MOTREC

RR-662



OPERATOR AND MAINTENANCE MANUAL SPARE PARTS LISTS INCLUDED

SERIAL NUMBER: 1194980 & UP

Printed in Canada

Limited Warranty

3-YEAR LIMITED WARRANTY ON AC PRODUCTS, STOCK CHASER AND TRAILERS 2-YEAR LIMITED WARRANTY ON DC PRODUCTS AND OTHER MOTREC PRODUCTS

Motrec warrants to the original purchaser that its products are free from defects in parts and workmanship.

STARTING DATE OF WARRANTY. The present terms and conditions of the Motrec Limited Warranty apply to new Motrec products only and do not replace any pre-existing warranty. The warranty period is effective from the date the purchaser registers the product, provided it is registered within thirty (30) days of reception and in conformity with Motrec's registration process.

REGISTRATION. IMPORTANT: AS A PURCHASER OF A MOTREC PRODUCT, IT IS IMPORTANT THAT YOUR PRODUCT BE REGISTERED UNDER YOUR NAME AS REQUIRED BY MOTREC'S PRODUCT REGISTRATION PROCEDURE. PLEASE ASK YOUR MOTREC DEALER TO REGISTER YOUR PRODUCT. MOTREC'S LIMITED WARRANTY WILL BECOME EFFECTIVE AT THE TIME OF PRODUCT REGISTRATION. IF YOU FAIL TO REGISTER YOUR PRODUCT WITHIN THE THIRTY (30) DAYS, THE WARRANTY WILL NOT BE APPLICABLE. IF YOU PURCHASED THE PRODUCT DIRECTLY FROM MOTREC AND NOT FROM A MOTREC DEALER, YOU MUST REGISTER YOUR PRODUCT FOLLOWING THE INSTRUCTIONS BELOW (CLAUSE 3) https://www.motrec.com/registration/

DEFECTS. Subject to the terms and conditions described below, parts, components or accessories installed on the product by Motrec which fail under normal usage within the warranty period, and that are proven to be defective, will be repaired or replaced without charge for parts or labor unless stated otherwise herein. This is Motrec's sole liability under this Warranty. The warranty excludes items described in (Clause 6). Motrec reserves the right to require that all parts or components claimed to be defective be returned for inspection and verification of defect. The purchaser is responsible for any and all shipping fees of any and all parts or components that it alleges to be defective. In the event the part is still under warranty and confirmed defective after inspection by Motrec, freight would be credited.

WARRANTY SERVICES. All warranty services must be rendered by authorized Motrec distributors and approved in writing by Motrec prior to initiating any repairs or adjustments. Motrec parts must also be used when performing the warranty otherwise the warranty will be voided. All approved warranty services will be paid for based on standard rates established by Motrec. Rather than replace or repair parts or components, Motrec may, at its discretion, replace the product or refund a prorated amount of its purchase price (based on service time, wear and tear) upon return of the defective product.

AUTHORIZATION PROCESS. No product shall be returned to Motrec without its prior authorization. All warranty claims must be disclosed to Motrec or its authorized distributor as soon as the purchaser is aware of a suspected defect or any event susceptible to give rise to a claim under the Motrec Limited Warranty. All claims must be processed through an authorized Motrec distributor using the warranty claim procedure approved by Motrec.

THE ABOVE TERMS AND CONDITIONS REPRESENT THE ONLY REPRESENTATIONS MADE BY MOTREC IN RELATION TO ITS PRODUCTS. MOTREC DOES NOT PROVIDE ANY OTHER PARTICULAR WARRANTY TO THE USER OF ITS PRODUCTS. MOTREC DOES NOT MAKE ANY EXPRESS OR IMPLIED WARRANTIES OR REPRESENTATION WITH RESPECT TO ANY RESULT, PERFORMANCE OR DURABILITY EXPECTED FROM THE USE OF ANY OF ITS PRODUCTS. MOTREC EXCLUDES AND DECLINES ANY OTHER WARRANTY OF SUITABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE, WOULD THEY BE PROVIDED BY LAW, BY CONTRACT OR OTHERWISE.

PRODUCT MODIFICATIONS ARE PROHIBITED. Motrec prohibits and disclaims any and all liability for any modification made to the product, including but not limited to, modifications that are susceptible to alter the weight distribution and stability of the product, increase its speed or affect its safety. Such modifications can cause serious personal injury or property damage for which Motrec disclaims and excludes any and all responsibility. It is the purchaser's responsibility to ensure that any technicians servicing the product are properly trained as required by OSHA (Occupational Safety and Health Administration: https://www.osha.gov/) and ANSI-B56 (American National Standards Institute: https://webstore. ansi.org/default.aspx). Service technicians shall read, understand and follow the instructions in the Motrec Owner's Manual before servicing the product. Only qualified and authorized personnel shall be permitted to maintain, repair, adjust and inspect the product.

TRAINING. It is the purchaser's responsibility to ensure that the driver or any person operating, using, maintaining or handling the product (or its accessories) is properly trained and instructed on the product's safety features and operation, including its stability. Operators shall read, understand and follow the safety and operating instructions in the Motrec Owner's Manual before driving the vehicle. Operators shall not be permitted to operate the product unless a complete and adequate training has been provided by the purchaser. Driving an electrical vehicle constitutes a hazard. The driver is responsible for the control of the product while driving and must always evaluate all unusual or particular situations that he or she may encounter while driving. The driver assumes the inherent hazards related to this activity. Motrec products are designed for off-road use only.

EXCLUSION OF LIABILITY. Motrec disclaims any liability for incidental or consequential damages, including, but not limited to, personal injury or property damage arising from misuse of the product, lack of maintenance or any defect in the vehicle.

UNDER NO CIRCUMSTANCE WILL MOTREC BE LIABLE FOR ANY DAMAGE, WHETHER DIRECT, INDIRECT OR OTHERWISE, RESULTING FROM THE USE OF ITS PRODUCTS, EVEN IF MOTREC OR ONE OF ITS REPRESENTATIVES WAS AWARE OF THE POSSIBILITY OF SUCH DAMAGE. ANY LIABILITY FOR LATENT DEFECT IS LIMITED TO THE PRICE OF THE PRODUCT.

1. Definitions

"Product": the complete vehicle manufactured and/or assembled by Motrec, including its parts, components and accessories installed by Motrec. "Purchaser": The party in whose name the product is originally registered at the time of purchase pursuant to the product registration procedure maintained by Motrec at that time, either: (a) the party to whom Motrec sold the product, if that party purchased the product for its own use, or (b) the customer of a Motrec dealer, who bought the product directly from such dealer.

2. Warranty Period

Your Motrec product using the AC technology is covered by the Motrec Limited Warranty for a period of three (3) years or 3,000 hours of use, whichever comes first. This period of three (3) years starts on the date the product is registered, as mentioned hereinabove. This coverage does not apply to wearable parts, normal use or abusive usage of the product.

Your Motrec stock chaser is covered by the Motrec Limited Warranty for a period of three (3) years or 3,000 hours of use, whichever comes first. This period of three (3) years starts on the date the product is registered, as mentioned hereinabove. This coverage does not apply to wearable parts, normal use or abusive usage of the product.

Your Motrec trailer is covered by the Motrec Limited Warranty for a period of three (3) years. This period of three (3) years starts on the date the product is registered, as mentioned hereinabove. This coverage does not apply to wearable parts, normal use or abusive usage of the product.

Your Motrec product using DC or other technology is covered by the Motrec Limited Warranty for a period of two (2) years or 2,000 hours of use, whichever comes first. This period of two (2) years starts on the date the product is registered, as mentioned hereinabove. This coverage does not apply to wearable parts, normal use or abusive usage of the product.

3. Warranty Registration

The warranty registration must be completed within thirty (30) days of purchase of the product. If registration is not completed within this time, the warranty will be voided. If you purchased the product from a Motrec dealer, please make sure the dealer has completed the registration. If you purchased the product directly from Motrec, please make sure to go to this link (https://www.motrec.com/registration/) and register your vehicle. In case of registration problems, please contact your Motrec representative.

4. Maintenance

Motrec requires that scheduled maintenance be performed at the times shown in the Owner's Manual (Refer to the "Preventive Maintenance Schedule"). If this scheduled maintenance is not done and the product fails as a result of a failure to properly maintain it, repairs will not be covered under any warranty.

5. Warranty will be void if:

- The product has been modified in any manner not approved in writing by Motrec
- The product has been overloaded beyond its rated capacity
- The product's maximum speed has been increased
- The product's motor controller parameters have been tampered without Motrec's authorization
- The product has been used abusively (including, but not limited to: improper use; twisted, bent, misaligned front or rear axles; any signs of abusive use)
- The product has been involved in an accident
- The product has been transferred to a second owner without Motrec's authorization
- The product has been used in extreme environments (including, but not limited to: freezers, excessive moisture areas, corrosive environments, etc.)
- The product has had its serial number modified or altered
- The product has been repaired with non-Motrec parts without Motrec's authorization
- The preventive maintenance schedule was not followed as specified in the Motrec Owner's Manual

6. The following items are not covered by the Motrec limited warranty:

- Batteries, charger, wheels (which are covered by warranties from manufacturers)
- Internal combustion engines (which are covered by warranties from manufacturers)
- Wearable parts (diodes & fuses, filters & spark plugs, lubricants, seals, switch, horn, tires, wheel bearings, seats, brake pads and shoes)
- Tear and wear resulting from normal use
- Adjustments, including field set-up
- Damage or defects caused by using non-Motrec parts, components or accessories
- Shipping damage caused by the freight carrier
- Shipping fees for warranty parts (if proven not admissible, refer to Defects section)
- Travel fees for technical support and repair

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INSTRUCTIONS

SAFETY WARNINGS FOR OPERATORS

FAILURE TO OBEY THE FOLLOWING SAFETY RULES MAY RESULT IN SEVERE INJURY.

It is the responsibility of the owner of this vehicle to train operators to ensure that they understand the operating characteristics of this vehicle, including training in vehicle stability, and obey the following safety rules and guidelines. Owner shall comply with OSHA and ANSI/ITSDF B56.8 & B56.9 Standards for vehicle use, safety rules, operator training and certification. Do not drive this vehicle unless you are a certified operator.

- Do not drive this vehicle under the influence of drugs or alcohol.
- Do not drive this vehicle on public roads and highways.
- This vehicle can make sparks which can ignite inflammable materials. Never use the vehicle in hazardous areas where there are inflammable materials, explosive dust or fumes in the air.
- Never run the engine in a confined area and avoid inhaling engine poisonous fumes which contain CO.
- Have your vehicle inspected regularly by trained personnel, and cease operation if a malfunction occurs.
- Do not open motor compartment. Keep clear from moving, rotating(wheels, sheaves, etc) or lifting parts.
- Keep clear from hot parts of exhaust system.
- Never carry more passengers than number allowed for this vehicle. Wait until all occupants are seated and holding on before moving. Always keep all body parts inside vehicle. Keep both hands on steering wheel.
- Do not exceed the vehicle cargo load capacity and gross trailing weight capacity, rated for flat hard even surface. Different operating conditions such as loose terrain or ramps reduce vehicle capacity.
- Avoid loose, unbalanced or top-heavy loads to keep a good stability and prevent overturn. Do not load cargo that can fall off the vehicle. Do not carry cargo that is longer, wider or higher than this vehicle.
- Always depress slowly the accelerator for smooth acceleration. Avoid stunt driving or horseplay.
- Avoid sharp turns, always slow down before turning, to prevent vehicle overturn or trailer jack knife. Vehicle is more sensitive to overturn and jack knife when traveling on inclines or when carrying a heavy load.
- Always drive straight up and down the face of an incline, never across the face, to prevent overturn and trailer jack knife. Drive slower and start applying brakes sooner on inclines to adjust for longer stopping distance.
- Use extra care and drive slowly in reverse, in congested areas or on wet or slippery ground.
- Keep to the right under normal conditions. Maintain a safe distance from all objects.
- Slow down and sound the horn when approaching a corner or other blind intersections.
- Before leaving the vehicle, park on level ground flat surface, turn off all switches, set forward/reverse selector to neutral, set parking brake, remove the key. Do not park the vehicle on an incline.
- Use another driver to steer this vehicle while it is towed. Be sure the driver uses brakes when you slow or stop the towing vehicle. Do not exceed 5 MPH or carry any passenger while towing this vehicle.

RR-660 - VEHICLE CONTROLS

! WARNING!

The accelerator and brake controls of this vehicle are different than a standard car. Read carefully the steering, accelerator, brake and safety instructions before operating the vehicle. Do not drive this vehicle unless you are a certified operator as required by OSHA.

Diesel & Hydraulic Tanks

Do not remove the fuel cap while the engine is running; do not fill the fuel tank to point of overflowing. Do not remove the hydraulic oil cap while the engine is running; do not fill the oil tank to point of overflowing and use hydraulic oil ISO VG-46

Engine Oil

Check the oil level when the engine is not running. Kept clear from muffler, moving parts, pulley, belt.

Oil & temperature sentry

When the red light above the pressure gage turns on, the engine oil pressure is too low, and the engine will shut off. When the red light above the temperature gage turns on, the engine temperature is too high, and the engine will shut off.

Horn button

The horn button is located on each side of the twist grip throttle.

Brake

Brake is applied automatically by releasing the throttle. For emergency braking, release footswitch.

Accelerator

Twist grip

Turn the twist grip throttle to speed up the vehicle and release the twist grip to slow down. The twist grip must automatically return to idle when released. If not, stop using the vehicle until an inspection and repair of the entire throttle system is performed.

Hand lever

Move the throttle lever towards the "FAST" indication to speed up the vehicle and release the lever to slow down. The lever must automatically return to "STOP" indication when released. If not, stop using the vehicle until an inspection and repair of the entire throttle system is performed.

Forward/Reverse Selector

Shift only when the vehicle is not moving and engine is at idle speed.

Key switch / starter

Before starting, set the F/R selector in NEUTRAL. To avoid starter damage do not crank the engine continuously for more than 10 seconds at a time; wait 60 seconds before attempting to start again. If engine have been parked outside, turn key CCW to activate the glow plugs and weight until the red light turns on to start the engine. Remove the key and set to neutral before leaving the vehicle.

Steering

Always depress the footswitch before turning the steering wheel. The footswitch turns on an hydraulic valve to steer the wheels according to the driver position.

Latch all doors before operating the vehicle.

MAINTENANCE

SAFETY WARNINGS FOR SERVICE TECHNICIANS

FAILURE TO OBEY THE FOLLOWING SAFETY RULES MAIN RESULT IN SEVERE INJURY.

Owner shall comply with OSHA and ASME/ANSI B56.8 & B56.9 regulations for vehicle maintenance.

Only qualified and authorized personnel shall be permitted to maintain, repair, adjust and inspect carriers, vehicles, tractors, and batteries.

Maintenance operations must be made by properly trained service technicians.

Before any maintenance work, park the vehicle on a flat level surface, set the shift lever to park, turn off all the switches, remove the key, lift the wheels off the ground and secure with jack stands of adequate capacity.

Keep clear from moving parts such as tires, sheaves, drive shaft and engine.

Keep clear from hot parts of exhaust system.

Avoid increasing engine RPM and vehicle speed to prevent accident and severe injuries.

Follow the maintenance instructions applicable to the type of repair, maintenance, or service.

Always wear a face shield and gloves when working around batteries. Use insulated tools to avoid sparks that can cause battery explosion and acid splashing. Use two counteracting tools, double-wrench technique, when disconnecting or tightening terminals on the battery to avoid damaging battery posts.

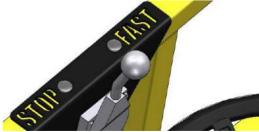
Keep cables and wires clear from mechanical and rubbing action. Make sure cable covering is free from cutting or visible damage.

Before replacing a fuse or circuit breaker, identify the cause of failure and repair.

Always ensure the integrity of the warning labels. If they suffered damage and are not readable, replace them promptly. The following images depict the dashboard and general security warning labels:







STOP and FAST indication must remain clean-visible

PREVENTIVE MAINTENANCE SCHEDULE - MOTREC I.C. UNITS

! WARNING! Read safety instructions before maintenance operations to avoid severe injury.

! WARNING! Maintenance operations must be made by properly trained service technicians. Follow OSHA and ANSI B56 regulations.

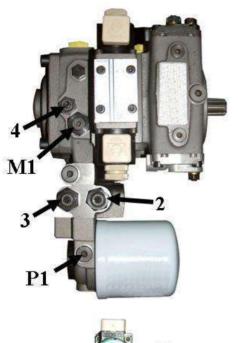
Change engine oil after first 8 hours of use. S/N: _____ Hour Meter reading: ____

Change engine on after first 8 nours of use.					·	
PERIOR	ESTIMATED TIME (MINUTES)			CHECK		
PERIOD DESCRIPTION	SHIFT START	100H	200 H	1000 H	YEAR	CHECK
Stop engine, check engine oil level.	3					
Check vehicle for visual damage	2					
Examine floor around and beneath unit for signs of	2					
transmission oil, differential oil, brake fluid leaks.						
Turn steering, check for hard steering, excessive free play, or unusual sound when turning.	1					
Check accelerator for free & smooth movement,	2					
and automatic spring-return to stop.						
Shift in neutral, before starting engine.	1					
Check reverse alarm, horn, strobe light.	2					
Check brake pedal travel and parking brake for secure hold. Start slowly and check service brake.	2					
Check tire pressure, see pressure rating on tire		5				
Check transmission & hydraulic oil level, if appl.		5				
Check radiator coolant level, if applicable.		2				
Check master cylinder fluid level (DOT 3)		2				
Check brake pedal travel		1				
Turn front wheels straight, check steering play		1				
Check parking brake, requires 75 lbs. force to apply		1				
Check brake lines and drive for leaks		5				
Check fuel pipe, hose, clamps for damage & leaks		5				
Check radiator fan belt, CVT belt, if applicable		3				
Service air filter, check intake pipe & clamps		5				
Check muffler, exhaust pipe, clamps, spark arrester		5				
Air cooled engines only, change engine oil		20				
Water-cooled engines only, change engine oil			20			
WARNING LABELS & MARKINGS			2			
Inspect wheel bearings and king pins for play			8			
Inspect steering suspension linkages & frame.			10			
Check pedal & master cylinder linkages for wear			10			
Check service brake linings and linkages for wear			15			
Check Spark Plugs			20			
Change Oil Filter			20			
Change air filter			10			
Clean radiators and engine shrouds			20			
Lubricate the vehicle			5			
Service fuel filter, LP vaporizer & regulator				20		
Check engine valve clearance & seats				40		
Check ignition wires, tighten all nuts and bolts				20		
Change differential oil, transmission oil & filter				20		
Clean & repack front hubs				20		
Flush/change brake fluid					30	
Flush/change radiator coolant, if applicable					30	
TOTAL TIME (MINUTES)	15	60	120	120	60	

OIL GRADE CHART

Vehicle system	Oil grade	Note
KOHLER engine Above +32°F Below +32°F	10W-30 5W-30	
KUBOTA engine Above 77°F +32°F to 77°F Below +32°F	30 or 10W-30 or 10W-40 20 or 10W-30 or 10W-40 10W or 10W-30 or 10W-40	
Hydrostatic transmission	ISO VG46	
Brakes	DOT 3	DMVSS116 standard

<u>HYDROSTATIC PUMP – PORTS AND ADJUSTING SCREWS</u>



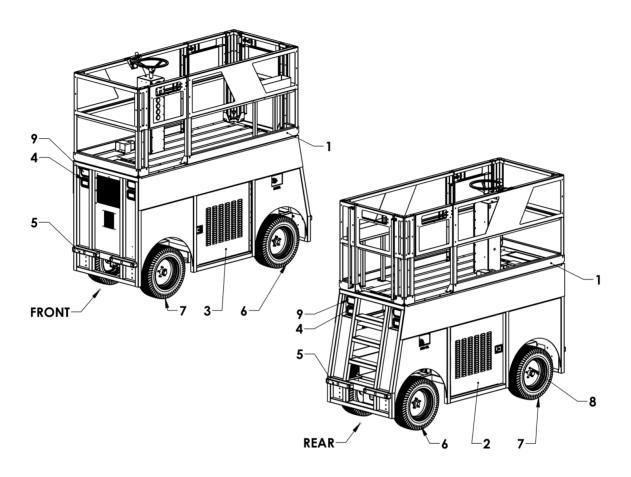




1	MACHINE RPM START-UP ADJUSTING SCREW Turn CW to increase RPM
2	POWER LIMITER ADJUSTING SCREW Turn CW to increase power
3	MINIMUM CHARGE PRESSURE ADJUSTING SCREW Turn CW to increase pressure
4	CHARGE PRESSURE ADJUSTING SCREW Turn CW to increase pressure
P1	CHARGE PRESSURE INTAKE
M1	HIGH PRESSURE SIDE A
M2	HIGH PRESSURE SIDE B

SPARE PARTS

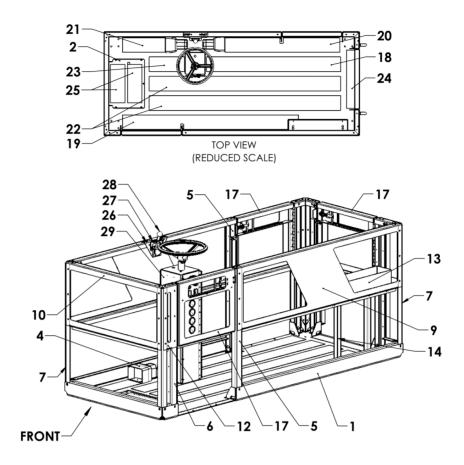
BODY

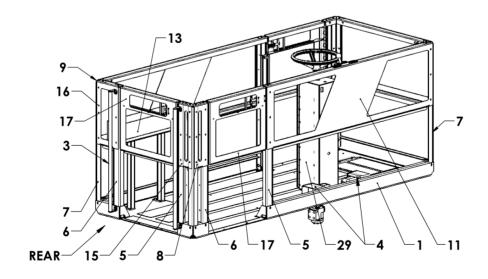


REF.	PART No.	DESCRIPTION	QTY
1	2333662337	SEE DECK ASSEMBLY PAGE	1
2	2362662010	BATTERY ACCESS RIGHT DOOR	1
3	2362662011	BATTERY ACCESS LEFT DOOR	1
4	3111000035	REAR LIGHT (RED)	4
5	2311000006	RUBBER BUMPER 4"x12"	4
6	2223662002	PNEUMATIC TIRE ON HD WHEEL FOR DRIVE AXLE	2
7	2223662003	PNEUMATIC TIRE ON HD WHEEL FOR STEERING AXLE	2
8	2202662007	WHEEL NUT 1/2-20 x 13/16"	20
9	311000064	HEADLAMP	4

DECK

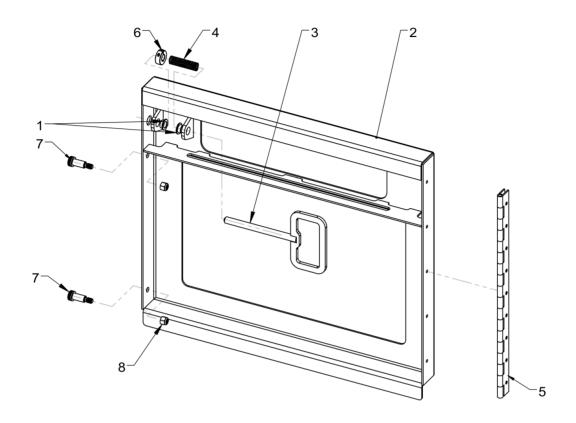
(RR-662-0011 model)





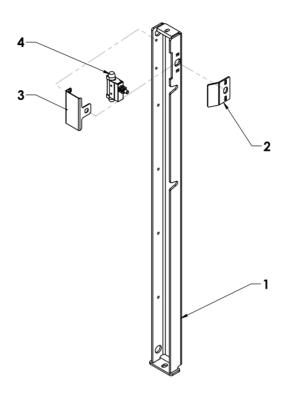
REF.	PART No.	DESCRIPTION	QTY
1	2333662338	DECK	1
2	2339662033	FLOOR ACCESS PANEL	1
3	2803700001	GRAB RAIL	2
4	3109606001	DEAD MAN FOOT SWITCH	2
5	2333700011K	SEE THE RAIL POST WITH LOCK PAGE	3
6	2333700031	HINGE RAIL POST	3
7	2333700021	CORNER RAIL POST	4
8	2333662345	RIGHT REAR RAIL GUARD	1
9	2333662344	LEFT RAIL GUARD	1
10	2333662341	FRONT RAIL GUARD	1
11	2333662347	RIGHT SIDE PANEL	1
12	2333662348	LEFT FRONT RAIL GUARD	1
13	2368662020	TOOL BOX	1
14	2339662040	TOOL BOX SUPPORT STRUCTURE	1
15	2333662342	SECOND REAR RIGHT RAIL GUARD	1
16	2333662343	SECOND REAR LEFT RAIL GUARD	1
17	2360700002	SEE THE DECK DOOR ASSEMBLY PAGE	3
18	5100662014	ANTI-SLIP 1	1
19	5100662012	ANTI-SLIP 2	1
20	5100662011	ANTI-SLIP 3	1
21	5100662013	ANTI-SLIP 4	1
22	5100662010	ANTI-SLIP 5	2
23	5100662015	ANTI-SLIP 6	1
24	5100700006	ANTI-SLIP 7	1
25	5100662005	ANTI-SLIP 8	2
26	2141662018	LEVER BRACKET	1
27	2141662014	LEVER GUIDE	1
28	2142662001	LEVER	1
29	2206662014	SEE THE STEERING ASSEMBLY PAGE	1

DECK DOOR



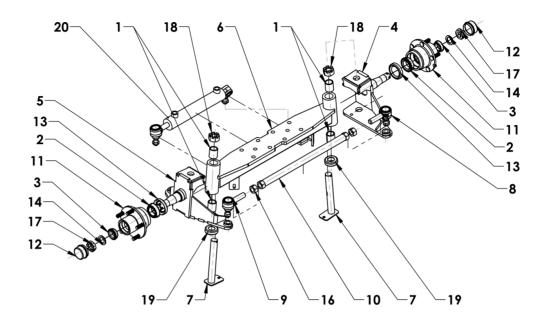
REF.	PART No.	DESCRIPTION	QTY
1	2100081004-RF	BUSHING	2
2	2362700002	WELDED DOOR ASSEMBLY	1
3	2366700001	LOCKING HANDLE	1
4	2662002-MX700	SPRING	1
5	2808700001	PIANO HINGE	1
6	2915008001	CLAMP-ON SHAFT COLLAR	1
7	714125080100	SHOULDER BOLT 3/8-16	2
8	731118060000	NYLON INSERT NUT 3/8-16	2

RAIL POST WITH DOOR LATCH



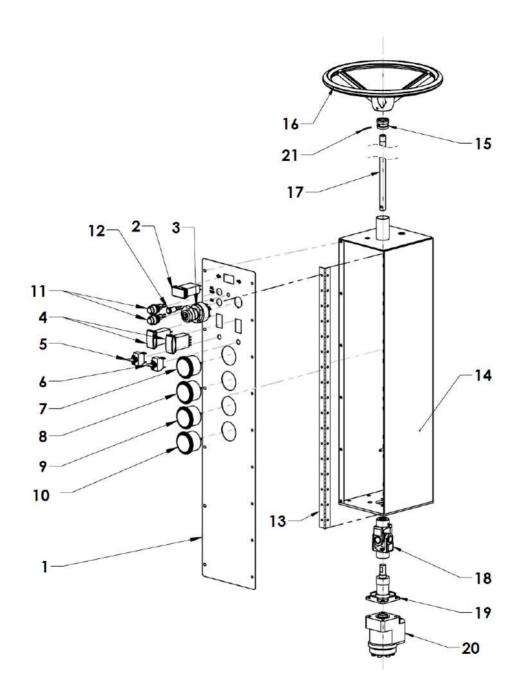
REF.	PART No.	DESCRIPTION	QTY
1	2333700011	RAIL POST DOOR LATCH MODEL	1
2	2366270019	S.S. DOOR LATCH	1
3	2392700001	DOOR SWITCH BRACKET	1
4	3109000043	LIMIT SWITCH	1

FRONT AXLE



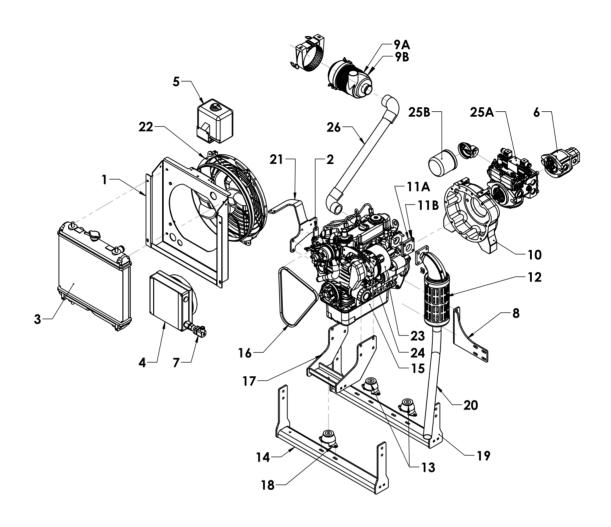
REF.	PART No.	DESCRIPTION	QTY
1	2100162024	BUSHING	4
2	2103300003	INSIDE TAPERED ROLLER BEARING	2
3	2103300005	OUTSIDE TAPERED ROLLER BEARING	2
4	2201662028	RIGHT SPINDLE	1
5	2201662029	LEFT SPINDLE	1
6	2201662035	AXLE BEAM	1
7	2205364006	HEAVY DUTY KING PIN	2
8	2207000001	LEFT ROD END	1
9	2207000002	RIGHT ROD END	1
10	2207662003	REAR TIE ROD	1
11	2224300002	HUB WITH 5 STUDS	2
12	2229300001	DUST CAP	2
13	2229300002	OIL SEAL	2
14	2229300003	SPINDLE WASHER	2
15	2910000005	LEFT-HAND NUT	1
16	2910000006	RIGHT-HAND NUT	1
17	2910300002	CASTELLATED NUT	2
18	2910364001	CASTELLATED NUT	2
19	361414	THRUST BEARING	2
20	4130448002	POWER STERRING CYLINDER	1

STEERING COLUMN



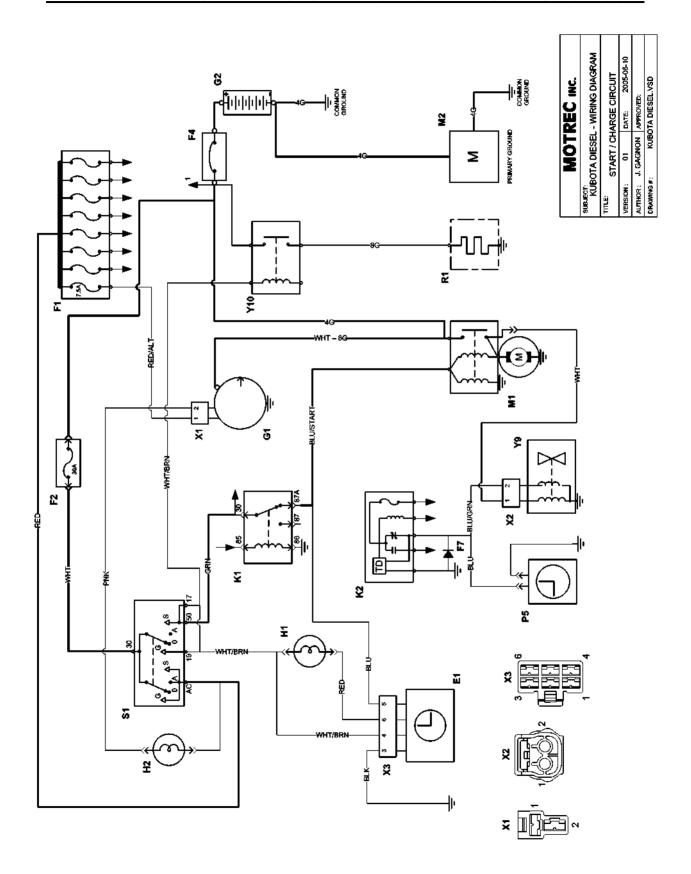
REF.	PART No.	DESCRIPTION	QTY
1	2500662003	PANEL	1
2	3109923030	ROCKER SWITCH	1
3	3109501005	KEY SWITCH FOR DIESEL ENGINE	1
4	3109922020	ROCKER SWITCH HEADLIGHT	2
5	55017	TOGGLE SWITCH	1
6	2469011	ON/OFF PLATE, TOGGLE SWITCH	1
7	3069007	VOLTMETER	1
8	3069008	HOURMETER	1
9	686203	FUEL GAUGE	1
10	3108449003	WATER TEMPERATURE GAUGE	1
11	246212	RED PILOT LIGHT Ø 5/8"	2
12	3126000001	RED PILOT LIGHT Ø 1/2"	1
13	2808662008	PIANO HINGE	1
14	220662017	STEERING CONSOL	1
15	2109012001	STEERING SHAFT BUSHING	1
16	2208240001	STEERING WHEEL	1
17	2200606002	STEERING SHAFT	1
18	2104250001	UNIVERSAL JOINT	1
19	2219364001	ADAPTER COLUMN/ORBITROL	1
20	4190448001	ORBITROL	1
21	2910000023	SPRING PIN	1

ENGINE MUFFLER & MOUNTING

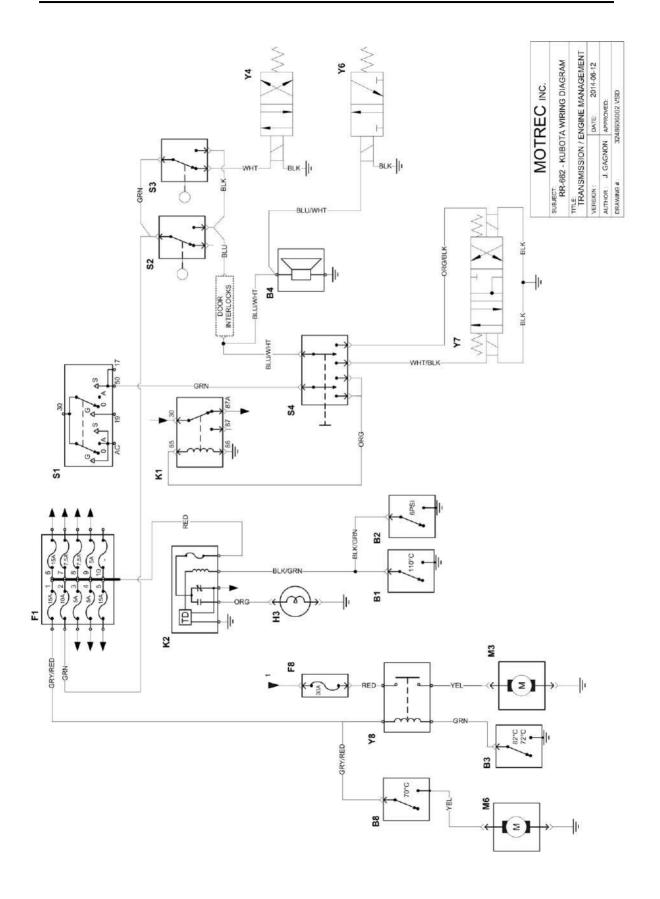


REF.	PART No.	DESCRIPTION	QTY
1	2169662006	RADIATOR SUPPORT	1
2	2149661006	BRACKET	1
3	2169501074	RADIATOR	1
4	4190501003	OIL COOLER	1
5	2604501002	reserve tank -prestone	1
6	4160322011	DOUBLE GEAR PUMP	1
7	4190501004	OIL TEMPERATURE THERMOSTAT	1
8	2169662013	MUFFLER SUPPORT	1
9A	2169501073	AIR FILTER ASSYEMBLY	1
9B	2169501073-F	AIR FILTER ONLY	1
10	2169501072	ADAPTOR - MOTOR/PUMP	1
11A	2158662011	EXHAUST SHIM	1
11B	2157501012	EXHAUST GASKET	1
12	2157501022	MUFFLER ASSEMBLY	1
13	2160501010	RUBBER MOUNT - REAR	2
14	2160662007	FRONT ENGINE BEAM	1
15A	2153501012	kubota diesel engine	1
15B	3108449001	WATER TEMPERATURE SENDER	1
15C	3109449001	HIGH TEMPERATURE ENGINE SHUT-OFF	1
16	2112662001	ALTERNATOR BELT	1
17	2160662013	front motor support	1
18	2160501011	RUBBER MOUNT - FRONT	1
19	2160662010	REAR ENGINE BEAM	1
20	2158662009	MUFFLER PIPE	1
21	2141662017	BRACKET	1
22	3129662005	ENGINE COOLING FAN	1
23	3123449001	ALTERNATOR 105 AMP	1
24	2169662005	ALTERNATOR ADJUSTMENT BRACKET	1
25A	4160322001	HYDROSTATIC PUMP	1
25B	5074009A	HYDROSTATIC PUMP FILTER	1
26	2169662009	AIR INLET PIPE	1

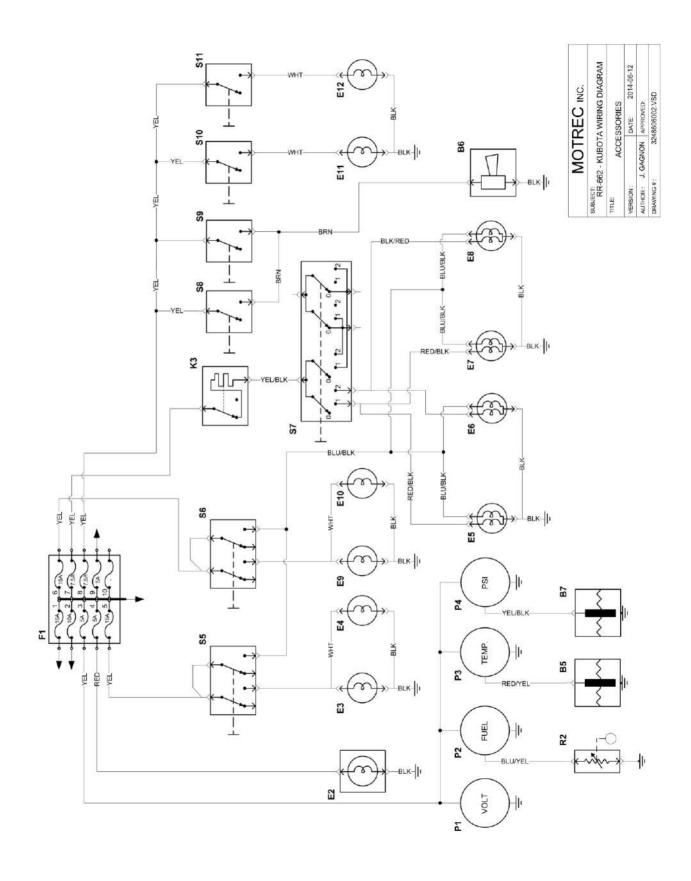
ELECTRICAL DIAGRAM – KUBOTA DIESEL START / CHARGE CIRCUIT



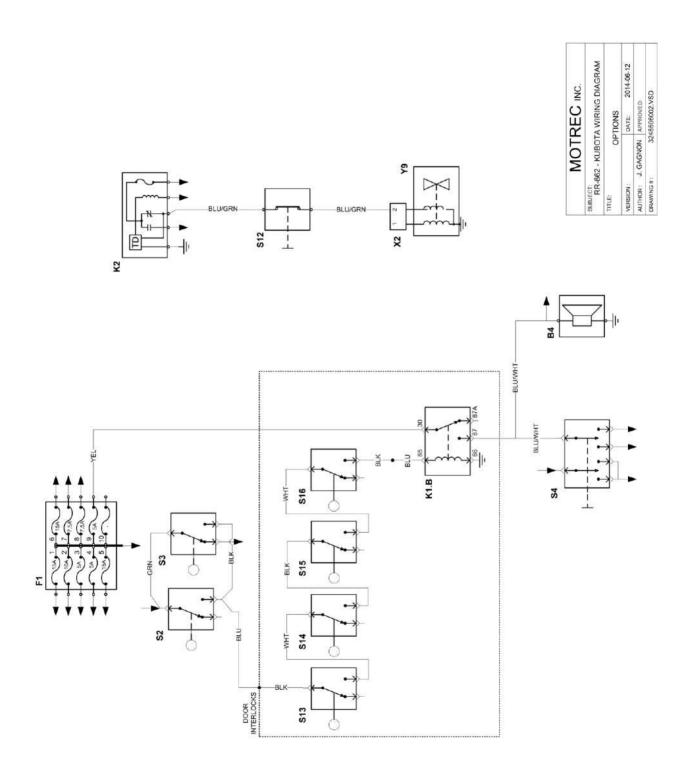
ELECTRICAL DIAGRAM – TRANSMISSION / ENGINE MANAGEMENT



ELECTRICAL DIAGRAM – ACCESSORIES



ELECTRICAL DIAGRAM – OPTIONS

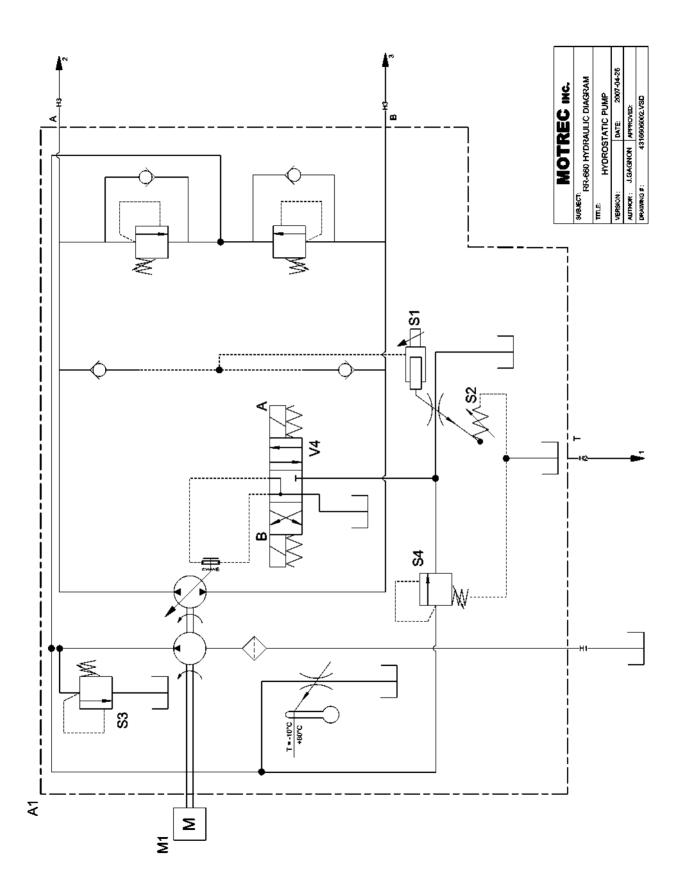


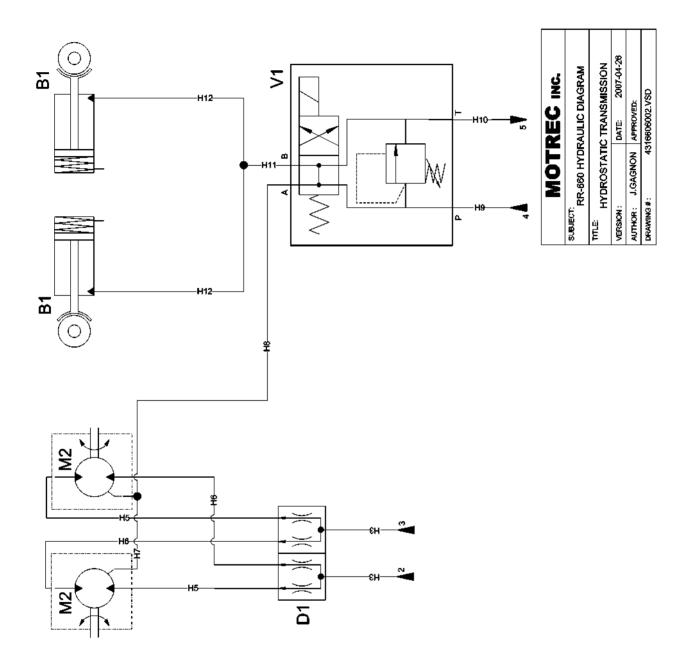
PARTS LIST

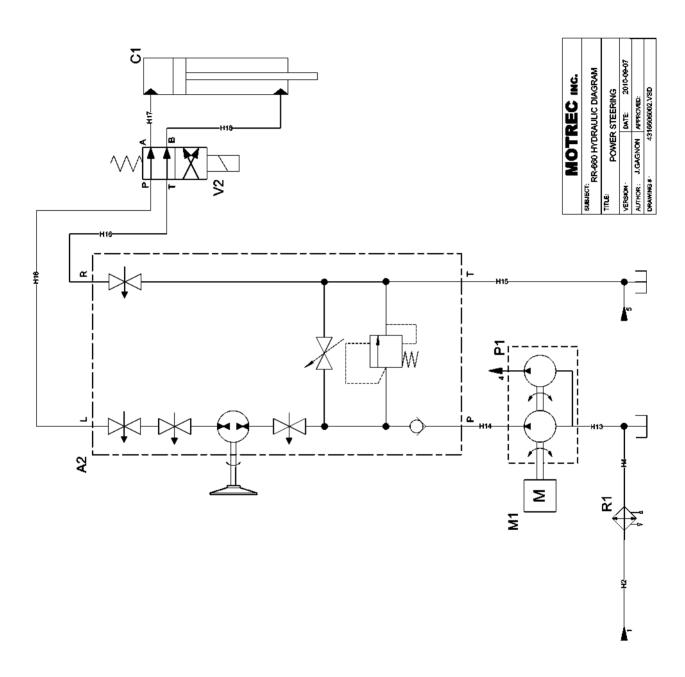
NO	DESIGNATION	REF	QTY
A1	ENGINE CONTROLLER	-	1
B1	EMERGENCY THERMAL SWITCH	3109449001	1
B2	EMERGENCY PRESSURE SWITCH	3109501001	1
В3	THERMOSTATIC SWITCH, RADIATOR	3109501004	1
B4	MOTION ALARM	3100000001	1
B5	COOLANT TEMPERATURE SENDER	3108449004	1
B6	HORN	246003	1
B7	OIL PRESSURE SENDER	3108501002	1
B8	THERMOSTATIC SWITCH, OIL COOLER	4190501004	1
E1	GLOW PLUG TIMER	-	1
E2	STROBE LIGHT	3116000001	1
E3-E4	HEAD LAMP	3069012	2
E5-E8	TAIL/BRAKE LIGHT	2469021	4
E9-E10	HEAD LAMP	3069012	2
	WORKING LAMP	3111240001	2
F1	MINI BLADE FUSE HOLDER	3118000011	1
F2	IN-LINE FUSE HOLDER	4890028	1
F4	CIRCUIT BREAKER	3107000002	1
F7	DIODE	367012	1
F8	MAXI FUSE 30A	3118501005	1
го	MAXI FUSE 30A MAXI FUSE HOLDER	3118501005	1
G1	ALTERNATOR	3118301000	1
G2	BATTERY	5060001	1
		5060001	
H1 H2	GLOW PLUG LAMP	246212	1
	CHARGE LAMP EMERGENCY LAMP		1
H3		246212	2
K1.A,B	RELAY 12V, F/R INTERUPT	3069010	
K2	TIMER DELAY SWITCH, SHUT DOWN	3129449001	1
K3	FLASHER RELAY	3127000002	1
K4	12V MULTIFUNCTION TIMER RELAY	3127662001	1
3.64	11 PIN RELAY BASE	3128662001	1
M1	STARTER	-	1
M2	KUBOTA ENGINE	-	1
M3	RADIATOR COOLING FAN	3129501004	1
M6	OIL COOLER FAN	4190501004	1
P1	VOLTMETER	3069007	1
P2	FUEL GAUGE	686203	1
P3	ENGINE COOLANT TEMP GAUGE	3108449003	1
P4	OIL PRESSURE GAUGE	3108501003	1
P5	HOUR METER	3069008	1
R1	GLOW PLUGS	-	1
R2	FUEL SENDER	686207	1
S 1	IGNITION SWITCH, DIESEL	3109501005	1
	IGNITION SWITCH, GAS	3109449002	1
S2-S3	FOOTSWITCH	3109606001	2
S4	FWD/REV SEALED ROCKER SWITCH	3109606002	1
S5-S6	HEADLIGHT SWITCH	1269004	1

S7	TURN SIGNAL SWITCH	3109240001	1
	HARNESS - TURN SIGNAL SWITCH	3109240002	1
S8-S9	HORN BUTTON	266210	-
S10-S11	WORKING LAMP SWITCH	55017	2
S12	EMERGENCY PUSH BUTTON		1
	HEAD PUSH BUTTON	3109800012	1
	NC CONTACT	3109000018	1
	MOUNTING BODY	3109000017	1
	EMERGENCY STOP LABEL	3109800006	1
S13-S16	DOOR INTERLOCK	3109662002	4
Y1	FUEL PUMP	2169501037	1
Y2	CARBURATOR FUEL VALVE	-	1
Y4	STEERING SOLENOID	3674013	1
	STEERING BLOCK KIT	3674013B	1
Y6	BRAKING SOLENOID	4170606004	1
	BRAKING MANIFOLD	4110000004	1
Y7	HYDROSTATIC MANIFOLD	-	1
Y8	COOLING FAN SOLENOID	246101	1
Y9	FUEL SOLENOID VALVE	3122501001	1
Y10	GLOW PLUG SOLENOID	246101	1
X1	ALTERNATOR CONNECTOR		1
X2	FUEL VALVE CONNECTOR	3119501003	1
X3	GLOW PLUG TIMER CONNECTOR		1

HYDRAULIC DIAGRAM



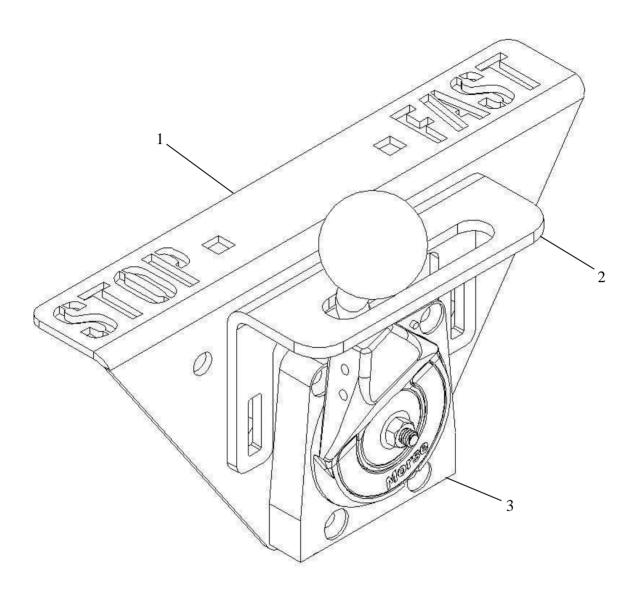




PARTS LIST

NO	DESCRIPTION	REF	QTÉ
A1	AUTOMOTIVE HYDROSTATIC PUMP	5070014	1
A2	HYDRAULIC UNIT – STEERING 4190448001		1
B1	HYDRAULIC BRAKE	- 2	
C1	STEERING CYLINDER	4130448001 1	
D1	MANIFOLD	5070015 1	
M1	ENGINE	-	1
M2	HYDRAULIC MOTOR	-	2
P1	POWERSTEERING PUMP	4160661001	1
R1	OIL COOLER	4190501003	1
S 1	MACHINE START-UP ADJ. SCREW	-	
S2	POWER LIMITER ADJ. SCREW	-	
S3	CHARGE PRESSURE ADJ. SCREW	-	
S4	MIN. CHARGE PRESSURE ADJ. SCREW	-	
V1	BRAKING VALVE	4170606004	1
	MANIFOLD W RELIEF VALVE	4110000004	1
V2	DIRECTIONAL VALVE	3674013	1
	DIRECTIONAL VALVE BODY	3674013B	1
V4	HYDROSTATIC FWD/REV VALVE	-	1

ENGINE CONTROLS



REF.	PART NO.	DESCRIPTION
1	2141662001	MOUNTING PLATE - HAND THROTTLE
2	2141662015	ACCELERATOR STOPPER
3	2142662001	HAND THROTTLE

MOTREC ILLUSTRATED ACCESSORIES



Strobe light, pole mount Amber 12-80V: 3116000002 Red 12-80V: 2469001 Blue 12-80V: 3690008



Strobe light, cab mount
Amber 12-48V: 3116250001
Red 12-48V: 3069026
Blue 12-48V: 3069014
Amber 72-80V: 3116720001
Red 72-80V: 3116720002
Blue 72-80V: 3116720003



Amber turn lamp
12V: 3111000022
Bulb 12V: 3069021
Multi-LED amber turn lamp
Round Light: 3111000010
Grommet: 3111000008
Plug: 3119000009



Amber turn lamp 2" 12V: 3111330002



Amber turn lamp 2" LED white background 12V: 3111330003



Red Tail/Turn/Rev light 12V: 3111000002



 Red Tail/Brake light

 Grommet:
 3269001

 Plug:
 246012A

 12V:
 2469021

 24V:
 2469022



Red Tail/Brake light
** Model EE **

Assembly: 3111000030

Housing: 3111000027

Plug: 3111000029

12V:



3111000028

Red Tail/Brake light Housing: 3111000041 Red Tail/Brake light Housing LED: 3111000044 Bulb 12V: 3117240001 Bulb 12V LED: 3117000010



Multi-LED Red Tail/Brake Light: 3111000006 Grommet: 3111000008 Plug: 3119000009



Red Tail/Brake light 12V: 386002



Red Tail/Turn LED light 12-24V: 3111000037



Red Tail/Turn LED light 12-24V: 3111000037



Clear lamp Incandescent 12V: 3111000039 Clear lamp LED 12V:

3111000042 Bulb incandescent 12V: 1269008

Bulb 12V LED:

3117000001



Oval lamp 12V: 3111330001



LED Headlight 12V: 3111000036



Left: 3111480003 Right: 3111480004 Bulb H/L: 3111480006 Bulb Turn: 3111480008 Bulb Mark: 3111480007



Headlight
Left: 3111480003
Right: 3111480004
Bulb H/L: 3117480001
Bulb Turn: 3117480003
Bulb Mark: 3117480002



Multi-LED Back-up Light: 3111000007 Strobe light: 3111000013 Grommet: 3111000008 Plug: 3119000009



Back-up lamp Grommet: 3269001 12V: 3669012 24V: 3669012A



Pedestal head lamp 12V: 3111240001 Bulb 12V: 2569001B Bulb 24V: 2169001B



Pedestal head lamp - LED 12-48V: 3111000034



Headlamp 12V:3111250007



Headlamp

12V: 3111300001 Bulb 12V: 3111300002



Analog Voltmeter

12V: 3069007 24V: 2469002 36-48V: 3669002



HOBBS Gauge

24V: 2469026 36V: 3069038 48V: 4869037



DC-DC converter, 10A 12-48V: 3069019



DC-DC Converter, 25A 12-48V: 3124000002 72-80V: 3124880001



DC-DC Converter, 300W 24V: 3124224001 36-48V: 3124280001 72-80V: 3124880001



CONNECTOR:3124280002



Wiper motor

12V: 3113000001 24V: 486211



Wiper arm 2800000001



Wiper blade

14" Blade: 2800000002 18" Blade: 2800000003



Pantograph wiper arm 246233A



Pantograph wiper blade 246233



Limit switch 3109000029



Cab heater

12V: 3103300001 36V: 3669008 48V: 4869020



12V Dome light 3669006



12V Fan 3669013



Back-up alarm or Motion beeper

12-48V: 3100000001 72-80V: 3105720001



12-24V Adjustable ECCO: 3100000002



12-48V Adjustable PRECO: 3100000004



Red Pilot light

12V: 246212 Bulb 12V: 246212B



Horn 12V: 24V:



Horn button VIP

2208224002

246003

246013



Horn button, column mount 3109000011



Horn button, dash mount 266210



Horn button 3109250001



Turn signal switch 246050