



Parts Manual

RANSOMES[®] *Frontline 938*

Series: XY - Engine type: Kubota model V1505
Product codes:LHAD002



WARNING: If incorrectly used this machine can cause severe injury. Those who use and maintain this machine should be trained in its proper use, warned of its dangers and should read the entire manual before attempting to set up, operate, adjust or service the machine.





INTRODUCTION

ITEM NUMBER

Each part which is identified in the illustrations has an item number. Parts which do not have an item number may not be readily identified in the illustration but are usually closely associated with the immediately adjacent part.

ASSEMBLIES

A complete assembly, e.g. a wheel motor or hydraulic motor or roll assembly, is listed as a complete item with subsequent individual components listed separately.

The assembly is listed under its part number with component parts being listed offset to the right, e.g.:-

ITEM	RANSOMES PART NO.	DESCRIPTION	QTY
1	LMSD798	Roll Assy.	1
2	MBB4490	• Tube	1
3	LMSD926	• End Cap Assy.	2
4	MBB6851	•• End Cap	1
5	H009116	•• Bearing	1
6	MBB2356	•• Seal Housing	1
7	A224016	•• Seal	2
*	A122192	Screw	2

It may not be possible to illustrate every item. With certain items purchased from outside suppliers some component parts may not be available from Ransomes and may need to be specially ordered from the supplier e.g. Volvo hydraulic motor components.

QUANTITIES

Quantities shown are for one assembly or sub-assembly.

USING THE PARTS LIST

Determine the function and application of the part required. Turn to the main index page and select the appropriate section. Locate the part on the illustration and parts list and read off the quantity from the appropriate MODEL column.

NUMERICAL INDEX

This is a summary of all part numbers used in the manual arranged in numerical sequence and showing the page and item number under which the parts appear.

ORDERING OF SPARE PARTS

When ordering replacement parts, it is most important to quote the SERIAL NUMBER of the machine, PART NUMBER, DESCRIPTION and QUANTITY required.



INTRODUCTIE

ILLUSTRATIE-NUMMER

Ieder onderdeel dat in de illustratie wordt weergegeven, is voorzien van een illustratie-nummer. Het is mogelijk dat onderdelen zonder een dergelijk illustratie-nummer, niet onmiddellijk in de illustratie kunnen worden gevonden. Deze behoren echter, over het algemeen, bij het onmiddellijk daarnaast geplaatste onderdeel.

SYSTEMEN

Een compleet systeem, zoals bijvoorbeeld een wiel, een motor, een hydraulische motor of rol, wordt als een compleet illustratie-nummer vermeld. De afzonderlijke componenten worden apart vermeld. Het systeem wordt ook vermeld onder het onderdeelnummer, terwijl onderdelen, iets inspringend naar rechts, zijn vermeld. Bijvoorbeeld:-

ILLUSTRATIE NUMMER	RANSOMES ONDERDEELNR.	BESCHRIJVING	AANT.
1	LMSD798	Rol - compleet	1
2	MBB4490	• Buis	1
3	LMSD926	• Eindkap - compleet	2
4	MBB6851	•• Eindkap	1
5	H009116	•• Lager	1
6	MBB2356	•• Keerringhuis	1
7	A224016	•• Keerring	2
*	A122192	Schroef	2

Het is vaak niet mogelijk om ieder onderdeel te illustreren. Daar bepaalde onderdelen door buitenleveranciers worden toegeleverd, is het mogelijk dat bepaalde onderdelen niet door Ransomes kunnen worden geleverd. Die moeten dan speciaal bij de leverancier worden besteld. Hierbij gaat het bijvoorbeeld om onderdelen van de hydraulische Volvo motor.

AANTALLEN

De vermelde aantallen zijn voor één systeem of sub-systeem.

HET GEBRUIKEN VAN DE ONDERDELENLIJST

Eerst de functie en toepassing van het betreffende onderdeel vaststellen. Vervolgens de pagina met de hoofdindex opslaan en juiste sectie kiezen. Het onderdeel in de illustratie en de onderdelenlijst opzoeken en de hoeveelheid aflezen in de kolom met de titel 'MODEL'.

NUMERIEKE INDEX

Deze index is een samenvatting van alle onderdeelnummers die worden gebruikt in het handboek. Deze onderdeelnummers zijn in numerieke volgorde geplaatst, inclusief het pagina- en illustratie-nummer, waaronder de onderdelen verschijnen.

BESTELLEN VAN VERVANGINGSONDERDELEN

Als vervangingsonderdelen worden besteld, is het uiterst belangrijk dat het SERIENUMMER van de machine, het ONDERDEELNUMMER, de BESCHRIJVING en het VEREISTE AANTAL worden vermeld.



INTRODUCTION

NUMERO D'ARTICLE

Chaque pièce, qui est identifiée sur les illustrations, est accompagnée d'un numéro d'article. Il peut s'avérer difficile d'identifier les pièces ne possédant pas de numéro d'article, mais celles-ci sont généralement étroitement associées à la pièce immédiatement adjacente.

ENSEMBLES

Un ensemble complet, par exemple: un ensemble de moteur de roue, de moteur hydraulique ou de rouleau, est listé en tant qu'article complet et les composants individuels subséquents sont listés séparément. L'ensemble est listé sous son numéro de pièce et les composants sont décalés vers la droite sur la liste, par exemple:

ARTICLE	NO.DE PIECE RANSOMES	DESCRIPTION	QTE
1	LMSD798	Ensemble de rouleau	1
2	MBB1190	• Tube	1
3	LMSD926	• Ensemble de bouchon	2
4	MBB6891	•• Bouchon	1
5	HOO9116	•• Roulement	1
6	MBB2356	•• Logement de joint	1
7	A224016	•• Joint	2
8	A123103	Vis	2

Il se peut que l'illustration de tous les articles ne soit pas possible. Pour certains articles achetés à des fournisseurs externes, il se peut que certains composants ne soient pas disponibles chez Ransomes et que ceux-ci soient commandés spécialement auprès du fournisseur, par exemple: composants de moteur hydraulique Volvo.

QUANTITES

Les quantités indiquées s'appliquent à un ensemble ou sous-ensemble.

UTILISATION DE LA LISTE DE PIECES

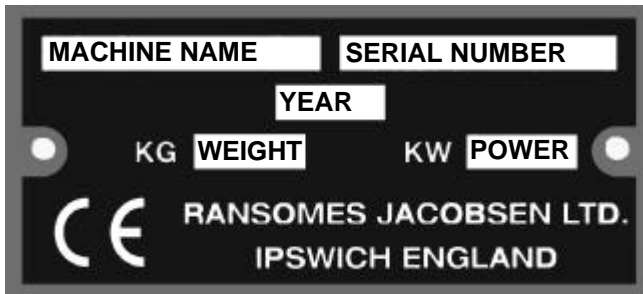
Déterminer la fonction et l'application de la pièce requise. Passer à la page d'index principal et sélectionner la section appropriée. Situer la pièce sur l'illustration et la liste de pièces, puis lire la quantité dans la colonne MODELE appropriée.

INDEX NUMERIQUE

Il s'agit d'un récapitulatif de tous les numéros de pièce utilisés dans le manuel, classés en séquence numérique, et indiquant la page et le numéro d'article sous lesquels les pièces apparaissent.

COMMANDE DES PIECES DE RECHANGE

Lors de la commande des pièces de rechange, il est essentiel de stipuler le NUMERO DE SERIE de la machine, le NUMERO DE PIECE, la DESCRIPTION et la QUANTITE requise.



SPECIFICATIONS

ENGINE SPECIFICATION

TYPE:	Kubota 28KW (38HP) @ 3000 RPM, 4 cylinder (in line) vertical Diesel engine, 4 stroke, water cooled, 1498cc (91.44 cu.in) with 12V electric start.
Model:	V1505-BBS-EC-1
Maximum Speed:	3000 ± 50 RPM (No load)
Idle Speed:	1500 \pm $\frac{100}{0}$ RPM
Oil Sump Capacity:	6 litres (10.56 Imp.pints) (12.68 US pints)
Firing Order:	1, 3, 4, 2.
Fuel:	No. 2-D Diesel fuel (ASTM D975)

MACHINE SPECIFICATION

DRIVE TRAIN

transmission: Variable displacement pump directly mounted to engine, infinitely variable foot speed control.

Filtration: 10 Micron

Drive: 4 wheel drive for cutting.
2 wheel drive for transport.
15 cu. in. front wheel motors, 12 cu. in. rear wheel motors.

Speeds:

Cutting: 0 - 11km/h (0 - 7 mph) FORWARD
0 - 6km/h (0 - 4 mph) REVERSE

Speed:

Transport: 0 - 25km/h (0 - 15mph) FORWARD

Differential lock:

Cross-flow parallel drive.

Tyres:

Front - 23 x 10.50 - 12 6 ply rating turf tread
Rear - 20 x 10.00 - 8 6 ply rating turf tread

Pressures:

All tyres 1 kg/cm² (14 p.s.i.)

Brakes:

Service: Hydrostatic braking through traction drive with foot operated self-energizing 270mm x 50mm (10.25" x 1.75") band brakes, on front wheels. Optional individual wheel brakes.

Parking: Foot operated self-energizing 270mm x 50mm (10.25" x 1.75") band brakes, on front wheels.

PTO Drive: Hydraulic gear pump directly mounted to transmission.

CAPACITIES

Cooling System

Capacity: 5litres (8 Imp. pints) (10.5 US pints)
50% Antifreez.

Fuel Tank

High density polyethylene
Capacity: 64.4 litres (14 Imp. galls) 17 US galls
Filtration: 10 micron in-line pre filter and cannister filter.

Hydraulic Tank

Capacity: 18.8 litres (4 Imp. galls) 5 US galls
Oil type: Turf Protector (vegetable based)



ELECTRICAL SYSTEM

Battery:	Exide 134
Charging:	30amp alternator.
Lights:	Optional 2 headlights; indicators.
Starting:	12 volt with 650amp cold cranking.
Warning system:	Audible alarm for high engine coolant temperature; low engine oil pressure; visual alarm for engine oil pressure; hydraulic oil temperature and charging system fuse and circuit breaker protected.

CONTROLS

Steering:	Power steering to rear wheels with rake adjustable steering wheel.
Deck lift:	Single lift lever.
Throttle:	Hand lever.
Forward/Reverse:	Foot pedal control.
Brake:	Foot pedal control.
PTO:	Single electric switch
4 WD/transport:Single	electric switch
Lights:	Single electric switch

INSTRUMENTS

Water temperature gauge
 Fuel level gauge
 Low oil pressure lamp
 High hydraulic oil temperature lamp
 Glow plug indicator lamp
 Alternator lamp

SEAT

Type:	High backed vinyl covered; moveable arm rest; adjustable for operators weight and fore and aft position.
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DIMENSIONS

Overall width: (transport)	
Tractor with 1.52m (60 in) deck	1.56 metres (61.25in)
Tractor with 1.60m (63in) deck	
with chute down	1.94 meters (76.55in)
with chute up	1.75 meters (88.75in)
Tractor with 1.82m (72in) side discharge deck	
with chute down	2.16 meters (85.00in)
with chute up	1.88 meters (74.00in)
Tractor with 1.82m (72in) rear discharge deck	
	1.86 meters (73.00in)
Overall height:	1.35 metres (53in)
Overall length:	
Tractor with 1.52m (60 in) deck	3.14 metres (123.5in)
Tractor with 1.60m (63in) deck	3.19 meters (125.5in)
Tractor with 1.82m (72in) deck	3.26 meters (128.5in)
Wheel base:	1.40 meters (55in)
Ground clearance:	16.5 cm (6.5in)
min. turning radius:	4.2cm (16.7in)
Overall weight of machine:	
Tractor with 1.52m (60 in) deck:	1240kg (2735lb)
Tractor with 1.60m (63in) deck:	1266kg (2790lb)
Tractor with 1.82m (72in) deck:	1311kg (2890lb)

CUTTING DECKS

Construction:	Heavy duty welded steel.
Deck drive:	Hydraulic motor driving single poly vee belt.
Cutter heads:	31.75mm (1.25in) diameter spindle with double sealed bearings.

Blades:	
1.52m (60 in) deck	Three 533mm x 6mm (21in x .25in) heat treated blade.
1.60m (63in) deck	Three 558mm x 6mm (22in x .25in) heat treated blade.
1.82m (72in) deck	Three 635mm x 6mm (25in x .25in) heat treated blade.
Castor wheels:	11 x 4.00 4pr pneumatic foam filled tubeless tyre.

Antiscalp rollers:

NOISE EMISSION with 1.52m (60 in) RD deck

Conforms to the specification of Directive EEC 79/113, 84/558, 87/252, 88/180, 88/181.

Sound Power Level:	101 dB(A) LWA (Bystander)
Sound Pressure Level:	84.8 dB(A) LpA (Operator Ear Level)

NOISE EMISSION with 1.60m (63in) SD deck

Conforms to the specification of Directive EEC 79/113, 84/558, 87/252, 88/180, 88/181.

Sound Power Level:	104dB(A) LWA (Bystander)
Sound Pressure Level:	87.8 dB(A) LpA (Operator Ear Level)

NOISE EMISSION with 1.82m (72in) SD deck

Conforms to the specification of Directive EEC 79/113, 84/558, 87/252, 88/180, 88/181.

Sound Power Level:	103 dB(A) LWA (Bystander)
Sound Pressure Level:	86.2 dB(A) LpA (Operator Ear Level)

NOISE EMISSION with 1.82m (72in) RD deck

Conforms to the specification of Directive EEC 79/113, 84/558, 87/252, 88/180, 88/181.

Sound Power Level:	101 dB(A) LWA (Bystander)
Sound Pressure Level:	84.2 dB(A) LpA (Operator Ear Level)

NOISE EMISSION with 1.52m (60 in) Envirodeck

Conforms to the specification of Directive EEC 79/113, 84/558, 87/252, 88/180, 88/181.

Sound Power Level:	103 dB(A) LWA (Bystander)
Sound Pressure Level:	86.3 dB(A) LpA (Operator Ear Level)

NOISE EMISSION with 1.82m (72 in) Envirodeck

Conforms to the specification of Directive EEC 79/113, 84/558, 87/252, 88/180, 88/181.

Sound Power Level:	103 dB(A) LWA (Bystander)
Sound Pressure Level:	85.5 dB(A) LpA (Operator Ear Level)



VIBRATION LEVEL

The machine was tested for whole body and hand/arm vibration levels. The operator was seated in the normal operating position with both hands on the steering mechanism. The engine was running and the cutting device was rotating with the machine stationary.

with 1.52m (60in) RD deck

Hand / Arm acceleration level : 0.444 m/s²

Whole body acceleration level

X axis : 0.053 m/s²

Y axis : 0.024 m/s²

Z axis : 0.077 m/s²

with 1.60m (63in) SD deck

Hand / Arm acceleration level : 0.587 m/s²

Whole body acceleration level

X axis : 0.044 m/s²

Y axis : 0.023 m/s²

Z axis : 0.080 m/s²

with 1.82m (72in) SD deck

Hand / Arm acceleration level : 0.653 m/s²

Whole body acceleration level

X axis : 0.042 m/s²

Y axis : 0.024 m/s²

Z axis : 0.026 m/s²

with 1.82m (72in) RD deck

Hand / Arm acceleration level : 0.569 m/s²

Whole body acceleration level

X axis : 0.052 m/s²

Y axis : 0.029 m/s²

Z axis : 0.061 m/s²

with 1.52m (60in) Envirodeck

Hand / Arm acceleration level : 0.916 m/s²

Whole body acceleration level

X axis : 0.035 m/s²

Y axis : 0.029 m/s²

Z axis : 0.088 m/s²

with 1.82m (72in) Envirodeck

Hand / Arm acceleration level : 0.652 m/s²

Whole body acceleration level

X axis : 0.023 m/s²

Y axis : 0.027 m/s²

Z axis : 0.023 m/s²



RECOMMENDED LUBRICANTS

Engine oil: Should be to MIL-L-2104C or to A.P.I.
Classification CE grades and as given in the
table below:

Temperature	Oil Viscosity
ABOVE 25°C (77°F)	SAE 30 or 10w-30/10w-40
0°C to 25°C (32°F to 77°F)	SAE 20 or 10w-30/10w-40
BELOW 0°C (32°F)	SAE 10w or 10w-30/10w-40

Hydraulic Oil: 10w-30 or Turf Protector
Grease: Shell Darina R2 or equivalent.

CUTTING PERFORMANCE

60" deck 1.44 ha/hr @ 8kph (3.49 acres/hr @ 5mph)
63" deck 1.52 ha/hr @ 8kph (3.66 acres/hr @ 5mph)
72" deck 1.73 ha/hr @ 8kph (4.18 acres/hr @ 5mph)



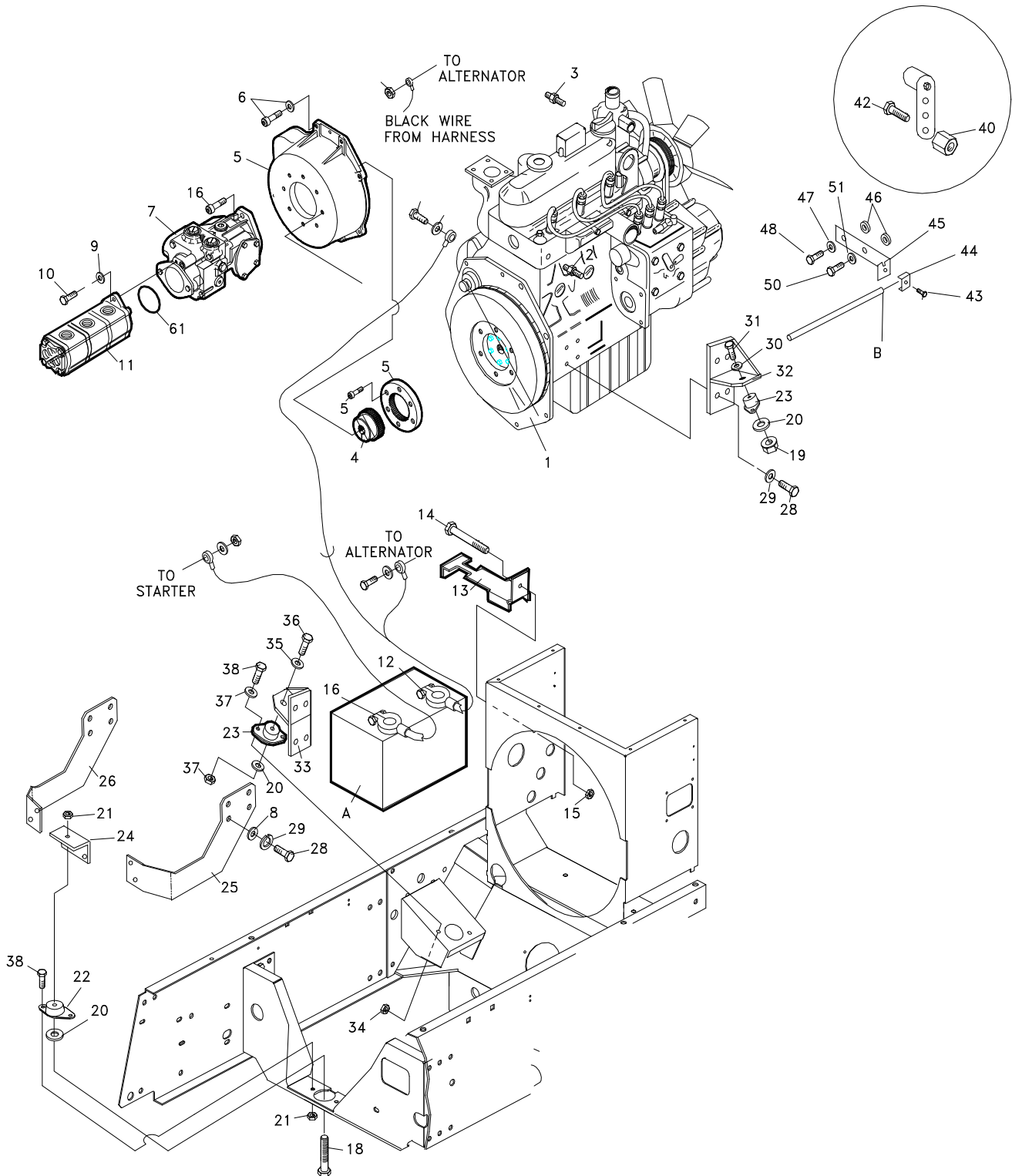
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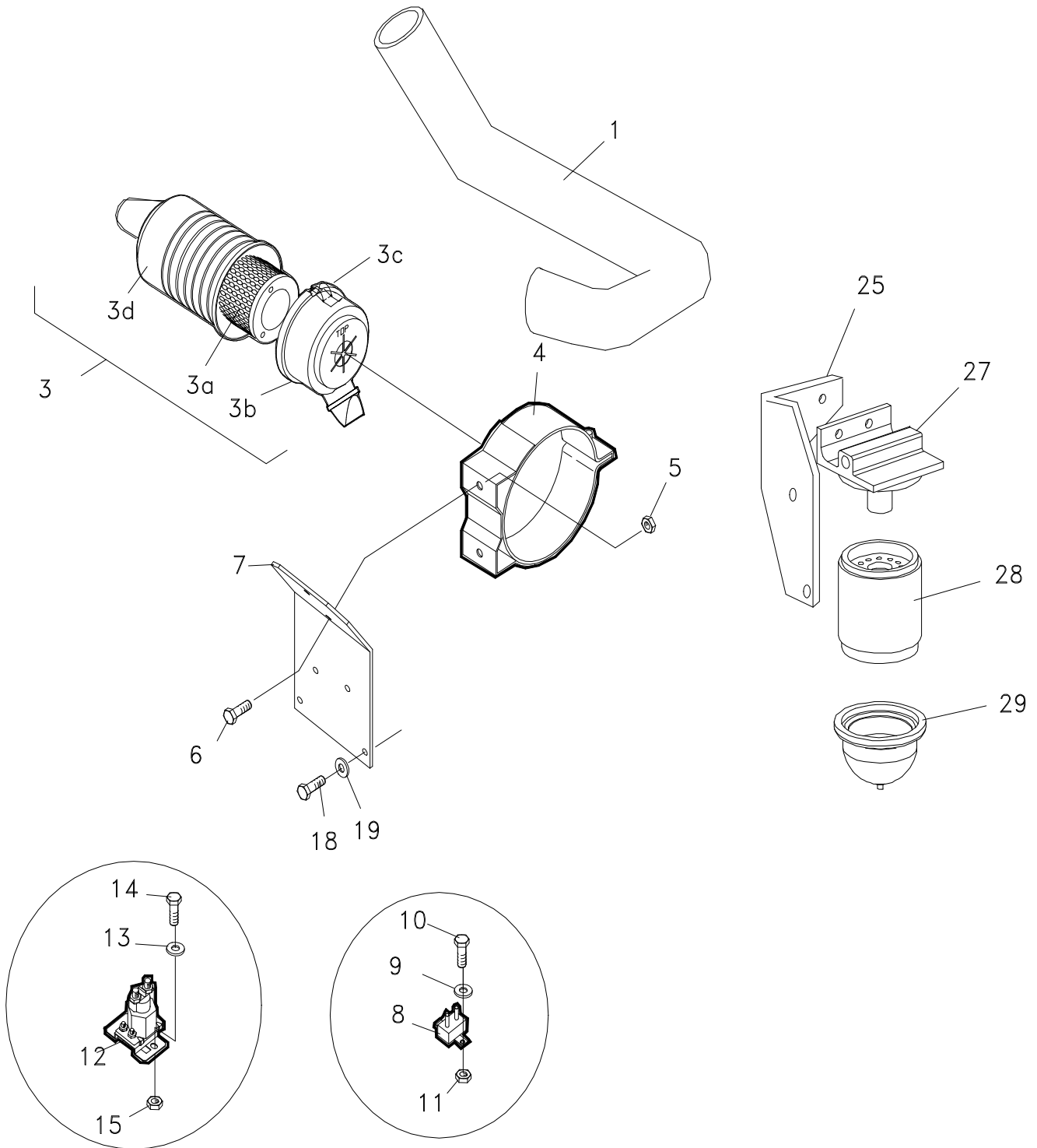
ITEM	RANSOMES PART NO	DESCRIPTION 	QTY
01	A682182	ENG-KUB V1505	1
	A691136	FAN 370mm DIA 10 BLADE PUSHER	1
02	A829594	TEMP SWITCH	1
*	A829589	THERMOSWITCH (ENGINE OVER TEMPERATURE)	1
03	W148270	SENDER-TEMP	1
04	2208063	COUPLING-15 TOOTH	1
05	2208048	BELL HOUSING AND DSCC	1
	A814646	• ENGINE FLANGE	1
06	A129047	SCREW SOCKET HEAD	AR
07	A800638	PUMP	1
09	GSF2163J	LOCKWSHR-HELICAL 3/8	AR
10	64123-50	BLT-HEX 3/8-16 X 1	AR
11	4125960	PUMP-3 STAGE	1
12	2218124	CABLE-BATTERY NEG.	1
13	2212107A	BATTERY-HOLD DOWM	1
14	450214	SCREW M10 x 25 HEX HD	AR
15	450454	NUT M10 VERBUS RIPP	AR
16	2218089	CABLE-BATTERY POS.	1
18	450037	BOLT M10 x 75 HEX HD	AR
19	GSF2080AC	LOCK NUT	AR
20	64163-27	WASHER-FLAT	AR
21	452437	NUT M10 FLANGED NYLOC	AR
22	2218105	ISOLATOR-VIBRATION	1
23	2218106	ISOLATOR-VIBRATION	2
24	MBG4824	MOUNT-TOP MOTOR	1
25	2212131	MOUNT-LH MOTOR	1
26	2212132	MOUNT-RH MOTOR	1
27	450214	SCREW M10 x 25 HEX HD	AR
28	A119021	M10 X 25 FINE	AR
29	450412	S.L.WASHER M10	AR
30	A159926	WASHER 25/64	AR
31	A109009	BOLT 3/8 UNC x 2.1/2	AR
32	2216046	WELDMNT-LH ENGINE MOUNT	1
33	2216047	WELDMNT-RH ENGINE MOUNT	1
34	A139322	NUT	AR
35	A1594010	WASHER 0.328	AR
36	450192	BOLT-HEX	AR
37	450391	WASHER	AR
38	450214	SCREW M10 x 25 HEX HD	AR
40	172084	CLAMP.	1
41	A159401	WASHER 0.328	AR
42	GSF2002CB	BLT-HEX 5/15-24 X 1/2	AR
43	A119109	SCREW No.10-24 x 3/4	AR
44	W022372	B&S CABLE CLAMP	2

* Not Illustrated


ITEM	RANSOMES PART NO	DESCRIPTION 	QTY
45	2212156	BRACKET-THROTTLE	1
46	A159926	WASHER 25/64	AR
47	64006-02	LOCKWSHR-HELICAL 5/16	AR
*	MBF1105A	PUMP BOSS	AR
48	A129047	SCREW SOCKET HEAD	AR
49	A139325	NUT No.10-24	AR
50	450214	SCREW M10 x 25 HEX HD	AR
A	N/A	BATTERY	1
B	148057-03	THROTTLE CABLE	1

* Not Illustrated

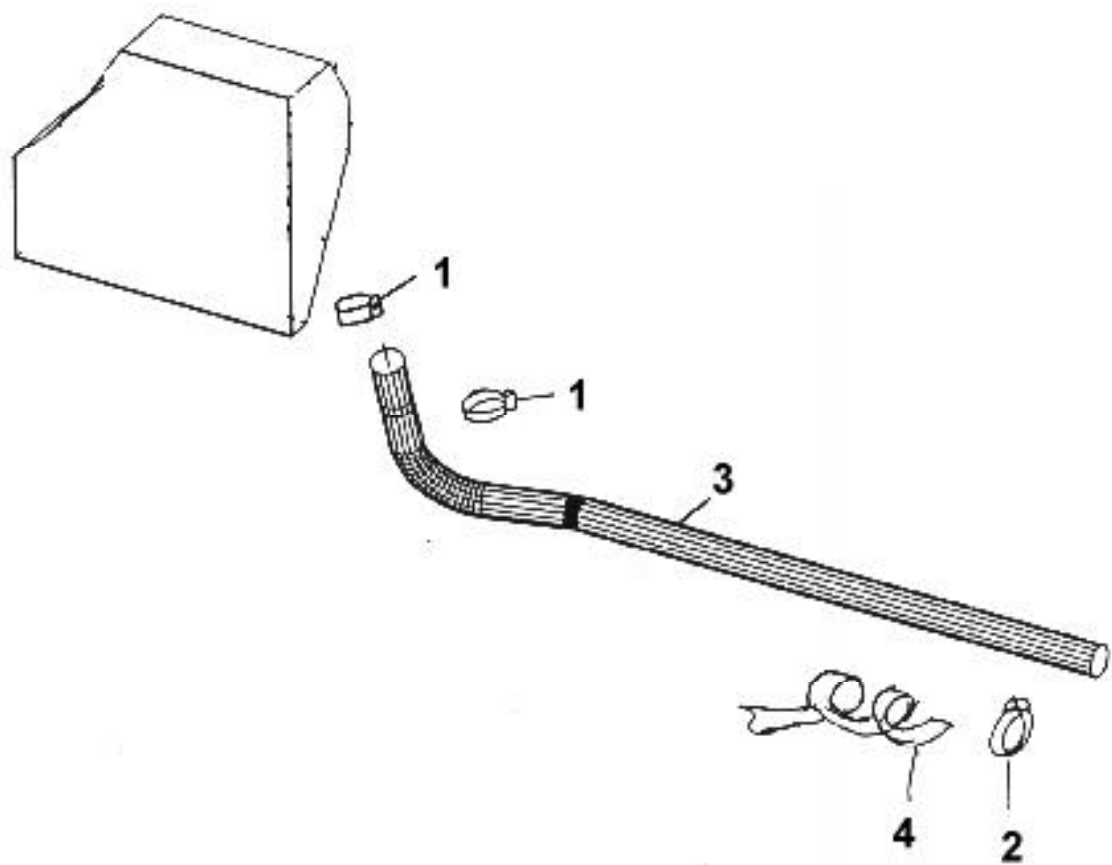
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2217005

ITEM	RANSOMES PART NO	DESCRIPTION 	QTY
01	A819033	HOSE-AIR CLEANER	1
02*	48383	CLAMP	AR
03	2198147	AIR CLEANER	1
03a	2198147-01	ELEMENT	1
03b	2198147-03	COVER	1
03c	2198147-04	COVER CLIP	2
03d		BODY	1
*	2198147-02	VALVE - DUST UNLOADER	1
04	2198114	CLAMP-AIR CLEANER	1
05	452436	NUT M8 FLANGED NYLOC	AR
06	450191	SCREW M8 x 20 HEX HD	AR
07	2212149A	BRACKET-AIR	1
08	A824942	CIRCUIT BREAKER	1
09	450388	WASHER 0.203	AR
10	450149	SCREW M5 x 12 HEX HD	AR
11	450376	LOCKNUT-NYLON M5-0.8P	AR
12	W38665	SOLENOID	1
13	450389	WASHER M6	AR
14	450170	SCREW M6 x 16 HEX HD	AR
15	452435	NUT M6 FLANGED NYLOC	AR
16*	68371-5121-0	FUEL PUMP EX KUBOTA	AR
*	A905575	HARNES (PUMP ADAPTOR)	1
17*	450170	SCREW M6 x 16 (FOR FUEL FILTER)	AR
17*	450172	SCREW M6 x 25 (FOR FUEL FILTER)	AR
18	450030	BOLT M10 x 40 HEX HD (ITEM 7 TO BELL HOUSING)	AR
19*	GSF2163J	LOCKWSHR M10 (FOR ITEM 18)	AR
20	450391	WASHER (FOR ITEM 18)	AR
21	450193	SCREW M8 x 30 HEX HD (ITEM 7 TO BELL HOUSING)	AR
22	64006-02	LOCKWSHR-HELICAL 5/16	AR
23	BAM3044	SPACER (ITEM 7 TO ENGINE)	1
24	73018A	SPACER-EYEBOLT (ITEM 7 TO ENGINE)	3
25	2212150	BRACKET-WATER SEPERATOR	1
26	450191	SCREW M8 x 20 HEX HD (FOR ITEM 27 TO 25)	AR
27	W178081	FILTER HEAD	1
28	W178078	COALESER FILTER	1
29	W178077	SIGHT BOWL	1
30*	48386-03	FITTING - BARB 1/4NPT X 5/16 OD (FOR ITEM 27)	1
31*	88042-02	CLAMP 5/16 (FOR ITEM 32 TO 39)	AR
32*	148263	FUEL HOSE-5/16 X 52 LONG	AR
39*	148264	FUEL HOSE-FUEL 3/16 X 40 (RETURN TO TANK)	1
40*	MBG1052	TIE PLATE	1

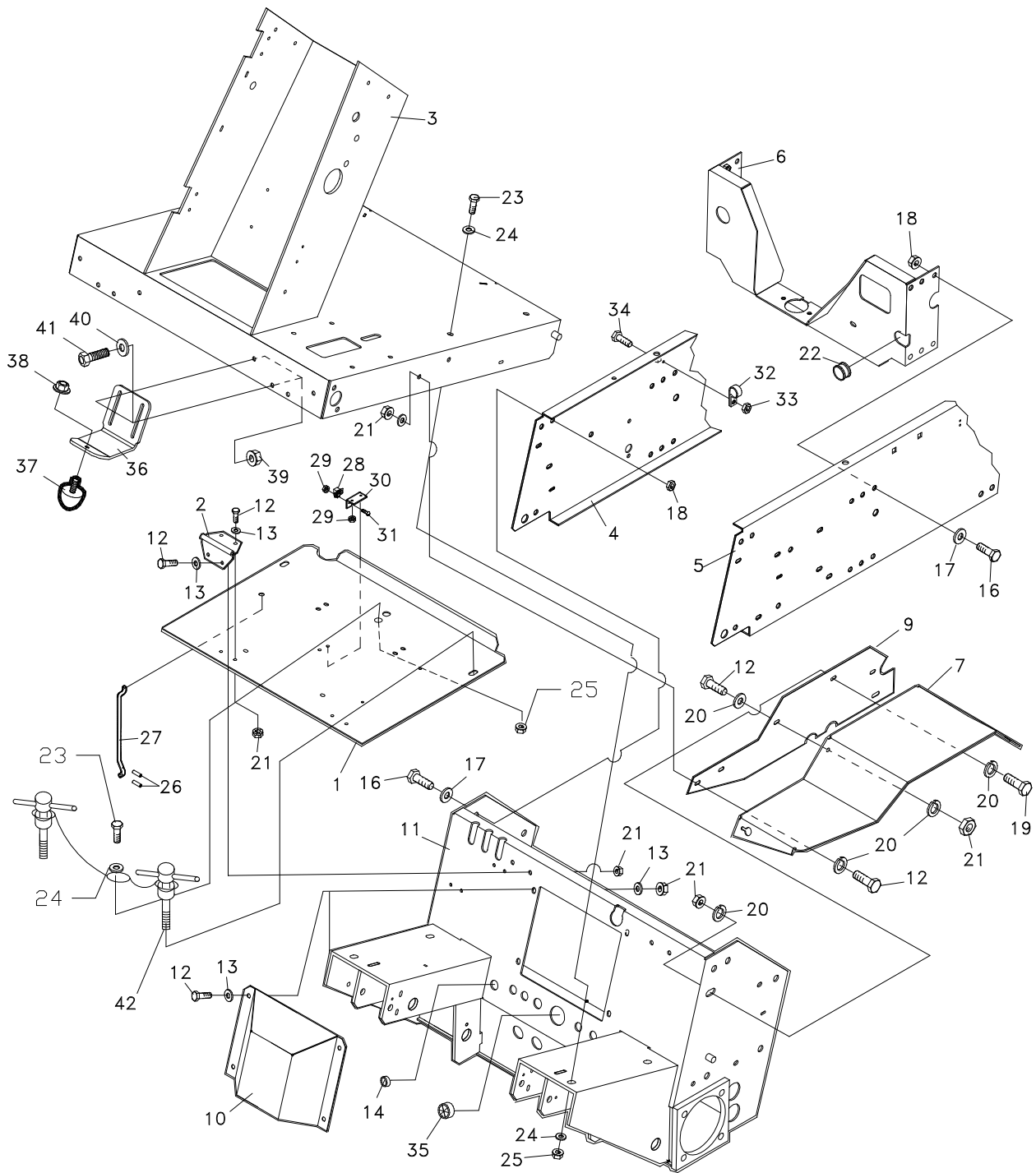
* Not Illustrated



ITEM	RANSOMES PART NO	DESCRIPTION 	QTY
01	108094-01	CLAMP	2
02	48319-01	CLAMP	1
03	2218102	EXHAUST PIPE	1
04	2218122	INSULATION	AR

* Not Illustrated


**RANSOMES
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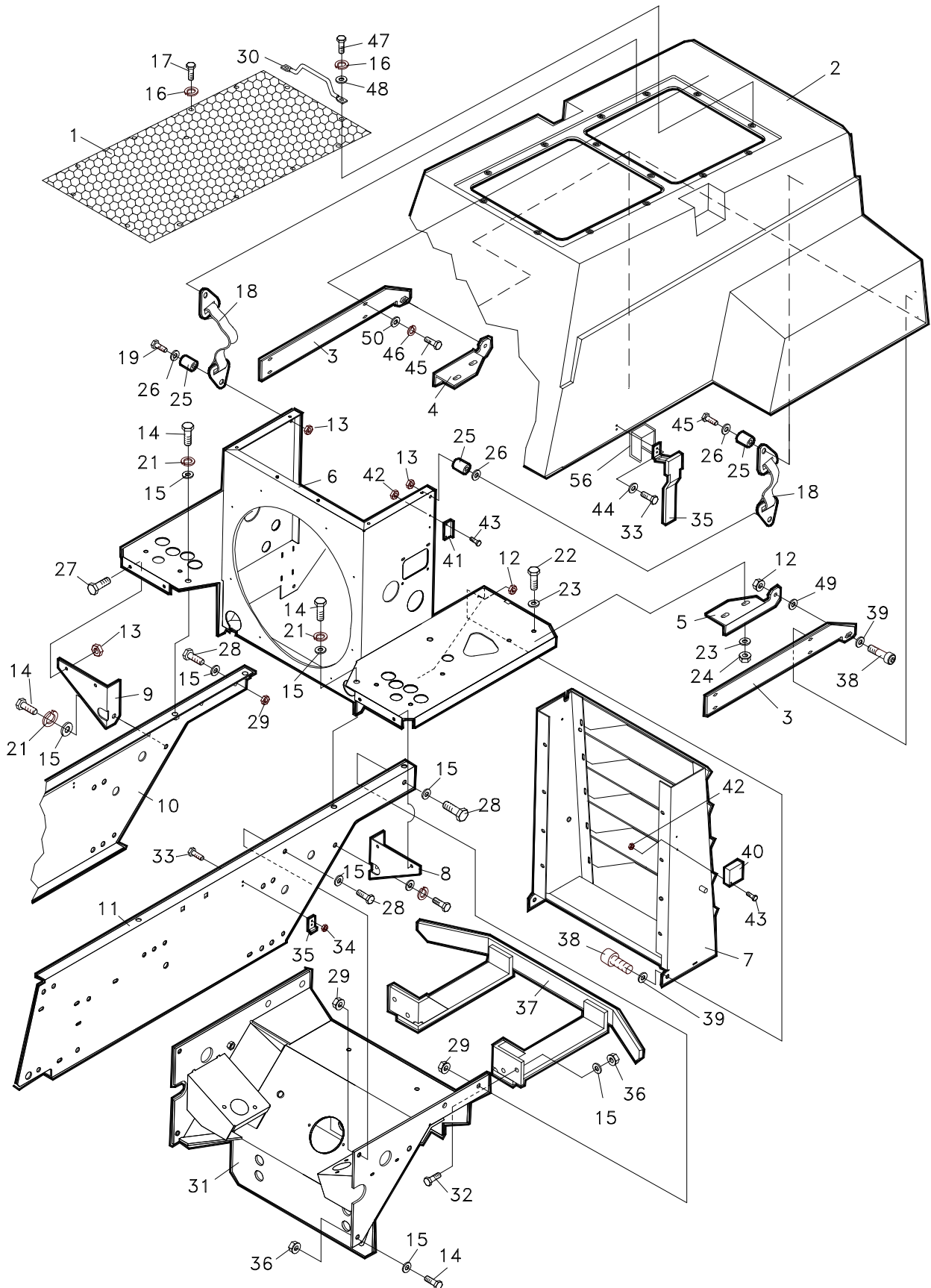
FRONT FRAME

LIST OF PARTS


ITEM	RANSOMES PART NO	DESCRIPTION 	QTY
3-01	2212048	PLATE-SEAT MTG	1
3-02	MBG2013	HINGE.	2
3-03	2216004F	WELDMNT-TOWER	1
3-04	2216027	WELDMNT-RH FRAME RAIL	1
3-05	2216028	WELDMNT-LH FRAME RAIL	1
3-06	2216002	WELDMNT-BULKHEAD	1
3-07	2212079	FENDER-LH	1
3-08	2212083	FENDER-RH	1
3-09	2212082	BACK-PLATE FENDER	2
3-10	2212064	COVER-ACCESS	1
3-11	MBF1928A	FRONT AXLE	1
3-12	450191	SCREW M8 x 20 HEX HD	AR
3-13	450390	WASHER M8	AR
3-14	A295322	GROMMET - INSULATION	AR
3-15	452436	NUT M8 FLANGED NYLOC	AR
3-16	450241	SCREW M12 x 30 HEX HD	AR
3-17	450392	WASHER M12	AR
3-18	452438	NUT M12 FLANGED NYLOC	AR
3-19	450193	SCREW M8 x 30 HEX HD	AR
3-20	001594010	WASHER 0.328	AR
3-21	452436	NUT M8 FLANGED NYLOC	AR
3-22	W148034-01	INSUL GROMMET 1 I/D	AR
3-23	450214	SCREW M10 x 25 HEX HD	AR
3-24	450391	WASHER M10	AR
3-25	452437	NUT M10 FLANGED NYLOC	AR
3-26	64061-04	ROLL PIN	AR
3-27	W143036A	SUPPORT ROD	1
3-28	W138040	CLIP - HOOD ROD	1
3-29	001393400	NUT No.6-32	AR
3-30	W142007	BRKT - ROD CLIP	AR
3-31	64152-21	6-32x1/2LG RD HD SCREW	AR
3-32	48228-05	CLIP-CABLE	AR
3-33	64229-01	LOCK NUT-NYLON 1/4-20	AR
3-34	001099002	BOLT 1/4 x 1/2	AR
3-35	2218084	GROMMET	1
3-36	MBG5723	BRACKET DECK STOP	2
3-37	523126	BUMPER-RUBBER	2
3-38	64141-6	NUT 5/16-18 WLF	2
3-39	64246-02	NUT M8 WLF	4
3-40	64163-29	WASHER	4
3-41	A1103051	BOLT M8 1.25x25	4
3-42	2720289	ASSY- M12 BOLT W/LAN	2

* Not Illustrated

**RANSOMES
FRONTLINE 938**

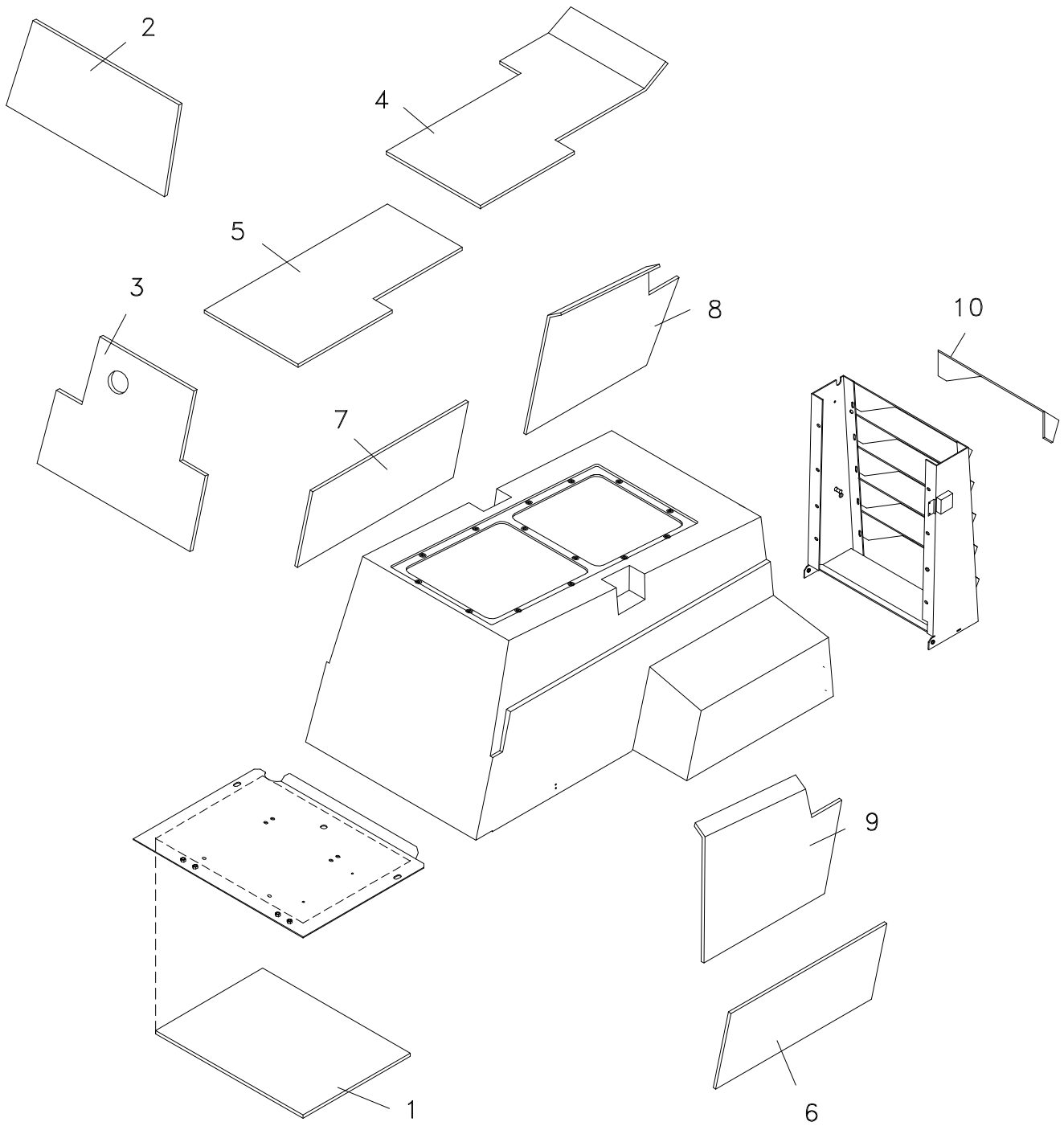


2217007


ITEM	RANSOMES PART NO	DESCRIPTION 	QTY
4-01	2212072	SCREEN - HOOD	1
4-*	A904435	BONNET SEALING STRIP	1
4-02	2218000	HOOD-PLASTIC	1
4-03	2212050	HINGE PLATE	2
4-04	2212054	HINGE-ADJ.RH	1
4-05	2212051	HINGE-ADJ.LH	1
4-06	2216008B	WELDMNT-FAN SHROUD	1
4-07	2216009	WELDMNT-RADIATOR SUPPORT	1
4-08	2212046	GUSSET - LH	1
4-09	2212045	GUSSET - RH	1
4-12	GSF2080AC	LOCK NUT	AR
4-13	452436	NUT M8 FLANGED NYLOC	AR
4-14	450241	SCREW M12 x 30 HEX HD	AR
4-15	450392	WASHER M12	AR
4-16	450389	LOCKWSHR-HELICAL	AR
4-17	450168	SCREW M6 x 12 HEX HD	AR
4-18	2218083	LANYARD	2
4-19	450191	SCREW M8 x 20 HEX HD	AR
4-20	GSF2080AC	LOCK NUT	AR
4-21	GSF2163L	LOCKWSHR-HELICAL 1/2	AR
4-22	450214	SCREW M10 x 25 HEX HD	AR
4-23	450391	WASHER M10	AR
4-24	452437	NUT M10 FLANGED NYLOC	AR
4-25	113006-01	SPACER IDLER	4
4-26	001599272	WASHER 21/64	AR
4-27	450192	SCREW M8 x 25 HEX HD	AR
4-28	450239	SCREW M12 x 20 HEX HD	AR
4-29	452438	NUT M12 FLANGED NYLOC	AR
4-30	MBG2637	HANDLE	1
4-31	2216006A	REAR AXLE SUPPORT	1
4-32	450048	BOLT M12 x 40 HEX HD	AR
4-33	450542	SCREW M6 x 20 HEX HD	AR
4-34	450376	LOCKNUT-NYLON M5-0.8P	AR
4-35	W178142	LATCH	2
4-36	452438	NUT M12 FLANGED NYLOC	AR
4-37	2216033	WELDMNT-BUMPER	1
4-38	64166-17	BLT-SHLDR 3/8-16 X 1.12	AR
4-39	001599450	WASHER 33/64	AR
4-40	2218076	LATCH-OVER CENTER	AR
4-41	2218075	LATCH-OVER CENTRE	AR
4-42	W64025-29	NUT	AR
4-43	001191140	SCREW RD HD NO8-32 X 1/2	AR
4-44	64002-02	LOCKWSHR-TOOTH EXTERNAL	AR
4-45	450190	SCREW M8 x 16 HEX HD	AR
4-46	64006-02	LOCKWSHR-HELICAL 5/16	AR
4-56	MBG6194	LATCH HOOD	2

* Not Illustrated

**RANSOMES
FRONTLINE 938**

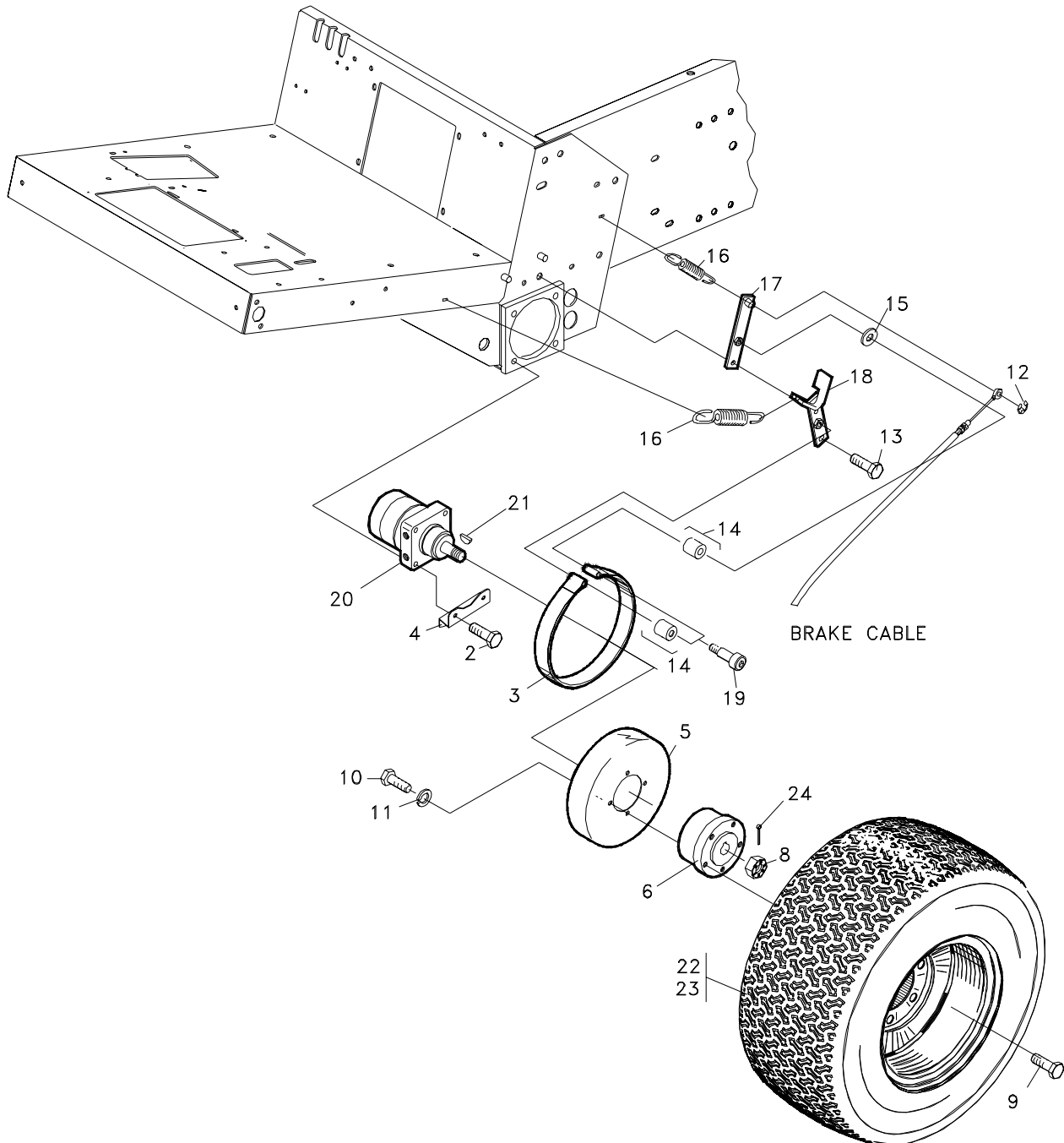


2217008

ITEM	RANSOMES PART NO	DESCRIPTION 	QTY
5-01	2218112	INSULATION-SEAT PLATE	1
5-02	2218113	INSULATION-HOOD REAR	1
5-03	2218118	INSULATION-INTERIOR HOOD	1
5-04	2218119	INSULATION-EXTERIOR HOOD	1
5-05	2218120	INSULATION-HOOD TOP	1
5-06	2218117	INSULATION-INTERIOR LH	1
5-07	2218116	INSULATION-INTERIOR RH	1
5-08	2218114	INSULATION-HOOD LH	1
5-09	2218115	INSULATION-HOOD RH	1
5-10	2218111	INSULATION - LOUVER	5
5-11*	A904435	BONNET SEAL	1

* Not Illustrated


RANSOMES
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2217009

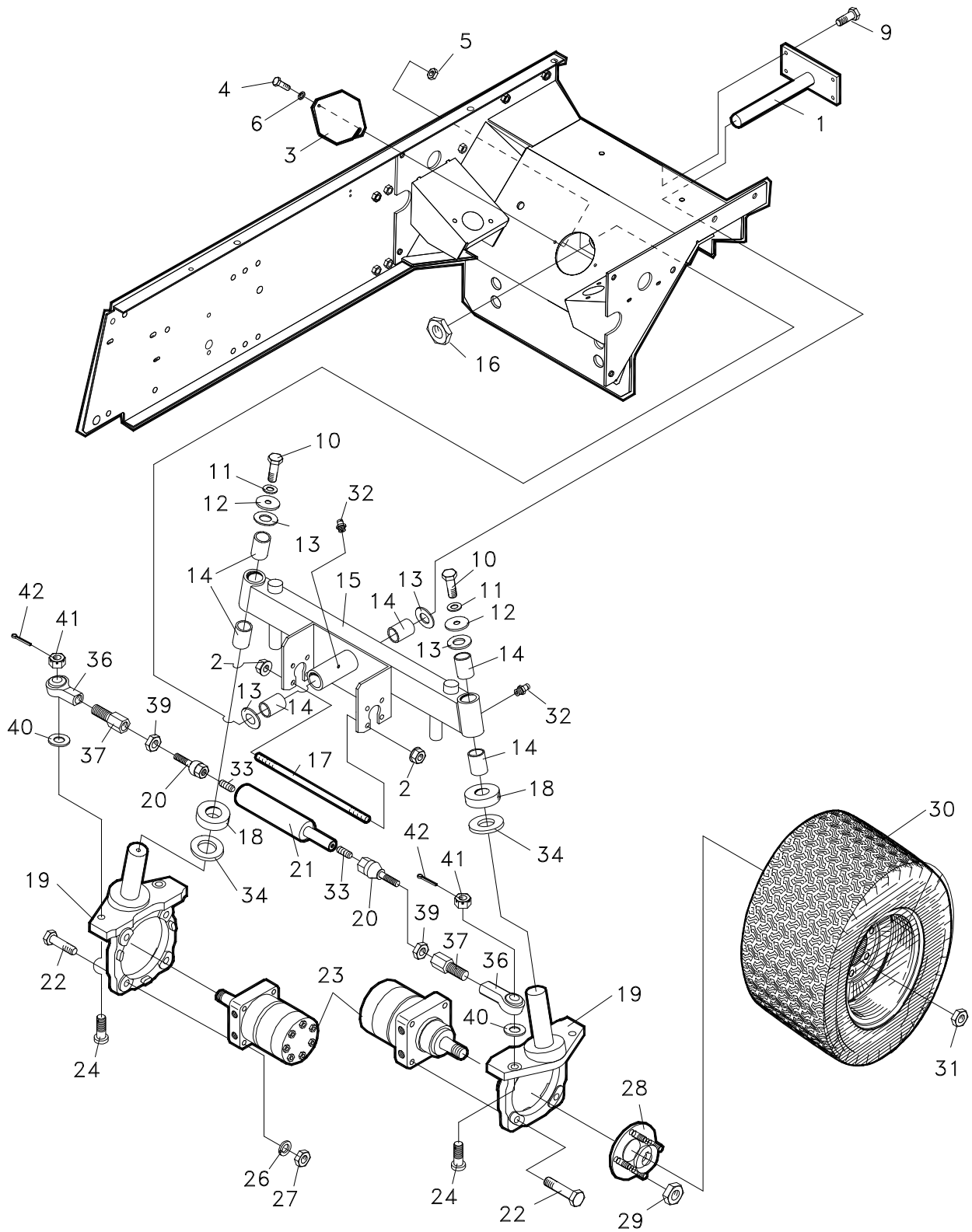
FRONT AXLE

LIST OF PARTS


ITEM	RANSOMES PART NO	DESCRIPTION 	QTY
6-2	451030641	BLT-HEX 1/2-20X2 1/4	8
6-3	W178013	BRAKE BAND	2
6-4	MBF1907	STOP-BRAKE BAND	2
6-5	172060	BRAKE DRUM	2
6-6	MBG5078	HUB (FOR ME15 WHEEL MTR.)	2
6-6	2171004A	HUB (FOR MJ15 WHEEL MTR.)	2
6-8		NUT SLOTTED	
6-8	A800747	NUT SLOTTED - (FOR MJ15 WHEEL MTR)	2
6-9	A100934	BLT-WHL 1/2	10
6-10	456110595	BLT-HEX 3/8-16X3/4	8
6-11	452200134	LCKWSHR-HELICAL 3/8	8
6-12	A179119	SNAP RING .375	2
6-13	64166-17	BLT-SHLDR 3/8-16X1.12	2
6-14	MBF1283	16 OD x 10.2 ID x 6 Lg SERIAL XY000370 ON	4
6-14	64163-04	WASH 25/64x5/8x16GA	AR
6-15	64163-02	WASH.21/64X19/32	2
6-16	699527153	SPRING-EXTENSION	4
6-17	2196143	WLDMT-BRAKE ARM	2
6-17	MBF1652A	BRAKE ARM LH SERIAL XY000370 ON	1
6-17	MBF1653A	BRAKE ARM RH SERIAL XY000370 ON	1
6-18	2196142	WLDMT-BRAKE	2
6-18	MBF1649A	BRAKE ARM LH SERIAL XY000370 ON	1
6-18	MBF1651A	BRAKE ARM RH SERIAL XY000370 ON	1
6-19	64166-7	SHOULDER BOLT	4
6-19	MBG3598	BOLT-BRAKE BAND SERIAL XY000370 ON	4
6-20	A800687	WHL MTR-ME15	2
6-20	W2178201-01	WHEEL MTR. - MJ15	2
	A230108	SEAL KIT (FOR MJ15 WHEEL MTR.)	1
6-21	A800746	SHAFT KEY (FOR MJ15 WHEEL MTR.)	1
6-22	A816252	WHEEL ASSEMBLY 23x10.5-12	2
6-23	A817332	• TYRE	1
6-*	N/A	• RIM	1
6-24	64140-5	COTTER PIN 1/8X1 1/2	2
6-24	451264	SPLIT PIN (FOR MJ15 WHEEL MTR.)	2

* Not Illustrated

**RANSOMES
FRONTLINE 938**

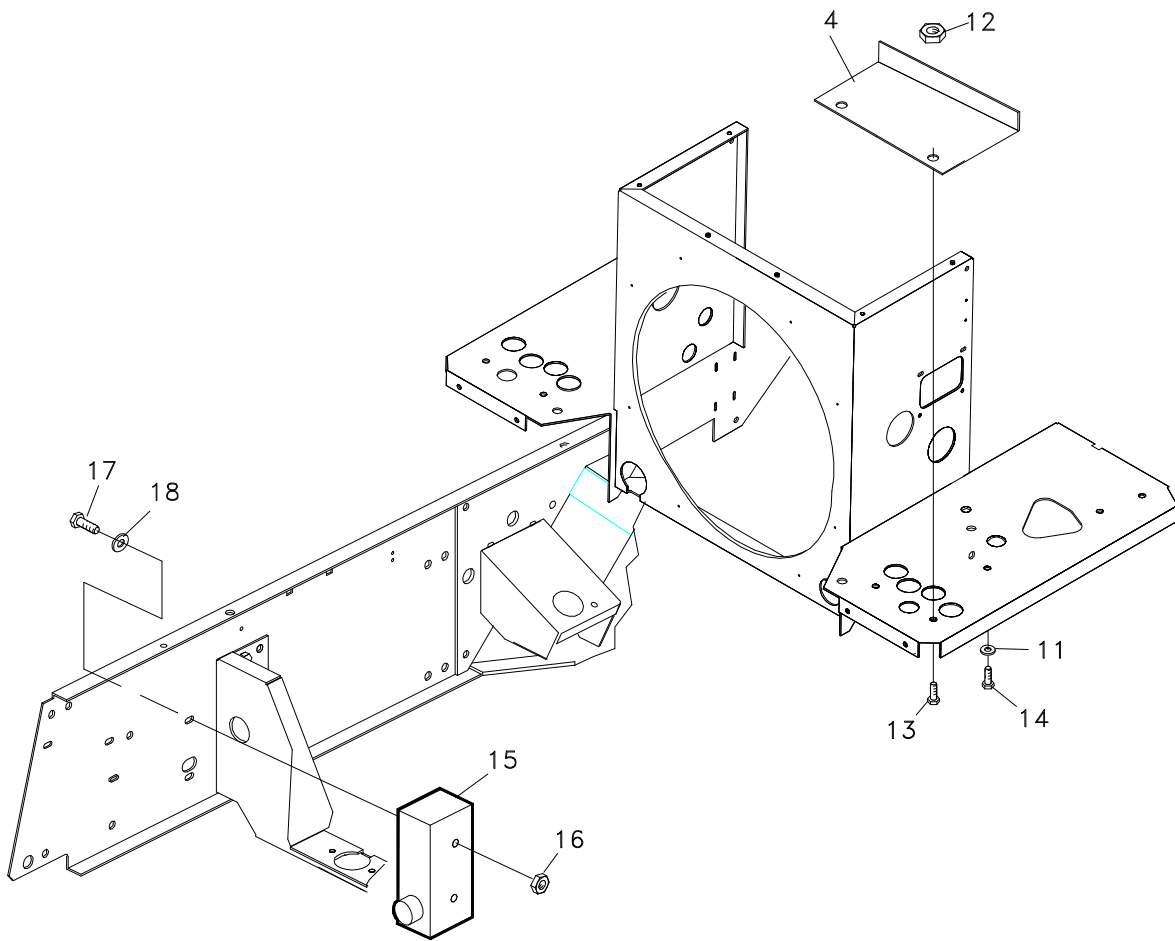
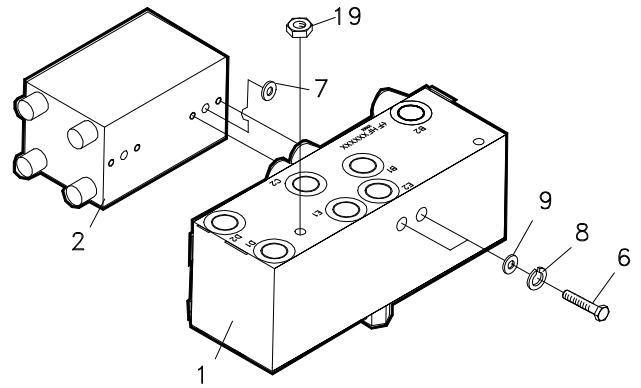


2217010.R2


ITEM	RANSOMES PART NO	DESCRIPTION 	QTY
7-01	W176078	PIVOT PIN	2
7-02	A139302	NUT 3/8 UNC	AR
7-03	2212087	FUEL TANK ACCESS	1
7-04	450000	BOLT M6 x 25 HEX HD	AR
7-05	452435	NUT M6 FLANGED NYLOC	AR
7-06	450389	WASHER M6	AR
7-07	452436	NUT M8 FLANGED NYLOC	AR
7-08	450390	WASHER M8	AR
7-09	450191	SCREW M8 x 20 HEX HD	AR
7-10	64123-15	BLT-HEX 3/8-16 X 3/4	AR
7-11	GSF2163J	LOCKWSHR-HELICAL 3/8	AR
7-12	64163-17	WASH 25/64 X 2 X 11GA	AR
7-13	62464-4A	WASHER-THRUST 1.25	AR
7-14	W108003	BEARING	6
7-15	2216007A	WELDMNT-REAR AXLE	1
7-16	A139382	NUT	AR
7-17	W173033	ROD	4
7-18	A202905	THRUST BEARING	2
7-19	2211004	PLATE-MOTOR	2
7-20	2218224	LINK-STEERING	2
7-21	W148404	CYLINDER	1
7-22	GSF2091JT	BLT-HEX 1/2-13 X 3	AR
7-23	W148141-02	WHEEL MOTOR 12cu	2
7-24	2213041	STUD	2
7-25	64140-1	COTTER PIN 1/8 X 1	AR
7-26	GSF2163L	LOCKWSHR-HELICAL 1/2	AR
7-27	64025-19	NUT-HEX 1/2-13	AR
7-28	BAM6152A	HUB	2
7-29	MBF1355	NUT 1 UNEF	AR
7-30	A816236	WHEEL AND TYRE ASSY	2
	N/A	• RIM	1
	A816236	• TYRE 20 x 10-8, 6ply	1
7-31	A134111	WHEEL NUT	8
7-32	85010N	STRAIGHT ZERK FITTING	AR
7-33	W143069	STUD - CYLINDER	2
7-34	MBE1693	SPACER	2
7-36	2188234	ROD-END	2
7-37	2213040	SLEEVE-THREAED	2
7-39	001399032	NUT-HEX 1/2 - 20 NYLOC	2
7-40	001599028	WASHER	2
7-41	450020516	NUT - HEX 3/4 - 16	2
7-42	454000297	SPLIT PIN	2

* Not Illustrated

**RANSOMES
FRONTLINE 938**

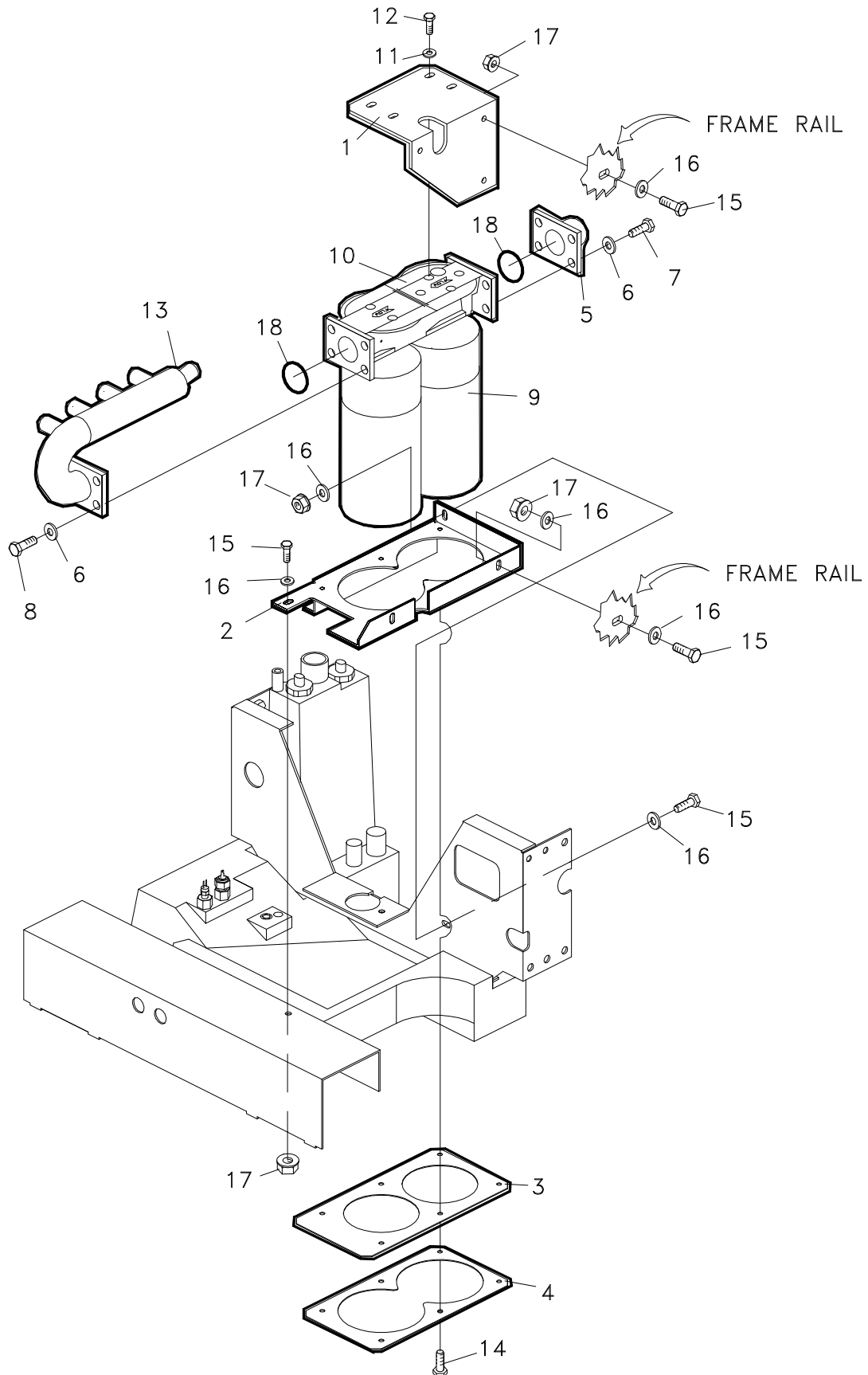


2217011


ITEM	RANSOMES PART NO	DESCRIPTION 	QTY
8-01	2218001	VALVE-4 WHEEL DRIVE	1
8-02	2178213	FLOW DIVIDER	1
8-04	2212145	PLATE - FENDER	2
8-06	64123-207	BOLT-HEX 5/16-18 X 5	AR
8-08	64006-02	LOCKWSHR-HELICAL 5/16	AR
8-09	A159401	WASHER 0.328	AR
8-11	450391	WASHER M10	AR
8-12	452437	NUT M10 FLANGED NYLOC	AR
8-13	450213	SCREW M10 x 20 HEX HD	AR
8-15	W178099	DECK VALVE	AR
8-16	GSF2080AC	LOCK NUT	AR
8-17	451111360	BOLT 3/8 UNC X 4 LONG	AR
8-18	A159968	WASHER .380/.390	AR
8-19	A139302	NUT 3/8 UNC	AR

* Not Illustrated

**RANSOMES
FRONTLINE 938**

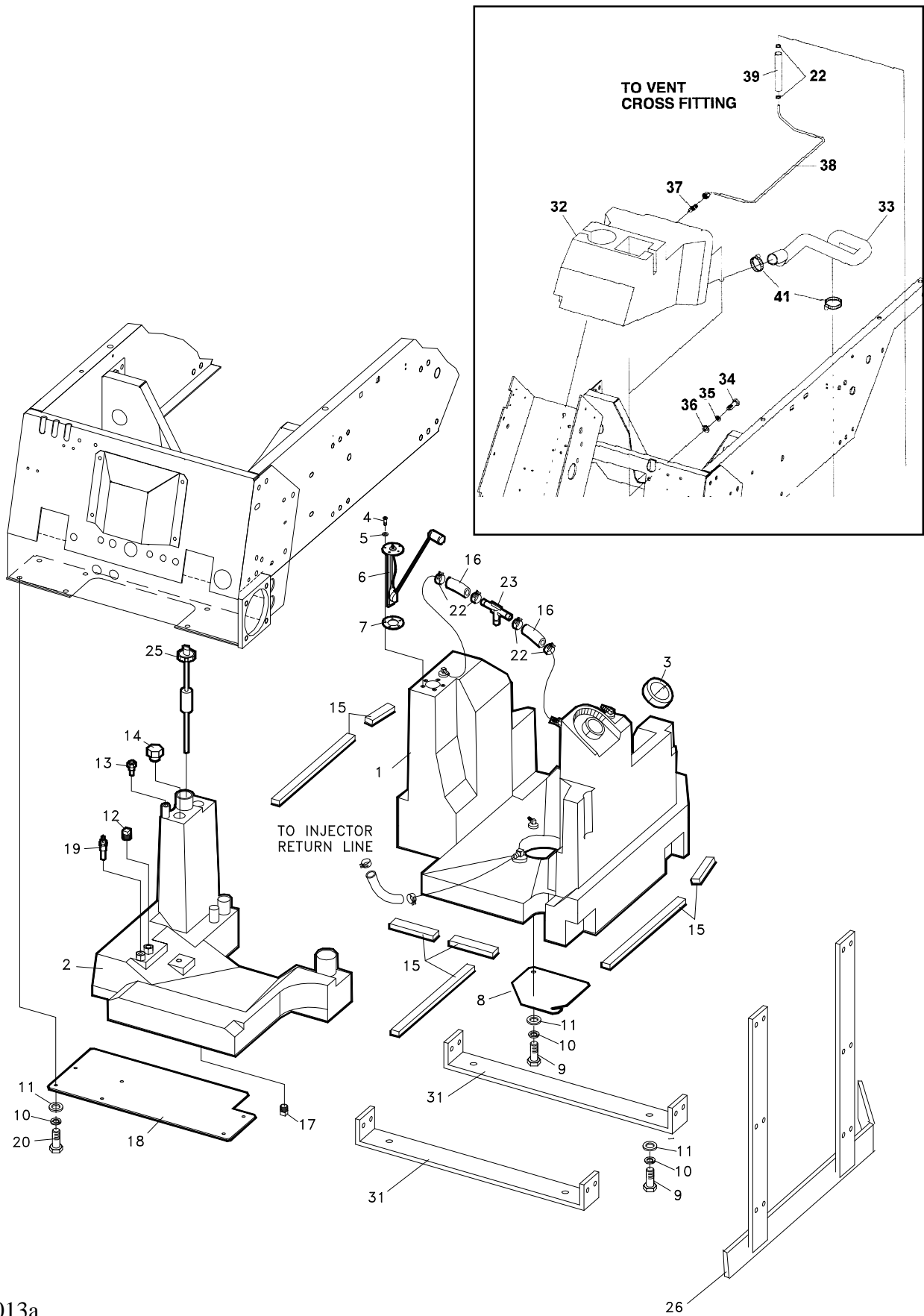


2217012


ITEM	RANSOMES PART NO	DESCRIPTION 	QTY
9-01	2212075	BRACKET-FILTER HEAD	1
9-02	2212078	BAFFLE-FILTER HEAD	1
9-03	2218043	SEAL-FILTER BAFFLE	1
9-04	2212074	PLATE-FILTER BAFFLE	1
9-05	W178043	TUBE	1
9-06	GSF2163L	LOCKWSHR-HELICAL 1/2	AR
9-07	64123-73	SCREW 1/2 UNC X 1 LONG	AR
9-08	GSF2093JH	BOLT	AR
9-09	W178025	OIL FILTER ELEMENT	1
9-10	W178024	FILTER HEAD	1
9-11	GSF2163J	LOCKWSHR-HELICAL 3/8	AR
9-12	64123-50	BLT-HEX 3/8-16 X 1	AR
9-13	2218107	MANIFOLD-INLET	1
9-14	452701	SCREW M8 x 16 HEX TAPTITE	AR
9-15	450193	SCREW M8 x 30 HEX HD	AR
9-16	450390	WASHER M8	AR
9-17	452436	NUT M8 FLANGED NYLOC	AR
9-18	W158061-05	O RING	2

* Not Illustrated

**RANSOMES
FRONTLINE 938**

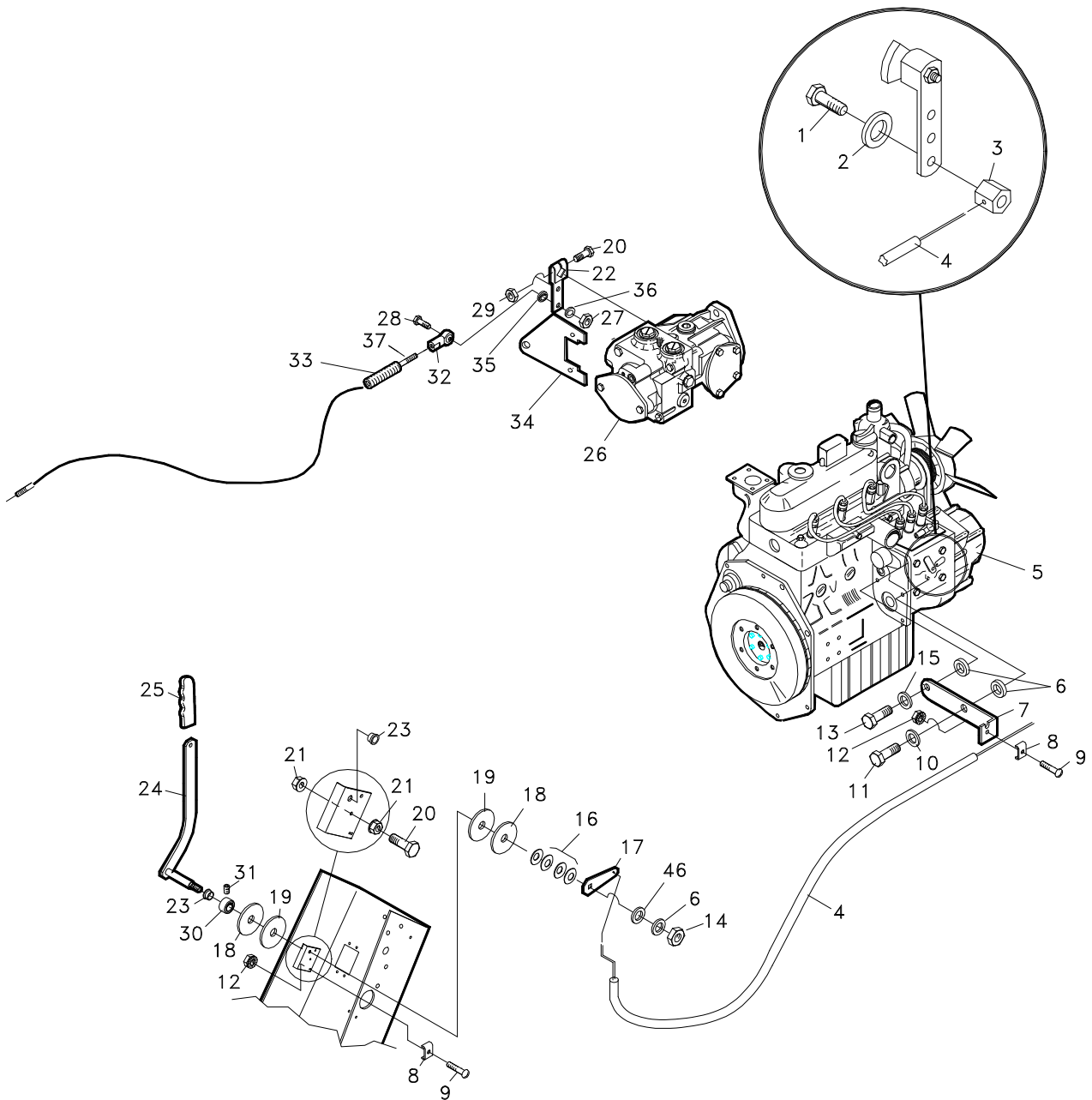


2217013a


ITEM	RANSOMES PART NO	DESCRIPTION 	QTY
01	2218154	TANK-FUEL	1
02	2218148	RESERVOIR-HYD.	1
03	2218078	CAP-FUEL TANK	1
04	A119007	SCREW No.10 x 1/2	AR
05	64006-02	LOCKWSHR-HELICAL 5/16	AR
06	2218046	SENDER-FUEL LEVEL	1
07	W148081	GASKET	1
08	2212087	FUEL-TANK ACCESS	1
09	450214	SCREW M10 x 25 HEX HD	AR
10	64006-06	LOCKWASHER HELICAL 7/16	AR
11	450391	WASHER M10	AR
13	W148027	BREATHER	1
15	W38471	FOAM	AR
16	09007-11	HOSE	1
17	W108029	PLUG	1
18	2212076A	SUPPORT-HYD RSEVOIR	1
19	2208083	SWITCH TEMPERATURE	1
20	450391	3/8 WASHER	AR
21	450215	SCREW M10 x 30 HEX HD	AR
22	88042N	HOSE CLAMP	7
23	2690027	HOSE BARB CROSS	1
25	A915146	GAUGE-OIL	1
*	A159905	WASHER 33/64	AR
26	MBF1028	SKID BAR LH	1
27*	MBF1027	SKID BAR RH	1
*	450048	BOLT M12 x 40 HEX HD	AR
*	GSF2163L	LOCKWSHR-HELICAL 1/2	AR
*	450412	S.L.WASHER M10	AR
31	2216037	WELDMNT-TANK SUPPORT	2
32	2218150	AUXILIARY FUEL TANK	1
33	2218153	FUEL HOSE	1
34	450190	SCREW M8 x 16, HEX HD	3
35	450390	WASHER M8	3
36	450411	S.L.WASHER M8	3
37	158006-15	STRAIGHT UNION	1
38	2218156	TUBE	1
39	09007-09	HOSE	1
41	108094-01	HOSE CLAMP	2

* Not Illustrated

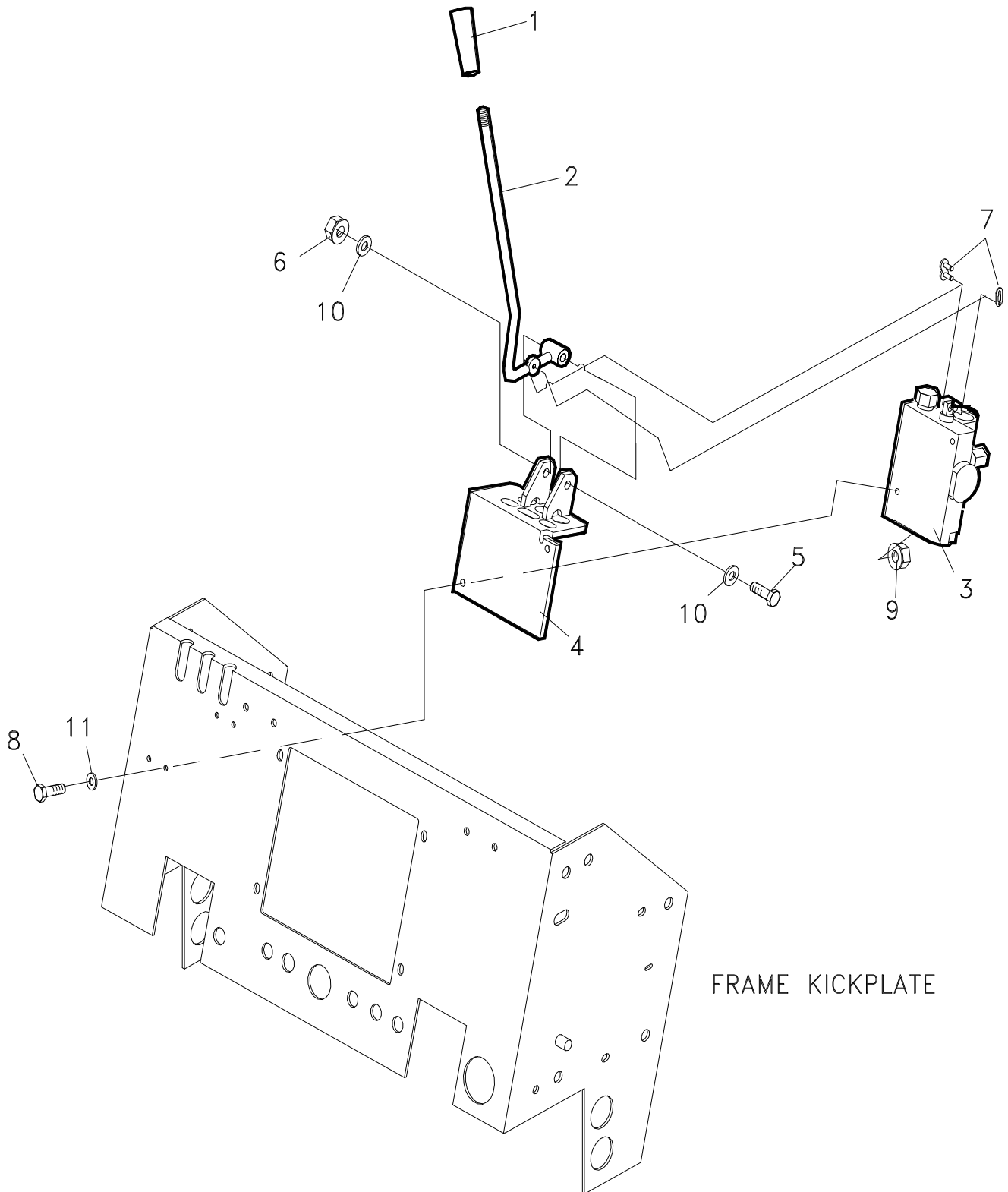
**RANSOMES
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2217014

ITEM	RANSOMES PART NO	DESCRIPTION 	QTY
3-1	64123-59	BOLT-HEX 5/16-24 X 1/2	1
3-2	A159401	WASHER	1
3-3	172084	CLAMP THROTTLE	1
3-4	W148057-03	CABLE, THROTTLE	1
3-5	A682182	ENGINE - KUBOTA V1505 (305)	1
3-6	A159926	WASHER	3
3-7	172085	BRACKET-THROTTLE	1
3-8	W022372	B & S CABLE CLAMP	2
3-9	A119109	10-24 X 3/4 MACH SCREW	2
3-10	450412	LOCKWASHER 10mm	1
3-11	450214	SCREW M10 X 25	1
3-12	A139325	NUT HEX #10-24 KEPS	2
3-14	A139303	5/16-18 HEX LOCKNUT	1
3-15	64006-02	LOCKWASHER	1
3-16	H083031	CONICAL SPRING WASHER	6
3-17	172088	THROTTLE	1
3-18	64163-18	WASHER	2
3-19	64163-25	WASHER	2
3-20	GSF2093CK	BOLT-HEX 5/16-18 X 1-1/2	2
3-21	A139301	NUT-WLF 5/16-18	4
3-22	172364A	ARM-CONTROL HD	1
3-23	W118047-02	BUSHING FLIP-LOK 1/2	2
3-24	176102	S THROTTLE LEVER W/LAB	1
3-25	W038404-02	GRIP, CONTROL LEVER	1
3-26	A800638	PUMP	1
3-27	GSF2073AC	3/8-16 CL HEX NUT	2
3-28	64123-50	BOLT-HEX 3/8-16 X 1	1
3-29	64151-3	3/8-24 HH LOCKNUT	1
3-30	W43067A	COLLAR SET	1
3-31	A129037	SET SCREW	1
3-32	128079	ROD END, 1/4 FEMALE	1
3-33	A291085	SPRING	2
3-34	MBG2938A	CABLE BRACKET	1
3-35	MBF1105A	BOSS	1
3-36	MBF1605	WASHER	1
3-37	A906764	TRACTION CABLE	1

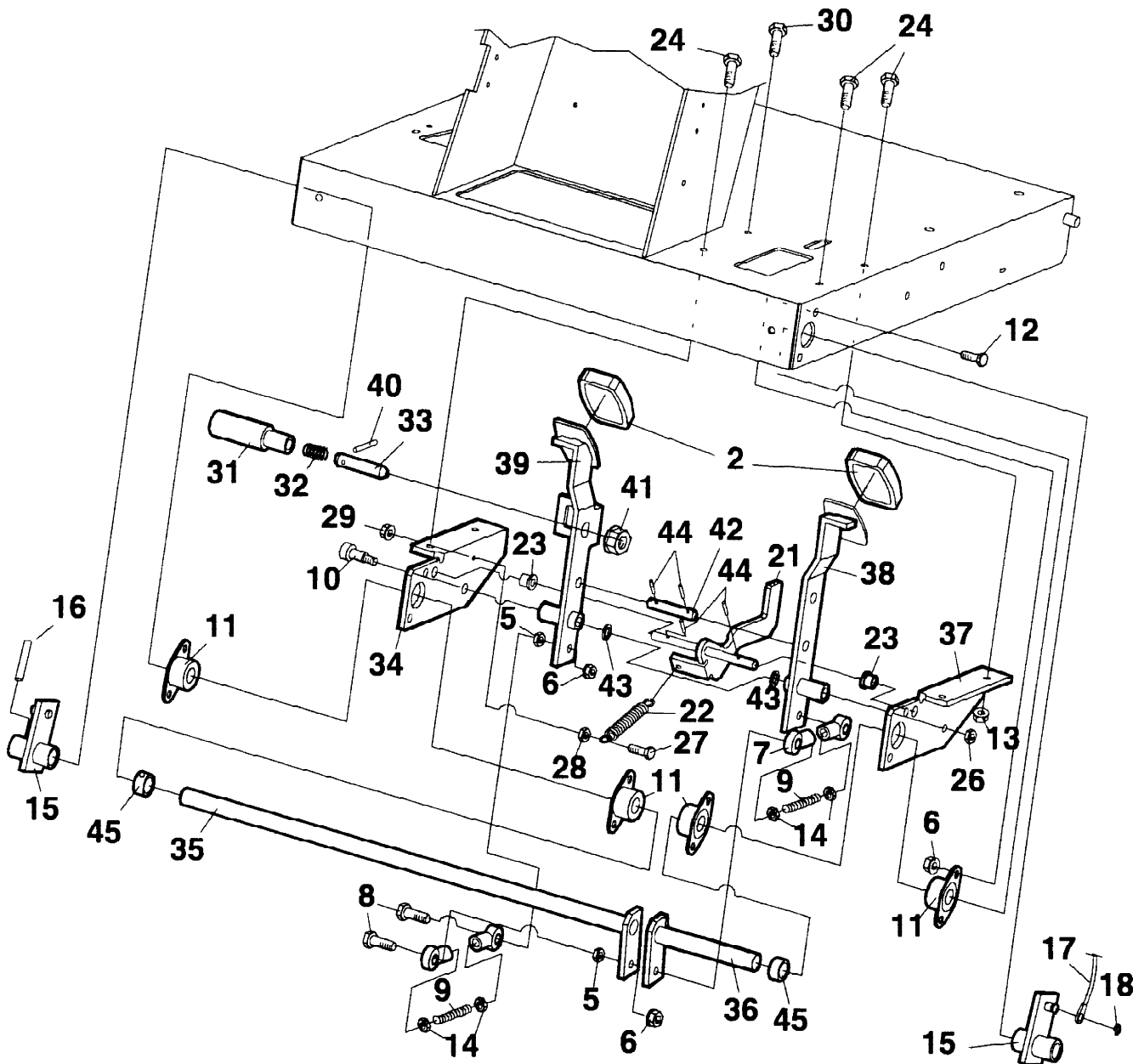
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ITEM	RANSOMES PART NO	DESCRIPTION 	QTY
12-01	2198109	KNOB	1
12-02	2216005	WELDMNT-LIFT LEVER	1
12-03	2208144	VALVE-LIFT	1
12-04	2216003	LEVER SUPPORT WA	1
12-05	001090016	BOLT 3/8 UNC x 2	AR
12-06	450379	HEX LOCK NUT	AR
12-07	W148062	MASTER LINK 150 CHAIN	1
12-08	450003	BOLT 1/4 UNC X 2.1/4	AR
12-09	64229-01	LOCK NUT-NYLON 1/4-20	AR
12-10	001594050	WASHER	AR
12-11	699536778	WASHER	AR


* Not Illustrated

RANSOMES
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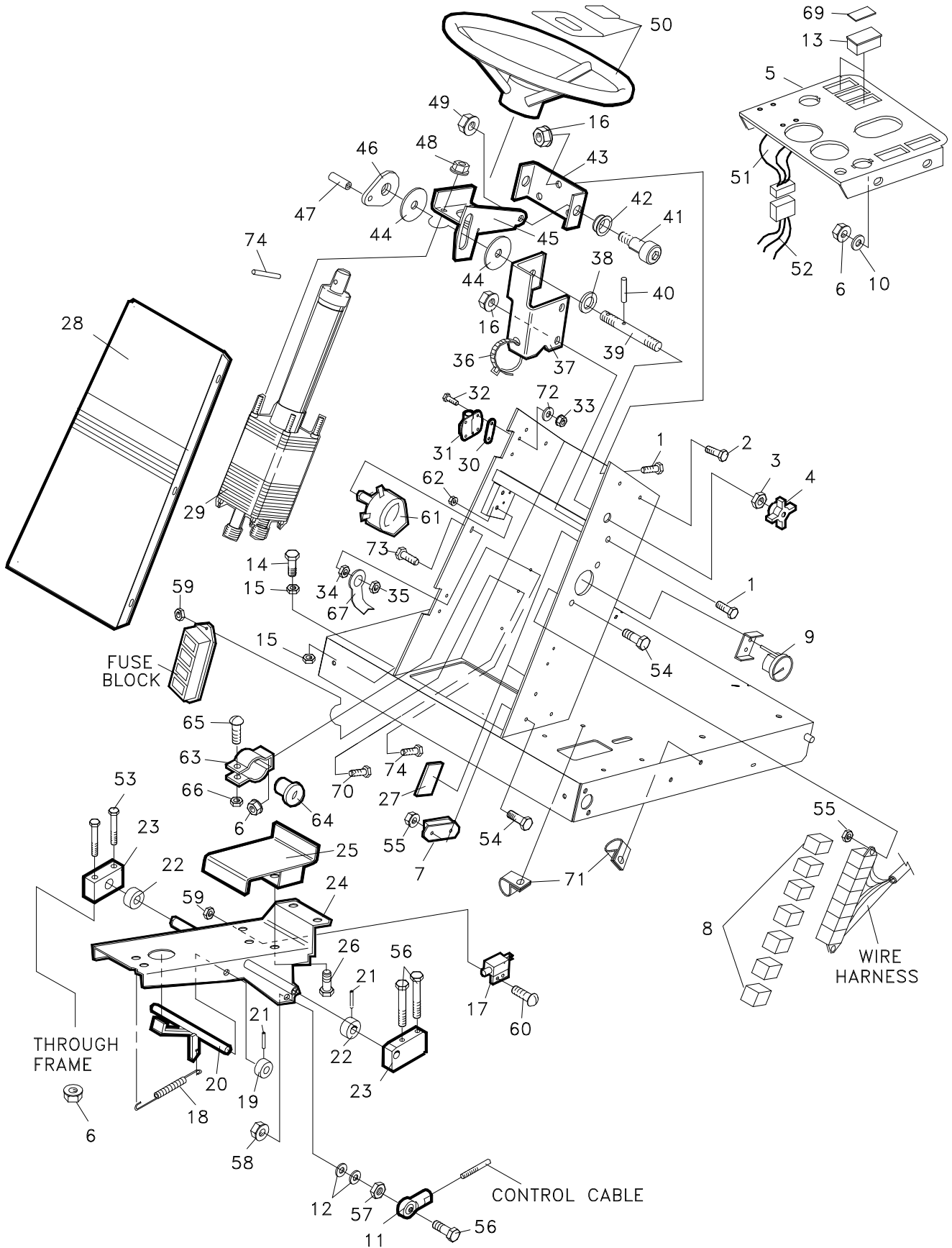
CONTROLS BRAKES

LIST OF PARTS

ITEM	RANSOMES PART NO	DESCRIPTION 	QTY
10-02	810152	COVER-FOOTPEDAL	2
10-05	64025-05	NUT-HEX 3/8-16	2
10-06	A139322	NUT	2
10-07	BAQ8011	BALL JOINT	4
10-08	64123-70	BOLT-HEX	4
10-09	64157-10	THREADED STUD	2
10-10	64166-19	SHOULDER BOLT	1
10-11	2188145	BEARING	6
10-12	GSF2093ED	BLT-HEX 3/8-16 X 3/4	16
10-13	452436	NUT M8 FLANGED NYLOC	4
10-14	GSF2051AC	NUT-HEX 3/8-24	4
10-15	2216035A	BRAKE SHAFT	2
10-16	64061-02	ROLL PIN	2
10-17	128025-07	CLUTCH CABLE	2
10-18	A179119	SNAP RING 0.375	2
10-21	2216070	LOCK LEVER	1
10-22	2218081	SPRING-EXTENSION	1
10-23	118047-08	BUSHING	2
10-24	450191	SCREW M8 x 20 HEX HD	3
10-25	2216035A	WLMNT-BRAKE SHAFT	2
10-26	A139302	NUT 3/8 UNC	1
10-27	450172	BOLT M6 x 25 HEX HD	1
10-28	450323	NUT M6	1
10-29	452435	NUT M6 FLANGED NYLOC	6
10-30	450193	SCREW M8 30, HEX HD	2
10-31	2213031	BUSHING - BRAKE LATCH	1
10-32	A906320	COMPRESSION SPRING	1
10-33	2218134	PIN - LATCH	1
10-34	2212014A	BRACKET - BRAKE PIVOT LH	1
10-35	2216017	BRAKE PIVOT ROD RH	1
10-36	2216018	BRAKE PIVOT ROD LH	1
10-37	2212047A	BRACKET - BRAKE PICOT RH	1
10-38	2216068	BRAKE PEDAL LH	1
10-39	2216069	BRAKE PEDAL RH	1
10-40	64061-38	ROLL PIN	1
10-41	450383	NUT, M20 NYLOC	1
10-42	2213005	PIN - LATCH	1
10-43	A159408	WASHER, 0.516"	2
10-44	64061-37	ROLL PIN 1/8" x 1"	4
10-45	2213034	BUSHING	2

* Not Illustrated


**RANSOMES
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2217017a

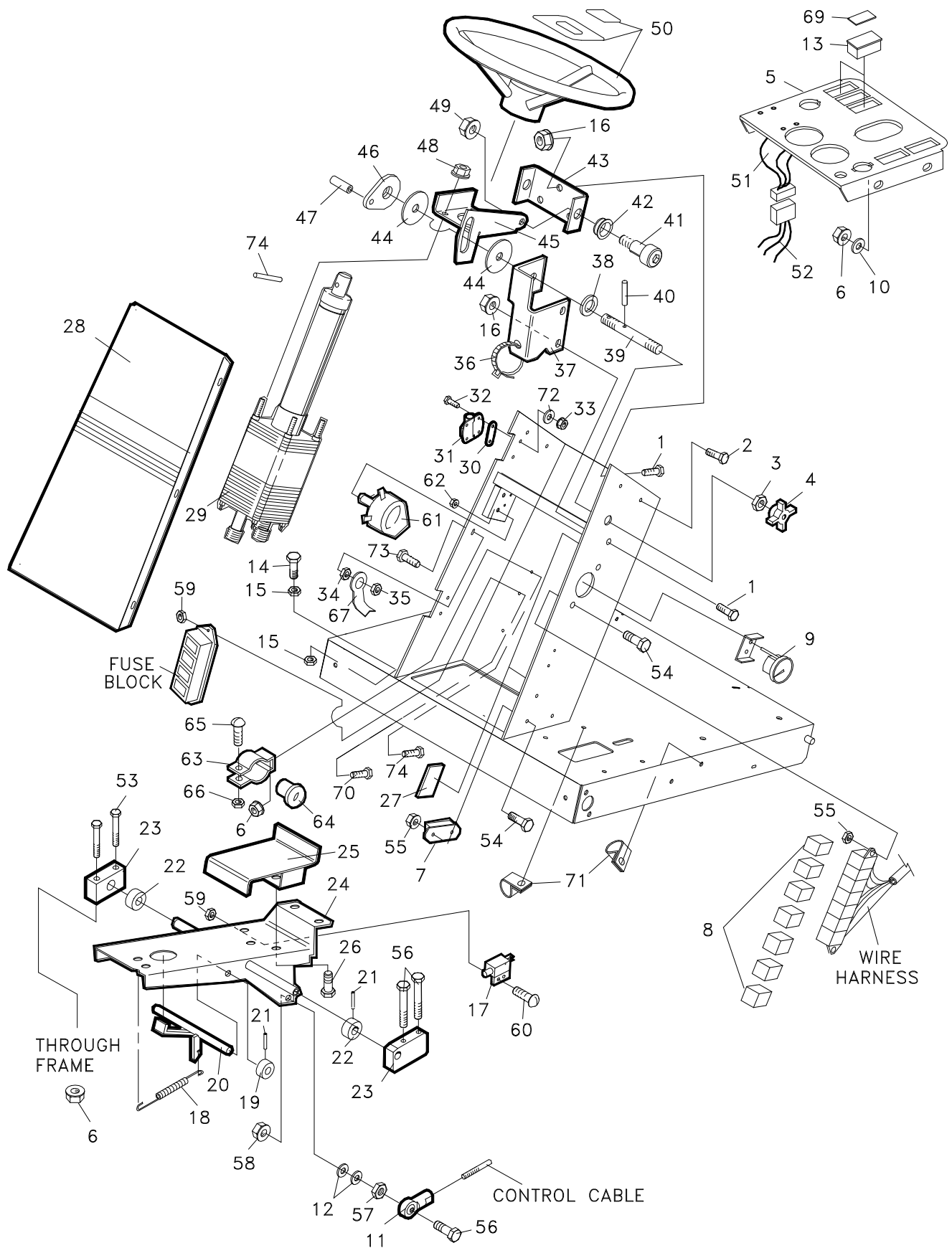
STEERING CONTROLS

LIST OF PARTS

ITEM	RANSOMES PART NO	DESCRIPTION 	QTY
13-01	450213	SCREW M10 x 20 HEX HD	AR
13-02	450171	SCREW M6 x 20 HEX HD	AR
13-03	GSF2072AE	NUT-HEX JAM 1/2-13	AR
13-04	W038124-01	KNOB	1
13-05	A905050	INSTRUMENT PANEL COMPLETE	1
13-06	452435	NUT M6 FLANGED NYLOC	AR
13-07	A824464	TIMER-INTERVAL	1
13-08	W128037	RELAY	5
13-09	A810966	HOURMETER	1
13-10	450389	WASHER M6	AR
13-11	128079	ROD END	1
13-12	450389	WASHER M6	AR
13-14	450020	BOLT M8 x 60 HEX HD	AR
13-15	450324	NUT M8	AR
13-16	452437	NUT M10 FLANGED NYLOC	AR
13-17	W038383	SWITCH	2
13-18	A9063080	SPRING EXTENSION	1
13-19	MBF0654A	COLLAR COMPLETE WITH SCREWS	2
13-20	MBF1280A	WLDMT-NEUTRAL CONTROL	1
13-21	A1290379	SCREW 1/4 UNC x 1/4	AR
13-22	MBF0654A	COLLAR - SET.	2
13-23	MBF1837	BLOCK ASSY	2
13-24	2206086A	FOOT PEDAL - W/ASSY.	1
13-25	46393	ADAPTOR	1
13-26	001190377	SCREW 1/4 UNC x 1/2	AR
13-27	2208077	CATCH-MAGNETIC W/ADJ	2
13-28	2202094	COVER-TOWER	1
13-29	2208142	STEER GEAR	1
13-30	2202108	SPACER-TOWER HINGE	2
13-31	2208076	HINGE-TOWER COVER	2
13-32	64152-50	SCREW-M5-.08 X 16 TOR	AR
13-33	450376	LOCKNUT-NYLON M5-0.8P	AR
13-34	450455	NUT M12 VERBUS RIPP	AR
13-35	452438	NUT M12 FLANGED NYLOC	AR
13-36	001992032	TIE 9 x 350	AR
13-37	172304	BRACKET - TILT WHEEL.	1
13-38	001594080	WASHER 0.516	AR
13-39	173006	SHAFT - LOCKING.	1
13-40	001419072	ROLL PIN 3/16 x 7/8	AR
13-41	64166-17	BLT-SHLDR 3/8-16 X 1.12	AR
13-42	W118047PB	BUSHING FLIP-LOK 1/2	AR
13-43	172042	STEERING BRACKET.	1
13-44	178138	FRICTION DISC	AR
13-45	172298	STEERING SUPPORT.	1
13-46	176100	FRICTION PLATE - W/ASSY.	1

* Not Illustrated


**RANSOMES
FRONTLINE 938**



2217017a

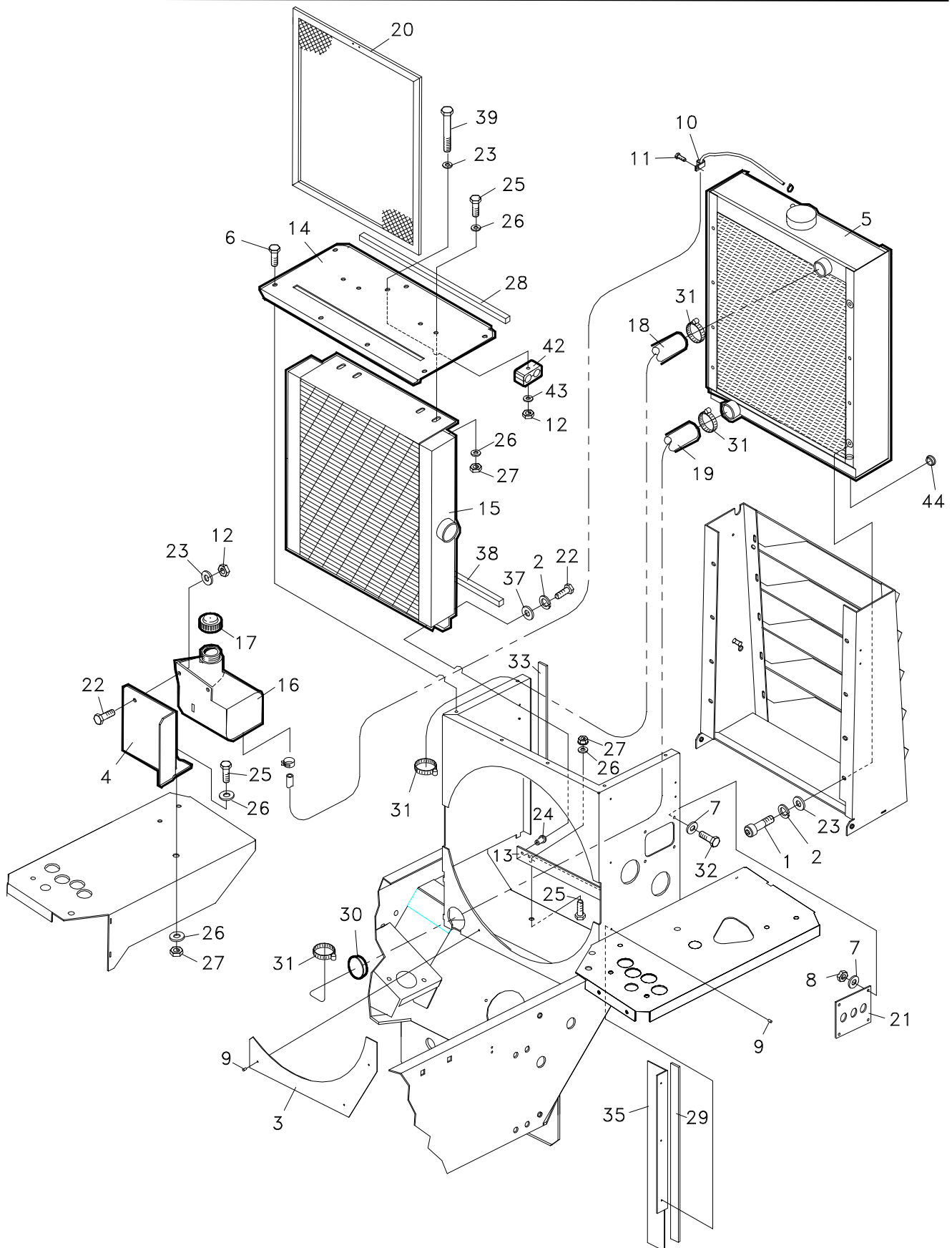
STEERING CONTROLS

LIST OF PARTS


ITEM	RANSOMES PART NO	DESCRIPTION 	QTY
13-47	001496248	PIN 5/16 x 1	
13-48	001393117	NUT 5/16 UNF	AR
13-49	GSF2080AC	LOCK NUT	AR
13-50	2198130	STEERING WHEEL	1
13-51	A905623	HARNESS INST PANEL 933	
13-52	A905637	HARNESS-MAIN	1
13-53	450002	BOLT M6 x 35 HEX HD	AR
13-54	450135	SCREW M4 x 20 HEX HD	AR
13-55	64237-08	LOCKNUT-NYLON M4-0.7	AR
13-56	450002	BOLT M6 x 35 HEX HD	AR
13-57	450323	NUT M6	AR
13-58	452435	NUT M6 FLANGED NYLOC	AR
13-59	001393256	NUT No.10-24	AR
13-60	001190042	SCREW No.10 x 1/2	AR
13-61	A823972	HORN	1
13-62	450453	NUT M8 VERBUS RIPP	AR
13-63	699521018	BRACKET	
13-64	699527226	FLASHER.	1
13-65	64018-2	BLT CRG 1/4-20X3/4	AR
13-66	64229-01	LOCK NUT-NYLON 1/4-20	AR
13-67	2218094	STRAP-DECK SUPPORT	1
13-68	W178150	DIODE	6
13-70	001191098	SCREW No.10-24 x 3/4	AR
13-71	48228-1A	CLIP-CABLE	AR
13-72	450389	WASHER M6	AR
13-73	450241	SCREW M12 x 30 HEX HD	AR
13-74	64061-26	ROLL PIN	AR
13-*	A913416	GAITER (STEERING FRAME)	1
13-*	MBE3961B	BEZEL	1
13-*	A823335	FUSE HOLDER	1
13-*	A823337	FUSE, STRIP LINK	1
13-*	A823315	FUSE 5 AMP	4
13-*	A823316	FUSE 10 AMP	6

* Not Illustrated

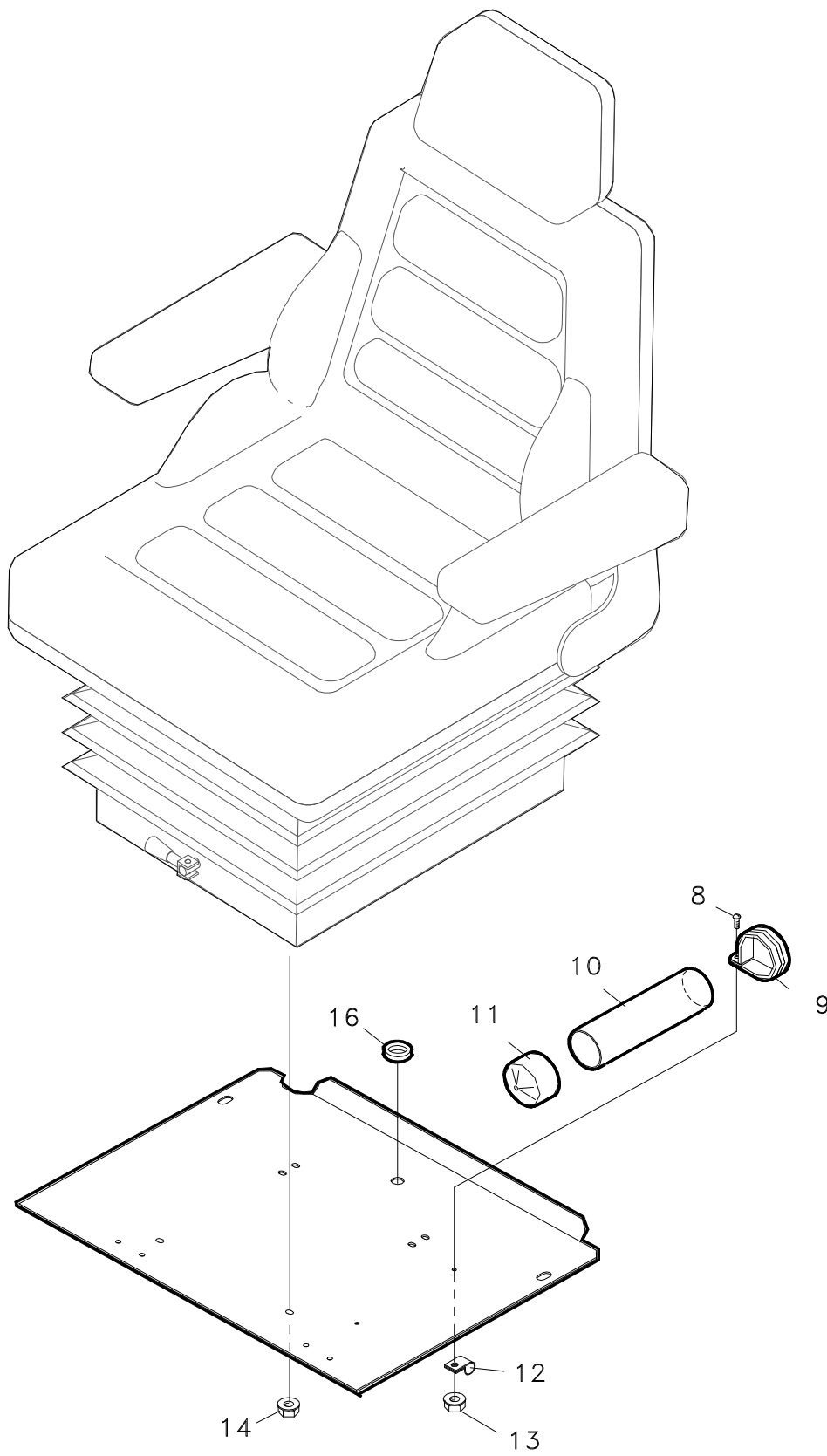
**RANSOMES
FRONTLINE 938**




2217018

ITEM	RANSOMES PART NO	DESCRIPTION 	QTY
14-01	450190	SCREW M8 x 16 HEX HD	AR
14-02	64006-02	LOCKWSHR-HELICAL 5/16	AR
14-03	2212148	FAN-SHROUD PLATE	1
14-04	2212091A	BRACKET-COOLING BOTTLE	1
	142350-01	BRACKET- RECOVERY TANK LH	1
	142350-02	BRACKET- RECOVERY TANK RH	1
14-05	2178211	RADIATOR	1
14-06	452701	SCREW M8 x 16 HEX TAPTITE	AR
14-07	450389	WASHER M6	AR
14-08	452435	NUT M6 FLANGED NYLOC	AR
14-09	W64215-01	POP RIVET IFI NO.43	AR
14-10	469016517	'P' CLIP H980	AR
14-11	001191103	SCREW 1/4 UNC x 5/8	AR
14-12	452436	NUT M8 FLANGED NYLOC	AR
14-13	2212043	BRACKET-OIL COOLER	1
14-14	2212044	SHROUD - TOP FAN	1
14-15	2178212	OIL COOLER	1
14-16	2208079	BOTTLE-COOLANT	1
14-18	2218095	HOSE-RADIATOR	1
14-19	2218096	HOSE-RADIATOR	1
14-20	2218006	SCREEN-OIL COOLER	1
14-21	2218086	SEAL-TUBE/FAN SHROUD	1
14-22	450191	SCREW M8 x 20 HEX HD	AR
14-23	450390	WASHER M8	AR
14-24	450369	NUTSERT M8 A-L 1ST GRIP	AR
14-25	450213	SCREW M10 x 20 HEX HD	AR
14-26	450391	WASHER M10	AR
14-27	452437	NUT M10 FLANGED NYLOC	AR
14-28	A904437	FOAM	2
14-29	38471	FOAM	AR
14-30	148034-05	GROMMET-INSULATION	1
14-32	450170	SCREW M6 x 16 HEX HD	AR
14-33	38471	FOAM	AR
14-35	2212118	BAFFLE-OIL COOLER LH	1
14-36	2212119	BAFFLE OIL COOLER RH	1
14-37	001599272	WASHER 21/64	AR
14-38	A904437	FOAM	AR
14-39	450020	BOLT M8 x 60 HEX HD	AR
14-42	2208139	CLAMP - TUBE	1
14-43	001599264	WASHER 25/64	AR
14-44	2690024-01	FITTING	1

* Not Illustrated

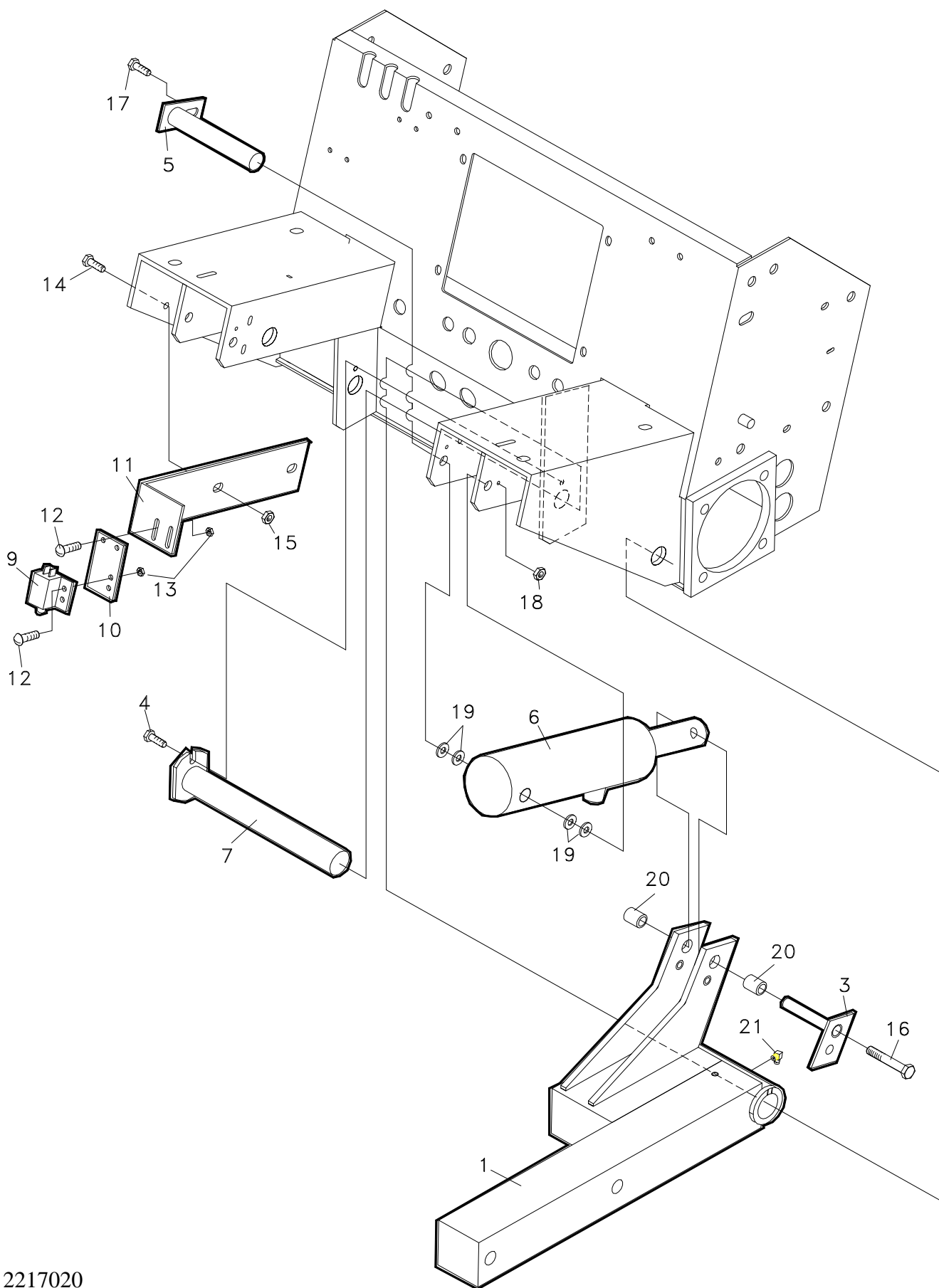


2217019

ITEM	RANSOMES PART NO	DESCRIPTION 	QTY
15-08	450171	SCREW M6 x 20 HEX HD	
15-09	38542	CLAMP-DOCUMENT TUBE	2
15-1	A819940	SEAT	1
	450552	SCREW, M8 x 20, PAN HD	4
	450390	WASHER, M8	4
	450411	S.L.WASHER, M8	4
	450324	NUT, M8	4
15-10	38541	TUBE-DOCUMENT	1
15-11	38061A	SPINDLE SHIELD	2
15-12	469016517	'P' CLIP H980	AR
15-13	450453	NUT M8 VERBUS RIPP	AR
15-14	A139301	NUT 5/16 UNC	AR
15-16	148034-08	GROMMET	1

* Not Illustrated

**RANSOMES
FRONTLINE 938**




2217020

PUSH ARM ASSEMBLY

LIST OF PARTS

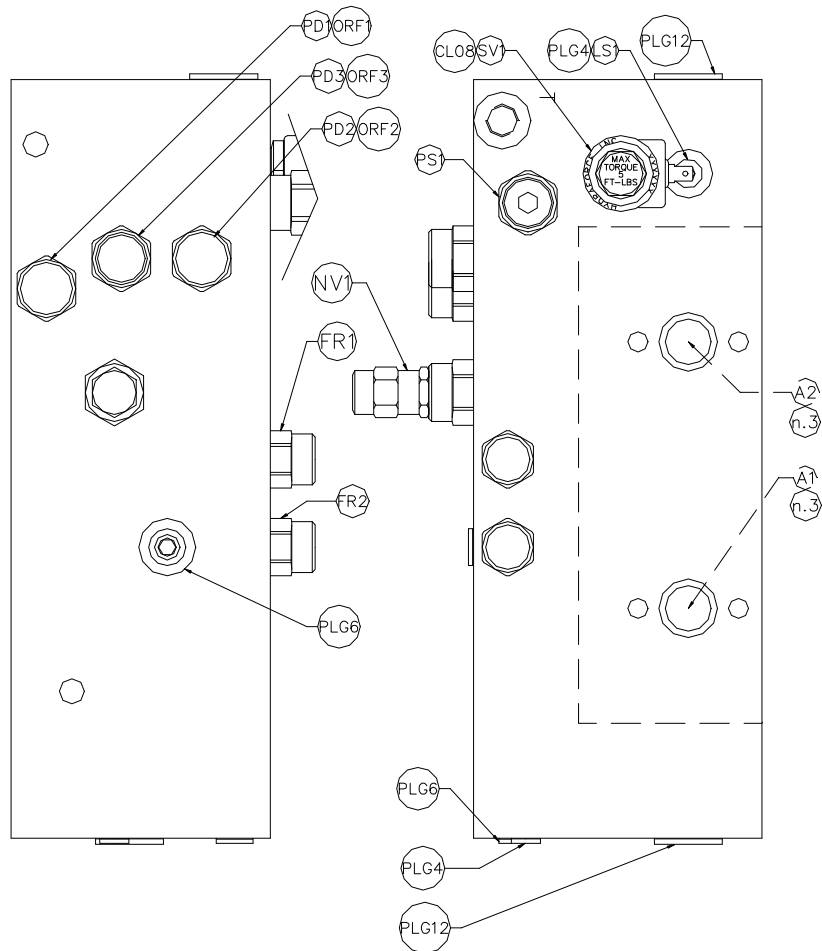
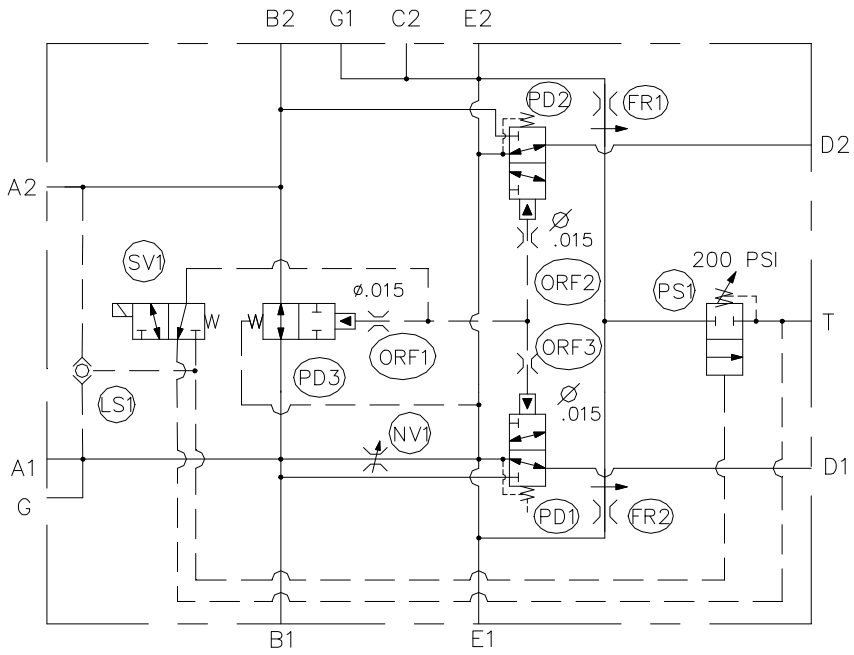
ITEM	RANSOMES PART NO	DESCRIPTION GB	QTY
17-01	W146259	PUSH ARM LH	1
17-02	W146260	PUSH ARM RH	1
17-03	46019A	PIN WELDMNT-PUSH ROD	2
17-04	450190	SCREW M8 x 16 HEX HD	AR
17-05	2216025	WLDMNT-CYL PIN ROD	2
17-06	2218014	CYLINDER-LIFT	2
17-07	146197	WLDMT - PUSH ARM PIN	2
17-09	W038383	SWITCH	1
17-10	W172359	PLATE	1
17-11	2212109	BRACKET SWITCH MOUNT	1
17-12	001190042	SCREW No.10 x 1/2	AR
17-13	001393256	NUT No.10-24	AR
17-14	450190	SCREW M8 x 16 HEX HD	AR
17-15	452436	NUT M8 FLANGED NYLOC	AR
17-16	001190644	SCREW 1/4 UNC x 5/16	AR
17-17	456110016	SCREW 1/4 UNC X 3/4 LONG	AR
17-18	64229-01	LOCK NUT-NYLON 1/4-20	AR
17-19	001594080	WASHER 0.516	AR
17-20	W138024-02	BRG-DX .500 I.D.	AR
17-21	35027N	ZERK FITTING	AR

* Not Illustrated


ITEM	RANSOMES PART NO	DESCRIPTION 	QTY
01	IDL001A	DECAL KIT	1
08	2218087	MAT-PLATFORM	1
11	W148317-01	MAT-FENDER EXT LH	1
11	W148317-02	MAT-FENDER EXT RH	1
14	7369	LABEL-RED/WHITE STR	3
21	48013-06A	MAT NON SKID 2.75*2	1
22	48436	MAT-NON SKID	1
34	48517	HOLE PLUG	4

* Not Illustrated

**RANSOMES
FRONTLINE 938**

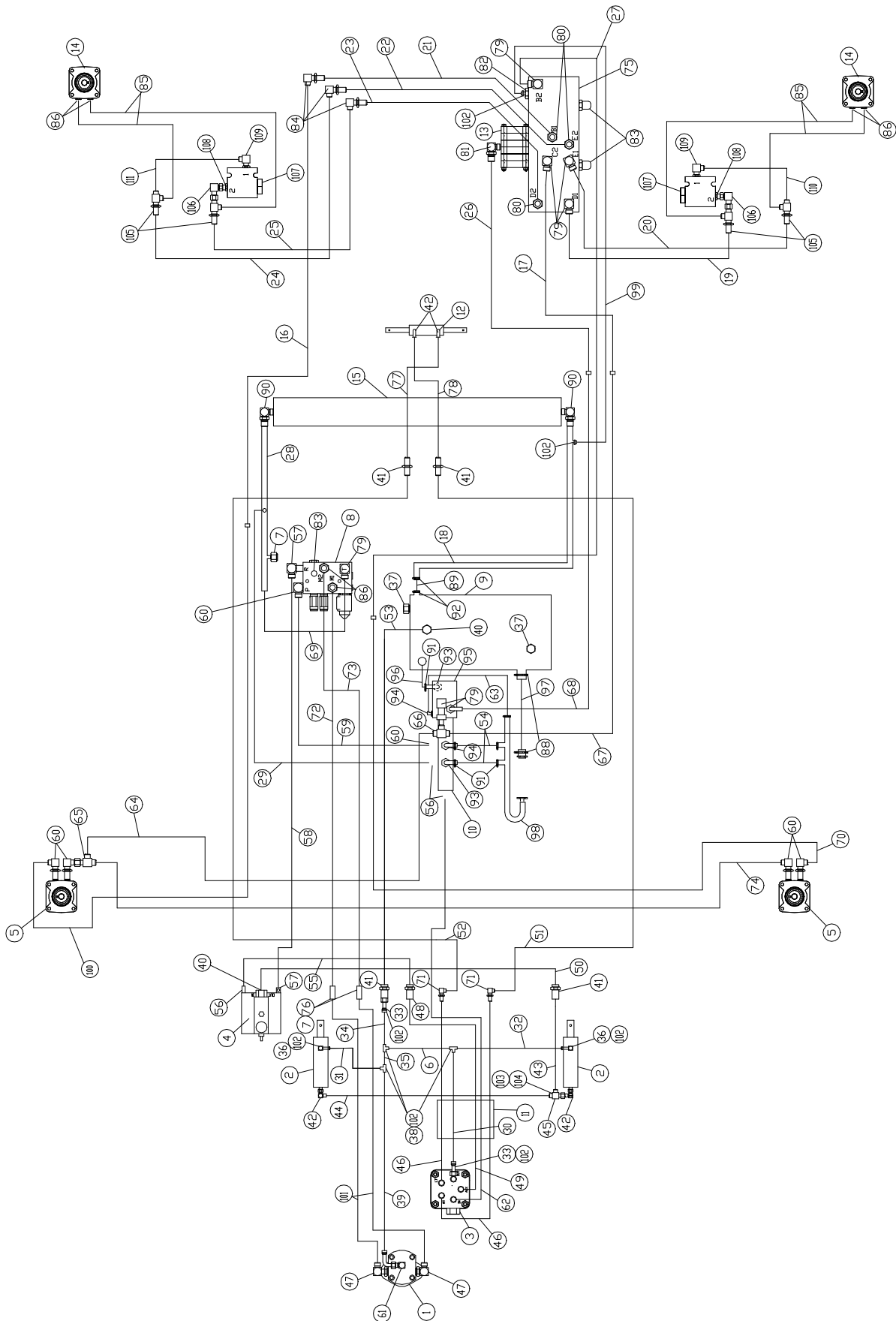


2217023a


ITEM	RANSOMES PART NO	DESCRIPTION 	QTY
	2218001	VALVE 4 WD	1
ORF1	178102-76	• ORIFICE DISC	1
ORF2	178102-76	• ORIFICE DISC	1
ORF3	178102-76	• ORIFICE DISC	1
PLG4	178102-60	• PORT PLUG	2
	178102-60	•• SEAL KIT	1
CL08	178102-21	• COIL ASSY.	1
LS1	178102-68	• LS04	1
	178102-69	•• SEAL KIT	1
PS1	178102-35	• PS08	1
	178102-48	•• SEAL KIT	1
NV1	178102-77	• NV10	1
	178102-08	•• SEAL KIT	1
FR1	178102-26	• FR08	1
	178102-04	•• SEAL KIT	1
FR2	178102-26	• FR08	1
	178102-04	•• SEAL KIT	1
PD3	178102-75	• PD10	1
	178102-54	•• SEAL KIT	1
PD1	178102-70	• PD10	1
	178102-54	•• SEAL KIT	1
PD2	178102-70	• PD10	1
	178102-54	•• SEAL KIT	1
SV1	178102-71	• SV08	1
	178102-72	•• SEAL KIT	1
PLG12	178102-73	• PORT PLUG	2
	178102-74	•• SEAL KIT	1
PLG6	178102-61	• PORT PLUG	2
	178102-63	•• SEAL KIT	1

* Not Illustrated

RANSOMES FRONTLINE 938

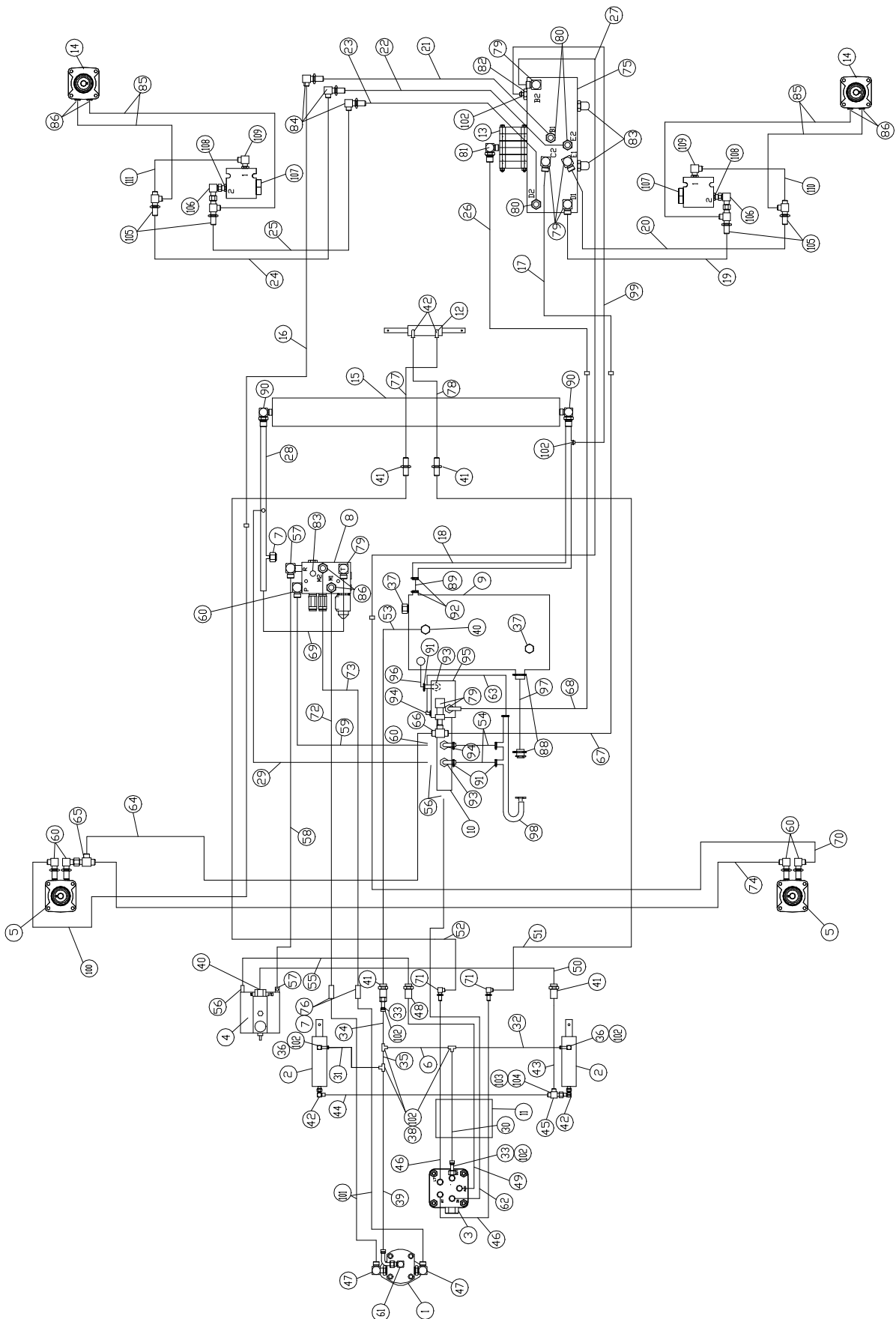


2217030


ITEM	RANSOMES PART NO	DESCRIPTION 	QTY
1	2218003-03	HYDRAULIC MOTOR	1
2	2218014	HYDRAULIC CYLINDER - LIFT	2
3	2208142	POWER STEERING VALVE	1
4	148023	LIFT VALVE	1
5	A800687	WHEEL MOTOR	2
6	69053	HOSE 3/8 HI TEMP BULK	1
7	178087-01	CAP NUT	3
8	W178099	CUTTER DECK VALVE	1
9	2218148	OIL RESERVOIR	1
10	2178227	PUMP - 3 SECTION	1
11	108218-03	SLEEVE - HOSE 24"	1
12	148404	CYLINDER - POWER STEERING	1
13	2178213	FLOW DIVIDER	1
14	148141-02	WHEEL MOTOR	2
15	2178212	OIL COOLER	1
16	A799383	HOSE ASSY.5/8"BORE X 1755LG.	1
17	A799384	HOSE ASSY.5/8"BORE X 1310LG.	1
18	2218020	OIL COOLER TUBE	1
19	A799385	HOSE ASSY.5/8"BORE X 970LG.	1
20	A799386	HOSE ASSY.5/8"BORE X 1170LG.	1
21	2692239-05	HOSE 5/8 90 ORS/90 ORS	1
22	2692239-04	HOSE 5/8 90 ORS/90 ORS	1
23	2692239-03	HOSE 5/8 90 ORS/90 ORS	1
24	A799387	HOSE ASSY.5/8"BORE X 915LG.	1
25	A799388	HOSE ASSY.5/8"BORE X 795LG.	1
26	A799389	HOSE ASSY.5/8"BORE X 1440LG.	1
27	A799390	HOSE ASSY.5/8"BORE X 2440LG.	1
28	2218030	OIL COOLER TUBE (OUTLET)	1
29	2692219-04	HOSE 1/2 90 ORS/90 ORS	1
30	69053	HOSE 3/8 HI TEMP BULK	3
31	69053	HOSE 3/8 HI TEMP BULK	1
32	69053	HOSE 3/8 HI TEMP BULK	1
33	2690019-01	STEM-O-RING SWIVEL STR	2
34	69053	HOSE 3/8 HI TEMP BULK	1
35	69053	HOSE 3/8 HI TEMP BULK	1
36	W158058-04	FITTING	2
37	2690017-03	FITTING ORB PLUG	2
38	58026-01	CONNECTOR	3
39	69213-05	HOSE - 90 ORS	1
40	W158006-01	FITTING ORS/ORB	1
41	W158067-01	FITTING,BULKHEAD	4
42	W158007-01	FITTING	4
43	2692214-02	HOSE-3/8 ORS/ORS	1
44	2692214-09	HOSE 3/8 ORS/ORS	1
45	W158010-01	FITTING - ORS RUN TREE	1
46	2692214-01	HOSE-3/8 ORS/ORS	2
48	158067-04	FITTING-BLKHD ORS/ORS	1

* Not Illustrated

RANSOMES FRONTLINE 938

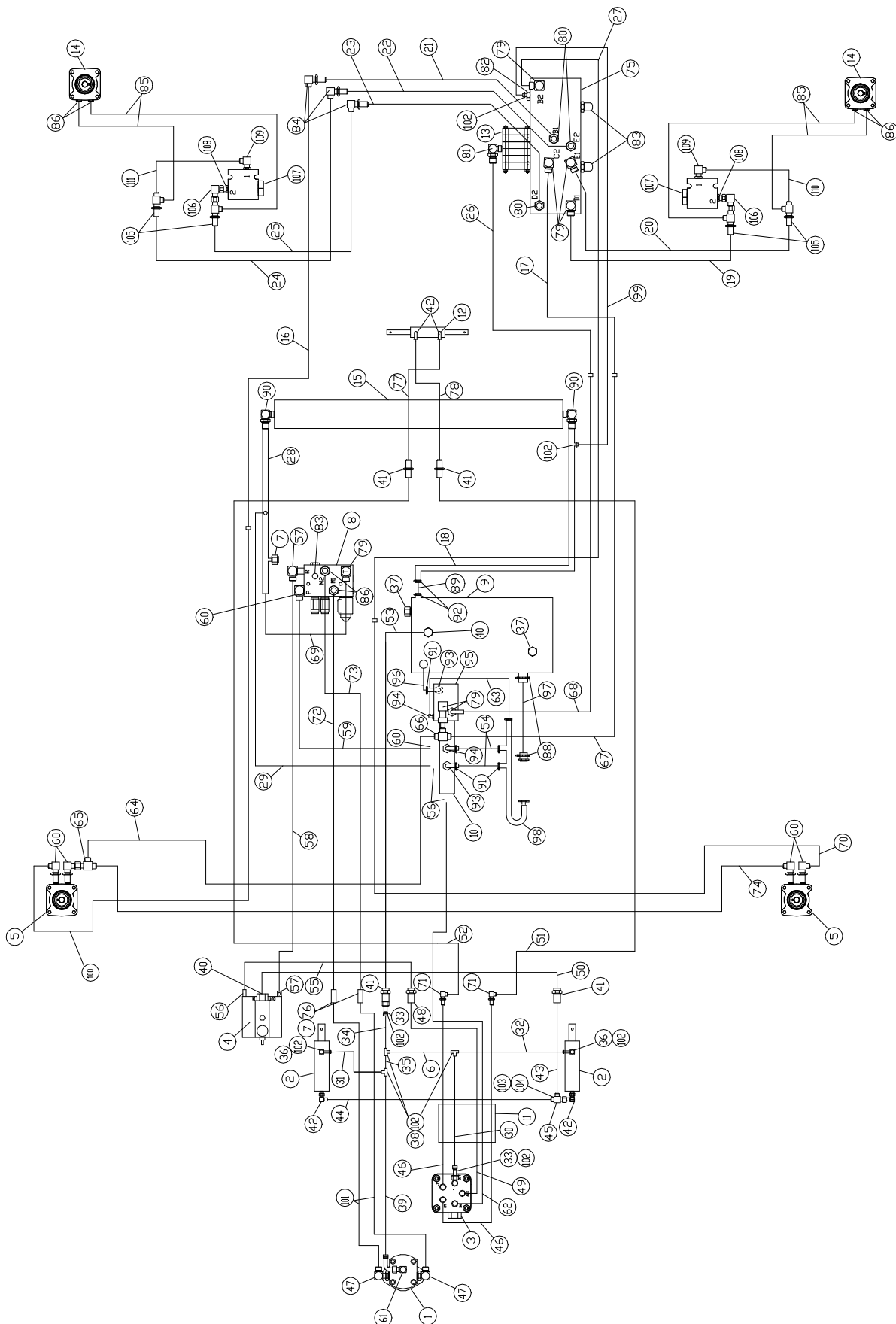


2217030

ITEM	RANSOMES PART NO	DESCRIPTION 	QTY
49	2692214-12	HOSE 3/8/ORS/ORS	1
50	2692216-02	HOSE 3/8 90 ORS/45 ORS	1
51	2692217-09	HOSE 3/8 ORS/45 ORS	1
52	2692217-01	HOSE-3/8 ORS/45 ORS	1
53	2692215-11	HOSE 3/8 ORS/90 ORS	1
54	108092-13	HOSE 1"BORE X 16"LG.100R3	1
55	2692223-04	HOSE 1/2 ORS/90 ORS	1
56	W158006-05	FITTING	3
57	W158007-02	FITTING	2
58	2692223-05	HOSE 1/2 ORS/90 ORS	1
59	2692237-08	HOSE 5/8 ORS/45 ORS	1
60	W158007-05	FITTING	6
61	158007-09	FITTING	1
62	2692215-23	HOSE 3/8 ORS/90 ORS	1
63	108092-14	HOSE 1"BORE X 18"LG.100R3	1
64	2692240-04	HOSE 5/8 ORS/90 ORS	1
65	W158010-02	FITTING	1
66	69057-02	FITTING - ORS BRANCH TEE	1
67	2692226-04	HOSE 3/4 - STR 12 ORS/STR 12 ORS	1
68	2692236-03	HOSE 3/4 - 45° 12 ORS/STR 12 ORS	1
69	2692228-02	HOSE 3/4 90 ORS/90 ORS	1
70	178120-02	HOSE 5/8 - 45° 12 ORS/STR 10 ORS	1
71	W69055-01	FITTING	2
72	2692237-08	HOSE 5/8 ORS/45 ORS	1
73	2692237-07	HOSE 5/8 ORS/45 ORS	1
74	2692238-03	HOSE 5/8 ORS/ORS	1
75	2218001	VALVE 4WD	1
76	W158067-02	FITTING	2
77	2692217-11	HOSE 3/8 ORS/45 ORS	1
78	2692214-11	HOSE 3/8 ORS/ORS	1
79	W158007-07	FITTING	7
80	W158006-08	FITTING	3
81	W158007-08	FITTING	1
82	W69060-01	FITTING	1
83	W178079	TEST FITTING	3
84	W69055-03	FITTING	3
85	W178127-01	HOSE	4
86	W158006-07	FITTING	6
88	48383	CLAMP-HOSE 2-1/2 DIA.	4
89	69059-06	HOSE-BULK,1.25ID X 1.06FT	2
90	158007-12	FITTING 90 ORS/ORB	2
91	108094-01	HOSE CLAMP .75 TO 1.75	10
92	48396	CLAMP-HOSE 2"DIA	6
93	W158058-02	FITTING	2
94	W158058-03	FITTING	2
95	A800638	PUMP	1

* Not Illustrated

RANSOMES FRONTLINE 938

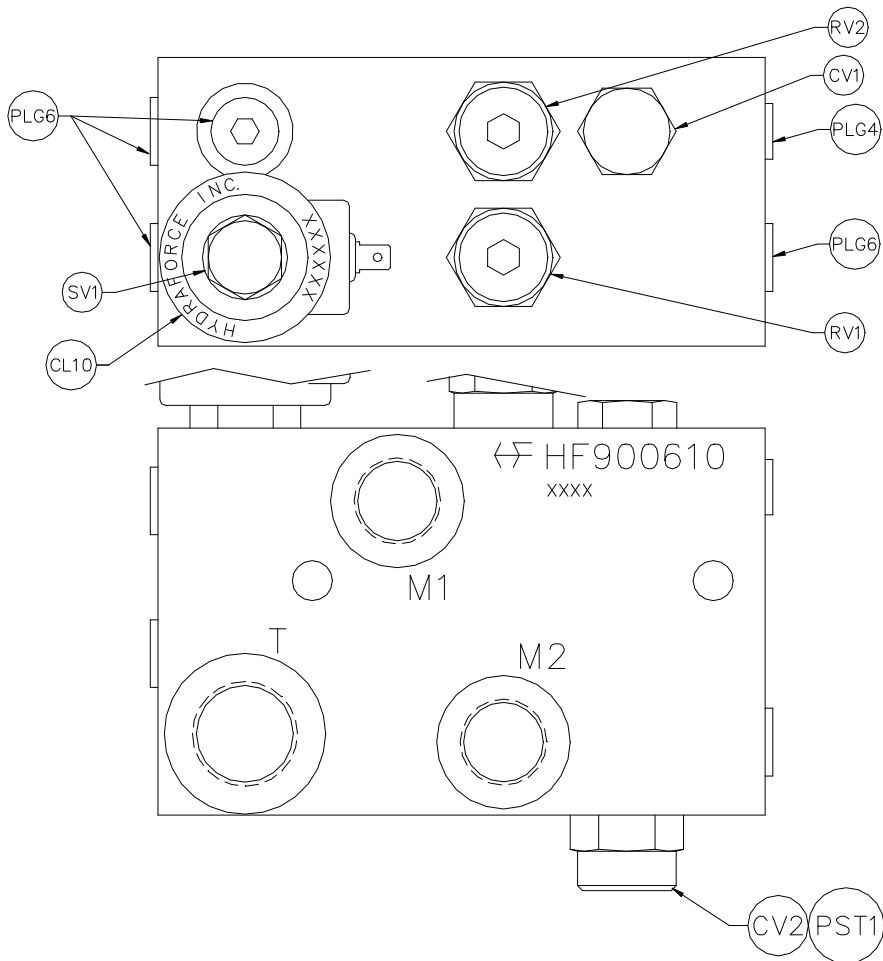
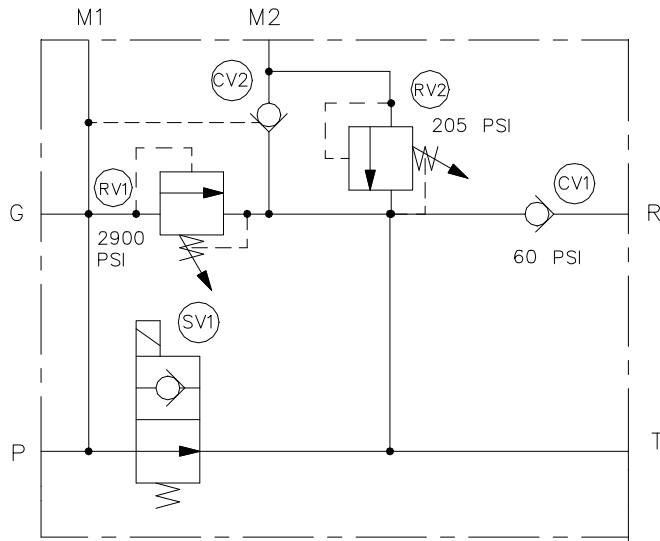


2217030


ITEM	RANSOMES PART NO	DESCRIPTION GB	QTY
96	108092-15	HOSE	1
97	2218066	HOSE - FILTER INLET	1
98	2218107	MANIFOLD	1
99	69053	HOSE 3/8 HI TEMP BULK	2
102	48540-01	HOSE CLAMP WITTEK	15
103	W158061-04	O RING	1
104	W69068-05	ORIFICE	1
105	W69056-01	FITTING	4
106	2218126	TUBE	2
107	2218125	CHECK VALVE	2
108	158006-14	FITTING-ORB/ORS	2
109	158007-14	FITTING 90 ORS/ORB	2
110	A799448	TUBE - CHECK PORT 1 LH	1
111	A799449	TUBE - CHECK PORT 1 RH	1
	A244403	PLUG (FOR ITEM 75)	2
	A259061	90° ELBOW TEST POINT (FOR TOP OF PUMP)	1
	A259060	90° ELBOW TEST POINT (FOR TOP OF PUMP)	1

* Not Illustrated

**RANSOMES
FRONTLINE 938**

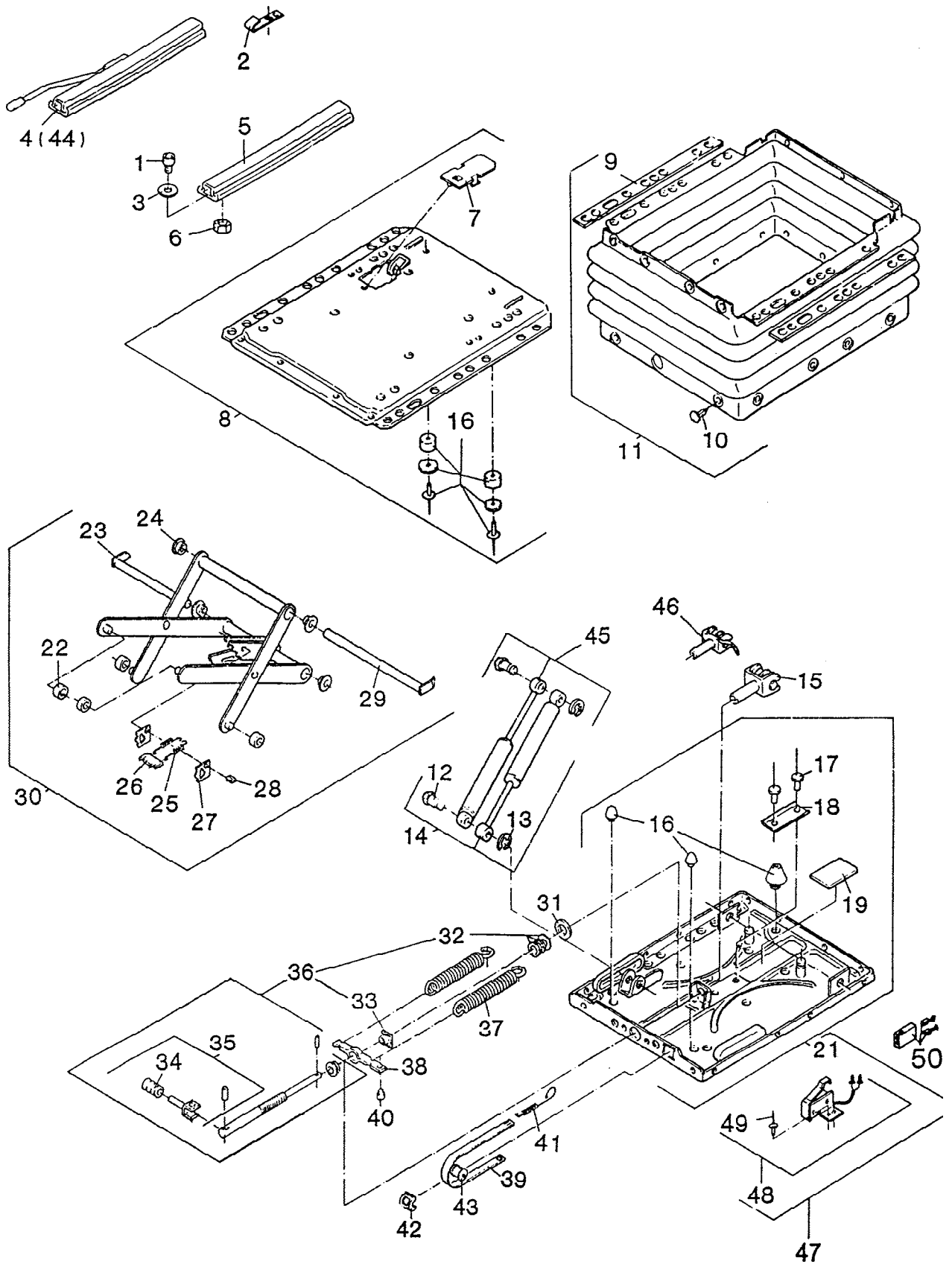


2217044

ITEM	RANSOMES PART NO	DESCRIPTION 	QTY
	W178099	VALVE	1
CV1	178102-58	• CV08	1
	178102-03	•• SEAL KIT	1
CV2	178102-59	• CV10	1
	178102-01	•• SEAL KIT	1
RV1	178102-12	• RV10	1
	178102-02	•• SEAL KIT	1
RV2	178102-34	• RV10	1
	178102-02	•• SEAL KIT	1
SV1	178102-16	• SV10	1
	178102-01	•• SEAL KIT	1
CL10	178102-17	• COIL	1
PST1	178102-57	• PILOT PISTON	1
PLG4	178102-19	• PLUG	1
	178102-09	•• SEAL KIT	1
PLG8	178102-18	• PLUG	4
	178102-10	•• SEAL KIT	1


* Not Illustrated

RANSOMES
FRONTLINE 938



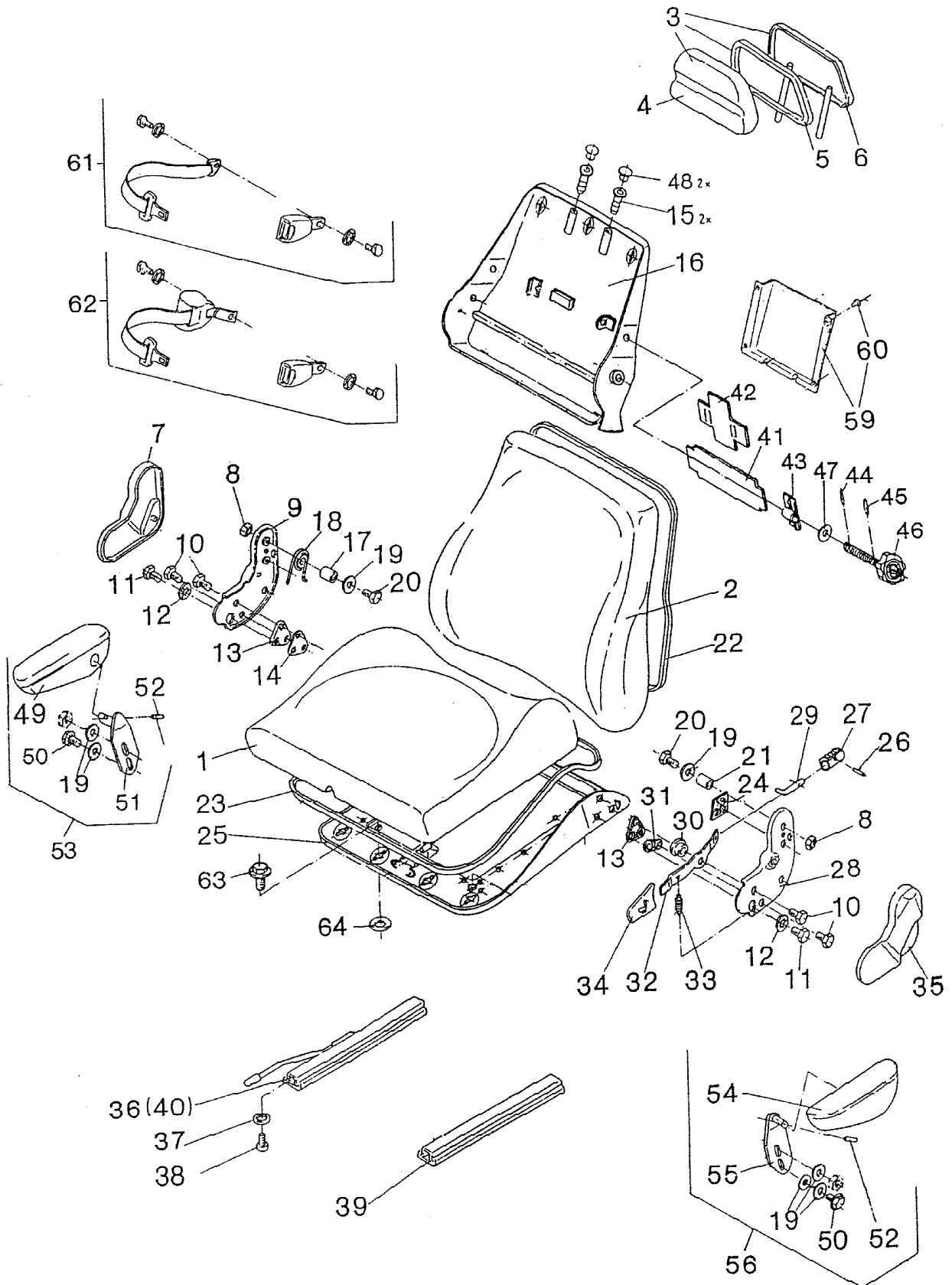
SEAT SUSPENSION BREAKDOWN

LIST OF PARTS

ITEM	RANSOMES PART NO	DESCRIPTION 	QTY
1	A817364	Screw	6
2	A817365	Stop	1
3	A817366	Washer	2
4	A819964	Slide with Lever	1
5	A819975	Slide	1
6	A817367	Nut	6
7	A817368	Cover	1
8	A817369	Base Assy.	1
9	A817370	Plate	2
10	A819979	Pin	21
11	A819984	Gaiter Assy.	1
12	A817371	Pin	2
13	A817372	E Clip	2
14	A819968	Damper Assy	1
16	A817373	Buffer Assy.	1
17	A817374	Rivet	2
18	A817375	Runner	1
19	A817376	Plate	1
20	A817377	Suspension Assy.	1
22	A817378	Roller	4
23	A817379	Pin	1
24	A817380	Bush	4
25	A817381	Spring	2
26	A817382	Plate	1
27	A817383	Plate	2
28	A817384	Bolt	1
29	A817385	Pin	1
30	A819990	Hinge	1
31	A817386	Washer	1
32	A817387	Bearing	1
33	A817388	Nut	1
34	A817389	Handle	1
35	A817390	Lever Assy.	1
36	A819992	Weight Adjuster	1
37	A819941	Spring	2
38	A817391	Spring hook	1
39	A817392	Weight Indicator	1
40	A817393	Stop	1
41	A817394	Spring	1
42	A817395	Window	1
43	A817396	Roller	1
46	A817397	Fork	1
47	A817398	Spring Frame	1
48	A905448	Microswitch	1
49	A817399	Screw	2
50	A817400	Connector	1


* Not Illustrated

**RANSOMES
FRONTLINE 938**



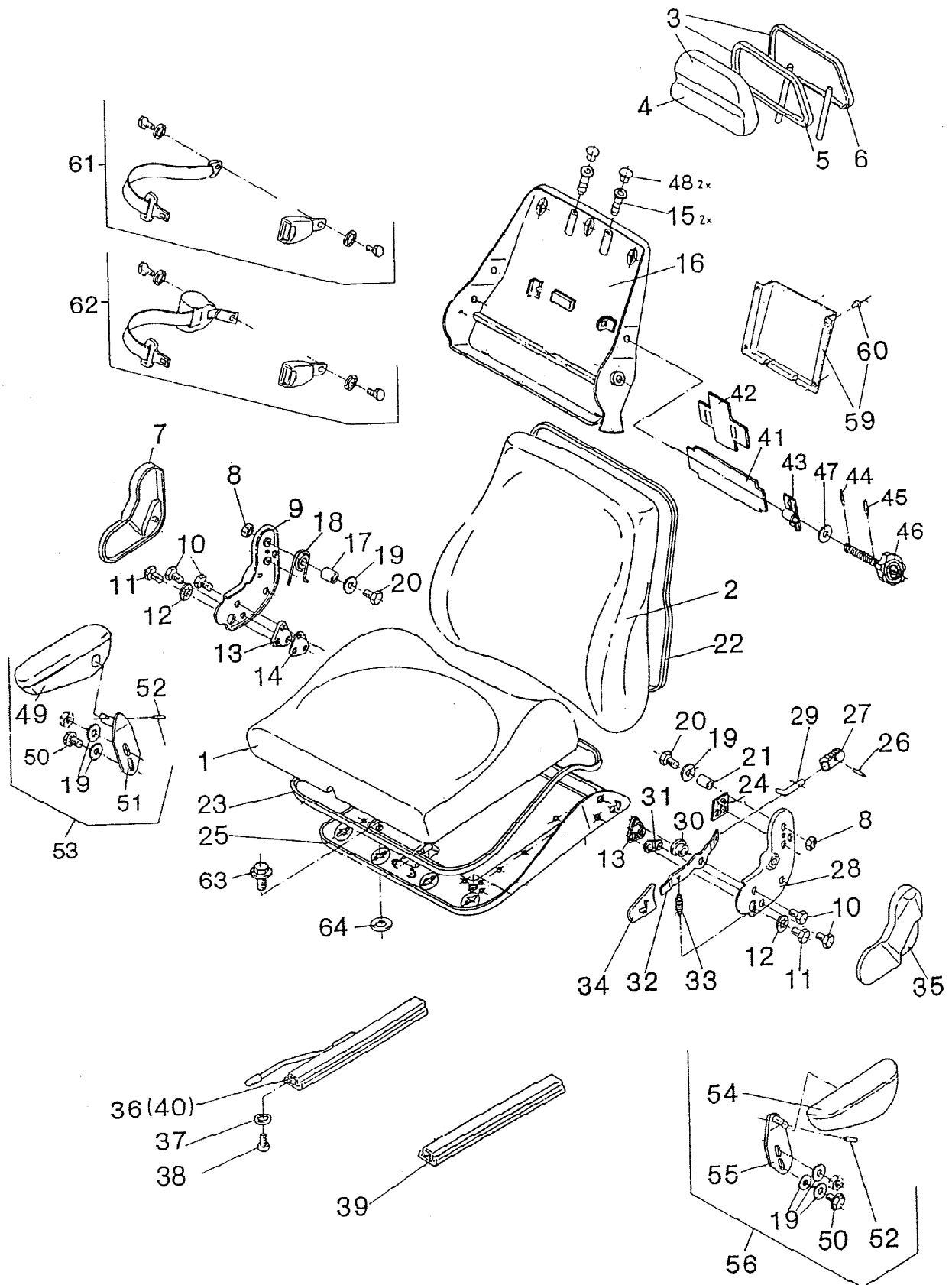
SEAT BREAKDOWN

LIST OF PARTS

ITEM	RANSOMES PART NO	DESCRIPTION 	QTY
1	A819940	SEAT ASSY COMPLETE INCLUDING SUSPENSION	1
2	A819945	SEAT CUSHION	1
3	A819946	BACK REST CUSHION	1
4	A819956	HEAD REST ASSY.	1
5	A819947	HEAD REST CUSHION	1
6	A817352	EDGE STRIP	1
7	N/A	HEAD REST FRAME	1
8	A819961	COVER RH	1
9	A817337	NUT	2
10	A817338	MOUNTING RH	1
11	A817339	SCREW	4
12	A817340	SCREW	2
13	A817341	SP WASHER	2
14	A817342	DISTANCE PLATE	2
15	A817343	DISTANCE PLATE	1
16	A817344	BUSH	2
17	A819969	BACK PLATE	1
18	A817345	TUBE	1
19	A817346	SPRING	1
20	A817347	WASHER	2
21	A817348	SCREW	2
22	A817349	TUBE	1
23	A817350	EDGE STRIP	1
24	A817351	EDGE STRIP	1
25	A817353	DISTANCE PIECE	1
26	A817354	SEAT PLATE	1
27	A819965	PIN	1
28	A819966	DETENT	1
29	A817355	MOUNTING LH	1
30	A819967	ROD	1
31	A817356	BUSH	1
32	A817357	DISTANCE PIECE	1
33	A817335	LEVER	1
34	A817336	SPRING	1
35	A819986	HANDLE	1
36	A817358	COVER LH	1
37	A819964	RAIL WITH LEVER	1
38	A817359	WASHER	4
39	A817360	SCREW	4
40	A819975	RAIL	1
41	A817361	PLATE	1
42	A817362	PLATE	1
43	A819970	NUT	1
44	A819971	PIN	1


* Not Illustrated

**RANSOMES
FRONTLINE 938**



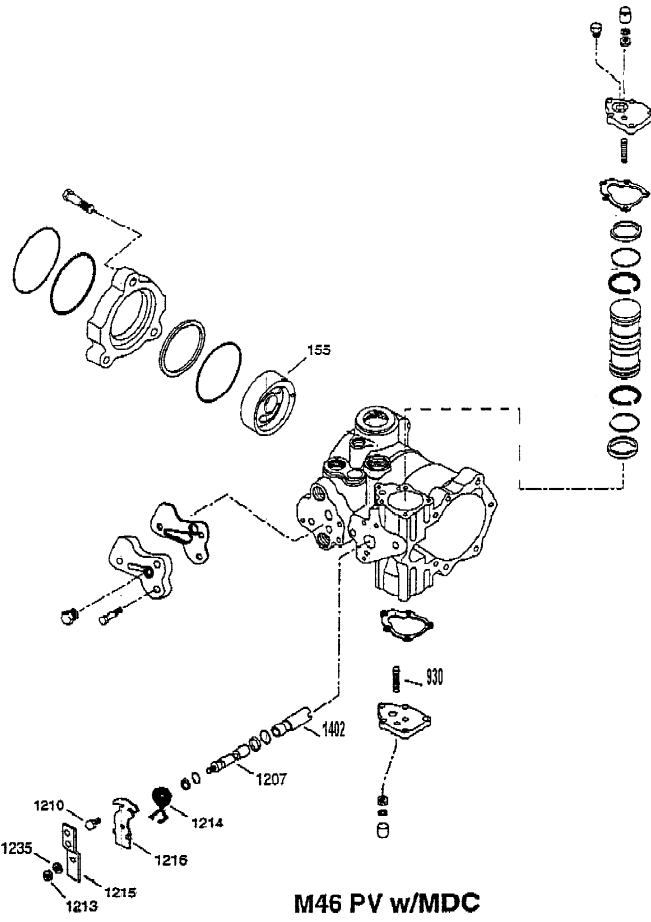
SEAT BREAKDOWN

LIST OF PARTS

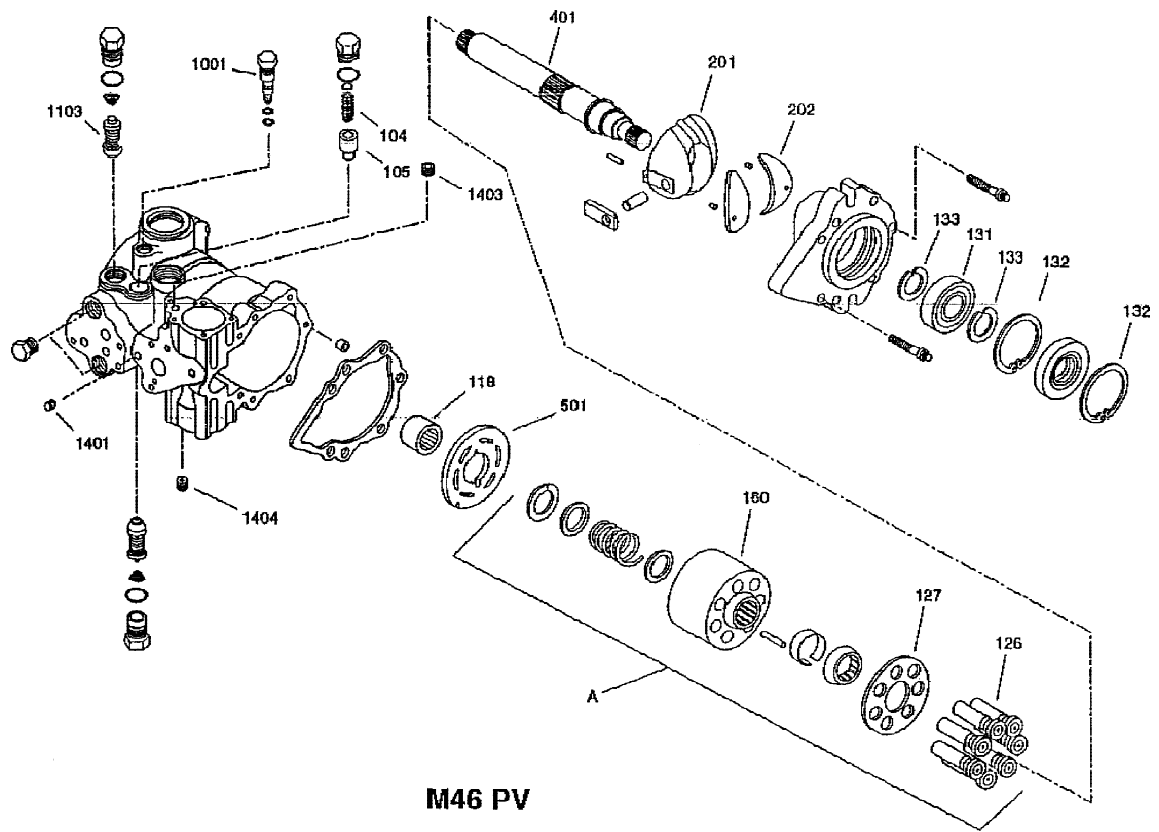
ITEM	RANSOMES PART NO	DESCRIPTION 	QTY
45	A819972	PIN	1
46	A819973	ADJUSTING SPINDLE	1
47	A819974	WASHER	1
48	N/A	PLUG	2
49	A819955	ARM REST RH	1
50	N/A	SCREW	2
51	N/A	SUPPORT RH	1
52	N/A	PIN	2
53	A819985	ARM REST ASSY. RH	1
54	A817363	ARM REST LH	1
55	N/A	SUPPORT LH	1
56	A819986	ARM REST ASSY. LH	1
59	N/A	COVER ASSY	1
60	N/A	SCREW	1
61	N/A	SEAT BELT FIXED	1
62	N/A	SEAT BELT REEL	1
63	N/A	SCREW	AR
64	N/A	WASHER	AR

* Not Illustrated


**RANSOMES
FRONTLINE 938**



M46 PV w/MDC



M46 PV

ITEM	RANSOMES PART NO	DESCRIPTION 	QTY
	A800638	TRANSMISSION PUMP	1
A	A800858	• CYLINDER BLOCK KIT	1
104	A800859	• SPRING	1
105	A800860	• POPPET CHARGE RELIEF VALVE	1
118	A800861	• NEEDLE BEARING CHARGE RELIEF VALVE	1
126	A800862	• PISTON	7
127	A800863	• SLIPPER RETAINER	1
131	A800864	• SHAFT BEARING	1
132	A800865	• CIRCLIP	2
133	A800866	• CIRCLIP	2
155	A800867	• CHARGE PUMP HOUSING	1
160	A800868	• CYLINDER BLOCK	1
201	A800869	• SWASHPLATE	1
202	A800870	• SWASHPLATE BEARING	2
401	A800871	• DRIVE SHAFT	1
501	A800872	• VALVE PLATE	1
930	A800873	• ADJUSTER SCREW	1
1001	A800874	• BY-PASS VALVE	1
1103	a800889	• RELIEF VALVE CARTRIDGE	2
1207	A800876	• ROTARY SPOOL	1
1210	A800877	• ADJUSTER SCREW	1
1213	A800878	• LOCKNUT	1
1214	A800879	• RETURN SPRING	1
1215	A800880	• CONTROL LEVER	1
1216	A800881	• CAM PLATE	1
1235	A800882	• LOCKWASHER	1
1401	A800883	• ORIFICE	1
1402	A800884	• SLEEVE	1
1403	A800885	• ORIFICE	1
1404	A800885	• ORIFICE	1
*	A800886	• SEAL KIT	1

* Not Illustrated



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Equipment from Ransomes Jacobsen Limited is built to exacting standards ensured by ISO 9001 registration at all our manufacturing locations. A worldwide dealer network and factory-trained technicians backed by Ransomes Jacobsen Parts Xpress provide reliable, high-quality product support.



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