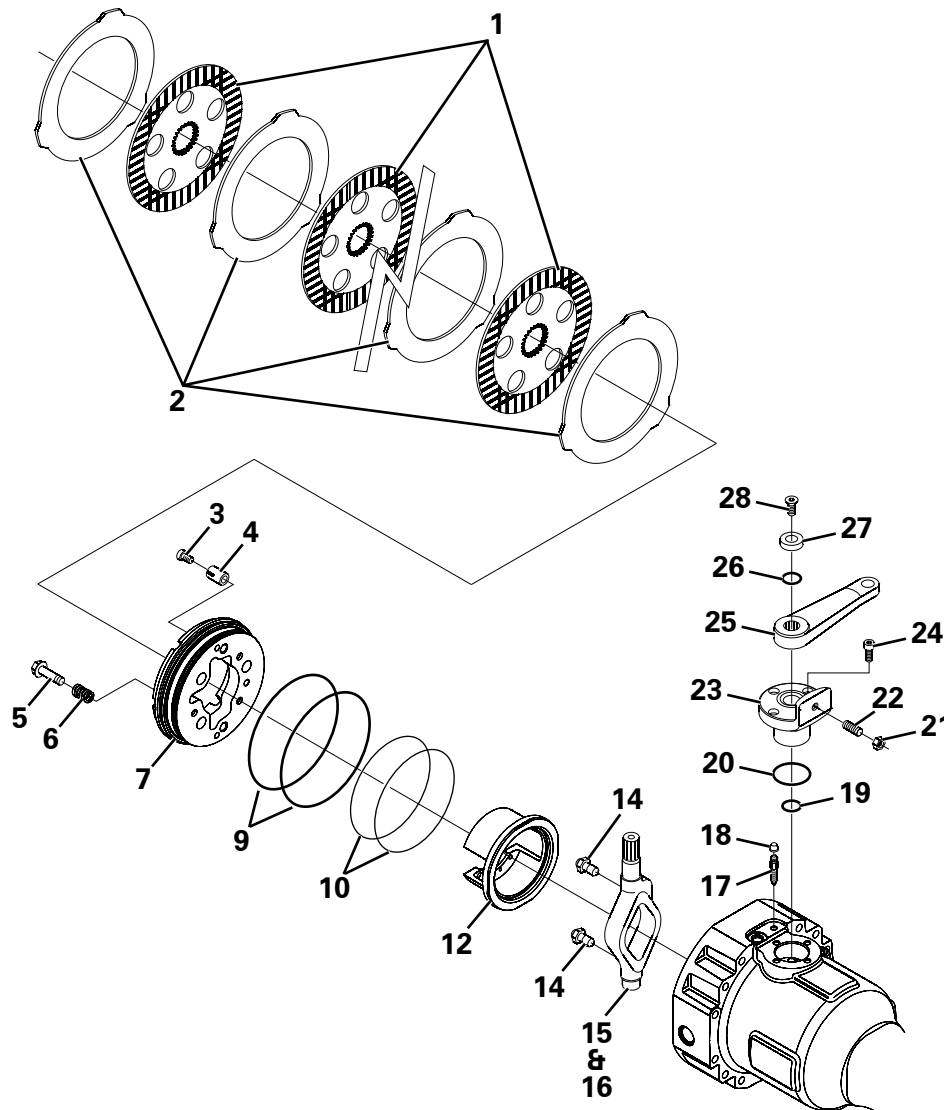


**FRONT AXLE - DIFFERENTIAL**

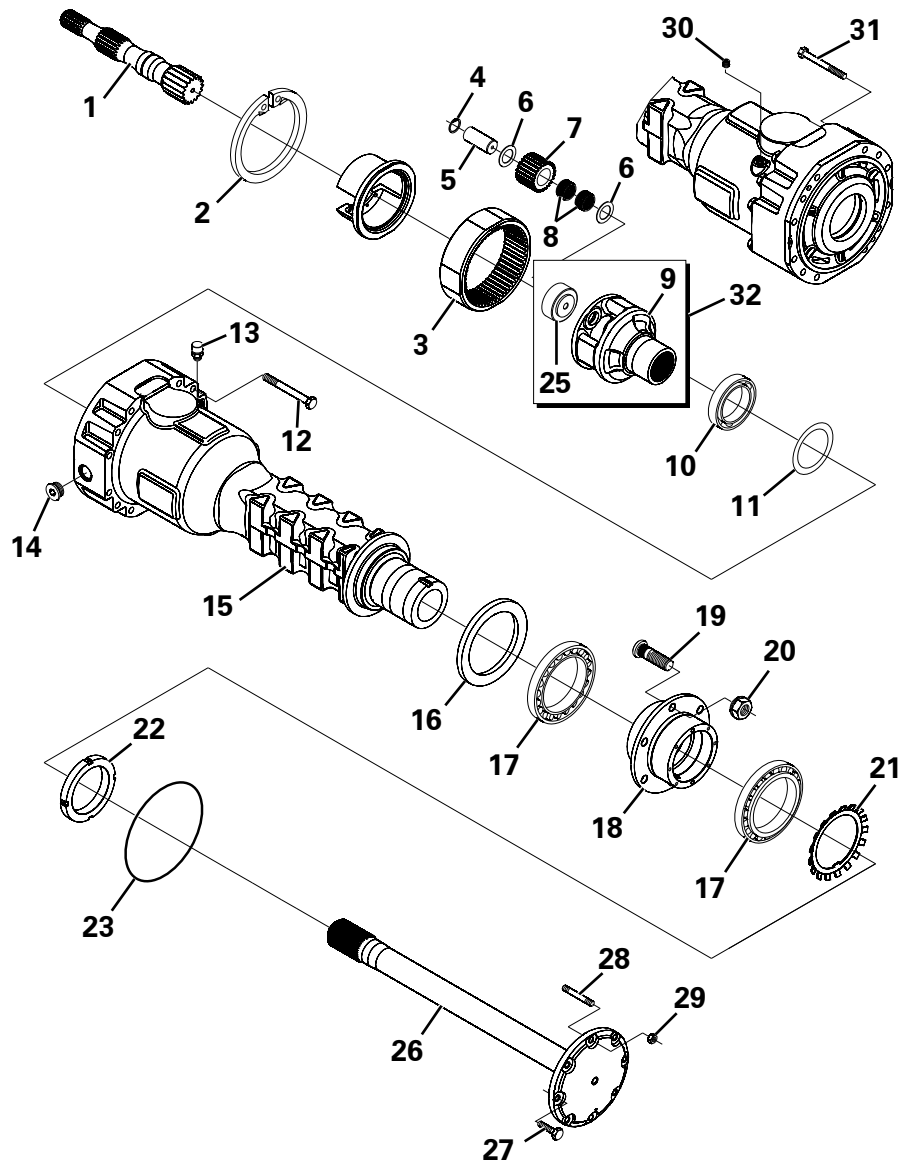


Item	Part No.	Description	Qty	U/M
1	T53897	CYLINDER BOLT	2.0	EA
2	T53896	HEXAGON BOLT	2.0	EA
3	T53895	LOCKING PLATE	2.0	EA
4	T53898	RING NUT	2.0	EA
5	T53555	TAPER ROLLER BEARING	2.0	EA
6	T53616	BOLT	12.0	EA
7	T53925	BEVEL GEAR SET	1.0	EA
8	T53899	SPACER	1.0	EA
9	T53900	DIFFERENTIAL SIDE GEAR	2.0	EA
* 10	T53901	WASHER	4.0	EA
* 11	T53902	DIFFERENTIAL PINION	4.0	EA
12	T53903	DIFFERENTIAL SHAFT	1.0	EA
* 13	T53904	ROLL PIN	3.0	EA
14	T53905	FRICTION WASHER	1.0	EA
* 15	T54194	DIFFERENTIAL CARRIER	1.0	EA
16	T53558	BEARING	2.0	EA
17	T53579	SHIM	A/R	EA
	T53580	SHIM	A/R	EA
	T53581	SHIM	A/R	EA
* 18	T54189	SPACER	1.0	EA
* 19	T54186	SHIM	1.0	EA
	T54187	SHIM	1.0	EA
	T54188	SHIM	1.0	EA
	T54190	SHIM	2.0	EA
* 20	T54196	SEAL	1.0	EA
21	T53774	COVER PLATE	1.0	EA
22	T53764	FLANGE	1.0	EA
* 23	T54191	O RING	1.0	EA
24	T53893	WASHER	1.0	EA
25	T53598	BOLT	1.0	EA
* 26	T54461	DIFFERENTIAL SHAFT	2.0	EA
* 27	T54462	SHAFT RETAINER	1.0	EA

**FRONT AXLE - BRAKES**

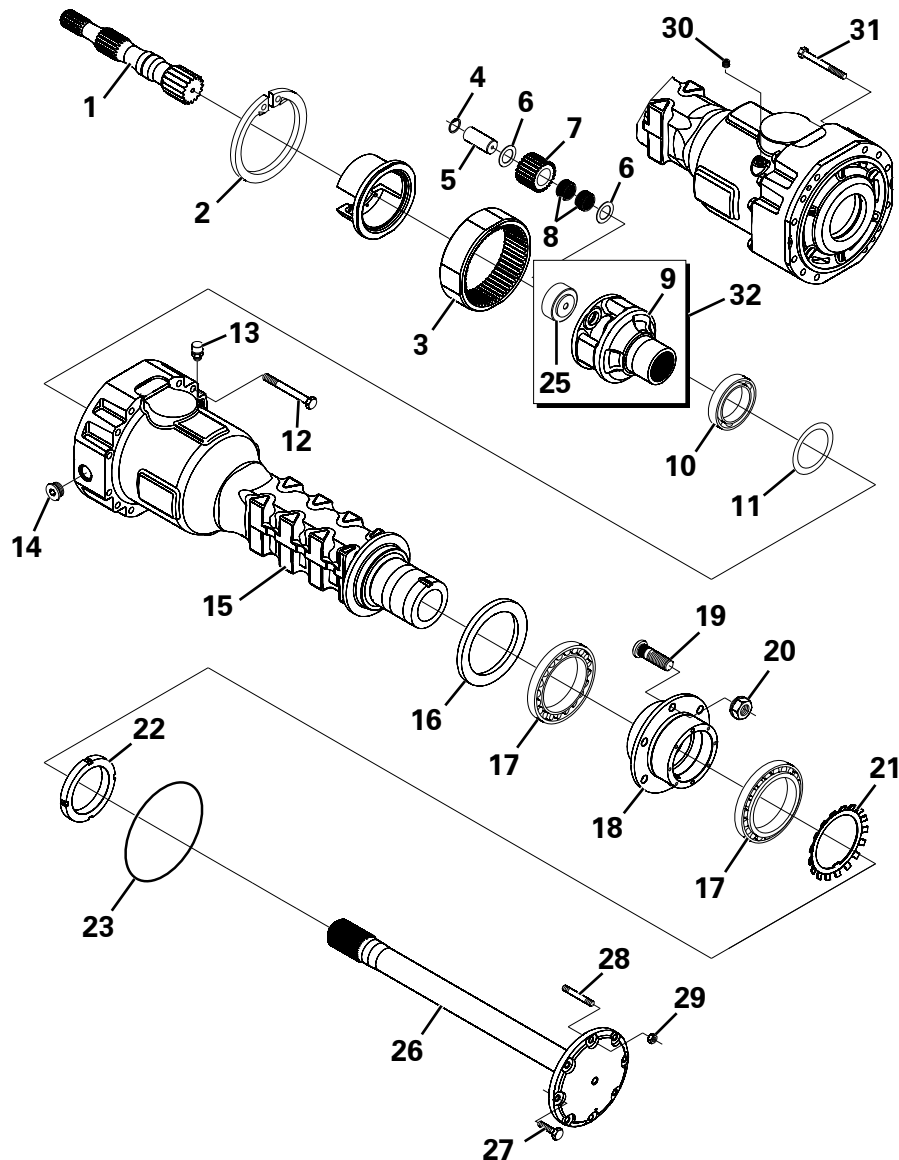


Item	Part No.	Description	Qty	U/M
1	T53875	BRAKE DISC	6.0	EA
2	T53874	BRAKE DISC	8.0	EA
3	T53933	ADJUSTING BOLT	6.0	EA
4	T53692	SPRING	6.0	EA
5	T53931	ADJUSTING BOLT	6.0	EA
6	T53932	SPRING	6.0	EA
7	T53934	PISTON	4.0	EA
*	9	O RING	4.0	EA
*	10	O RING	4.0	EA
12	T53929	SELECTOR	2.0	EA
14	T53928	PUSHER	4.0	EA
15	T53926	LEVER LH	1.0	EA
16	T53927	LEVER RH	1.0	EA
17	T53767	BLEEDING BOLT	2.0	EA
18	T53768	PLUG	2.0	EA
19	T53534	O RING	2.0	EA
20	T53533	O RING	2.0	EA
21	T53939	NUT	2.0	EA
22	T53938	GRUB BOLT	2.0	EA
23	T53937	REDUCTION BUSHING	2.0	EA
24	T53604	CYLINDER BOLT	6.0	EA
25	T53936	LEVER	2.0	EA
26	T53530	O RING	2.0	EA
27	T53722	WASHER	2.0	EA
28	T53609	COUNTERSUNK BOLT	2.0	EA



**REAR AXLE - HUB REDUCTION**

Item	Part No.	Description	Qty	U/M
* A	T105068	AXLE	1.0	EA
* 1	T54464	HALF SHAFT	2.0	EA
2	T53916	CIRCLIP	2.0	EA
3	T53917	RING GEAR	2.0	EA
4	T53544	CIRCLIP	6.0	EA
5	T53643	PIN	6.0	EA
6	T53644	FRICTION WASHER	12.0	EA
* 7	T54471	DIFFERENTIAL PINION	6.0	EA
8	T53562	NEEDLE ROLLER BEARING	12.0	EA
9	T54130	PLANET GEAR CARRIER	2.0	EA
10	T53919	BALL BEARING	2.0	EA
11	T53922	SHIM	A/R	EA
	T53576	SHIM	A/R	EA
	T53577	SHIM	A/R	EA
	T53582	SHIM	A/R	EA
	T53583	SHIM	A/R	EA
* 12	T53924	HEXAGON BOLT	12.0	EA
13	T53765	VENT	1.0	EA

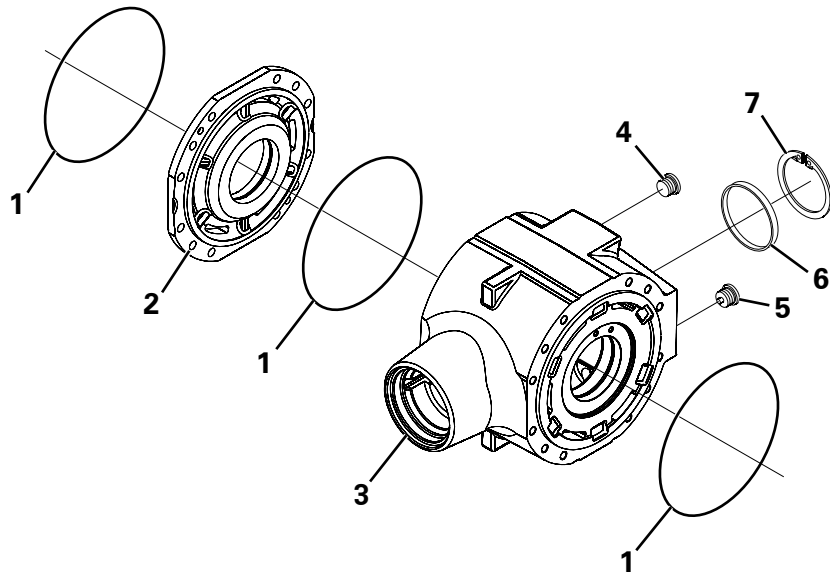


**REAR AXLE - HUB REDUCTION**

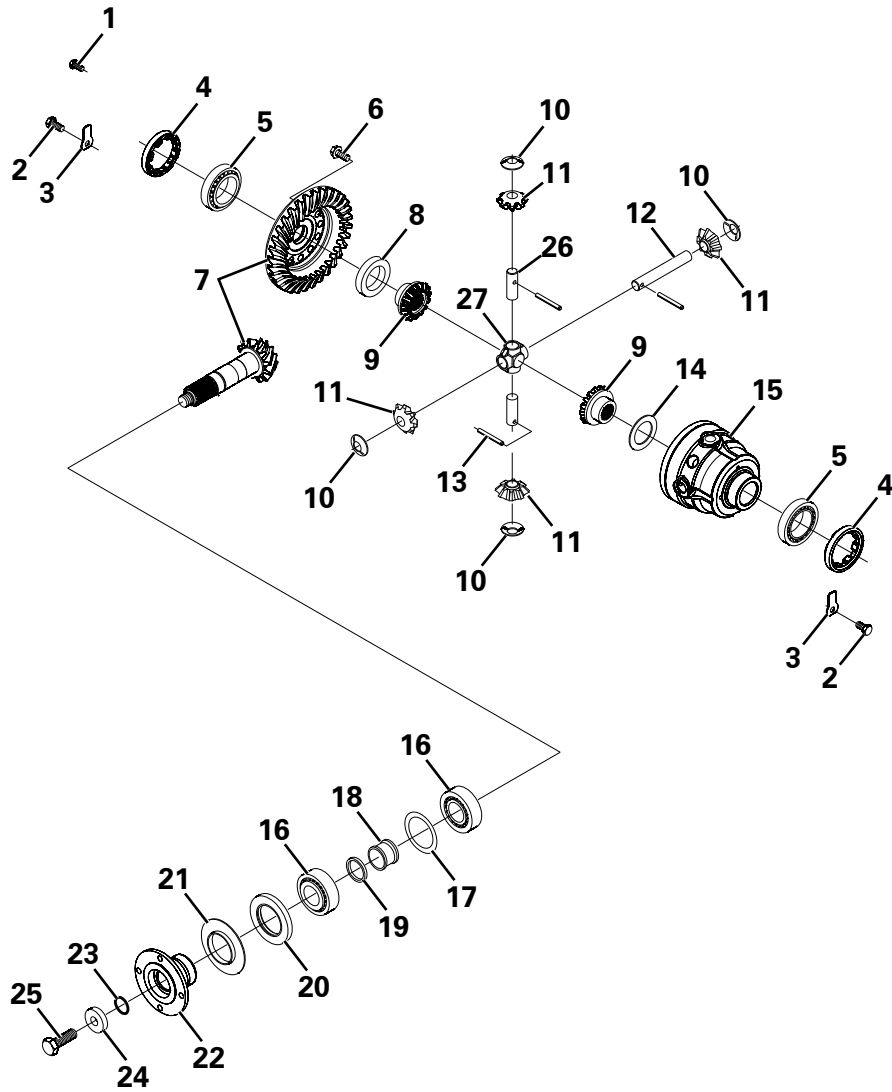
Item	Part No.	Description	Qty	U/M
	14	T53663 PLUG	2.0	EA
	* 15	T54460 AXLE CASE	2.0	EA
	16	T54125 HUB SEAL	2.0	EA
	17	T53913 TAPER ROLLER BEARING	4.0	EA
	18	T54139 WHEEL HUB	2.0	EA
	19	T53773 WHEEL STUD	12.0	EA
	20	T53567 WHEEL NUT	12.0	EA
	21	T53872 TAB WASHER	2.0	EA
	22	T53912 RING NUT	2.0	EA
	23	T53870 O RING	2.0	EA
	25	T54131 SPACER	2.0	EA
	26	T53947 HALF SHAFT	2.0	EA
	27	T54297 HEXAGON BOLT	12.0	EA
	28	T54140 STUD	4.0	EA
	29	T54141 NUT	4.0	EA
	30	T53615 PLUG	1.0	EA
	31	T53924 HEXAGON BOLT	12.0	EA
	32	T54132 PLANET CARRIER C/W SPACER	2.0	EA

**REAR AXLE - CENTRAL HOUSING**

Item	Part No.	Description	Qty	U/M
1	T53873	O RING	3.0	EA
2	T53891	INTERMEDIATE COVER	1.0	EA
3	T54137	HOUSING	1.0	EA
4	T53663	PLUG	1.0	EA
5	T53664	MAGNET PLUG	1.0	EA
6	T53709	PLUG	1.0	EA
* 7	T54463	CIRCLIP	1.0	EA

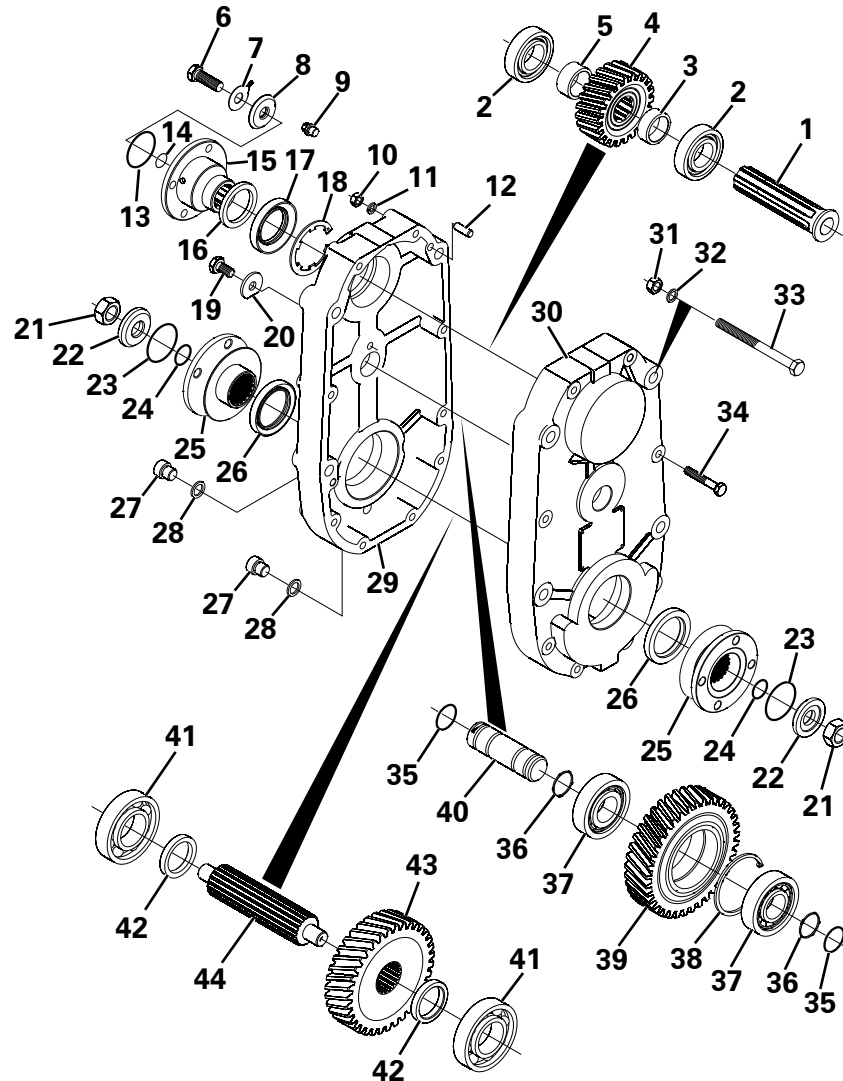


**REAR AXLE - DIFFERENTIAL**



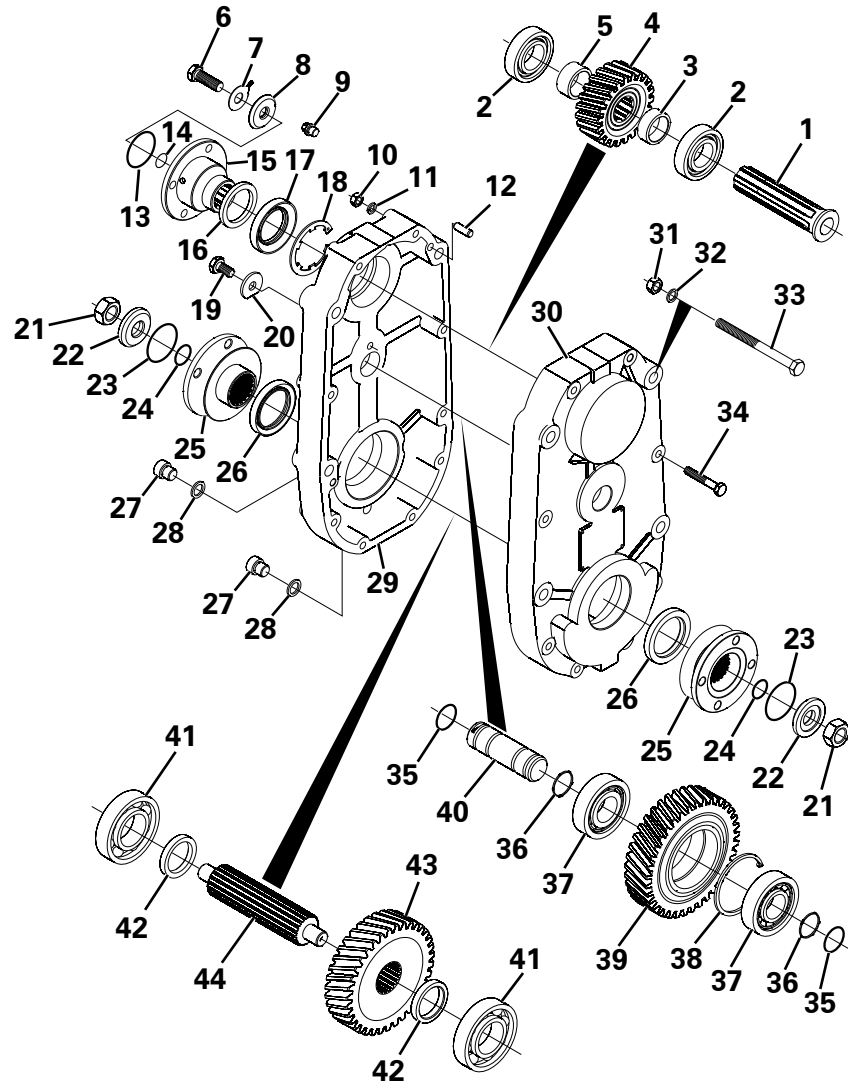
Item	Part No.	Description	Qty	U/M
1	T53897	CYLINDER BOLT	2.0	EA
2	T53896	HEXAGON BOLT	2.0	EA
3	T53895	LOCKING PLATE	2.0	EA
4	T53898	RING NUT	2.0	EA
5	T53555	TAPER ROLLER BEARING	2.0	EA
6	T53616	BOLT	12.0	EA
*	T53925	BEVEL GEAR SET	1.0	EA
8	T53899	SPACER	1.0	EA
9	T53900	DIFFERENTIAL SIDE GEAR	2.0	EA
* 10	T53901	WASHER	4.0	EA
* 11	T53902	DIFFERENTIAL PINION	4.0	EA
12	T53903	DIFFERENTIAL SHAFT	1.0	EA
* 13	T53904	ROLL PIN	3.0	EA
14	T53905	FRICTION WASHER	1.0	EA
* 15	T54194	DIFFERENTIAL CARRIER	1.0	EA
16	T53558	BEARING	2.0	EA
17	T53579	SHIM	A/R	EA
	T53580	SHIM	A/R	EA
	T53581	SHIM	A/R	EA
* 18	T54189	SPACER	1.0	EA
* 19	T54186	SHIM	1.0	EA
	T54187	SHIM	1.0	EA
	T54188	SHIM	1.0	EA
	T54190	SHIM	2.0	EA
* 20	T54196	SEAL	1.0	EA
21	T53774	COVER PLATE	1.0	EA
22	T53764	FLANGE	1.0	EA
* 23	T54191	O RING	1.0	EA
24	T53893	WASHER	1.0	EA
25	T53598	BOLT	1.0	EA
* 26	T54461	DIFFERENTIAL SHAFT	2.0	EA
* 27	T54462	SHAFT RETAINER	1.0	EA

## DROPBOX ASSEMBLY



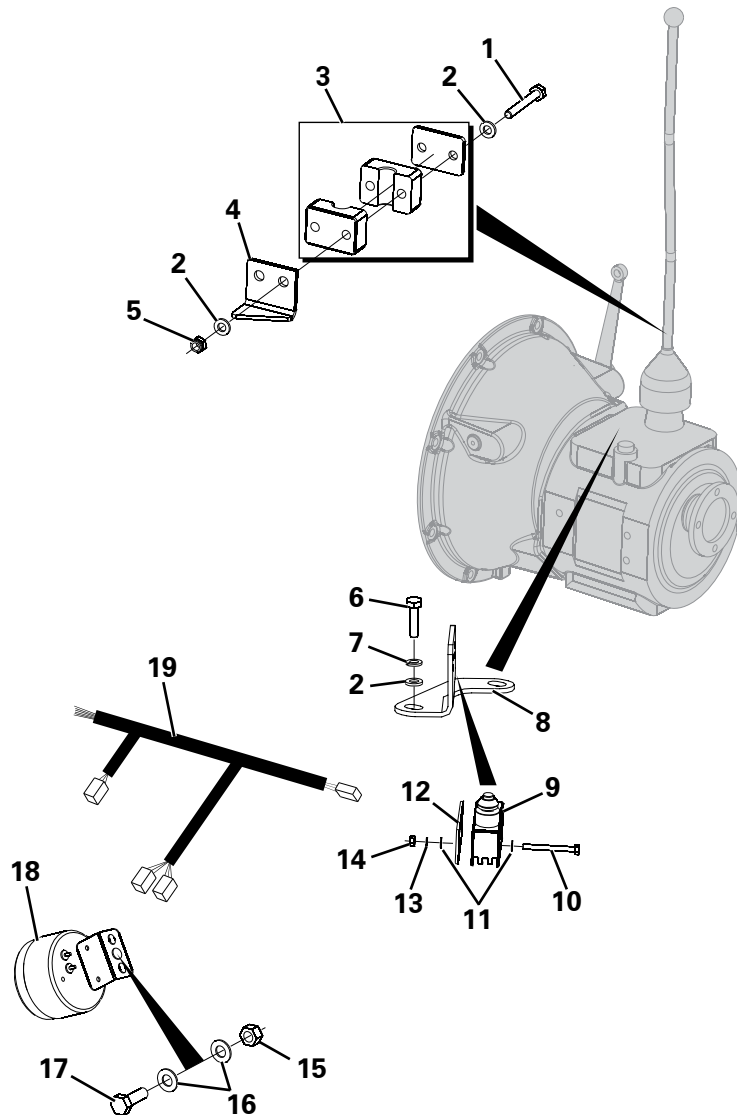
Item	Part No.	Description	Qty	U/M
A	T103421	DROPBOX	1.0	EA
1	T54079	SHAFT	1.0	EA
2	T54080	BALL BEARING	2.0	EA
3	T54082	SPACER	1.0	EA
4	T54081	GEAR	1.0	EA
5	T54083	SPACER	1.0	EA
6	T54069	HEXAGON BOLT	1.0	EA
7	T54068	STOP	1.0	EA
8	T54067	WASHER	1.0	EA
9	T54089	VENT	1.0	EA
10	T54087	NUT	8.0	EA
11	T54086	SPRING WASHER	8.0	EA
12	T54084	DOWEL	2.0	EA
13	T54065	O-RING	1.0	EA
14	T54066	O-RING	1.0	EA
15	T54064	FLANGE	1.0	EA
16	T54063	COVER PLATE	1.0	EA
17	T54062	SEAL	1.0	EA
18	T54088	CIRCLIP	1.0	EA
19	T54102	BOLT	1.0	EA
20	T54101	SPACER	1.0	EA
21	T54071	NUT	2.0	EA
22	T54072	WASHER	2.0	EA

## DROPOX ASSEMBLY



Item	Part No.	Description	Qty	U/M
23	T54073	O-RING	2.0	EA
24	T54074	O-RING	2.0	EA
25	T54075	FLANGE	2.0	EA
26	T54076	SEAL	2.0	EA
27	T54090	GRUB BOLT	2.0	EA
28	T53570	SEAL WASHER	2.0	EA
29	T54085	COVER	1.0	EA
30	T54078	HOUSING	1.0	EA
31	T14283	PHILIDAS NUT	4.0	EA
32	T14748	HEAVY DUTY WASHER	4.0	EA
33	T101270	BOLT	4.0	EA
34	T54077	HEXAGON BOLT	8.0	EA
35	T54095	O-RING	2.0	EA
36	T54096	CIRCLIP	2.0	EA
37	T54097	BEARING	2.0	EA
38	T54098	CIRCLIP	1.0	EA
39	T54099	GEAR	1.0	EA
40	T54100	PIN	1.0	EA
41	T54091	BALL BEARING	2.0	EA
42	T54092	SPACER	2.0	EA
43	T54094	GEAR	1.0	EA
44	T54093	SHAFT	1.0	EA

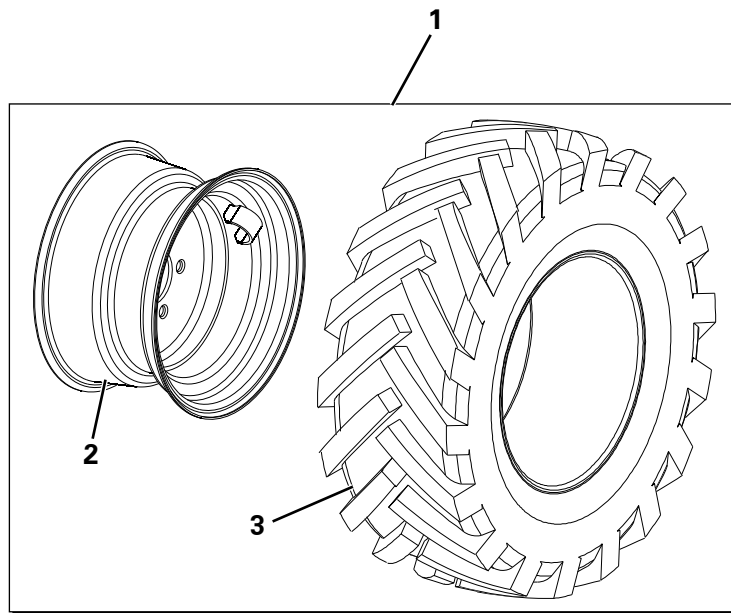
**REVERSE ALARM**



Item	Part No.	Description	Qty	U/M
1	T17155	BOLT	2.0	EA
2	T13911	WASHER	6.0	EA
3	T20411	PIPE CLAMP	1.0	EA
4	T20914	REVERSE ALARM ACTUATOR	1.0	EA
5	T16481	NYLOC NUT	2.0	EA
6	T16476	SET SCREW	2.0	EA
7	T14837	SPRING WASHER	2.0	EA
8	T103821	REVERSING SWITCH MOUNTING PLATE	1.0	EA
9	T104111	LIMIT SWITCH	1.0	EA
10	T13321	SET SCREW	2.0	EA
11	T11440	WASHER	4.0	EA
12	T13289	MICRO SWITCH BACKING PLATE	1.0	EA
13	T11439	SPRING WASHER	2.0	EA
14	T11447	NUT	2.0	EA
15	T13457	NYLOC NUT	1.0	EA
16	T12973	WASHER	2.0	EA
17	T12694	SET SCREW	1.0	EA
18	T101887	REVERSE ALARM	1.0	EA
19	T102219	REVERSE ALARM LOOM	1.0	EA

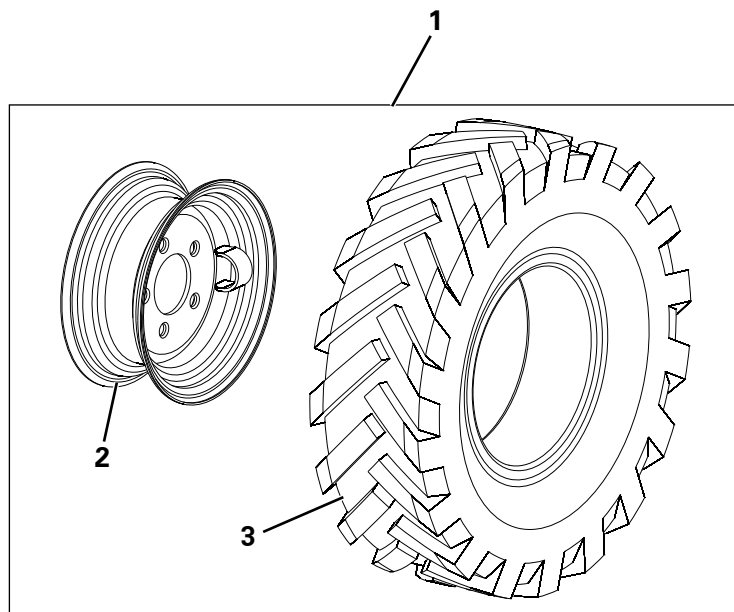
**WHEEL ASSEMBLY - TRAC GRIP**

Item	Part No.	Description	Qty	U/M
1	T100945	WHEEL & TYRE ASSEMBLY	4.0	EA
2	T100944	WHEEL RIM	1.0	EA
3	T20966	TYRE	1.0	EA



**WHEEL ASSY - TRAC GRIP NARROW**

Item	Part No.	Description	Qty	U/M
1	T103635	WHEEL & TYRE ASSEMBLY	4.0	EA
2	T103633	WHEEL RIM	1.0	EA
3	T103634	TYRE	1.0	EA



**MODIFIED AND ADDITIONAL PARTS**

Old Part No.	Qty	Description	Page	Item	Prefix	Issue	New Part No.
T102624	1.0	FRONT AXLE	31	A	02	02	T105072
T53915	2.0	HALF SHAFT	31	01	02	02	T54464
T53642	6.0	DIFFERENTIAL PINION	31	07	02	02	T54471
T54138	12.0	HEXAGON BOLT	31	12	02	02	T53924
T53951	2.0	AXLE CASE	32	05	02	02	T54465
T53855	1.0	CIRCLIP	33	07	02	02	T54463
ADDED	2.0	WASHER	34	10	02	02	T53901
ADDED	2.0	DIFFERENTIAL PINION	34	11	02	02	T53902
ADDED	2.0	ROLL PIN	34	13	02	02	T53904
T53906	1.0	DIFFERENTIAL CARRIER	34	15	02	02	T54194
T53630	1.0	SPACER	34	18	02	02	T54189
T53748	1.0	RING	34	19	02	02	T54186
T53522	1.0	SEAL	34	20	02	02	T54196
T53523	1.0	O RING	34	23	02	02	T54191
ADDED	2.0	DIFFERENTIAL SHAFT	34	26	02	02	T54461
ADDED	1.0	SHAFT RETAINER	34	27	02	02	T54462
T53698	2.0	BACKUP RING	35	08	02	02	DELETED
T53696	2.0	O RING	35	09	02	02	T54467
T53695	2.0	O RING	35	10	02	02	T54468
T53697	2.0	BACKUP RING	35	11	02	02	DELETED
T102625	1.0	REAR AXLE	36	A	03	03	T105068
T53915	2.0	HALF SHAFT	36	01	03	03	T54464
T53642	6.0	DIFFERENTIAL PINION	36	07	03	03	T54471
T54138	12.0	HEXAGON BOLT	36	12	03	03	T53924
T53948	2.0	AXLE CASE	37	05	03	03	T54460
T53855	1.0	CIRCLIP	38	07	03	03	T54463
T53894	1.0	BEVEL GEAR SET	39	07	03	03	T53925
ADDED	2.0	WASHER	39	10	03	03	T53901
ADDED	2.0	DIFFERENTIAL PINION	39	11	03	03	T53902
ADDED	2.0	ROLL PIN	39	13	03	03	T53904
T53906	1.0	DIFFERENTIAL CARRIER	39	15	03	03	T54194
T53630	1.0	SPACER	39	18	03	03	T54189

**MODIFIED AND ADDITIONAL PARTS**

Old Part No.	Qty	Description	Page	Item	Prefix	Issue	New Part No.
T53748	1.0	RING	39	19	03	03	T54186
T53522	1.0	SEAL	39	20	03	03	T54196
T53523	1.0	O RING	39	23	03	03	T54191
ADDED	2.0	DIFFERENTIAL SHAFT	39	26	03	03	T54461
ADDED	1.0	SHAFT RETAINER	39	27	03	03	T54462
ADDED	3.0	SPRING BAND CLAMP	27	18	03	04	T100421
T104854	1.0	FUEL PIPE	27	24	03	04	T105210
ADDED	2.0	HOSE TAIL SPIGOT	27	31	03	04	T105199
ADDED	1.0	FUEL HOSE	27	32	03	04	T105209
T16610	1.0	CHEESE HEAD SCREW	11	13	03	05	T102918
ADDED	4.0	WASHER	11	14	03	05	T11612
ADDED	2.0	NYLOC NUT	11	15	03	05	T11613
T104768	1.0	MAIN HARNESS	11	24	03	05	T105360
ADDED	1.0	STARTER BLOCKING RELAY	11	31	03	05	T105354
T52796	1.0	KINGLINK ASSEMBLY	05	06	03	06	T54351
T54351	1.0	KINGLINK ASSEMBLY	05	06	04	07	T52796

## Service and Warranty

Thwaites give a warranty which, subject to certain conditions, gives an assurance as to the quality of their product.

### The Thwaites warranty states:-

In the manufacture of Thwaites machines we endeavour to ensure that only the best workmanship and materials are used. Consequently, provided:-

1. The machine has been properly used in accordance with our recommendations and,
2. That no alterations have been made to the machine without prior written approval and,
3. That the machine has been maintained, serviced and lubricated in accordance with our recommendations and,
4. That Thwaites Warranty Certificate and/or New Machine Delivery Report has been completed and received by Thwaites within one month of delivery to the user.
5. That Thwaites receive a correctly completed Warranty Claim form within thirty days of the failure occurring.
6. **UK**  
That the alleged defective parts are returned to Thwaites within 6 weeks of date of failure.
7. **All other territories**  
That unless otherwise instructed the alleged defective parts are to be stored for inspection for a 6 month period from date of failure.

We will examine the alleged defective part and if we are reasonably satisfied that any defect is solely due to bad workmanship or materials, we will at our cost and at our option either repair any defective part or supply a replacement part in full discharge of all obligations upon us.

This warranty does not, however, extend to reconditioned or second-hand machines. For the avoidance of doubt, we will not entertain any other claims of a direct or consequential nature of whatsoever description and our responsibility is limited to the above.

The above warranty shall in no way detract from your statutory rights

#### **Warranty**

It is important to use only genuine Thwaites Limited spare parts and to adhere strictly to the conditions of operation and maintenance laid down by Thwaites Limited.

**Your warranty may be invalidated if you do not comply with the above recommendations.**