



MSX & MSC Series Forage Wagon

Operator's Manual



Part Number: 595-0004

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Disclaimer

Although every attempt has been made to ensure the correctness of information and diagrams in this manual, *Giltrap Engineering Limited* will not be responsible for any damage or consequential loss arising out of misinterpretation or failure to follow recommended procedures; nor will it be liable for any damage caused by or arising out of modification or misuse of its product.

For parts or service enquires, please contact the applicable numbers on the previous page.

First Edition printed February 1999
Second Edition amended and reprinted July 2002
Third Edition amended and reprinted September 2006

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Printed in New Zealand

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Introduction

Thank you for purchasing a *Giltrap* product. *Giltrap Engineering Limited* has enjoyed a long-standing success with their machinery. We would like you to enjoy the benefits of owning a *Giltrap* too. By following the guidelines laid out in this book, you will ensure trouble free, low maintenance operating for years.

Giltrap Engineering Limited is a progressive company which continually strives to satisfy your needs, so we welcome any feedback which you can provide to help us improve our products and services and to ensure that they perform to your expectations. Any constructive comments about this operator's manual are also welcome.

Your machine has been designed to perform its task efficiently and with a minimum of maintenance. This handbook provides safety guidelines, instructions, maintenance requirements and parts listings. We recommend that you read the entire handbook, before operating the machine as this will enable you to take full advantage of your new machine's considerable potential.

Please fill in the details below for future reference.

Model:
Serial No:
Delivery Date:
Dealer:

Delivery and Warranty

Before you begin to use your machine, please check it to make sure there is no delivery damage. If damage is evident, contact the dealer who supplied the machine so that they can make the appropriate claims.

If you have any other queries, please contact your dealer or *Giltrap Engineering Limited* (0800 80 GILTRAP).

All *Giltrap* products are covered by a 12-month warranty on parts and labour, subject to normal use.

Description

Giltrap Forage Wagons have been designed and refined over many years to feed out all manner of forage materials. They are built specifically with pit silage in mind, but with a little care and common sense they will effectively feed round or square baleage, silage bales, hay bales and straw bales.

Giltrap build two styles of forage wagon - centre feed and cross conveyer. Centre feed wagons are very good at handling most types of forage materials, especially long cut silage and bales since there is a reduced chance of blockage in the elevator region in a centre feed wagon. Fine cut materials can also be fed with a centre feed model but the windrow will tend to be wide with spillage off the front edge of the floor. This can be alleviated to a degree by fitting an elevator trough (standard accessory, part no. ET).

Cross conveyer wagons also handle most types of forage material including round and square bales. Cross conveyer wagons are generally recognised as the more versatile of the two styles with the ability to feed a narrow controlled row either on the ground, beneath or through a fence, or into a feed bin.

All Giltrap Forage Wagons are powered either hydraulically or from the tractor PTO. Hydraulic models have a load sensing system and speed controls to protect the wagon. PTO models have mechanical speed adjustments and the drivelines are protected by shear bolts.

Features

- Stainless steel sides.
- 900mm wide belt on cross conveyer models to reduce chance of blockage.
- Hydraulic load sensing with priority belt speed control on cross conveyers.
- Cast iron bearings for long life.
- Bolt on floor and elevator bars for simple maintenance.
- Central greasing for difficult access bearings.
- Crash-lock back gate system.
- Cross conveyer belt assembly is adjustable in and out.

Specifications

CENTRE FEED SPECIFICATIONS (MSC SERIES)

MODEL	Overall Measurements			Bin Measurements			Cubic Capacity	Tyres	Axle	Floor Chains	Approx Tare Weight
	L	H	W	L	H	W					
MSC70	5.8	2.23	2.53	3.55	1.2	1.74	7.1	11.5/80x15.3	single	2	1280kg
MSC85	5.8	2.4	2.53	3.55	1.2	2.05	8.4	11.5/80x15.3	single	2	1450kg
MSC90	6.8	2.23	2.53	4.55	1.2	1.74	9.2	11.5/80x15.3	single	2	1490kg
MSC105	6.8	2.41	2.53	4.55	1.2	2.05	10.8	11.5/80x15.3	tandem	2	1920kg
MSC130	7.8	2.4	2.75	5.55	1.2	2.05	13.3	400/60x15.5	tandem	3	2430kg
MSC165	7.8	2.8	2.8	5.55	1.58	2.05	17.7	15/70-18	tandem	3	2970kg
MSC215	9.0	2.8	2.8	6.55	1.58	2.05	21.2	15Rx22.5	tandem	3	4200kg

SIDE DELIVERY SPECIFICATIONS (MSX SERIES)

MODEL	Overall Measurements			Bin Measurements			Cubic Capacity	Tyres	Axle	Floor Chains	Approx Tare Weight
	L	H	W	L	H	W					
MSX66	5.8	2.34	2.53	3.55	1.2	1.74	7.1	11.5/80x15.3	single	2	1690kg
MSX80	5.8	2.46	2.53	3.55	1.2	2.05	8.4	11.5/80x15.3	single	2	1860kg
MSX100	6.8	2.46	2.55	4.55	1.2	2.05	10.8	11.5/80x15.3	tandem	2	2350kg
MSX125	7.8	2.46	2.75	5.55	1.2	2.05	13.3	400/60x15.5	tandem	3	2860kg
MSX160	7.8	2.8	2.8	5.55	1.58	2.05	17.7	15/70-18	tandem	3	3500kg
MSX210	9.1	2.8	2.8	6.55	1.58	2.05	21.2	15Rx22.5	tandem	3	4500kg

Options & Accessories

Giltrap offer many standard accessories to customise your forage wagon so that it suits your needs perfectly. These include;

- Electronic load weigh scales (new machines only)
- Sidelift Feature – excellent for trough or bin feeding (new machines only)
- Fast Floor Kits for rear unloading (MSX100, MSX125, MSX160, MSX210, MSC105, MSC130, MSC165 & MSC215 only)
- Cross Conveyor Thrower - throws feed from the end of the belt
- Cross Conveyor Extension - independent extension belt, 1.0m long
- Round Bale Cradle - a backing gate that assists in feeding round bales
- Ladder and Walkway
- Harvesting Accessories including extension panels for low back gates, roof and cover, extension high sides, swivel hitches and raising blocks for towing wagons over silage stacks.

Pre-Service Guidelines for All Giltrap Wagons

Prior to delivering your machine, your dealer should have completed a pre-delivery check.

It is advantageous to you to check the following points before using the machine for the first time.

Caution: Do not stand in the bin or near the shredder elevator while the machine is running.

- **CHECK FLOOR CHAIN TENSION.** A simple check is to stand in the bin and exert a strong pull at the centre of the floor. There should be approximately 70mm of vertical movement in this area.
- **CHECK ELEVATOR CHAIN TENSION.** Exert a pull at the mid-point of the elevator face. If necessary adjust for approximately 30mm of movement from rest towards the rear of the wagon.
- **CHECK ALL TRANSMISSION CHAINS.** These should have some slack. The factory settings should be okay.
- **CHECK ALL WHEEL NUTS ARE SUFFICIENTLY TIGHT.**
- **CHECK ALL AXLE MOUNTING BOLTS AND NUTS ARE SUFFICIENTLY TIGHT.**
- **THE FLAPS** on Centre Feed wagons are normally tied closed for delivery purposes. Make sure the flaps are opened sufficiently to allow material to pass through without blocking. Hay requires a larger opening than chopped silage.
- **THE BELT ON CROSS-CONVEYER MODELS** should be checked for alignment, and adjusted if necessary to ensure it is tracking correctly. See the notes on cross-conveyer belt adjustment.
- **THERE ARE SEVERAL GREASE POINTS** on all Giltrap wagons. Check the yellow label on the side of your machine to see how many grease points there are. You should fully grease everything before running it for the first time.

Maintenance

Tension all chains as per the pre-service guidelines. The location of the floor chain tensioners is shown in Fig.1.



Fig.1

Transmission chains have floating nylon tensioner arms. Chain slack can be removed by adjusting the nylon blocks in the slotted holes (Fig.2).



Fig.2

Difficult access cast iron bushes are greased via a central greasing location (Fig.2).

The back gate is protected by a crash lock mechanism that can be opened manually by pulling on the handle shown; otherwise the gate will open under pressure applied by a reversing load on the floor. The load setting of the crash lock system can be adjusted by removing the end cap fitting which encloses a compression spring that applies pressure to the ball bearing that locks the handle in place. The adjustment is made on a bolt within the spring assembly. Replace the end cap after adjusting.



Fig.3

The easiest way to check and service the floor and elevator chains is from inside the bin. Access through the back gate is made simple by using the stay provided to hold the back gate open (Fig.4)

It may be necessary to loosen the nyloc nut on the stay slightly on a new machine, as this is tightened for delivery purposes.



Fig.4

An important feature of the MSX series wagons is the ability to adjust the position of the cross conveyor assembly relative to the chassis. This is done with ease by loosening 4 clamps - 2 bolts at the front of the machine (Fig.5)...



Fig.5

...And 2 bolts at the back of the cross conveyor (Fig.6).
With these clamps loosened off simply position the conveyor at the desired point then refasten the clamps.



Fig.6

Adjusting the Cross Conveyor Belt

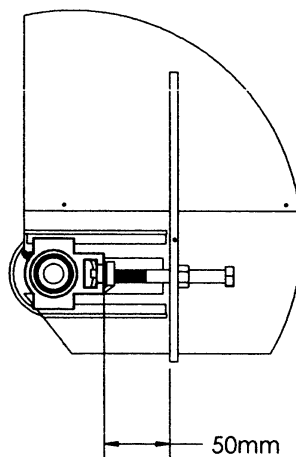
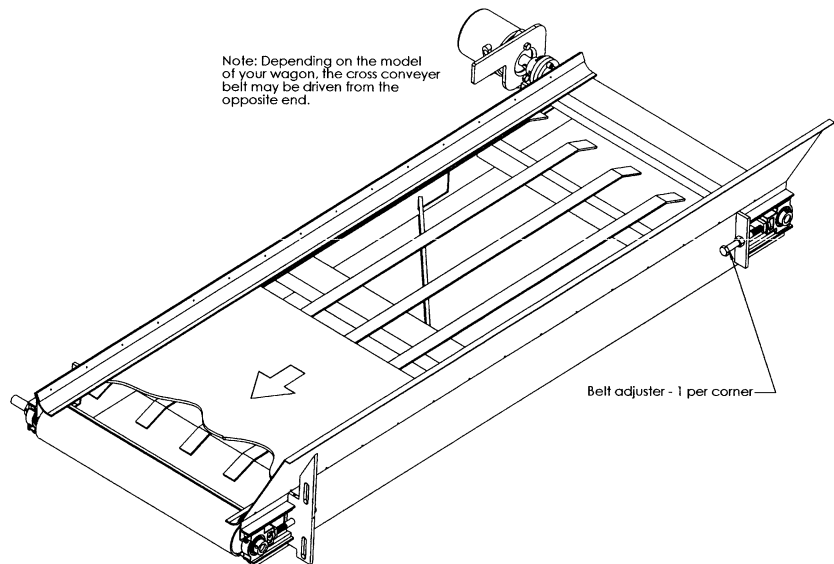
The cross conveyor belt is set up and adjusted at the factory before delivery; however it is usual after a period of time to notice the belt running off centre. This is normal and is caused by belt stretch or movement under load.

Simply adjust the take-up bearings a little at a time using the adjusting bolts, until the belt runs true again. You usually only need to work at one end (the discharge end has the easiest access), where you should either loosen one adjuster slightly, or tighten the other, or a combination of both.

All adjustments must be made with wagon running, preferably empty. Only adjust $\frac{1}{4}$ of a turn at a time and run for at least 5 minutes between adjustments.

THE BELT WILL RUN TO THE LOOSE SIDE.

DO NOT OVERTIGHTEN - THIS WILL CAUSE A POWER LOSS!



Use this as a starting distance to set the belt up from scratch if it has been removed for maintenance reasons or replaced.

Operation

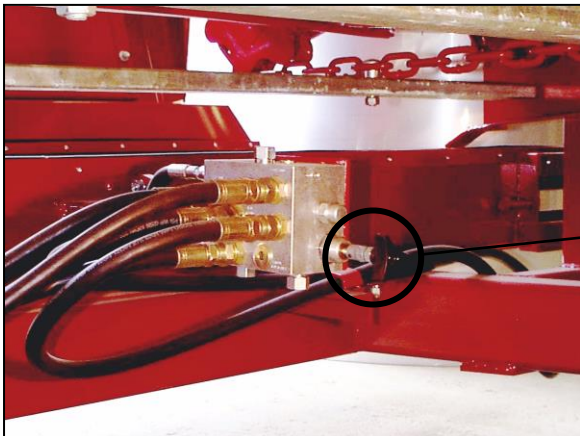
All Super Hydraulic Models:

- GREASE daily for the first week, then at weekly intervals during each feeding out season. Always grease and oil the machine after it has been in storage or not used for a long period of time.
- OIL the transmission chains at regular intervals. Note that models MSX160-SUPER and MSC165-SUPER have a gearbox as the first reduction in the floor driveline. Check the oil level at the back of the gearbox, and make sure the seals are not leaking.
- LOAD the wagon from the rear to the front. When difficult material has to be handled, eg long, wet silage, load the material in sections. It may sometimes be necessary to reverse the load a short distance, then bring it forward again to present a new face to the elevator. Note: reverse the floor by pushing the hydraulic lever on your tractor in the opposite direction.
- BEST FEEDING OUT CONDITIONS occur when the wagon is freshly loaded. If left loaded overnight, the material can settle into a hard mass that becomes difficult to feed out. The practice of leaving a load in the machine for hours before feeding out will also accelerate the deterioration of the wagon because of the acidic nature of silage.
- CONTROLLING THE FEED-OUT RATE is done by using the control rod mounted on the drawbar (Fig.7). This adjusts the load pressure that the 'Super' valve uses to start and stop the floor automatically. When you have adjusted the feed-out rate to your requirements, the 'Super' valve will maintain an even flow of material to the elevator by automatically adjusting the floor speed. As the wagon empties the floor will automatically speed up. Cross conveyer models have the added feature of independent belt speed control that is adjusted using the knob shown (Fig.8) - this adjustment can only be made with the tractor hydraulics disengaged. Cross conveyer models have a priority hydraulic system, meaning that if you want, you can run the belt independently to clear it by idling your tractor. As tractor revs are increased the oil flow output from the tractor naturally improves and the elevator and floor will begin to work.



Adjusting Handle

Fig.7



Adjusting Knob

Fig.8

Operation

All Power Take-Off (PTO) Models:

- GREASE daily for the first week, then at weekly intervals during each feeding out season. Always grease and oil the machine after it has been in storage or not used for a long period of time.
- OIL the transmission chains at regular intervals.
- CHECK ALL SHEARBOLTS are in position and that you have spare bolts before you start to feed out.
- LOAD the wagon from the rear to the front. When difficult material has to be handled, e.g. long, wet silage, load the material in sections. It may sometimes be necessary to reverse the load a short distance, and then bring it forward again to present a new face to the elevator.
- THE MACHINE SHOULD BE RUN AT 400 - 500 RPM with the floor set at a slow speed. When the wagon is about $\frac{3}{4}$ unloaded the floor speed can be increased to empty the rest of the material.
- BEST FEEDING OUT CONDITIONS occur when the wagon is freshly loaded. If left loaded overnight, the material can settle into a hard mass that becomes difficult to feed out. The practice of leaving a load in the machine for hours before feeding out will also accelerate the deterioration of the wagon because of the acidic nature of silage.
- WHEN OPERATING THE WAGON IN FAST FLOOR REVERSE always ensure that the gear selector arm is bolted in the lock-hole position.

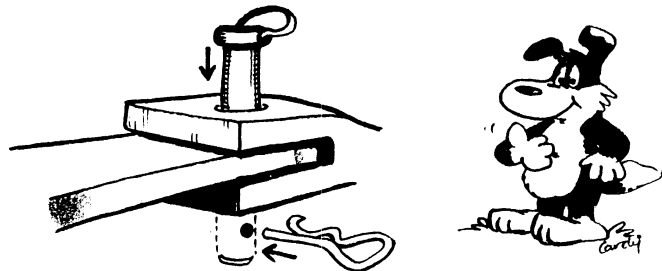
General Safety

For the safety of others and yourself, please read and follow the precautions in this operator's manual. Pay particular attention to the following safety aspects of operating machinery.

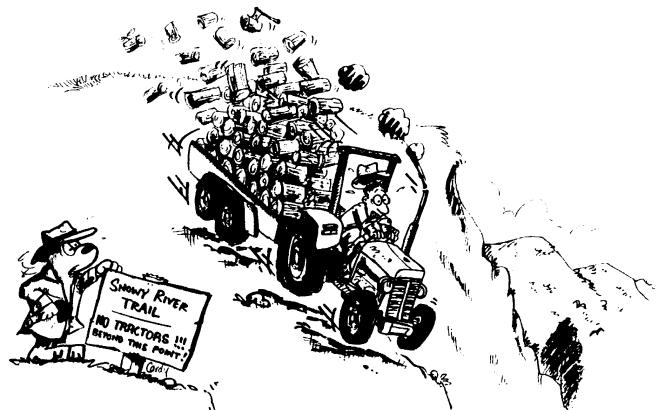
Do not ride on or allow passengers on the machine.



Always use a recognised hitch pin with a safety clip to hook trailed implements on behind the tractor.



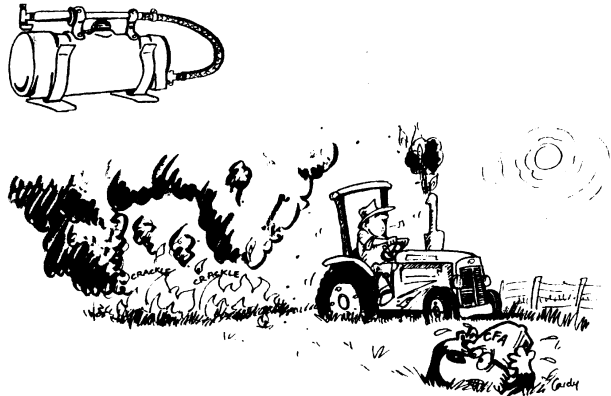
When pulling trailed implements or loads, be sure to use a tractor of greater or equal weight than the combined weight of the load and trailer.



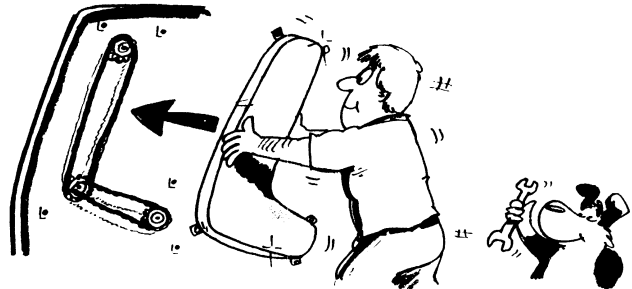
Carry a suitable fire extinguisher.

A fire can ignite under certain conditions, so please take the following precautions:

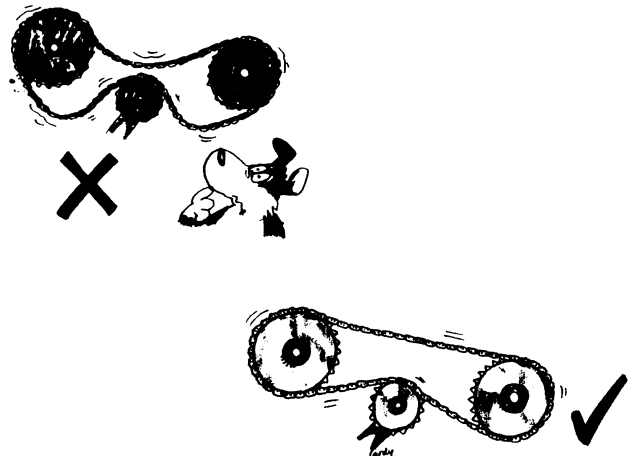
- After running your machine for a short time, check for defective bearings. A faulty bearing can become very hot, eventually discolouring, requiring immediate replacement.
- Do not allow combustible material to accumulate inside guards or around rollers and other moving parts.
- If your machine becomes blocked, stop immediately and remove the obstruction.
- Be careful when operating in hot or dry conditions or on extreme fire risk days.



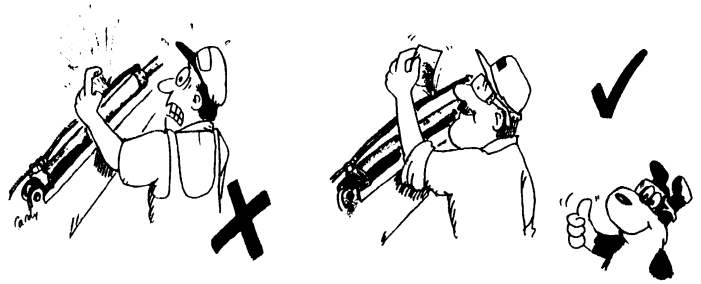
Never operate your machine without the safety guards in place.



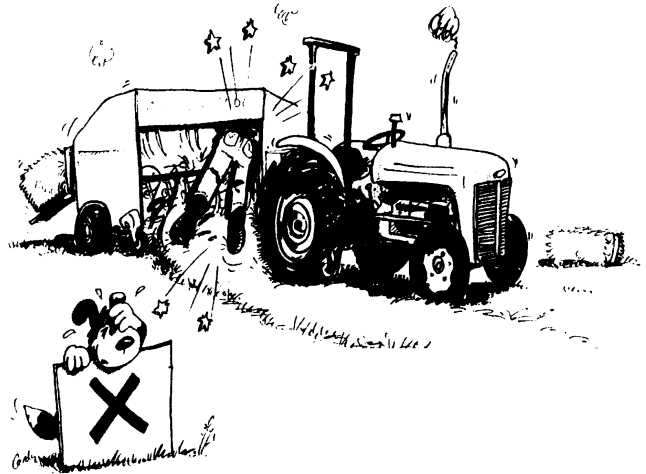
All chains should be properly adjusted and replaced when necessary.



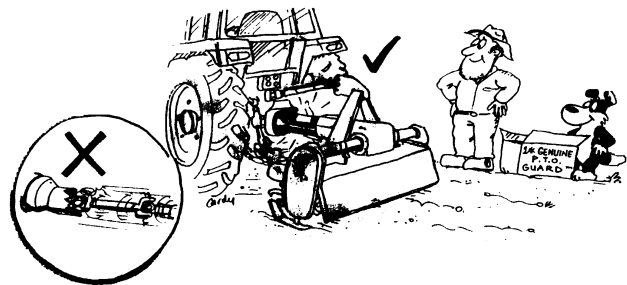
Release all hydraulic pressure from implements before commencing service work. Never look for suspected oil leaks with your hands or body - use a piece of cardboard instead. Any fluid which penetrates the skin will have to be removed immediately by a medical expert. Seek specialist advice on this type of injury.



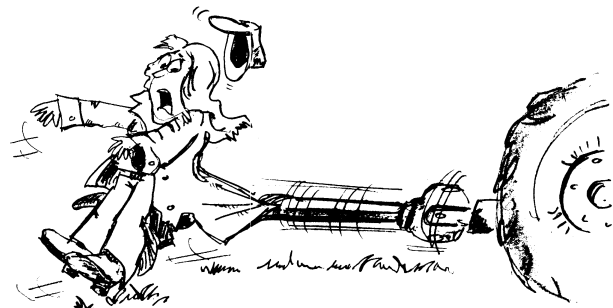
Never attempt to unblock equipment while it is still operating. Always disengage power take-off, hydraulics and shut down engine before removing materials, checking or servicing. Failure to follow these precautions is likely to result in serious injury.



Ensure that your PTO shaft is adequately guarded. Do not attempt to use a driveshaft without a cover.



Wear proper protective clothing. Loose attire can easily be snagged by rotating machinery resulting in serious injury or death.



MSX Troubleshooting Guide

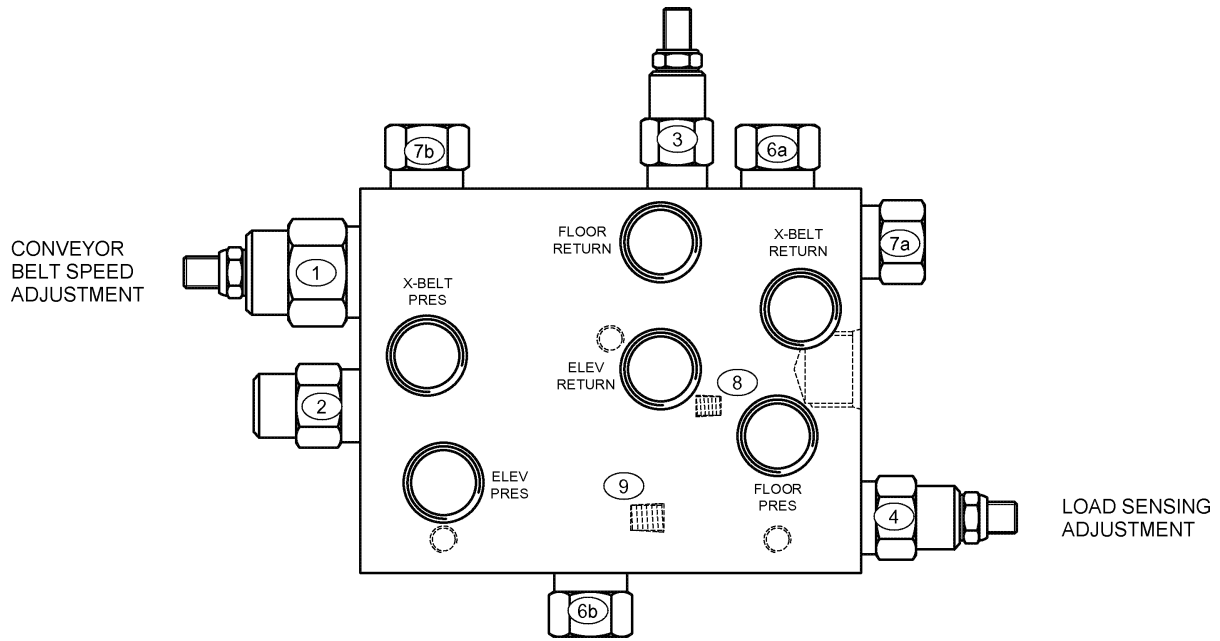


When using the guide, it has been assumed that the tractor has been checked to provide a oil flow rate of between 30 and 60 litres per minute at full working pressure, usually between 2500psi (170 bar) and 2800psi (190 bar). If these conditions are not satisfied, the forage wagon will perform poorly or not at all.

Notes:

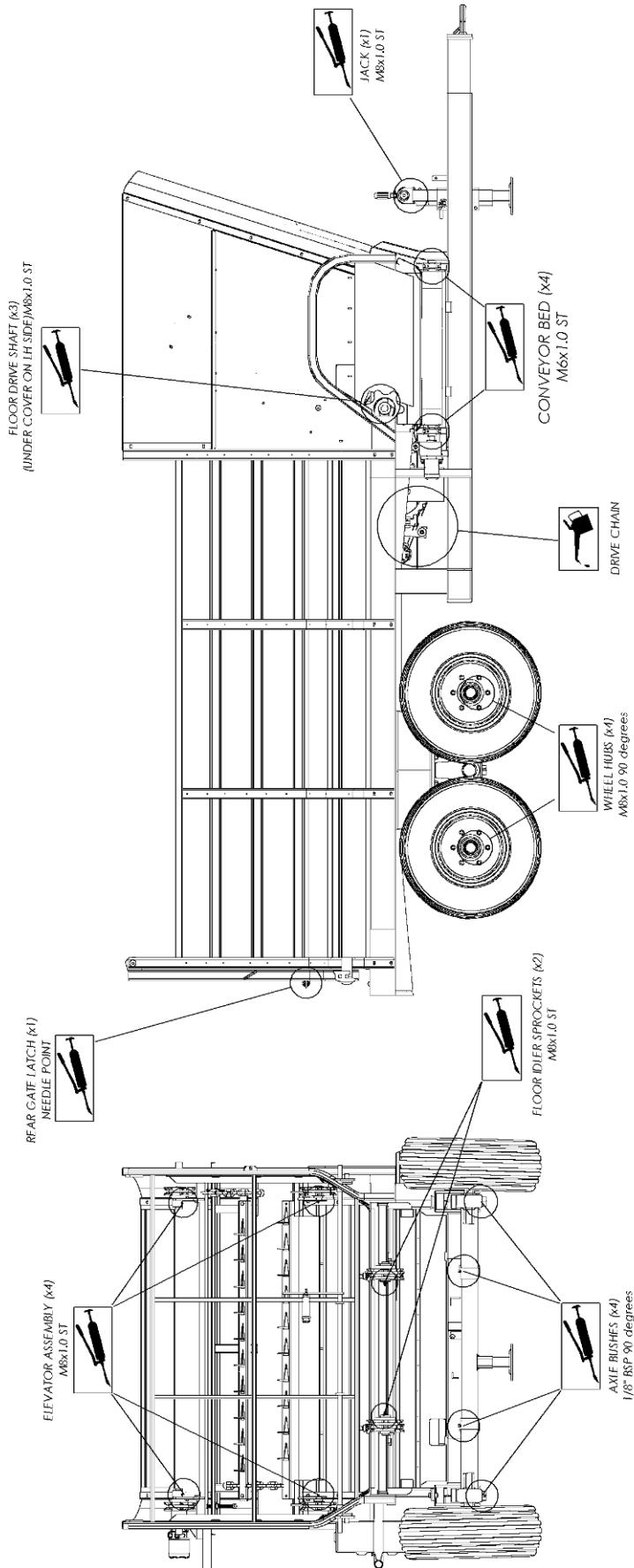
- To allow for lower flow tractors (30l/min and below), cartridge #6a can be changed with other types of valve cartridges to change the floor and elevator motor circuit from a series to a parallel circuit to reduce the oil flow requirement. Please note that this arrangement will cause the machine to run with acceptable speed but reduced power compared to the series circuit.
- Cartridge #6a (as fitted as standard) is a check valve (CXCD) for a permanent series connection between the floor and elevator motors. By replacing this with a cavity blank (XFOA) permanent parallel connection is achieved.
- By replacing cartridge #6a with a free flow reverse needle valve (NCCB), it is possible to convert the circuit between series and parallel in the field by winding fully in for series or fully out for parallel.
- Changing cartridge #6b from CXCD to SCCB (set @ 1700psi) will provide pressure relief when the floor is reversed. When relief pressure is reached, the conveyor belt will begin to operate in reverse.
- Machines that develop or operate with a jerking or shuddering action can be rectified by fitting a non standard inline valve (SCCB 154Z P8) with relevant fittings between the port marked 'ELEV PRES' and the elevator motor. This preloads the hydraulic circuit and smoothes the operation.

HCV1899B Valve Layout



Position	Qty	Supplier Part #	Description	Setting
1	1	FRDA LAN	Flow Control (3.6mm)	16 lpm
1(a)	1	KNOB547B-1	Tri-Knob 3/8" UNF (not shown)	
2	1	LHDA XEN	Flow Compensator	
3	1	RDBA LAN	Floor Relief Valve	1700 psi
4	1	DPBB LAN	Sequencing Element N.C.	2000psi
5 (a & b)	2	CXDA XAN	Check Valve	4 psi
6 (a & b)	2	CXCD XAN	Check Valve	4 psi
7(a)	1	CXCD XAN (std)	Check Valve (for perm. series conn.)	4 psi
7(a,i)	1	XFOA XXN	Cavity Blank (for perm. parallel conn.)	
7(a,ii)	1	NCCB LCN	Needle Valve (for selectable conn.)	
7(b)	1	CXCD XAN (std)	Check Valve	4 psi
7(b,i)	1	SCCD	Relief Valve (see note)	1500psi
8	1	1/16" NPT x 0.8mm	Dampening Orifice	
9	1	1/8" BSPT x 0.8mm	Dampening Orifice	

Lubrication Diagram



LUBRICATION SCHEDULE

ELEVATOR SPROCKETS - GREASE EVERY 5 LOADS
 FLOOR SHAFT - GREASE EVERY 10 LOADS
 FLOOR IDLER SPROCKETS - GREASE EVERY 10 LOADS
 AXLE BUSHES - GREASE EVERY DAY
 WHEEL HUBS - GREASE EVERY 3 MONTHS
 CONVEYOR BED - GREASE EVERY 10 LOADS
 REAR GATE LATCH - GREASE EVERY 3 MONTHS
 FLOOR REDUCTION CHAIN - OIL EVERY MONTH
 JACK STAND - GREASE EVERY WEEK

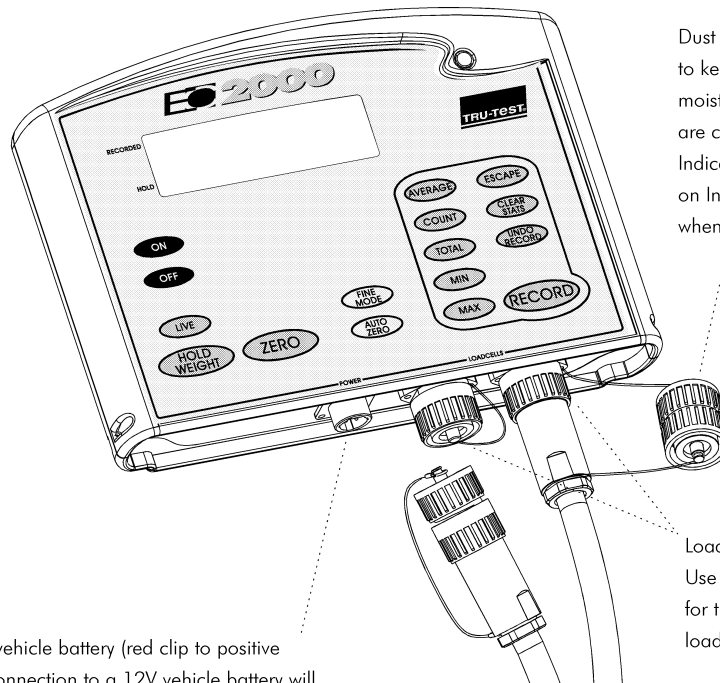
EO 2000

USER GUIDE

Congratulations if you have purchased this Tru-Test Series 2000 scale Indicator with your Giltrap silage wagon. To ensure you receive maximum benefit from owning a weighing system, please pay careful attention to the following instructions.

INSTALLATION

Your Tru-Test indicator is supplied fully installed and calibrated for your Giltrap silage wagon. The internal battery is charged and ready to use, or you may wish to connect the power cable semi-permanently by installing a plug at the back of your tractor.





Dust caps screw together to keep out dirt and moisture when cables are connected to Indicator. Screw back on Indicator/cables when cables removed.

Loadcell connectors. Use either connection for the silage wagon load cells.

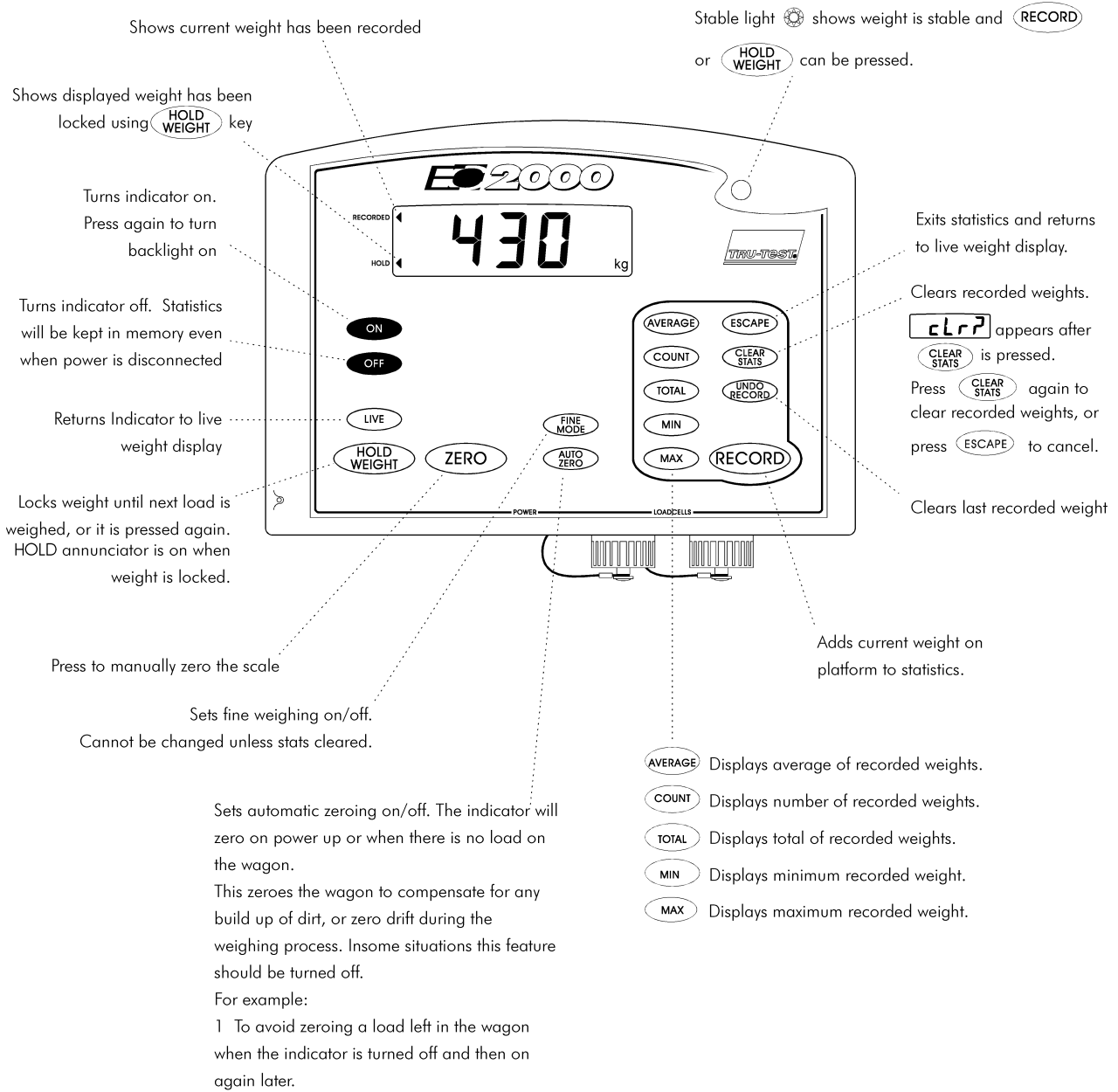
Power connector for connecting 12 V vehicle battery (red clip to positive terminal) or Tru-Test power adaptor. Connection to a 12V vehicle battery will charge the internal battery in the indicator.

BASIC WEIGHING







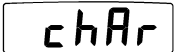

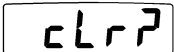










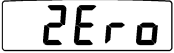
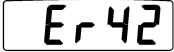

- 1 Press **ON** and wait for  display.
- 2 Load the silage wagon with the first feed product.
- 3 Wait for stable light .
- 4 Note the weight before continuing to load, or commence feeding out when the wagon is loaded satisfactorily.



FUNCTIONS



DISPLAY MESSAGES


	Loadcell type not recognised. Contact TRU-TEST.		External power supply too high. Check power supply.
	Recharge battery. About 10 minutes till flat.		External power supply too low. Voltage too low to charge.
	Memory empty, or previous recorded weights already removed.		Not recorded. No loadcell connected or weight not stable. Otherwise clear stats and try again.
	Battery is charging. Indicator can be used normally.		Function is off.
	Clear statistics prompt. Press  to confirm, or  to cancel.		Function is on.
	Previous recorded weight has been removed from statistics.		Overload. Weight on scale is greater than capacity. If fine mode is on, clear stats and turn fine mode off.
	Duplicate record. Weight already recorded.		Weight recorded.
	Charge level. Battery is low.		Under load. Negative load or faulty loadcell/wiring.
	Charge level. Battery is fully charged. It is safe to leave on charge.		Indicator is zeroing.
	Scale needs service. Note the error number and contact TRU-TEST.		Zero overload.

OPERATING NOTES

Do not leave the Indicator or loadbars in or exposed to water. Store the Indicator in a cool dry place.
The Indicator automatically turns off after 15 minutes of no activity, to limit discharge of the internal battery.

INTERNAL BATTERY

The internal battery charger operates from either the recommended Tru-Test power adaptor or a 12 volt vehicle battery. Damage to the Indicator caused by other charging supplies, including automotive battery chargers, is not covered by the warranty.

The Indicator displays  about 10 minutes before flat, if the battery was fully charged within the last 2 weeks.

Charge the Indicator for 12 hours before using it for the first time.

To maximise battery life, observe the following simple guidelines:

- Preferably recharge the battery overnight.
- Never charge the Indicator in direct sunlight.
- Store the Indicator in a cool dry place.

The internal battery charger ensures maximum life of the battery, while giving the fastest charging rate possible. The battery is protected from overcharging. Charging a flat battery takes 6 hours at temperatures of 10 °C to 35 °C (50 °F to 95 °F).

You can safely leave the Indicator on charge all the time. The scale can be used while charging. You do not need to charge before storage.

Charging at low or high temperatures could extend the charging time to 12 hours. At extreme temperatures the Indicator will not charge.

Fully charge the Indicator after storage.

SPECIFICATIONS

Note: product specifications may change without prior notice.

Total Capacity	15000 kg
Resolution	Set to 0.5 kg (fine mode 0.1 kg) or 1 lb (fine mode 0.2 lb).
Accuracy	±1 % or 2 resolutions (whichever is greater) with Tru-Test loadbars/EziFeet connected.
Power supply	12 V DC (power adaptor or vehicle battery).
Operating temperature	-10 °C to +40 °C (14 °F to +104 °F).
Storage temperature	-20 °C to +35 °C (-4 °F to +95 °F).
Internal battery run time	Up to 8 hours
Environmental	IP67 (immersion in 1 m of water).

FOR SERVICE www.tru-test.com

New Zealand	Phone (09) 978 8888	Facsimile (09) 978 8889	Toll Free 0800 878 837
USA	Phone (210) 495 9130	Facsimile (210) 495 9129	Toll Free 1 800 874 8494
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Hungary	Phone (23) 414 100		
Czech Republic	Phone (5) 4721 5729		
Poland	Phone (22) 645 1247		
Latvia	Phone 2945 796	E-mail doma@sal.lv	
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Estonia	Phone 7362 716	E-mail estdoma@kodu.ee	

FCC NOTICE

The Tru-Test Model EC2000 Indicator has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is used in a commercial environment. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instruction leaflet, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference, in which case users will be required to correct the interference at their own expense.



WID81000 English rev 2 11.99

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Serial Number Position & Identification

Before ordering any parts, check the serial number and the delivery date of the machine and include this information with all orders.

The serial number plate is located on the front left hand panel adjacent to the vertical post.

If the Serial Number Plate is missing, check the indicated places where the serial number could have been stamped (depending on the model).

Manufactured by



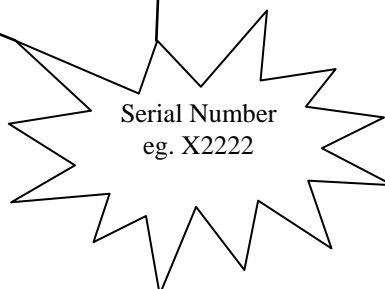
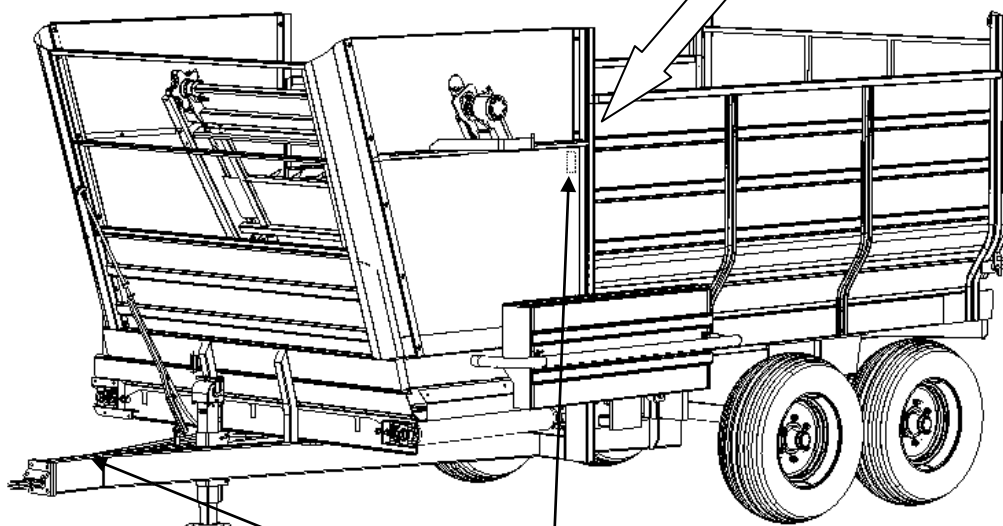

ENGINEERING LTD

3 Main North Road,
Otorohanga, New Zealand
Telephone 07-873 7199

MODEL

SERIAL No.

**Quote number
when ordering parts**



Hydraulic Components – All Models

Forage Wagon Model	Manufacture Date	Super Valve	Floor Motor	Elevator Motor	Conveyor Motor
MSX66-SUPER	Current	HCV1899	OMR200 TE0-195-AS	RE32 TG0530MS030	C101-2241 OMP40 BG50NC25 OMP50
MSC70-SUPER	Current	HCV1918	OMR200 TE0-195-AS	RE32 TG0530MS030	- - -
MSX80-SUPER	Current	HCV1899	OMR200 TE0-195-AS	RE32 TG0530MS030	C101-2241 OMP40 BG50NC25 OMP50
MSC85-SUPER	Current	HCV1918	OMR200 TE0-195-AS	RE32 TG0530MS030	- - -
MSC90-SUPER	Current	HCV1918	OMR250 TE0-230-AS	RE32 TG0530MS030	- - -
MSX100-SUPER	Current	HCV1899	OMR250 TE0-230-AS	RE32 TG0530MS030	C101-2241 OMP40 BG50NC25 OMP50
MSC105-SUPER	Current	HCV1918	OMR250 TE0-230-AS	RE32 TG0530MS030	- - -
MSX125-SUPER	Current	HCV1899	RE32 TG0530MS030	RE32 TG0530MS030	C101-2241 OMP40 BG50NC25 OMP50
MSC130-SUPER	Current	HCV1918	RE32 TG0530MS030	RE32 TG0530MS030	- - -
MSX160-SUPER	Nov '98 - Jun '01	HCV1899	OMP80 (in gearbox)	RE45 TG0625MS200 TG0785MS200	C101-2241 OMP40 BG50NC25 OMP50
MSX160-SUPER	Jul '01 Onwards	HCV1899	TG0625MS200	TG0625MS200	BG50NC25 OMP50
MSC165-SUPER	Current	HCV1918	TG0625MS200	TG0625MS200	- - -
MSX210-SUPER	Current	HCV1899	TG0625MS200	TG0625MS200	BG50NC25 OMP50
MSC215-SUPER	Current	HCV1918	TG0625MS200	TG0625MS200	- - -

Note: Any combination of the motors listed may occur in the given period for each model.

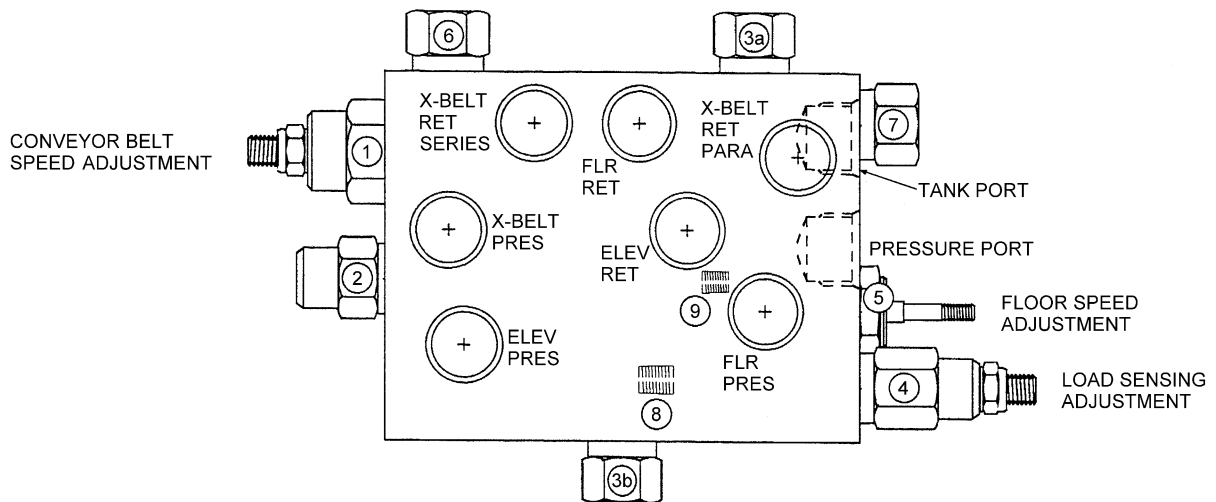
Transfers & Labels – MSC Series

Item	Part Number	Description	Quantity Used						
			70	85	90	105	130	165	215
1	995-1005	Transfer 'Giltrap' Black	2	2	2	2	2	-	-
2	995-1025	Label 'CAUTION! Ensure Hydraulic'	1	1	1	1	1	-	-
3	995-1031	Transfer 'SUPER' 250x50mm White	2	2	2	2	2	-	-
4	995-1103	Transfer 'MSC' 50mm White	2	2	2	2	2	-	-
5	995-1128	Label 'Slow Fast'	2	2	2	2	2	-	-
6	995-1128-1	Label 'Feed Rate'	1	1	1	1	1	-	-
7	995-1195	Label 'Award NZ National Fielddays'	2	2	2	2	2	-	-
8	995-1221	Label 'Stand well clear'	1	1	1	1	1	-	-
9	995-1222	Label 'Do not stand in'	1	1	1	1	1	-	-
10	995-1223	Label 'This machine has'	1	1	1	1	1	-	-
11	995-1228	Label 'Ensure jack is in'	1	1	1	1	1	-	-
12	995-1229	Label 'Do not operate'	1	1	1	1	1	-	-
13	995-1230	Label 'Read operators manual'	1	1	1	1	1	-	-
14	995-1300	Number '1' 50mm White				2	2	-	-
14	995-1301	Number '2' 50mm White						-	-
14	995-1304	Number '3' 50mm White					2	-	-
14	995-1307	Number '5' 50mm White		2		2		-	-
14	995-1325	Number '7' 50mm White	2					-	-
14	995-1328	Number '8' 50mm White		2				-	-
14	995-1331	Number '9' 50mm White			2			-	-
14	995-1363	Number '0' 50mm White	2		2	2	2	-	-
15	995-1370	Transfer >>>>>> 1 metre Black	4	4	6	6	8	-	-
16	995-1377	Transfer >>>>>> 1 metre White	2	2	2	2	2	-	-
17	995-1815	Aluminium Plate 'Serial No' 50x125	1	1	1	1	1	-	-
Machines manufactured from November 2001 onwards.									
1	995-2114	Transfer 'Giltrap MSC70' Silver	2						
1	995-2128	Transfer 'Giltrap MSC85' Silver		2					
1	995-2135	Transfer 'Giltrap MSC90' Silver			2				
1	995-2149	Transfer 'Giltrap MSC105' Silver				2			
1	995-2163	Transfer 'Giltrap MSC130' Silver					2		
1	995-2177	Transfer 'Giltrap MSC165' Silver						2	
1	995-2191	Transfer 'Giltrap MSC215' Silver							2
1	995-2206	Transfer 'SCALES' 50mm Silver (when fitted)	2	2	2	2	2	2	2
2	995-1025	Label 'CAUTION! Ensure Hydraulic'	1	1	1	1	1	1	1
3	995-1195	Label 'Award NZ National Fielddays'	2	2	2	2	2	2	2
4	995-1128-1	Label 'Feed Rate'	1	1	1	1	1	1	1
5	995-1221	Label 'Stand well clear'	1	1	1	1	1	1	1
6	995-1222	Label 'Do not stand in'	1	1	1	1	1	1	1
7	995-1223	Label 'This machine has'	1	1	1	1	1	1	1
8	995-1228	Label 'Ensure jack is in'	1	1	1	1	1	1	1
9	995-1229	Label 'Do not operate'	1	1	1	1	1	1	1
10	995-1230	Label 'Read operators manual'	1	1	1	1	1	1	1
11	995-1245	Label Grease Gun	2	2	2	2	2	2	2
12	995-1815	Aluminium Plate 'Serial No' 50x125	1	1	1	1	1	1	1

Transfers & Labels – MSX Series

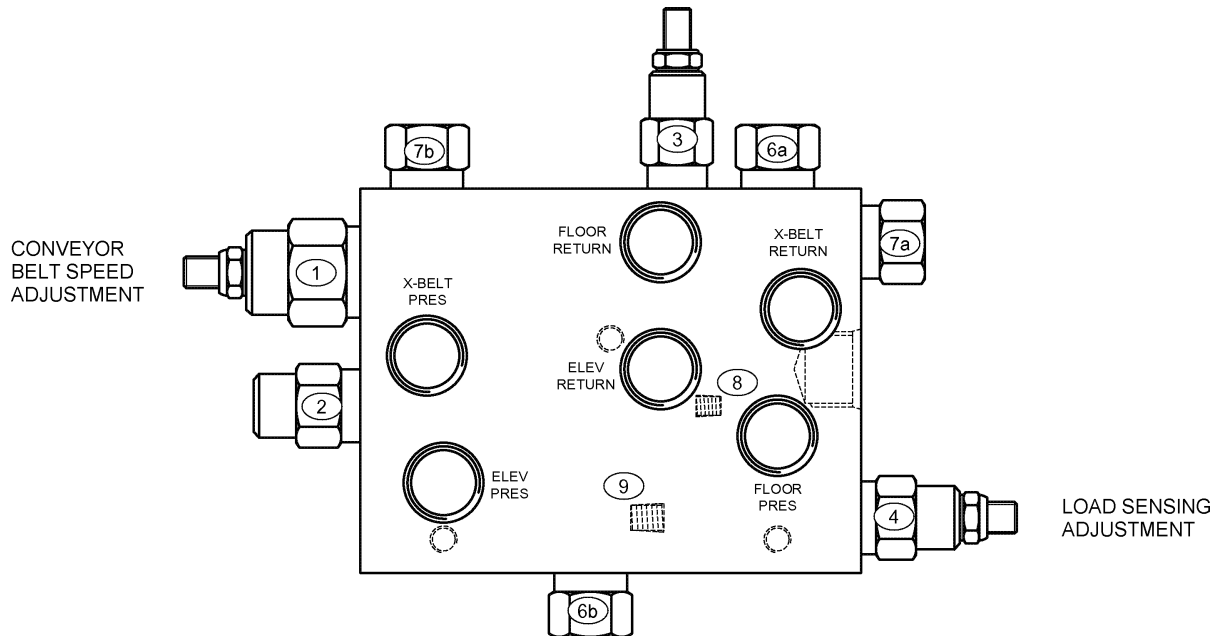
Item	Part Number	Description	Quantity Used					
			66	80	100	125	160	210
1	995-1005	Transfer 'Giltrap' Black	2	2	2	2	2	-
2	995-1025	Label 'CAUTION! Ensure Hydraulic'	1	1	1	1	1	-
3	995-1031	Transfer 'SUPER' 250x50mm White	2	2	2	2	2	-
4	995-1105	Transfer 'MSX' 50mm White	2	2	2	2	2	-
5	995-1128	Label 'Slow Fast'	2	2	2	2	2	-
6	995-1128-1	Label 'Feed Rate'	1	1	1	1	1	-
7	995-1195	Label 'Award NZ National Fieldays'	2	2	2	2	2	-
8	995-1221	Label 'Stand well clear'	1	1	1	1	1	-
9	995-1222	Label 'Do not stand in'	1	1	1	1	1	-
10	995-1223	Label 'This machine has'	1	1	1	1	1	-
11	995-1228	Label 'Ensure jack is in'	1	1	1	1	1	-
12	995-1229	Label 'Do not operate'	1	1	1	1	1	-
13	995-1230	Label 'Read operators manual'	1	1	1	1	1	-
14	995-1240	Label 'DANGER'	1	1	1	1	1	-
15	995-1300	Number '1' 50mm White			2	2	2	-
15	995-1301	Number '2' 50mm White				2		-
15	995-1307	Number '5' 50mm White				2		-
15	995-1328	Number '8' 50mm White		2				-
15	995-1331	Number '9' 50mm White	4				2	-
15	995-1363	Number '0' 50mm White		2	4		2	-
16	995-1370	Transfer >>>>>> 1 metre Black	4	4	6	8	8	-
17	995-1377	Transfer >>>>>> 1 metre White	2	2	2	2	2	-
18	995-1815	Aluminium Plate 'Serial No' 50x125	1	1	1	1	1	-
Machines manufactured from November 2001 onwards.								
1	995-2107	Transfer 'Giltrap MSX66' Silver	2					
1	995-2121	Transfer 'Giltrap MSX80' Silver		2				
1	995-2142	Transfer 'Giltrap MSX100' Silver			2			
1	995-2156	Transfer 'Giltrap MSX125' Silver				2		
1	995-2170	Transfer 'Giltrap MSX160' Silver					2	
1	995-2184	Transfer 'Giltrap MSX210' Silver						2
1	995-2206	Transfer 'SCALES' 50mm Silver (when fitted)	2	2	2	2	2	2
1	995-2213	Transfer 'SIDELIFT' 50mm Silver (when fitted)	2	2	2	2	2	2
2	995-1025	Label 'CAUTION! Ensure Hydraulic'	1	1	1	1	1	1
3	995-1195	Label 'Award NZ National Fieldays'	2	2	2	2	2	2
4	995-1128-1	Label 'Feed Rate'	1	1	1	1	1	1
5	995-1221	Label 'Stand well clear'	1	1	1	1	1	1
6	995-1222	Label 'Do not stand in'	1	1	1	1	1	1
7	995-1223	Label 'This machine has'	1	1	1	1	1	1
8	995-1228	Label 'Ensure jack is in'	1	1	1	1	1	1
9	995-1229	Label 'Do not operate'	1	1	1	1	1	1
10	995-1230	Label 'Read operators manual'	1	1	1	1	1	1
11	995-1240	Label 'DANGER'	1	1	1	1	1	1
12	995-1245	Label Grease Gun	2	2	2	2	2	2
13	995-1815	Aluminium Plate 'Serial No' 50x125	1	1	1	1	1	1

Valve Assembly – 1899 (MSX Side Delivery Models)



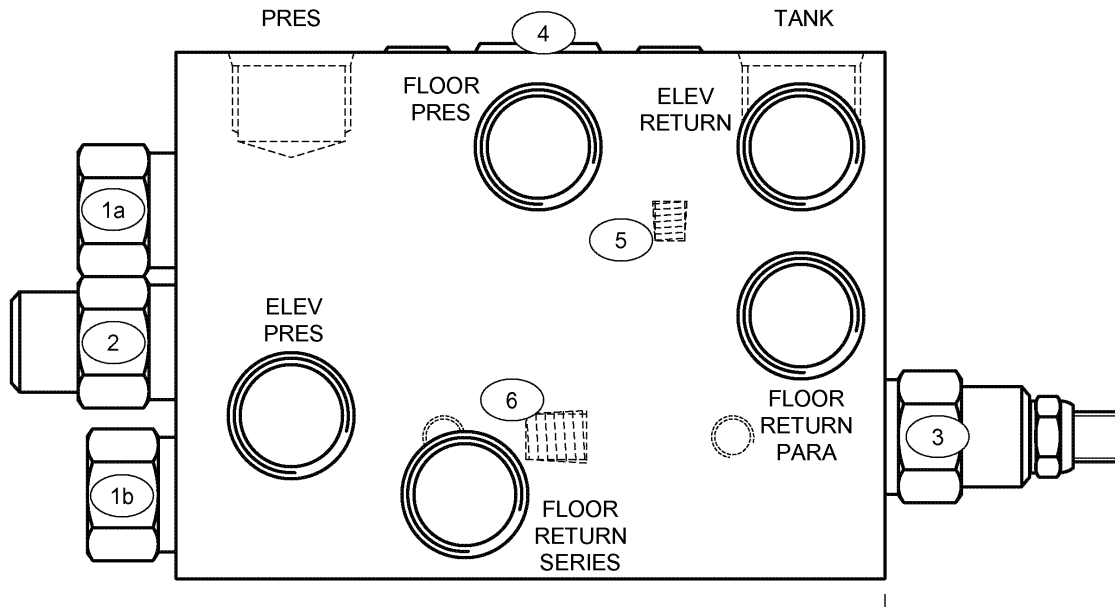
Position	Qty	Supplier Part #	Description	Setting
1	1	FRDA LAN	Flow Control (3.0mm)	11 l/m
1(a)	1	KNOB547B-1	Tri-Knob 3/8" UNF (not shown)	
2	1	LHDA XEN	Flow Compensator	
3a	1	CXDA XAN	Check Valve	4 psi
3b	1	CXDA XAN	Check Valve	4 psi
4	1	DPBB LAN	Sequencing Element N.C.	2000psi
5	1	NV1-10-T	Needle Valve	
6	2	CXCD XAN	Check Valve	4 psi
7(a)	1	CXCD XAN (std)	Check Valve (for perm. series conn.)	4 psi
7(a,i)	1	XFOA XXN	Cavity Blank (for perm. parallel conn.)	
7(a,ii)	1	NCCB LCN	Needle Valve (for selectable conn.)	
8	1	1/8" BSPT x 0.8mm	Dampening Orifice	
9	1	1/16" NPT x 0.8mm	Dampening Orifice	

Valve Assembly – 1899B (MSX Side Delivery Models)



Position	Qty	Supplier Part #	Description	Setting
1	1	FRDA LAN	Flow Control (3.0mm)	12 l/m
1	1	FRDA LAN	Flow Control (3.6mm)	16 l/m
1(a)	1	KNOB547B-1	Tri-Knob 3/8" UNF (not shown)	
2	1	LHDA XEN	Flow Compensator	
3	1	RDBA LAN	Floor Relief Valve	1700 psi
4	1	DPBB LAN	Sequencing Element N.C.	2000psi
5 (a & b)	2	CXDA XAN	Check Valve	4 psi
6 (a & b)	2	CXCD XAN	Check Valve	4 psi
7(a)	1	CXCD XAN (std)	Check Valve (for perm. series conn.)	4 psi
7(a,i)	1	XFOA XXN	Cavity Blank (for perm. parallel conn.)	
7(a,ii)	1	NCCB LCN	Needle Valve (for selectable conn.)	
7(b)	1	CXCD XAN (std)	Check Valve	4 psi
7(b,i)	1	SCCD	Relief Valve (see note)	1500psi
8	1	1/16" NPT x 0.8mm	Dampening Orifice	
9	1	1/8" BSPT x 0.8mm	Dampening Orifice	

Valve Assembly – 1918 (MSC Centre Feed Models)

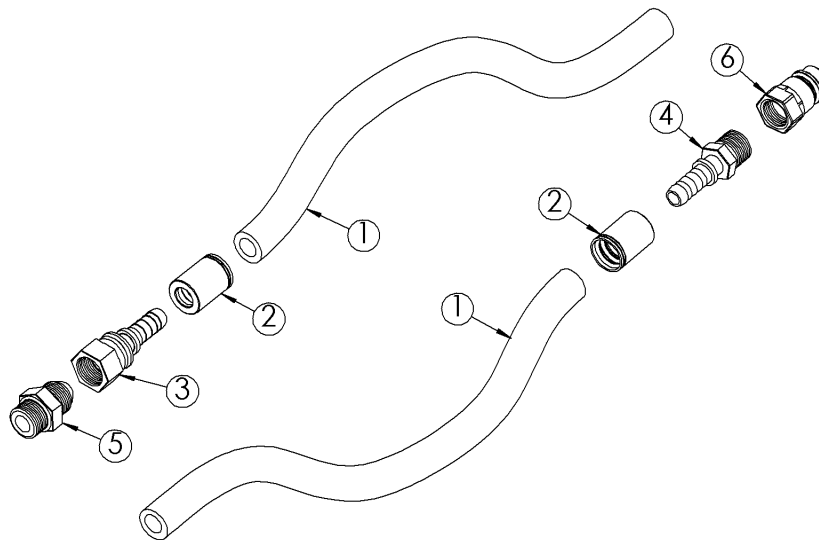


Position	Qty	Supplier Part #	Description	Setting
1a	1	CXDA XAN	Check Valve	4 psi
1b	1	CXDA XAN	Check Valve	4 psi
2	1	LHDA XEN	Flow Compensator	
3	1	DPBB LAN	Sequencing Element N.C.	2000psi
4	1	7/8" UN Plug	Blank	
5	1	1/16" NPT x 0.8mm	Dampening Orifice	
6	1	1/8" BSPT x 0.8mm	Dampening Orifice	

Note: 'FLOOR RETURN PARA' port is normally plugged.

Hydraulic Hoses (excluding Sidelift models)

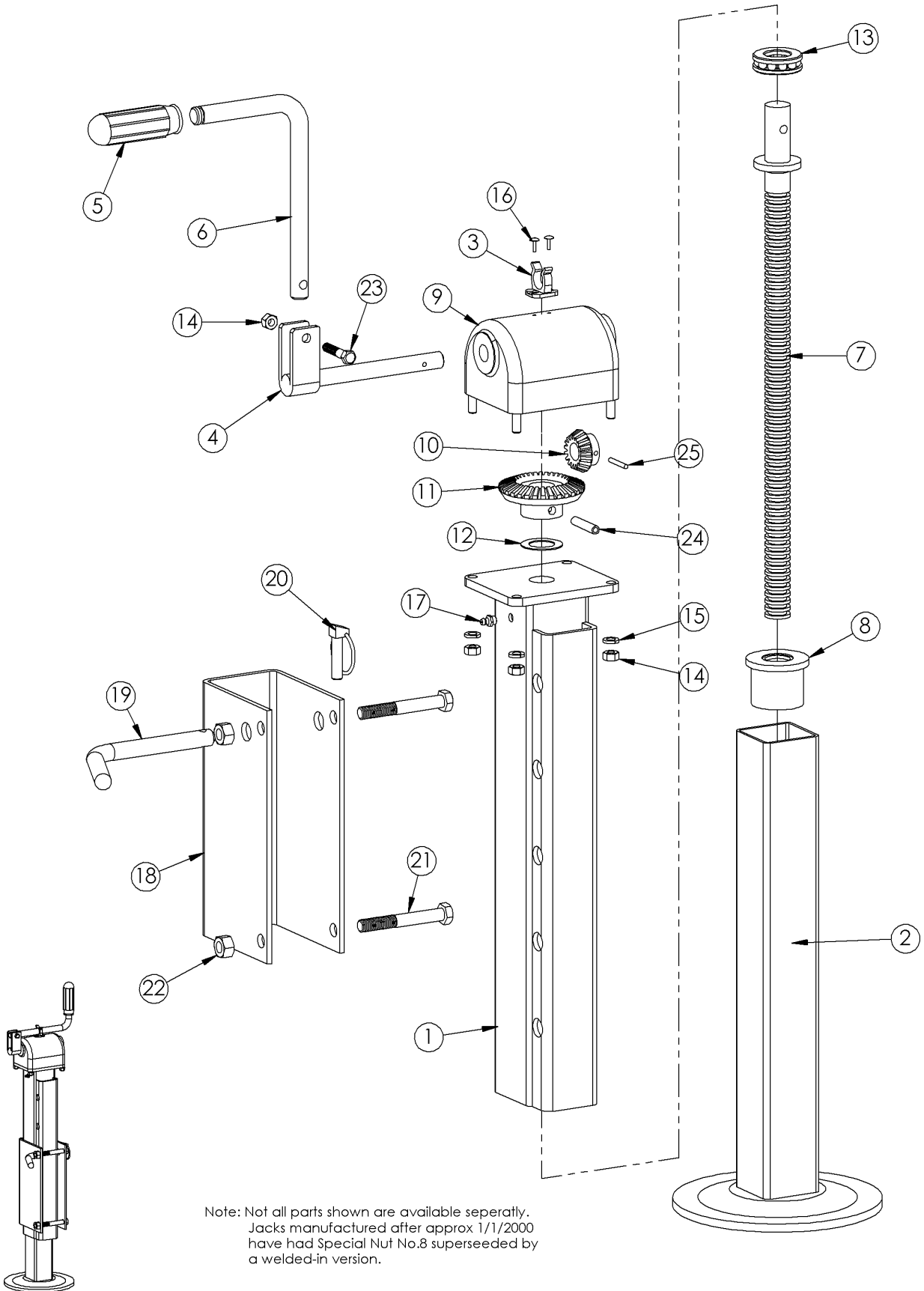
Cavity Designation	Valve	Relevant Hose Description	Hose Part #
Pres	HCV1899B	Valve To Tractor	450-1020-99
Tank	HCV1899B	Valve To Tractor	450-1020-99
Cross Belt Pres	HCV1899B	Valve To Conveyor Motor	450-1024-99
Cross Belt Ret	HCV1899B	Valve To Conveyor Motor	450-1024-99
Flr Pres	HCV1899B	Valve To Floor Motor	450-1022-99
Flr Ret	HCV1899B	Valve To Floor Motor	450-1022-99
Elev Pres	HCV1899B	Valve To Elevator Motor	450-1026-99
Elev Ret	HCV1899B	Valve To Elevator Motor	450-1026-99
Flr Pres	HCV1918	Valve To Floor Motor	-
Flr Ret	HCV1918	Valve To Floor Motor	-
Elev Pres	HCV1918	Valve To Elevator Motor	-
Elev Ret	HCV1918	Valve To Elevator Motor	-



Item	Part Number	Description	Quantity Used
1	HYH1/2	Hose 1/2" 2 Wire Non-Skive	-
2	HYFSN2-08	1/2" 2 Wire Ferrule Pressed	12
3	HYFS05-1408	7/8" JICF - 1/2M Swage Tail	10
4	HYFS15-0808	1/2" BSPM - 1/2M Swage Tail	2
5	HYFA-GN-1414	Hose Adaptor 7/8" JICF	10
6	HYFQRC1/2M	1/2" CCS Q.R.C Male End	2

Note: See page 97 for Sidelift hose details.

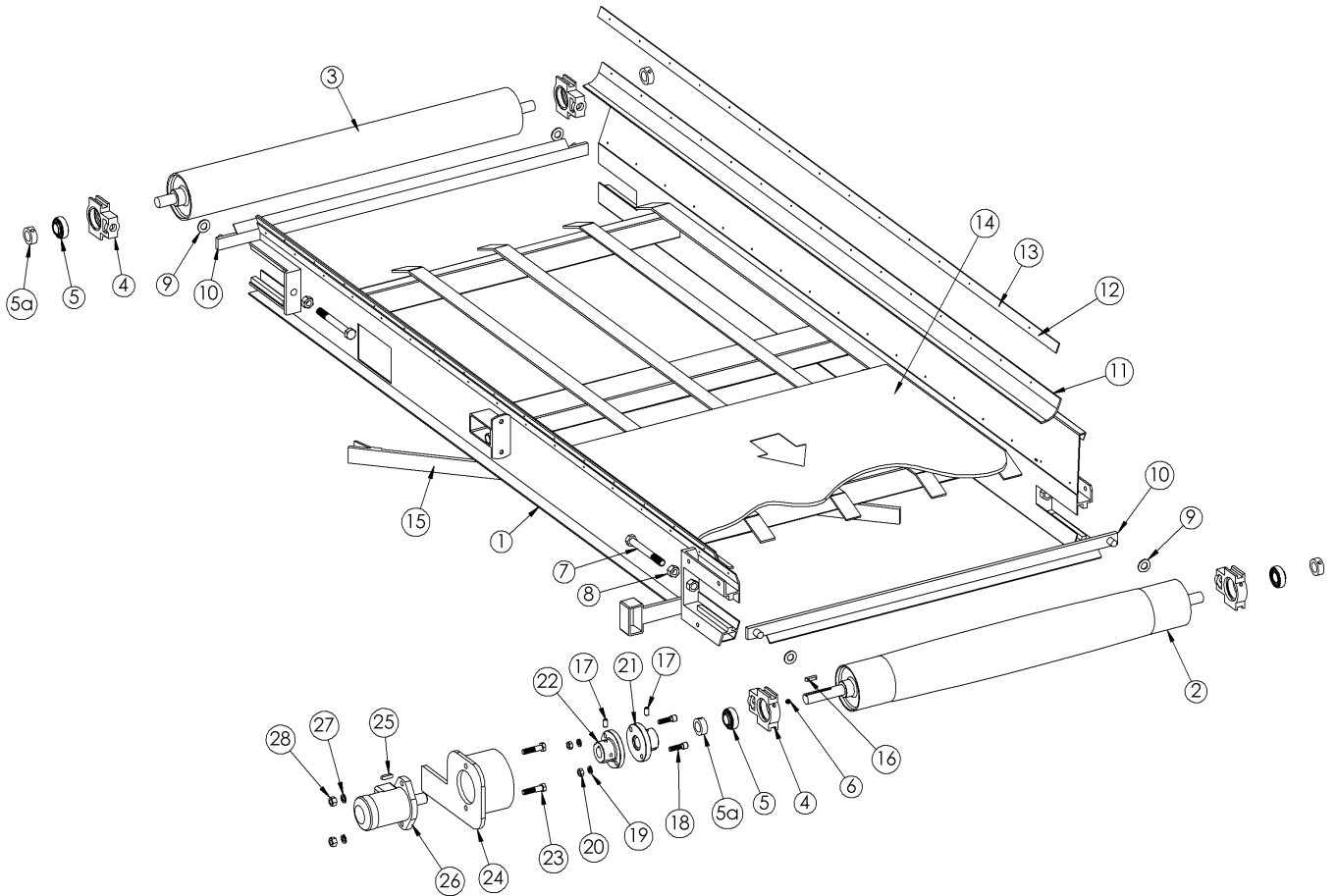
Jack Assembly



Jack Assembly

Item	Part Number	Description	Qty
-	301-4000-1	Jack Model 4 Assembly - c/w Pin, Sleeve etc.	1
-	301-4000	Jack Model 4 Assembly - no Pin, Sleeve etc.	1
1	301-4010	Upper Body	1
2	301-4017	Lower Foot	1
3	CLNPC3/4	Nylon Pole Clip ¾"	1
4	301-4031	Shaft	1
5	301-4049	Handle Knob, Plastic	1
6	301-4056	Handle - c/w knob	1
7	301-4024	Main Thread	1
8	-	Special Nut (included with #2)	1
9	301-4038	Aluminum Cover	1
10	301-4058	Gear, Small	1
11	301-4059	Gear, Large	1
12	301-4044	Thrust Washer - 25x40x1	1
13	BRGT51205	Thrust Bearing, T51205	1
14	NN8	Nut , Nyloc M8	5
15	WASG8	Washer, Spring M8	4
16	RIVIT-73406	Rivet	2
17	GRN8-ST	Grease Nipple, M8x1.0 Straight	1
18	301-4100	Jack Sleeve	1
19	301-4200	Jack Pin	1
20	FP10.006	Linch Pin	1
21	B12X100	Bolt, M12x100	2
22	NN12	Nut, Nyloc M12	2
23	B8x40	Bolt, M8x40	1
24	RP8x40	Roll Pin, 8x40	1
25	RP4x30	Roll Pin, 4x30	1

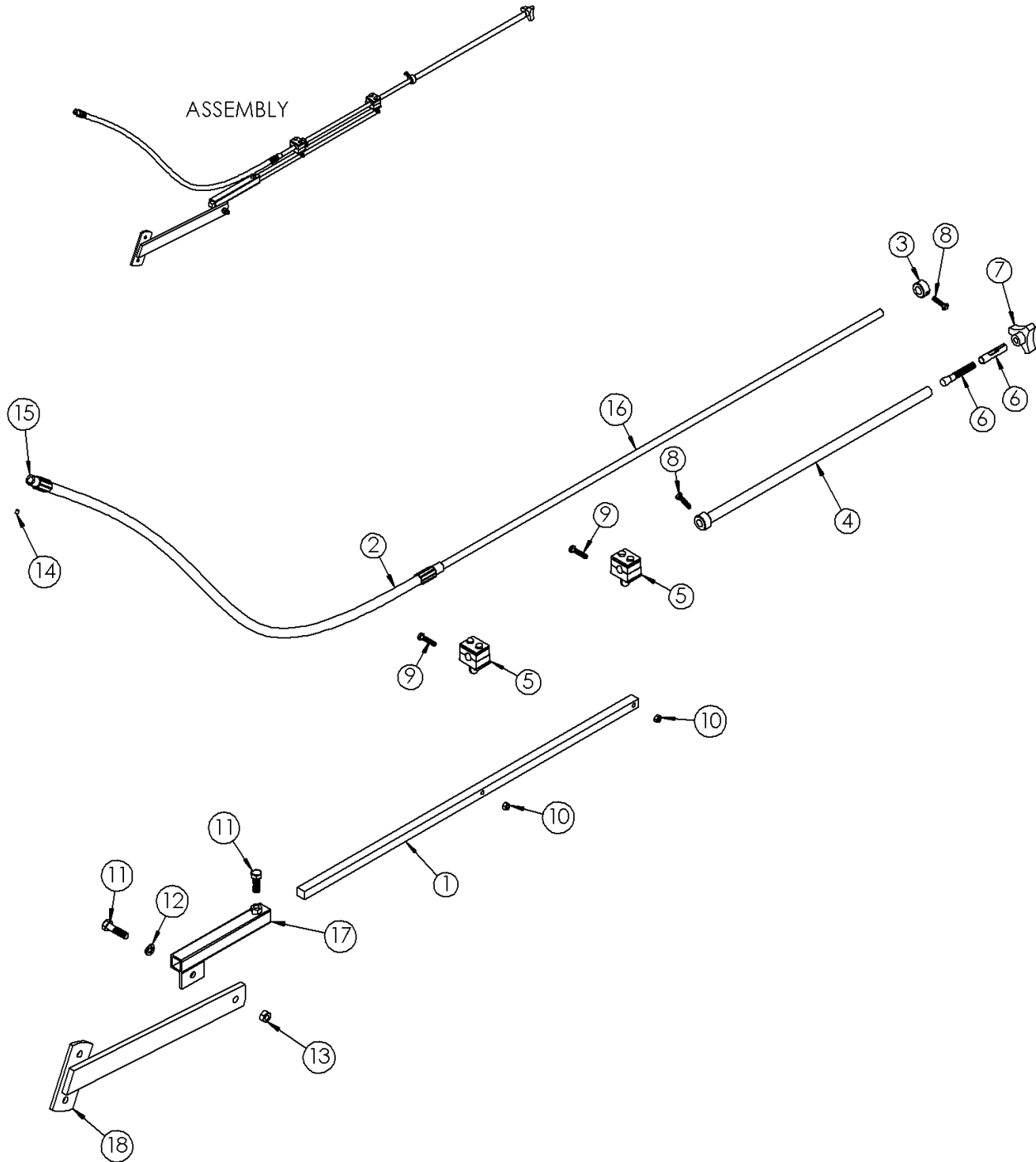
Conveyor Bed Assembly



Conveyor Bed Assembly

Item	Part Number	Description	Quantity Used
1	501-8005	Conveyor Bed Chassis - MSX66 only	-
1	501-8001	Conveyor Bed Chassis - All other models	1
2	501-9513	Drive Roller - 900mm	1
3	501-9518	Idler Roller - 900mm	1
4	HSGTU505	Take-up Housing, TU505	4
5	BRGYET205	Bearing Insert, with collar YET205	4
5a	-	Bearing Collar (included with #5)	4
6	GRN6-ST	Grease Nipple, M8x1.0 Straight	4
7	596-1001	Adjusting Tensioner M16x100 c/w Nuts	4
8	N16	Nut, M16 (2 c/w each tensioner)	8
9	WA16	Washer, Flat M16	4
10	595-1080	Belt Roller Cleaner 900mm	2
11	501-9521	Rubber Insertion Strip	2
12	501-9535	Rivet Strip	2
13	RIVITMGLPR67	Rivet	35
14	501-9108-1	Cross Conveyor Belt c/w Slats & Joiner 900 wide (MSX66 only)	1
14	501-9110-1	Cross Conveyor Belt c/w Slats & Joiner 900 wide	1
15	CCBC-MSX	Cross Conveyor Belt Cleaner (rigid in later models)	1
16	SK8X7	Key, Parallel 8x7x40mm	1
17	GSC3/8X1/2A	Grub Screw, Allen Head 3/8" UNC	4
18	SC10X40SC	Socket Cap Screw, M10x40	2
19	WASG10	Washer, Spring M10	2
20	N10	Nut, M10	2
21	554-1136	Coupling Male - Cross Conveyor	1
22	554-1143	Coupling Female - Cross Conveyor	1
23	B12X45	Bolt, M12x45	2
24	615-3542	Cross Conveyor Motor Mount Plate	1
25	-	Parallel Key 8mm	1
26	-	Hydraulic Motor (25mm shaft)	1
-	BELTFASTPST	Conveyor Belt Joining Wire, 3mm S/S	1.0m
27	WASG12	Washer, Spring M12	2
28	N12	Nut, M12	2

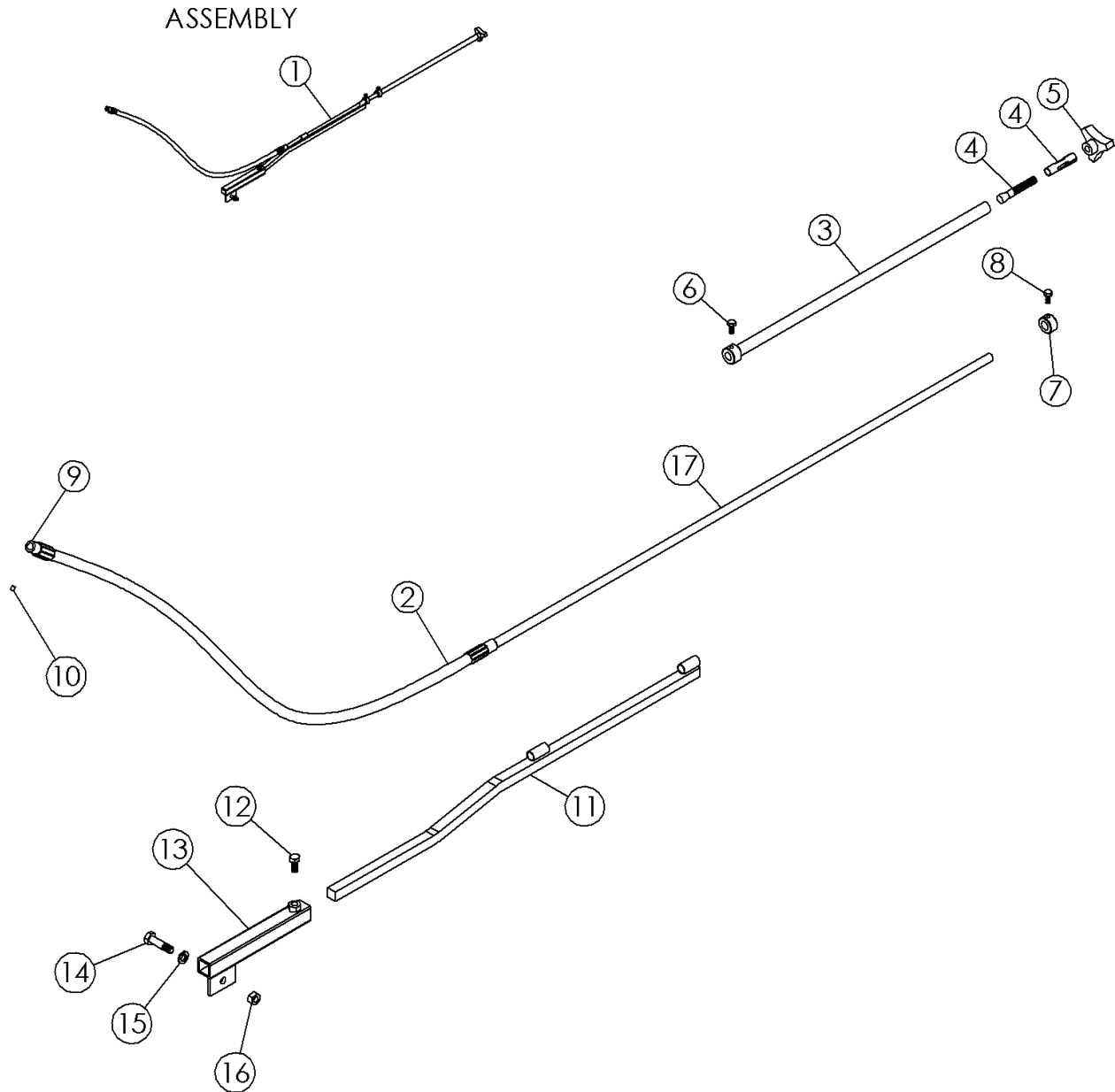
Super Valve Front Adjuster Assembly (Floor Speed Adj.)



Super Valve Front Adjuster Assembly (Floor Speed Adj.)

Item	Giltrap Part #	Description	Quantity Used	
			MSX	MSC
-	595-1041-1	Complete Assembly - Floor Speed Control	1	1
1	595-1046	Adjusting Handle Support Base	1	1
2	595-1051	Inner Rod & Hose Assembly	1	-
2	595-1050	Inner Rod & Hose Assembly	-	1
3	595-1049	Super Valve Handle Shaft Collar 13mm	1	1
4	595-1043	Adjustment Handle Outer c/w Knob	1	1
5	CL2127	Clamp 2127 ½" OD Tube	2	2
6	B-SA12X60	Anchor Bolt 12x60, M10	1	1
7	KNOB547B	Tri-Knob, 547B M10	1	1
8	B6X12	Bolt, M6x12	1	1
9	B6X30	Bolt, M6x30	2	2
10	NN6	Nut, Nyloc M6	2	2
11	B10X30	Bolt, M10x30	2	2
12	WASG10	Washer, Spring M10	1	1
13	N10	Nut, M10	1	1
14	GSC4X4A	Grubscrew, Allen Head M4x4	1	1
15	595-1025	Hose Fitting, M5	1	1
16	595-1056	Rod only	1	1
17	595-1047	RHS Support Base	1	1
18	595-1047-98	Support Base (Bolts to Conveyor Bed)	1	1
19	595-1028	Rod End Fitting	1	1

Super Valve Front Adjuster Assembly (Load Sensing Adj.)



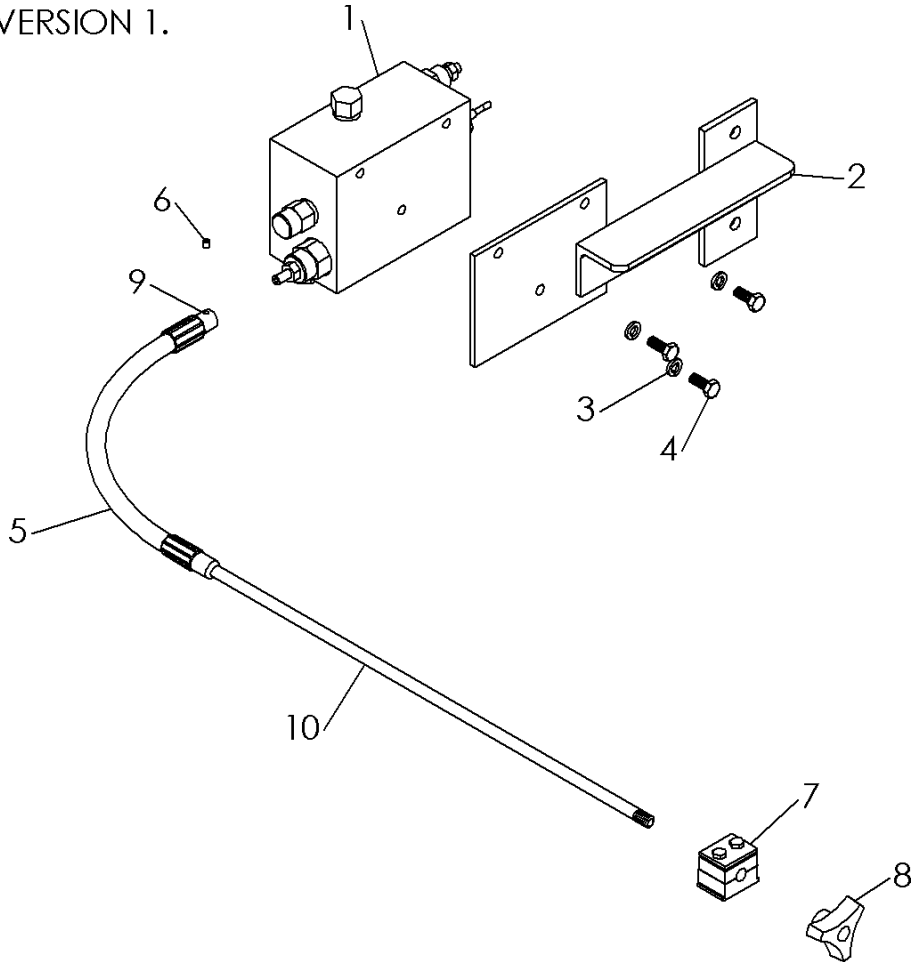


Super Valve Front Adjuster Assembly (Load Sensing Adj.)

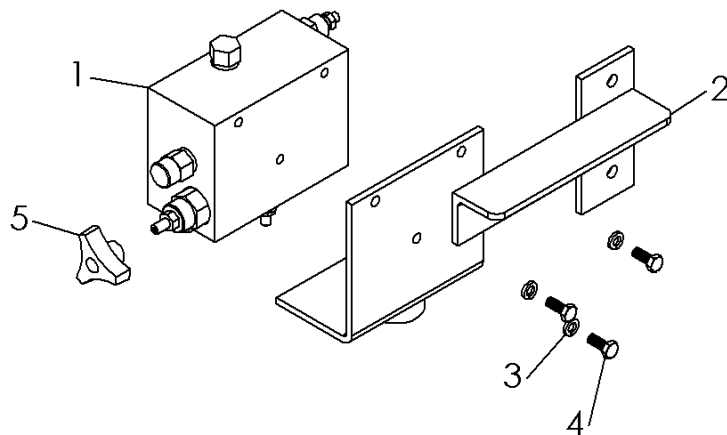
Item	Part Number	Description	Quantity Used	
			MSX	MSC
1	595-1041-2	Complete Assembly – Load Sensing Control Handle	1	1
2	595-1053	Inner Rod & Hose Assembly (Vers. 2), MSX Series	1	-
2	595-1054	Inner Rod & Hose Assembly, MSC Series	-	1
3	595-1043	Adjustment Handle Outer c/w Knob	1	1
4	B-SA12X60	Anchor Bolt 12x60	1	1
5	KNOB547B	Tri-Knob 547B M10	1	1
6	B6x12	Bolt, M6x12	1	1
7	595-1049	Super Valve Handle Shaft Collar, 13mm	1	1
8	B6x12	Bolt, M6x12	1	1
9	595-1027	Fitting only, 3/8" UNF	1	1
10	GSC5X5A	Grubscrew Allen Head, M5x5	1	1
11	595-1046-1	Support Base	1	1
11	595-1046-2	Support Base with tag (eliminates #13)	1	1
12	B10x25	Bolt, M10x25	1	1
13	595-1047	RHS Support Base	1	1
14	B10x30	Bolt, M10x30	1	1
15	WASG10	Washer, Spring M10	1	1
16	NN10	Nut, Nyloc M10	1	1
17	595-1056	Rod only	1	1
18	595-1028	Rod End Fitting	1	1

MSX Valve Mount Assembly

VERSION 1.



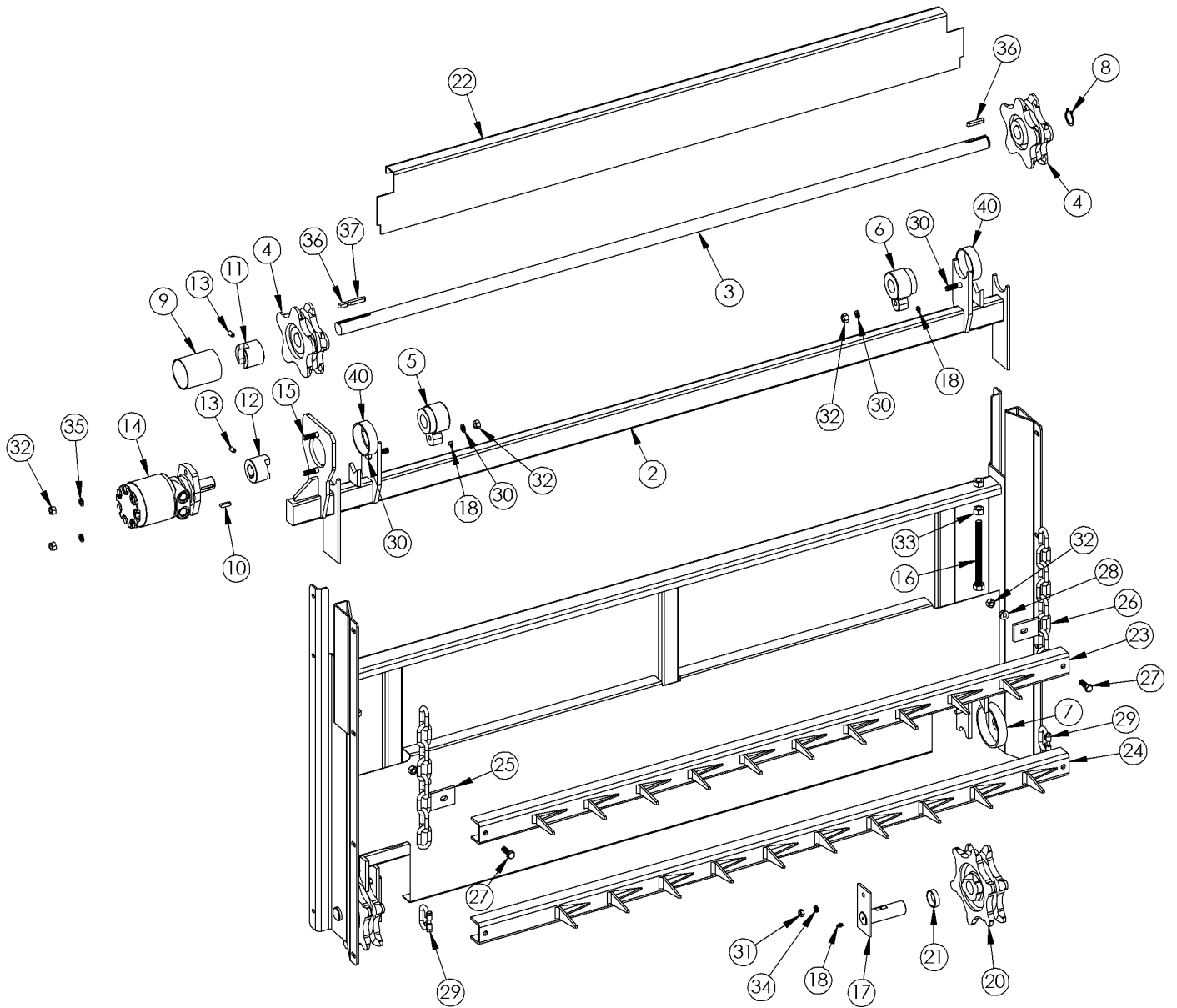
VERSION 2.



MSX Valve Mount Assembly

Item	Part Number	Description	Quantity Used
			All MSX Models
Version 1.			
-	595-1060	Flexible Control Handle Assembly	1
1	HYSUPERV-2	Sequence Valve Block, HCV1899	1
2	595-1615	Valve Block Mount V1	1
3	WASG8	Washer, Spring M8	3
4	B8x20	Bolt, M8x20	3
5	595-1055	Flexible Control Handle	1
6	GSC5x5A	Grubscrew, Allen Head M5x5	1
7	CL2127	Clamp Assembly, 10mm	1
8	KNOB547B	Knob, M10 Black	1
9	595-1027	Fitting only, 3/8" UNF	1
10	595-1057	Rod Only, M10	1
Version 2.			
1	HYSUPERV-2B	Sequence Valve Block, HCV1899	1
2	595-1615	Valve Block Mount V2	1
3	WASG8	Washer, Spring M8	3
4	B8x20	Bolt, M8x20	3
5	KNOB547B-1	Knob, 3/8" UNF Red	1

Elevator Assembly – MSX Series

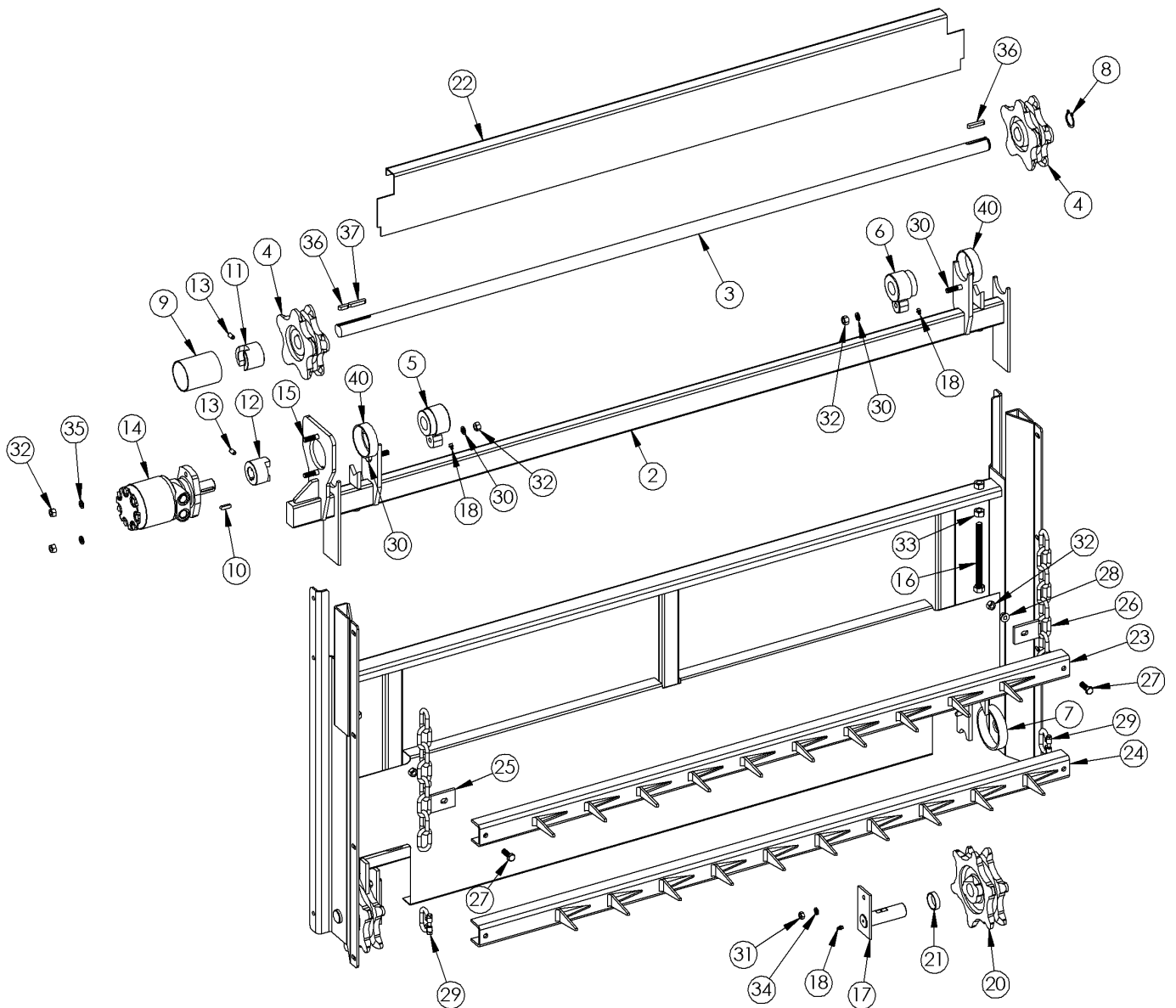


Elevator Assembly – MSX Series

Item	Giltrap Part #	Description	Quantity Used		
			MSX66	80, 100 & 125	160 & 210
1	650-0045	Elevator Chassis - Narrow Body	1	-	-
1	650-0044	Elevator Chassis - Wide Body	-	1	-
1	650-0040	Elevator Chassis - Wide Body	-	-	1
2	650-0020-1	Elevator Top Drive Mount - Narrow	1	-	-
2	650-0018-1	Elevator Top Drive Mount - Wide	-	1	1
3	510-1336	Shaft - Elevator Top Drive (narrow)	1	-	-
3	510-1343	Shaft - Elevator Top Drive (wide)	-	1	1
4	210-0003	Sprocket 5 Tooth, 35mm Key Drive	2	2	2
5	615-1997	Deadeye, 1 leg 35mm	1	1	1
6	615-1996	Deadeye, 1 leg 35mm	1	1	1
7	625-0049	Pipe Spacer	2	2	2
8	CCE35	External Circlip, 35mm	1	1	1
9	625-0047	PVC Sleeve	1	1	1
10	SK8X7	Key Steel @ 35mm	1	1	1
11	554-1106	Mechanical Coupling - Female 35mm	1	1	1
12	554-1123	Mechanical Coupling - Male 1-1/4"	1	1	-
12	554-1134	Mechanical Coupling - Male 1-3/8"	-	-	1
13	GSC3/8x1/2A	Grubscrew, Allen Head 3/8" UNC	2	2	2
14	HYM500	Hydraulic Motor (530cc) 1-1/4" Shaft	1	1	-
14	HYM625	Hydraulic Motor (625cc) 1-3/8" Shaft	-	-	1
15	B12x45	Bolt, M12x45	2	2	2
16	596-1004	Adjustable Tensioner c/w nuts	2	2	2
17	597-1029	Idler Axle Assembly	2	2	2
17	597-1029-1	Idler Axle Assembly (from 5/2002)	2	2	2
18	GRN8-ST	Grease Nipple, M8x1.0 Straight	4	4	4
19	B10x30	Bolt, M10x30	2	2	2
20	210-0012	Sprocket 6 Tooth, 35mm Idler	2	2	2
21	625-0040	Spacer - Idler Axle	2	2	2
22	580-2013	Elevator Top Drive Cover - Narrow	1	-	-
22	580-2006	Elevator Top Drive Cover - Wide	-	1	1
23	501-0028	Elevator Spiked Bar - Narrow Body set left	4	-	-
23	501-0027	Elevator Spiked Bar - Wide Body set left	-	4	5
24	501-0029	Elevator Spiked Bar - Narrow Body set right	4	-	-
24	501-0030	Elevator Spiked Bar - Wide Body set right	-	4	5
25	232-0052	LH Chain - Elevator (with welded tags)	1	1	-
25	232-0052-1	LH Chain - Elevator (with welded tags)	-	-	1
26	232-0059	RH Chain - Elevator (with welded tags)	1	1	-
26	232-0059-1	RH Chain - Elevator (with welded tags)	-	-	1
27	B12X35	Bolt, M12x35	16	16	20
28	N12-W	Nut, Locking M12	16	16	20
29	230-1007	Chain Joiner Link c/w Bolt etc	2	2	2
30	B12x55	Bolt, M12x55	2	2	2
31	N10	Nut, M10	4	4	4
32	N12	Nut, M12	18	18	22
33	N16	Nut, M16	2	2	2
34	WASG10	Washer, Spring M10	2	2	2
35	WASG12	Washer, Spring M12	4	4	4
36	SK10X8	Key Steel @ 35mm	1	1	1
37	SK10X8	Key Steel @ 55mm	2	2	2
38	595-1100	Sprocket Cleaner	2	2	2
39	580-3012	Narrow Elevator Panel	1	-	-
39	580-3005	Wide Elevator Panel	-	1	-
39	-	Wide Elevator Panel	-	-	1
40	625-0046	Pipe Spacer	1	1	1

Note: Machines built after May 2002 use external greasing of the lower pins (#17).

Elevator Assembly – MSC Series



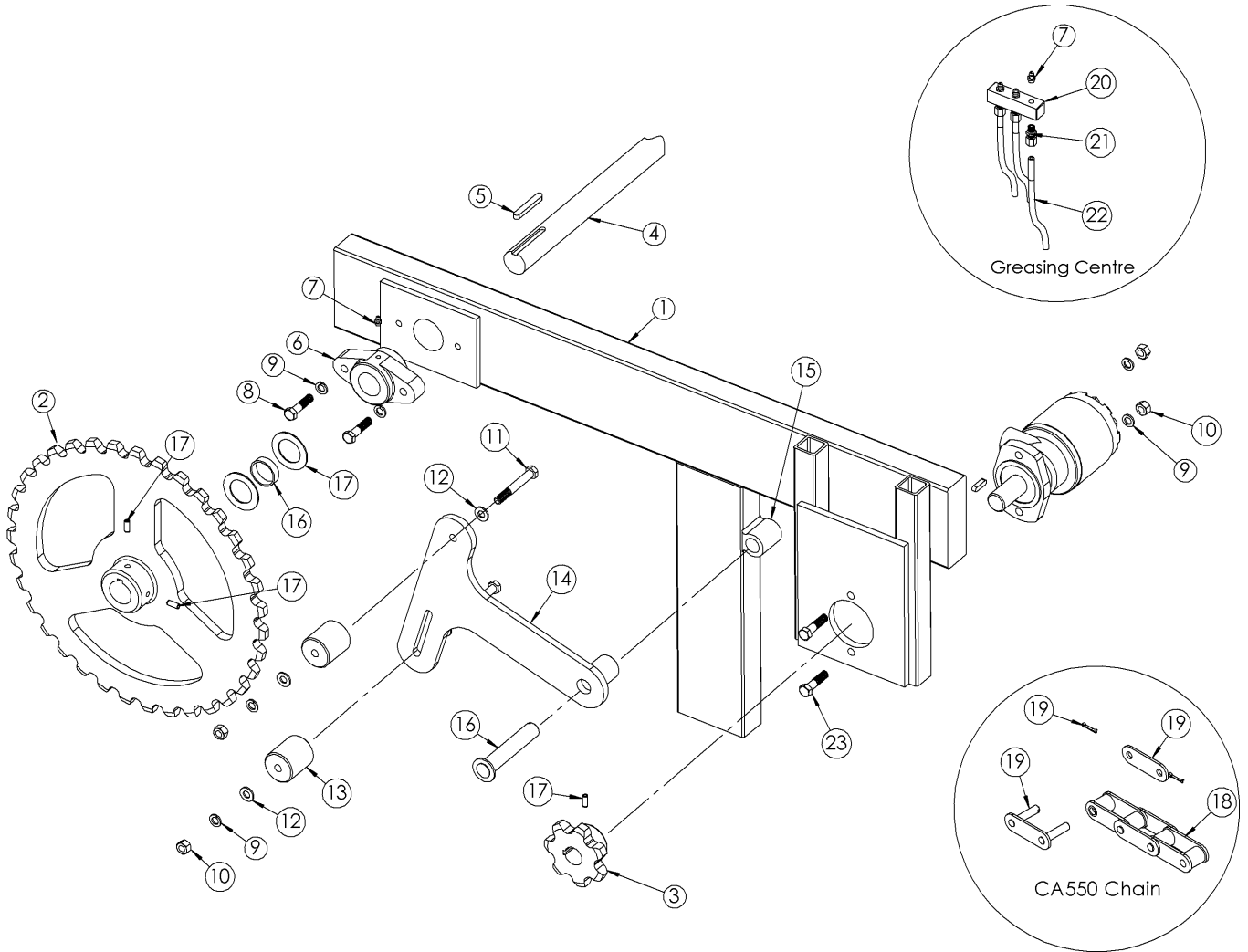


Elevator Assembly – MSC Series

Item	Part Number	Description	Quantity Used		
			70 & 90	85, 105 & 130	165 & 215
1	650-0045	Elevator Chassis - Narrow Body	1		
1	650-0044	Elevator Chassis - Wide Body		1	
1	650-0040	Elevator Chassis - Wide Body			1
2	650-0020-1	Elevator Top Drive Mount - Narrow	1		
2	650-0018-1	Elevator Top Drive Mount - Wide		1	1
3	510-1336	Shaft - Elevator Top Drive (narrow)	1		
3	510-1343	Shaft - Elevator Top Drive (wide)		1	1
4	210-0003	Sprocket 5 Tooth, 35mm Key Drive	2	2	2
5	615-1997	Deadeye, 1 leg 35mm	1	1	1
6	615-1996	Deadeye, 1 leg 35mm	1	1	1
7	625-0049	Pipe Spacer	2	2	2
8	CCE35	External Circlip, 35mm	1	1	1
9	625-0047	PVC Sleeve	1	1	1
10	-	Key, Parallel	1	1	1
11	554-1106	Mechanical Coupling - Female 35mm	1	1	1
12	554-1123	Mechanical Coupling - Male 1-1/4"	1	1	
12	554-1134	Mechanical Coupling - Male 1-3/8"			1
13	GSC3/8x1/2A	Grubscrew, Allen Head 3/8" UNC	2	2	2
14	HYM500	Hydraulic Motor (530cc) 1-1/4" Shaft	1	1	
14	HYM625	Hydraulic Motor (625cc) 1-3/8" Shaft			1
15	B12x45	Bolt M12x45	2	2	2
16	596-1004	Adjustable Tensioner c/w nuts	2	2	2
17	597-1029	Idler Axle Assembly	2	2	2
17	597-1029-1	Idler Axle Assembly (from 5/2002)	2	2	2
18	GRN8-ST	Grease Nipple, M8x1.0 Straight	4	4	4
19	B10x30	Bolt, M10x30	2	2	2
20	210-0012	Sprocket 6 Tooth, 35mm Idler	2	2	2
21	625-0040	Spacer - Idler Axle	2	2	2
22	580-2013	Elevator Top Drive Cover - Narrow	1		
22	580-2006	Elevator Top Drive Cover - Wide		1	1
23	501-0028	Elevator Spiked Bar - Narrow Body set left	5		
23	501-0027	Elevator Spiked Bar - Wide Body set left		5	6
24	501-0029	Elevator Spiked Bar - Narrow Body set right	5		
24	501-0030	Elevator Spiked Bar - Wide Body set right		5	6
25	232-0052-1	LH Chain - Elevator (with welded tags)	1	1	
25	232-0080	LH Chain - Elevator (with welded tags)			1
26	232-0059-1	RH Chain - Elevator (with welded tags)	1	1	
26	232-0073	RH Chain - Elevator (with welded tags)			1
27	B12X35	Bolt, M12x35	20	20	24
28	N12-W	Nut, Locking M12	20	20	24
29	230-1007	Chain Joiner Link c/w Bolt etc	2	2	2
30	B12x55	Bolt, M12x55	2	2	2
31	N10	Nut, M10	4	4	4
32	N12	Nut, M12	24	24	28
33	N16	Nut, M16	2	2	2
34	WASG10	Washer, Spring M10	2	2	2
35	WASG12	Washer, Spring M12	4	4	4
36	SK10X8	Key Steel @ 35mm	1	1	1
37	SK10X8	Key Steel @ 55mm	2	2	2
38	595-1100	Sprocket Cleaner	2	2	2
39	580-3012	Narrow Elevator Panel	1		
39	580-3005	Wide Elevator Panel		1	
39	-	Wide Elevator Panel			1
40	625-0046	Pipe Spacer	1	1	1

Note: Machines built after May 2002 use external greasing of the lower pins (#17).

Floor Drive Transmission – MSX66 & MSC70 (V1)

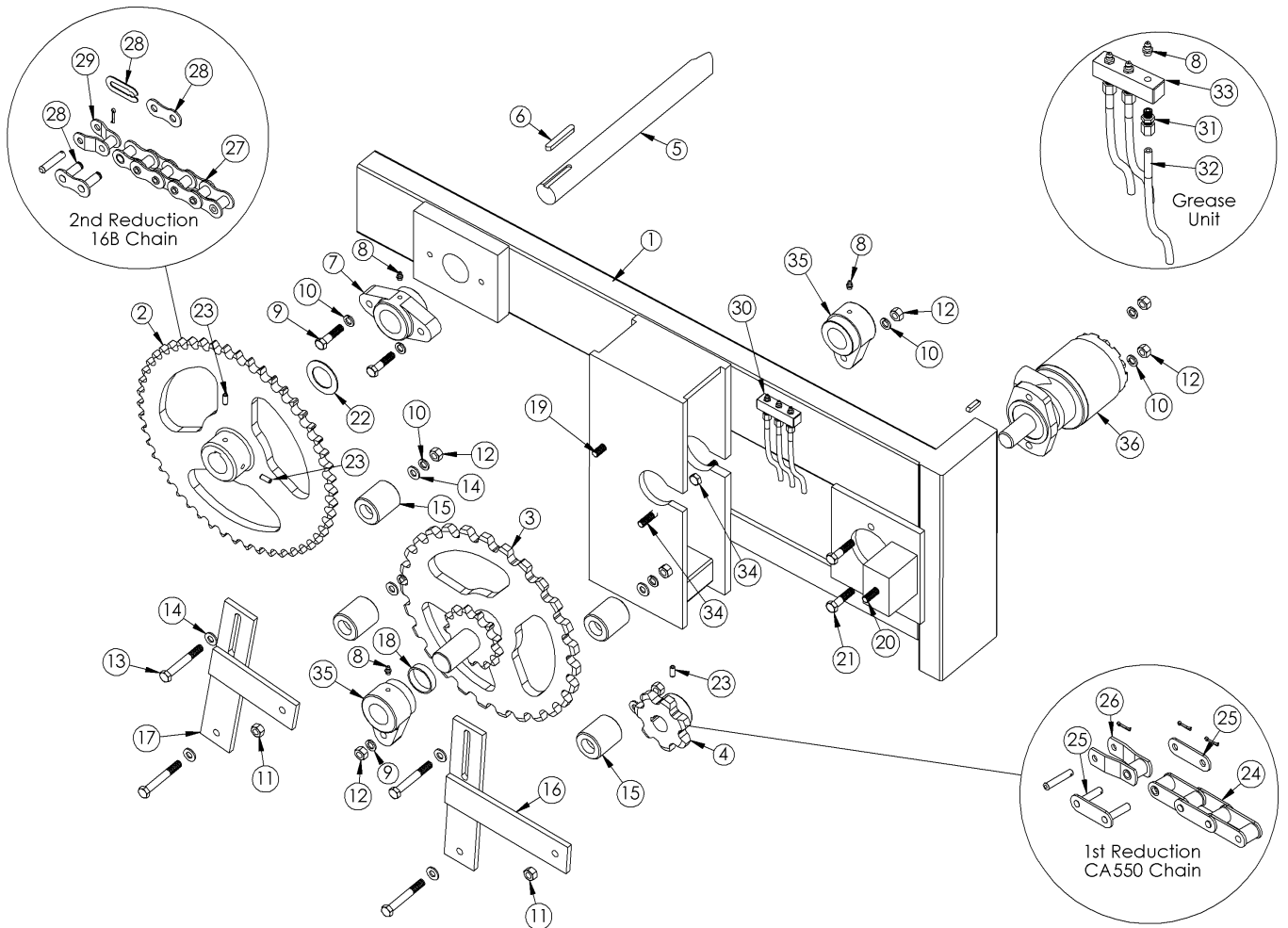


Floor Drive Transmission – MSX66 & MSC70 (V1)

Item	Part Number	Description	Quantity Used
1	-	Main Chassis	
2	210-1125	Sprocket, 35 Tooth CA550 40mm Bore	1
3	210-1039	Sprocket, 7 Tooth CA550 1-1/4" Bore	1
4	510-1049	Floor Shaft, 40mm	1
5	SK10x8	Key, Parallel 10x8 @ 60mm	1
6	615-1111	Deadeye, 1 Leg 40mm	1
7	GRN8-ST	Grease Nipple, M8x1.0 Straight	4
8	B12x40	Bolt, M12x40	2
9	WASG12	Washer, Spring M12	4
10	N12	Nut, M12	2
11	B12x90	Bolt, M12x90	2
12	WA12	Washer, Flat M12	2
13	595-1062	Nylon Tension Block	2
14	595-1065	Tension Arm CA550	1
15	900-0330	Pivot Bush	1
16	595-1073	Tension Arm Pin, 25mm	1
17	GSC3/8X1/2A	Grubscrew, Allen Head 3/8" UNC	2
18	CHCA550	Roller Chain CA550	2.7m
19	CHCA550J	Chain Joiner CA550	1
20	615-3214	Central Grease Unit Block	1
21	GDM-GLC6-8	Grease Lube Connector 6mm - 8mm	3
22	GDM-GLT6.15	Grease Lube Tube Helios 6mm (1 @ 900mm, 1 @ 1930mm)	2
23	B12x50	Bolt, M12x50	2

Note: MSX66 uses the same transmission as shown on the next page from approx 1999 onwards.

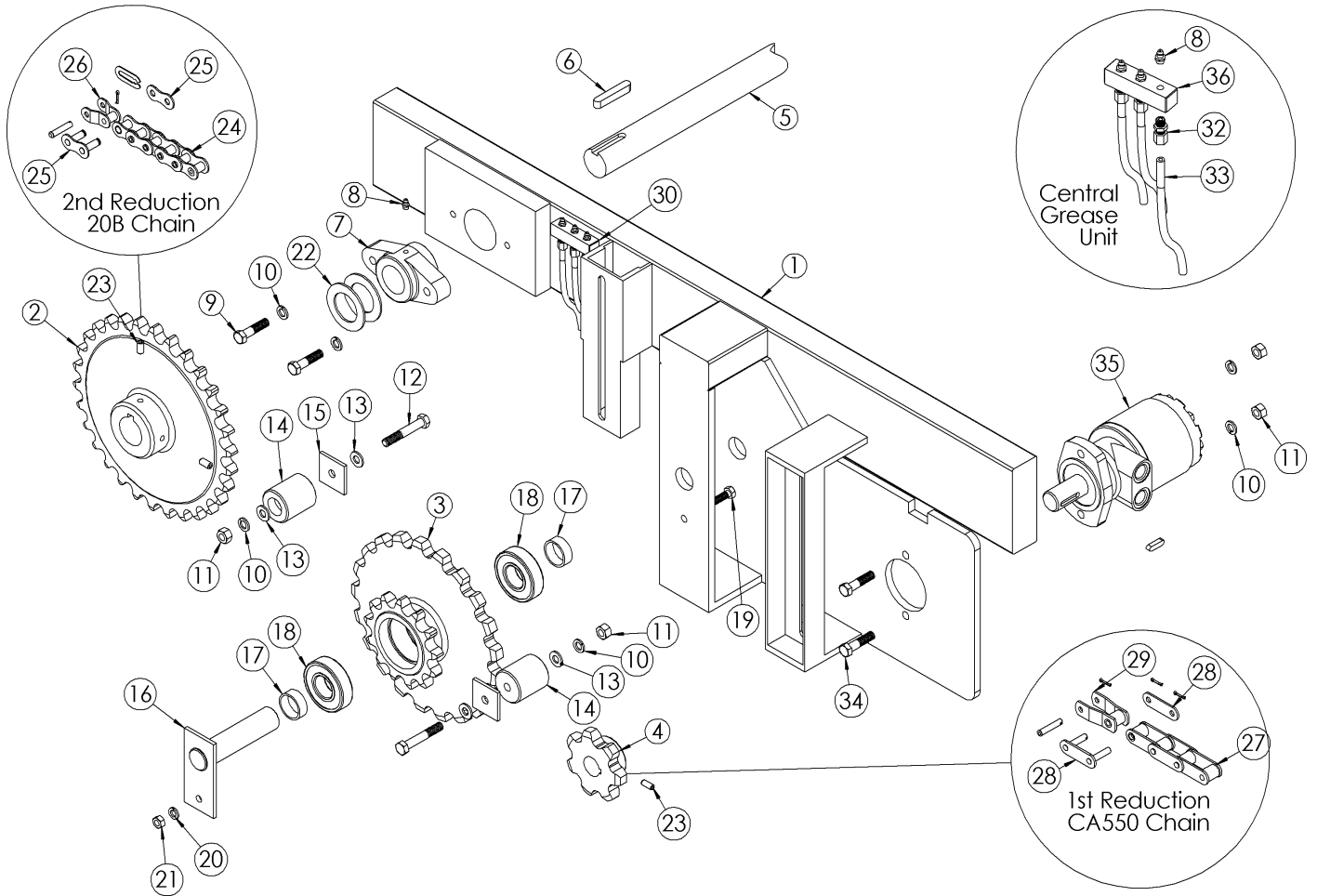
Floor Drive Transmission – MSX66 (V2), MSX80, MSX100, MSC70 (V2), MSC85, MSC90 & MSC105



Floor Drive Transmission – MSX66 (V2), MSX80, MSX100, MSC70 (V2), MSC85, MSC90 & MSC105

Item	Part Number	Description	Quantity Used
1	-	Main Chassis	1
2	210-1216	Sprocket 50TH 40mm Bore	1
3	210-1084	Sprocket 27/13TH Idler Welded	1
4	210-1044	Sprocket 7TH 25mm Bore	1
5	510-1049	Shaft, Floor Drive 40mm (10mm Key)	1
or	510-1049-1	Shaft, Floor Drive 40mm (12mm Key)	1
6	SK10x8	Key, Parallel 10x8	1
or	SK12x8	Key, Parallel 12x8	1
7	615-1111	Deadeye, 2 Leg 40mm	1
8	GRN8-ST	Grease Nipple, M8x1.0 Straight	5
9	B12x40	Bolt, M12x40	2
10	WASG12	Washer, Spring M12	8
11	NN12	Nut, Nyloc M12	2
12	N12	Nut, M12	7
13	B12x90	Bolt, M12x90	4
14	WA12	Washer, Flat M12	6
15	595-1062	Chain Tensioner Block	4
16	595-1070-1	Tensioner Arm, Long	1
17	595-1075-1	Tensioner Arm, Short	1
18	625-0040	Spacer	2
19	B12x30	Bolt, M12x30	1
20	B12x35	Bolt, M12x35	1
21	B12x45	Bolt, M12x45	2
22	WA40	Washer, Flat M40	2
23	GSC3/8X1/2A	Grubscrew, Allen Head 3/8" UNC	3
24	CHCA550	Roller Chain CA550	1.45m
25	CHCA550J	CA550 Chain Joiner	1
26	CHCA550C	CA550 Chain Crank	as reqd.
27	CH16B	Roller Chain 16B	1.86m
28	CH16BJ	16B Chain Joiner	1
29	CH16BC	16B Chain Crank	as reqd.
30	615-3207	Deadeye Central Greaseunit -Complete	1
31	GDM-GLC6-8	Grease Lube Connector 6mm-8mm	3
32	GDM-GLT6.15	Grease Lube Tube Helios 6mm (1 @ 600mm, 1 @ 1000mm, 1 @ 2230mm)	3
33	615-3214	Central Grease Unit Block	1
34	B12x55	Bolt, M12x55	2
35	615-2002	Deadeye, 1 Leg 40mm	2
36	-	Hydraulic Motor	1

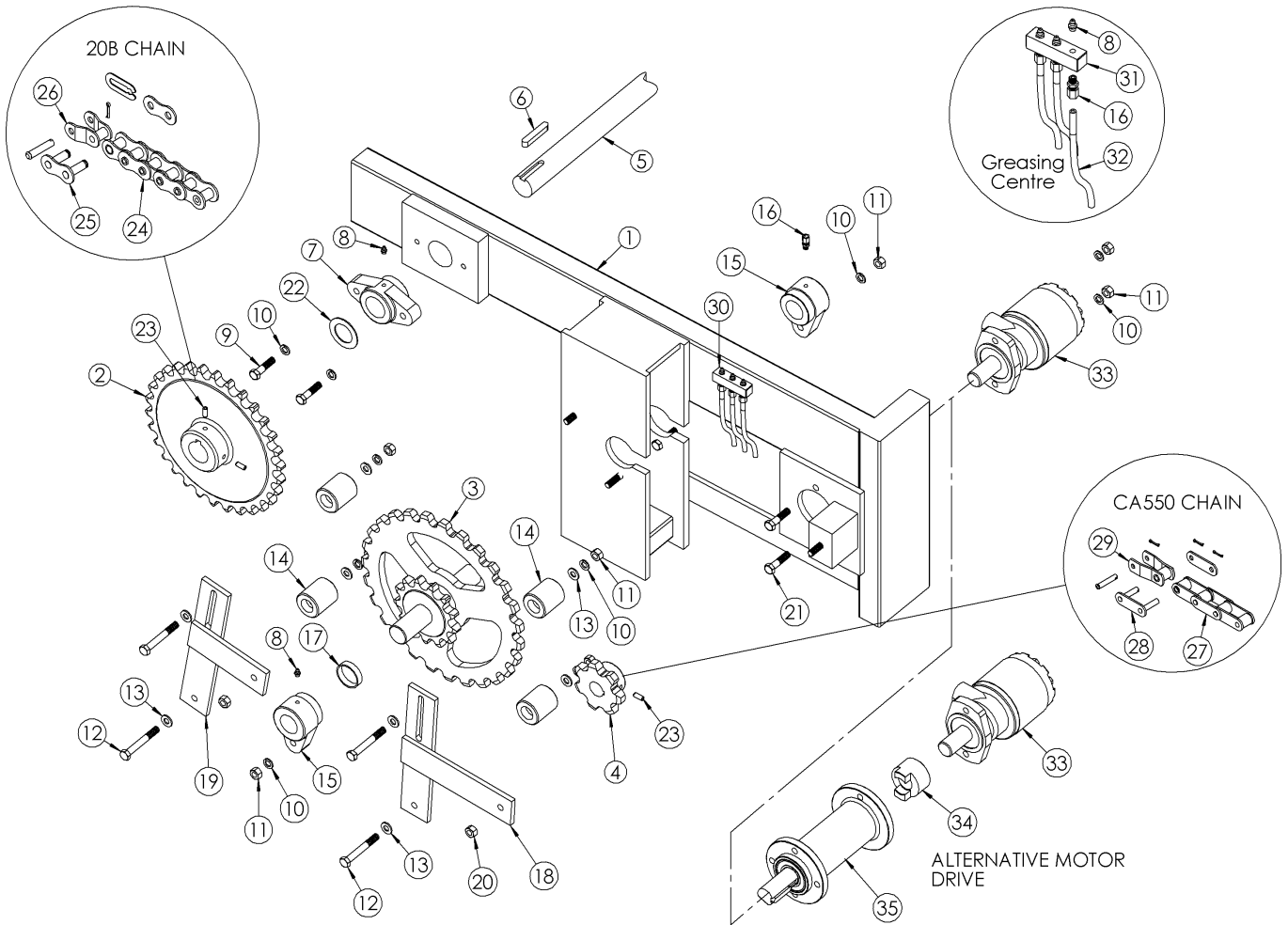
Floor Drive Transmission – MSX125 & MSC130 (V1)



Floor Drive Transmission – MSX125 & MSC130 (V1)

Item	Part Number	Description	Quantity Used
1	-	Main chassis	1
2	210-1104	Sprocket, 30 Tooth 20B 45mm Bore	1
3	210-1071	Sprocket, 21/13TH Idler c/w Bearings	1
4	210-1053	Sprocket, 7 Tooth CA550 1-1/4" Bore	1
5	510-1301	Shaft, 45mm	1
6	SK12x12	Key, Parallel 12x12 @ 75mm	2
7	615-1111	Deadeye, 2 Leg 45mm	1
8	GRN8-ST	Grease Nipple, M8x1.0 Straight	4
9	B12x40	Bolt, M12x40	2
10	WASG12	Washer, Spring M12	6
11	N12	Nut, M12	4
12	B12x100	Bolt, M12x100	2
13	WA12	Washer, Flat M12	2
14	595-1062	Nylon Tensioner Block	2
15	SF50x6	Plate	2
16	597-1050	21/13TH Idler Sprocket Axle	1
17	625-0042	Spacer	2
18	BRG6307-2RS1	Bearing, 6307-2RS1	2
19	B10x30	Bolt, M10x30	1
20	WASG10	Washer, Spring M10	1
21	N10	Nut, M10	1
22	WA42	Washer, Flat M45	4
23	GSC3/8X1A	Grubscrew, Allen Head 3/8" UNC	3
24	CH20B	Roller Chain 20B	27 pitches
25	CH20BJ	20B Chain Joiner	1
26	CH20BC	20B Chain Crank	as reqd.
27	CHCA550	Roller Chain CA550	17 pitches
28	CHCA550J	CA550 Chain Joiner	1
29	CHCA550C	CA550 Chain Crank	as reqd.
30	615-3207	Deadeye Central Grease Unit -Complete	1
32	GDM-GLC6-8	Grease Lube Connector 6mm-8mm	3
33	GDM-GLT6.15	Grease Lube Tube Helios 6mm (1 @ 600mm, 1 @ 1200mm & 1 @ 2100mm)	3
34	B12x50	Bolt, M12x50	2
35	-	Hydraulic Motor	1
36	615-3214	Central Grease Unit Block	1

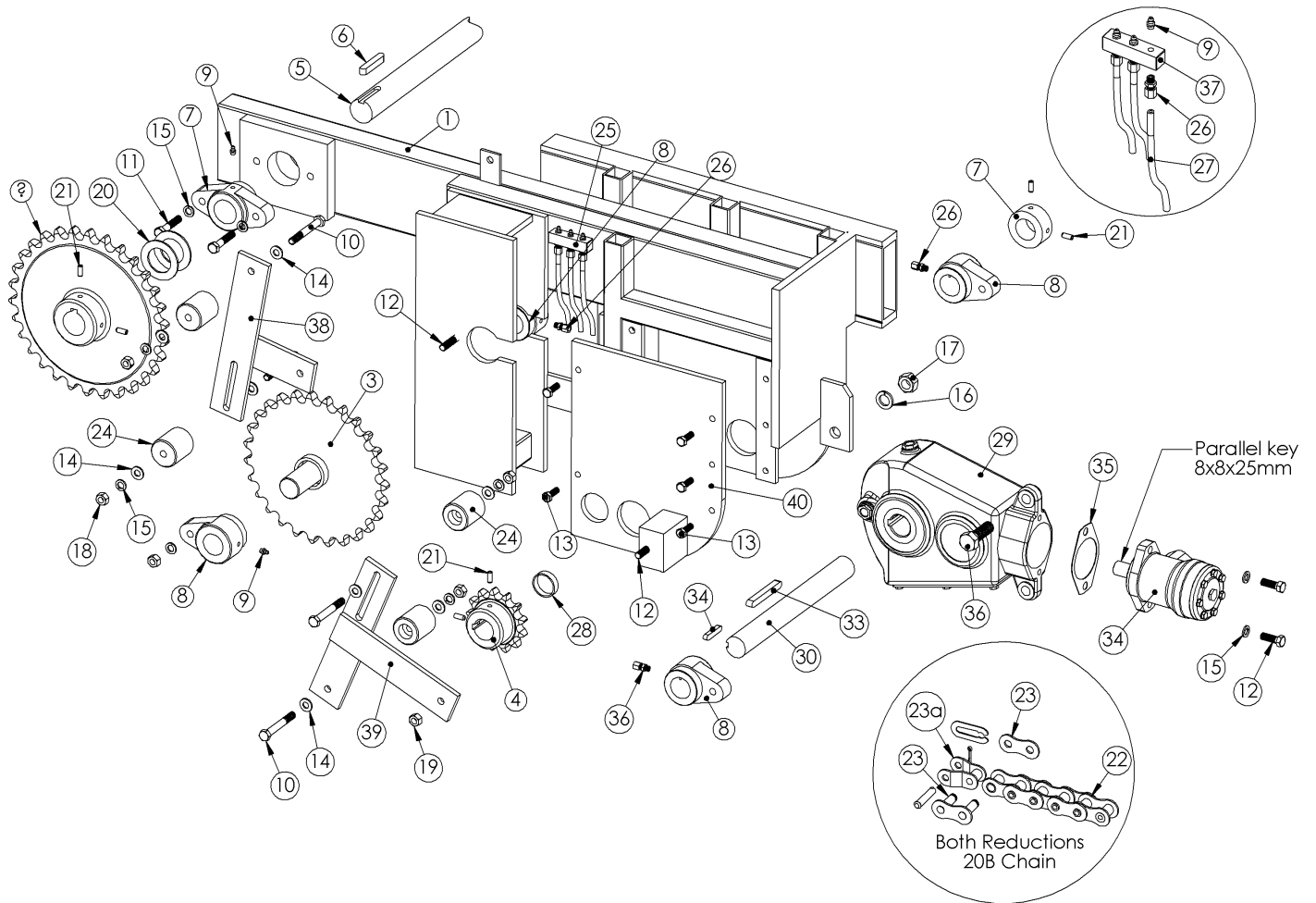
Floor Drive Transmission – MSX125 & MSC130 (V2)



Floor Drive Transmission – MSX125 & MSC130 (V2)

Item	Part Number	Description	Quantity Used
1	-	Main chassis	1
2	210-1104	Sprocket, 30T 45mm Bore	1
3	210-1086	Sprocket, 27/13T Idler	1
4	210-1053	Sprocket, 7T 1-1/4" Bore	1
4	210-1060	Sprocket, 7T 35mm Bore (used with hanger bearing)	1
5	510-1301	Shaft, 45mm	1
6	SK12x12	Key, Parallel 12x12	2
7	615-1111	Deadeye, 2 Leg 45mm	1
8	GRN8-ST	Grease Nipple, M8x1.0 Straight	4
9	B12x40	Bolt, M12x40	2
10	WASG12	Washer, Spring M12	6
11	N12	Nut, M12	4
12	B12x100	Bolt, M12x100	2
13	WA12	Washer, Spring M12	2
14	595-1062	Nylon Tensioner Block	2
15	615-2002	Deadeye, 1 Leg 40mm	2
16	GDM-GLC6-8	Grease Lube Connector 6mm-8mm	3
17	625-0042	Spacer	2
18	595-1070-1	Chain Tensioner Arm, Long	1
19	595-1075-1	Chain Tensioner Arm, Short	1
20	NN12	Nut, Nyloc M12	1
21	B12x50	Bolt, M12x50	1
22	WA45	Washer, Flat M45	4
23	GSC3/8X1A	Grubscrew, Allen Head 3/8" UNC	3
24	CH20B	Roller Chain 20B	1.75m
25	CH20BJ	20B Chain Joiner	1
26	CH20BC	20B Chain Crank	as reqd.
27	CHCA550	Roller Chain CA550	1.45m
28	CHCA550J	Chain Joiner CA550	1
29	CHCA550C	Chain Crank CA550	as reqd.
30	615-3207	Central Grease Unit - Complete Assembly	1
32	GDM-GLT6.15	Grease Lube Tube Helios 6mm (1 @ 600mm, 1 @ 1200mm & 1 @ 2100mm)	3
33	-	Hydraulic Motor	1
34	554-1134	Drive Coupling - Male 1-3/8" Large Dogs	1
35	571-1072	Hanger Bearing Assembly	1 (if used)

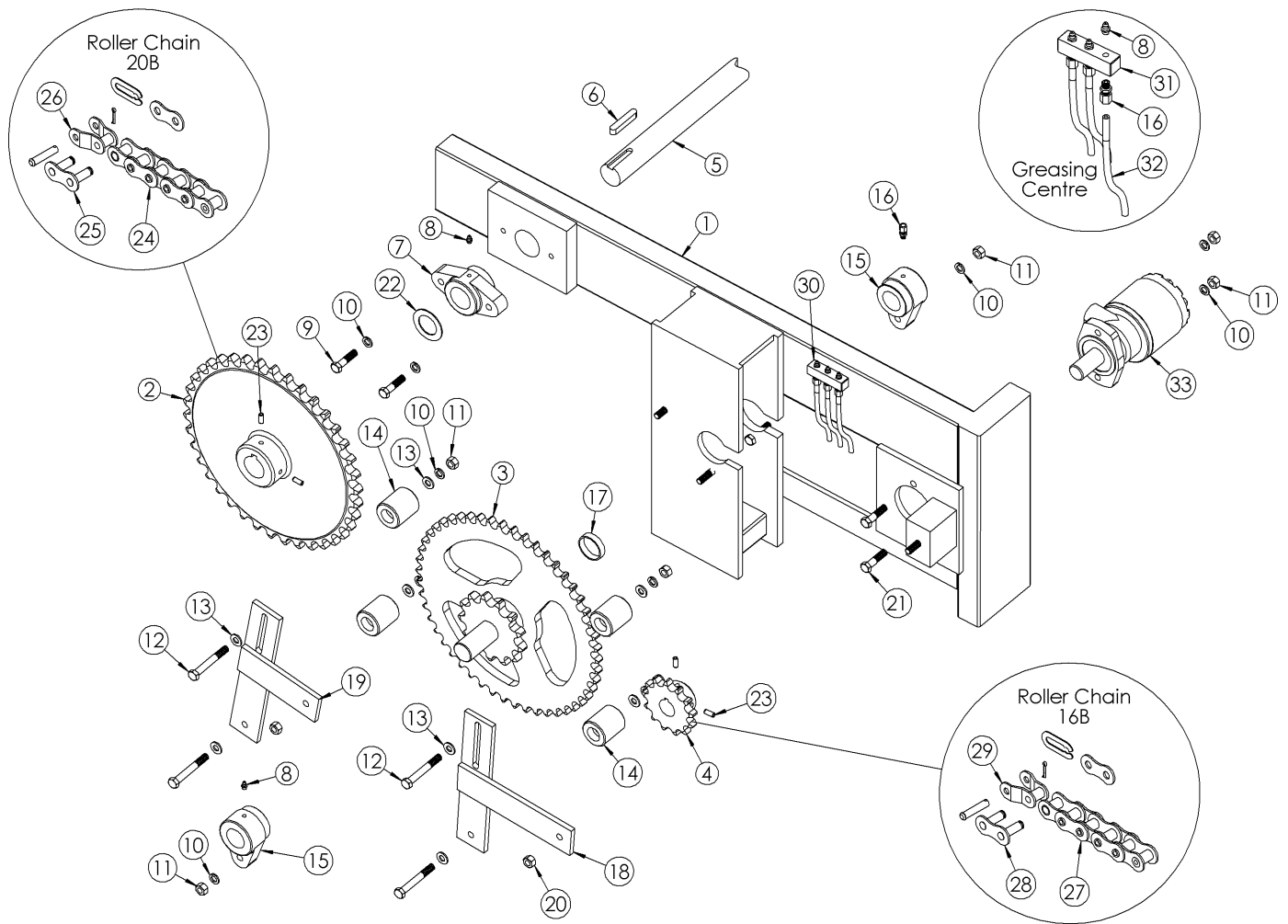
Floor Drive Transmission – MSX160 & MSC165 (V1) (Nov 1998 – June 2001)



Floor Drive Transmission – MSX160 & MSC165 (V1) (Nov 1998 – June 2001)

Item	Part Number	Description	Quantity Used
1	-	Main chassis	1
2	210-1104	Sprocket, 30 Tooth 20B 45mm Bore	1
3	210-1088	Sprocket, 27/13TH 20B Idler	1
4	210-1158	Sprocket, 13 Tooth 20B 40mm Bore	1
5	510-1301	Shaft, 45mm	1
6	SK12X12	Key, Parallel 12x12 @ 70mm	1
7	615-1118	Deadeye, 2 Leg 45mm	1
8	615-2002	Deadeye, 1 Leg 40mm	4
9	GRN8-ST	Grease Nipple, M8x1.0 Straight	6
10	B12x90	Bolt, M12x90	4
11	B12x55	Bolt, M12x55	2
12	B12x40	Bolt, M12x40	2
13	B10x40	Bolt, Spring Washer and Nut assembly	5
14	WA12	Washer, Flat M12	8
15	WASG12	Washer, Spring M12	12
16	WASG16	Washer, Spring M16	1
17	N16	Nut, M16	1
18	N12	Nut, M12	8
19	NN12	Nut, Nyloc M12	2
20	WA45	Washer, Flat M45	as reqd.
21	GSC3/8X1A	Grubscrew, Allen Head 3/8" UNC	6
22	CH20B	Roller Chain 20B	2
23	CH20BJ	20B Chain Joiner	2
23a	CH20BC	20B Chain Crank	as reqd.
24	595-1062	Nylon Tensioner Block	4
25	615-3207	Deadeye Central Grease Unit - Complete	1
26	GDM-GLC6-8	Grease Lube Connector 6mm-8mm	6
27	GDM-GLT6.15	Grease Lube Tube Helios 6mm	-
28	625-0042	Spacer	1
29	GBRT200-40	Planetary Gearbox	1
30	510-1046	Shaft, 40mm	1
31	-	Retainer Collar	1
32	SK12X12	Key, Parallel 12x12 @ 100mm	1
33	SK10X8	Key, Parallel 10x8 @ 50mm	1
34	HYMOMP80	Hydraulic Motor, OMP80 25mm Shaft	1
35	-	Gasket	1
36	B16x60	Bolt, M16x60	1
37	615-3214	Grease Nipple Bank	1
38	595-1075-1	Chain Tensioner, Short	1
39	595-1070-1	Chain Tensioner, Long	1
40	-	Side Plate	1

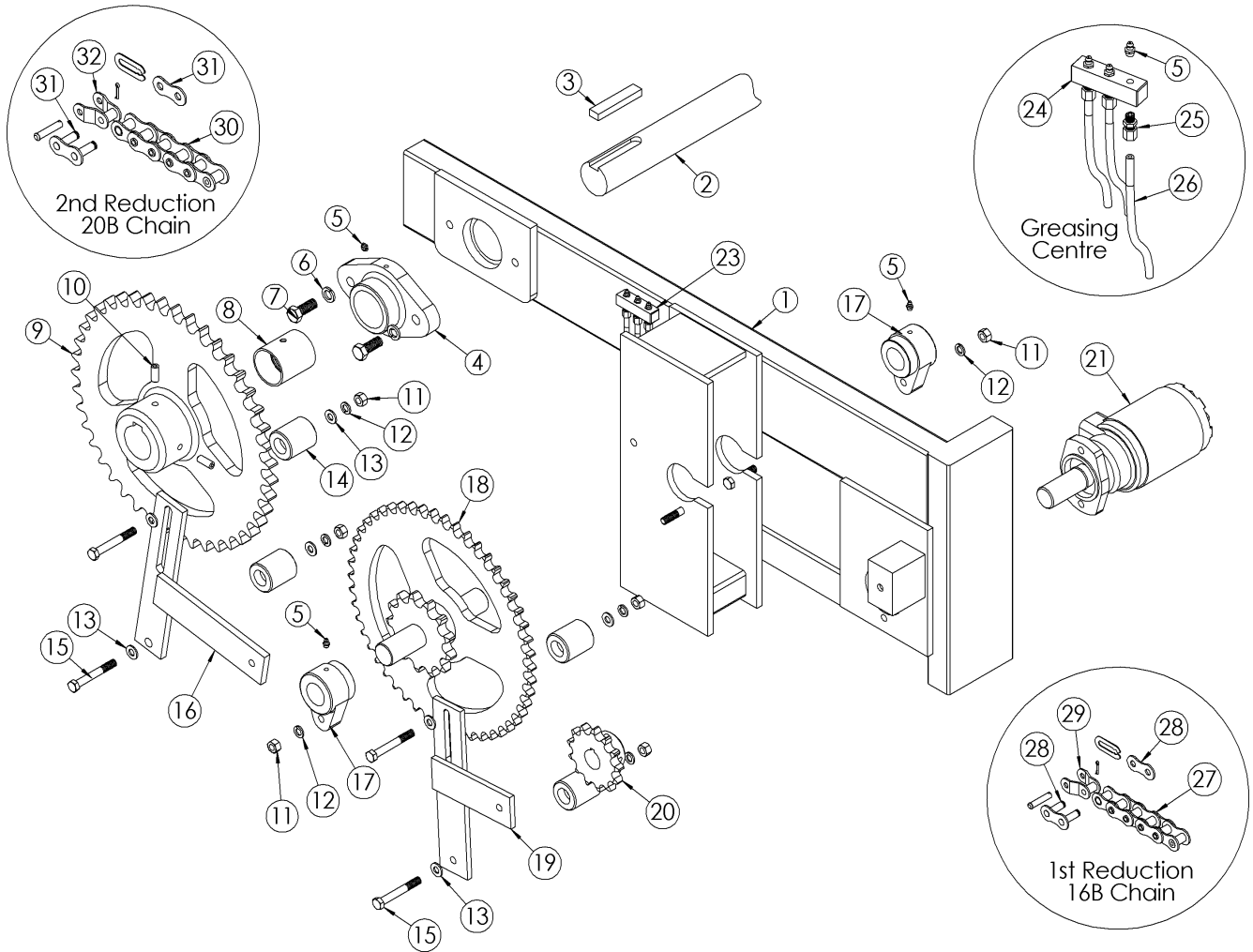
Floor Drive Transmission – MSX160 & MSC165 (V2) (July 2001 onwards)



Floor Drive Transmission – MSX160 & MSC165 (V2) (July 2001 onwards)

Item	Part Number	Description	Quantity Used
			MSX160 / MSC165
1	-	Main chassis	1
2	210-1138	Sprocket, 38T 20B 45mm Bore	1
3	210-1088-1	Sprocket, 50/13T Idler	1
4	210-1188	Sprocket, 13T 1-3/8" Bore	1
5	510-1301	Shaft, 45mm	1
6	SK12x12	Key, Parallel 12x12	2
7	615-1111	Deadeye, 2 Leg 45mm	1
8	GRN8-ST	Grease Nipple, M8x1.0 Straight	4
9	B12x40	Bolt, M12x40	2
10	WASG12	Washer, Spring M12	6
11	N12	Nut, M12	4
12	B12x100	Bolt, M12x100	2
13	WA12	Washer, Spring M12	2
14	595-1062	Nylon Tensioner Block	2
15	615-2002	Deadeye, 1 Leg 40mm	2
16	GDM-GLC6-8	Grease Lube Connector 6mm-8mm	3
17	625-0042	Spacer	1
18	595-1070-1	Chain Tensioner Arm, Long	1
19	595-1075-1	Chain Tensioner Arm, Short	1
20	NN12	Nut, Nyloc M12	1
21	B12x50	Bolt, M12x50	1
22	WA45	Washer, Flat M45	4
23	GSC3/8X1A	Grubscrew, Allen Head 3/8" UNC	3
24	CH20B	Roller Chain 20B	1.87m
25	CH20BJ	20B Chain Joiner	1
26	CH20BC	20B Chain Crank	as reqd.
27	CH16B	Roller Chain 16B	1.6m
28	CH16BJ	16B Chain Joiner	1
29	CH16BC	16B Chain Crank	as reqd.
30	615-3207	Central Grease Unit - Complete Assembly	1
31	615-3214	Central Grease Block	1
32	GDM-GLT6.15	Grease Lube Tube Helios 6mm (1 @ 600mm, 1 @ 1200mm & 1 @ 2100mm)	3
33	-	Hydraulic Motor	1

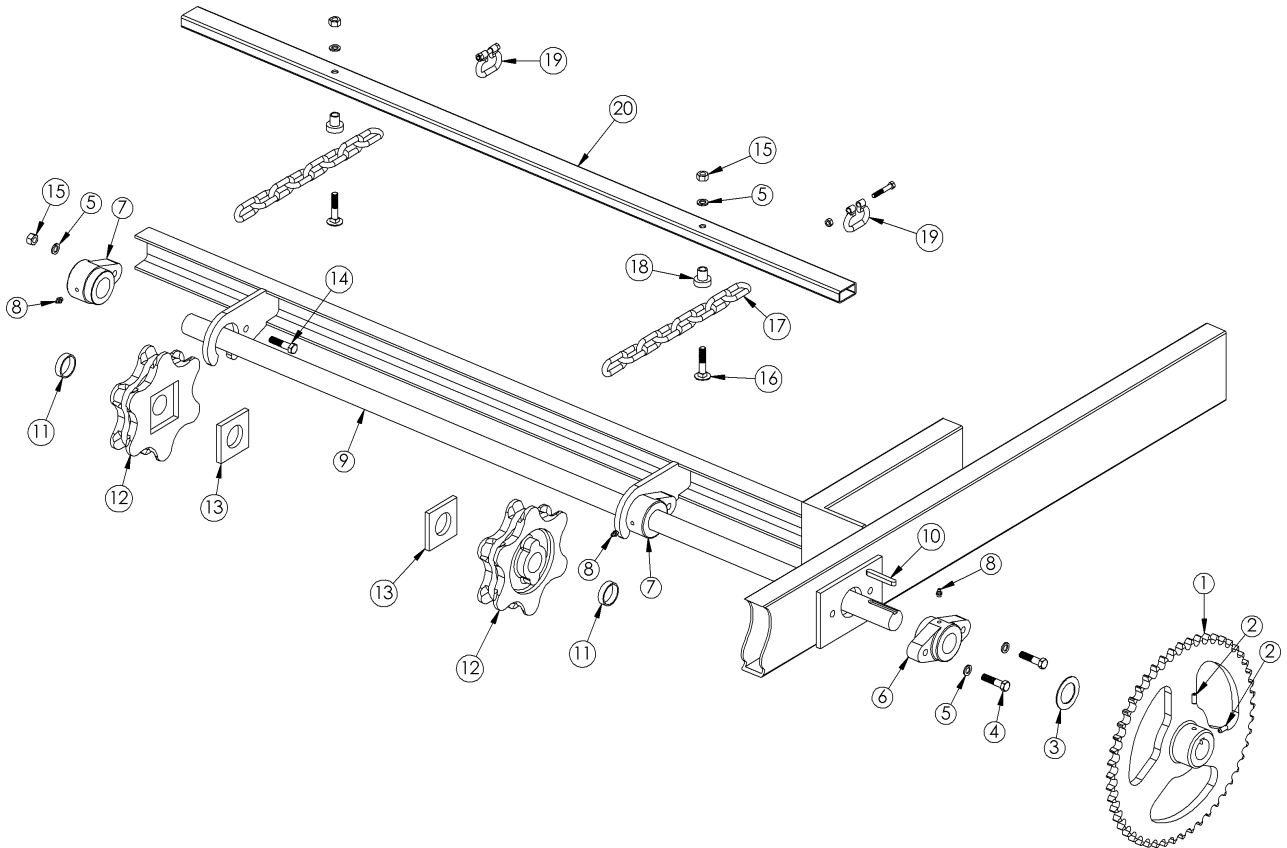
Floor Drive Transmission – MSX210 & MSC215



Floor Drive Transmission – MSX210 & MSC215

Item	Part Number	Description	Quantity Used
1	-	Chassis	1
2	510-1309	Shaft, Floor 60mm HT	1
3	SK20X13	Key, Parallel 20x13 @ 100mm	1
4	615-1132	Deadeye Housing, 2 Leg c/w 60mm bush	1
5	GRN8-ST	Grease Nipple, M8x1.0 Straight (or GDM-GLC6-8 if fitted)	6
6	WASG16	Washer, Spring M16	2
7	B16x40	Bolt, M16x40	2
8	615-1200	Bush, Bronze 60ID x 75mm	1
9	210-1211	Sprocket, 43 Tooth 20B 60mm Bore	1
10	GSC12X30A	Grub Screw, Allen Head M12x30	2
11	N12	Nut, M12	6
12	WASG12	Washer, Spring M12	6
13	WA12	Washer, Flat M12	4
14	595-1062	Tensioner Bush, Nylon	4
15	B12x90	Bolt, M12x90	4
16	595-1075-1	Tensioner Arm, Short	1
17	615-2002	Deadeye, 1 Leg 40mm	2
18	210-1088-1	Reduction Sprocket, 50/13 Tooth 40mm Idler	1
19	595-1070-1	Tensioner Arm, Long	1
20	210-1188	Sprocket, 13 Tooth 16B 1-3/8" Bore	1
21	-	Hydraulic Motor	1
22	B12x50	Bolt, M12x50	2
23	615-3207	Central Grease Unit	1
24	615-3214	Central Grease Block	1
25	GDM-GLC6-8	Grease Lube Connector 6mm-8mm	3
26	GDM-GLT6.15	Grease Lube Tube Helios 6mm	3
27	CH16B	Chain, 16B	1.54m
28	CH16BJ	Chain Joiner, 16B	1
29	CH16BC	Chain Crank, 16B	as reqd.
30	CH20B	Chain, 20B	1.97m
32	CH20BJ	Chain Joiner, 20B	1
33	CH20BC	Chain Crank, 20B	as reqd.

Front Floor Shaft Assembly – 2 Floor Chains



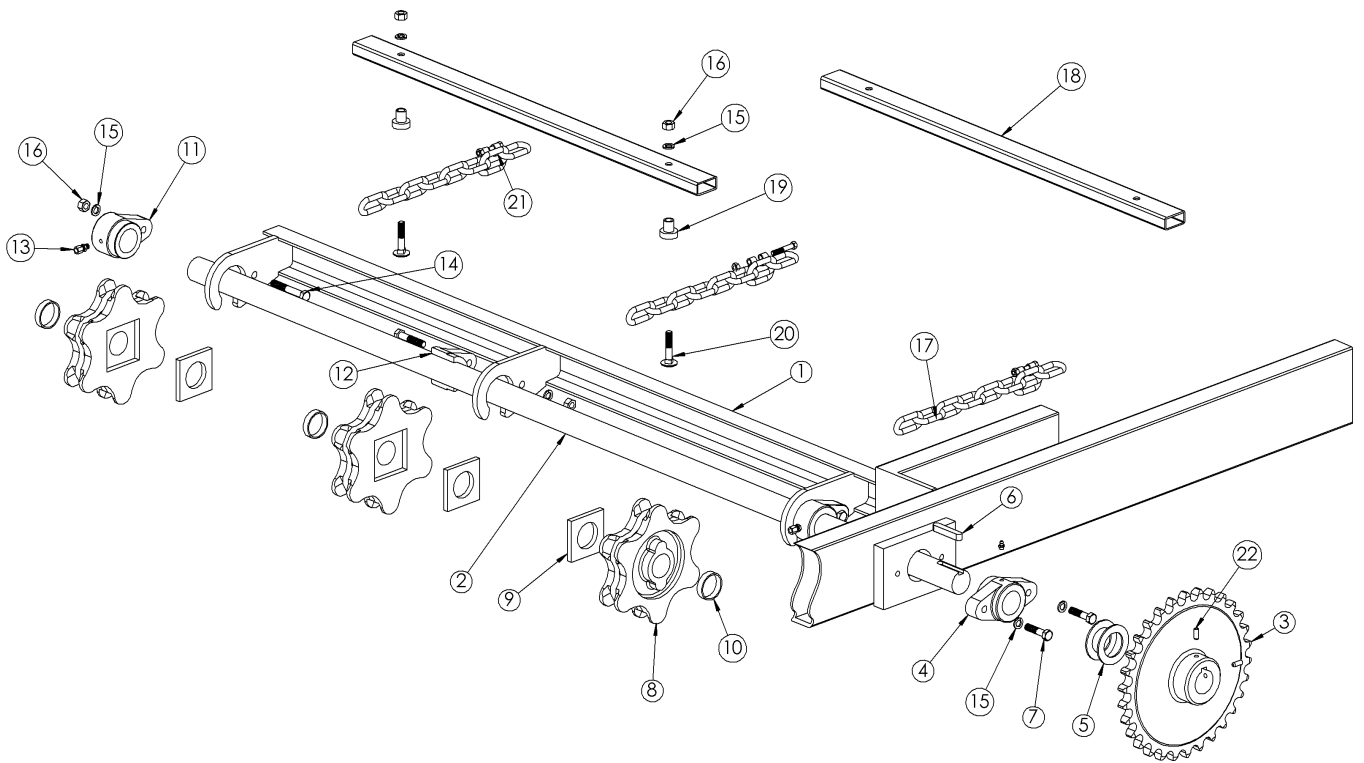
Front Floor Shaft Assembly – 2 Floor Chains

Item	Part Number	Description	Quantity Used		
			66 & 70	80 & 85	90,100&105
1a	210-1125	Sprocket 35 Tooth 40mm Bore CA550* See Note 1	1		
1b	210-1216	Sprocket 50 Tooth 40mm Bore 16B		1	1
2	GSC3/8X1/2A	Grubscrew, Allen Head 3/8" UNC	2	2	2
3	WA40	Washer 40x85x3 Black	as reqd.	as reqd.	as reqd.
4	B12X40	Bolt, M12x40	2	2	2
5	WASG12	Washer, Spring M12	30	30	38
6	615-1111	Deadeye, 2 Leg 40mm	1	1	1
7	615-2002	Deadeye, 1 Leg 40mm	2	2	2
8	GRN8-ST	Grease Nipple, M8x1.0 Straight (or GDM-GLC6-8 if central lube fitted)	3	3	3
9	510-1049	Shaft, Floor 40mm 10mm Key* See Note 2	1	1	1
or	510-1049-1	Shaft, Floor 40mm 12mm Key (from Oct 2000 onwards)	1	1	1
10	SK10X8	Key, Parallel 10x8 @ 70mm	1	1	1
or	SK12X8	Key, Parallel 12x8 @ 60mm (from Oct 2000 onwards)	1	1	1
11	625-0040	Spacer 40x15	2	2	2
12	210-0020	Sprocket 6 Tooth 40mm Square Drive	2	2	2
13	211-0114	6 T Drive Sprocket Weld-on Square 40mm	2	2	2
14	B12X55	Bolt, M12x55	2	2	2
15	N12	Nut, M12	28	28	36
16	BCH12X60	Bolt, Coach M12x60 Galv.	26	26	34
17	231-1152	Floor Chain - 1 Length MSX66, 80, MSC70 & 85	2	2	
17	231-1120	Floor Chain - 1 Length MSX100 & MSC105			2
18	605-3001-1	Floor Slat Bush, 1990 on	26	26	34
19	230-1007	Chain Joiner Link c/w Bolt	2	2	2
20	605-2002	Floor Slat - Bolt On	12	12	16

Note 1: Later models use 1b.

Note 2: Check if drive key #10 is 10mm or 12mm wide.

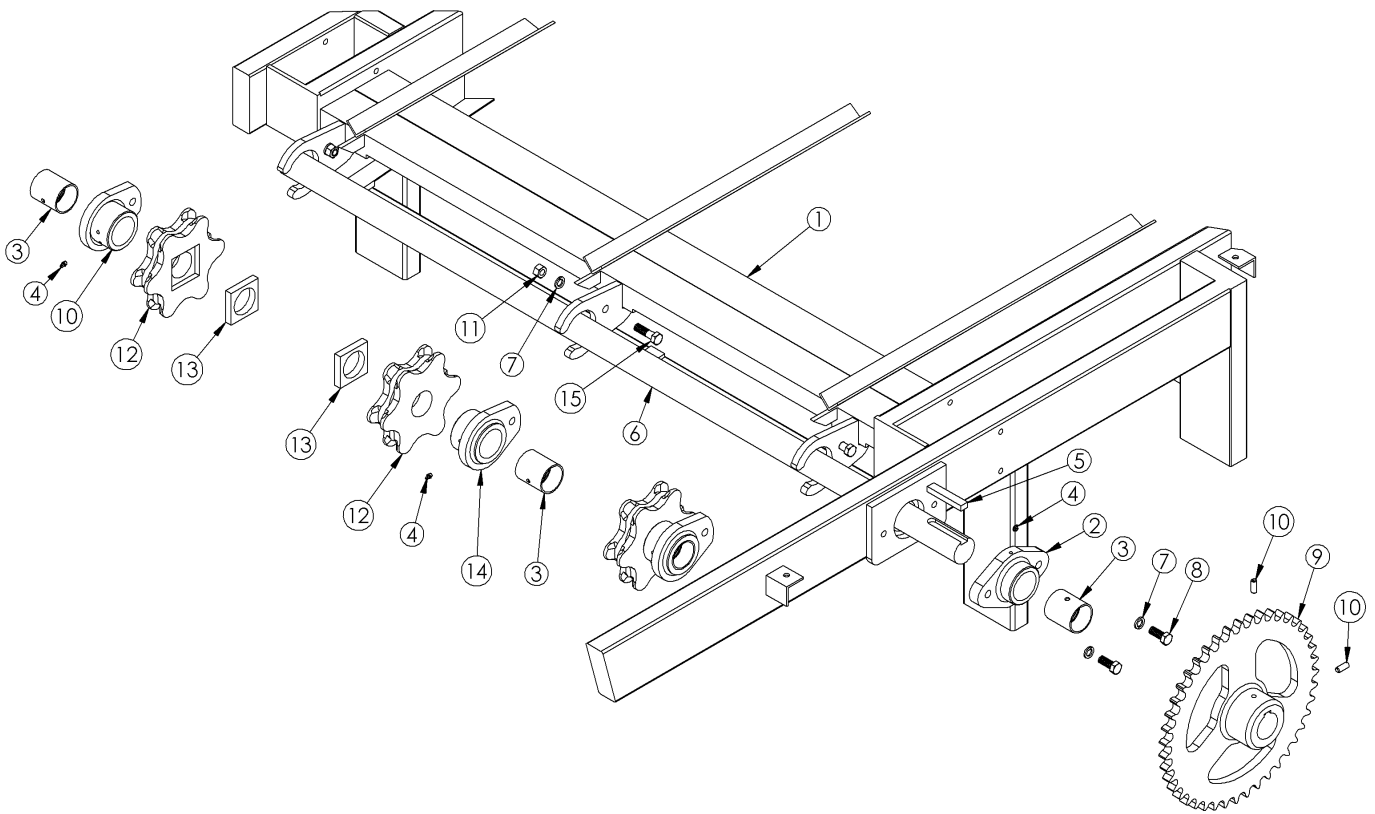
Front Floor Shaft Assembly – 3 Floor Chains



Front Floor Shaft Assembly – 3 Floor Chains

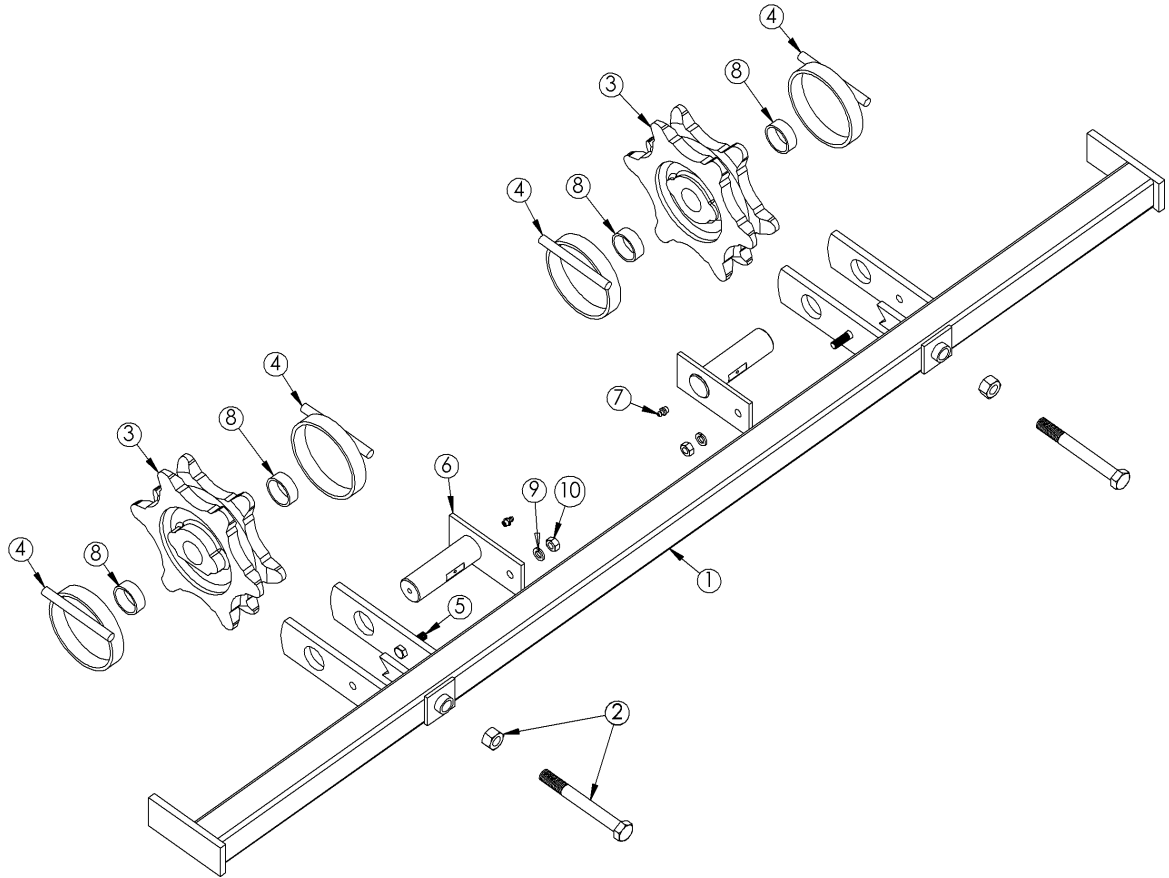
Item	Part Number	Description	Quantity Used	
			MSX125	MSX160
1	-	Main Chassis		
2	510-1301	Shaft, Floor Drive 45mm	1	1
3	210-1104	Sprocket 30 Tooth 45mm Bore 20B	1	1(v1)
3	210-1138	Sprocket 38 Tooth 45mm Bore 20B		1(v2)
4	615-1118	Deadeye, 2 Leg 45mm	1	1
5	WA45	Washer, Flat M45	as reqd.	as reqd.
6	SK12x12	Key, Parallel 12x12 @ 60mm	1	1
7	B12x40	Bolt, M12x40	2	2
8	210-0030	Sprocket 6 Tooth 45mm Bore Square Drive	3	3
9	211-0121	Sprocket Weld Square Insert	3	3
10	625-0045	Spacer 45x15	3	3
11	615-2023	Deadeye, 1 Leg 45mm Bore	2	2
12	615-2040	Deadeye, 1 Leg 45mm Bore – Cut off	1	1
13	GDM-GLC6-8	Grease Lube Connector 6mm - 8mm	2	2
14	B12X55	Bolt, M12x55	3	3
15	WASG12	Washer, Spring M12	85	85
16	N12	Nut, M12 Galv.	89	89
17	231-1125	Chain Floor - 1 Length - MSX125	3	3
18	605-2028	Floor Slat - M90-125X	40	40
19	605-3001-1	Floor Slat Bush - 1990 on	80	80
20	BCH12x60	Bolt, Coach M12x60 Galv.	80	80
21	230-1007	Chain Joiner Link c/w Bolt	3	3
22	GSC3/8x1A	Grubscrew, Allen Head 3/8" UNC	2	2

Front Floor Shaft Assembly – MSX210 & MSC215



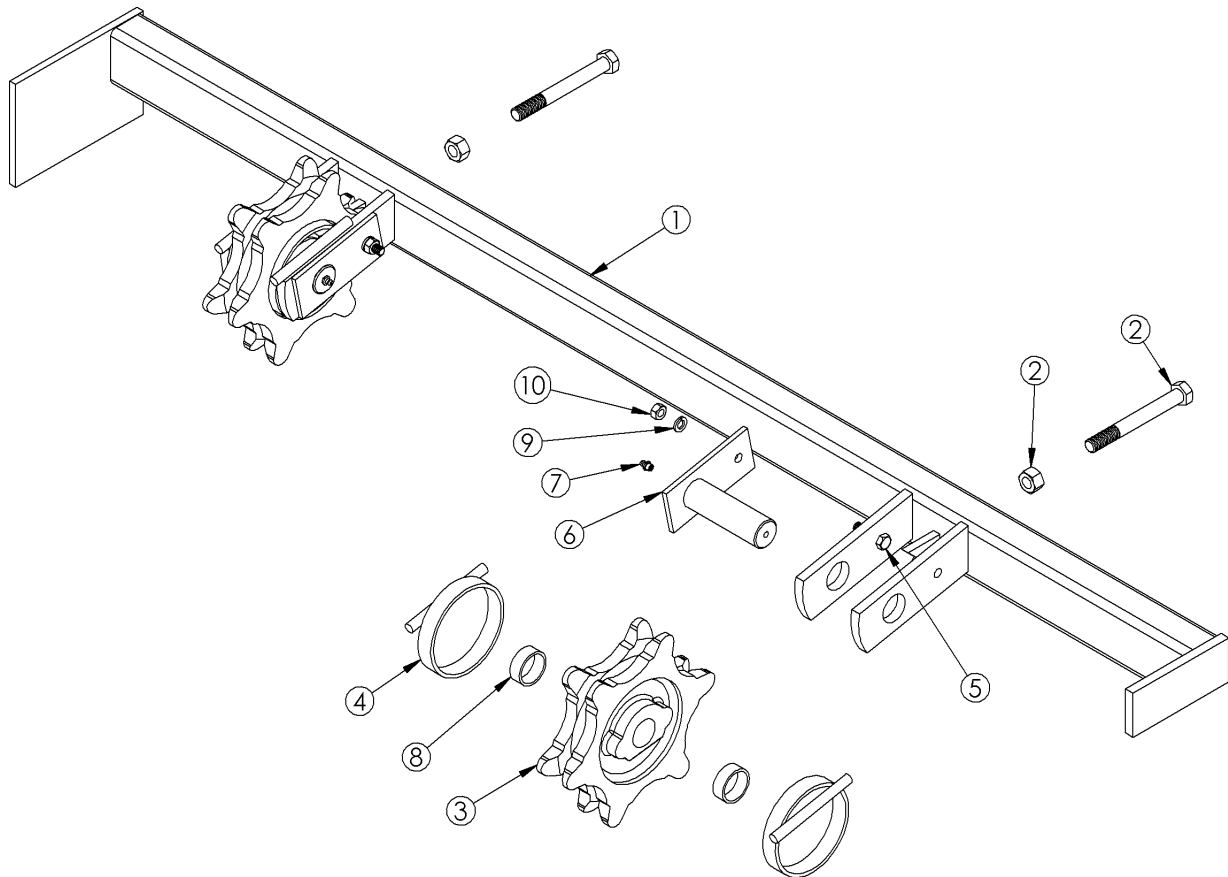
Item	Part Number	Description	Quantity Used
1	-	Chassis	-
2	615-1132	Deadeye Housing, 2 Leg c/w bush	1
3	615-1200	Bush, Bronze 60ID x 75mm	4
4	GRN8-ST	Grease Nipple, M8x1.0 (or GDM-GLC6-8 where fitted)	4
5	SK20x13	Key, Parallel 20 x 13 x 100mm	1
6	510-1309	Floor Shaft - 60mm HT	1
7	WASG16	Washer, Spring M16	5
8	B16x40	Bolt, M16x40	2
9	210-1211	Sprocket, 43 Tooth 20B 60mm Bore	1
10	GSC12x30A	Grubscrew, Allen Head M12x30	2
11	N16	Nut, M16	3
12	210-0032	Sprocket 6 Teeth, 60mm Bore c/w plate	3
13	211-0123	Square Drive Plate, Weld On	3
14	615-2058	Deadeye Housing, 1 Leg c/w bush	3
15	B16x55	Bolt, M16x55	3

Floor Chain Adjuster – MSX66, 80, MSC70, 85 & 90



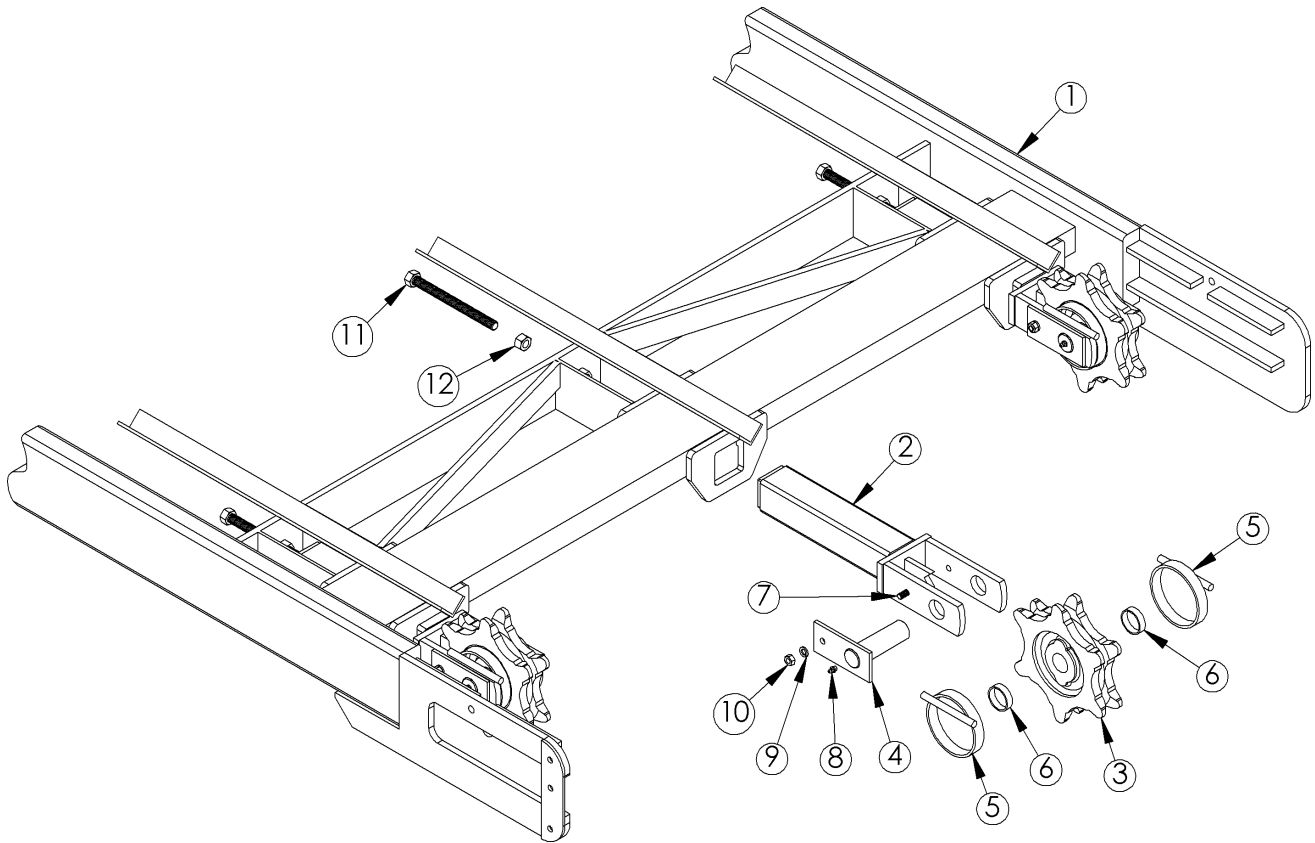
Item	Part Number	Description	Quantity Used
-	571-0295	Rear Floor Adjuster Assembly	1
1	571-0155	Rear Floor Adjuster Frame	1
2	596-1004	Adjusting Tensioner M16x200 c/w Nuts	2
3	210-0012	Sprocket, 6 Tooth 35mm Idler	2
4	597-1036	6 Tooth Idler Sprocket Spacer c/w Stop	4
5	B10x25	Bolt, M10x25	2
6	597-1029	Sprocket Axle Assembly, 35mm	2
7	GRN8-ST	Grease Nipple, M8x1.0 Straight	2
8	625-0040	Spacer 40x15	4
9	WASG10	Washer, Spring M10	2
10	N10	Nut, M10	2
-	571-0043	Complete Assembly	-

Floor Chain Adjuster – MSX100 & MSC105



Item	Part Number	Description	Quantity Used
-	571-0299	Rear Floor Adjuster Assembly	1
1	571-0038	Rear Floor Adjuster Frame	1
2	596-1004	Adjusting Tensioner M16x200 c/w Nuts	2
3	210-0012	Sprocket, 6 Tooth 35mm Idler	2
4	597-1036	6 Tooth Idler Sprocket Spacer c/w Stop	4
5	B10x25	Bolt, M10x25	2
6	597-1029	Sprocket Axle Assembly, 35mm	2
7	GRN8-ST	Grease Nipple, M8x1.0 Straight	2
8	625-0040	Spacer 40x15	4
9	WASG10	Washer, Spring M10	2
10	N10	Nut, M10	2

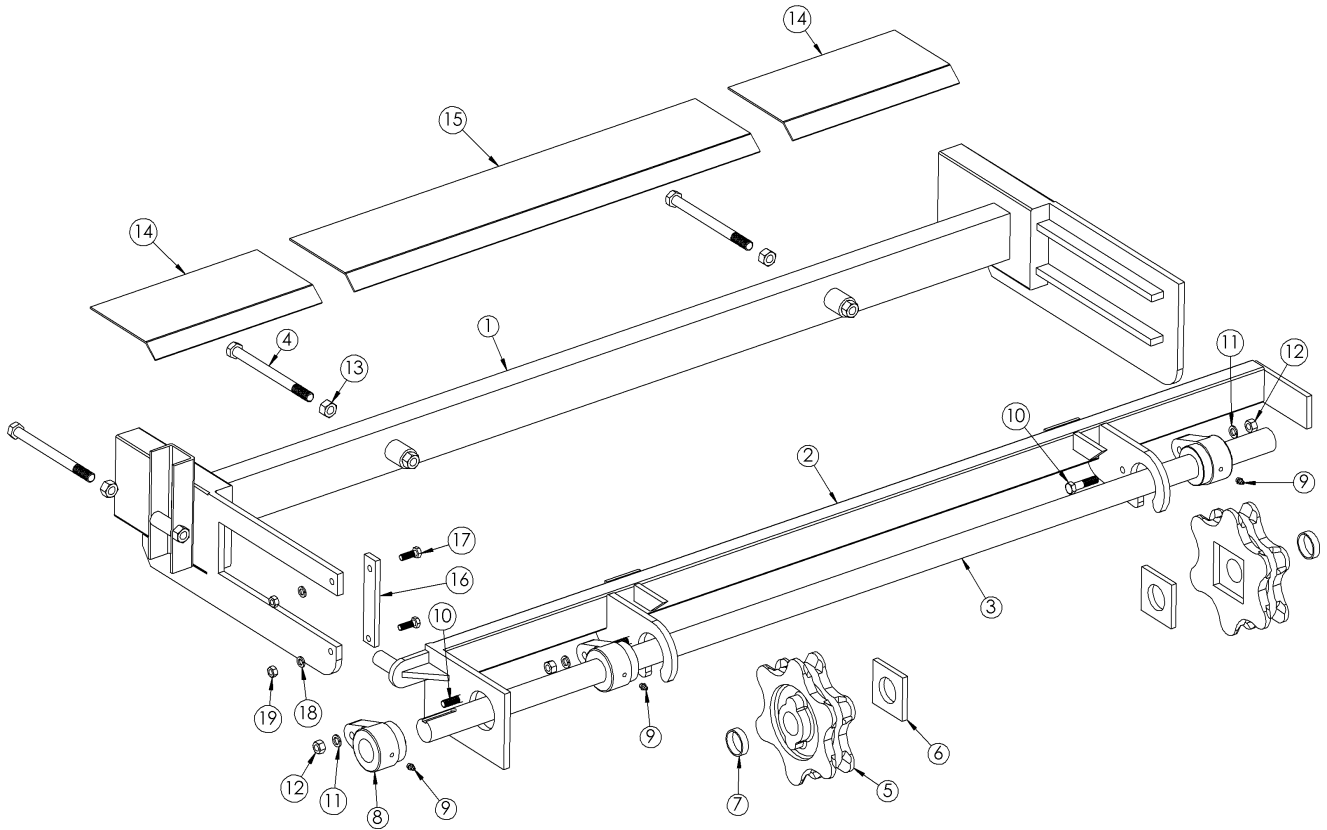
Independent Floor Chain Adjuster (March 2000 onwards)



Item	Part Number	Description	Quantity Used Each
1	-	Main Chassis	-
2	571-0087	Box Adjuster	1
2a	571-0087-1	Capped RHS Section (when converted to fast floor)	1
3	210-0012	Sprocket, 6 Tooth 35mm Idler	1
4	597-1029	Sprocket Axle Assembly, 35mm	1
5	597-1036	Idler Sprocket Spacer c/w Stop	2
6	625-0040	Spacer 40x15	2
7	B10x25	Bolt, M10x25	1
8	GRN8-ST	Grease Nipple 8x1.0 Straight	1
9	WASG10	Washer, Spring M10	1
10	N10	Nut, M10	1
11	596-1004	Adjusting Tensioner M16x200 c/w nuts	1
or	596-1025	Adjusting Tensioner M20x250 c/w nuts	1
12	N16	Nut, M16	2
or	N20	Nut, M20	2
13	571-0085	Complete Adjuster Assembly	-

#13 includes components #2, #3, #4, #5, #6, #7, #8, #9 & #10

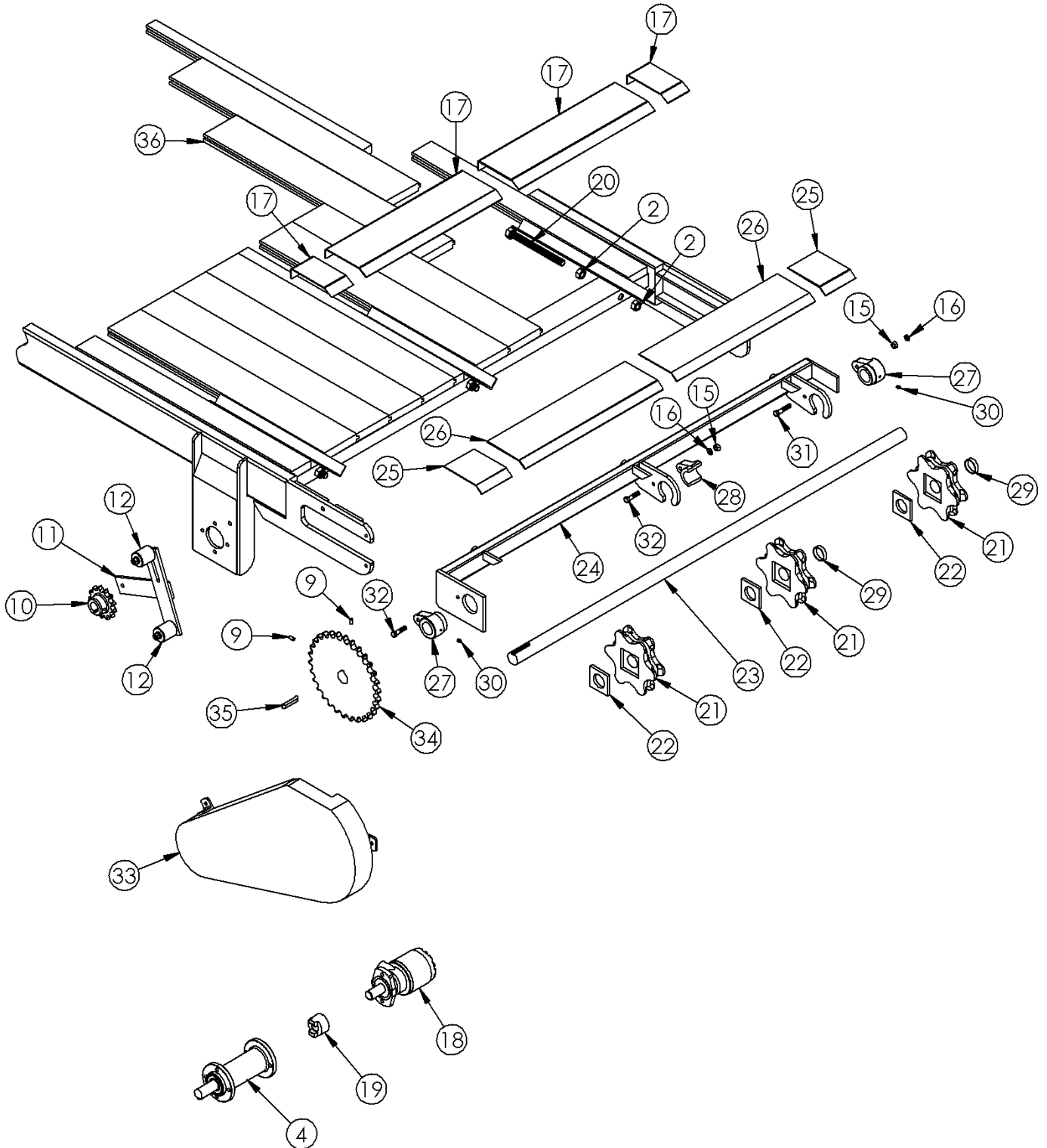
Rear Floor Drive Assembly – MSX100 & MSC105



Rear Floor Drive Assembly – MSX100 & MSC105

Item	Part Number	Description	Quantity Used
1	-	Main Chassis	-
2	571-0038	Rear Floor Adjuster Frame, MSX100 & MSC105	1
3	510-1088	Shaft, Rear Floor Drive 40mm	1
4	596-1004	Adjusting Tensioner M16x200 c/w Nuts	3
5	210-0020	Sprocket 6 Tooth 40mm Square Drive	2
6	211-0114	6 Tooth Drive Sprocket Weld-on Square 40mm	2
7	625-0040	Spacer 40x15	2
8	615-2002	Deadeye, 1 Leg 40mm	3
9	GRN8-ST	Grease Nipple M8x1.0 Straight	3
10	B12X50	Bolt, M12x50	3
11	WASG12	Washer, Spring M12	3
12	N12	Nut, M12	3
13	N16	Nut, M16 (included with #4)	-
14	580-1010	Cover Plate Small - Rear Floor	2
15	580-1017	Cover Plate Large - Rear Floor	1
16	SF40x5	Flat Steel 40x5	1
17	B10x30	Bolt, M10x30	2
18	WASG10	Washer, Spring M10	2
19	N10	Nut, M10	2
-	571-0057	Complete Rear Floor Drive Assembly	-

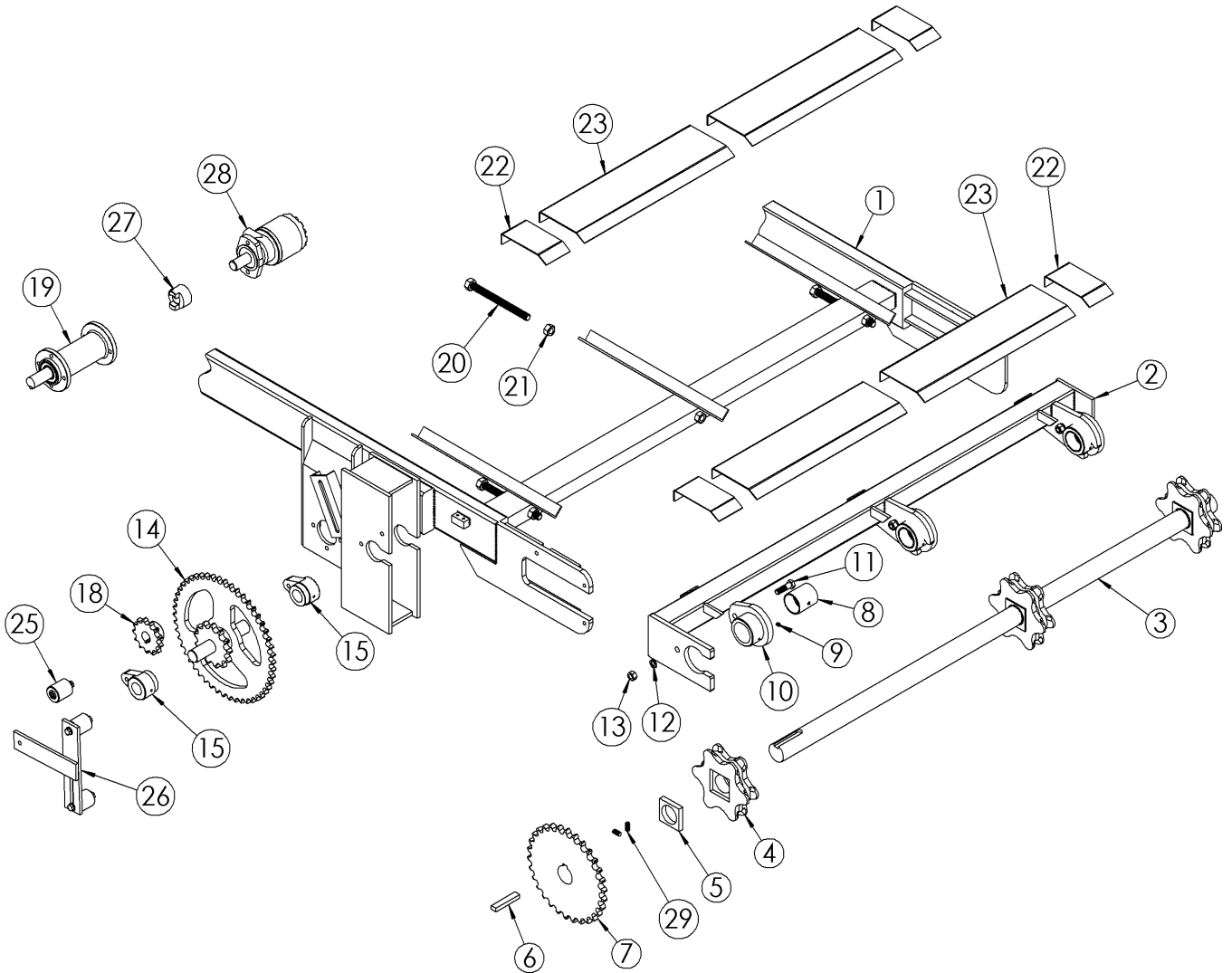
Rear Floor Drive Assembly – MSX125, 160, MSC130 & 165



Rear Floor Drive Assembly – MSX125, 160, MSC130 & 165

Item	Part Number	Description	Quantity Used
1	-	Main Chassis	-
2	N16	Nut, M16 - supplied with adjusters	-
or	N20	Nut, M20 - supplied with adjusters	-
4	571-1071	Motor Mount Complete Assembly	1
9	WASG10	Washer, M10	2
9	N10	Nut, M10	2
10	210-1065.1	Sprocket 10T 20B 35mm Bore	1
11	595-1070-1	chain Tensioner Arm	1
12	595-1062	Nylon Tensioner Block	2
14	SF40X5	Steel Flat 40x5	1
15	N12	Nut, M12	3
16	WASG12	Washer, Spring M12	3
18		Hydraulic motor	1
19	554-1106	Coupling 35mm Female	1
20	596-1004	Adjusting Tensioner M16x200 c/w Nuts	4
or	596-1025	Adjusting Tensioner M20x250 c/w Nuts	4
21	210-0030	Sprocket 6 Tooth 45mm Square Drive	3
22	211-0121	6T Drive Sprocket - Weld Ring 45mm	3
23	510-1302	Shaft, Rear Assembly 45mm	1
24	571-0039	Rear Floor Adjuster Frame MSX125/160 & MSC130/165	1
25	580-1075	Cover Plate Small 130/125X Rear Floor	2
26	580-1073	Cover Plate Large 130/125X Rear Floor	2
27	615-2023	Deadeye, 1 Leg 45mm Bore	2
28	615-2040	Deadeye, 1 Leg 45mm Bore - Cutoff	1
29	625-0045	Spacer 45x15	2
30	GRN8-ST	Grease Nipple M8x1.0 Straight	3
31	B10X30	Bolt, M12x30	2
32	B12X50	Bolt, M12x50	3
33	571-1078	Cover	1
34	210-1104	Sprocket 30T 20B 45mm Bore	1
35	SK8X10	Key Parallel 8x10 @ 70mm	1
36	Timber150x40	Timber 150x40 TG Decking	
-	571-0053	Complete Rear Floor Drive Assembly	-

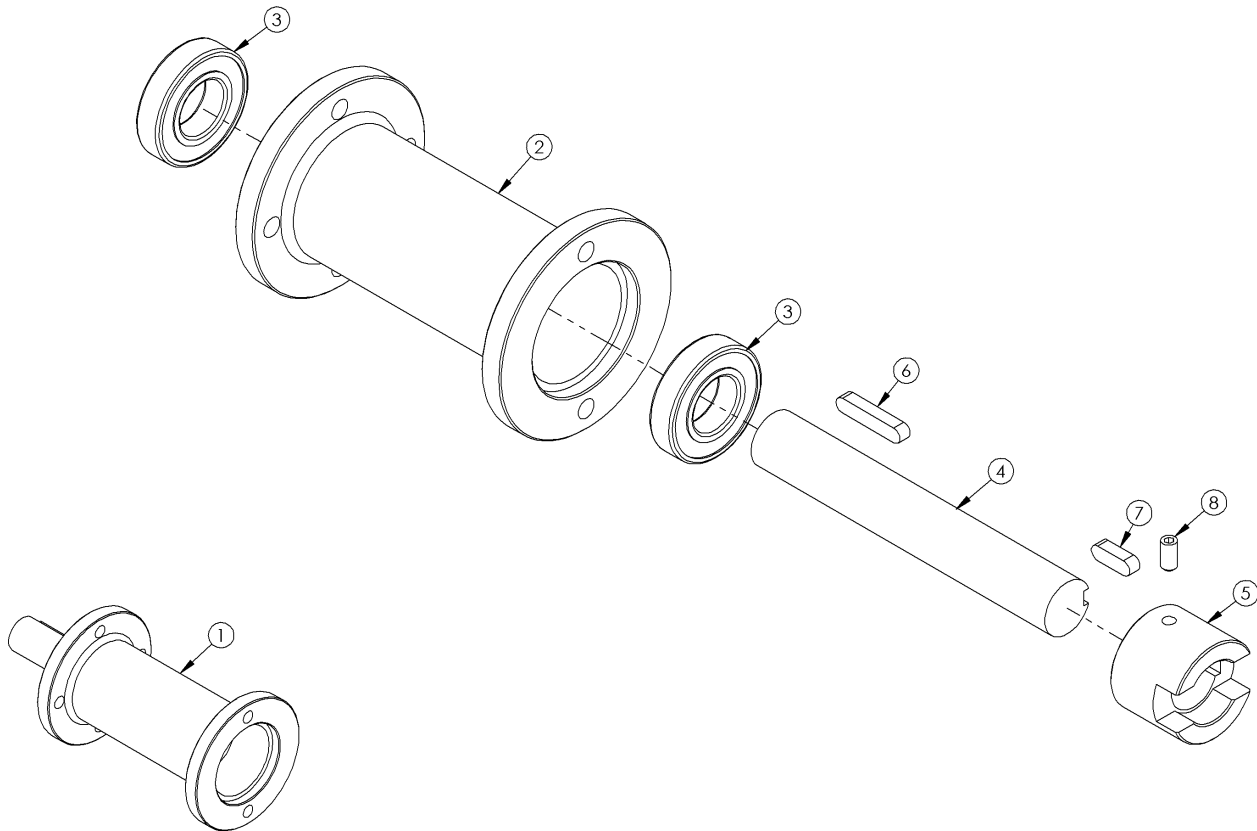
Rear Floor Drive Assembly – MSX210 & MSC215



Rear Floor Drive Assembly – MSX210 & MSC215

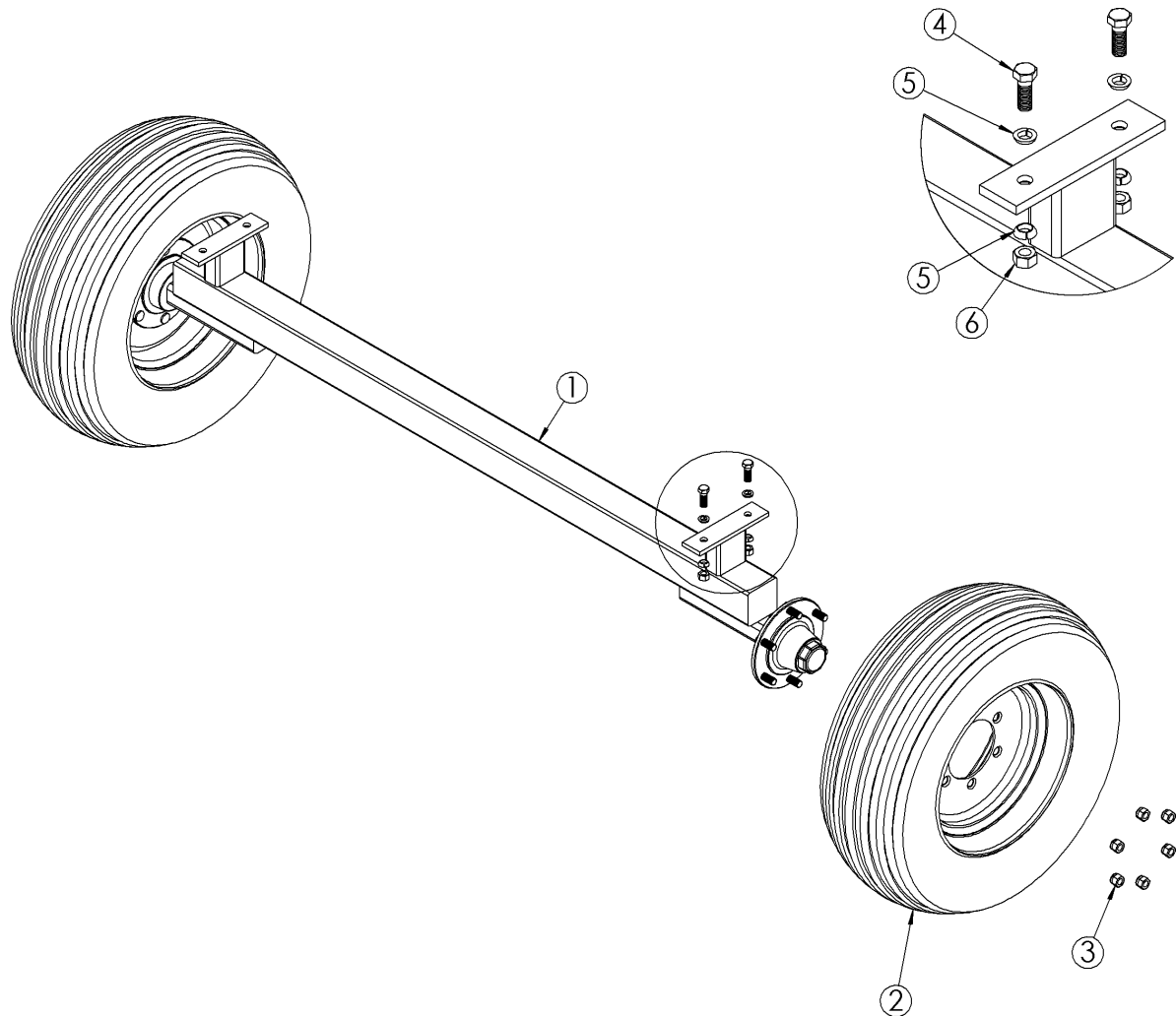
Item	Part Number	Description	Quantity Used
1	-	Main Chassis	
2	571-0046	Rear Floor Adjuster Frame MSX210 & MSC215	1
3	510-1309	Shaft, Rear Assembly 60mm HT	1
4	210-0032	Sprocket, 6 Tooth 60mm Square Drive c/w square insert	3
5	211-0123	Square Drive Plate, Weld On - 60mm	3
6	SK20X13	Key Steel, 20x13 @ 100mm	1
7	210-1104-1	Sprocket, 30T, 20B, 60mm Bore	1
8	615-1200	Bronze Bush	3
9	GRN8-ST	Grease Nipple, M8x1.0 Straight	5
10	615-2058	Deadeye, 1 Leg Housing c/w bush	3
11	B16X50	Bolt, M16x50	3
12	WASG16	Washer, Spring M16	3
13	N16	Nut, M16	3
14	210-1088-1	Reduction Sprocket, 50/13 Tooth 40mm Idler	1
15	615-2002	Deadeye, 1 Leg 40mm	2
16	WASG12	Washer, Spring M12	2
17	N12	Nut, M12	2
18	210-1182	Sprocket, 13 Tooth 16B 35mm Bore	1
19	571-1071	Motor Mount Housing Assembly	1
20	596-1025	Adjusting Tensioner, M20x250 c/w Nuts	3
21	N20	Nut, M20 - supplied with adjusters	6
22	580-1075	Cover Plate, Small 130/125X Rear Floor	2
23	580-1073	Cover Plate, Large 130/125X Rear Floor	2
24	WA12	Washer, Flat M12	1
25	595-1062	Tensioner Bush, Nylon	2
-	571-0060	Complete Rear Floor Drive Assembly	-

Motor Mount Assembly



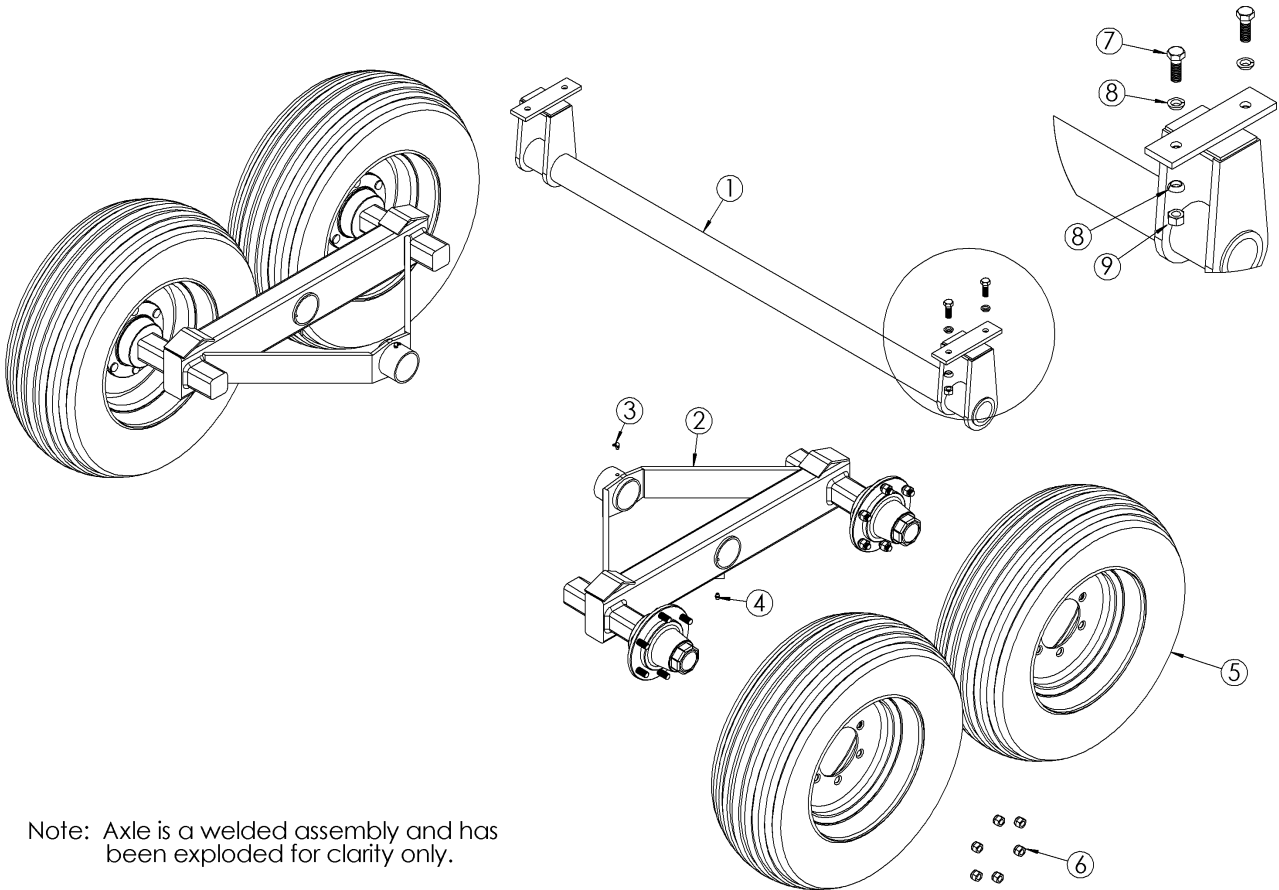
Item	Part Number	Description	Quantity Used
1	571-1071	Motor Mount Complete Assembly	1
2	571-1072	Housing	1
3	BRG6207-2RS1	Bearing, 6207-2RS1	2
4	510-1385	Shaft, 35mm HT	1
5	554-1106	Coupling, 35mm Female 1" Dogs	1
6	SK10x8	Key, Parallel 10x8 @ 35mm	1
7	SK10x8	Key, Parallel 10x8 @ 50mm	1
8	GSC3/8x1/2A	Grubscrew, Allen Head 3/8" UNC x 1/2"	1

Single Axle Assembly



Item	Part Number	Description	Quantity Used				
			MSC70	MSC85	MSC90	MSX66	MSX80
1	-	Axle Beam, 60sq Hubs	1	1		1	1
1	-	Axle Beam, 70sq Hubs			1		
2	-	Wheel Assembly 11.5/80-15.3	2	2	2	2	2
3	110-0917	Wheel Nut, M18x1.5	12	12	12	12	12
4	B16x45	Bolt, M16x45	4	4	4	4	4
5	S51239	Washer, Conical M16	8	8	8	8	8
6	N16	Nut, M16	4	4	4	4	4

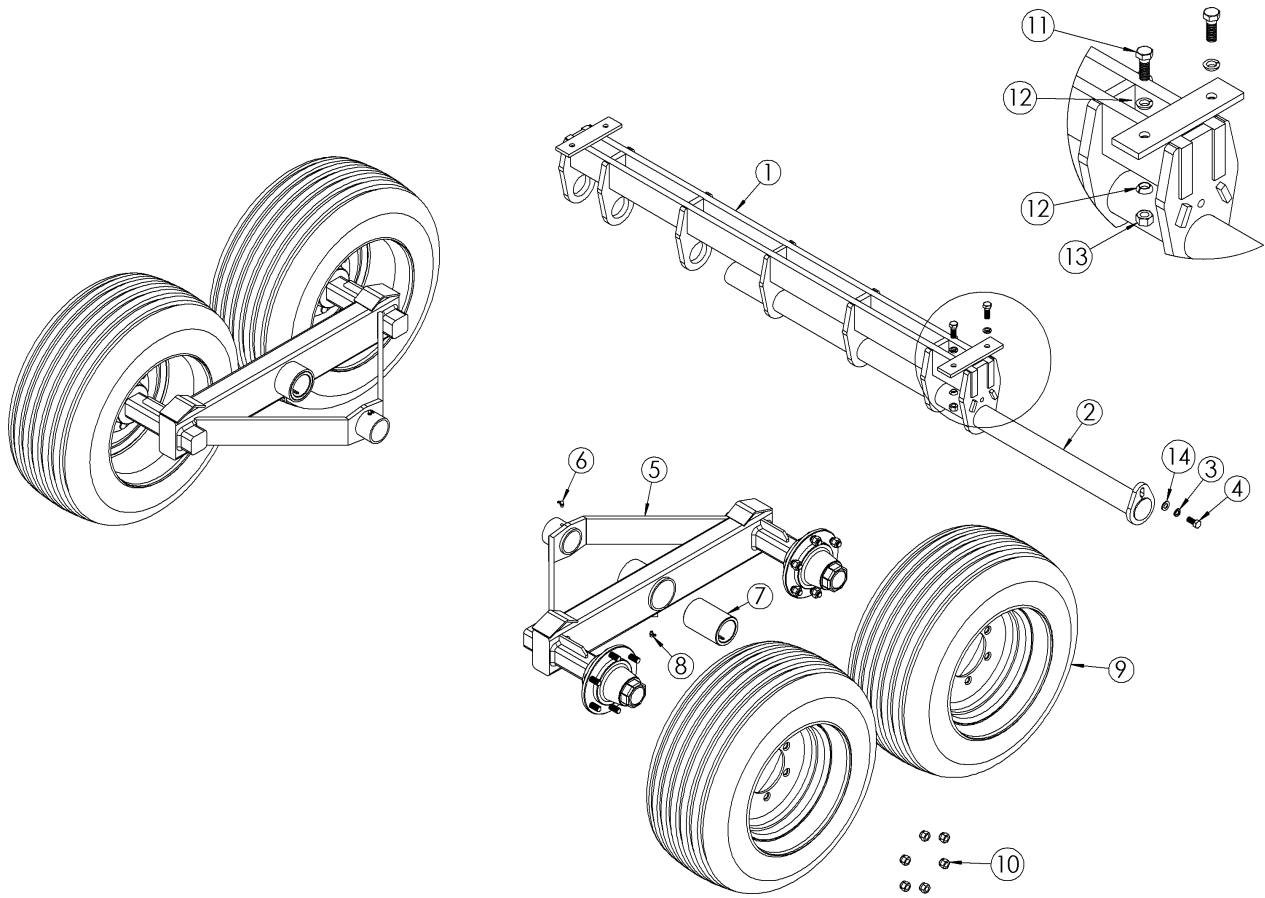
Tandem Axle Assembly – 11.5/80 x 15.3 Wheels



Note: Axle is a welded assembly and has been exploded for clarity only.

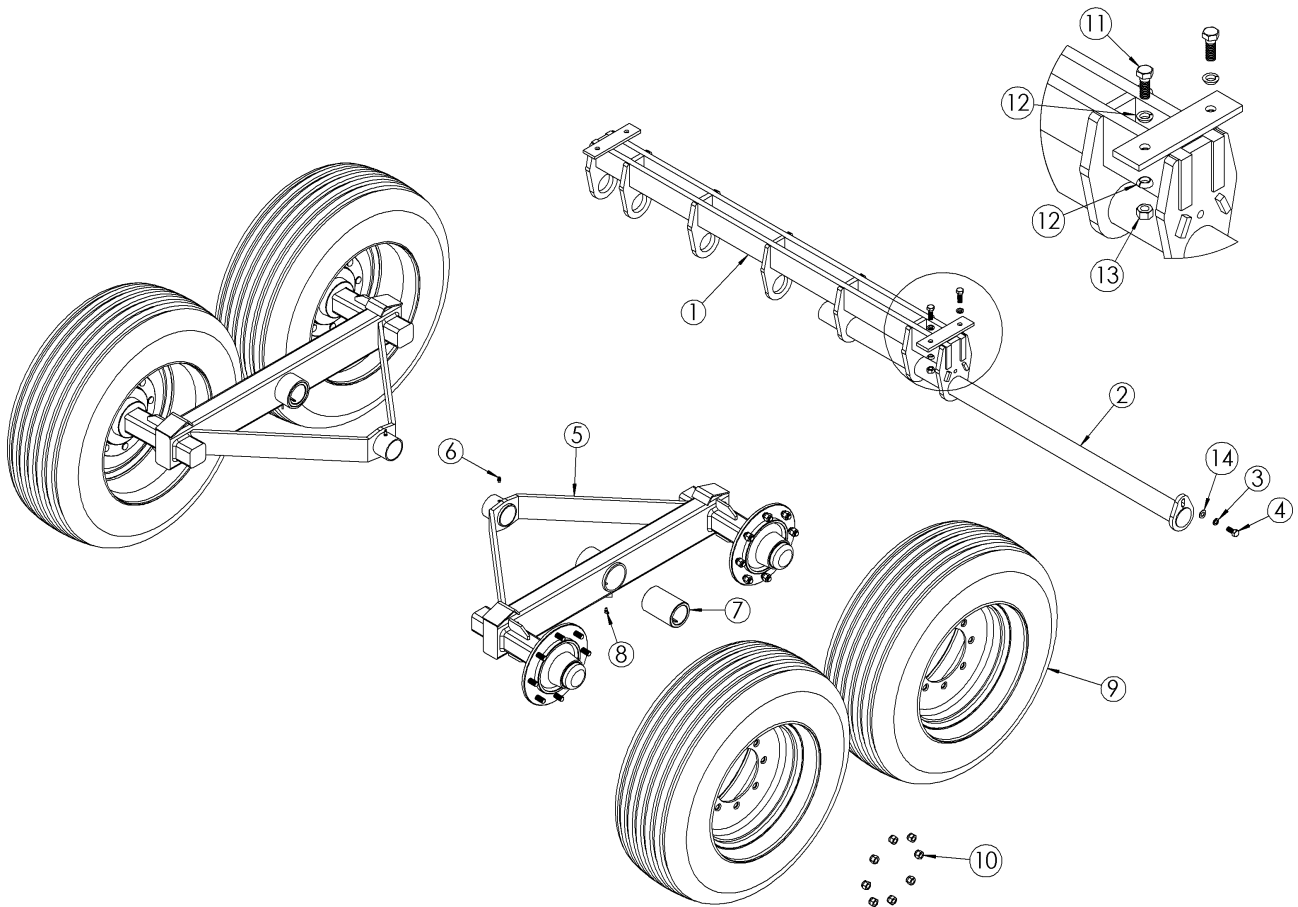
Item	Part Number	Description	Quantity Used	
			Up to MSX100	MSX100 & MSC105
1	110-0547	Axle Beam	1	
1	110-0549	Axle Beam		1
2	110-0250	Hub Mount, 60sq Hubs	2	
2	110-0262	Hub Mount, 70sq Hubs		2
3	GRN1/8-90	Grease Nipple, 1/8" BSP 90deg	2	2
4	GRN1/8-90	Grease Nipple, 1/8" BSP 90deg	2	2
5	-	Wheel Assembly 11.5/80x15.3	4	4
6	110-0917	Wheel Nut, M18x1.5	24	24
7	B16x45	Bolt, M16x45	4	4
8	S51239	Washer, Conical M16	8	8
9	N16	Nut, M16	4	4

Tandem Axle Assembly – 400/60 x 15.5 Wheels



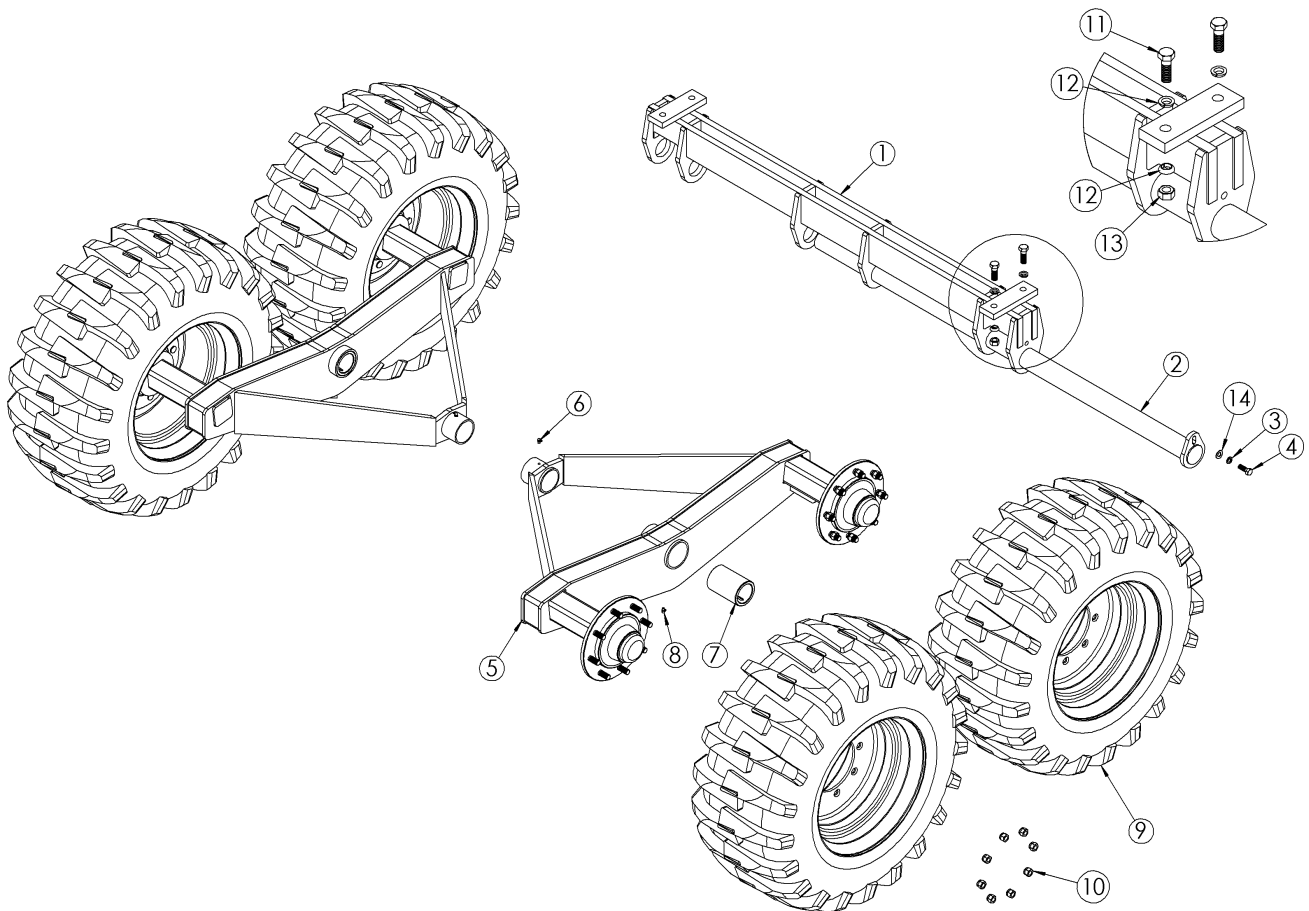
Item	Part Number	Description	Quantity Used
1	110-0556	Axle Beam	1
2	110-0507	Axle Pivot Shaft	1
3	WASG16	Washer, Spring M16	1
4	B16x35	Bolt, M16x35	1
5	110-0264	Hub Mount	2
6	GRN1/8-90	Grease Nipple, 1/8" BSP 90deg	2
7	110-0114	Replaceable Bush 3"x4" x 150mm	2
8	GRN1/8-90	Grease Nipple, 1/8" BSP 90deg	2
9	-	Wheel Assembly 400/60x15.5	4
10	110-0917	Wheel Nut, M18x1.5	32
11	B16x45	Bolt, M16x45	4
12	S51239	Washer, Conical M16	4
13	N16	Nut, M16	4
14	WA16	Washer, Flat	1

Tandem Axle Assembly – MSX160 & MSC165



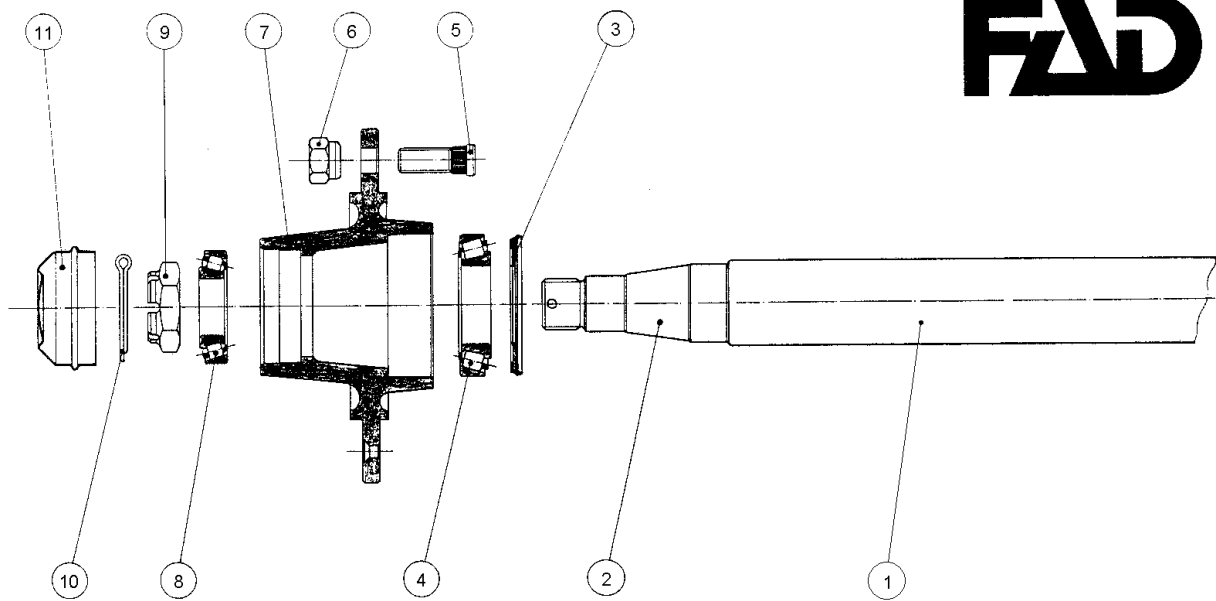
Item	Part Number	Description	Quantity Used
1	110-0556	Axle Beam	1
2	110-0507	Axle Pivot Shaft	1
3	WASG16	Washer, Spring M16	1
4	B16x35	Bolt, M16x35	1
5	110-0260	Hub Mount	2
6	GRN1/8-90	Grease Nipple, 1/8" BSP 90deg	2
7	110-0114	Replaceable Bush 3"x4" x 150mm	2
8	GRN1/8-90	Grease Nipple, 1/8" BSP 90deg	2
9	-	Wheel Assembly 15/70-18	4
10	110-0917	Wheel Nut, M18x1.5	32
11	B16x45	Bolt, M16x45	4
12	S51239	Washer, Conical M16	4
13	N16	Nut, M16	4
14	WA16	Washer, Flat M16	1

Tandem Axle Assembly – MSX210 & MSC215



Item	Part Number	Description	Quantity Used
1	110-0560	Axle Beam	1
2	110-0520	Axle Pivot Shaft	1
3	WASG16	Washer, Spring M16	1
4	B16x35	Bolt, B16x35	1
5	110-0269	Hub Mount	2
6	GRN1/8-90	Grease Nipple, 1/8" BSP 90deg	2
7	110-0114	Replaceable Bush 3"x4" x 150mm	2
8	GRN1/8-90	Grease Nipple, 1/8" BSP 90deg	2
9	-	Wheel Assembly 15Rx22.5	4
10	110-0919	Wheel Nut, M20x1.5	32
11	B20x70	Bolt, M20x70	4
12	S51245	Washer, Conical M20	4
13	N20	Nut, M20	4
14	WA16	Washer, Flat M16	1

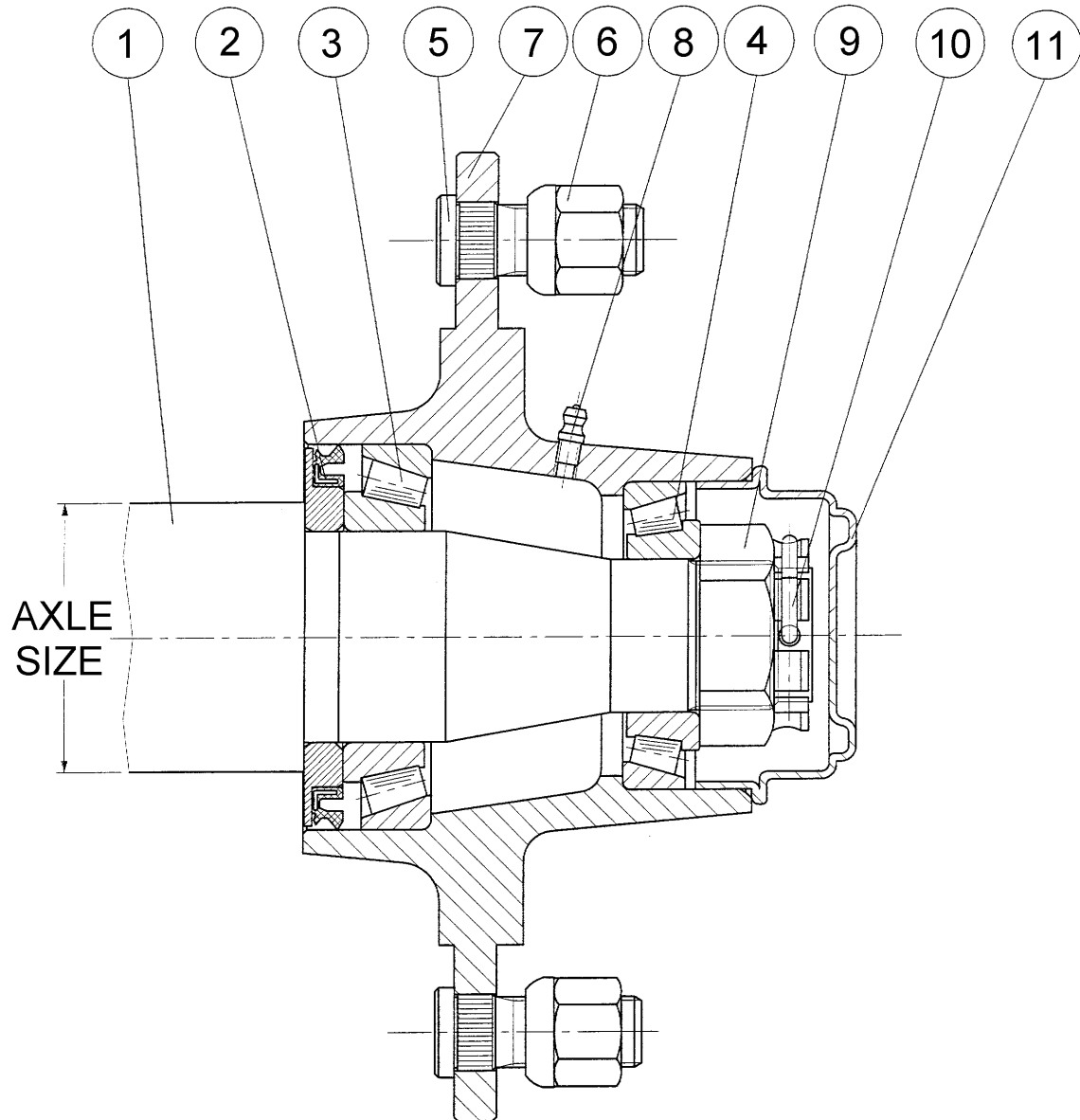
Axle Hub Assembly – FAD



Axle Hub Assembly – FAD

Item	Part Number	Description	Quantity Used				
			50mm	60mm	70mm	80mm	90mm
1	HUB1350KG	Hub Assembly, FAD 1350kg 5 Stud 50sq	1				
1	HUB2000KG	Hub Assembly, FAD 2000kg 6 Stud 60sq		1			
1	HUB3000KG	Hub Assembly, FAD 3000kg 6 Stud 70sq			1		
1	HUB4250KG	Hub Assembly, FAD 4250kg 8 Stud 80sq				1	
1	HUB5000KG	Hub Assembly, FAD 5000kg 8 Stud 90sq					1
2	-	Stub Axle FAD 1350kg	1				
2	110-0457	Stub Axle FAD 2000kg		1			
2	110-0464	Stub Axle FAD 3000kg			1		
2	110-0468	Stub Axle FAD 4250kg				1	
2	-	Stub Axle FAD 5000kg					1
3	-	Seal	1				
3	SL589010	Seal, 58x90x10 (or 60x90x8 old)		1			
3	SL8012012	Seal, 80x120x12			1		
3	SL9013012	Seal, 90x130x12 or 85x130x12				1	
3	-	Seal, 100x140x12					1
4	BRG30209J2	Taper Roller Bearing, 30209 J2	1				
4	BRG30211J2	Taper Roller Bearing, 30211 J2 (or 30210 J2)		1			
4	BRG30213J2	Taper Roller Bearing, 30213 J2			1		
4	BRG32215J2	Taper Roller Bearing, 32215 J2				1	
4	BRG32216J2	Taper Roller Bearing, 32216 J2					1
5	-	Wheel Stud, M16x45	5				
5	110-0945	Wheel Stud, M18x50		6	6	8	
5	110-0950	Wheel Stud, M20x62					8
6	110-0905	Wheel Nut, M16	5				
6	110-0917	Wheel Nut, M18		6	6	8	
6	110-0909	Wheel Nut, M20					8
7	-	Hub Only - FAD 1350kg, 5 Stud	1				
7	110-0660	Hub Only - FAD 2000kg, 6 Stud		1			
7	110-0667	Hub Only - FAD 3000kg, 6 Stud			1		
7	110-0669	Hub Only - FAD 4250kg, 8 Stud				1	
7	-	Hub Only - FAD 5000kg, 8 Stud					1
8	BRG30206J2	Taper Roller Bearing, 30206 J2	1				
8	BRG30208J2	Taper Roller Bearing, 30208 J2 (or 30207 J2)		1			
8	BRG30210J2	Taper Roller Bearing, 30210 J2			1		
8	BRG32211J2	Taper Roller Bearing, 32211 J2				1	
8	BRG32212J2	Taper Roller Bearing, 32212 J2					1
9	-	Slotted Nut,	1				
9	110-1022	Slotted Nut, M33x2		1			
9	110-1029	Slotted Nut, M39x2			1		
9	110-1057	Slotted Washer Nut, M45x2				1	
9	110-1057	Slotted Washer Nut, M45x2					1
10	-	Split Pin,	1				
10	SP6x45	Split Pin, 6x45		1			
10	SP6x50	Split Pin, 6x50			1		
10	SP6.3x60	Split Pin, 6.3x60				1	
10	SP6.3x60	Split Pin, 6.3x60					1
11	-	Grease Cap Pressed Steel	1				
11	110-0833	Grease Cap Pressed Steel, 72mm		1			
11	110-0847	Grease Cap Pressed Steel, 80mm		1			
11	110-0840	Grease Cap Pressed Steel, 90mm			1		
11	110-0875	Grease Cap Pressed Steel, 100mm				1	
11	110-0877	Grease Cap Pressed Steel, 110mm					1
-	N/S	Inner Sealing Ring 77x90x13				1	
-	N/S	Inner Sealing Ring 82x100x16					1

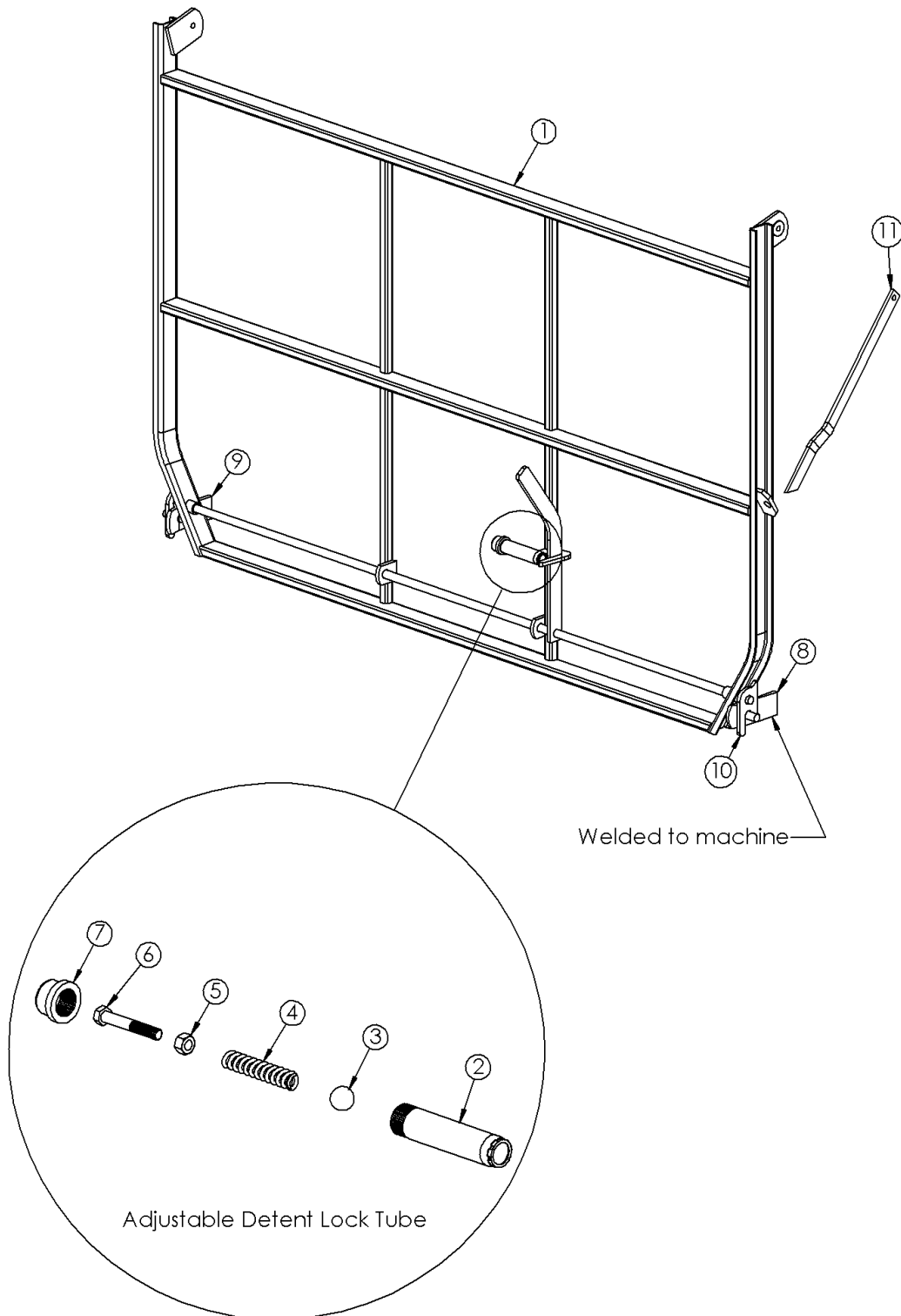
Axle Hub Assembly – ADR



Axle Hub Assembly – ADR

Item	Part Number	Description	Quantity			
			60mm	70mm	80mm	90mm
1	HUB2000KG	Complete Stub Axle, ADR 6 stud 60sq	1			
1	HUB3000KG	Complete Stub Axle, ADR 6 stud 70sq		1		
1	HUB4250KG	Complete Stub Axle, ADR 8 stud 80sq			1	
1	HUB5000KG	Complete Stub Axle, ADR 8 stud 90sq				1
2	110-0193	Seal 57x100x10 O/A (80x100x8 nom.)	1			
2	110-0194	Seal 67x120x12 O/A (100x120x10 nom.)		1		
2	110-0195	Seal 78x130x10 O/A (108x130x8 nom.)			1	
2	110-0196	Seal 82x140x10 O/A (119x140x8 nom.)				1
3	BRG30211J2	Taper Roller Bearing, 30211 J2	1			
3	BRG30213J2	Taper Roller Bearing, 30213 J2		1		
3	BRG32215J2	Taper Roller Bearing, 32215 J2			1	
3	BRG32216J2	Taper Roller Bearing, 32216 J2				1
4	BRG30208J2	Taper Roller Bearing, 30208 J2	1			
4	BRG32210J2	Taper Roller Bearing, 32210 J2		1		
4	BRG32212J2	Taper Roller Bearing, 32212 J2			1	
4	BRG32113J2	Taper Roller Bearing, 32213 J2				1
5	110-0945	Wheel Stud, M18x50	6	6	8	
5	110-0950	Wheel Stud, M20x60x1.5				8
6	110-0917	Wheel Nut, M18	6	6	8	
6	110-0919	Wheel Nut, M20x1.5				8
7	-	Hub Only, ADR 2350 kg 6 stud	1			
7	-	Hub Only, ADR 3400 kg 6 stud		1		
7	-	Hub Only, ADR 4250 kg 8 stud			1	
7	-	Hub Only, ADR 5000 kg 8 stud				1
8	GRN8-45	Grease Nipple, M8x1.0 45 deg	1	1	1	1
9	110-1047	Slotted Nut, M39x1.5	1			
9	110-1047	Slotted Nut, M39x1.5		1		
9	110-1060	Slotted Washer Nut, M48x1.5			1	
9	110-1060	Slotted Washer Nut, M48x1.5				1
10	-	Retaining Clip (or Split Pin SP5x70)	1			
10	-	Retaining Clip (or Split Pin SP5x70)		1		
10	-	Retaining Clip (or Split Pin SP5x80)			1	
10	-	Retaining Clip (or Split Pin SP5x90)				1
11	110-0799	Grease Cap ADR Pressed Steel - 80mm	1			
11	110-0881	Grease Cap ADR Pressed Steel - 90mm		1		
11	110-0883	Grease Cap ADR Pressed Steel - 110mm			1	
11	110-0884	Grease Cap ADR Pressed Steel - 120mm				1

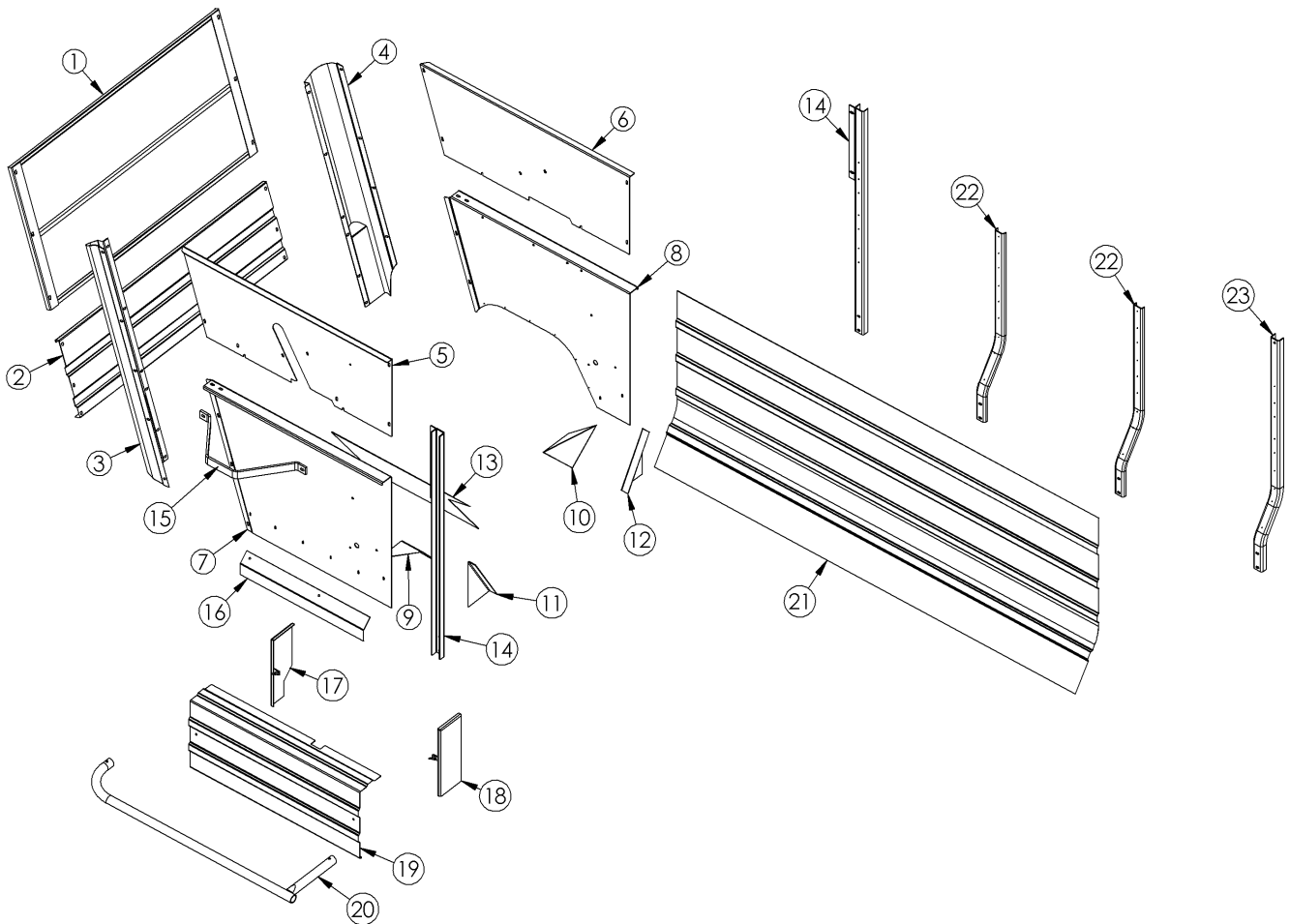
Rear Gate Assembly



Rear Gate Assembly

Item	Part Number	Description	Quantity Used		
			66/70	80/100	160/210
1	670-1130	Gate Assembly - Straight Sides	1		
1	670-1128	Gate Assembly - Straight Sides, extra high	opt.		
1	670-1131	Gate Assembly - Bathtub Sides		1	
1	670-1132	Gate Assembly - Bathtub Sides, extra high		opt.	1
2	670-1152	Detent Tube	1	1	1
3	BRGUC1"	Ball Bearing, 1"	1	1	1
4	SGC100x10	Spring, Compression 100x22ODx5	1	1	1
5	N10	Nut, M10	1	1	1
6	B10x65	Bolt, M10x65	1	1	1
7	PFCAP25G	Cap, Galv	1	1	1
8	670-1163	Latch Plate c/w pin (RH side)	1	1	1
9	670-1162	Latch Plate c/w pin (LH side)	1	1	1
10	590-0212	Catch Plate	2	2	2
11	699-1002	Gate Support	1	1	1
-	670-1145	Gate Latch Components Kit (for retro fitting)			

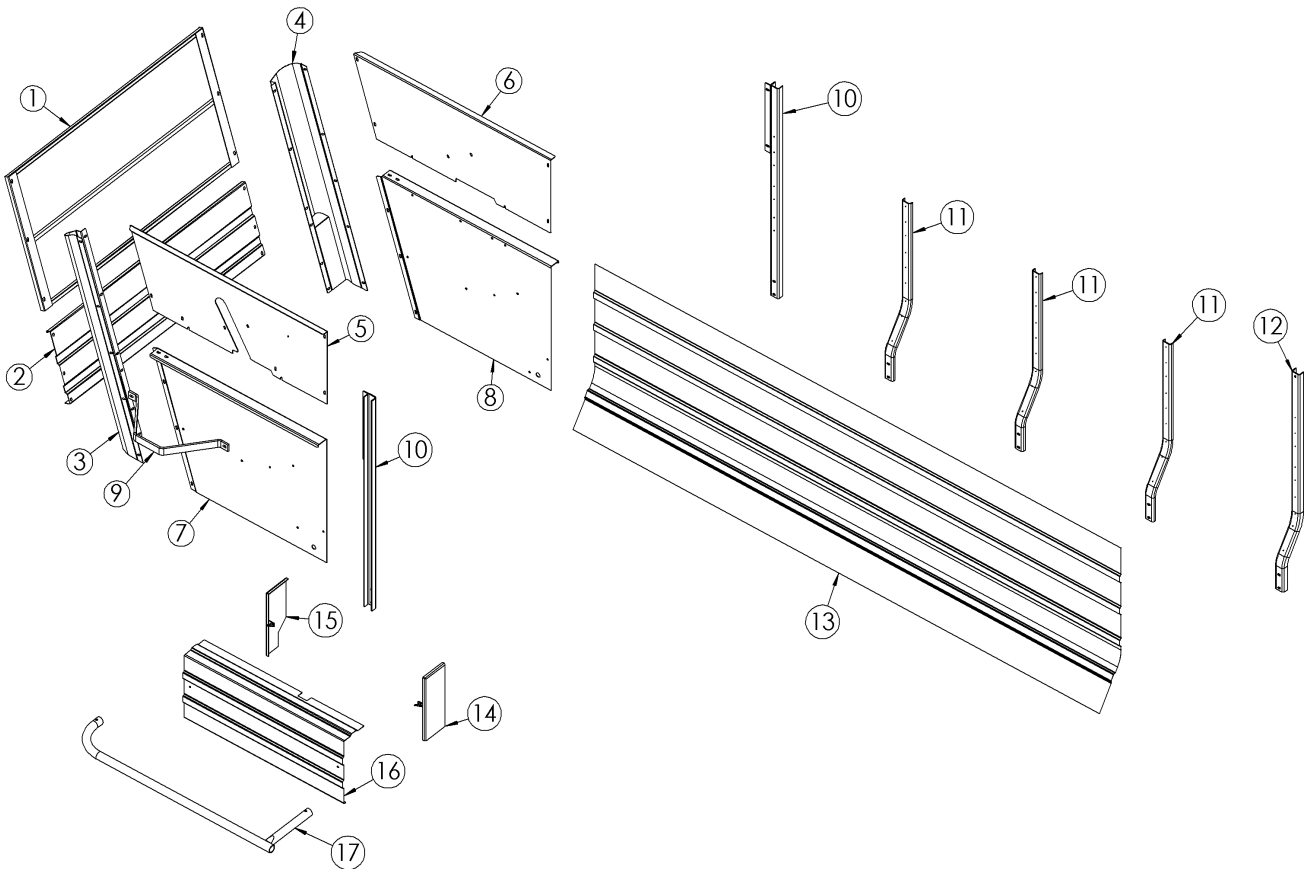
Panels, Guards & Covers – MSX



Panels, Guards & Covers – MSX

Item	Part Number	Description	Quantity Used					
			66	80	100	125	160	210
1	670-2028-1	Front Mesh Panel - Narrow	1					
1	670-2035-1	Front Mesh Panel - Wide		1	1	1	1	1
2	670-2063	Front Panel - Narrow (RHS X member)	1					
2	670-2070	Front Panel - Wide (RHS X member)		1	1	1		
2	670-2000	Front Panel - Wide (RHS X member)					1	1
2	670-2063-1	Front Panel - Narrow (RHS X member)	1					
2	670-2070-1	Front Panel - Wide (RHS X member)		1	1	1		
2	670-2000-1	Front Panel - Wide (RHS X member)					1	1
2	670-2063-2	Front Panel - Narrow (scales - channel X member)	1					
2	670-2070-2	Front Panel - Wide (scales - channel X member)		1	1	1		
2	670-2000-2	Front Panel - Wide (scales - channel X member)					1	
3	670-6014-1	Pressed Round Corner - LH	1	1	1	1		
3	670-6028-1	Pressed Round Corner - LH					1	1
4	670-6021-1	Pressed Round Corner - RH	1	1	1	1		
4	670-6035-1	Pressed Round Corner - RH					1	1
5	670-2175	Side Front Panel - Top LH	1	1	1	1		
5	670-2199	Side Front Panel - Top LH					1	1
6	670-2185	Side Front Panel - Top RH	1	1	1	1		
6	670-2206	Side Front Panel - Top RH					1	1
7	670-1501-98	Side Front Panel - Bottom LH	1	1	1	1		
7	670-1517	Side Front Panel - Bottom LH					1	1
8	670-1508-98	Side Front Panel - Bottom RH	1	1	1	1		
8	670-1524	Side Front Panel - Bottom RH					1	1
9	670-1538	Corner Insert - LH		1	1	1	1	1
10	670-1531	Corner Insert - RH		1	1	1	1	1
10	670-1531-1	Corner Insert - RH (from Nov 2001 onwards)		1	1	1	1	1
11	670-6333	Corner Support - LH		1	1	1	1	1
12	670-6326	Corner Support - RH		1	1	1	1	1
13	670-1545	Deflector Shield		1	1	1	1	1
14	655-0262	Front Upright Post	2	2	2	2		
14	655-0264	Front Upright Post - Long					2	2
15	580-4600	Elevator Motor Guard	1	1	1	1	1	1
16	670-6319	Conveyor Roller Shield		1	1	1	1	1
17	580-4300	Front Gear Cover Mount	1	1	1	1	1	1
18	580-4307	Rear Gear Cover Mount	1	1	1	1	1	1
19	580-4057	Cover - Drive Mechanism	1	1	1	1	1	1
20	580-4507	Pipe Guard	1	1	1	1	1	1
21	672-3661	Stainless Steel Side Panel MSX66 & MSX80	2	2				
21	672-3668	Stainless Steel Side Panel MSX100			2			
21	672-3675	Stainless Steel Side Panel MSX125 & MSX160				2	2	
21	672-3682	Stainless Steel Side Panel MSX210						2
22	655-0758	Side Support Post - Straight	4					
22	655-0758-1	Side Support Post - Pressed		4	6	6		
22	655-0758-2	Side Post - Pressed - with support				2		
22	655-0765	Side Support Post - Pressed - Long					6	6
22	655-0765-2	Side Post - Pressed - Long with support					2	4
23	655-0098	Rear Gate Post	2					
23	655-0098-1	Rear Gate Post - Pressed		2	2	2		
23	655-0099-1	Rear Gate Post - Pressed - Long					2	2
24	575-0049	Timber Cap – RH	1	1	1			
25	575-0042	Timber Cap – LH	1	1	1			
26	575-0035	Timber Cap – Centre	1	1	1			
27		Timber Cap – RH				1	1	1
28		Timber Cap – LH				1	1	1
29		Timber Cap – Centre				2	2	2

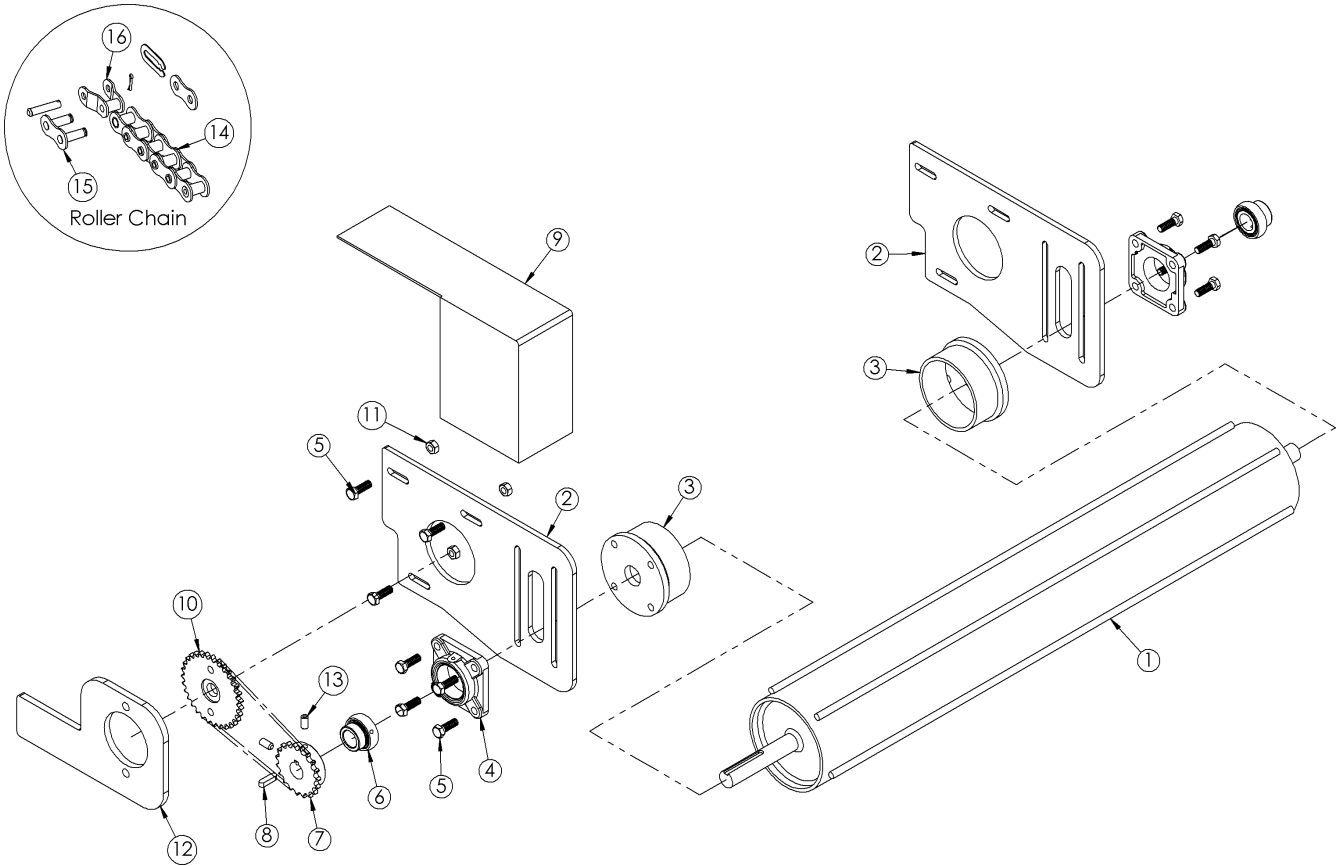
Panels, Guards & Covers – MSC



Panels, Guards & Covers – MSC

Item	Part Number	Description	Quantity Used						
			70	85	90	105	130	165	215
1	670-2028-1	Front Mesh Panel - Narrow	1		1				
1	670-2035-1	Front Mesh Panel - Wide		1		1	1	1	1
2	670-2063	Front Panel - Narrow	1		1				
2	670-2070	Front Panel - Wide		1		1	1		
2	670-2000	Front Panel - Wide						1	1
3	670-6014-1	Pressed Round Corner - LH	1	1	1	1	1		
3	670-6028-1	Pressed Round Corner - LH						1	1
4	670-6021-1	Pressed Round Corner - RH	1	1	1	1	1		
4	670-6035-1	Pressed Round Corner - RH						1	1
5	670-2161	Side Front Panel - Top LH	1	1	1	1	1		
5	670-2199	Side Front Panel - Top LH						1	1
6	670-2168	Side Front Panel - Top RH	1	1	1	1	1		
6	670-2206	Side Front Panel - Top RH						1	1
7	670-1501-98	Side Front Panel - Bottom LH	1	1	1	1	1		
7	670-1517	Side Front Panel - Bottom LH						1	1
8	670-1508-98	Side Front Panel - Bottom RH	1	1	1	1	1		
8	670-1524	Side Front Panel - Bottom RH						1	1
9	580-4600	Elevator Motor Guard	1	1	1	1	1	1	1
10	655-0262	Front Upright Post	2	2	2	2	2		
10	655-0264	Front Upright Post - Long						2	2
11	655-0758	Side Post - Straight	4		4				
11	655-0758-1	Side Post - Pressed		4		4	6		
11	655-0765	Side Post - Pressed - Long						6	8
12	655-0098	Rear Gate Post	2		2				
12	655-0098-1	Rear Gate Post - Pressed		2		2	2		
12	655-0099-1	Rear Gate Post - Pressed - Long						2	2
13	672-3661	Stainless Steel Side Panel MSC70 & 85	2	2					
13	672-3668	Stainless Steel Side Panel MSC90 & 105			2	2			
13	672-3675	Stainless Steel Side Panel MSC130 & 165					2	2	
13	672-3682	Stainless Steel Side Panel MSC215							2
14	580-4300	Front Gear Cover Mount	1	1	1	1	1	1	1
15	580-4307	Rear Gear Cover Mount	1	1	1	1	1	1	1
16	580-4057	Cover - Drive Mechanism	1	1	1	1	1	1	1
17	580-4507	Pipe Guard	1	1	1	1	1	1	1
18	575-0049	Timber Cap – RH	1	1	1	1			
19	575-0042	Timber Cap – LH	1	1	1	1			
20	575-0035	Timber Cap – Centre	1	1	1	1			
21		Timber Cap – RH					1	1	1
22		Timber Cap – LH					1	1	1
23		Timber Cap – Centre					2	2	2

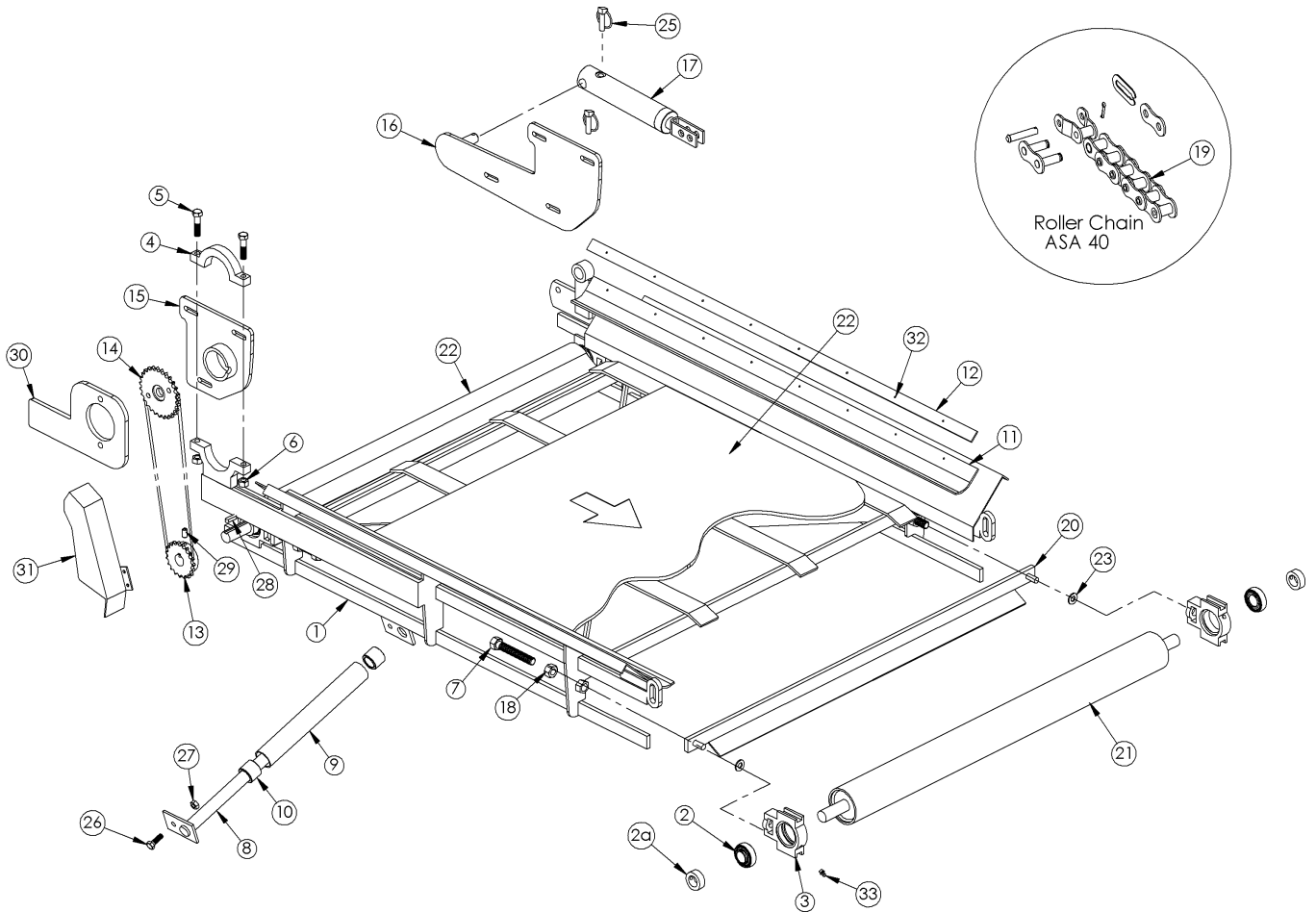
Conveyor Thrower Assembly (Optional)



Conveyor Thrower Assembly (Optional)

Item	Part Number	Description	Quantity Used
1	501-9707	Thrower Roller	1
2	590-0107	Mounting Plate	2
3	501-9714	Bearing Location Mount	2
4	HSGFY505M	Bearing Housing, FY505 4 Bolt Flange	2
5	B10x30	Bolt & Spring Washer, M10x30	14
6	BRGYET205	Bearing Insert, YET205	2
7	210-1066	Sprocket, 19 Tooth RS40 25mm Bore	1
8	SK8x7	Key, Parallel 8x7 @ 30mm	1
9	CCT-MSXCOV	Chain Cover	1
10	210-1109	Sprocket, 31 Tooth RS40 35mm Step Bore	1
11	N10	Nut, M10	6
12	590-0177	Motor Mounting Plate	1
13	GSC3/8X3/4A	Grubscrew, Allen Head 3/8" UNC	1
14	CHRS40	Roller Chain RS40 - 1/2" Pitch	600mm
15	CHRS40J	Roller Chain RS40 Joiner	1
16	CHRS40C	Roller Chain RS40 Crank Link	opt.

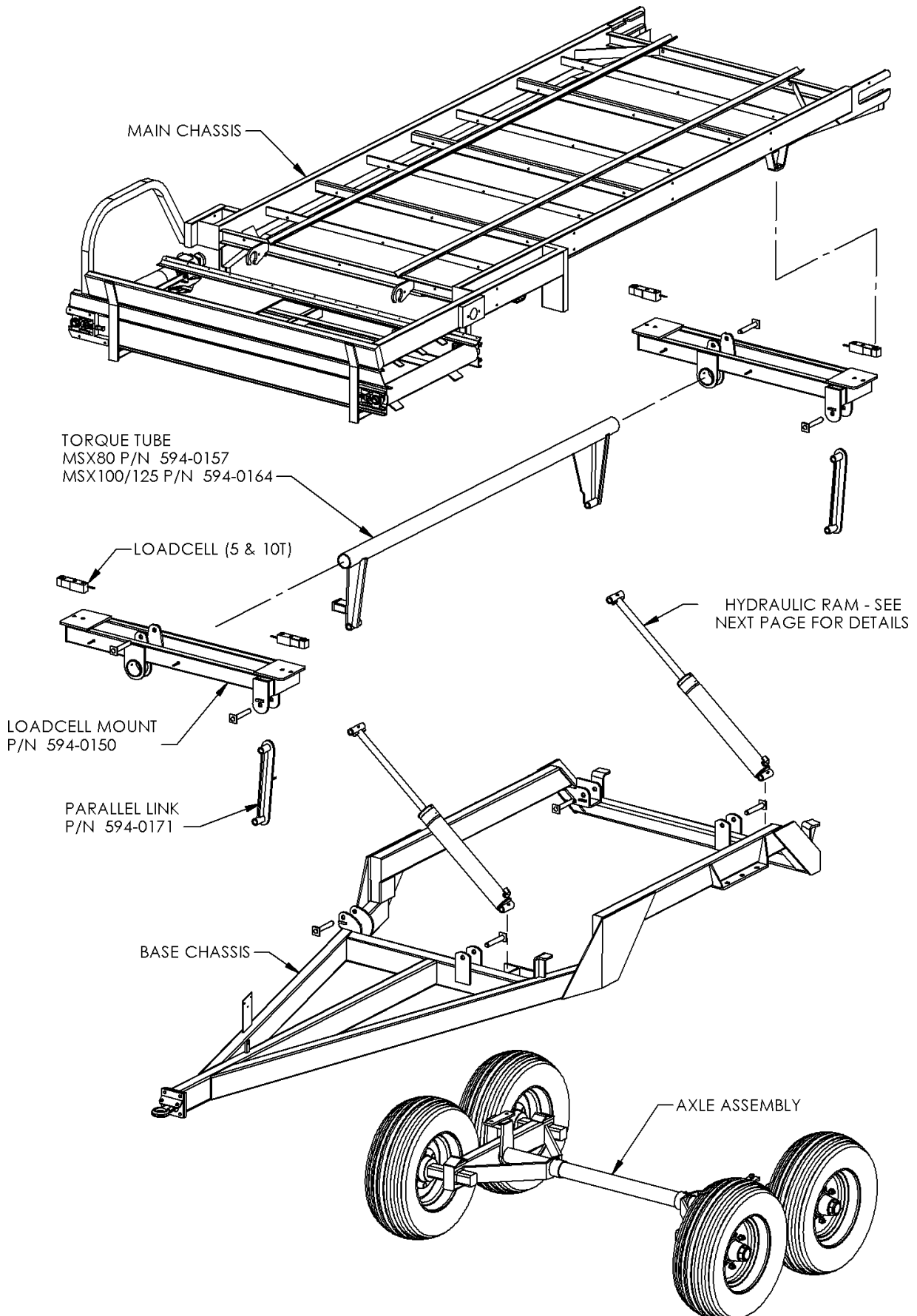
Conveyor Extension Belt Assembly (Optional)



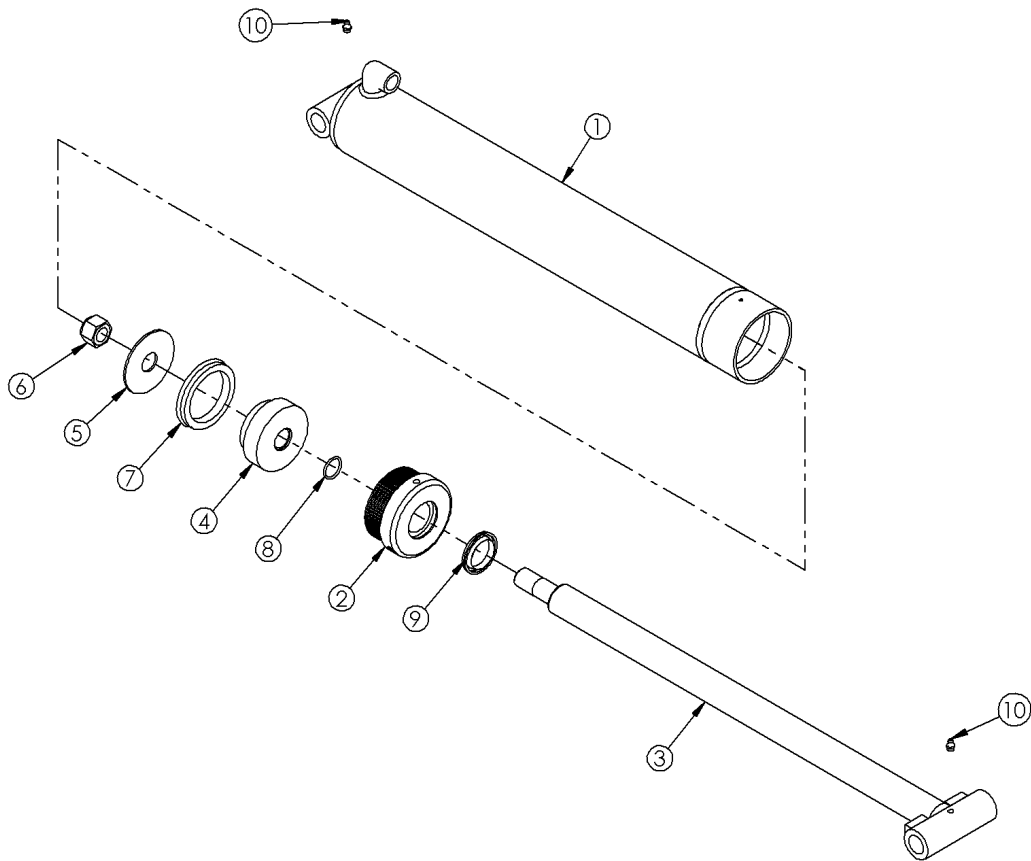
Conveyor Extension Belt Assembly (Optional)

Item	Part Number	Description	Quantity Used
1	CCE-MFMSX	Cross Conveyer Extension Main Frame	1
2	BRGYET205	Bearing Insert, YET205	4
2a	-	Bearing Insert Collar (included with #2)	4
3	HSGTU505	Take Up Housing, TU505	4
4	590-0128	Bracket Cap	1
5	B10x50	Bolt, M10x50	2
6	N10	Nut, M10	2
7	596-1001	Adjusting Tensioner M16x100 with nuts	4
8	CCE-GRP	Guide Roller - Pin	2
9	CCE-GRR	Guide Roller - Tube	2
10	CCE-GRB	Guide Roller - Bush	4
11	501-9521-1	Insertion Strip 100mm x 3mm	2
12	501-9535-1	Insertion Retainer Strip	2
13	210-1066	Sprocket, 19 Tooth RS40 25mm Bore	1
14	210-1102	Sprocket, 27 Tooth RS40 35mm Step Bore	1
15	590-0114	Rear Mounting Bracket	1
16	590-0100	Front Mounting Bracket	1
17	RAMAXM94125	Ram – single acting, no spring	1
18	N16	Nut, M16	8
19	CHRS40	Roller Chain RS40 - ½" Pitch	650mm
-	CHRS40J	Roller Chain RS40 Joiner	1
-	CHRS40C	Roller Chain RS40 Crank Link	as reqd.
20	595-1080	Cross Conveyer Roller Cleaner	2
21	501-9518-1	Idler Roller	1
22	501-9513-1	Drive Roller	1
23	WA12	Washer, Flat M12	as reqd.
24	501-9140	Cross Conveyer Extension Belt & Pin	1
25	FP10.006	Lynch Pin	2
26	B10X25	Bolt, Spring Washer & Nut Assembly M10	2
27	N10	Nut, M10	2
28	SK8x7	Key, Parallel 8x7 @ 30mm	1
29	GSC3/8X3/4A	Grubscrew, Allen Head 3/8" UNC	1
30	590-0177	Motor Mounting Plate	1
31	580-4335	Chain Guard	1
-	232-0262	Support Chains (not shown)	2
-	450-1775/2	Hydraulic Hose (not shown)	1
32	RIVIT-2771-0613	Monobolt Rivet	16

Sidelift Assembly Components



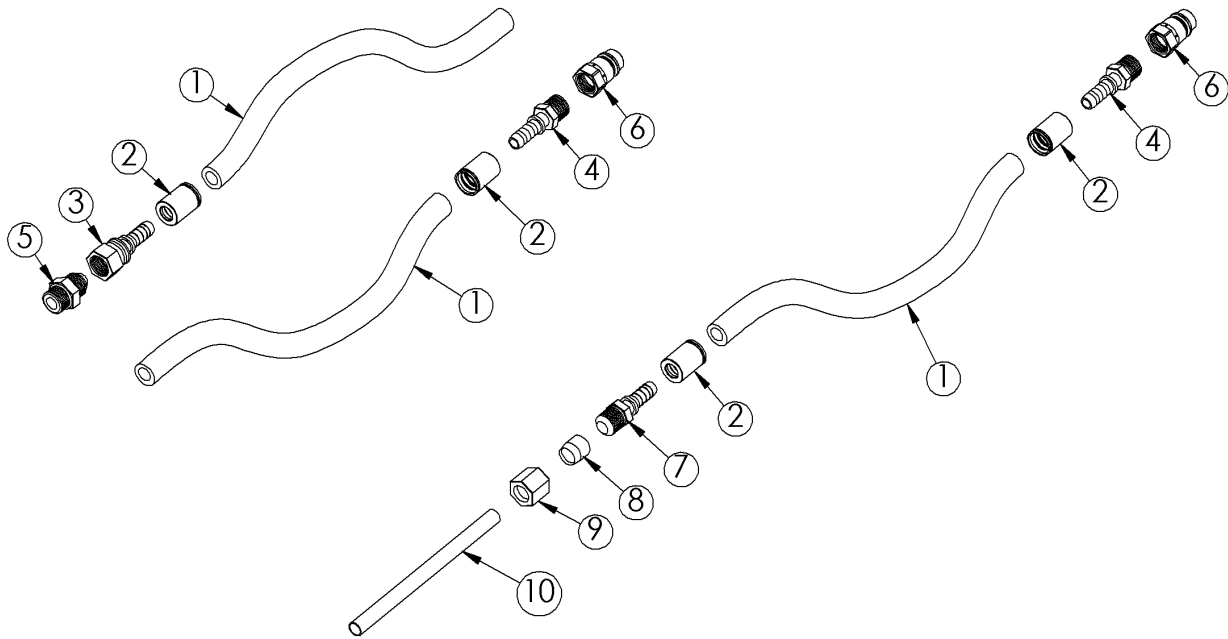
Sidelift Hydraulic Ram



Item	Part Number	Description	Quantity Used	
			2-3/4" Cylinder	3-1/2" Cylinder
-	2TRAMSL	Complete Ram	1	
-	3TRAMSL	Complete Ram		1
1	600-0913	Cylinder, Lower 2-3/4"	1	
1	600-0920	Cylinder, Lower 3-1/2"		1
2	600-0760	Retaining Head	1	
2	600-0773	Retaining Head		1
3	600-1024	Spear Assembly	1	1
4	600-1012	Piston, 2-3/4"	1	
4	600-1019	Piston, 3-1/2"		1
6	NNF1x14TPI	Nut, Nyloc 1x14 TPI	1	1
7	SLUSAL27	Seal, 2-3/4x2x9/16 U Ring	1	
7	SLUSAL32	Seal, 3-1/2x2-3/4x1/2 U Ring		1
8	OR120	O-Ring 120, 1x3/32	1	1
8	WA25x65x3	Washer, Flat 26x65x3 Black	1	
8	WA25x85x3	Washer, Flat 26x85x3 Black		1
9	SLW67-40	Seal, Wyclip 67-40	1	1
10	GRN8-ST	Grease Nipple, M8x1.0 Straight	2	2
7, 8 & 9	SLK2T-1	Seal Kit	1	
7, 8 & 9	SLK3T-1	Seal Kit		1

Sidelift Hydraulics

Cavity Designation	Relevant Hose Description	Hose Part #
Pres	Valve To Tractor	450-0210
Tank	Valve To Tractor	450-0210
Cross Belt Pres	Valve To Conveyor Motor	450-0231
Cross Belt Ret Para	Valve To Conveyor Motor	450-0231
Fir Pres	Valve To Floor Motor	450-0217
Fir Ret	Valve To Floor Motor	450-0217
Elev Pres	Valve To Elevator Motor	450-0224
Elev Ret	Valve To Elevator Motor	450-0224
-	Tractor To Ram Pipe	450-0245
-	Ram Pipe To Front Ram	450-0238
-	Ram Pipe To Rear Ram	450-0238



Item	Part Number	Description	Quantity Used
1	HYH1/2	Hose 1/2" 2 Wire Non-Skive	
2	HYFSN2-08	1/2" 2 Wire Ferrule Pressed	16
3	HYFS05-1408	7/8JICF - 1/2M Swage Tail	14
4	HYFS15-0808	1/2BSPM - 1/2M Swage Tail	2
5	HYFA-GN-1414	Hose Adaptor 7/8JICF	14
6	HYFQRC1/2M	1/2" CCS Q.R.C Male End	2
7	HYFS78-M2408	M24 - 1/2M Swage Tail	3
8	HYFFTCS-16	Cutting Ring - 16mm	4
9	HYFFTNS-16	Tube Nut - 16mm	4
10	HYT16	Hydraulic Tube - 16mm	2