



**MJ91-1000 DRIBBLE BAR  
MJ91-750-30, MJ91-750-20 DRIBBLE BAR  
MJ81-750 TRAILING SHOE**

**Operator's Manual  
and Parts List**



Read this instruction manual thoroughly before using your machine and follow all safety precautions.

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## **Disclaimer**

While every effort has been made in the production of this manual to ensure that the information contained herein is full and correct, Major assumes no responsibility for errors or omissions.

Major reserves the right to modify the machinery and the technical data contained within the manual without prior notice.

Further to this, Major assumes no liability for any damages which may result from the use of the information contained within this manual.

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# Introduction

## Thank you

We appreciate having you as a customer and wish you many years of safe and satisfied use of your machine.

## Safety Aspects

This manual is an important part of your machine and should remain with the machine when you buy it. Reading your operator's manual will help you and others avoid personal injury or damage to the machine. Information given in this manual will provide the operator with the safest and most effective use of the machine. Only competent and skilled persons who have fully read and understood this operator's manual are allowed to operate this machine.

Sections in your operator's manual are placed in a specific order to help you understand all the safety messages so you can operate this machine safely. You can also use this manual to answer any specific operating or servicing questions.

Your manual contains special messages to bring attention to potential safety concerns, machine damage as well as helpful operating and servicing information. Please read all the information carefully to avoid injury and machine damage. Should any questions arise regarding the information given in this booklet, please contact your local MAJOR dealer or MAJOR.

The operator is solely responsible for the safe use and maintenance of the machine. The machine must only be operated by a competent and skilled person. Setting up and adjustment must only be carried by the operator. Do not let a third party person to adjust or modify the machine in any way.

## Intended Use

The Dribble Bar and the Trailing Shoe (further referred to as "the Slurry Applicator" or "the Machine") is an agricultural machine which is exclusively developed for the injection of fluids in or onto the soil, like water or slurry, with a limited amount of solid matter. The slurry applicator should not be used for other purposes other than applying slurry. Other applications outside the correct use can be dangerous.

# Product Identification

## Machine Serial Numbers

If you need to contact MAJOR or your MAJOR dealer for information on servicing or spare parts, always provide the product model and serial numbers.

We suggest that you record your machine details below:

Model No: \_\_\_\_\_

Serial No: \_\_\_\_\_

Date of Purchase: \_\_\_\_\_

Dealer Name: \_\_\_\_\_

Dealer Telephone: \_\_\_\_\_

MAJOR EQUIPMENT INTL. LTD. BALLYHAUNIS, CO. MAYO, IRELAND TEL: +353 (0) 9496 30572 EMAIL: info@major-equipment.com	
MAJOR EQUIPMENT LTD (UK) MAJOR IND. ESTATE, HEYSHAM, LANCS, LA3 3JJ, UK TEL: +44 (0) 1524 850501 EMAIL: ukinfo@major-equipment.com	Serial Number/Seriennummer <input type="text"/>
MAJOR EQUIPMENT INTL LTD POSTBUS 29, NL-7700 AA DEDEMSVAART, NEDERLAND TEL: + 31 (0) 6389 19585 EMAIL: euinfo@major-equipment.com	Model/Modell <input type="text"/>
	Year of manufacture/Baujahr <input type="text"/>

## Register Your Product and Warranty Online

To register your product through the Internet, simply go to the Support section on [www.major-equipment.com](http://www.major-equipment.com). Completing the information, either online or with the product warranty card, will ensure the customer that their product receives all post sales service and important product information.

The MAJOR machine is warranted for 12 months with farmers' use, 6 months with contractors. No warranty is given where the machine is being used as a hire machine. Warranty is against faulty workmanship or parts with the exception of float balls, seals, valve tongues, valve rods and hydra pneumatic ram.

Warranty covers parts only: All parts must be returned to the manufacturer. No warranty can be considered unless parts are returned. All replacement parts will be supplied on a chargeable basis until warranty has been accepted.

## Tractor Requirements



Attaching the machine to the tractor will influence the stability and manoeuvrability of the tractor. Please consult your tractor manual for limitations on weight and towing ability of the tractor. The slurry applicator is designed to be attached to the Back Door of the tanker.

It is the operator's responsibility to ensure that the tractor is suitable for the machine. Always consult your tractor's manual for any further information required.

Consult the Macerator Operator's Manual for oil flow requirements.

Road light kit requires a 12V 7 pin socket.

# Safety

The operator's manual also explains any potential safety hazards whenever necessary in special safety messages that are identified with the word, CAUTION, and the safety-alert symbol

## Hazards associated with operating Slurry Applicators

### Gas Hazards

Filling the tanker and spreading slurry releases gases into the atmosphere. The gases present include methane, carbon dioxide, ammonia and hydrogen sulphide. All these gases are unpleasant, however hydrogen sulphide is extremely poisonous both to people and animals. It affects the nervous system causing symptoms which range from discomfort to sudden death.

### Crush Hazard

Bystanders can be injured when the machine is lowered or when the wings are raised/lowered. Keep clear of machine when moving it.

### Pinch Hazard

Pinch points are created when two objects move together, with at least one of them moving in a circle. Ensure all guarding is present.

### Wrap Hazard

Any exposed, rotating machine component is a potential wrap point. Injuries usually occur when loose clothing or long hair catch on and wrap around rotating parts such as PTO shafts or Drive shafts on the machine. Ensure all guarding is present.

### Thrown objects Hazard

Slurry Applicator expels liquid at force, note that stones & other items may be in the slurry mix. Ensure that output nozzle is not directed at persons.

### Hydraulic Hazard

Hydraulic systems store considerable energy. Careless servicing, adjustment, or replacement of parts can result in serious injury. High pressure blasts of hydraulic oil can injure eyes or other body parts. The following precautions are crucial:

- Make certain the pump is turned off.
- Lower attached equipment to the ground.
- Confirm that load pressure is off the system.

A pinhole leak in an hydraulic hose is a serious hazard. A leak may not be visible, and the only sign may be a few drops of fluid. Never inspect hydraulic hoses with your hands, because a fine jet of hydraulic fluid can pierce the skin.

### Noise Hazard

Please note that the machine is normally used outdoors and that the position of the operator is seated in the driving seat of the tractor. It is advisable to consult the prescriptions listed in tractor operator and maintenance manuals.

### Slips trips and falls Hazard

Slips and falls often result from:

1. Slippery footing on the ground
2. Cluttered steps and work platforms.

The potential for slips and falls can be greatly reduced by using good judgement and practicing good housekeeping on and around equipment.

## Operating Safely



Users should become thoroughly familiar with the contents of this manual before using, servicing and mounting the implement to the tractor and all other pertinent operations. Never wear jewellery, loose clothing such as ties, scarves, belts, unbuttoned jackets or dungarees with open zips which could become caught up in moving parts.



Always wear approved garments complying with accident prevention provisions such as non-slip shoes, ear muffs, goggles and gauntlets. Wear a jacket with reflecting stickers if the implement is used near public highways.



Consult your retailer, the Labour Health Service or your nearest equivalent authority for the information about the current safety provisions and specific regulations with in order to ensure personal safety.



**ALWAYS DISENGAGE PTO, SWITCH OFF THE TRACTOR ENGINE AND ENGAGE THE PARKING BRAKE BEFORE MAKING ADJUSTMENT TO THE MACHINE.**

**Sound Levels:** The average measured sound-pressure level of a slurry applicator is less than 70 dB (A). Take care, the average sound-level of a slurry tanker can be more than 80 dB(A), it is therefore recommended that you wear ear protection.

## Driving safely on public roads

When the machine is used for transport on the public road, it must conform to all road safety regulations. For these laws the Dribble Bar/Trailing Shoe have a road lighting kit fitted. A topped off reflective triangle can also be fitted if required. Transport on the public road is only allowed when both wings are folded up and locked in position. Ensure the machine is coupled together correctly and pins are retained.

**Hydraulic connections:** Check connections are clean before attaching, ensuring correct fitment and prevention of internal damage.

**Foldable parts:** Do not allow people in the working area when folding or unfolding wings as there could be serious injury and or loss of limb. Lock wings in position after folding. Take account of the stability of the tanker while driving with a coupled Slurry Applicator. Ensure tractor is weighted correctly to balance steering.

## Transport on a Trailer

Both wings of the Slurry Applicator must be secured when transported on a trailer. Be aware of the total height and width of a trailer with load.

## General Precautions

The following rules summarise a practical approach to disposal of slurry from tanks:

- When filling/emptying tanker make sure that the area is well ventilated.
- Work in conjunction with a second adult person - preferably keeping a watch from outside the house if you have to enter to move the tanker etc.
- Avoid vigorous agitation in confined spaces and do not allow slurry to rise within 300mm of the slats or covers.
- Drowning is the most common cause of death involving slurry, if slats are removed, cover exposed areas of the tank beside the pump to avoid falling in.
- Keep children safely away from the work site. Animals should be moved out of the shed before starting work.
- Never enter an underground tank without an independent air supply and lifeline attached.
- Avoid smoking and do not use naked flames as slurry gases are highly flammable.
- Beware of the risk of back injury if you need to lift slats in the shed.

**The most effective defence against the slurry gas threat is common sense and following the rules above because it is fair to assume that gas is present in all cases.**

**Danger! Slurry gases can kill!**



## Workstation

The operator must remain seated while working the machine. Always ensure the PTO has been turned off and the parking brake applied before leaving the tractor cab. The operator must always apply the parking brake, and turn off the engine before leaving machine or carrying out maintenance.



**NEVER OPERATE THE HYDRAULICS WITH THE TRACTOR SWITCHED OFF**

## Operating conditions

While operating the machine on hilly or sloping ground extra precautions must be taken by the operator as the fluid moves inside the tanker. It is important to remember that the centre of gravity of the complete machine with the slurry applicator changes. Wet ground may also affect tanker stability. It is advisable to drive up and down the slope as oppose to across the slope.



Always check that any imminently dangerous conditions have been eliminated before using the machine. Ensure all guarding is present & the operator is fully aware of the operations of the machine.

## Product Specification

Model	MJ91-750 Dribble Bar	MJ91-1000 Dribble Bar	MJ81-750 Trailing Shoe
Working Width	7.5m (24' 7")	10.1m (24' 7") (10.3m o/a)	7.5m (24' 7")
Transport Width	2.2m (7'2")	2.2m (7'2")	2.4m (8')
Wing pivot	100°	100°	100°
Height	2.8m (9' 2")	2.4m	2.9m (9' 6")
No. of outlets	30	40	30
Weight (incl back door)	645kg	912kg (w/o backdoor)	755kg, 810kg(incl stabiliser kit)
Macerator	Vogelsang ExaCut 30/40	Vogelsang ExaCut 40/40	Vogelsang ExaCut 30/40
Spools required	2 double acting hdr spools	2 double acting hdr spools	2 double acting hydraulic spools
Back door size	20" + 30"	N/A	30"

## Machine Safety Labels

The machine safety labels shown in this section are placed in important areas on your machine to draw attention to potential safety hazards.

On your machine safety labels, the words DANGER, WARNING, and CAUTION are used with a safety-alert symbol. DANGER identifies the most serious hazards.

**WARNING**

**DO NOT GO NEAR LEAKS**

- High pressure oil easily punctures skin causing serious injury, gangrene or death.
- If injured, seek emergency medical help, immediate surgery is required to remove oil.
- Do not use finger or skin to check for leaks.
- Lower load or relieve hydraulic pressure before loosening fittings.

High oil pressure hazard

**ATTENTION**

**TO PREVENT SERIOUS INJURY OR DEATH**

- Do not operate or work on this machine without reading and understanding the Operator's Manual.
- Avoid unsafe operation or maintenance.
- If manual is lost, contact your nearest dealer for a new manual.

To avoid injury, read the manual

Do not insert hands during operation

**ATTENTION**

**KEEP CLEAR WHEN RAISING & LOWERING WING**

Moving parts

**GREASE**  
ABSCHMIEREN  
GRAISSE

Grease points

Don't run macerator dry

Read the manual before opening

Lift before reversing

**MAJOR**

**HYDRAULIC HOSES CABLE-TIE COLOUR KEY**

MACERATOR	1 BLACK 2 BLACK
FREE FLOW RETURN	3 YELLOW
REAR GATE VALVE	1 GREEN
WINGS	1 RED - DOWN MACERATOR GV OPEN 2 RED - UP MACERATOR GV CLOSE

DIVERTER VALVE:  
POWER ON - OPERATES MACERATOR GV  
POWER OFF - OPERATES WINGS

Cable-tie key DB

WINGS UP MACERATOR GATE VALVE CLOSES	WINGS DOWN MACERATOR GATE VALVE OPENS
WINGS UP MACERATOR GATE VALVE CLOSES	WINGS DOWN MACERATOR GATE VALVE OPENS

**MAJOR**

**HYDRAULIC HOSES CABLE-TIE COLOUR KEY**

MACERATOR	1 BLACK 2 BLACK
MACERATOR GV (ENERGISED)	1 BLACK OPEN 2 BLACK CLOSE
FREE FLOW RETURN	3 YELLOW
REAR GATE VALVE	1 GREEN
WINGS	1 RED - DOWN ENERGISED - SPREAD 2 RED - UP DEENERGISED - TRANSPORT

WINGS UP TRANSPORT	WINGS DOWN SPREAD
WINGS UP TRANSPORT	WINGS DOWN SPREAD

Cable-tie key TS



## **EEC certificate of conformity for machines**

*(conforming to Directive 2006/42/EC)*

Name of Manufacturer: Major Equipment Ltd  
Address: Coolnaha, Ballyhaunis, Co. Mayo, Rep of Ireland

Tel. +353949630572  
Fax +353949630788

*declares in sole responsibility that the product:*

**Machine description and function:** The slurry applicator is an agricultural machine which is exclusively developed for the injection of fluids in or onto the soil with a limited amount of solid matter, like water or slurry.


**Model:** Slurry Applicator (Dribble Bar (MJ91) and Trailing Shoe (MJ81))

**Type:** \_\_\_\_\_ **Serial number:** \_\_\_\_\_

- **THE SUPPLY OF MACHINERY (SAFETY) REGULATIONS 2008.**
- **Construction and Use regulations 1986 (UK).**
- **EN 707: 1999 + A1: 2009.** Agricultural machinery. Slurry tankers.
- **ISO 4254-1: 2008.** AGRICULTURAL MACHINERY - safety part.
- **S.I. No. 299 of 2007,** Safety, Health and Welfare at Work (General Application) Regulations 2007 (Ireland).
- **Health & Safety at Work, etc. Act 1974 (c.37) (UK).**
- **Machinery Directive 2006/42/EC.**
- **EN ISO 13857 - Safety of machinery: Safety distances to prevent hazard zones being reached by upper and lower limbs.**
- **ISO 12100-2: 2003 SAFETY OF MACHINERY - general principles for design.**
- **ISO 14121-1: 2007 SAFETY OF MACHINERY risk assessment.**
- **ISO 3767-1: 1998 + A1-2008.** Tractor and machinery for agriculture and forestry. Symbols for operator controls and other displays.

Technical file compiled by: Alex Kolchanov (c/o Major Equipment Ltd)

I hereby certify on behalf of Major Equipment Int. Ltd., that this machine when properly installed and operated correctly, complies with all the essential Health & Safety requirements of all legislation referred to above.

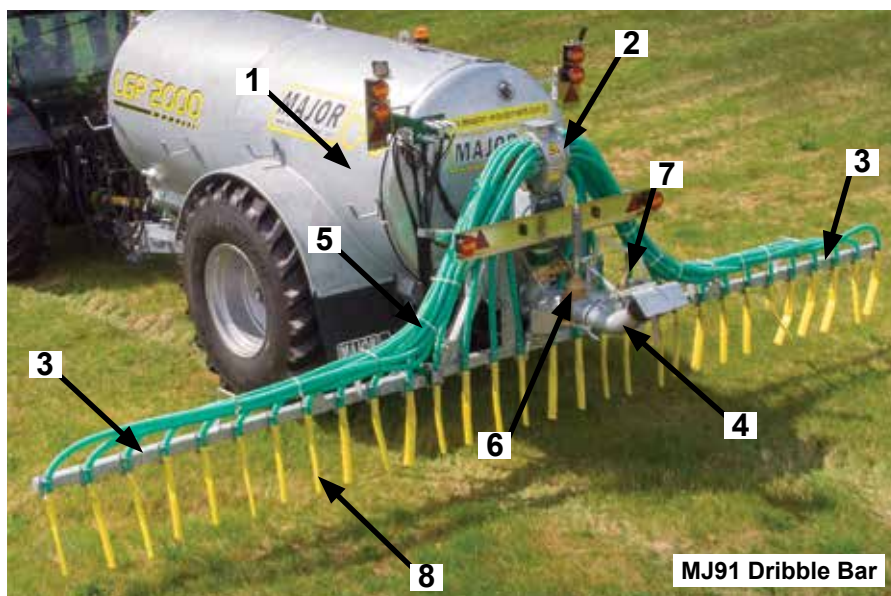
Signed:  \_\_\_\_\_ Place: Coolnaha, Ballyhaunis, Co. Mayo, Rep of Ireland  
Date: 13/12/2019  
Name: John Murphy  
Position: Managing Director

## Key to main parts



MJ81 Trailing Shoe

1	Tanker
2	Macerator
3	Wing
4	Splash plate
5	Slurry distribution pipes
6	Splash plate gate valve
7	Rear fill point
8	Dribble slurry hose
9	Slurry injecting shoe
10	Trailing Shoe twist plate
11	Slurry applicator mounting bolts
12	Parking stands
13	Trailing shoe lowering ram



MJ91 Dribble Bar



# Operating the machine

The MAJOR Dribble Bar and the Trailing Shoe slurry applicators are mounted on the 30"/20" back door of the slurry tanker or directly on the back of the tanker. Depending on the width and version of the machine, the slurry is pushed under pressure from the vacuum tanker via the stone trap and through the Macerator/Distributor unit into the slurry distribution pipes. The Macerator chops the slurry into a fine pulp and distributes it evenly between the hoses.

The Major Dribble Bar does not come in contact with the ground. Slurry dribble hoses (layflat hoses) are hanging just above the ground. The hose can be cut to a desired height.

The Major Trailing Shoe model rests on the ground on its own weight with the slurry placed in the track left by the shoe.

For optimum application, the slurry must be well agitated before filling the tanker. The macerator is more prone to blockages if the slurry is thick and heavy with grass. The two side parts (wings) of the slurry applicators are foldable, so the machine is capable for transport on the public roads. The distributor, frame lift and fold up cylinders are hydraulically operated.



Transport position



Working position

## Inspections before Use

Before transporting the combination of slurry tanker and slurry injector, the following points should be checked and followed:

- Check the entire technical conditions of the machine.
- Check the locking pins of the linkages and wings are secure.
- Check the hydraulic system for leakages.
- Check the gate valves and couplings for leakages
- Check the lights are operating correctly.

### Retro-fitting a Slurry Applicator to a Tanker

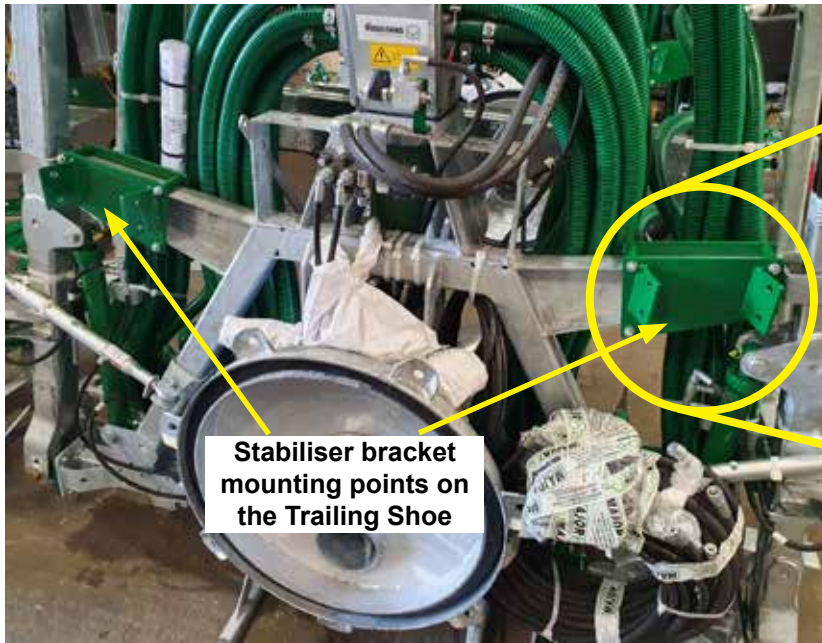
Due to the variations in sizes and types of Back doors, seal types and models of tankers the Slurry Applicator might require an additional support for stability and trouble free operation.

There are various types of support brackets available.

### Retro-fitting to a MAJOR tanker using existing Light Brackets.

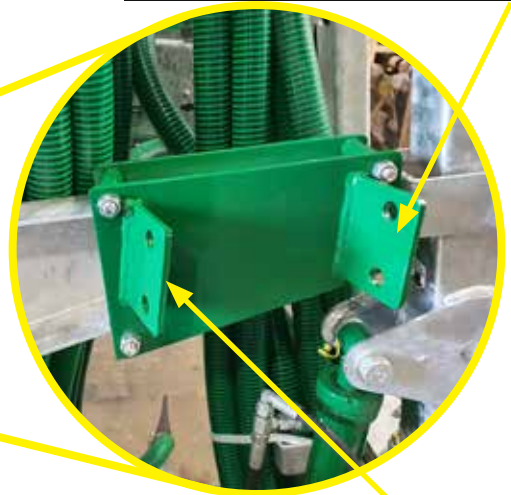
Use light brackets as an anchor point to secure the Slurry Applicator.

See diagrams below. Complete parts list is provided in the Spare Parts section of this booklet (STB01-KIT3).



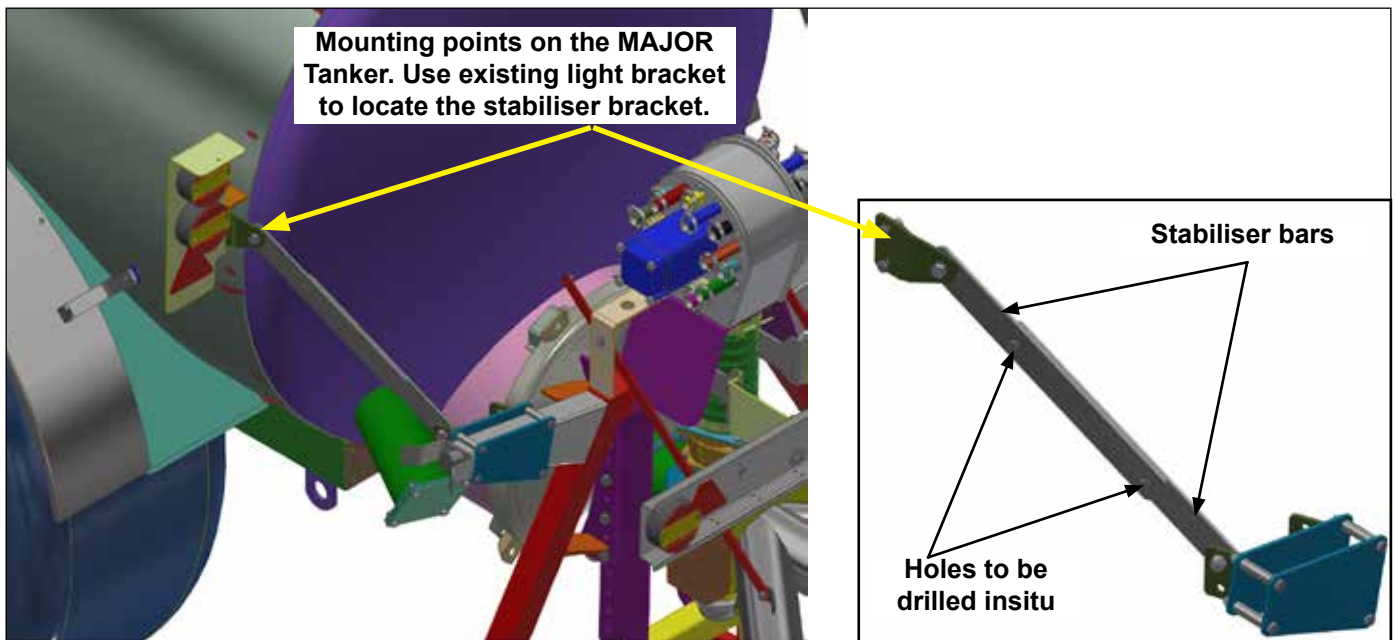
**Stabiliser bracket mounting points on the Trailing Shoe**

**Location of stabiliser bars on LGP tankers with capacity greater than 2150 gallons**



**Location of stabiliser bars on LGP tankers with capacity less than 2050 gallons**

Stabiliser bars will require to have holes drilled insitu depending on the model and specification of your tanker.



**Mounting points on the MAJOR Tanker. Use existing light bracket to locate the stabiliser bracket.**

**Stabiliser bars**

**Holes to be drilled insitu**

## Starting Regulations



Always check that any imminently dangerous conditions have been eliminated before using the machine. Ensure all guarding is present and the operator is fully aware of the operations of the machine

## Coupling the Slurry Applicator to the Tanker



Never couple or manoeuvre if somebody is beside the slurry tanker or the slurry applicator. Only attach or detach hydraulic connections when the tractor is switched off. Make sure the hydraulic valves and electric cables are coupled in a way that there is not a chance of damage.

The Slurry Applicator is designed to be attached to the tanker via Rear 30" or 20" Inspection door. If the Slurry Applicator is supplied coupled to a tanker then it is fully connected and ready to use. If the unit is being retrofitted to a different tanker the following steps must be completed.

Connect the following while referring to the image below.

- Remove the existing door from the tanker;
- Mount the slurry applicator to the 30" or 20" port;
- Tighten the Hook bolts (4-7 depending on the model);
- Connect Hydraulic hoses:
  - 1/2" Male Connections Macerator Hydraulic Motor. 5/8" hoses x2.
  - 1/2" Female Connection Macerator Hydraulic Motor Drain. 1/4" hose x1.
  - 1/2" Male Connection Fold out Wings Cylinder (operates the macerator gate valve). 3/8" hoses x2.
  - 1/2" Male Connector for rear gate valve. 3/8" hose x1.

Hydraulic hose connections	MJ91 Dribble Bar	MJ81 Trailing Shoe
Direct	Macerator	Wings & Headland lift
Through a 6 port diverter	Wings & Macerator GV	Macerator & Macerator GV

- Couple the 4" hose feed from the slurry tanker to the macerator (optional);
- Take both support legs away once the slurry injector is coupled and secured in place;
- Attach the lights cable to the socket (standard 7-pin plug).



The Major Tanker is designed to be balanced correctly when coupled and uncoupled to the Slurry Applicator. If you are attaching the unit to a third party tanker, please consult the manufacturers manual for further information on stability.

A splash plate can attach onto the rear of the slurry applicator, therefore the slurry applicator need not be removed.



**Operate Hydraulic Rams smoothly using tractor spool as linkage will drop quickly.**



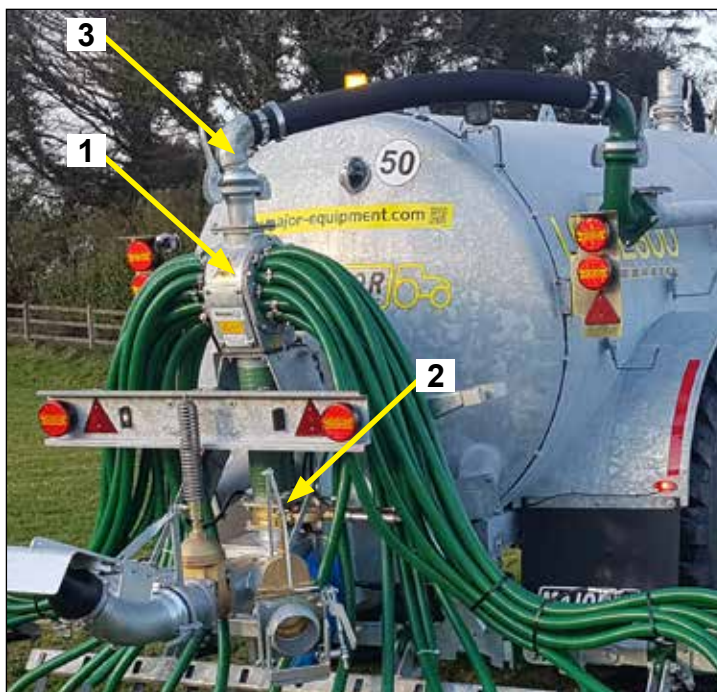
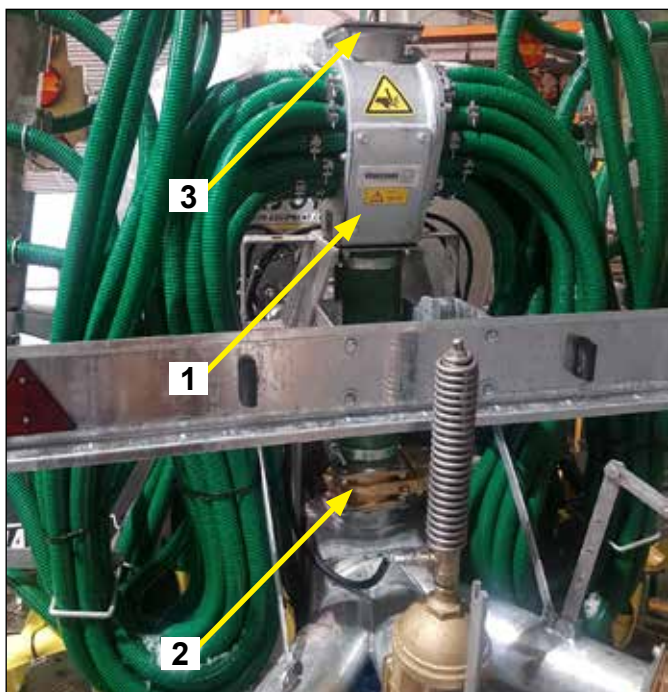
## Uncoupling the Slurry Applicator from the Tanker

To uncouple the slurry applicator from the tanker repeat the Coupling steps in reverse order. The Slurry Applicator should be uncoupled on stable, flat and horizontal ground. If the slurry injector is stored with both wings folded up, then those parts should be locked. If the machine is not being used for a prolonged period of time, then it is recommended to open the wings out, this will prevent the corrosion damage to the rods of the hydraulic rams. Keep the following points in mind when uncoupling:

- Put the support legs in the right place and lock in position.
- Switch off the tractors engine.
- Ensure the hydraulic valves are not pressurised, uncouple them from the slurry tanker. Put the valves in position to guarantee they remain clean.
- Uncouple the light socket from the slurry tanker and store the cable.
- Remove the Slurry Applicator together with the Back Door and replace with a Standard Back Door.

The macerator is fed through the Back Door and regulated by a gate valve. Alternatively it can be fed through a 4" inlet pipe at the top.

1	Macerator
2	Primary feed gate valve
3	Alternative feed



## Coupling the tanker to the tractor

Connecting the Tanker must be carried out in accordance with the Tanker Operator's Manual.

1. Connect Hitch.
2. Connect Hydraulic hoses.
3. Connect the Tractor Control box.
4. Attach the cable of the lights to the socket (standard 7-contact plug).
5. Connect Brake hoses.
6. Connect PTO Shaft as described in Tanker manual after checking for length.

## Operating the Machine



Do not operate the macerator motor without slurry in the distributor or damage can occur.



Read and understand the Macerator Operator's Manual before operating the machine.

### Dribble Bar:

- Lower the wings by operating the spool valve.
- Start the PTO to pressurise the tank.
- Open the Macerator Gate valve by moving the toggle switch **2** to the "Macerator Gate Valve" position on the Control Box by the same Spool valve as above. (1 Red cable tie)
- Macerator GV will stay open until the operator moves the spool in the opposite direction.
- Start the Macerator by operating the spool valve.
- When finished, repeat the steps in reverse.

### Trailing Shoe:

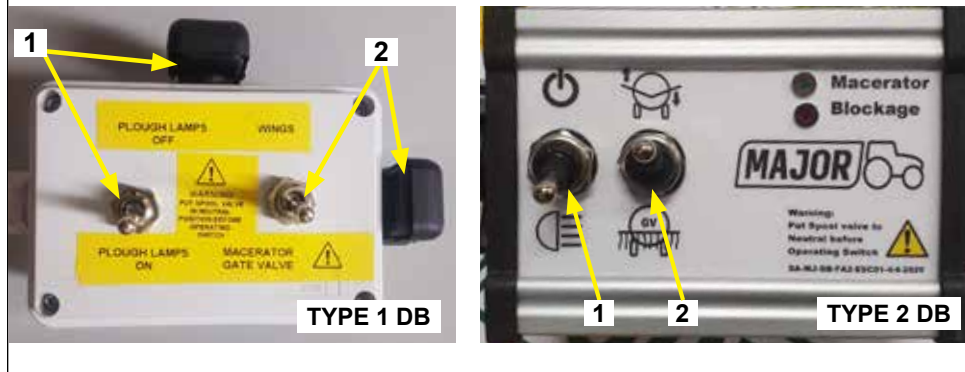
- Move the toggle switch **4** into the "Wings Spread" position and lower the wings by operating the spool valve. **NOTE:** Make sure to put Wings spool in floating during operation.
- Start the PTO to pressurise the tank.
- Move the Toggle switch **3** into the "Macerator Gate Valve" position.
- Open the Macerator GV by operating the spool valve (1 Black cable tie).
- Macerator GV will stay open until the operator moves the spool in the opposite direction.
- Move the toggle switch **3** to the "Macerator" position and operate macerator by operating the spool valve.
- When finished, repeat the steps in reverse.



Put spool in neutral position before operating the switches on the Control Box.

- |   |                    |
|---|--------------------|
| 1 | Work lamps         |
| 2 | 6 port diverter DB |
| 3 | 6 port diverter TS |
| 4 | Wings TS           |

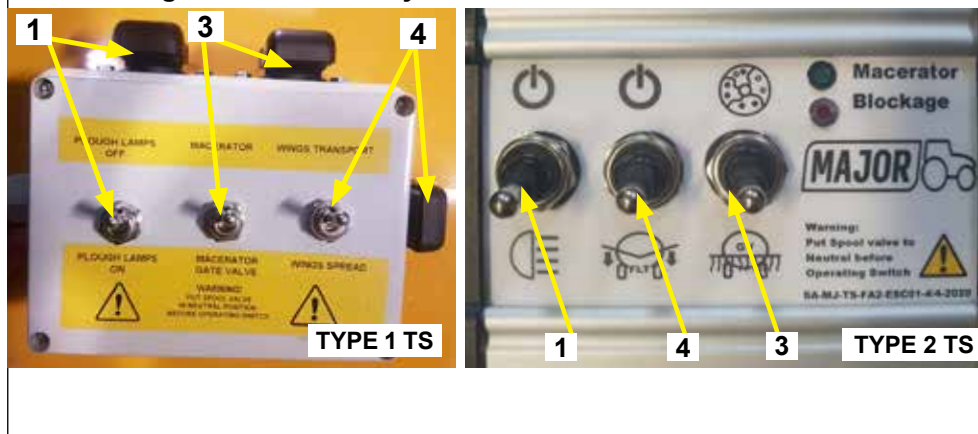
### MJ91 Dribble Bar cable-tie key and Control Box



HYDRAULIC HOSES CABLE-TIE COLOUR KEY	
MACERATOR	1 BLACK 2 BLACK
FREE FLOW RETURN	3 YELLOW
REAR GATE VALVE	1 GREEN
WINGS	1 RED - DOWN MACERATOR GV OPEN 2 RED - UP MACERATOR GV CLOSE
DIVERTER VALVE: POWER ON - OPERATES MACERATOR GV POWER OFF - OPERATES WINGS	

The hydraulic hoses are marked with colour cable ties for ease of identification.

### MJ81 Trailing Shoe cable-tie key and Control Box



HYDRAULIC HOSES CABLE-TIE COLOUR KEY	
MACERATOR	1 BLACK 2 BLACK
MACERATOR GV (ENERGISED)	1 BLACK OPEN 2 BLACK CLOSE
FREE FLOW RETURN	3 YELLOW
REAR GATE VALVE	1 GREEN
WINGS	1 RED - DOWN ENERGISED - SPREAD 2 RED - UP DEENERGISED - TRANSPORT



## Trailing Shoe Tine assembly setup

When operating the Trailing Shoe Slurry Applicator the tine assembly must be positioned at approximately 55° to the ground. This will allow an even distribution of slurry and the trailing shoe will follow the contours of the ground more efficiently.



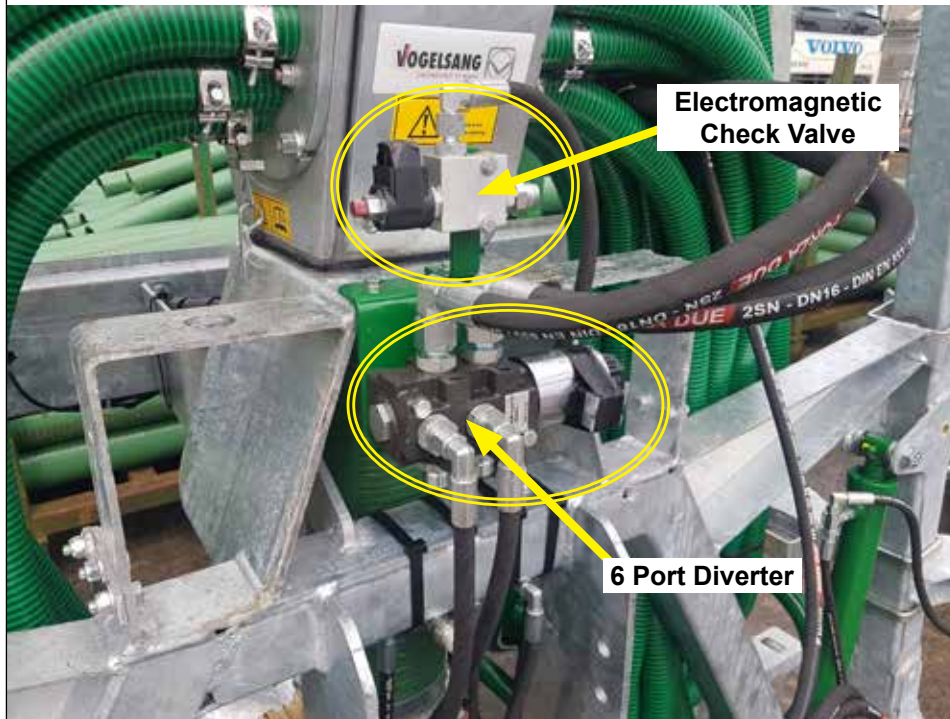
**When finished**

- Stop the PTO shaft.
- Switch off the Macerator motor.
- Close the Macerator GV.
- Raise the wings by operating:
  - Toggle switch 2 to “Wings” position on **Dribble Bar**
  - Toggle switch 4 to “Wings Transport” position on **Trailing Shoe**.

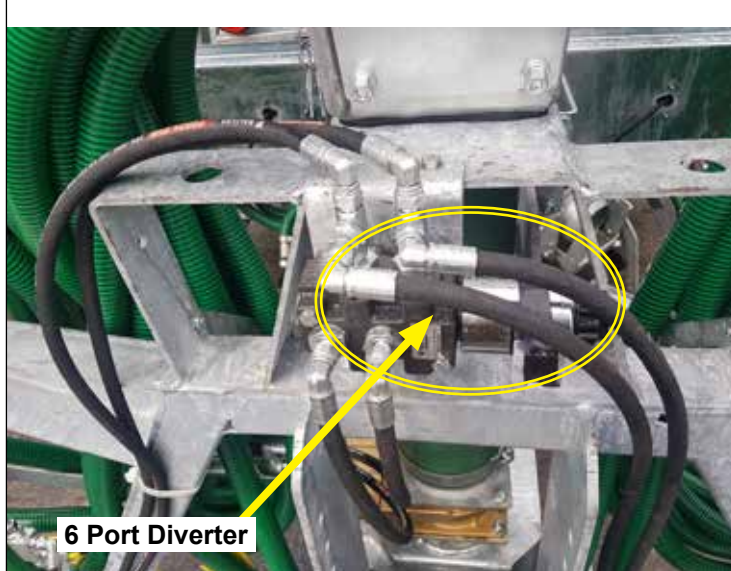


Put the toggle switch 4 on a Trailing Shoe into “Wings Transport” position for Road Use.

**MJ81 Trailing Shoe**



**MJ91 Dribble Bar**





## Turbo Pump



Do not engage Turbo Pump gears while PTO is turning or damage can occur to the machine. Ensure the levers are detented in position.



### Handles in neutral position

Centrifugal pump handle on the left vacuum pump handle on the right

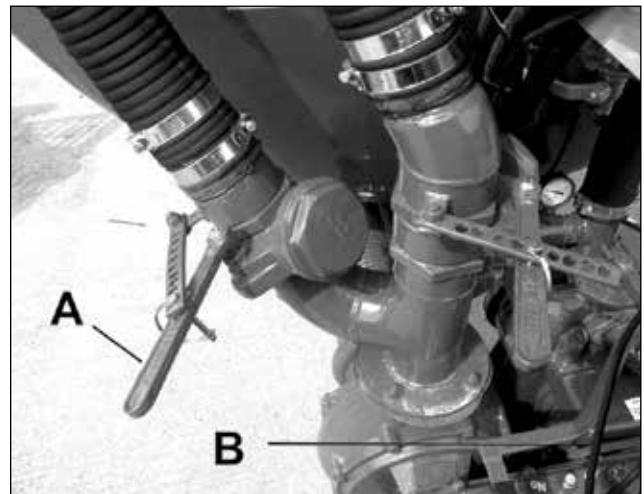


### Handles in operating position

Centrifugal pump handle on the left vacuum pump handle on the right.

## Slurry Flow Controllers

- Adjust the flow controllers to optimise the output of the pump against the forward speed of the machine.
- Handle 'A' controls the macerator feed valve and can be left in position as the hydraulic gate valve feeding the macerator is closed when filling tanker.
- Handle 'B' controls the macerator overflow and can be varied to remove the excess of slurry when spreading.
- Handle 'B' is opened fully when filling tanker through the centrifugal pump



## Filling tanker with Turbo Pump

- Connect vacuum hose to either turbo filler inlets located on side of tanker.
- Close stone trap gate valve
- Open fully, handle 'B' on the slurry flow controller
- Place vacuum pump into vacuum position and engage both vacuum pump and centrifugal pump into gear
- Start PTO & prime centrifugal pump with slurry
- Once Centrifugal pump engages, continue to fill tanker when tanker is full, Slurry will exit through the yellow overflow hose & into the centrifugal pump. This will prevent more slurry from entering the tanker.
- Close gate valve and disengage PTO.

## Vogelsang Macerator



The Macerator Operator's Manual is supplied with this machine, read and understand it fully before operating the machine.



### ATTENTION!!!

The operator must switch off the spool before reversing rotation on the macerator motor. This is to prevent any torque reaction in the macerator.



To ensure cutting knives remain sharp, please change rotation on each pass or each load.



Read and understand the Maintenance section of the Vogelsang Macerator Manual before opening the macerator, pay particular attention to sections "Removing the rotor from the hydraulic motor", "Tensioning the eccentrics" and "Replacing the wear parts".

## Troubleshooting

Fault	Cause	Remedy
No slurry is going to the macerator	Macerator gate valve closed	Open the gate valve
	The tank is not pressurised	Start the PTO pump
Macerator will not spin	Low flow rate/ Oil pressure	Check hydraulic flow rate set to running specifications
	Macerator shear plate blocked	Empty macerator by opening bottom stone trap. Open inspection port and clear any blockages.
Macerator vibrates	Rotor runs too slowly	Check the hydraulics
	Rotor is clogged	Clean the Macerator
	Ventilation is blocked	Clean the ventilation ducts from outside using a water hose
Cutting force insufficient	Liquid manure flow rate excessive	Reduce the pump speed
	Cutting knives worn	Replace the cutting knives
	Pre-tensioning part(s) defective	Replace pre-tensioning part(s)
	Cutting knives do not move	Make cutting knives operational
	Rotor runs too slowly	Check the hydraulics
Bad distribution	Rotor speed too low/too high	Check the oil flow rate of the PTO
	Pressure in pot too low	Increase the delivery rate quantity
	Hoses laid wrongly	Refer to hose laying diagram
	Fibrous matter under the cutting knife	Remove fibrous matter
Only a few hoses are fed with medium	Rotor blocked	If possible, reverse the rotor several times
		Remove blockage
		Check the hydraulics
Cover cannot be assembled	Excentrics are not preloaded	Preload excentrics

# Maintenance

Maintenance must be carried out by qualified personnel. To make sure that all parts of the Slurry Applicator function properly, the machine has to be cleaned regularly. Clean the machine after each use. Consult Macerator Manual (provided) for the maintenance of the Macerator.

## Check the following points regularly:

- Check the gate valves for jams damages / leakages;
- Check the hydraulic valves for damages / leakages;
- Check the hydraulic connections for damages / leakages;
- Check the hydraulic cylinders for leakages;
- Check if the fastening bolts of the linkage device are tightened.
- Check the linkage device for metal fatigue and cracks;
- Check the pivot points folding parts for damage.

## Lubricating Schedule

Standard hydraulic tractor oil can be used as hydraulic oil.

Use EP2 or an equal type of grease. Other Grease points should be lubricated on a weekly basis.

**Macerator (x1)**



**Wing Ram (2 x1)**



**Wing Hinge (2 x2)**



## Trailing Shoe model only

### Headland Lift

2 points on each:

Right, Left and Centre Tines



## MJ91-1000 Dribble Bar model only

Foldable wing arm ram  
1 point on each ram



## MJ91-1000 Dribble Bar model only

### Foldable wing arm

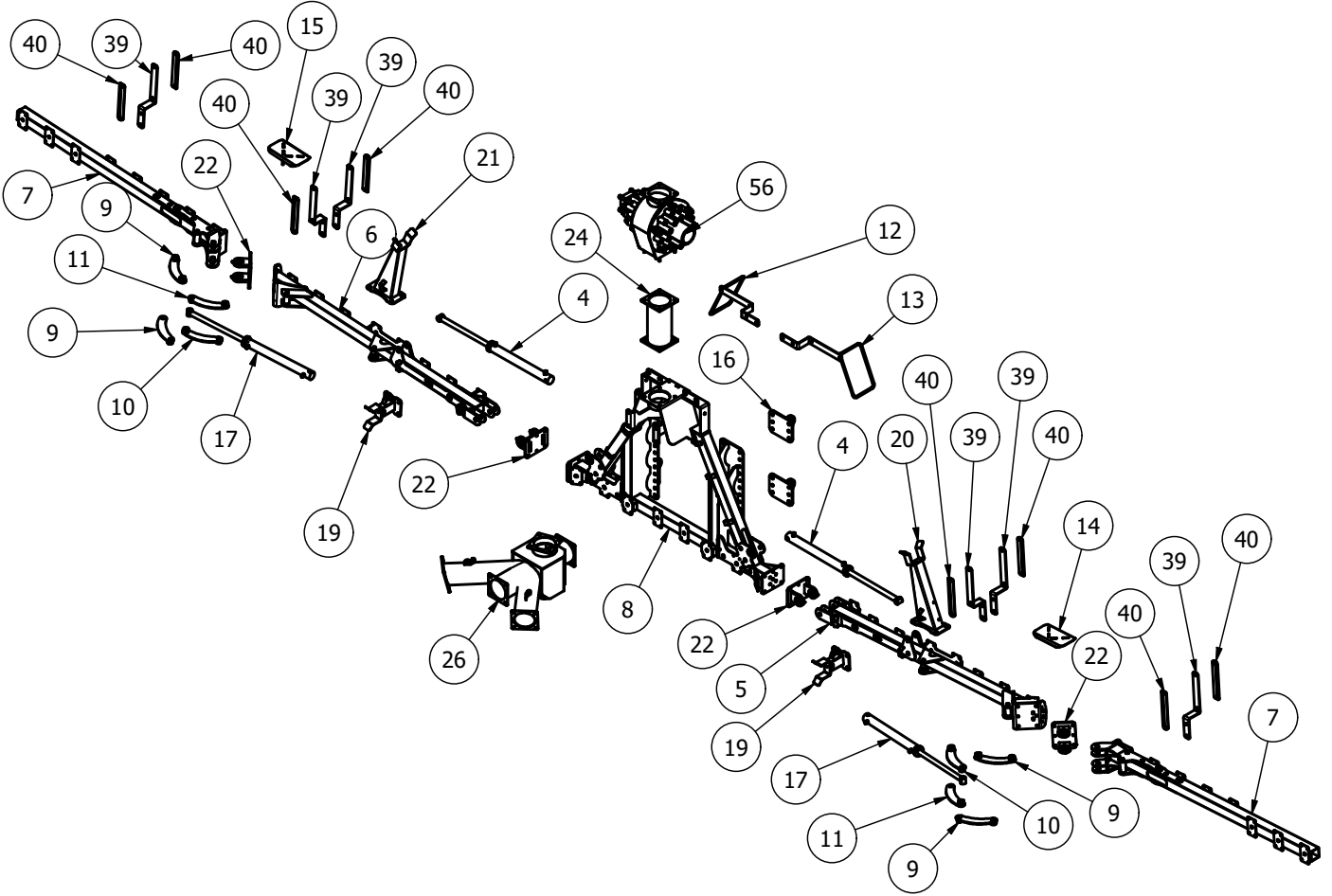
2 points on each:

Right and Left

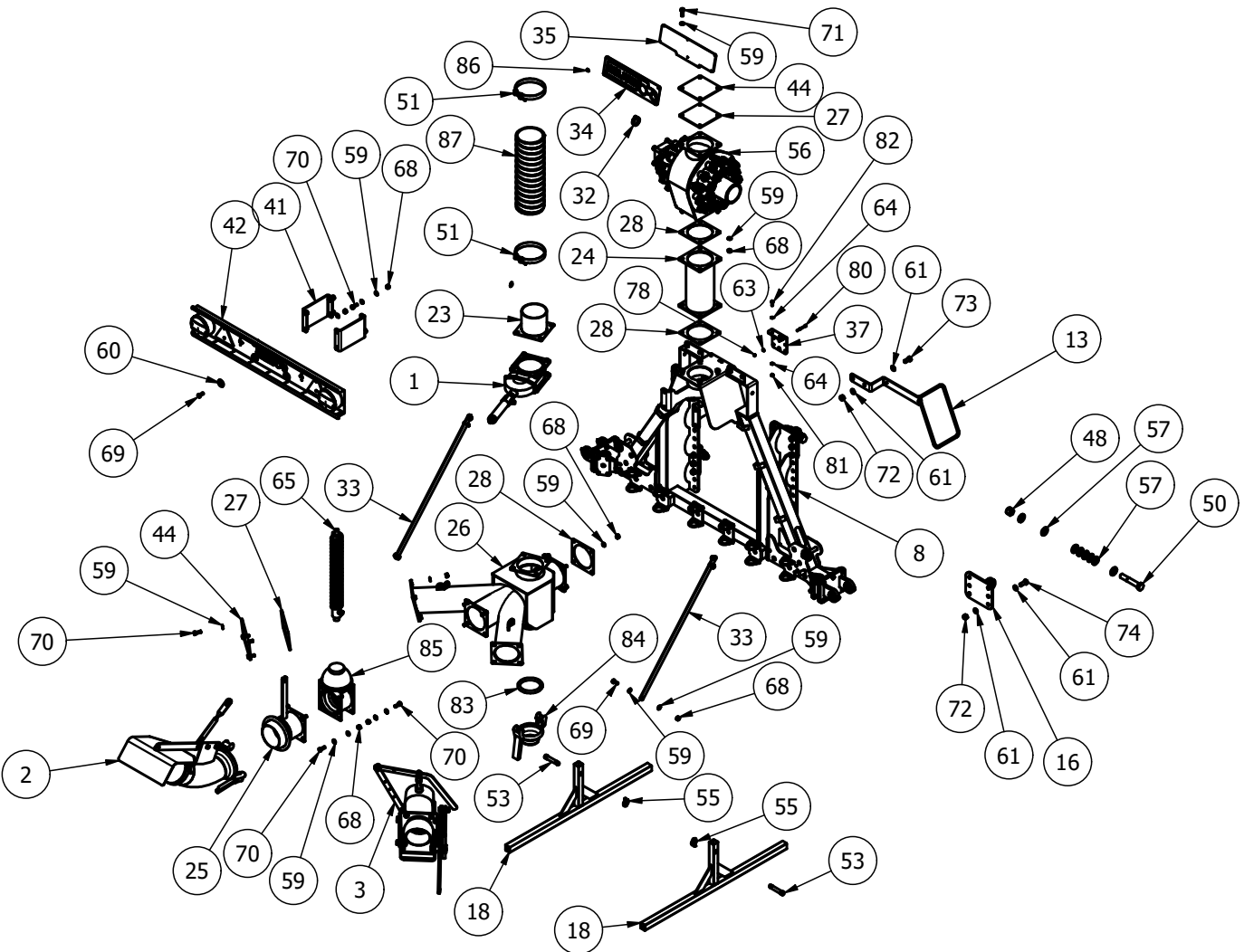
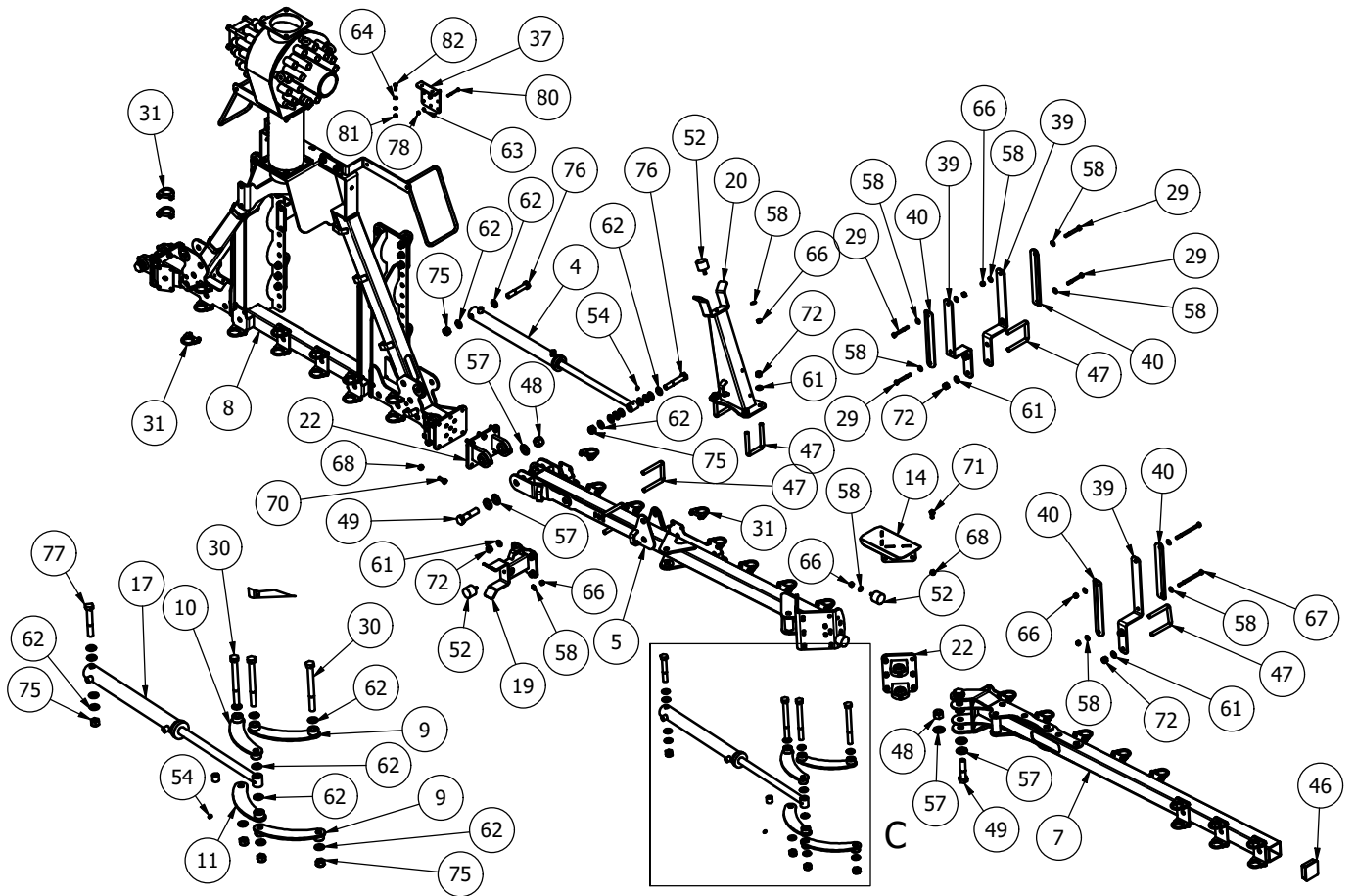


# Spare parts - MJ91 Dribble Bar and MJ81 Trailing Shoe

## MJ91-1000 Dribble Bar - General Assembly





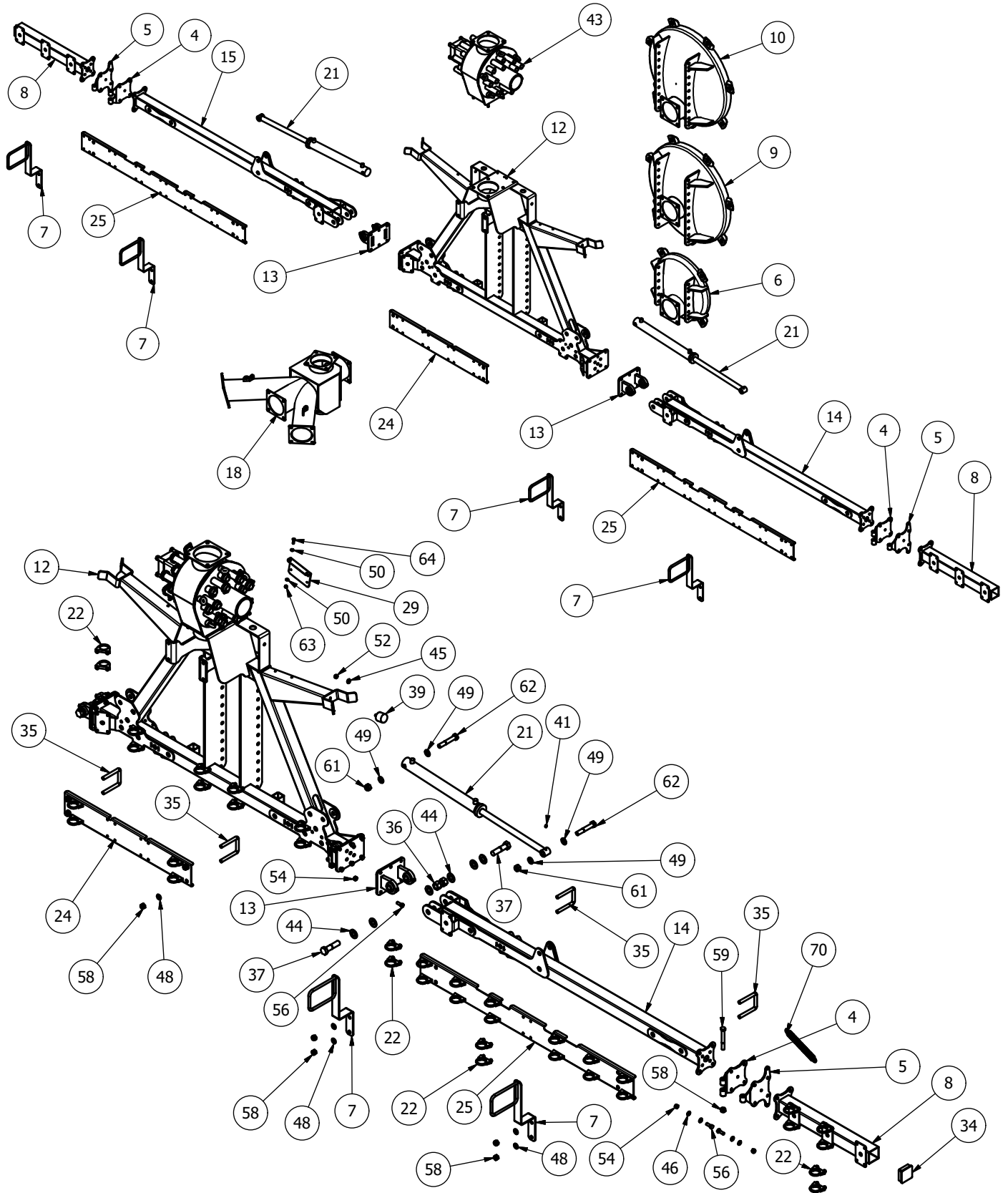




## MJ91-1000 - Parts List

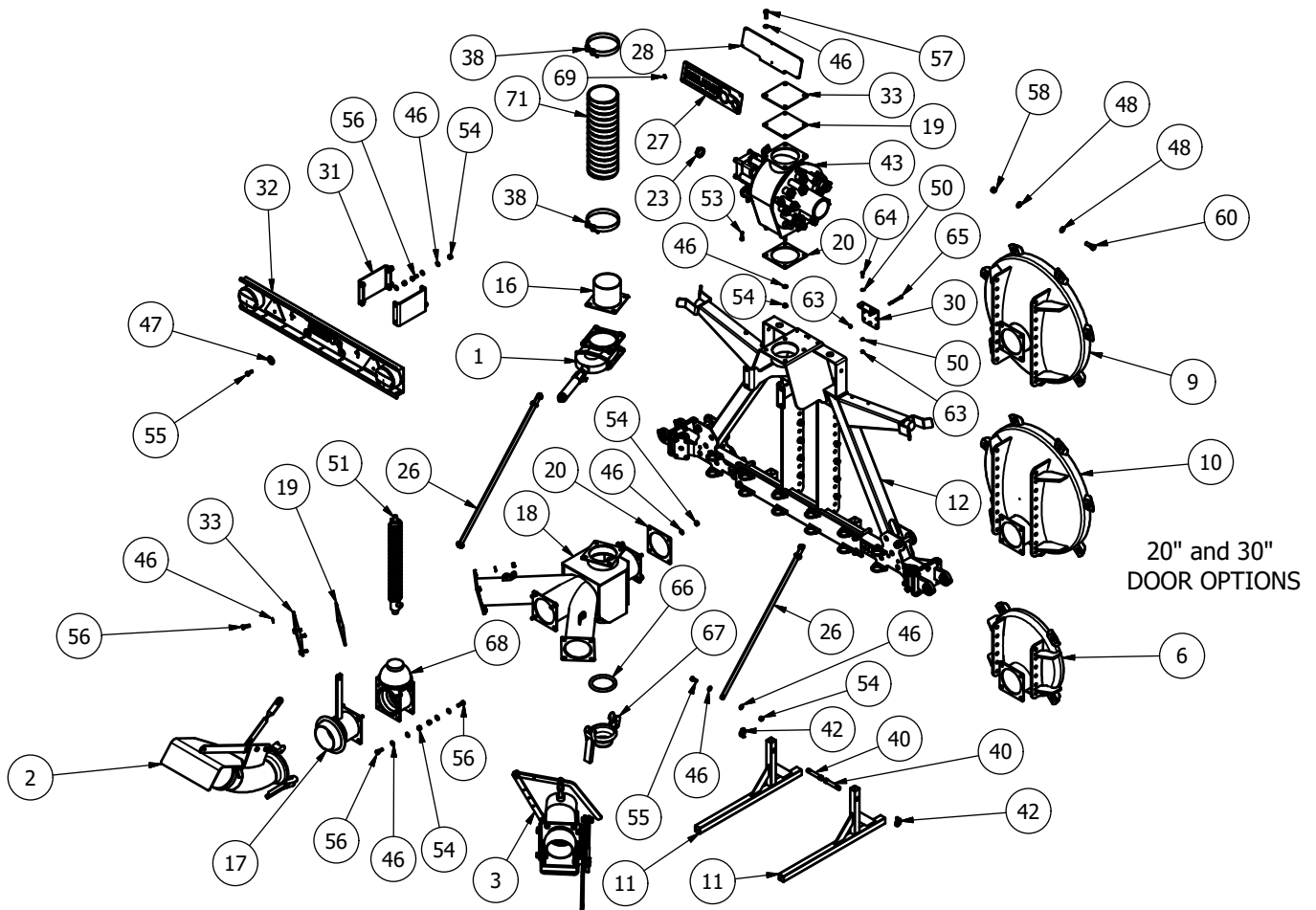
Item	Part No.	Description	Qty
1	6000072DA	6" DOUBLE ACTING GATE VALVE	1
2	OM051	SPLASH ASSY (FEMALE)	1
3	R1716-6SH	SIDE FILL COMPLETE (RH)	1
4	SA-MJ-DB10-RAM01	WING LIFT RAM	2
5	SA-MJ-DB10-WA01	RIGHT WING ARM	1
6	SA-MJ-DB10-WA02	LEFT WING ARM	1
7	SA-MJ-DB10-WA10	DOUBLE FOLD WING ARM	2
8	SA-MJ-DB12-CF01	CENTRE FRAME ASSEMBLY	1
9	SA-MJ-DB12-DF02	RAM LINK	4
10	SA-MJ-DB12-DF03	RAM LINK	2
11	SA-MJ-DB12-DF03H	RAM LINK	2
12	SA-MJ-DB12-HG03	HOUSE GUIDE	1
13	SA-MJ-DB12-HG03H	HOUSE GUIDE	1
14	SA-MJ-DB12-HG05	HOSE DEFLECTOR	1
15	SA-MJ-DB12-HG05H	HOSE DEFLECTOR	1
16	SA-MJ-DB12-PVE01	PIVOT EYE	4
17	SA-MJ-DB12-RAM01	DOUBLE FOLD RAM	2
18	SA-MJ-DB12-SDA	MACHINE STAND	2
19	SA-MJ-DB12-WA20	DOUBLE FOLD CRADDL	2
20	SA-MJ-DB12-WA30	DOUBLE FOLD CRADDL	1
21	SA-MJ-DB12-WA30H	DOUBLE FOLD CRADDL	1
22	SA_MJ_TS_CFA04	WING PIVOT EYES	4
23	TA-TS-CESPE-T07	SPLASH PLATE OUTLET	1
24	TA-TS-CESPE-T10	OUTLET PIPE	1
25	OM028-6N	6" MALE CONNECTION	1
26	SA-MJ-TS-SPE20	SPLASH PLATE EXTENSION	1
27	3722160	6" FLANGE BLANK SEAL	2
28	3722161	6" PIPE FLANGE SEAL	3
29	M10x90BZP	M10x90 BOLT	8
30	M20x210BZP	M20x210 BOLT	6
31	S8880	DIA 50mm SILENCER CLAMP	80
32	TF088	JUBILEE CLIP 38-50	52
33	SA-MJ-TS-BD13	SIDE TUBE SUPPORT	2
34	SA-MJ-TS-ML02	MAJOR LOGO	1
35	SA-MJ-TS-ML03	LOGO MOUNT PLATE	1
36	SA-MJ-DB-FA2-ESC10	JUNCTION BOX MOUNT	1
37	SA-MJ-DB-FA2-HYD10	DIVERTER VALVE MOUNT	1
38	SA-MJ-DB12-ESC10	JUNCTION BOX MOUNT	1
39	SA-MJ-DB12-HG01	HOSE GUIDE FLAT	6
40	SA-MJ-DB12-HG02	HOSE GUIDE CLAMP	8
41	TA-INJ-LB10	EXTENDER LIGHT BRACKET	2
42	TA-INJ-LB13	MAJOR TS LIGHT BAR	1
43	12T-BBS	BLADE BACK SPACER	2
44	3722170	6" PIPE FLANGE BLANK	2
45	111047	DIA 40 (1-3mm) INSERT	2
46	111227	SQ 74-78mm INSERT	2
47	150507	M16x82x120mm SQ U-BOLT	13
48	1F	1" FINE NYLOC NUT	12
49	1x4FBZP	1"x4" FINE BOLT	8
50	1x6FBZP	1"x6" FINE BOLT	4
51	5101150	HOSE CLIP 162-174	2
52	53005802	DIA 50x40xM10 BUFFER	8
53	73	CAT 1 PIN DIA 19x76mm	2
54	851	GREASE NIPPLE M8x1.25 STR	4
55	AN099/10	LINCH PIN DIA 9.5	2
56	ECL40DN40	EXACUT ECL40DN40	1
57	FW1	DIA 1" FLAT WASHER	56
58	FWM10	M10 FLAT WASHER	32
59	FWM12	M12 FLAT WASHER	72
60	FWM12XL	M12 FLAT WASHER (EX-LARGE)	4
61	FWM16	M16 FLAT WASHER	82
62	FWM20	M20 FLAT WASHER	44
63	FWM6	M6 FLAT WASHER	2
64	FWM8	M8 FLAT WASHER	8
65	HA1	6" SPRING RETURN RAM	1
66	M10	M10 NYLOC NUT	20
67	M10x150BZP	M10x150 BOLT	4
68	M12	M12 NYLOC NUT	64
69	M12x30SZP	M12x30 SET BOLT	8
70	M12x35BZP	M12x35 BOLT	42
71	M12x40BZP	M12x40 BOLT	10
72	M16	M16 NYLOC NUT	54
73	M16x35SZP	M16x35 SET BOLT	4
74	M16x40SZP	M16x40 SET BOLT	24
75	M20	M20 NYLOC NUT	12
76	M20x120BZP	M20x120 BOLT	4
77	M20x130BZP	M20x130 BOLT	2
78	M6	M6 NYLOC NUT	4
79	M6x60SZP	M6x60 SET BOLT	2
80	M6x70SKS129	M6x70 SOCKET CAP	2
81	M8	M8 NYLOC NUT	4
82	M8x25BZP	M8x25 BOLT	4
83	OM022-4	4" COUPLING 'O' RING	1
84	OMO11-4	4" FEMALE BLANK	1
85	R1706-6	6" DOME GATE VALVE	1
86	R4816LF	LARGE FLANGE RIVET	6
87	TVTE150	6" SUCTION HOSE	1

# MJ91-750-30/20 Dribble Bar - General Assembly



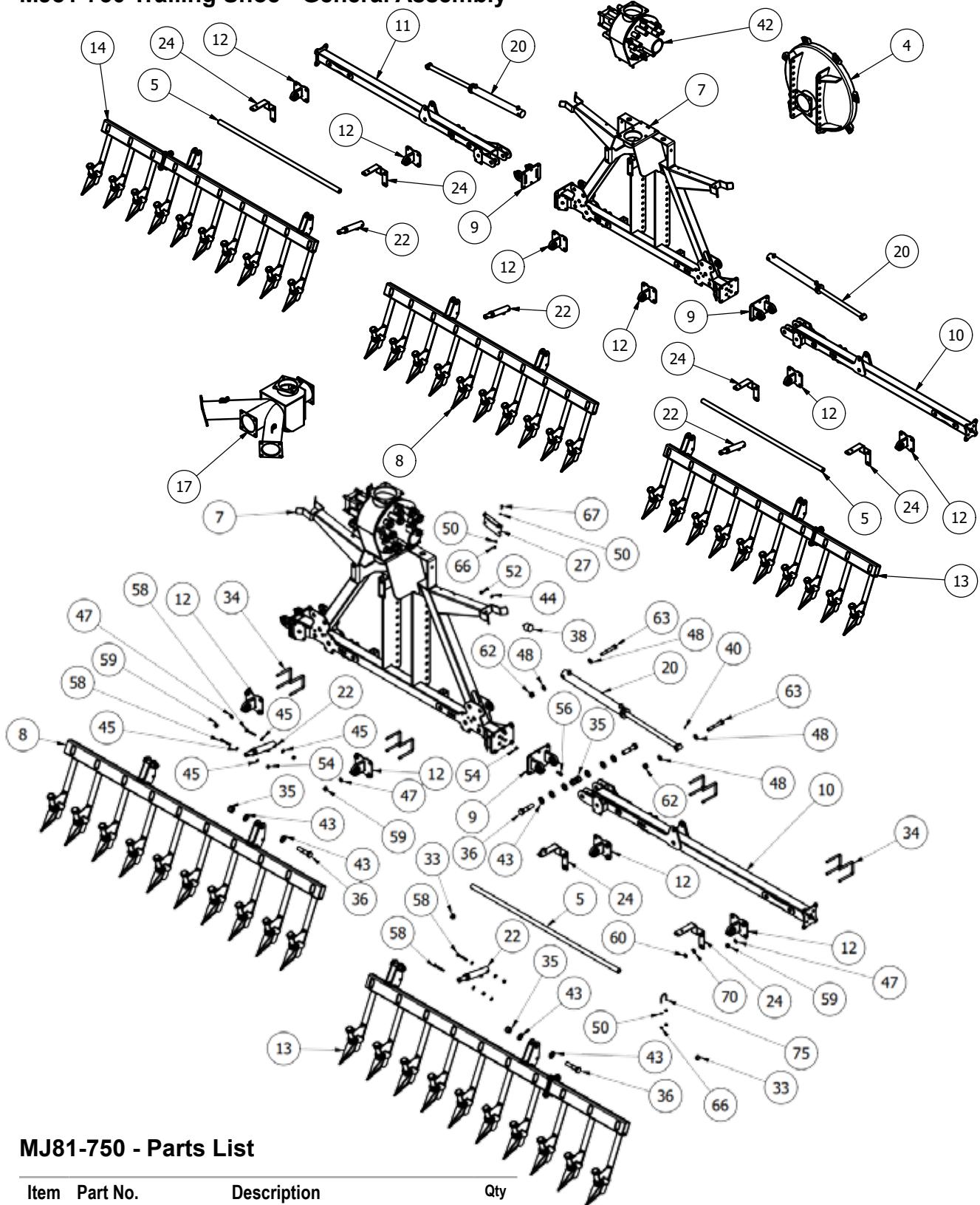
## MJ91-750-30/20 - Parts List

Item	Part No.	Description	Qty
1	6000072DA	6" DOUBLE ACTING GATE VALVE	1
2	OM051	SPLASH ASSY (FEMALE)	1
3	R1716-6SH	SIDE FILL COMPLETE (RH)	1
4	SA-MJ-DB-BKA01	BREAKAWAY PIVOT	2
5	SA-MJ-DB-BKA03	BREAKAWAY PIVOT	2
6	SA-MJ-DB-DA02	20" BACK DOOR	1
7	SA-MJ-DB-HG01	HOUSE GUIDE	4
8	SA-MJ-DB-WF20	WING EXTENSION	2
9	SA-MJ-TS-BDA02	30" STEPPED BACK DOOR	1
10	SA-MJ-TS-BDA10	30" FLUSH BACK DOOR	1
11	SA-MJ-TS-SDA	STAND	2
12	SA_MJ_TS_CFA01	CENTRE FRAME ASSEMBLY	1
13	SA_MJ_TS_CFA04	WING PIVOT EYES	2
14	SA_MJ_TS_WA01	RIGHT WING ARM	1
15	SA_MJ_TS_WA02	LEFT WING ARM	1



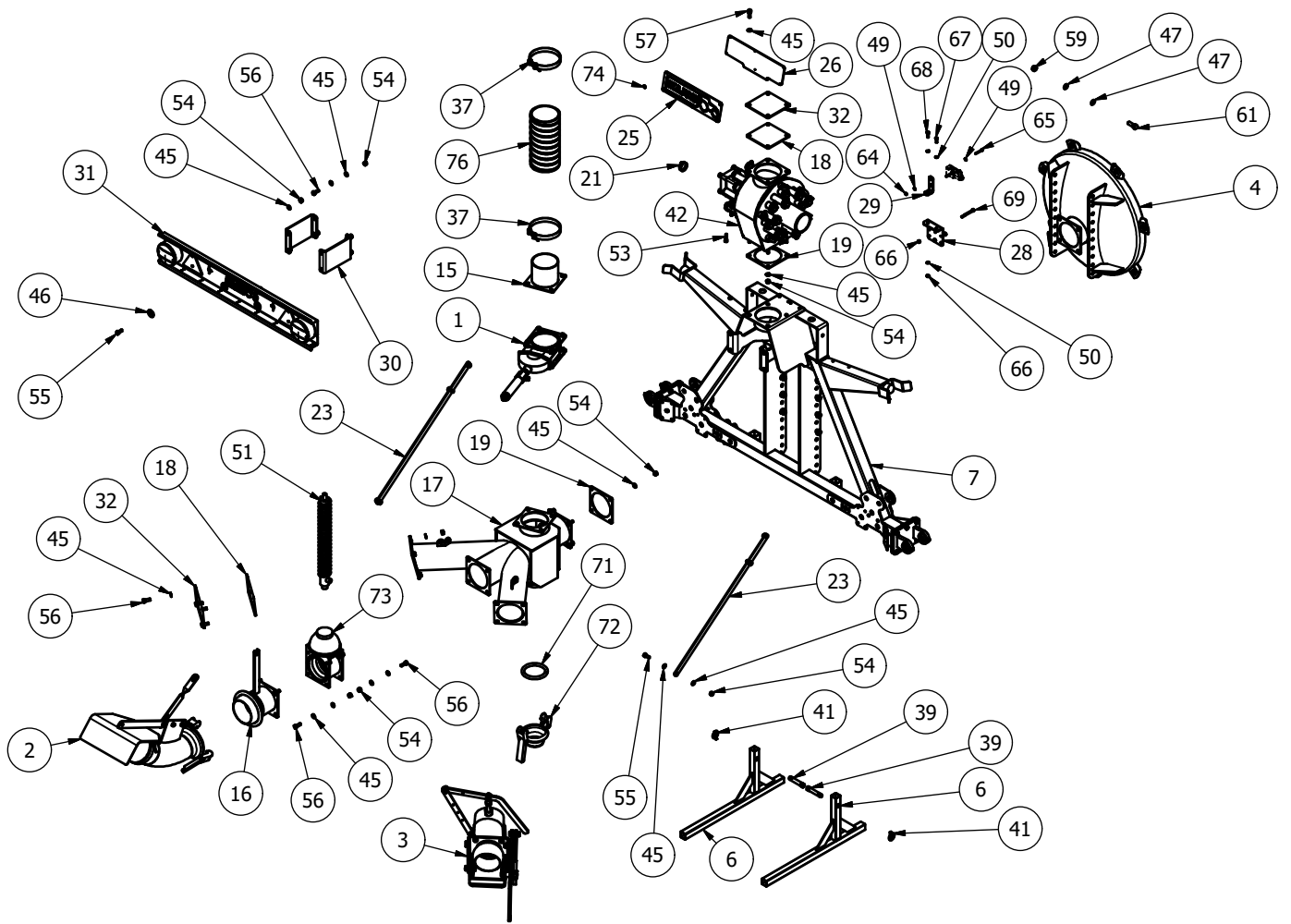
16	TA-TS-CESPE-T07	SPLASH PLATE OUTLET	1	44	FW1	DIA 1" FLAT WASHER	12
17	OM028-6N	6" MALE CONNECTION	1	45	FWM10	M10 FLAT WASHER	2
18	SA-MJ-TS-SPE20	SPLASH PLATE EXTENSION	1	46	FWM12	M12 FLAT WASHER	96
19	3722160	6" FLANGE BLANK SEAL	2	47	FWM12XL	M12 FLAT WASHER (EX-LARGE)	4
20	3722161	6" PIPE FLANGE SEAL	2	48	FWM16	M16 FLAT WASHER	32
21	8TD-RAM	DRAWBAR RAM BODY	2	49	FWM20	M20 FLAT WASHER	8
22	S8880	DIA 50mm SILENCER CLAMP	60	50	FWM8	M8 FLAT WASHER	8
23	TF088	JUBILEE CLIP 38-50	30	51	HA1	6" SPRING RETURN RAM	1
24	SA-MJ-DB-CF20	CENTRE HOSE MOUNT	1	52	M10	M10 NYLOC NUT	2
25	SA-MJ-DB-WF30	WING HOSE MOUNT	2	53	M10x40SKS	M10x40mm SOCKET HEAD 12.9	2
26	SA-MJ-TS-BD13	SIDE TUBE SUPPORT	2	54	M12	M12 NYLOC NUT	64
27	SA-MJ-TS-ML02	MAJOR LOGO	1	55	M12x30SZP	M12x30 SET BOLT	8
28	SA-MJ-TS-ML03	LOGO MOUNT PLATE	1	56	M12x35BZP	M12x35 BOLT	50
29	SA-MJ-DB-FA2-ESC10	JUNCTION BOX MOUNT	1	57	M12x40BZP	M12x40 BOLT	2
30	SA-MJ-DB-FA2-HYD10	DIVERter VALVE MOUNT	1	58	M16	M16 NYLOC NUT	24
31	TA-INJ-LB10	EXTENDER LIGHT BRACKET	2	59	M16x130BZP	M16x130 BOLT	2
32	TA-INJ-LB13	MAJOR TS LIGHT BAR	1	60	M16x50BZP	M16x50 BOLT	10
33	3722170	6" PIPE FLANGE BLANK	2	61	M20	M20 NYLOC NUT	4
34	111227	SQ 74-78mm INSERT	2	62	M20x120BZP	M20x120 BOLT	4
35	150507	M16x82x120mm SQ U-BOLT	6	63	M8	M8 NYLOC NUT	6
36	1F	1" FINE NYLOC NUT	4	64	M8x25BZP	M8x25 BOLT	4
37	1x4FBZP	1"x4" FINE BOLT	4	65	M8x90BZP	M8x90 BOLT	2
38	5101150	HOSE CLIP 162-174	2	66	OM022-4	4" COUPLING 'O' RING	1
39	53005802	DIA 50x40xM10 BUFFER	2	67	OMO11-4	4" FEMALE BLANK	1
40	73	CAT 1 PIN DIA 19x76mm	2	68	R1706-6	6" DOME GATE VALVE	1
41	851	GREASE NIPPLE M8x1.25 STR	2	69	R4816LF	LARGE FLANGE RIVET	6
42	AN099/10	LINCH PIN DIA 9.5	2	70	SPR3-5-180	BRAKE RAM SPRING	2
43	EXA30-40	EXACUT ECL30DN40 (Galvanised)	1	71	TVTE150	6" SUCTION HOSE	1
43	Red Macerator	Red Macerator	1				

# MJ81-750 Trailing Shoe - General Assembly



## MJ81-750 - Parts List

Item	Part No.	Description	Qty
1	6000072DA	6" DOUBLE ACTING GATE VALVE	1
2	OM051	SPLASH ASSY (FEMALE)	1
3	R1716-6SH	SIDE FILL COMPLETE (RH)	1
4	SA-MJ-TS-BDA02	30" STEPPED BACK DOOR	1
5	SA-MJ-TS-HG02	HOSE GUIDE TUBE	2
6	SA-MJ-TS-SDA	STAND	2
7	SA_MJ_TS_CFA01	CENTRE FRAME ASSEMBLY	1
8*	SA_MJ_TS_CFA03	CENTRE TINE ASSEMBLY	1
9	SA_MJ_TS_CFA04	WING PIVOT EYES	2
10	SA_MJ_TS_WA01	RIGHT WING ARM	1
11	SA_MJ_TS_WA02	LEFT WING ARM	1
12	SA_MJ_TS_WA03	BEAM PIVOT EYE	6
13*	SA_MJ_TS_WA04	RIGHT TINE ASSEMBLY	1
14*	SA_MJ_TS_WA06	LEFT TINE ASSEMBLY	1
15	TA-TS-CESPE-T07	SPLASH PLATE OUTLET	1
16	OM028-6N	6" MALE CONNECTION	1
17	SA-MJ-TS-SPE20	SPLASH PLATE EXTENSION	1
18	3722160	6" FLANGE BLANK SEAL	2
19	3722161	6" PIPE FLANGE SEAL	2
20	8TD-RAM	DRAWBAR RAM BODY	2



21	TF088	JUBILEE CLIP 38-50	30
22	TS-HM-RAM02	HEADLAND MANAGEMENT	3
23	SA-MJ-TS-BD13	SIDE TUBE SUPPORT	2
24	SA-MJ-TS-HG01	HOSE GUIDE FLAT	4
25	SA-MJ-TS-ML02	MAJOR LOGO	1
26	SA-MJ-TS-ML03	LOGO MOUNT PLATE	1
27	SA-MJ-DB-FA2-ESC10	JUNCTION BOX MOUNT	1
28	SA-MJ-DB-FA2-HYD10	DIVERTER VALVE MOUNT	1
29	SA-MJ-TS-FA2-HYD10	CHECK VALVE MOUNT	1
30	TA-INJ-LB10	EXTENDER LIGHT BRACKET	2
31	TA-INJ-LB13	MAJOR TS LIGHT BAR	1
32	3722170	6" PIPE FLANGE BLANK	2
33	111044	DIA 26-30mm INSERT	4
34	150507	M16x82x120mm SQ U-BOLT	12
35	1F	1" FINE NYLOC NUT	10
36	1x4FBZP	1"x4" FINE BOLT	10
37	5101150	HOSE CLIP 162-174	2
38	53005802	DIA 50x40xM10 BUFFER	2
39	73	CAT 1 PIN DIA 19x76mm	2
40	851	GREASE NIPPLE M8x1.25 STR	2
41	AN099/10	LINCH PIN DIA 9.5	2
42	EXA30-40	EXACUT ECL30DN40 (Galvanised)	1
42	Red Macerator	Red Macerator	1
43	FW1	DIA 1" FLAT WASHER	24
44	FWM10	M10 FLAT WASHER	2
45	FWM12	M12 FLAT WASHER	76
46	FWM12XL	M12 FLAT WASHER (EX-LARGE)	4
47	FWM16	M16 FLAT WASHER	36
48	FWM20	M20 FLAT WASHER	8

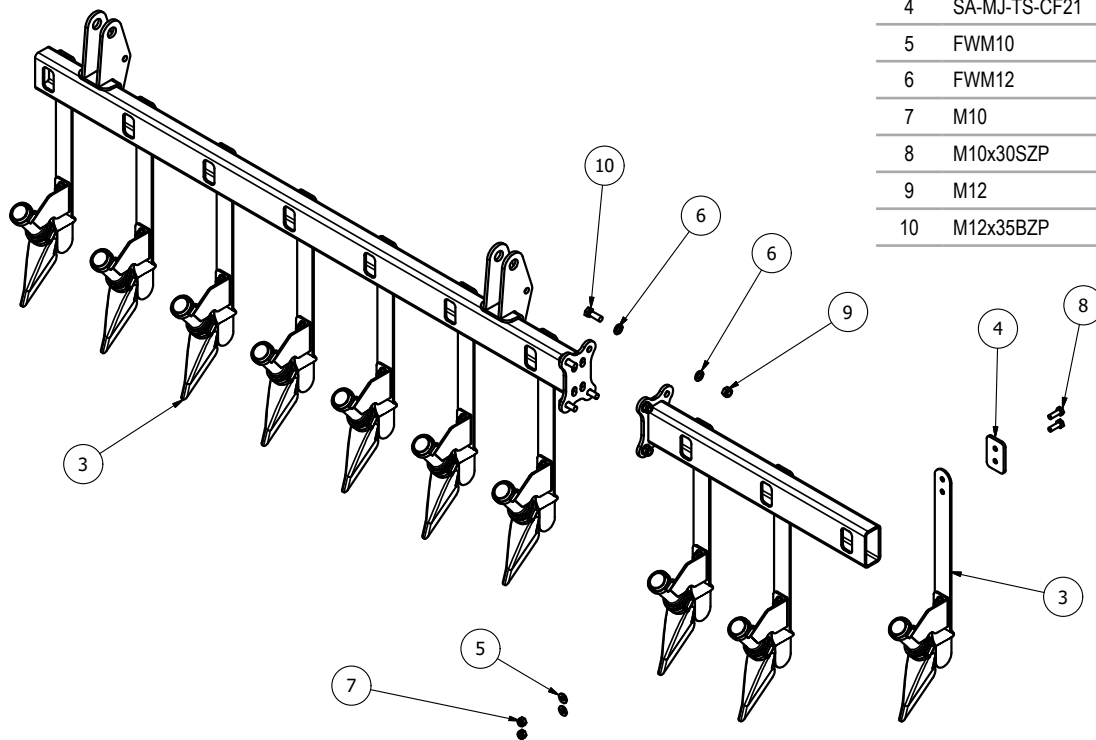
49	FWM6	M6 FLAT WASHER	4
50	FWM8	M8 FLAT WASHER	16
51	HA1	6" SPRING RETURN RAM	1
52	M10	M10 NYLOC NUT	2
53	M10x40SKS	M10x40mm SOCKET HEAD 12.9	2
54	M12	M12 NYLOC NUT	54
55	M12x30SZP	M12x30 SET BOLT	8
56	M12x35BZP	M12x35 BOLT	34
57	M12x40BZP	M12x40 BOLT	2
58	M12x80BZP	M12x80 BOLT	6
59	M16	M16 NYLOC NUT	26
60	M16HEX12	M16 PLAIN HALF NUT	8
61	M16x50BZP	M16x50 BOLT	10
62	M20	M20 NYLOC NUT	4
63	M20x120BZP	M20x120 BOLT	4
64	M6	M6 NYLOC NUT	2
65	M6x50SZP	M6x50 SET BOLT	2
66	M8	M8 NYLOC NUT	14
67	M8x25BZP	M8x25 BOLT	3
68	M8x30BZP	M8x30 BOLT	1
69	M8x90BZP	M8x90 BOLT	2
70	NL16SP	M16 SP NORDLOCK	8
71	OM022-4	4" COUPLING 'O' RING	1
72	OMO11-4	4" FEMALE BLANK	1
73	R1706-6	6" DOME GATE VALVE	1
74	R4816LF	LARGE FLANGE RIVET	6
75	S8874-A	M8xDIA 35 U-BOLT (1 3/8")	4
76	TVTE150	6" SUCTION HOSE	1

\* - Further breakdown provided



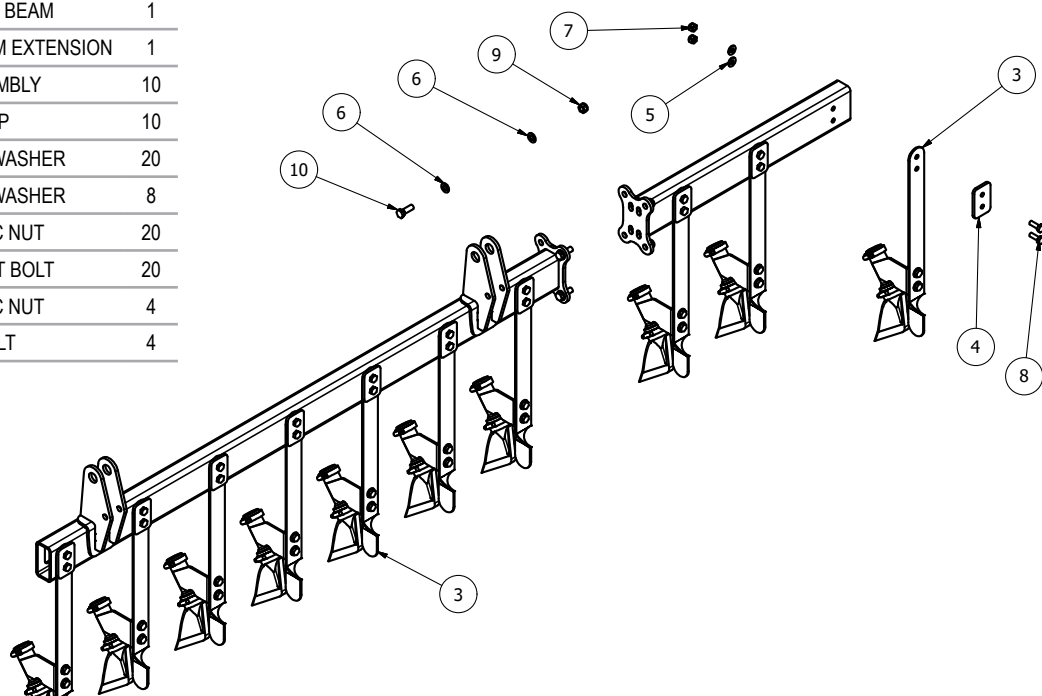
## MJ81-750 - Trailing Shoe - Right Tine Assembly (SA\_MJ\_TS\_WA04)

Item	Part No.	Description	Qty
1	SA_MJ_TS_WA09	RIGHT WING BEAM	1
2	SA_MJ_TS_WA11	WING BEAM EXTENSION	1
3	TS-0184-21A	TINE ASSEMBLY	10
4	SA-MJ-TS-CF21	TINE CLAMP	10
5	FWM10	M10 FLAT WASHER	20
6	FWM12	M12 FLAT WASHER	8
7	M10	M10 NYLOC NUT	20
8	M10x30SZP	M10x30 SET BOLT	20
9	M12	M12 NYLOC NUT	4
10	M12x35BZP	M12x35 BOLT	4



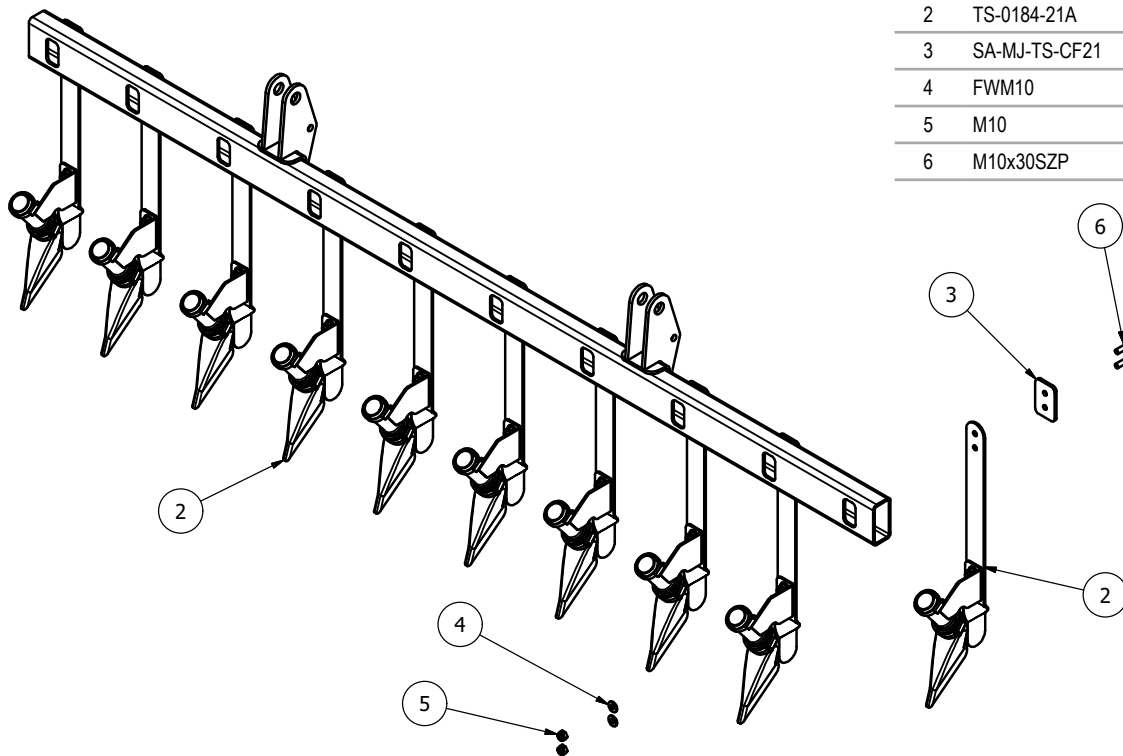
## MJ81-750 - Trailing Shoe - Left Tine Assembly (SA\_MJ\_TS\_WA06)

Item	Part No.	Description	Qty
1	SA_MJ_TS_WA10	LEFT WING BEAM	1
2	SA_MJ_TS_WA11	WING BEAM EXTENSION	1
3	TS-0184-21A	TINE ASSEMBLY	10
4	SA-MJ-TS-CF21	TINE CLAMP	10
5	FWM10	M10 FLAT WASHER	20
6	FWM12	M12 FLAT WASHER	8
7	M10	M10 NYLOC NUT	20
8	M10x30SZP	M10x30 SET BOLT	20
9	M12	M12 NYLOC NUT	4
10	M12x35BZP	M12x35 BOLT	4



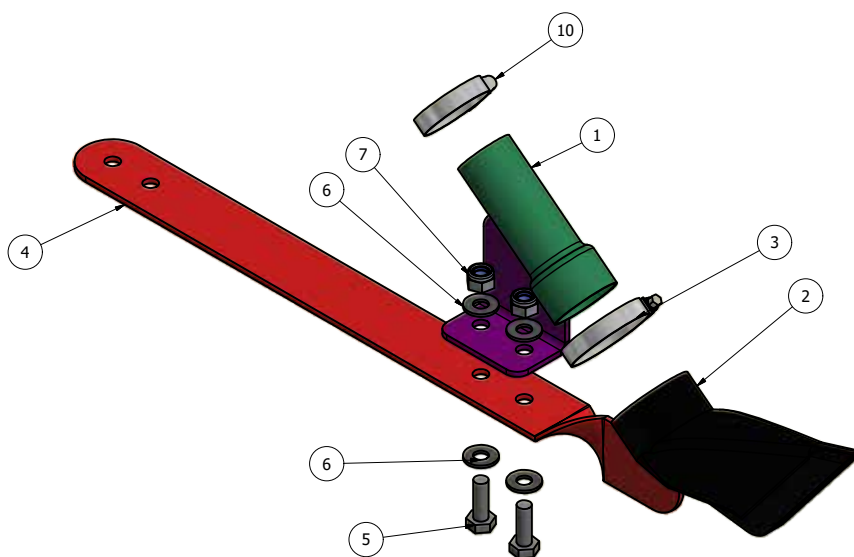
## MJ81-750 - Trailing Shoe - Centre Tine Assembly (SA\_MJ\_TS\_CFA03)

Item	Part No.	Description	Qty
1	SA_MJ_TS_CFA05	CENTRE BEAM	1
2	TS-0184-21A	TINE ASSEMBLY	10
3	SA-MJ-TS-CF21	TINE CLAMP	10
4	FWM10	M10 FLAT WASHER	20
5	M10	M10 NYLOC NUT	20
6	M10x30SZP	M10x30 SET BOLT	20



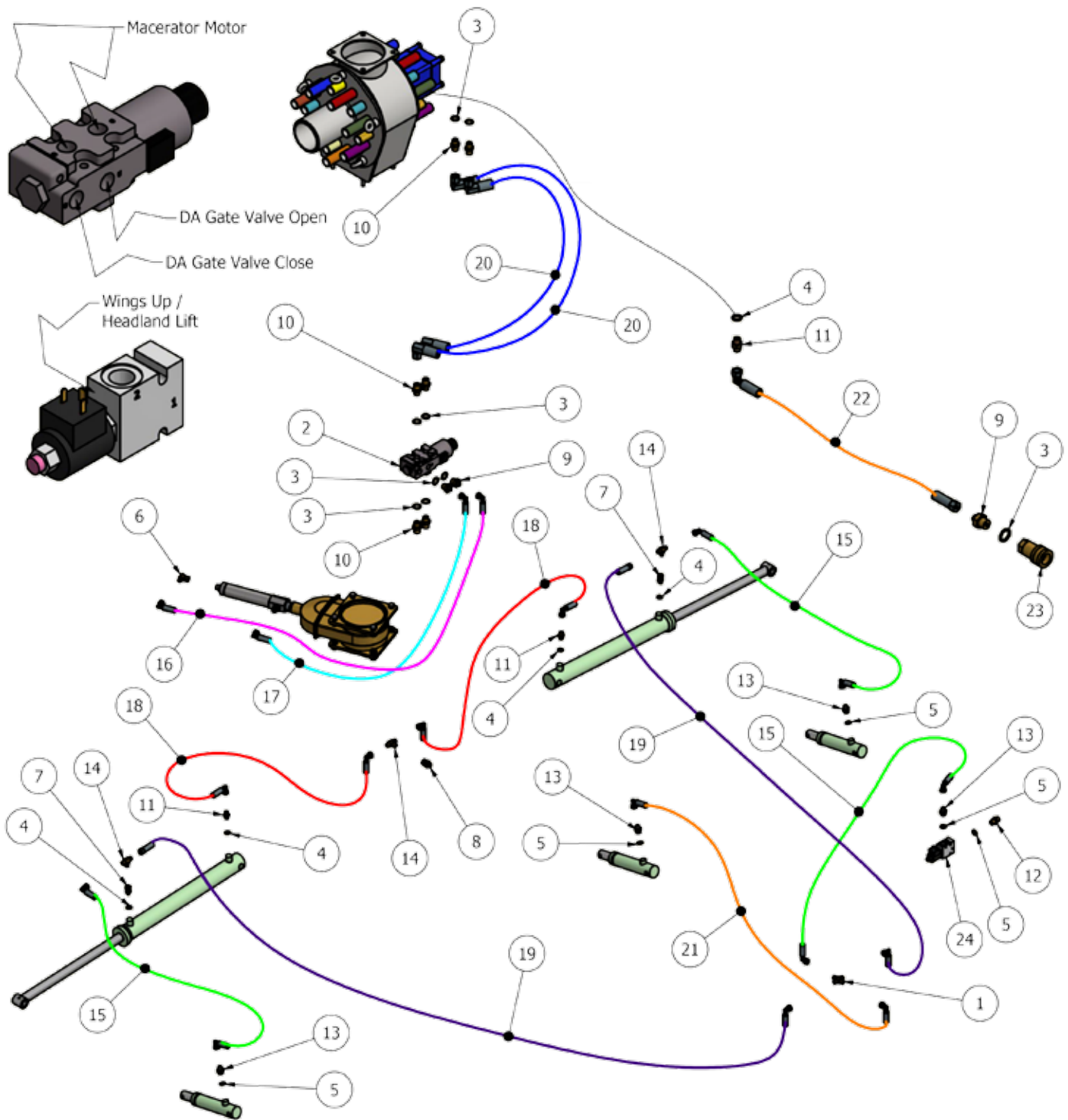
## MJ81-750 - Trailing Shoe - Tine Assembly (TS-0184-21A)

Item	Part No.	Description	Qty
1	TS-0184-20A	SHOE HOLDER ASSY	1
2	DU1076Z-120	RUBBER BOOT	1
10	TF088	JUBILEE CLIP 38-50	1
3	W2 40-60	JUBILEE CLIP	1
4	TS-0184-21	SPRING ARM LOWER	1
6	FWM10	M10 FLAT WASHER	4
7	M10	M10 NYLOC NUT	2
5	M10x30SZP	M10x30 SET BOLT	2





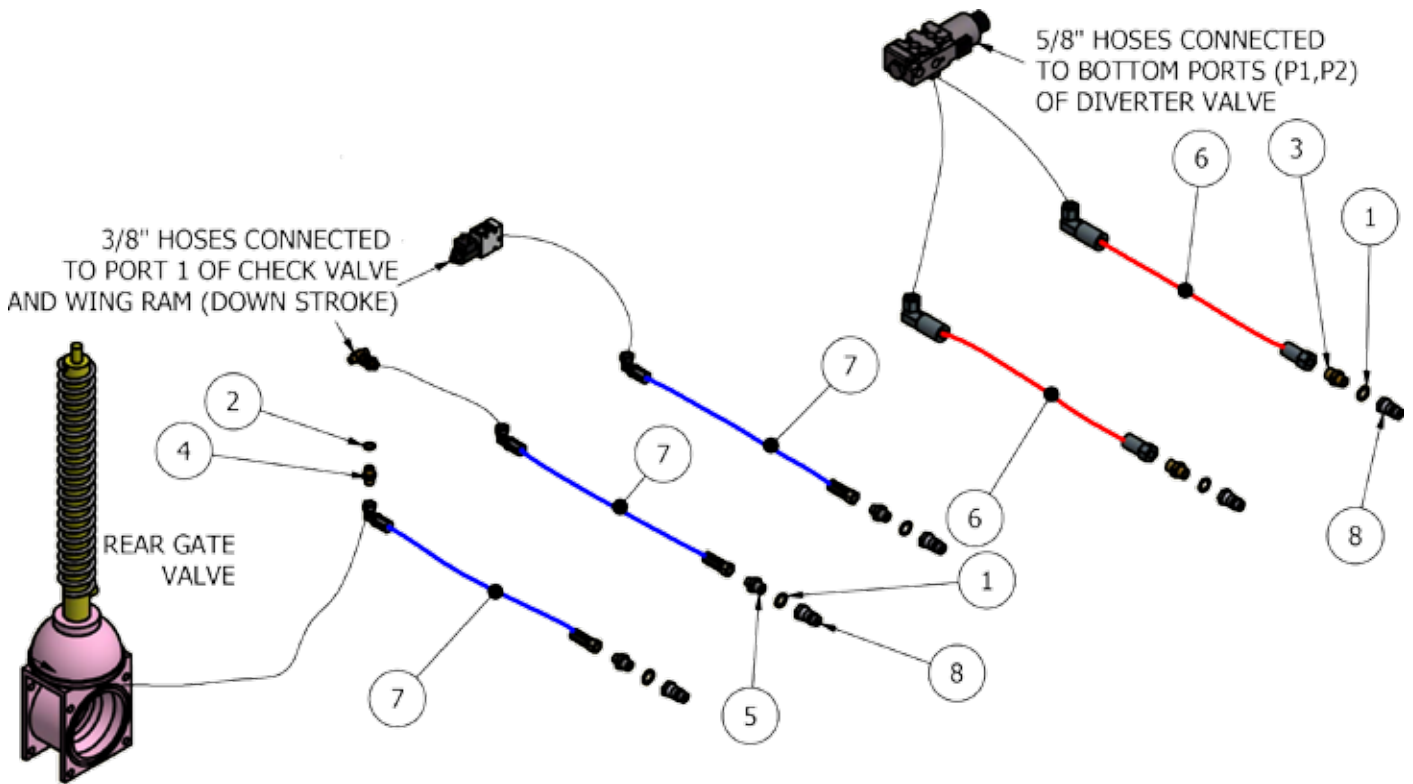
# MJ81 TS Hydraulics (SA-MJ-TS-FA2-HYD01)



Item	Part No.	Description	Qty
1	14CROSS	1/4" M/M/M CONNECTOR	1
2	CDL_106WI-12V	6 PORT DIVERTER	1
3	EDOW12	1/2" DOWTY WASHER	9
4	EDOW14	1/4" DOWTY WASHER	5
5	EDOW38	3/8" DOWTY WASHER	5
6	EFM9014	1/4" F/M ELBOW	1
7	EMF14	1/4" M/F CONNECTOR	2
8	EMF3814	3/8" MALE - 1/4" FEMALE	1
9	EMM12-14	1/2"-1/4" M/M CONNECTOR	3
10	EMM12-58	1/2"-5/8" M/M CONNECTOR	6
11	EMM14	1/4" M/M CONNECTOR	3
12	EMM38	3/8" M/M CONNECTOR	1

13	EMM3814	3/8-1/4" M/M CONNECTOR	4
14	EMMMT14	1/4" M/M/M CONNECTOR	3
15	Hose-A	1/4" x 600mm Block90 to Block90	3
16	Hose-B	1/4" x 1150mm Block 90 to Block 90	1
17	Hose-C	1/4" x 900mm Block 90 to Block 90	1
18	Hose-D	1/4" x 1700mm Block 90 to Block 90	2
19	Hose-E	1/4" x 1950mm Str to Block 90	2
20	Hose-F	5/8" x 750mm Block 90 to Block 90	2
21	Hose-G	1/4" x 1500mm Block 90 to Block 90	1
22	Hose-H	1/4" x 9150mm Str to Block 90	1
23	QRF12	1/2" QUICK RELEASE FEMALE	1
24	SV08-22M-38	N/C, 3/8" BODY, 12V c/w M/O	1

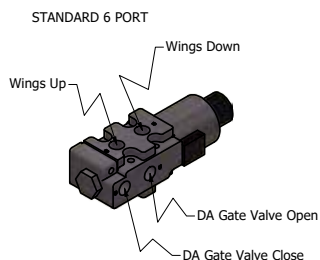
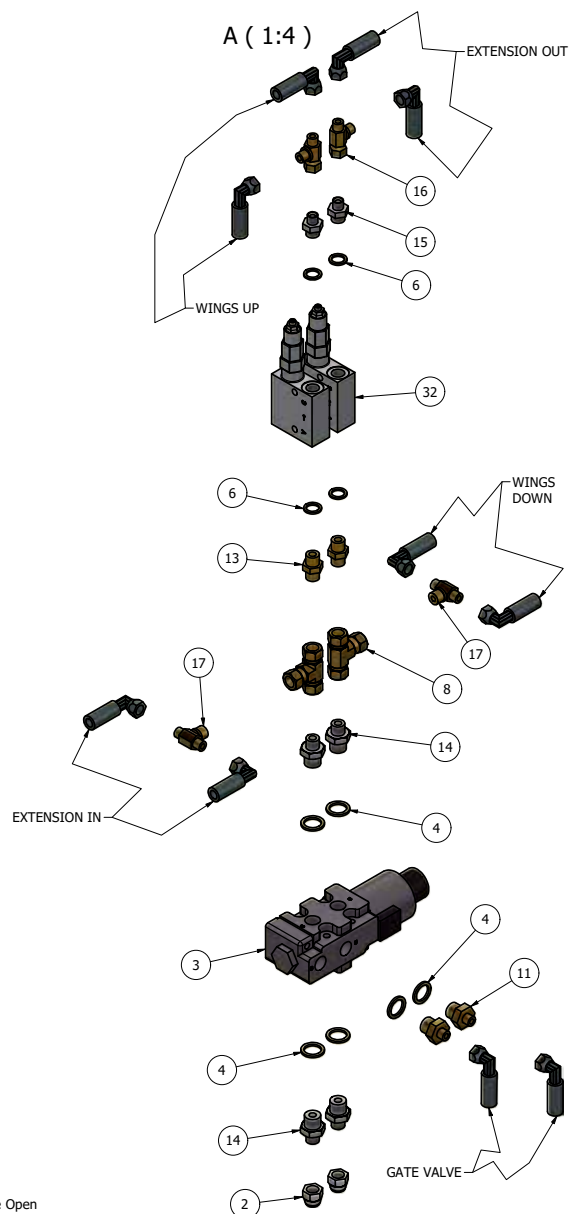
## MJ81 TS Hydraulic Hoses (SA-MJ-TS-FA2-HYD02)

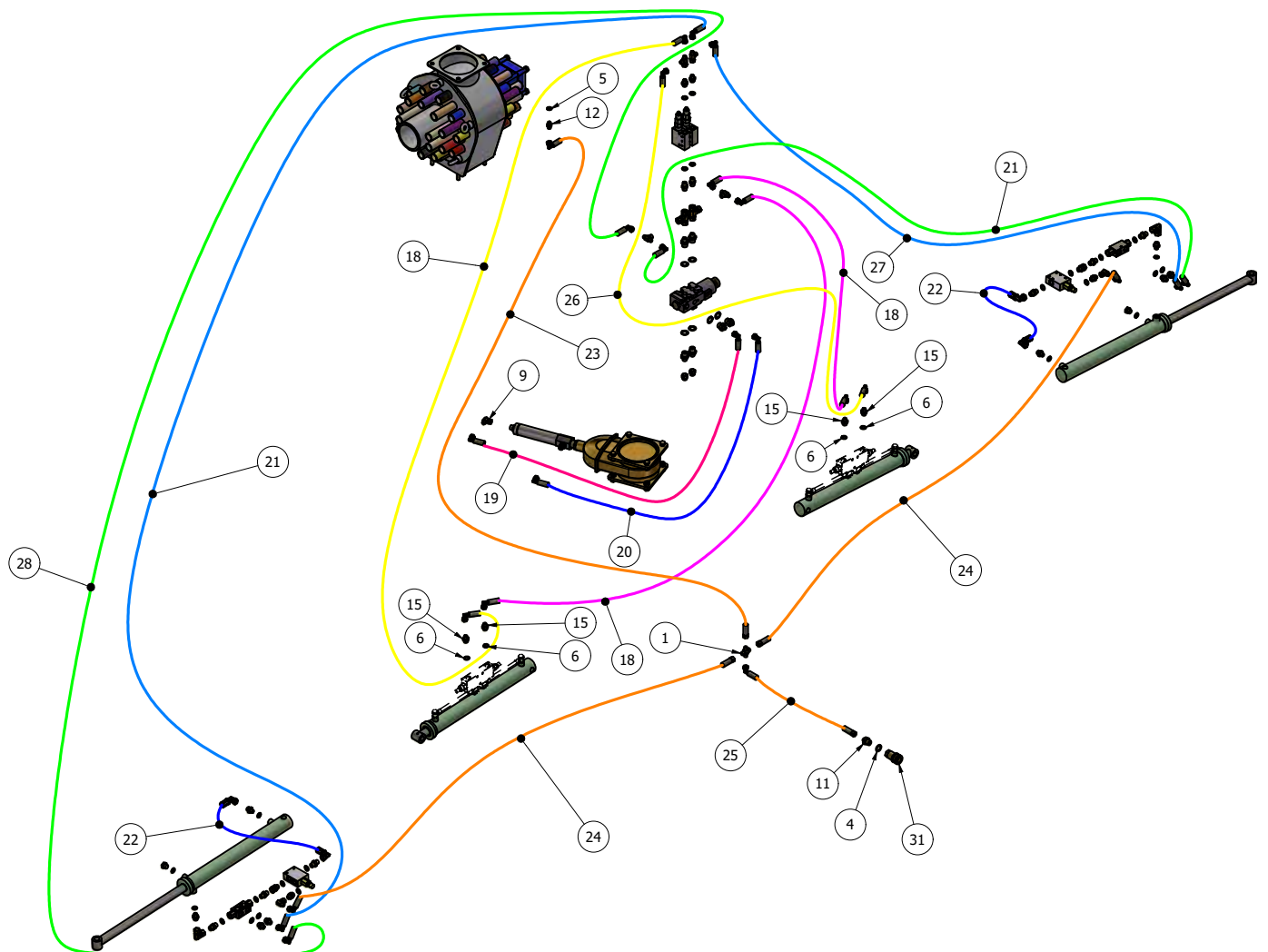
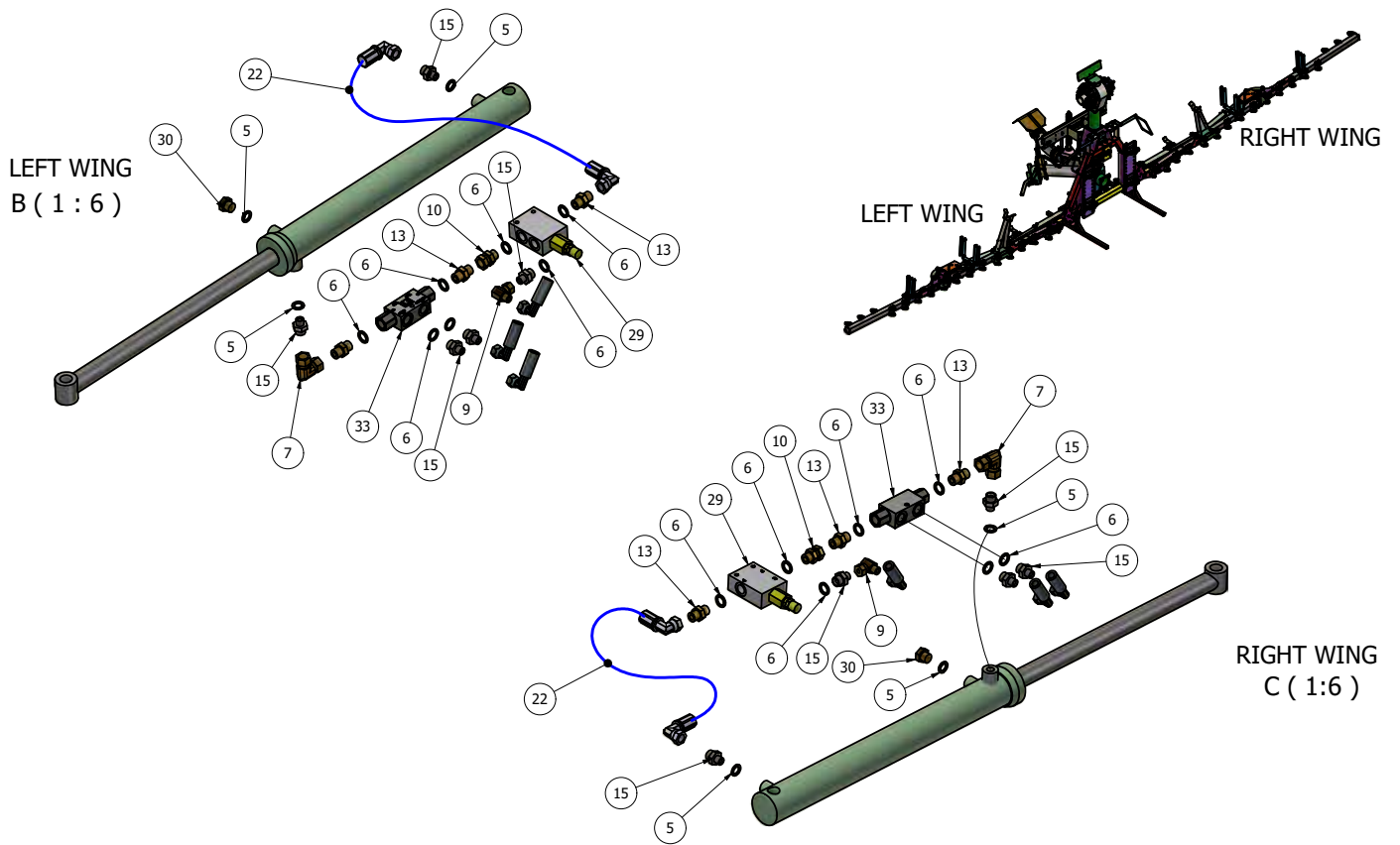


Item	Part No.	Description	Qty
1	EDOW12	1/2" DOWTY WASHER	5
2	EDOW38	3/8" DOWTY WASHER	1
3	EMM12-58	1/2-5/8" M/M CONNECTOR	2
4	EMM38	3/8" M/M CONNECTOR	1
5	EMM3812	1/2-3/8" M/M CONNECTOR	3
6	Hose-A	5/8" x 9150mm Str to Block 90	2
7	Hose-C	3/8" x 9150mm Str to Block 90	3
8	QRM12	1/2" QUICK RELEASE MALE	5

# MJ91-1000 DB Hydraulics (SA-MJ-DB10-FA1-HYD01)

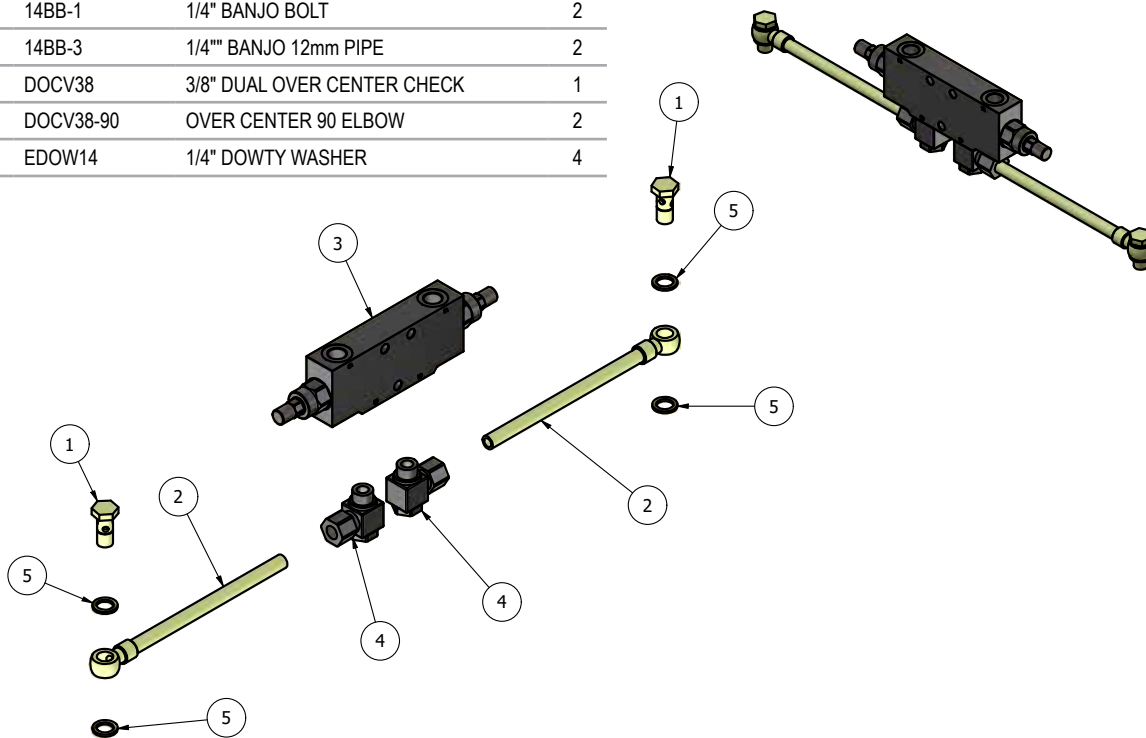
Item	Part No.	Description	Qty
1	14CROSS	1/4" M/M/M/M CONNECTOR	1
2	BC-06	3/8" BLANKING CAP (FEMALE)	2
3	CDL_106WI-12V	6 PORT DIVERTER	1
4	EDOW12	1/2" DOWTY WASHER	7
5	EDOW14	1/4" DOWTY WASHER	7
6	EDOW38	3/8" DOWTY WASHER	22
7	EFF90-38	3/8" Female 90	2
8	EFFFT38	3/8" Female Tee	2
9	EFM9014	1/4" F/M ELBOW	3
10	EMF38	3/8" M/F CONNECTOR	2
11	EMM12-14	1/2"-1/4" M/M CONNECTOR	3
12	EMM14	1/4" M/M CONNECTOR	1
13	EMM38	3/8" M/M CONNECTOR	8
14	EMM3812	1/2-3/8" M/M CONNECTOR	4
15	EMM3814	3/8-1/4" M/M CONNECTOR	16
16	EMMFT14	1/4" M/M/F CONNECTOR	2
17	EMMMT3814	3/8" - 1/4" M/M/M CONNECTOR	2
18	Hose-A	1/4" x 2050mm Block 90 to Block 90	3
19	Hose-B	1/4" x 1150mm Block 90 to Block 90	1
20	Hose-C	1/4" x 900mm Block 90 to Block 90	1
21	Hose-D	1/4" x 3560mm Block 90 to Block 90	2
22	Hose-E	3/8" x 300mm Block 90 to Block 90	2
23	Hose-F	1/4" x 1020mm Str to Block 90	1
24	Hose-G	1/4" x 3130mm Str to Block 90	2
25	Hose-H	1/4" x 9150mm Str to Block 90	1
26	Hose-I	1/4" x 1870mm Block 90 to Block 90	1
27	Hose-J	1/4" x 3430mm Block 90 to Block 90	1
28	Hose-K	1/4" x 3660mm Block 90 to Block 90	1
29	LU00207000	PRESSURE RELIEF VALVE	2
30	PLUG14H	1/4" PLUG (HEX)	2
31	QRF12	1/2" QUICK RELEASE FEMALE	1
32	V0642-180	PRESSURE BALANCE SEQUENCE VALVE	2
33	VRDE-15-FF-38	DOUBLE PILOT CHECK VALVE	2





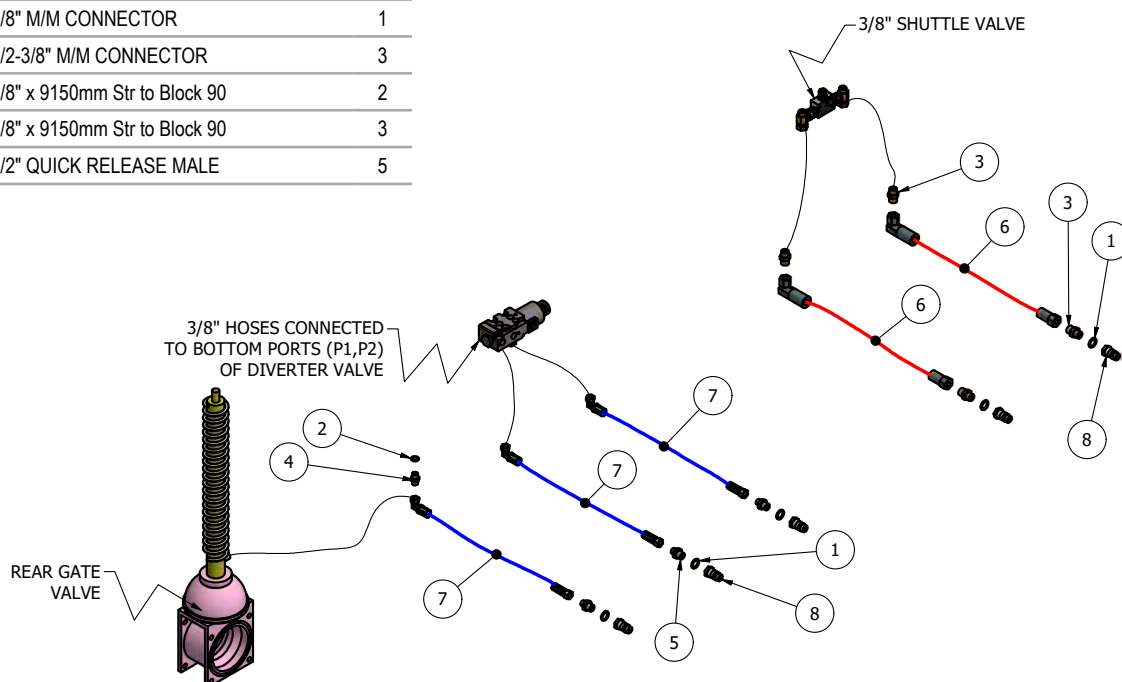
## MJ91-1000 DB Dual over centre check kit (SA-MJ-DB10-FA1-HYD02)

Item	Part No.	Description	Qty
1	14BB-1	1/4" BANJO BOLT	2
2	14BB-3	1/4" BANJO 12mm PIPE	2
3	DOCV38	3/8" DUAL OVER CENTER CHECK	1
4	DOCV38-90	OVER CENTER 90 ELBOW	2
5	EDOW14	1/4" DOWTY WASHER	4



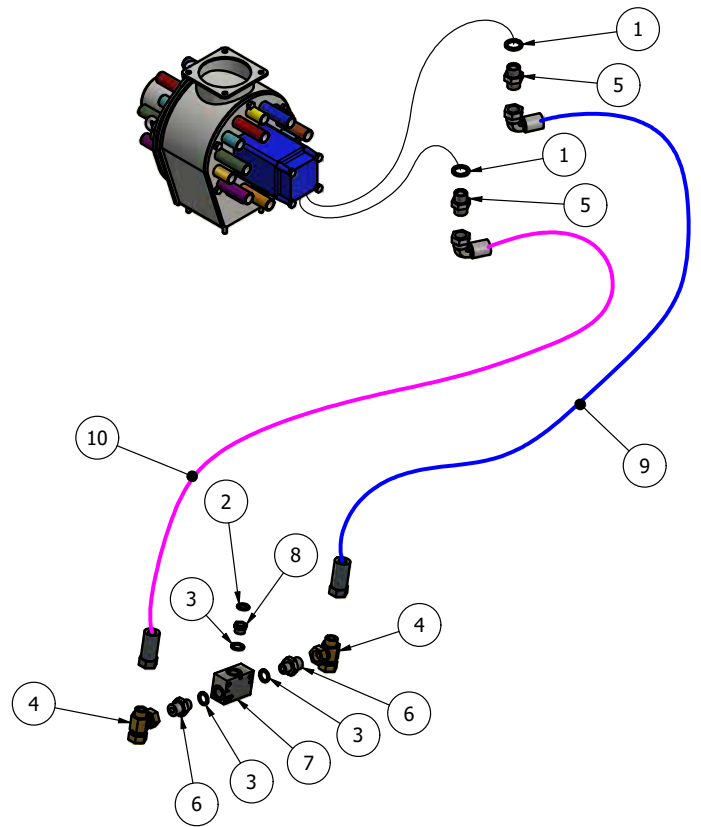
## MJ91-1000 DB Hoses (SA-MJ-DB-FA2-HYD03)

Item	Part No.	Description	Qty
1	EDOW12	1/2" DOWTY WASHER	5
2	EDOW38	3/8" DOWTY WASHER	1
3	EMM12-58	1/2-5/8" M/M CONNECTOR	4
4	EMM38	3/8" M/M CONNECTOR	1
5	EMM3812	1/2-3/8" M/M CONNECTOR	3
6	Hose-A	5/8" x 9150mm Str to Block 90	2
7	Hose-C	3/8" x 9150mm Str to Block 90	3
8	QRM12	1/2" QUICK RELEASE MALE	5



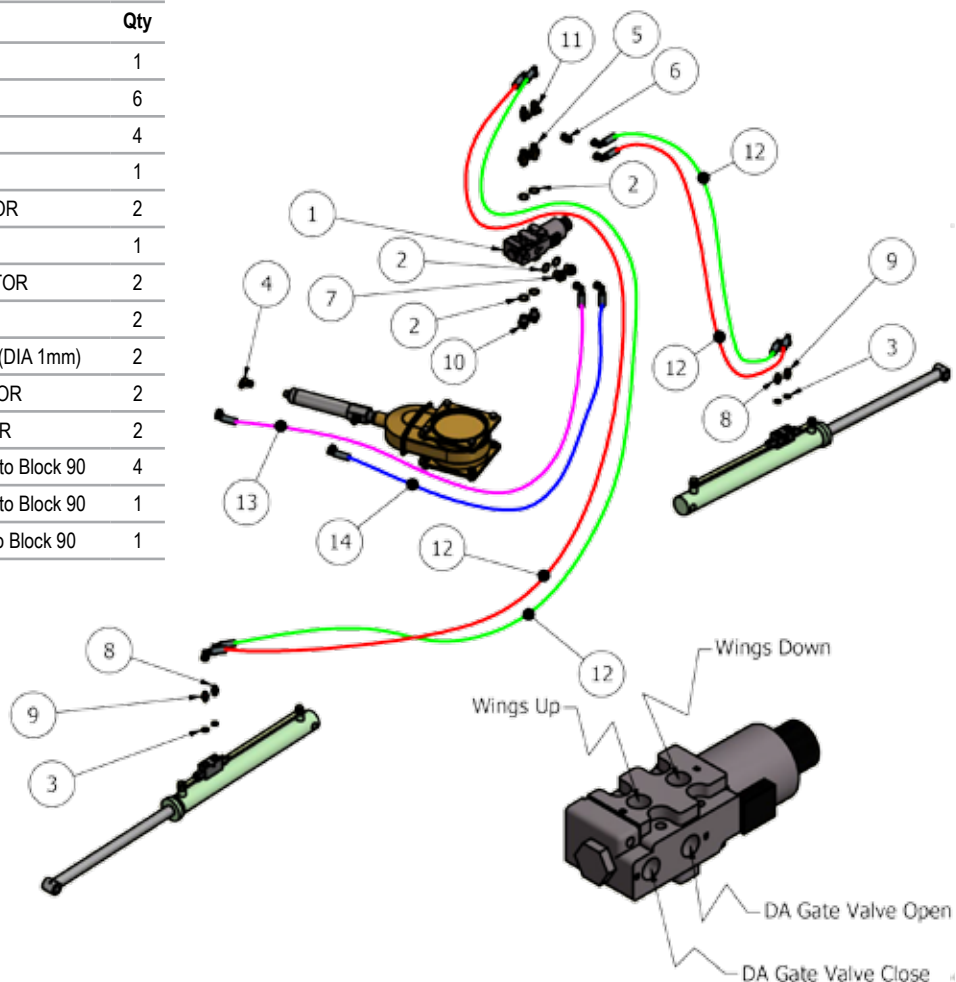
## MJ91-1000 DB Macerator connection (SA-MJ-DB-FA2-HYD06)

Item	Part No.	Description	Qty
1	EDOW12	1/2" DOWTY WASHER	2
2	EDOW14	1/4" DOWTY WASHER	1
3	EDOW38	3/8" DOWTY WASHER	3
4	EMFFT12	1/2" M/F/F CONNECTOR	2
5	EMM12	1/2" M/M CONNECTOR	2
6	EMM3812	1/2-3/8" M/M CONNECTOR	2
7	FPT38	3/8" SHUTTLE VALVE	1
8	G3814MF	3/8"-1/4" REDUCER	1
9	Hose-A	1/2" x 1100mm Block 90 to Str	1
10	Hose-B	1/2" x 1170mm Block 90 to Str	1



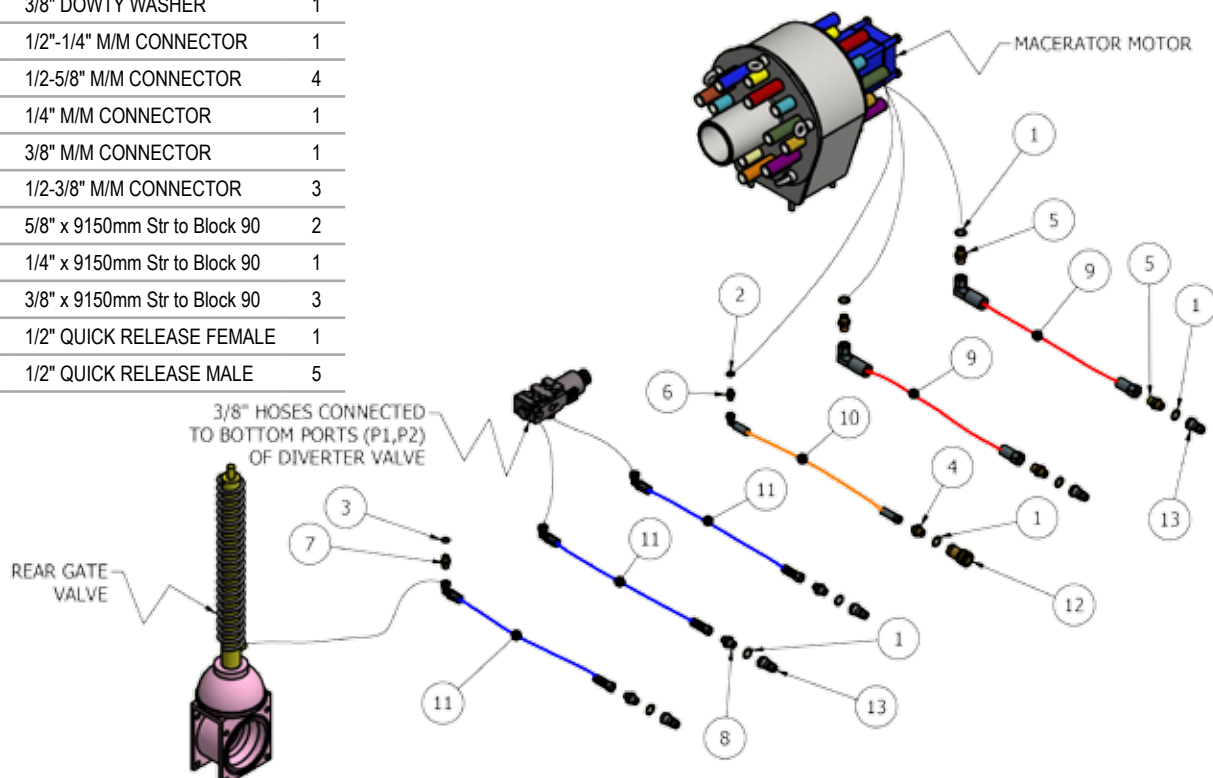
## MJ91-750 DB Hydraulics (SA-MJ-DB-FA2-HYD01)

Item	Part No.	Description	Qty
1	CDL_106WI-12V	6 PORT DIVERTER	1
2	EDOW12	1/2" DOWTY WASHER	6
3	EDOW14	1/4" DOWTY WASHER	4
4	EFM9014	1/4" F/M ELBOW	1
5	EMF12-14	1/2" M 1/4"F CONNECTOR	2
6	EMF14	1/4" M/F CONNECTOR	1
7	EMM12-14	1/2"-1/4" M/M CONNECTOR	2
8	EMM14	1/4" M/M CONNECTOR	2
9	EMM14RV	1/4" M/M RESTRICTOR (DIA 1mm)	2
10	EMM3812	1/2-3/8" M/M CONNECTOR	2
11	EMMMT14	1/4" M/M/M CONNECTOR	2
12	Hose-A	1/4" x 1650mm Block 90 to Block 90	4
13	Hose-B	1/4" x 1000mm Block 90 to Block 90	1
14	Hose-C	1/4" x 750mm Block 90 to Block 90	1



## MJ91-750 DB Hydraulic Hoses (SA-MJ-DB-FA2-HYD03)

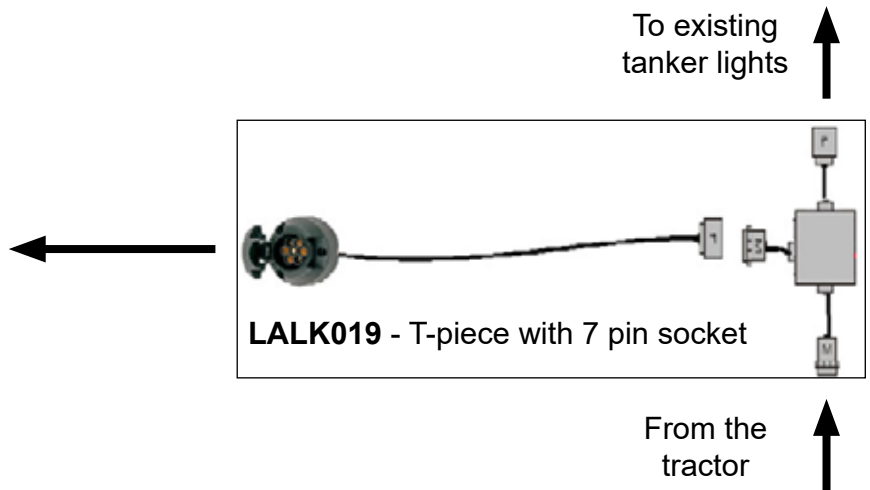
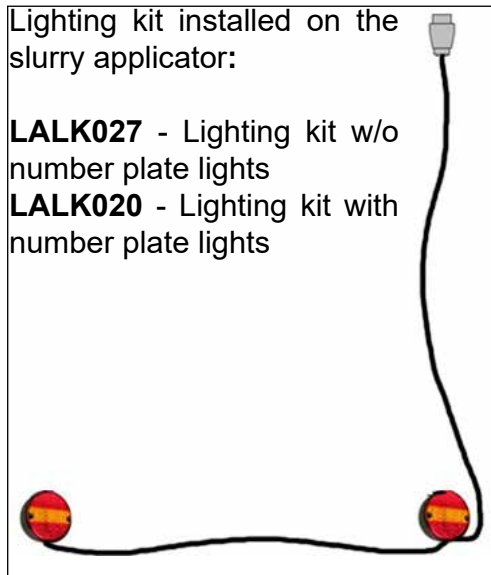
Item	Part No.	Description	Qty
1	EDOW12	1/2" DOWTY WASHER	8
2	EDOW14	1/4" DOWTY WASHER	1
3	EDOW38	3/8" DOWTY WASHER	1
4	EMM12-14	1/2"-1/4" M/M CONNECTOR	1
5	EMM12-58	1/2-5/8" M/M CONNECTOR	4
6	EMM14	1/4" M/M CONNECTOR	1
7	EMM38	3/8" M/M CONNECTOR	1
8	EMM3812	1/2-3/8" M/M CONNECTOR	3
9	Hose-A	5/8" x 9150mm Str to Block 90	2
10	Hose-B	1/4" x 9150mm Str to Block 90	1
11	Hose-C	3/8" x 9150mm Str to Block 90	3
12	QRF12	1/2" QUICK RELEASE FEMALE	1
13	QRM12	1/2" QUICK RELEASE MALE	5





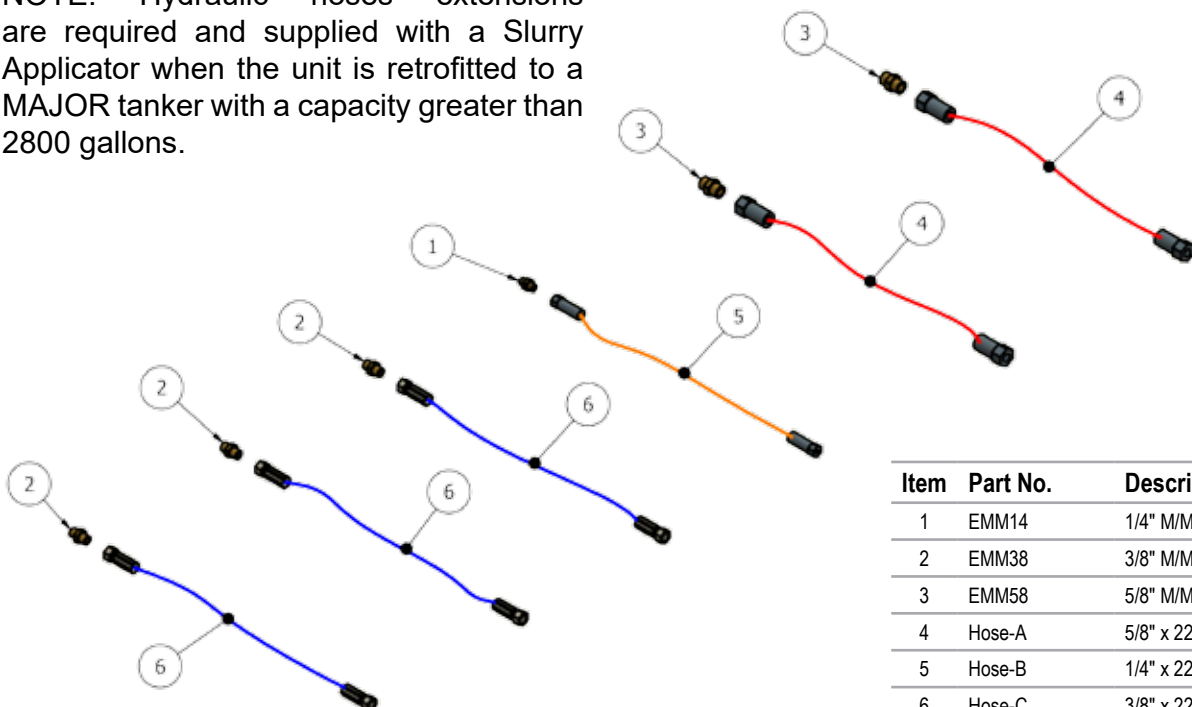
## Retrofitting the road lighting kit to a Major Tanker

This wiring setup applies to tankers produced from 2018



## Hydraulic hoses extension kit 2800+ gallons (SA-MJ-DB-FA2-HYD04)

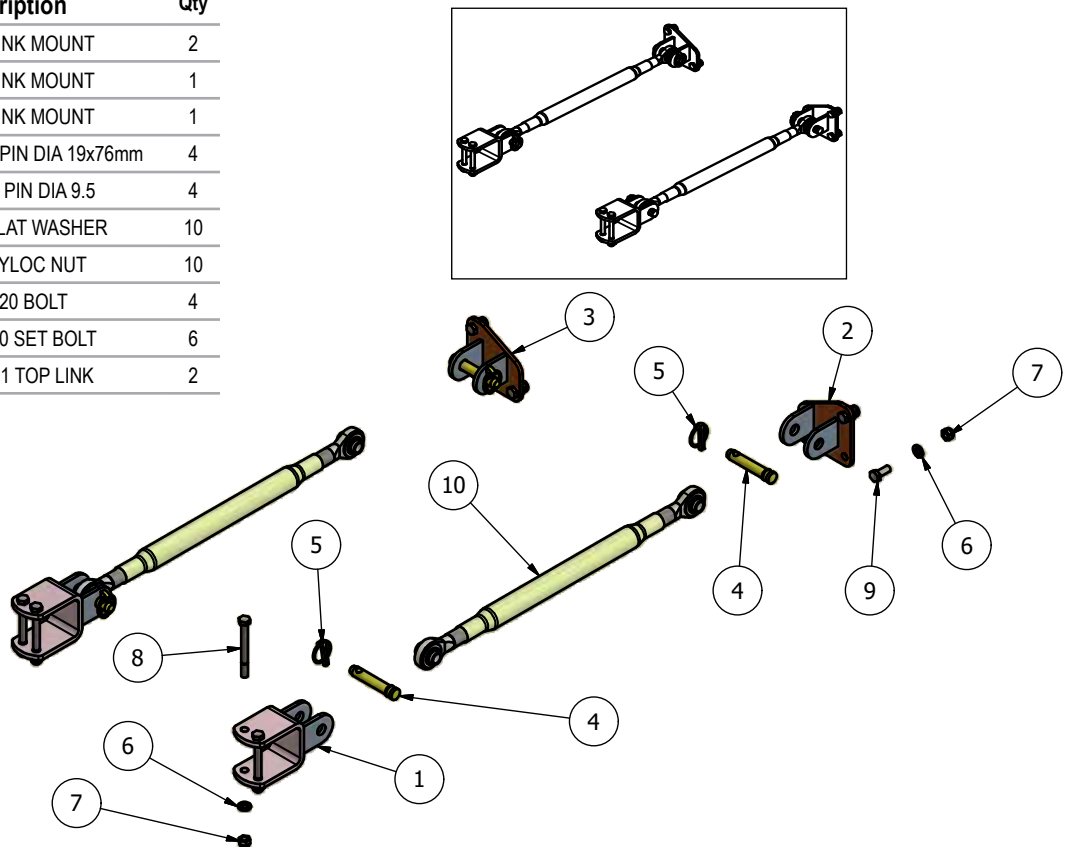
NOTE: Hydraulic hoses extensions are required and supplied with a Slurry Applicator when the unit is retrofitted to a MAJOR tanker with a capacity greater than 2800 gallons.



Item	Part No.	Description	Qty
1	EMM14	1/4" M/M CONNECTOR	1
2	EMM38	3/8" M/M CONNECTOR	3
3	EMM58	5/8" M/M CONNECTOR	2
4	Hose-A	5/8" x 2250mm Str to Str	2
5	Hose-B	1/4" x 2250mm Str to Str	1
6	Hose-C	3/8" x 2250mm Str to Str	3

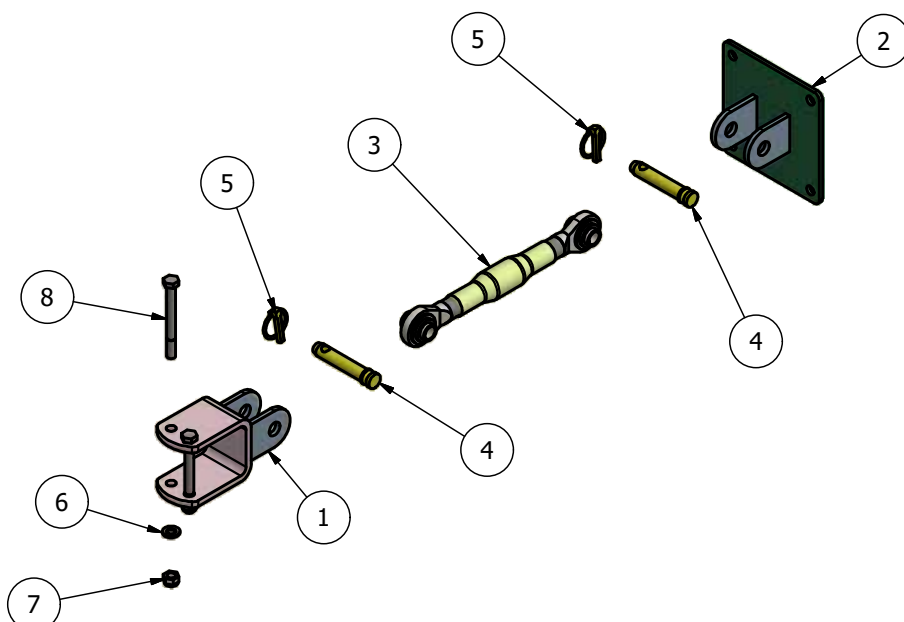
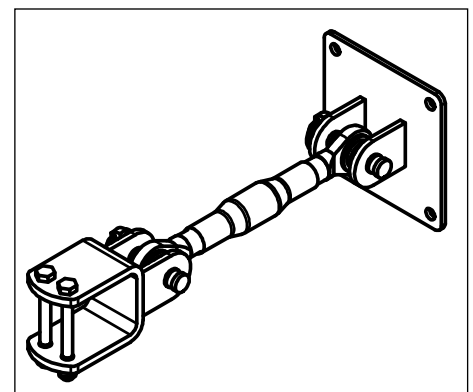
## Stay bar kit (STB-01-KIT1) to suit ALPINE, TANDEM & LGP 2050+ models

Item	Part No.	Description	Qty
1	SA-MJ-TS-STB01	TOP LINK MOUNT	2
2	SA-MJ-TS-STB02	TOP LINK MOUNT	1
3	SA-MJ-TS-STB02H	TOP LINK MOUNT	1
4	73	CAT 1 PIN DIA 19x76mm	4
5	AN099/10	LINCH PIN DIA 9.5	4
6	FWM12	M12 FLAT WASHER	10
7	M12	M12 NYLOC NUT	10
8	M12x120BZP	M12x120 BOLT	4
9	M12x30SZP	M12x30 SET BOLT	6
10	S316-A	CAT 1-1 TOP LINK	2

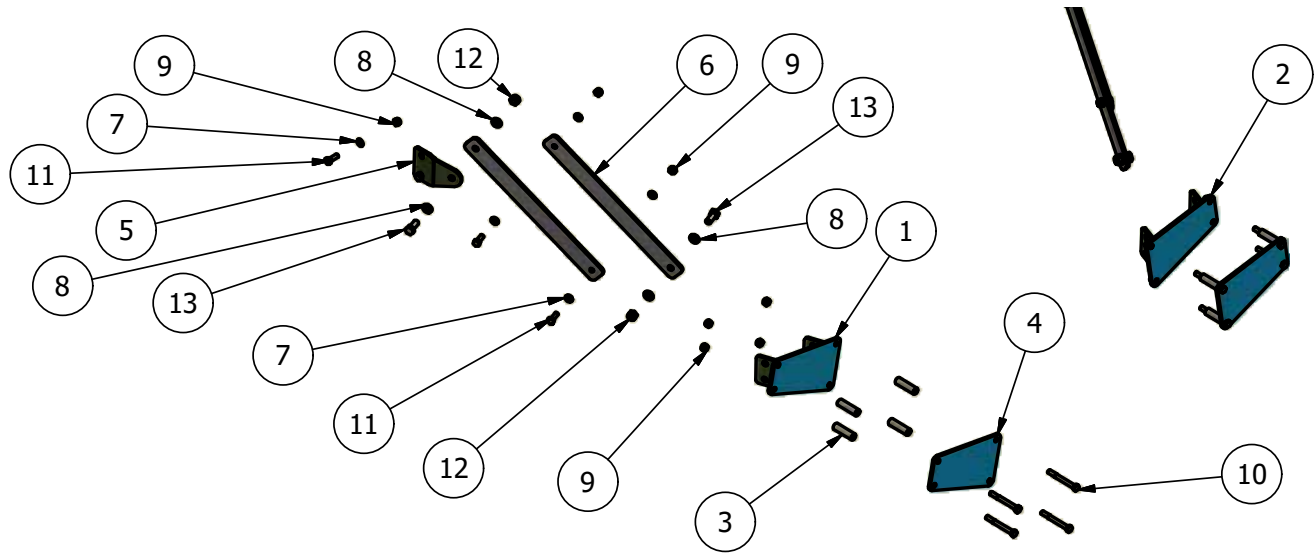


## Stay bar kit (STB-01-KIT2) to suit STANDARD and LGP up to 2000 models

Item	Part No.	Description	Qty
1	SA-MJ-TS-STB01	TOP LINK MOUNT	1
2	SA-MJ-TS-STB05	TOP LINK MOUNT	1
3	15502-B	CAT 1 TOP LINK	1
4	73	CAT 1 PIN DIA 19x76mm	2
5	AN099/10	LINCH PIN DIA 9.5	2
6	FWM12	M12 FLAT WASHER	2
7	M12	M12 NYLOC NUT	2
8	M12x120BZP	M12x120 BOLT	2



## Stabiliser bar kit (STB-01-KIT3) to suit all MAJOR Tankers



Item	Part No.	Description	Qty
1	SA-MJ-TS-STB10	FRAME MOUNT	1
2	SA-MJ-TS-STB10H	FRAME MOUNT	1
3	SA-MJ-TS-STB15	SPACER TUBE	8
4	SA-MJ-TS-STB11	BASE PLATE	2
5	SA-MJ-TS-STB13	LIGHT BRACKET	2
6	SA-MJ-TS-STB14	JOINER FLAT	4
7	FWM12	M12 FLAT WASHER	12
8	FWM16	M16 FLAT WASHER	8
9	M12	M12 NYLOC NUT	16
10	M12x110BZP	M12x110 BOLT	8
11	M12x35BZP	M12x35 BOLT	8
12	M16	M16 NYLOC NUT	4
13	M16x40SZP	M16x40 SET BOLT	4



All MAJOR machines must be registered when sold, to ensure that you receive the correct warranty cover and service bulletins. To register your machine for warranty, please go to the SALES & SUPPORT section of our website [www.major-equipment.com](http://www.major-equipment.com) and enter your details.

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Please register your machine to ensure you get the correct warranty cover and service bulletins. Please provide your full postal address.

**Name \*** **Email \***

**Address \***

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Address 2



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