

*Challenger*

# Repair Time Schedule

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**MT735 / MT745 / MT755 / MT765**

**MT835 / MT845 / MT855 / MT865 / MT875**

**RUBBER TRACKED TRACTORS**

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# Challenger

## TO OUR CUSTOMER:

*Congratulations on your selection of a Challenger® Product. We believe you have exercised excellent judgment in the purchase of your Challenger® machine. We are most appreciative of your patronage.*

*Your Dealer has performed the pre-delivery service on your new machine.*

*He will discuss with you the operating and maintenance instructions given in this manual, and instruct you in the proper and varied applications of this machine. Call on him at any time when you have a question or need equipment related to the use of your machine.*

*We recommend that you carefully read this entire manual before operating the unit. Also, time spent in becoming fully acquainted with it's performance features, adjustments, and maintenance schedules will be repaid in a long and satisfactory life of the product.*

*This equipment is covered by a written warranty which will be provided to you by your Challenger® Dealer at time of purchase.*

AGCO® reserves the right to make changes or add improvements to its products at any time without incurring any obligation to make such changes to products manufactured previously. AGCO®, or its dealers, accept no responsibility for variations which may be evident in the actual specifications of its products and the statements and descriptions contained in this publication.

### **CALIFORNIA Proposition 65 Warning**

**WARNING:** Diesel engine exhaust and some of its constituents are known to the State of California to cause cancer, birth defects, and other reproductive harm.

**WARNING:** Battery posts, terminals and related accessories contain lead and lead compounds, chemicals known to the State of California to cause cancer, birth defects, and other reproductive harm. Wash hands after handling.

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**CHALLENGER®**

Model MT735 / MT745/ MT755 / MT765 / MT835 / MT845 / MT855

**CONTENTS**

INTRODUCTION.....	00
ENGINE EQUIPMENT.....	01
COOLING SYSTEM.....	02
AIR INDUCTION AND EXHAUST.....	03
FUEL SYSTEM.....	04
ELECTRICAL.....	05
TRANSMISSION.....	06
CHASSIS AND SHEET METAL.....	07
MTS.....	08
BRAKE SYSTEM.....	09
DIFFERENTIAL STEERING.....	10
HYDRAULICS.....	11
LINKAGE.....	12
PTO.....	13
OPERATOR ENVIRONMENT.....	14
ACCESSORIES.....	15

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# INTRODUCTION AND WARRANTY

## 1-INTRODUCTION AND WARRANTY

### CONTENTS

A. Time Allowance .....	2
B. Times .....	4
C. Review of Times.....	4
D. Amendments .....	4
E. Request for Review of Time Schedule .....	5
F. Description of Symbols and Abbreviations .....	6

# Introduction and warranty

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## A. TIME ALLOWANCE

The times listed in this publication are the result of careful study of the operation concerned; they represent the average time ONE trained Dealer mechanic, of normal ability has taken to carry out the operation in a typical Dealership, using standard workshop tooling and equipment, located for reasonable access and working conditions. They DO NOT include any travelling to or from the farm or site.

The tractor is assumed to be clean and to be bare of any extra equipment or attachment of non "AGCO" manufacture, and delivered to an authorized and duly equipped workshop where trained personnel and spare parts required to perform the operations are immediately available.

The times given include difficulties encountered working on used as opposed to new machines, and are based on methods and recommended Challenger Special Tools shown in the workshop manual.

The times are based on a second hand machine in reasonable condition properly maintained using approved parts. Extra time may be required to deal with seized, rusted or damaged parts, which must be claimed for separately when carrying out warranty work.

Allowances are included in the operation times quoted for setting up the tractor in the workshop, obtaining all tools and parts, cleaning and testing after repair.

Time required to remove and install mounted implements, such as loaders, hedge cutters, etc., which interfere with performing a specific job is NOT INCLUDED in the time allowed.

The times given in this Repair Time Schedule are for a complete job from start to finish, including allowances for intermediated operations.

### EXAMPLE 1:

#### Engine Coupler Failure

Code	Hours	Part Description	Work Included
210165	2.5	Engine Flywheel Coupler	<ul style="list-style-type: none"><li>Remove failed engine drive coupler</li><li>Clean any residue from failure</li><li>Install new engine drive coupler</li></ul>

### EXAMPLE 2:

#### Alternator Replacement

Code	Hours	Part Description	Work Included
140102	3.0	Alternator Replacement	<ul style="list-style-type: none"><li>Diagnosis alternator (Electrical Testing)</li><li>Remove failed alternator</li><li>Install new alternator</li></ul>

**EXAMPLE 3:**

**Input Shaft & Clutch Failure  
(Catastrophic Failure)**

Code	Hours	Part Description	Work Included
192619	230.0	Clutch Hub (35T)	<ul style="list-style-type: none"> <li>• Put tractor up on standsr</li> <li>• Remove undercarriages</li> <li>• Remove cab</li> <li>• Remove fuel tanks</li> <li>• Remove hydraulic components</li> <li>• Remove 3-PT hitch (If equipped)</li> <li>• Remove differential from transmission housing</li> <li>• Remove transmission</li> <li>• Disassemble transmission</li> <li>• Clean differential/transmission housing of any debris from failure</li> <li>• Reassemble transmission with required replacement</li> <li>• Install transmission</li> <li>• Install differential housing</li> <li>• Install 3-PT (If equipped)</li> <li>• Install fuel tanks</li> <li>• Install cab</li> <li>• Install undercarriages</li> <li>• Test transmission</li> <li>• Calibrate transmission</li> <li>• Remove tractor from stands</li> <li>• Test drive tractor</li> </ul>
192678	50.0	Powertrain Clean & Flush	

*NOTE: Times can only be added if the appropriate Special Codes is identified on the RTS page as the causal part.*

# Introduction and warranty

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## B. TIMES

All the operation times are presented in hours and the decimal parts of an hour. Decimal times must be used on all warranty claims. A chart is provided below so that time can be converted.

Min.	0	1	2	3	4	5	6	7	8	9
0	--	0.02	0.03	0.05	0.07	0.08	0.10	0.12	0.13	0.15
10	0.17	0.18	0.20	0.22	0.23	0.25	0.27	0.28	0.30	0.32
20	0.33	0.35	0.37	0.38	0.40	0.42	0.43	0.45	0.47	0.48
30	0.50	0.52	0.53	0.55	0.57	0.58	0.60	0.62	0.63	0.65
40	0.67	0.68	0.70	0.72	0.73	0.75	0.77	0.78	0.80	0.82
50	0.83	0.85	0.87	0.88	0.90	0.92	0.93	0.95	0.97	0.98

The times given in this repair time schedule are for a complete job from start to finish. Where access has been gained for an adjacent repair only the additional time for the second repair will be accepted and not the total time for the two failures.

The term 'ADD' indicates that the time may be added to the main repair time if required, e.g., diagnosis time, pressure testing.

## C. REVIEW OF TIMES

On the MT700 & MT800 Series of tractors, if you find an improvement in method which reduces the time of an operation or if you find you cannot meet an operation time after more than three attempts using the recommended method, a 'Request of Time Change' form (see page 1-5) must be submitted quoting all relevant details. Photo copy the form and send it to the following address:

AGCO Corporation

Attn: Challenger Product Reliability

202 Industrial Park

Jackson, MN 56143

or Fax 507-847-7220

These requests will not be actioned unless the information asked for is provided in full, on the form provided. Any amendments will be advised by Service Bulletin.

## D. AMENDMENTS

All times contained in this schedule are based on the latest information available at the time of publication. The right is reserved to publish revisions at any time. All operation times are subject to amendment if design, method or technique changes result in alteration of time taken.

**E. REQUEST FOR REVIEW OF TIME SCHEDULE**

**Introduction and Warranty**

**Request for review of time schedule**

Distributor Name..... Date.....

Address.....

RTS Publication No..... Failure code No.....

Machine Model..... Serial No.....

We wish to query your time allowance against the above failure code number and confirm that we have observed and accurately timed this operation as carried out by a trained mechanic using recommended procedures and special tools, our findings are detailed below:

Analysis of Time			
Work Performed	Time		Remarks
Remove component			
Dismantle			
Clean and inspect			
Obtain parts and tools			
Reassemble			
Reinstall			
Adjust and test			
<b>TOTAL OF TIME</b>			
Number of mechanics used on job			

Signed..... Name.....

Post to:

AGCO Corporation  
 Attn: Challenger Product Reliability  
 202 Industrial Park  
 Jackson, MN 56143  
 or Fax 507-847-7220



## F. DESCRIPTION OF SYMBOLS AND ABBREVIATIONS

### Introduction and Warranty

#### F. Description of Symbols and Abbreviations



Failure code



Bleeding



Time



Hydraulic tests



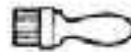
Service tool



Electrical diagnosis



Recharging air conditioning



Paint work



Adjustment only



Use of special tool

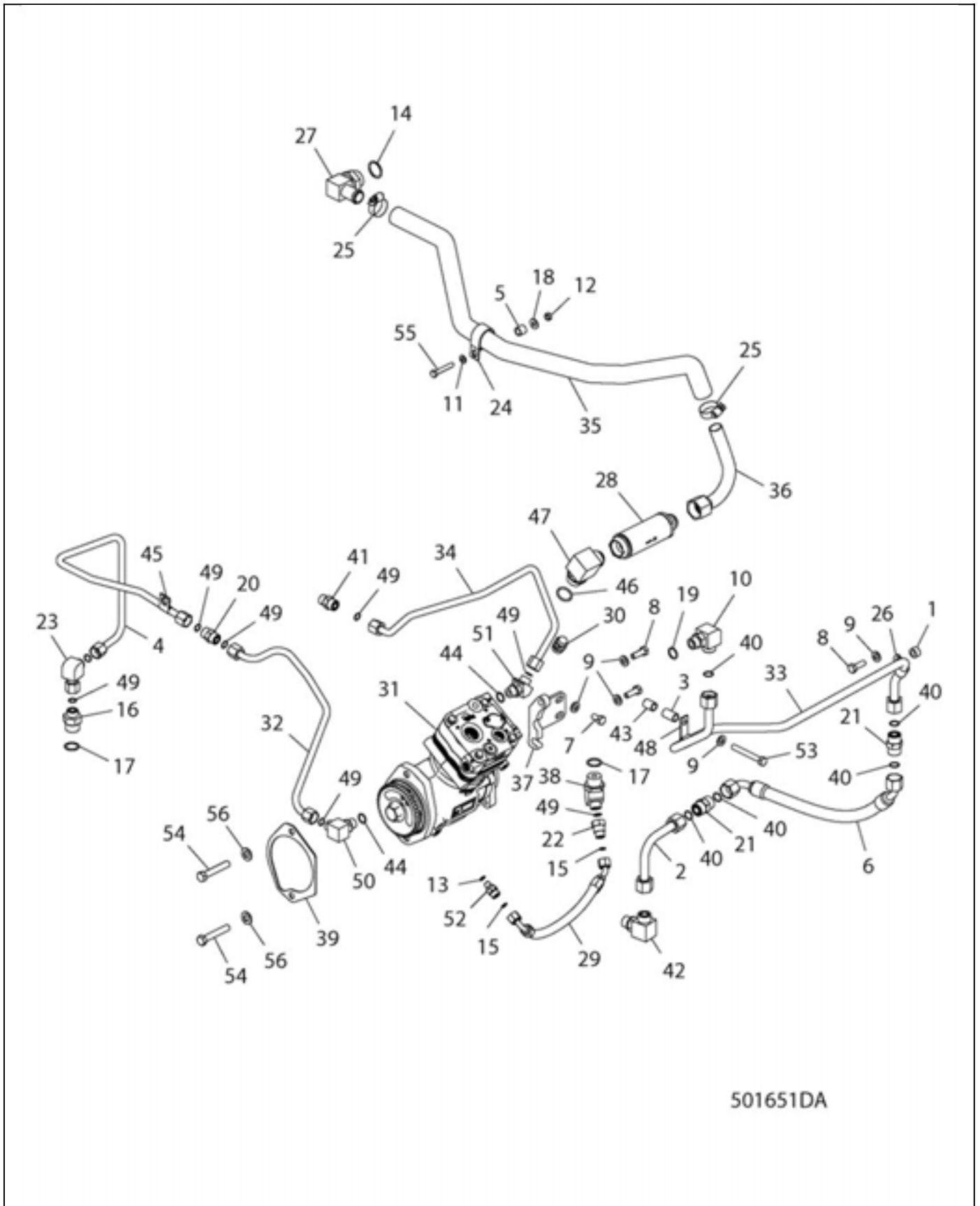


Additional Labour



MT700 Air Compressor Lines Group .....	1-1
MT800 Air Compressor Lines Group .....	1-2
MT800 Air Compressor Lines Group .....	1-3
Flywheel Coupling .....	1-4
Alternator .....	1-5
Engine Mounts .....	1-6
Air Conditioning Compressor .....	1-7
MT700 Air Conditioner Lines Group .....	1-8
MT800 Air Conditioner Lines Group .....	1-9
MT700 Engine Belts .....	1-10
MT800 Fan Drive .....	1-11
MT800 Accessory Drive Belt .....	1-12
MT800 Fan Hub .....	1-13

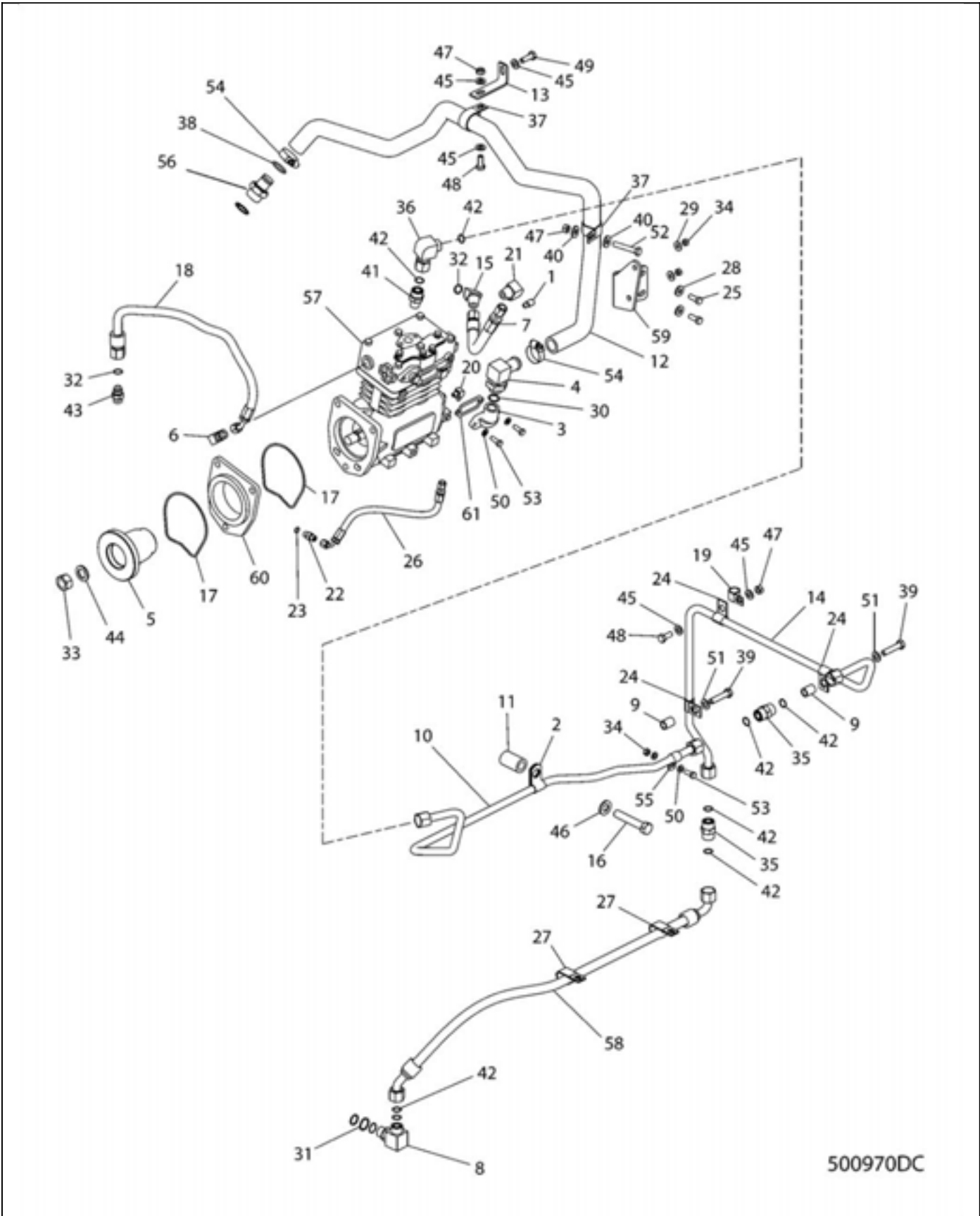
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# ENGINE EQUIPMENT



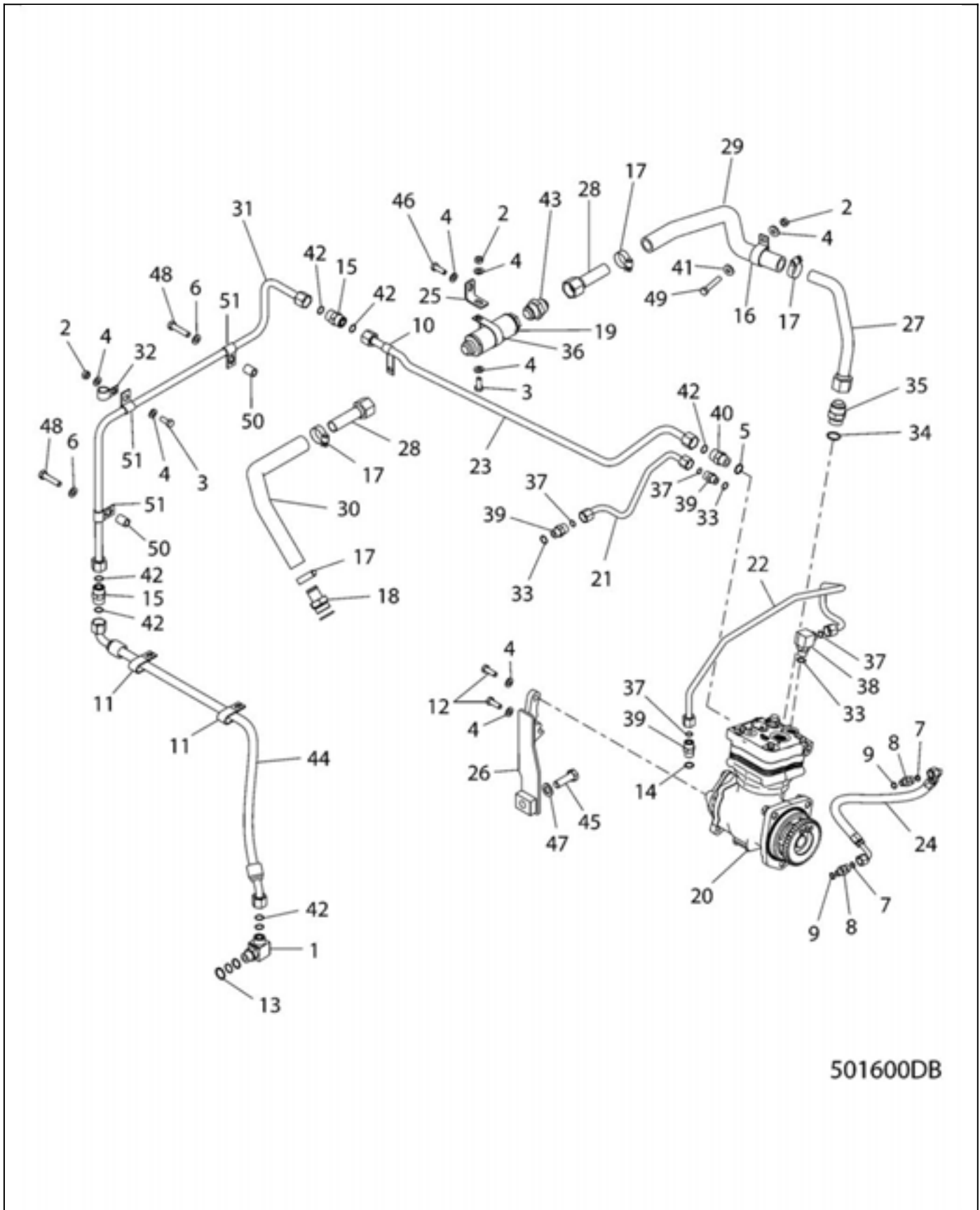
					MT700 Air Compressor Lines Group
		MT700	MT800		
2	58 65 71	1.0	N/A		Tube
4	58 65 55	1.5	N/A		Air Compressor Lube Supply Tube
6	58 65 59	1.0	N/A		Hose
10	58 65 63	1.0	N/A		Hydraulic Fitting(Elbow)
16	58 65 64	0.6	N/A		Hydraulic Fitting(Union)
20	58 65 64	0.6	N/A		Hydraulic Fitting(Union)
21	58 65 64	0.6	N/A		Hydraulic Fitting(Union)
22	58 65 64	0.6	N/A		Hydraulic Fitting(Union)
23	58 65 64	0.6	N/A		Hydraulic Fitting(Union)
25	58 65 62	0.5	N/A		Hose Clamp
27	58 65 61	0.8	N/A		Air Line Fitting(Elbow)
28	58 65 58	1.5	N/A		Check Valve
29	58 65 60	0.7	N/A		Hose
30	58 65 68	0.6	N/A		Pressure Relief Valve
31	58 65 01	4.0	N/A		Air Compressor
32	58 65 72	1.2	N/A		Tube
33	58 65 72	1.2	N/A		Tube
34	58 65 73	1.2	N/A		Tube
35	58 65 56	1.8	N/A		Air Supply Hose
36	58 65 57	1.5	N/A		Air Supply Tube
37	58 65 70	1.6	N/A		Support Bracket
38	58 65 65	0.5	N/A		Hydraulic Fitting(Elbow)
39	58 65 69	2.0	N/A		Seal
41	58 65 67	1.2	N/A		Hydraulic Fitting(Union)
42	58 65 66	0.8	N/A		Hydraulic Fitting(Elbow)
47	58 65 66	0.8	N/A		Hydraulic Fitting(Elbow)
50	58 65 66	0.8	N/A		Hydraulic Fitting(Elbow)
51	58 65 66	0.8	N/A		Hydraulic Fitting(Elbow)
52	58 65 64	0.6	N/A		Hydraulic Fitting(Union)



# ENGINE EQUIPMENT



					MT800 Air Compressor Lines Group
		MT700	MT800		
3	58 65 77	N/A	1.0		Air Inlet Manifold
4	58 65 61	N/A	1.2		Air Line Fitting(Elbow)
5	58 65 76	N/A	2.5		Air Compressor Gear
6	58 65 66	N/A	0.7		Hydraulic Fitting(Elbow)
7	58 65 55	N/A	0.8		Air Compressor Lube Supply Tube
8	58 65 63	N/A	1.2		Hydraulic Fitting(Elbow)
10	58 65 83	N/A	2.2		Tube
12	58 65 56	N/A	3.0		Air Supply Hose
14	58 65 84	N/A	2.3		Tube
15	58 65 66	N/A	0.7		Hydraulic Fitting(Elbow)
17	58 65 69	N/A	2.5		Seal
18	58 65 81	N/A	1.8		Lube Hose
20	58 65 80	N/A	1.0		Hydraulic Fitting(Elbow)
21	58 65 63	N/A	1.2		Hydraulic Fitting(Elbow)
22	58 65 64	N/A	0.8		Hydraulic Fitting(Union)
26	58 65 56	N/A	3.0		Hose
35	58 65 64	N/A	0.8		Hydraulic Fitting(Union)
36	58 65 65	N/A	0.8		Hydraulic Fitting(Elbow)
41	58 65 64	N/A	0.8		Hydraulic Fitting(Union)
43	58 65 64	N/A	0.8		Hydraulic Fitting(Union)
54	58 65 62	N/A	0.5		Hose Clamp
56	58 65 79	N/A	0.8		Hose Connector
57	58 65 01	N/A	4.0		Air Compressor
58	58 65 78	N/A	2.0		Hose
59	58 65 70	N/A	2.0		Support Bracket
60	58 65 82	N/A	2.5		Pilot Adapter
61	58 65 75	N/A	1.2		Air Compressor Gasket



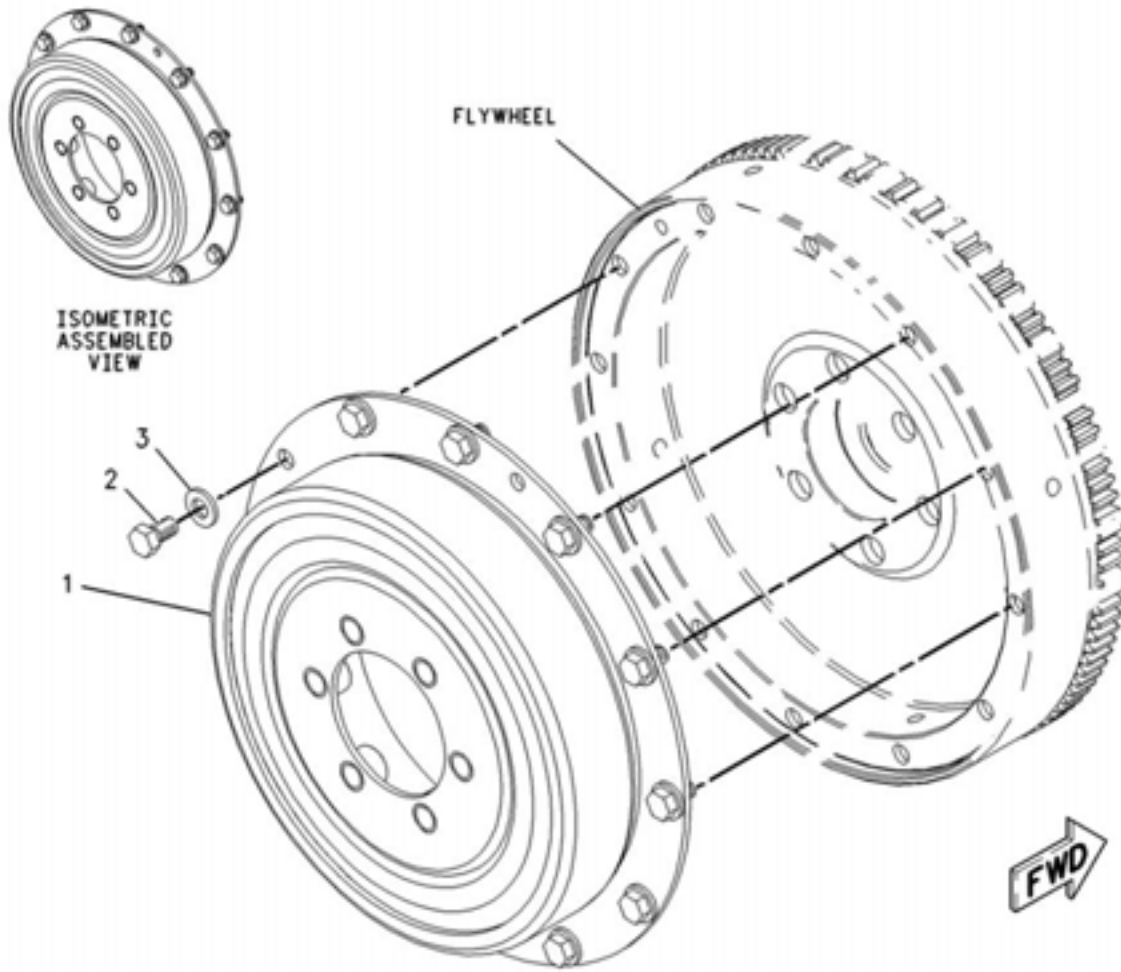
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# ENGINE EQUIPMENT



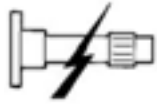


					MT800 Air Compressor Lines Group
		MT700	MT800		
1	58 65 80	N/A	1.0		Hydraulic Fitting(Elbow)
8	58 65 64	N/A	0.8		Hydraulic Fitting(Union)
15	58 65 92	N/A	1.0		Hydraulic Fitting(Union)
17	58 65 62	N/A	0.5		Hose Clamp
18	58 65 79	N/A	0.8		Hose Connector
19	58 65 98	N/A	0.9		Valve Assembly
20	58 65 01	N/A	4.0		Air Compressor
21	58 65 94	N/A	1.8		Tube
22	58 65 95	N/A	1.5		Tube
23	58 65 96	N/A	1.6		Tube
24	58 65 89	N/A	1.2		Hose
26	58 65 88	N/A	1.5		Bracket
27	58 65 87	N/A	0.9		Air Supply Tube
28	58 65 79	N/A	0.8		Hose Connector
29	58 65 85	N/A	1.2		Air Supply Hose
30	58 65 86	N/A	0.8		Air Supply Hose
31	58 65 97	N/A	1.4		Tube
35	58 65 64	N/A	0.8		Hydraulic Fitting(Union)
38	58 65 91	N/A	0.6		Hydraulic Fitting(Elbow)
39	58 65 93	N/A	0.6		Hydraulic Fitting(Union)
40	58 65 64	N/A	0.8		Hydraulic Fitting(Union)
43	58 65 64	N/A	0.8		Hydraulic Fitting(Union)
44	58 65 90	N/A	1.8		Hose

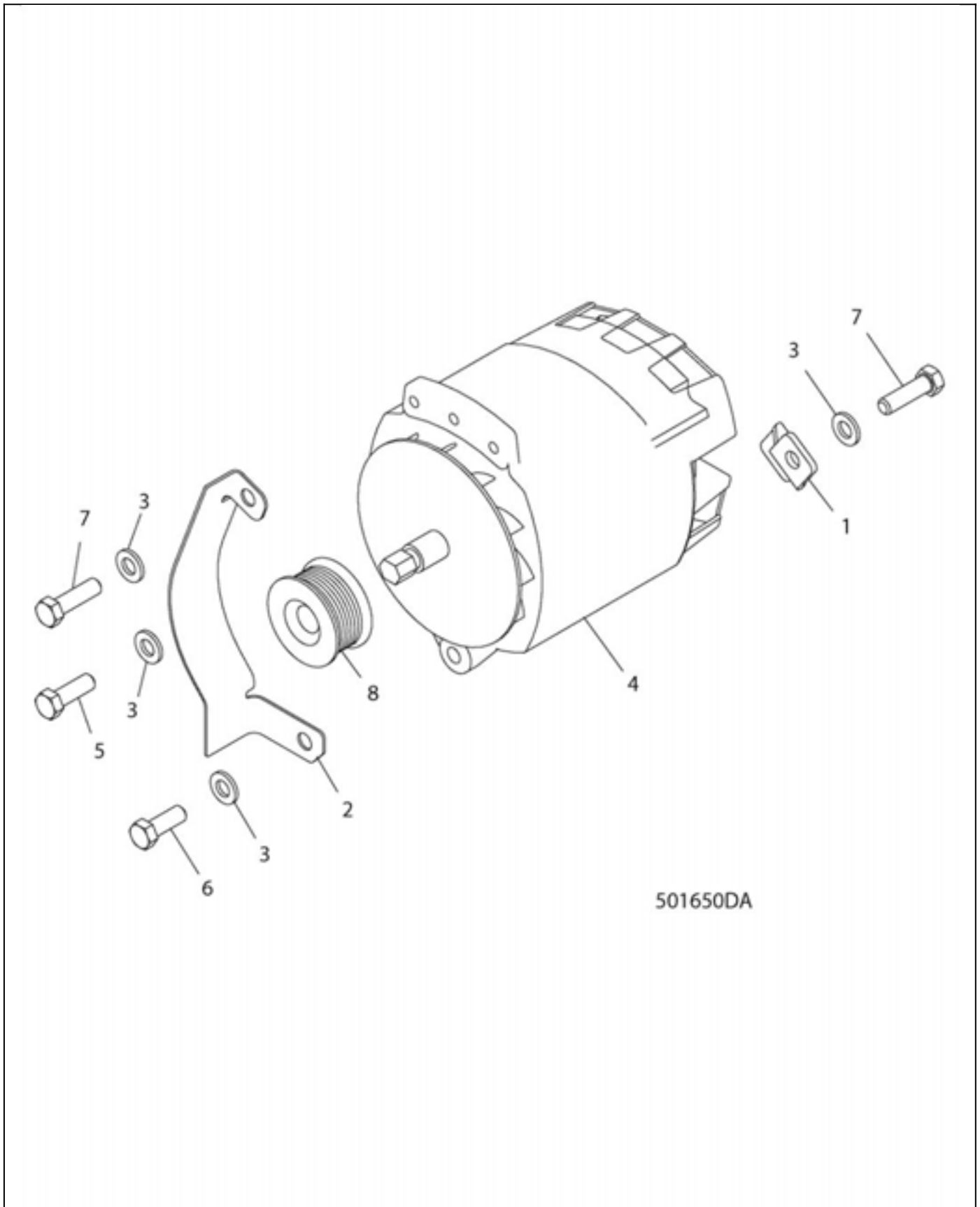


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# ENGINE EQUIPMENT






				Flywheel Coupling	
		MT700	MT800		
1	21 01 65	4.0	5.0		Flywheel Coupling/Damper

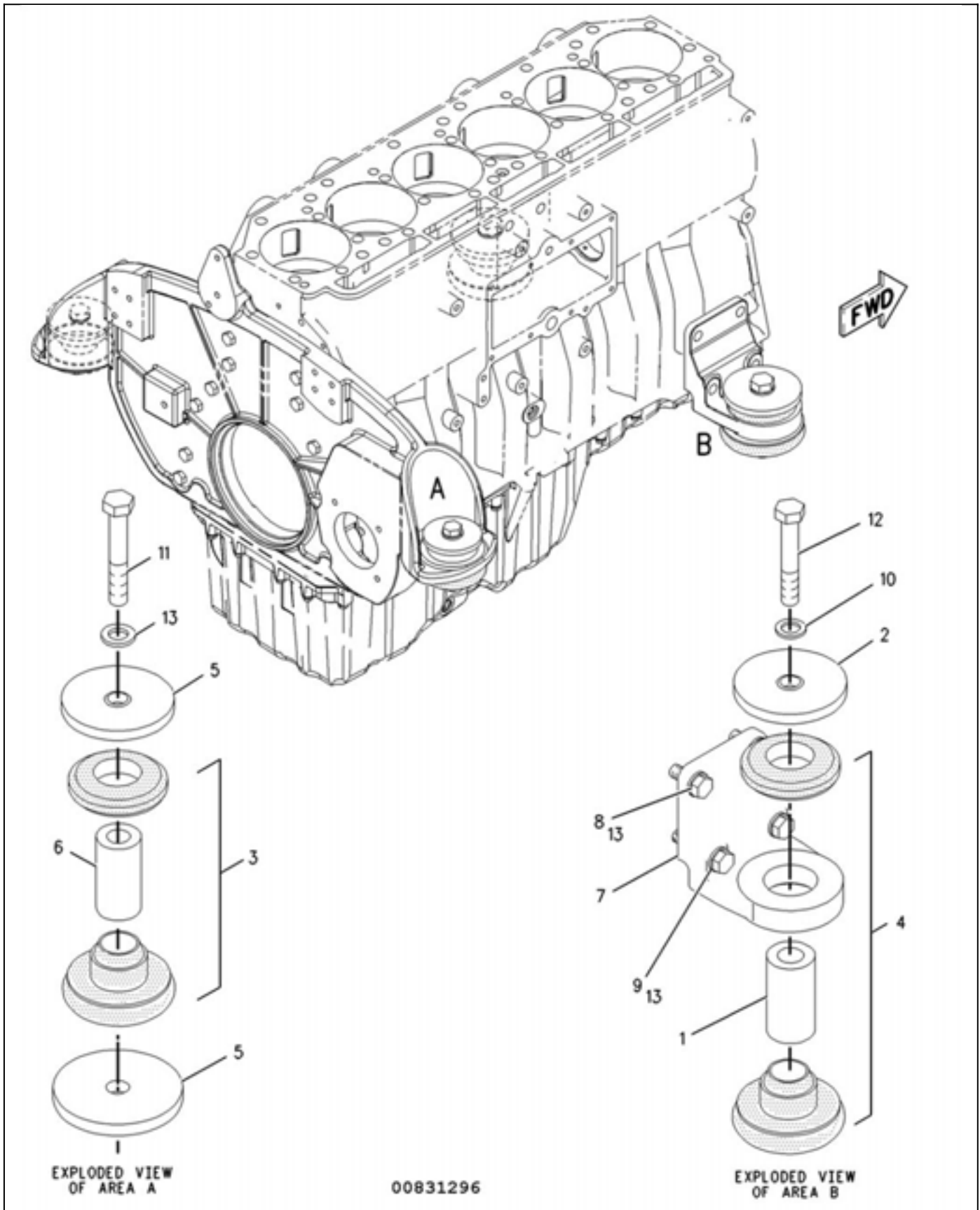


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# ENGINE EQUIPMENT






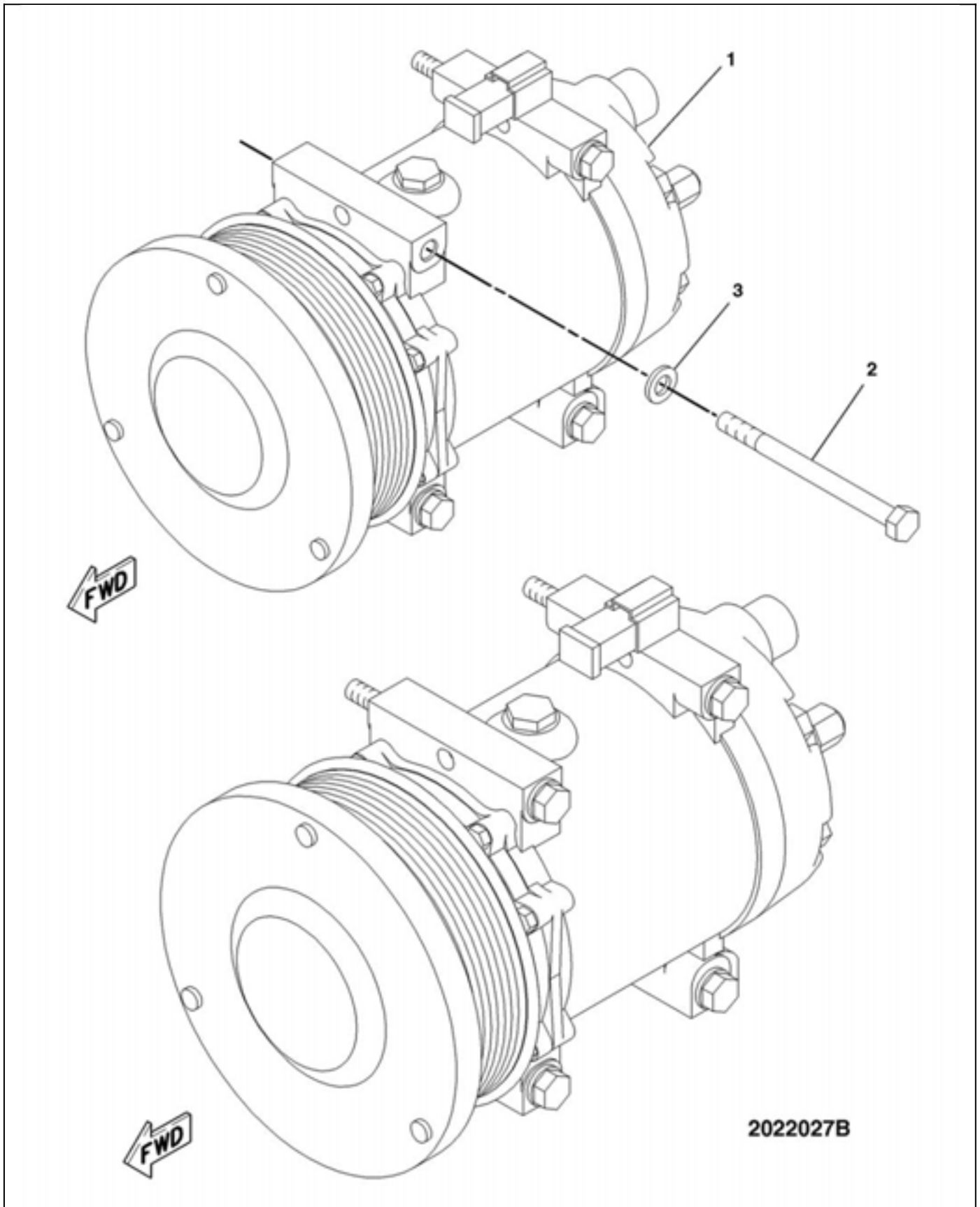
					Alternator
		MT700	MT800		
1	14 01 03	0.6	0.6		Alternator Bracket
2	14 01 98	1.2	1.2		Alternator Guard
4	14 01 02	2.0	2.0		Alternator
REF	14 01 00	1.0	1.0		Electronic Diagnosis (Not Illustrated)
REF	14 01 99	1.0	1.0		Alternator Regulator(not illustrated)



# ENGINE EQUIPMENT



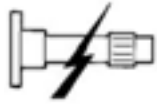


					Engine Mounts
		MT700	MT800		
3	58 39 05	2.0	2.0		Engine Rear Mount
4	58 39 04	2.5	2.5		Engine Front Mount
7	58 39 03	3.0	3.0		Engine Mount Support

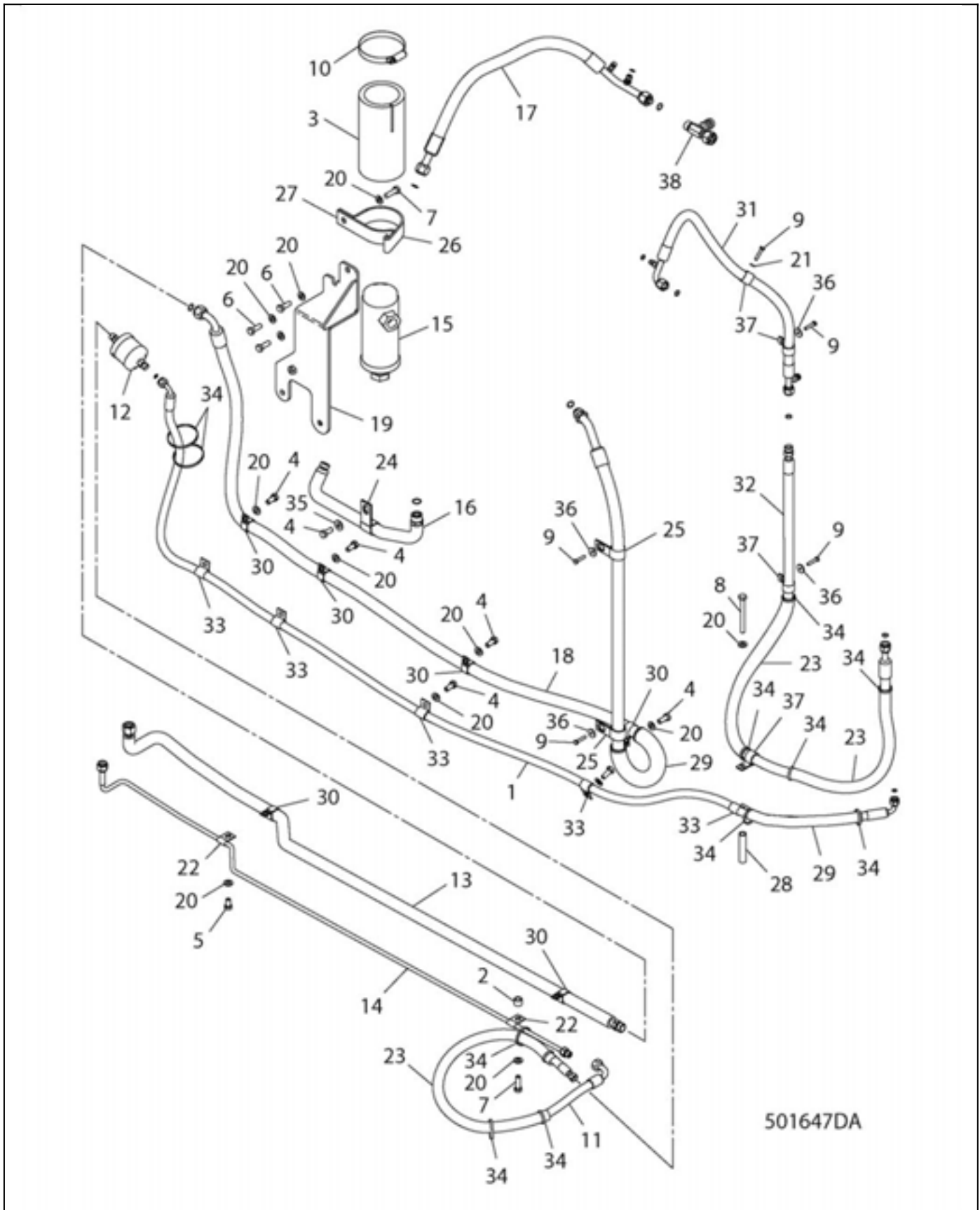




# ENGINE EQUIPMENT






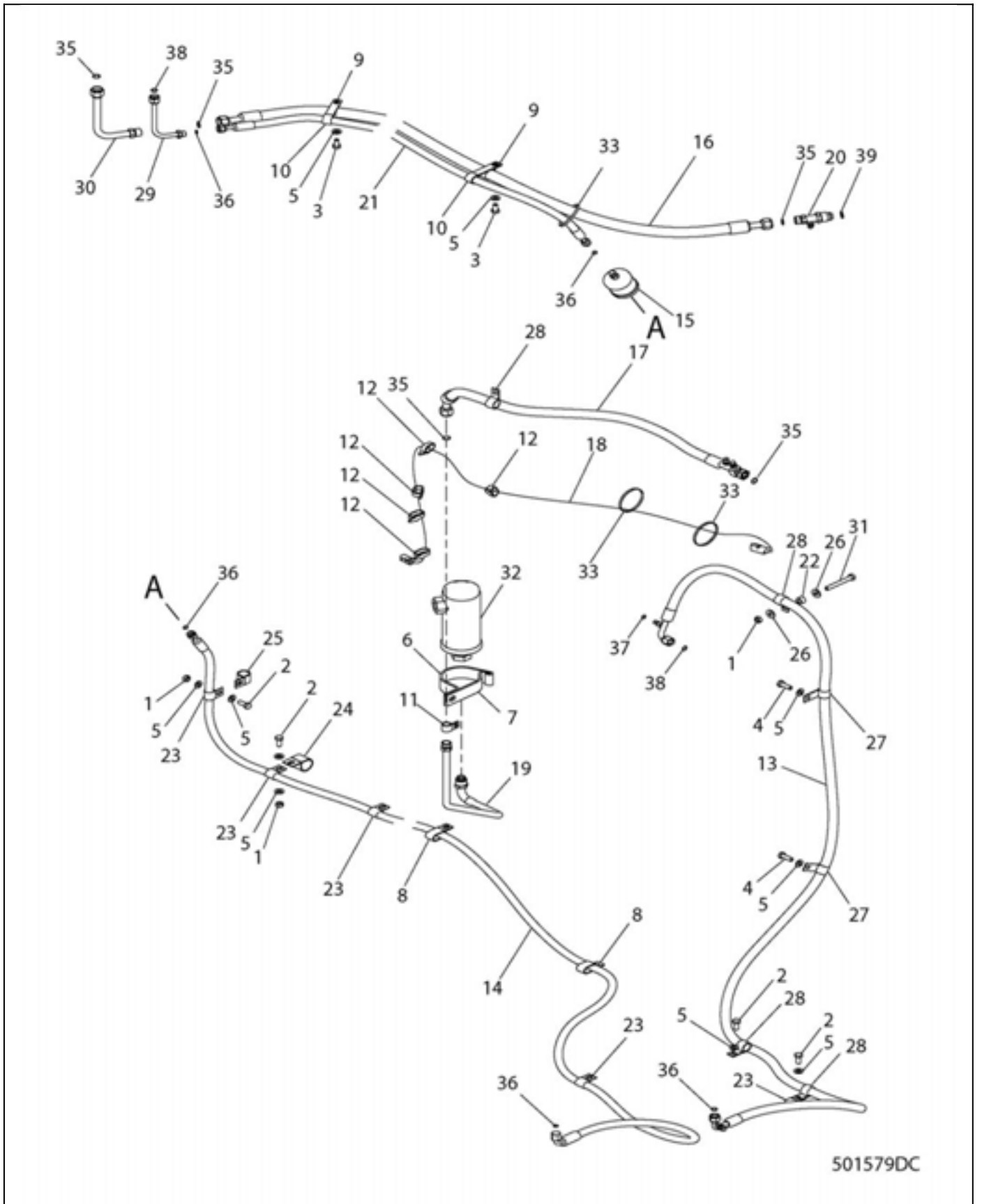
					Air Conditioning Compressor
		MT700	MT800		
1	15 01 12	4.0	4.0		Air Conditioning Compressor
REF	15 01 23	3.0	3.0		Recharging A/C System (Not Illustrated)



# ENGINE EQUIPMENT






					MT700 Air Conditioner Lines Group
		MT700	MT800		
1	15 03 13	8.0	N/A		Evaporator Supply Hose
3	15 03 10	1.0	N/A		Dryer Insulation
10	15 03 19	0.5	N/A		Hose Clamp
11	15 03 14	6.0	N/A		Evaporator Supply Hose
12	15 03 08	4.0	N/A		A/C Filter
13	15 03 11	8.0	N/A		Evaporator Return Hose
14	15 03 15	8.0	N/A		Evaporator Supply Tube
15	15 01 11	4.0	N/A		Receiver/Dryer
16	15 03 16	4.5	N/A		Evaporator/Dryer Tube
17	15 03 20	4.0	N/A		Low Pressure Hose
18	15 03 12	8.0	N/A		Evaporator Return Hose
19	15 03 09	5.0	N/A		Dryer Bracket
31	15 03 17	3.0	N/A		High Pressure Hose
32	15 03 18	4.0	N/A		High Pressure Hose
REF	15 01 23	3.0	N/A		Recharging A/C System (Not Illustrated)

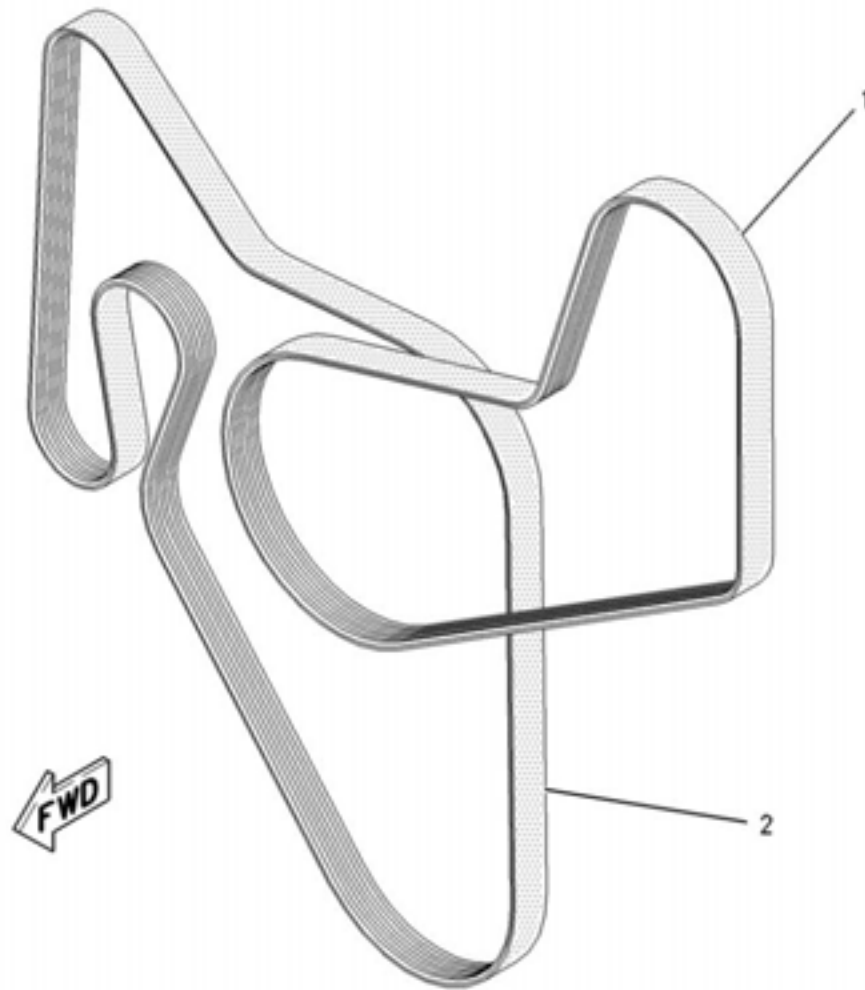


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# ENGINE EQUIPMENT



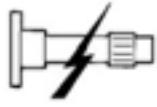


					MT800 Air Conditioner Lines Group
		MT700	MT800		
13	15 03 17	N/A	3.0		High Pressure Hose
14	15 03 13	N/A	8.0		Evaporator Supply Hose
15	15 03 08	N/A	3.0		A/C Filter
16	15 03 12	N/A	7.0		Evaporator Return Hose
17	15 03 20	N/A	4.0		Low Pressure Hose
18	15 03 22	N/A	2.0		Low Pressure Switch Harness
19	15 03 16	N/A	4.0		Evaporator/Dryer Tube
20	15 03 21	N/A	4.0		Low Pressure Switch Adapter
21	15 03 14	N/A	7.0		Evaporator Supply Hose
29	15 03 15	N/A	5.0		Evaporator Supply Tube
30	15 03 11	N/A	5.0		Evaporator Return Hose
32	15 01 11	N/A	4.0		Reciever/Dryer
REF	15 01 23	N/A	3.0		Recharging A/C System (Not Illustrated)

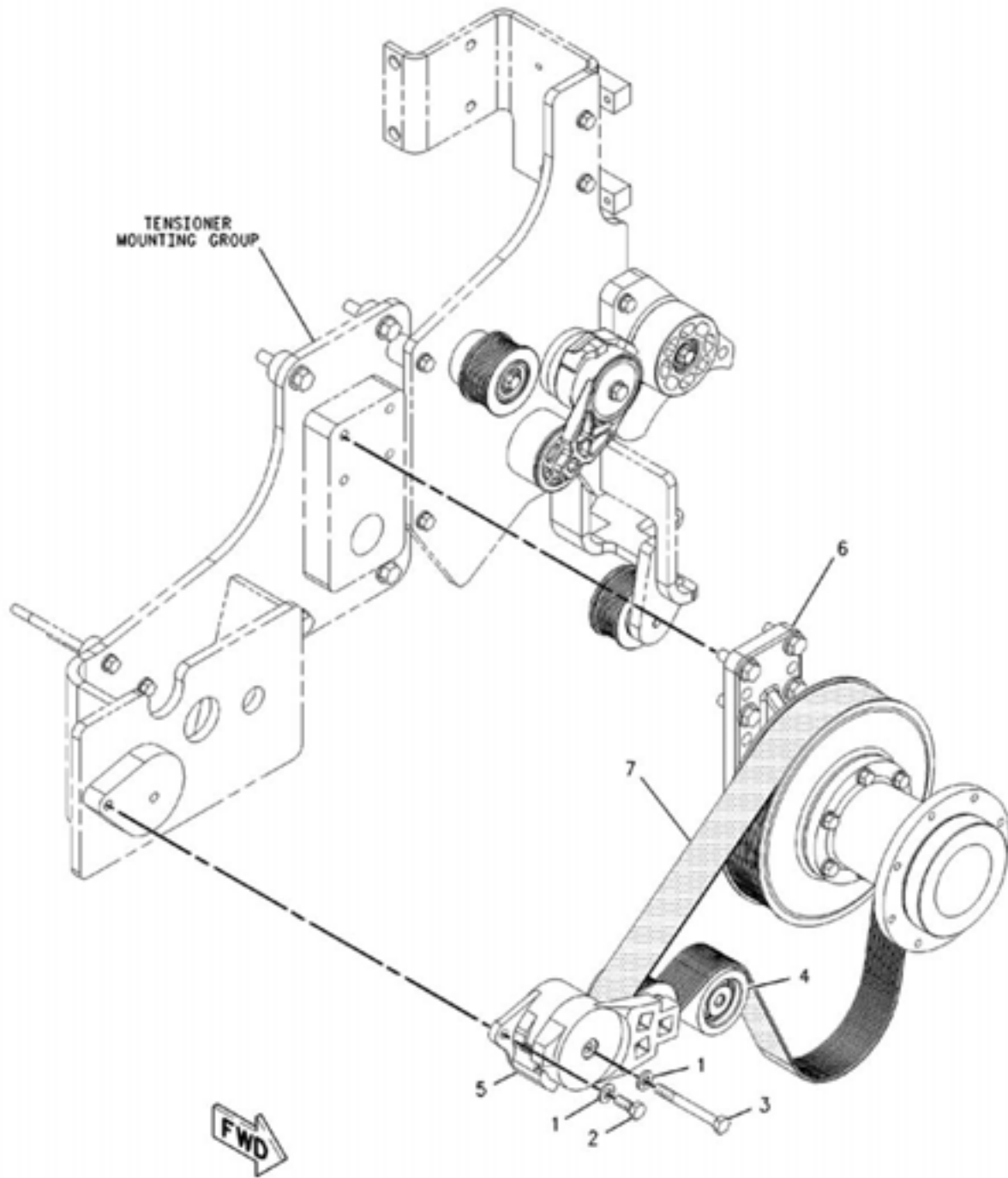


00794300

# ENGINE EQUIPMENT



					MT700 Engine Belts
		MT700	MT800		
1	15 01 18	2.0	N/A		Accessory Drive Belt
2	59 07 00	2.0	N/A		Fan Drive Belt






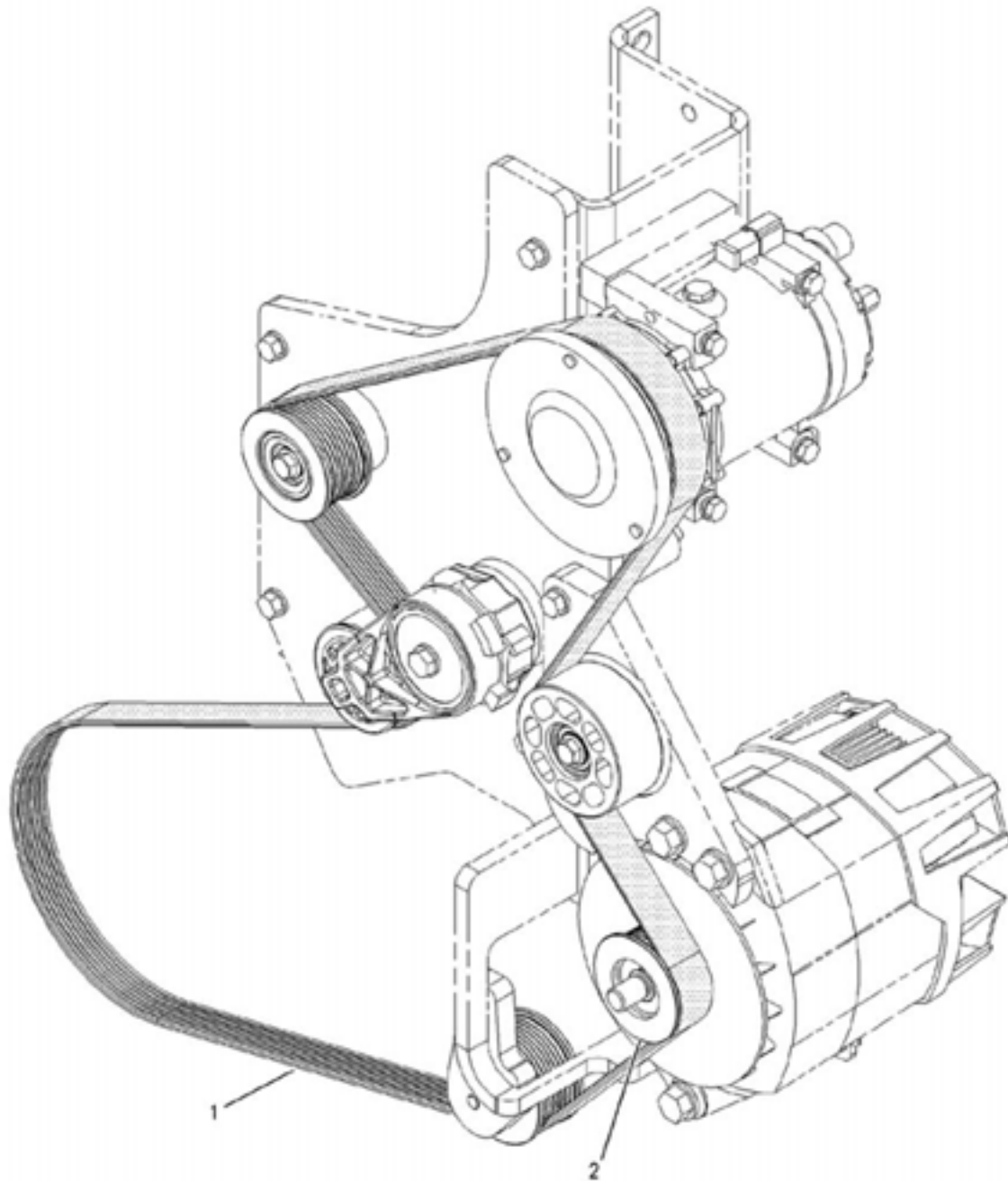
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# ENGINE EQUIPMENT



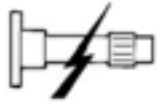


					MT800 Fan Drive
		MT700	MT800		
4	59 22 02	N/A	2.0		Smooth Idler
5	59 22 03	N/A	2.5		Fan Belt Tensioner
6	51 99 04	N/A	3		Fan Pulley Assembly
7	59 07 00	N/A	2		Fan Drive

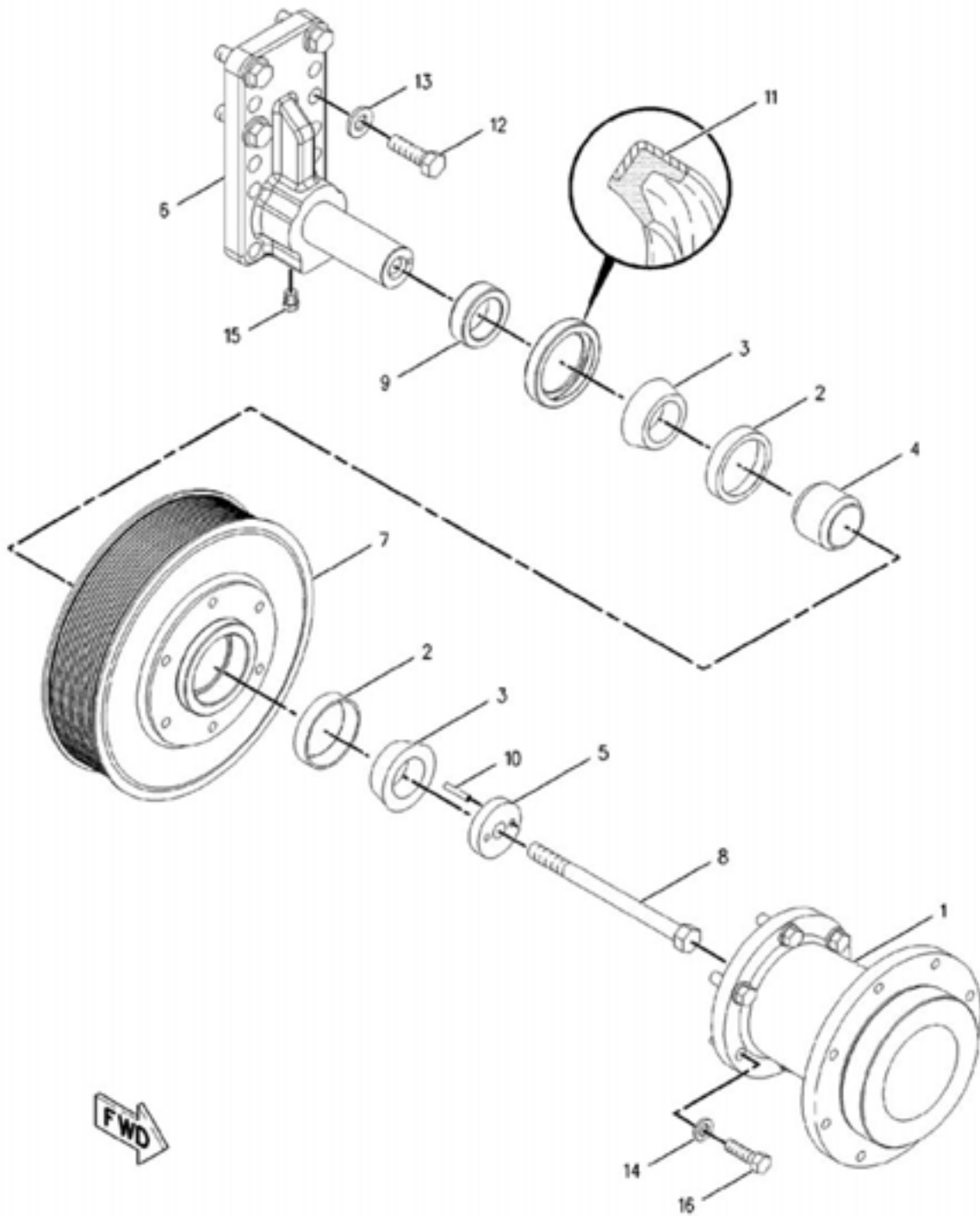


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# ENGINE EQUIPMENT



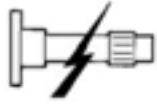


				MT800 Accessory Drive Belt	
		MT700	MT800		
1	15 01 18	N/A	2.0		Accessory Drive Belt



00878552

# ENGINE EQUIPMENT

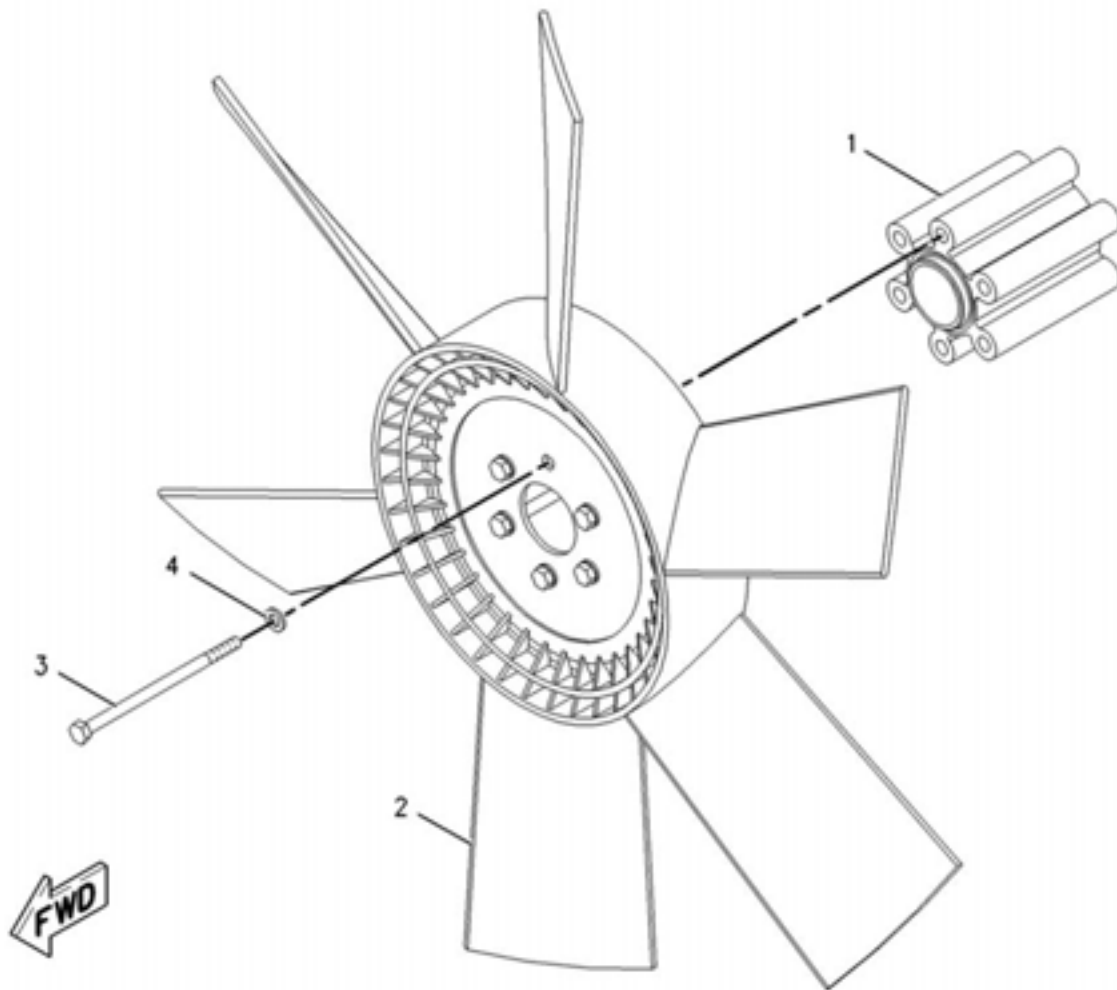


					MT800 Fan Hub
		MT700	MT800		
1	59 22 04	N/A	5.0		Fan Adapter
2	59 22 05	N/A	5.0		Fan Bearing
3	59 22 05	N/A	5.0		Fan Bearing
4	59 22 06	N/A	5.0		Fan Bearing Spacer
5	59 22 07	N/A	5.0		Fan Bearing Plate
6	59 22 08	N/A	5.0		Fan/Pulley Bracket
7	59 22 00	N/A	5.0		Fan Drive Pulley
11	59 22 09	N/A	5.0		Fan Bearing Seal

MT700 Engine Fan .....	2-1
MT700 Cooling System Brackets/Guards .....	2-2
MT700 Oil Cooler.....	2-3
MT700 Cooler Mounting Group.....	2-4
MT700 Core Group Mounting.....	2-5
MT700 Core Group.....	2-6
MT700 Core Group.....	2-7
MT800 Fan and Shroud .....	2-8
MT800 Cooler Mounting Group.....	2-9
MT800 Core Group 1 of 3 .....	2-10
MT800 Cooler Group 2 of 3 .....	2-11
MT800 Cooler Group 3 of 3 .....	2-12
MT700 Cooling System Lines .....	2-13
MT800 Coolant Lines Group.....	2-14
MT800 Fan Blast Shield .....	2-15
MT700 Expansion Tank.....	2-16
MT800 Expansion Tank.....	2-17

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