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SAFETY CAB WITH AIR CONDITIONING & HEATER BLOWER INSTRUCTION MANUAL & PARTS LIST

Model 02880
For LT3240 / T4240 / R3240T
Models 02740 / 02750 / 02770
ORIGINAL VERSION (EN)
SERIAL NO. 311000001

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INTRODUCTION

This manual provides instructions on the use of the safety cab and it's accessories.
The Cab KS-524 (Model 02880) is designed to be fitted to the machines listed above. This provides additional operator protection, particularly when the mower is to be used on slopes and provides limited safety protection in the event of a roll-over. For maximum safety, the seat belt must be correctly fitted and worn by the operator.

The Heater Blower kit (Model 02881) has been designed to fit to the Cab KS-524 (Model 02880) and to progressively enhance the operator environment. This kit is incompatible with the air conditioning system and is therefore required to be removed if the cab is subsequently upgraded to include the Air conditioner and Heater Blower (Model 02882).

The Air conditioner and Heater Blower (Model 02882), (with various fitting kits), is designed for use with the safety cab to progressively enhance the operator environment. Fitting of the Air conditioning system must be carried out by a qualified technician.

The Air conditioning fit kit (Model 02885) is to be used in conjunction with Model 02882 when fitting the Air conditioning and Heater Blower kit to the LT3240. Fitting of the Air conditioning system must be carried out by a qualified technician.

The Air conditioning fit kit (Model 02883) is to be used in conjunction with Model 02882 when fitting the Air conditioning and Heater Blower kit to the T4240. Fitting of the Air conditioning system must be carried out by a qualified technician.

The Air conditioning fir kit (Model 02884) is to be used in conjunction with Model 02882 when fitting the Air conditioning and Heater Blower kit to the R3240T. Fitting of the Air conditioning system must be carried out by a qualified technician.

This manual contains guidance for the correct assembly and operation of the Safety Cab and ventilation kits. It is provided for the protection of those operating and servicing the equipment.

The Safety Cab must only be fitted to the above machines by an authorised dealer.

These instructions include safety, training, preparation, operation, maintenance, health & safety, specifications and assembly. These instructions should be considered as part of the machine.

In pursuit of continuous product development, we reserve the right to alter specifications without notice.

Left and Right: Throughout this manual refers to the mower when looking in the direction of forward travel.

This manual contains information on the following:
Cab KS-524: Model 02880
Heater Blower: Model 02881
Air conditioning & Heater Blower: Model 02882
Air conditioning fitting kit LT3240: Model 02885
Air conditioning fitting kit T4240: Model 02883
Air conditioning fitting kit R3240T: Model 02884
Beacon kit LT3240: Model 02848
Beacon kit T4240 & R3240T: Model 02843
Noise reduction kit

ATTENTION

THIS SYMBOL MEANS BE ALERT!

YOUR SAFETY IS INVOLVED

THIS SAFETY CAB AND ACCESSORIES ARE FOR USE ON THE LT3240, T4240 & R3240T.

READ THIS MANUAL BEFORE FITTING OR CARRYING OUT ANY WORK.
IT IS ESSENTIAL THAT SERVICE PERSONNEL AND OPERATORS STUDY IT FOR THEIR OWN SAFETY

SAFETY PRECAUTIONS

THESE INSTRUCTIONS ARE IN ADDITION TO THOSE CONTAINED IN THE MACHINE OPERATORS MANUAL UNLESS OTHERWISE STATED. READ AND UNDERSTAND THE SEPARATE MACHINE OPERATORS MANUAL BEFORE ATTEMPTING TO FIT THIS KIT.

THE FOLLOWING PRECAUTIONS MUST BE TAKEN TO HELP PREVENT ACCIDENTS.

SAFETY PRECAUTIONS - TRAINING

Read the instructions carefully. Be familiar with the use of the equipment.

Ensure that the specified torque settings are adhered to.

The cab and its mountings must not be drilled, cut or altered in any way.

All drivers should seek and obtain professional and practical instruction. Such instruction should emphasise the need for care and concentration when working with this equipment.

SAFETY PRECAUTIONS - PREPARATION

Ensure that all lifting equipment is in good condition and has sufficient capacity to lift the item required as specified in this manual.

Always ask for assistance when lifting heavy or awkward loads.

Ensure that the seat belt is correctly fitted and in good condition. Always replace a damaged seat belt.

SAFETY PRECAUTIONS - OPERATION

Always wear the seat belt when the safety cab is fitted.

Care should be taken when using the mower on any slope where ground conditions are such that there may be a risk of the mower rolling over. The requirements of SI 1998 No. 2306 “Provisions and Use of Work Equipment Regulations” should be considered.

WARNING: ALWAYS SEEK PROFESSIONAL ADVICE FROM YOUR LOCAL AUTHORISED DEALER IF, AFTER STUDYING THIS, YOU ARE UNSURE HOW TO FIT THIS KIT.

Care should be taken when using the mower on any slope where ground conditions are such that there may be a risk of the mower rolling over. The requirements of 89/355/EEC, as amended by 95/63/EEC ‘Provision and Use of Work Equipment Directive’ should be considered.

Stability angles given are maximum figures and are for guidance only. Particular conditions such as wet grass or uneven ground may not permit safe operation on the slope limit stated.

Remember there is no such thing as a 'safe' slope. Travel on grass slopes requires particular care. To guard against overturning or loss of traction when travelling or mowing on a slope:

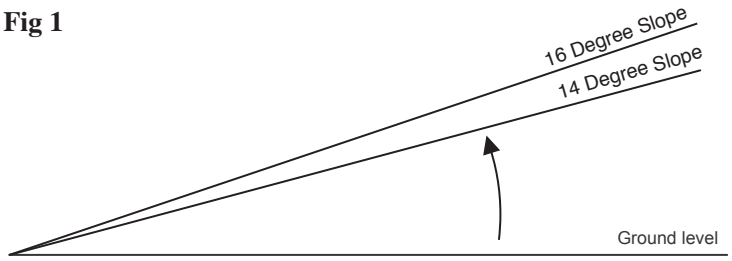
- Exercise extreme care when changing direction on a slope.
- Do not stop or start suddenly.
- Engage drive slowly.
- Keep machine speed low.
- Avoid tight turns.
- Stay alert for humps, hollows and other hidden hazards.
- Keep away from sharp inclines and steep slopes.
- A thorough risk assessment should be carried out by a competent person before travelling or mowing on a slope.

Never park on a slope.

Use extreme caution when reversing.

Max slope angles of machines with ROPS.
LT3240 = 14º
R3240T, T4240 = 16º

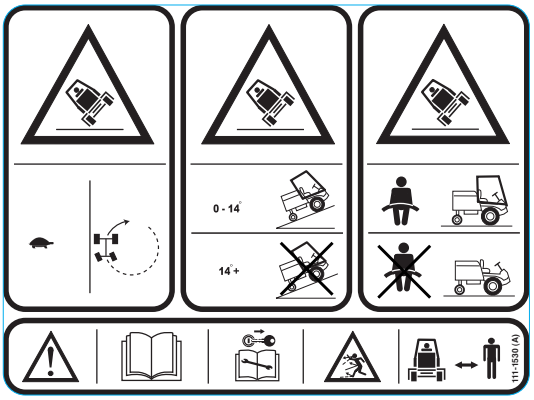
Fig 1



WARNING: Please ensure that the correct angle decal is fitted. 111-1530-A.

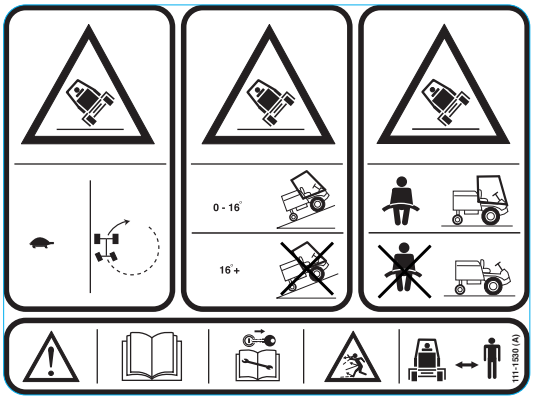
Decal - Slope angles
Part No: 111-1530 (A)
Location: Centre platform
LT3240 = 14º Max

Fig 2



Decal - Slope angles
Part No: 111-0936 (A)
Location: Centre platform
T4240 = 16º Max
R3240T = 16º Max

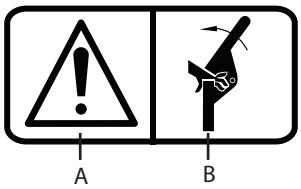
Fig 3



SAFETY SYMBOLS

Decal - Warning Crush Hazard **Fig 4**
Part No: 111-0773 (A)
Location: Centre platform

A) Safety Alert - Be aware to the possibility of injury
B) Crushing fingers. Force applied from side



Decal - Safety Alert **Fig 5**
Part No:
Location:

A) Safety Alert - Be aware to the possibility of injury

Decal - Severing Toes or Fingers **Fig 6**
Part No:
Location:

A) Danger of severing toes or fingers in cutting mechanism

Decal - Danger of Thrown Objects **Fig 7**
Part No:
Location:

A) Danger of being hit by thrown objects

Decal - Read Operator's Manual **Fig 8**
Part No:
Location:

A) Carefully read the Operator's Manual before using the machine

Decal - Hearing Protection **Fig 9**
Part No:
Location:

A) Hearing protection should be worn

Decal - Protective Footwear **Fig 10**
Part No:
Location:

A) Protective footwear should be worn

For all other decals please refer to the Operator's Manual provided.

WARNING:
- **Refrigerant must never be discharged into the atmosphere.**
- **Before separating parts or connections in the air conditioning system, drain refrigerant into a recycling bottle and dispose of correctly.**

WARNING: Air conditioning - To avoid any accidents, do not attempt to fill or top up your refrigerant. This should only be carried out by a qualified technician.

NOISE LEVEL

Operator's Daily Personal Noise Exposure: TORO have no control over site conditions, duration of use, degree of cab doors/ windows, state of maintenance or adjustment of the mower. All of these factors will affect the operator's daily personal exposure level - $L_{EP,d}$

Under typical working conditions, operator's could be exposed to a daily personal noise exposure level in excess of 85dB(A) $L_{EP,d}$

If ear protection is required, ear protectors with good attenuation in the 63 - 8000 Hz frequency range should be used.

Employers of personnel using this machine are advised to read the "Noise at Work Regulations" as the operator's daily personal exposure level could be above the "First Action Level"

Operator Ear level noises

LT3240: 80 dB(A)
T4240: 83 dB(A)
R3240T: 86 dB(A)

Wear Hearing Protection

Sound pressure level:
The sound pressure level at the operator's position is 85 dB (A) measured in accordance with European Standard EN836.

EC DECLARATION OF CONFORMITY

EC DECLARATION OF INCORPORATION

Manufactured by: HAYTER LIMITED,

Address: Spellbrook, Bishop's Stortford, Herts. CM23 4BU. ENGLAND
declare that the:

Model Name: **SAFETY CAB AIR CONDITIONING AND HEATER BLOWER**
Model No: 02880

Complies with the provisions of the EU Directive: 79/622/EEC relating to the structures of wheeled or forestry tractors (static testing), as amended and the regulations transposed into national law.

This SAFETY CAB has only been tested and approved for use on the following products:

Model No. / Name: 02740 LT3240
Model No. / Name: 02750 T4240
Model No. / Name: 02770 R3240T

Authorised Signatory:

S.A Maryniak
(Technical Director)

Date: 03.03.11
Declaration done and technical documentation kept at:
HAYTER LIMITED
Spellbrook, Bishop's Stortford,
Herts. CM23 4BU ENGLAND

SPECIFICATIONS

Dimensions of machines with cab and Air conditioning
Weight: 84kg

Machine Model	Overall Height	Total weight with 8" cutterheads
CAB	N/A	202 kg
LT3240	1785 mm	1317 kg
T4240	1775 mm	1870 kg
R3240T	1775 mm	1869 kg
Beacon	Add 150 mm	N/A

Windscreen washer bottle capacity: 0.17 litres

CONTROLS

Cab only:
Windscreen wiper ON / OFF switch
Windscreen washer ON / OFF switch
Beacon (optional) ON / OFF switch

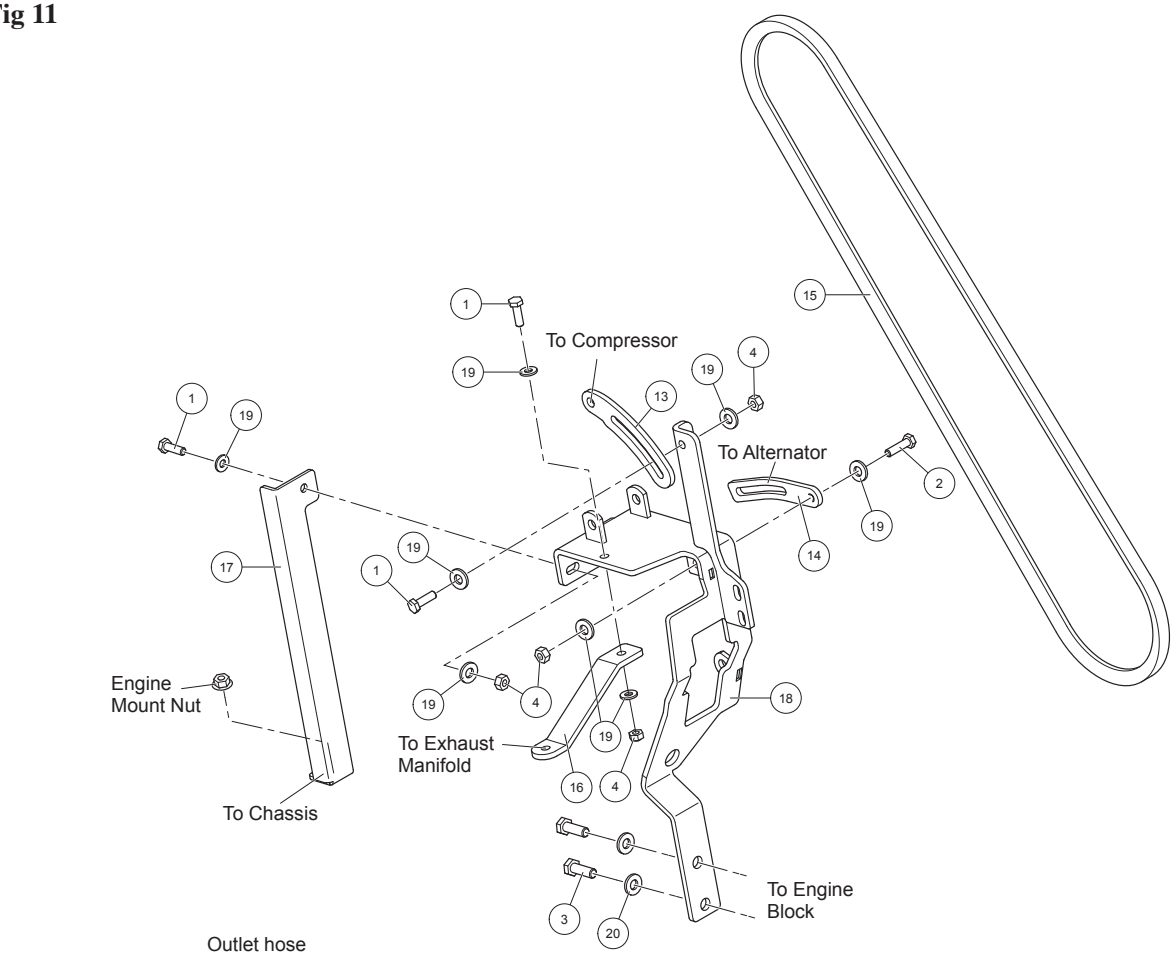
Deluxe Cab - with Heater Blower:
Windscreen wiper ON / OFF switch
Windscreen washer ON / OFF switch
Beacon (optional) ON / OFF switch
Water Temperature Valve - ROTARY control
Blower Speed - 3 position switch

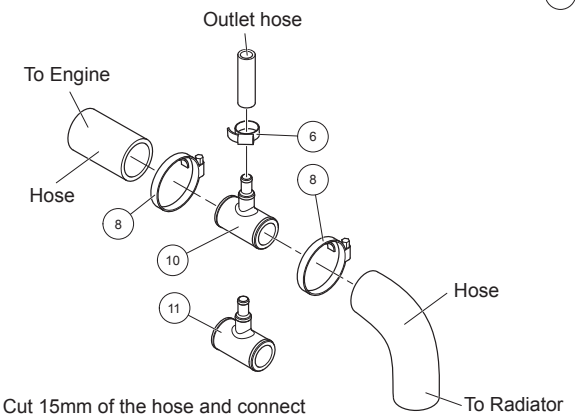
Super Deluxe Cab - with Air conditioning and Heater Blower:
Windscreen wiper ON / OFF switch
Windscreen washer ON / OFF switch
Beacon (optional) ON / OFF switch
Water Temperature Valve - ROTARY control
Blower Speed - 3 position switch
Cooling Temperature Control - ROTARY control

AIR CONDITIONING FITTING KIT (MODEL 02885) - 02740 PARTS LIST

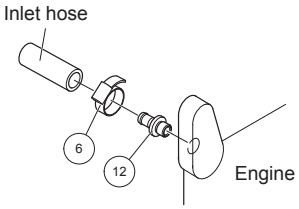
ITEM NO.	DESCRIPTION	PART NO.	QTY	ITEM NOTE
1	SCREW M8*25	03162	4	
2	SCREW M8*30	09369	1	
3	SETSCREW M10*40*1.25 FINE PITCH	50-11-006	2	
4	NUT M8	09441	4	
5	WASHER - M10 SPRING	09480	3	NOT SHOWN
6	CLIP - 11-17mm	111-1716	2	
7	PULLEY V1505 CRANKSHAFT	978108	1	NOT SHOWN
8	HOSE CLAMP HI-TORQUE 30-50mm	10-11-034	2	
9	SETSCREW M10*35*1.25	111-0597	3	NOT SHOWN
10	FITTING - TEE 35mm	111-1569	1	
11	FITTING - TEE 27mm	111-1570	1	
12	PIPE UNION	111-1571	1	
13	CLAMP - COMPRESSOR	111-1575	1	
14	CLAMP - ALTERNATOR	111-1576	1	
15	DRIVE BELT	111-1578	1	
16	BRACKET - EXHAUST SUPPORT	111-1579	1	
17	BRACKET - SIDE SUPPORT	111-1580	1	
18	COMPRESSOR BRACKET	111-1581	1	
19	WASHER PLAIN M8	ZWP1H000U	8	
20	WASHER PLAIN M10 HEAVY	ZWQ1J000U	2	
21	FITTING KIT - AIR CONDITIONING LT3240	111-1466	1	NOT SHOWN

Fig 11





Cut 15mm of the hose and connect Tee piece to the hoses. Tighten the hoses with clamps.

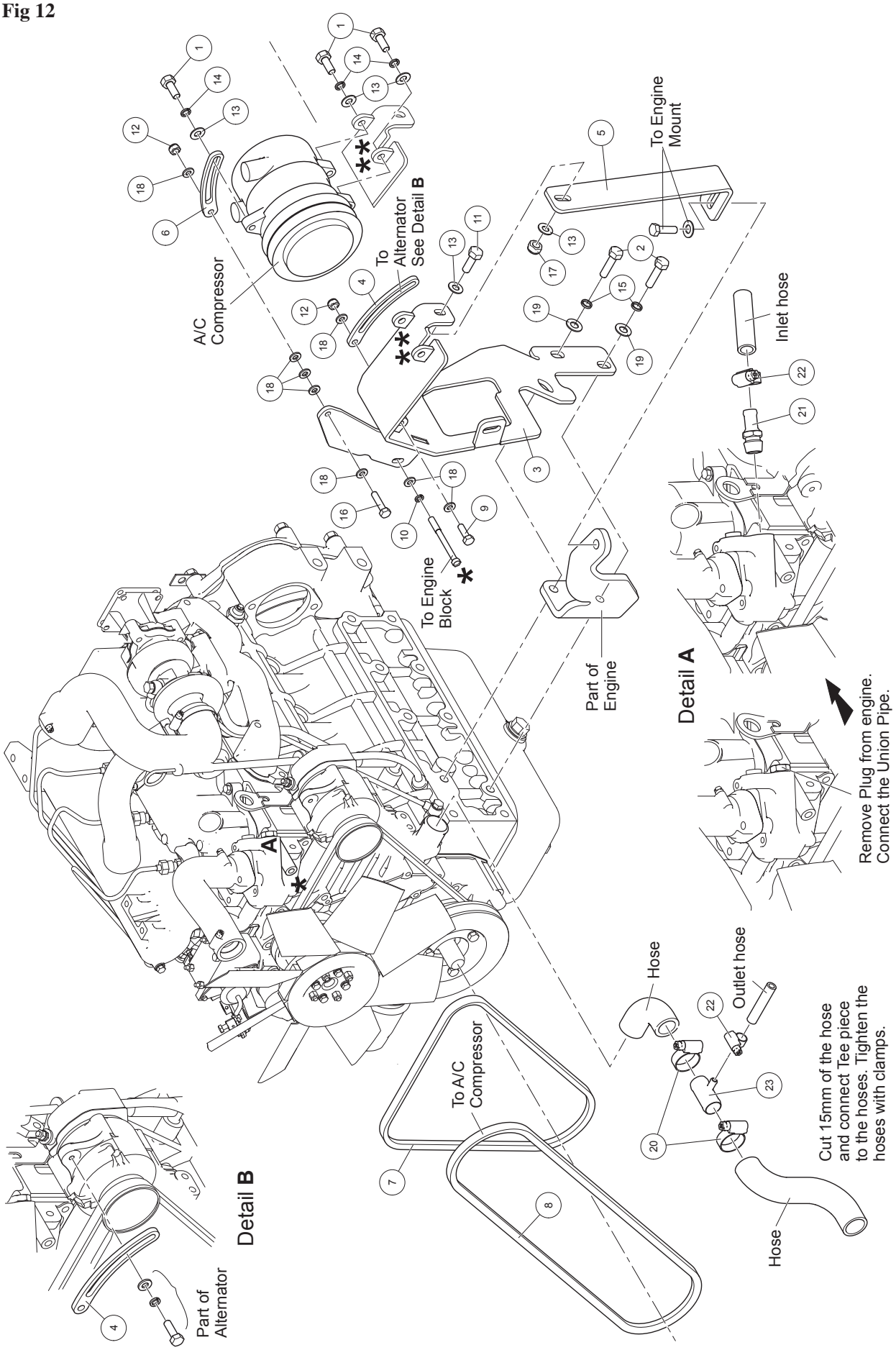


Remove Plug from the engine block. Connect the Union Pipe.

AIR CONDITIONING FITTING KIT (MODEL 02844) - 02770 PARTS LIST

ITEM NO.	DESCRIPTION	PART NO.	QTY	ITEM NOTE
1	SETSCREW M10*25*1.25 FINE PITCH	50-11-005	3	
2	SETSCREW M12*40*1.25 FINE PITCH	111-1718	2	
3	BRACKET - AIR CON	111-1512-03	1	
4	ALTERNATOR ADJUSTER	111-1514-03	1	
5	BRACKET AIR CON SUPPORT	111-1531-03	1	
6	AIR CON ADJUSTER	111-1532-03	1	
7	FAN BELT - XPA 1060	111-1647	1	
8	BELT - XPA 1382	111-1648	1	
9	SETSCREW M8*25	03162	1	
10	WASHER M8 SPRING	03469	1	
11	SETSCREW M10*30	09392	1	
12	NUT M8 NYLOC INSERT T TYPE	09441	2	
13	WASHER M10*21*1.45 FORM B	09479	5	
14	WASHER SPRING M10 SC	09480	3	
15	WASHER SPRING M12 SC	09599	2	
16	BOLT M8*35	09631	1	
17	NUT M10 NYLOC	ZNN1J000U	1	
18	WASHER PLAIN M8	ZWP1H000U	8	
19	WASHER PLAIN M12 LD	ZWP1L000U	2	
20	HOSE CLAMP HI-TORQUE 25-40mm	10-11-033	2	
21	HOSE UNION ¾ BSP	111-1571	1	
22	HOSE CLAMP HI-TORQUE 11-17mm	111-1716	2	
23	FITTING T PIECE (T4240)	977103	1	

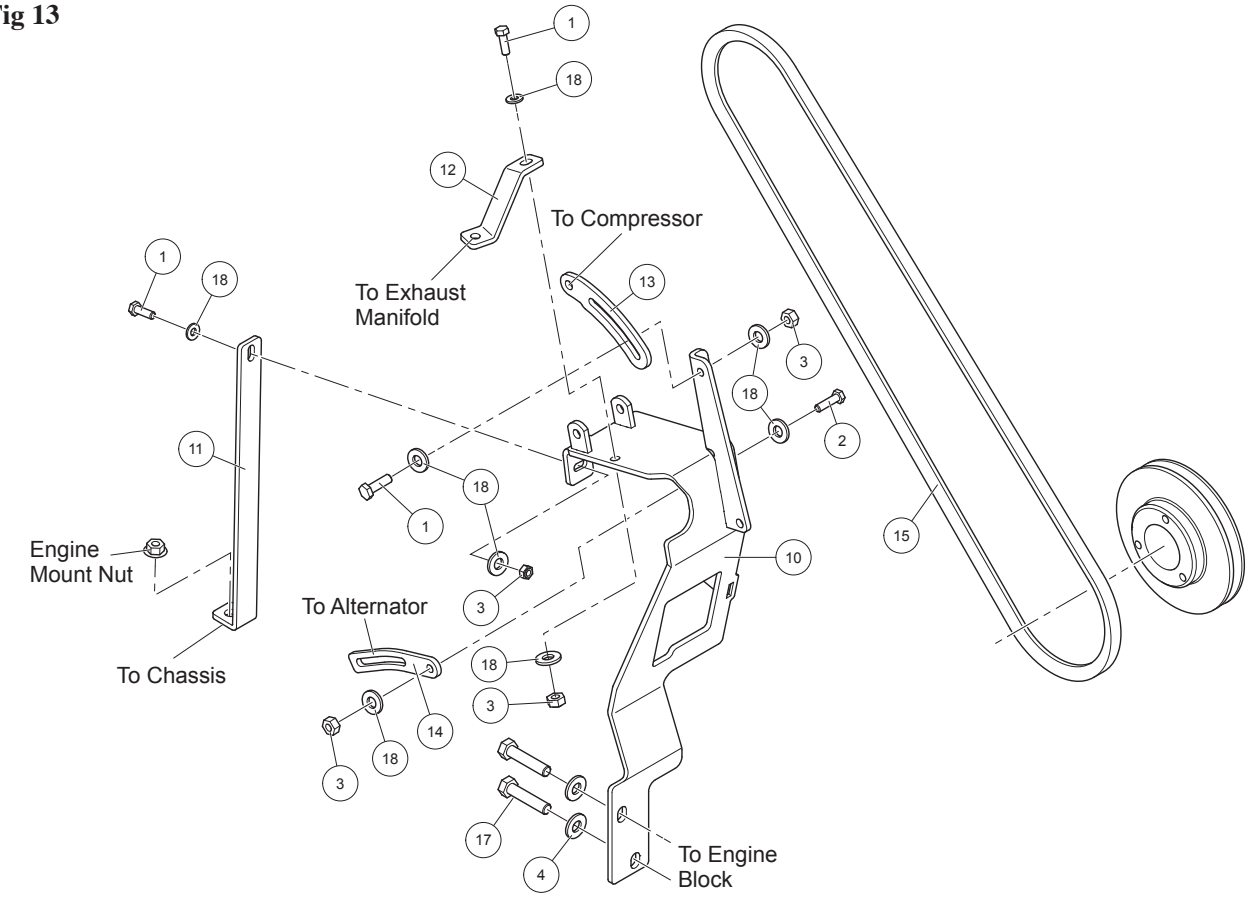
Fig 12

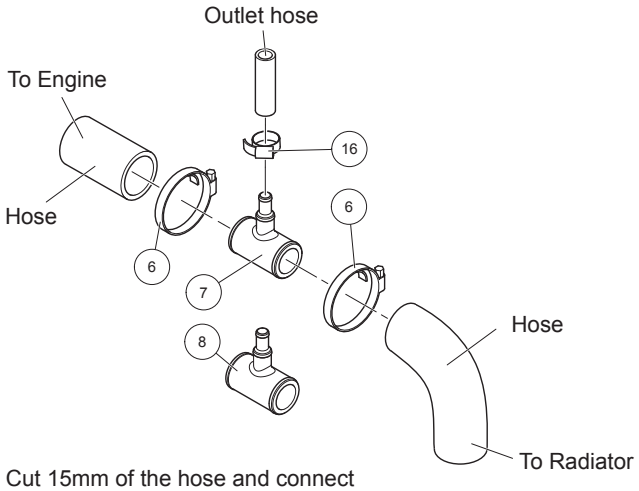

A/C Compressor
To Alternator See Detail B
To Engine Mount
Inlet hose
To Engine Block
Part of Engine
Detail A
Remove Plug from engine. Connect the Union Pipe.
Hose
Outlet hose
To A/C Compressor
Cut 15mm of the hose and connect Tee piece to the hoses. Tighten the hoses with clamps.
Hose
Detail B
Part of Alternator

AIR CONDITIONING FITTING KIT (MODEL 02844) - 02750 PARTS LIST

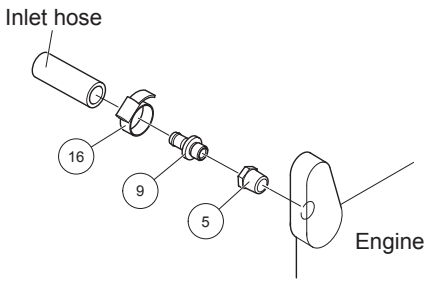
ITEM NO.	DESCRIPTION	PART NO.	QTY	ITEM NOTE
1	SCREW M8*25	03162	4	
2	SCREW M8*30	09369	1	
3	NUT M8	09441	4	
4	WASHER PLAIN M12	HY09485	2	
5	ADAPTOR 3/8" BSP - ½"	10-06-043	1	
6	HOSE CLAMP HI-TORQUE 30-50mm	10-11-034	2	
7	FITTING - TEE 35mm	111-1569	1	
8	FITTING - TEE 27mm	111-1570	1	
9	PIPE UNION	111-1571	1	
10	COMPRESSOR BRACKET	111-1572	1	
11	BRACKET - SIDE SUPPORT	111-1573	1	
12	BRACKET - SUPPORT EXHAUST	111-1574	1	
13	CLAMP - COMPRESSOR	111-1575	1	
14	CLAMP - ALTERNATOR	111-1576	1	
15	BELT - DRIVE	111-1577	1	
16	HOSE CLAMP	111-1716	2	
17	SETSCREW M12*40*1.25 FINE PITCH	111-1718	2	
18	WASHER PLAIN M8	ZWP1H000U	8	
19	FITTING KIT - AIR CON / HEATER T4240	111-1468	1	NOT SHOWN

Fig 13





Cut 15mm of the hose and connect Tee piece to the hoses. Tighten the hoses with clamps.

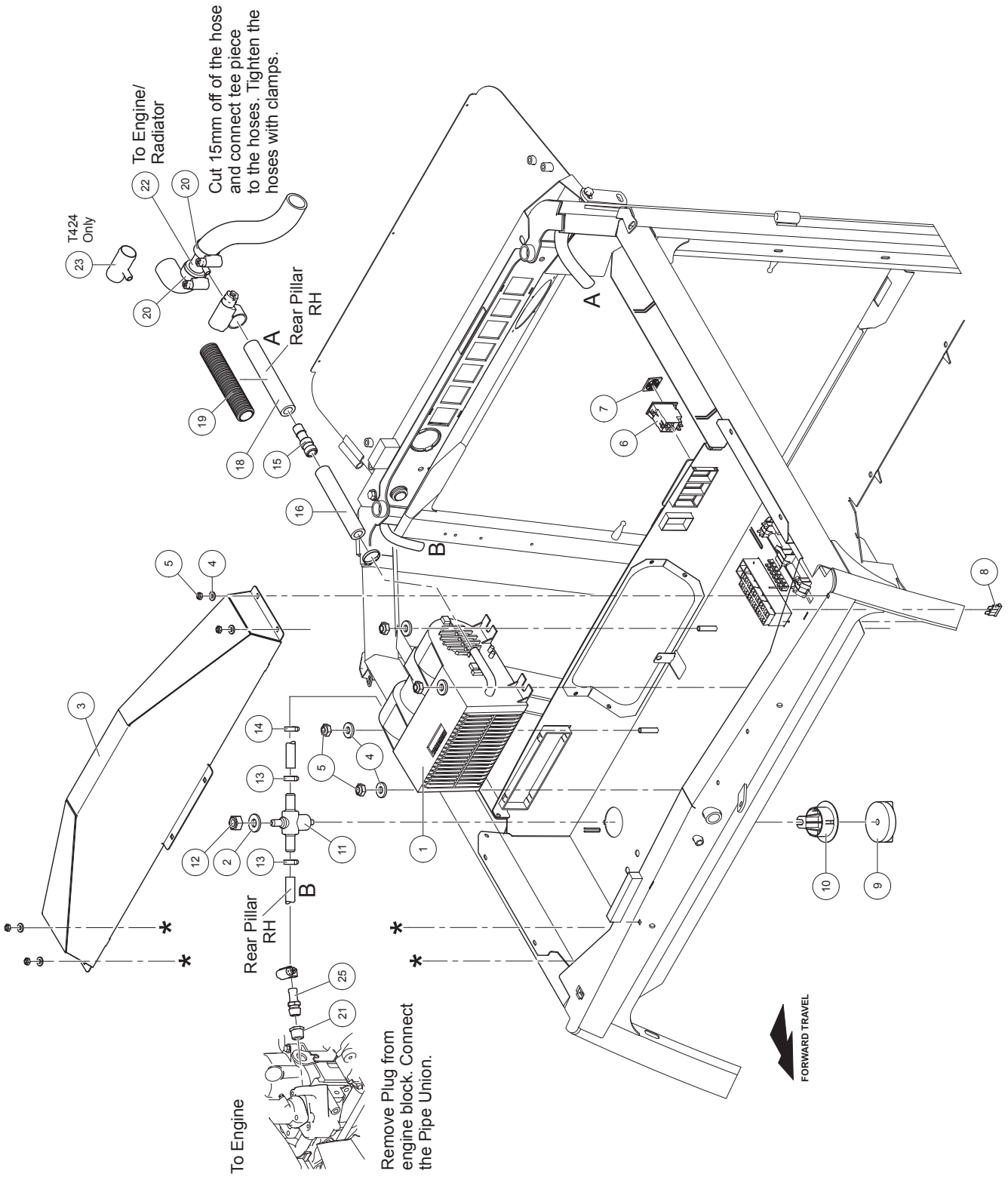


Remove Plug from engine block. Connect the Union Pipe.

HEATER BLOWER KIT (MODEL 02881) - PARTS LIST

ITEM NO.	DESCRIPTION	PART NO.	QTY	ITEM NOTE
1	HEATER MATRIX	111-1556	1	
2	WASHER PLAIN M8	ZWP1H000U	1	
3	AIR DUCT - HEATER	111-1557	1	
4	WASHER PLAIN M6*12*1.6	09472	10	
5	NUT M6 NYLOC T TYPE	09438	10	
6	SWITCH - HEATER	111-1558	1	
7	LENS - HEATER SWITCH	111-1559	1	
8	FUSE - 5 AMP	70-09-025	1	
9	HANDLE - TEMP CONTROL	111-1560	1	
10	MOUNT - TEMP CONTROL HANDLE	111-1561	1	
11	TAP - HEATER HOSE	111-1562	1	
12	NUT M8	09441	1	
13	CLIP JUBILEE O/D ¾" TUBE	910845	4	
14	CLIP - HOSE	111-1582	4	
15	CONNECTOR - HOSE	111-1563	1	
16	HOSE - HOT WATER I/D 14mm*0.85m	111-1564	1	
17	CABLE - WIRING	111-1565	1	NOT SHOWN
18	HOSE - HOT WATER I/D 10.5mm*5.50m	111-1566	2	
19	HOSE GUARD - 3.60m	111-1567	1	
20	HOSE CLAMP HI-TORQUE 30-50mm	10-11-034	2	
21	REDUCING BUSH	111-1568	1	
22	FITTING - TEE 35mm	111-1569	1	
23	FITTING - TEE 27mm	111-1570	1	
24	TIE BAND	HY3966	5	NOT SHOWN
25	PIPE UNION	111-1571	1	
26	HEATER SYSTEM - MAUSER CAB	111-1459	1	NOT SHOWN

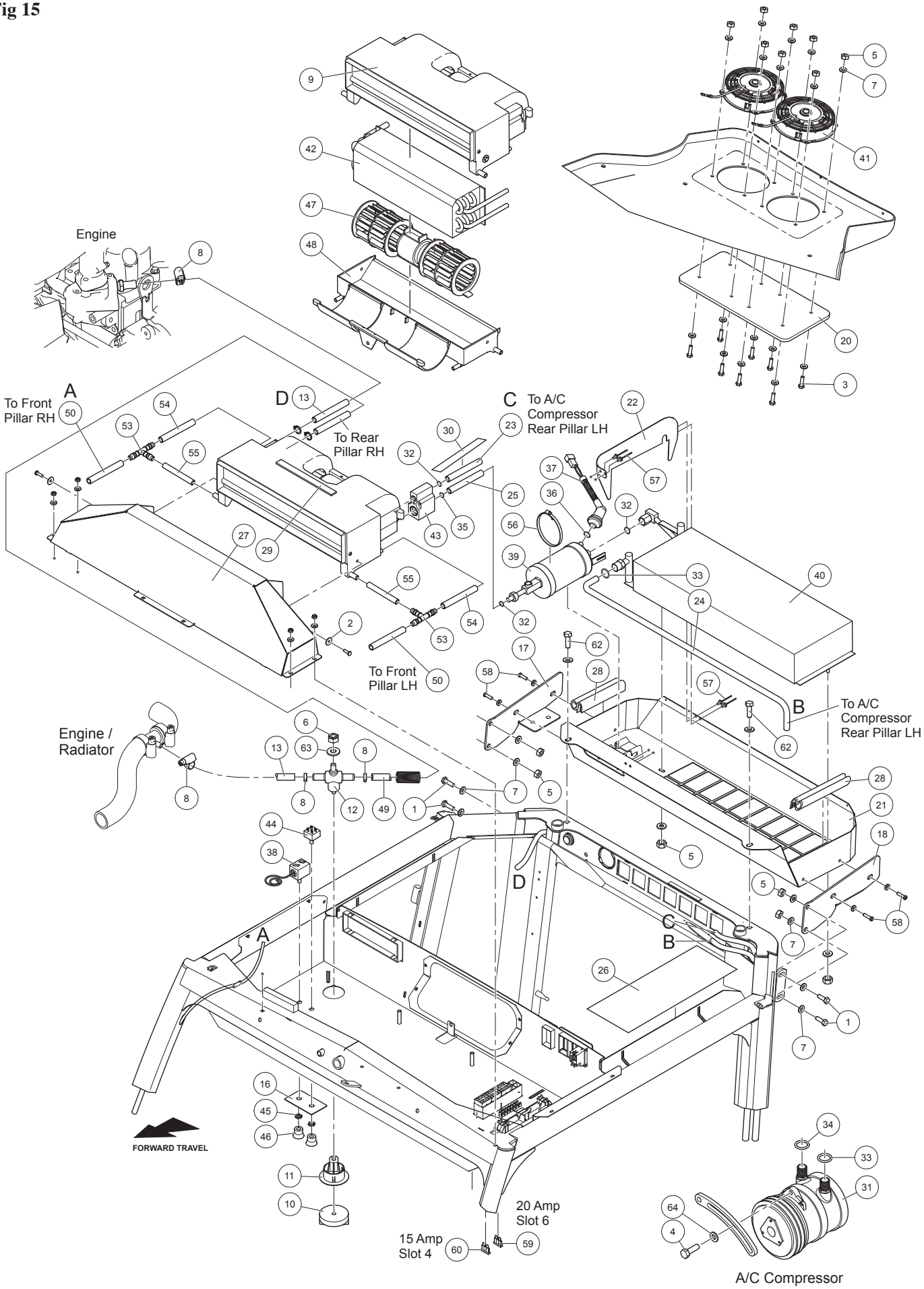
Fig 14


To Engine/
Radiator
Cut 15mm off of the hose
and connect tee piece
to the hoses. Tighten the
hoses with clamps.
T424
Only
Rear Pillar
RH
A
B
Rear Pillar
RH
To Engine
Remove Plug from
engine block. Connect
the Pipe Union.
FORWARD TRAVEL

AIR CONDITIONING & HEATER BLOWER KIT (MODEL 02882) - PARTS LIST

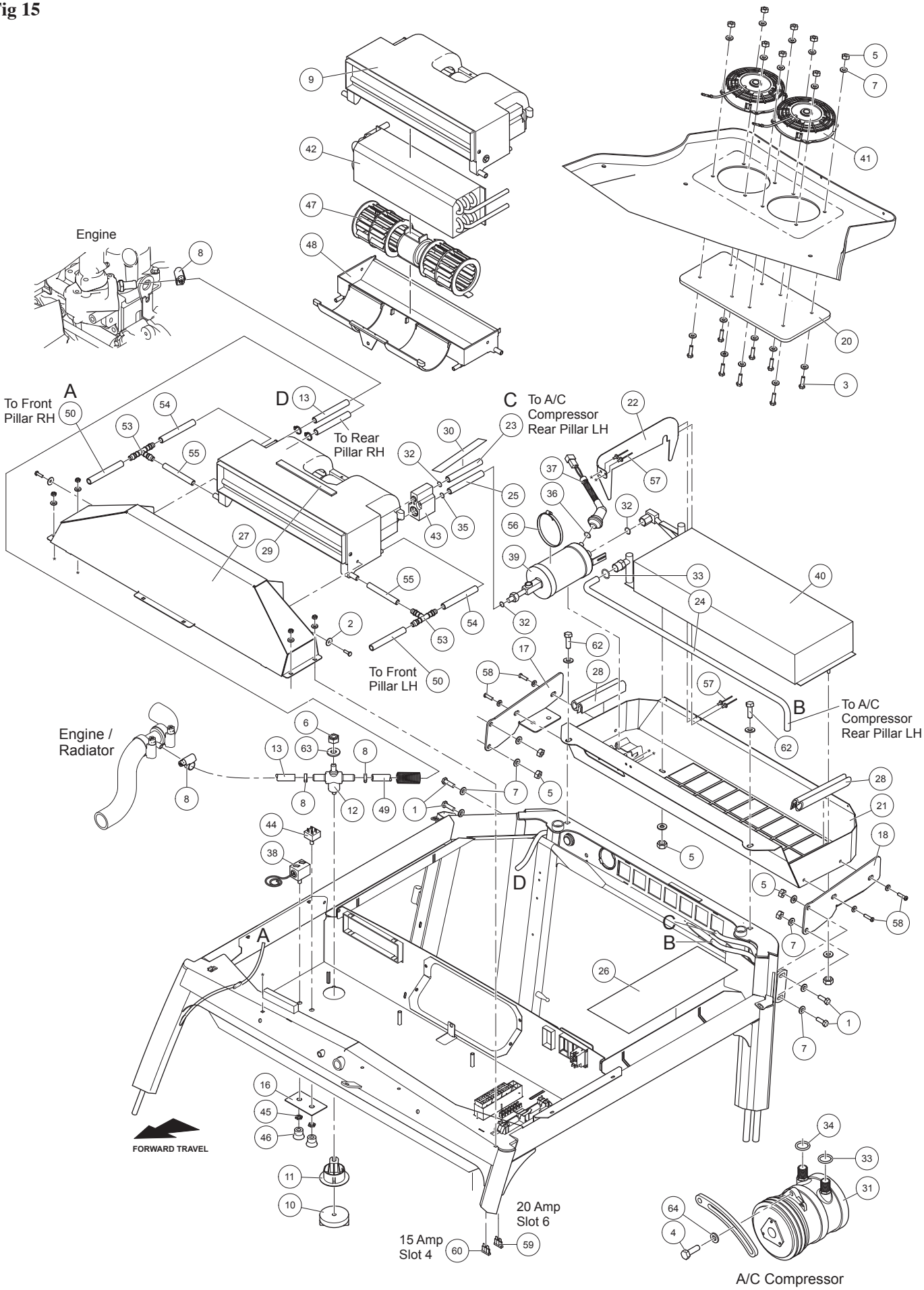
ITEM NO.	DESCRIPTION	PART NO.	QTY	ITEM NOTE
1	SCREW M8*25	03162	4	
2	WASHER ¼"*7/8"*0.8" THK	09263	3	
3	SCREW M6*20	09363	10	
4	SETSCREW M10*25*1.25 FINE PITCH	50-11-005	1	
5	NUT M6 NYLOC INSERT TYPE	09438	10	
6	NUT M8 NYLOC INSERT TYPE	09441	1	
7	WASHER PLAIN M6*12*1.6	09472	26	
8	HOSE CLAMP 11-17mm	111-1716	4	
9	AIR CONDITIONING SYSTEM	111-1460	1	
10	HANDLE - TEMP CONTROL	111-1560	1	
11	MOUNT - TEMP CONTROL HANDLE	111-1561	1	
12	TAP - HEATER HOSE	111-1562	1	
13	HOSE - HOT WATER I/D 10.5mm*5.50m	111-1566	2	
14	FUSE BOX - MAXI VAL	111-1583	1	NOT SHOWN
15	FUSE BOX - UNI VAL	111-1584	1	NOT SHOWN
16	BASE - A/C SWITCH	111-1585	1	
17	BRACKET MOUNTING - A/C R/H	111-1586	1	
18	BRACKET MOUNTING - A/C L/H	111-1587	1	
19	CABLE - WIRING A/C	111-1588	1	NOT SHOWN
20	PLATE COVER - A/C FAN	111-1589	1	
21	BRACKET - CONDENSOR	111-1590	1	
22	PLATE - A/C SEPARATION	111-1591	1	
23	HOSE - CLIMATIC 1	111-1592	1	
24	HOSE - CLIMATIC 2	111-1593	1	
25	HOSE - CLIMATIC 3	111-1594	1	
26	COVER - A/C HOSE	111-1595	1	
27	AIR DUCT - HEATER WITH A/C	111-1596	1	
28	SEALING STRIP - 0.52m LG	111-1597	1	
29	FOAM STRIP - 0.45m LG	111-1598	1	
30	SEALING STRIP - 2.50m LG	111-1599	1	
31	COMPRESSOR - 12V WITH CLUTCH	111-1600	1	
32	SEAL - O RING 3/8"	111-1601	3	
33	SEAL - O RING ½"	111-1602	2	
34	SEAL - O RING 5/8"	111-1603	1	
35	SEAL - O RING 3/4"	111-1604	1	
36	SEAL - O RING 6.5-1.5	111-1605	1	
37	SWITCH - PRESSURE	111-1606	1	
38	TEMPERATURE REGULATOR	111-1607	1	
39	COLLECTING TANK - DRYERS	111-1608	1	
40	CONDENSOR	111-1609	1	
41	AXIAL BLOWER	111-1610	2	
42	HEAT EXCHANGER	111-1611	1	
43	EXPANSION VALVE	111-1612	1	
44	FAN SWITCH	111-1613	1	
45	NUT FAN SWITCH FIXING	111-1614	2	
46	KNOB FAN SWITCH	111-1615	2	
47	BLOWER WHEEL	111-1616	1	
48	BLOWER LOWER PART	111-1617	1	

Fig 15


Engine
To Front Pillar RH
To Rear Pillar RH
To Front Pillar LH
To A/C Compressor Rear Pillar LH
To A/C Compressor Rear Pillar LH
Engine / Radiator
FORWARD TRAVEL
20 Amp Slot 6
15 Amp Slot 4
A/C Compressor

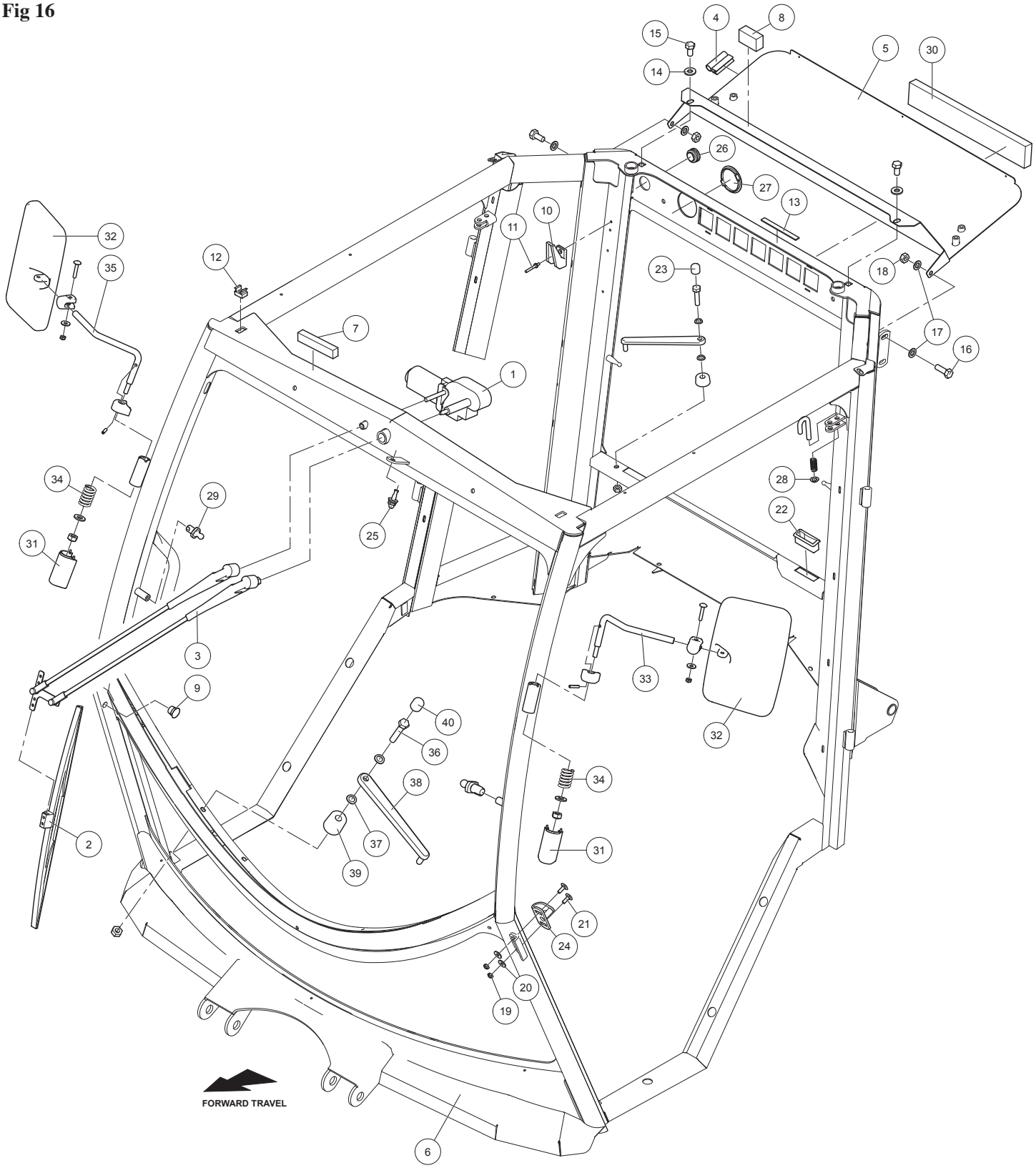
ITEM NO.	DESCRIPTION	PART NO.	QTY	ITEM NOTE
49	HOSE - HOT WATER I/D 10.5mm*0.2m	111-1566	1	
50	WATER DRAIN HOSE - 1.70m	111-1623	1	
51	HOSE DIA. 17mm	111-1620	1	NOT SHOWN
52	HOSE GUARD - 1.80m	111-1621	1	NOT SHOWN
53	T-FITTING - A/C HOSE	111-1622	2	
54	WATER DRAIN HOSE - 0.40m	111-1623	1	
55	WATER DRAIN HOSE - 0.18m	111-1623	1	
56	HOSE CLAMP - 77-90mm	111-1625	1	
57	RIVET - 4*12	111-1627	4	
58	SCREW	111-1628	4	
59	FUSE 20 AMP	111-1642	1	
60	FUSE 15 AMP	70-09-151	1	
61	TIE BAND	HY3966	20	NOT SHOWN
62	SCREW M8*20	ZDH1H020U	2	
63	WASHER PLAIN M8	ZWP1H000U	1	
64	WASHER PLAIN M10 HEAVY	ZWQ1J000U	1	

Fig 15


Engine
To Front Pillar RH
To Rear Pillar RH
To Front Pillar LH
To A/C Compressor Rear Pillar LH
To A/C Compressor Rear Pillar LH
Engine / Radiator
FORWARD TRAVEL
20 Amp Slot 6
15 Amp Slot 4
A/C Compressor

ITEM NO.	DESCRIPTION	PART NO.	QTY	ITEM NOTE
1	WIPER MOTOR	964165	1	
2	WIPER BLADE 500mm	964166	1	
3	WIPER ARM	964167	1	
4	SEAL	111-1683	1	0.6m
5	COVER REAR	111-1670	1	
6	FRAME	111-1665	1	
7	SEAL	111-1740	1	3.2m
8	SEAL	111-1684	1	0.8m
9	PLUG	111-1706	2	
10	HOOK	111-1705	1	
11	RIVET	111-1695	1	
12	NUT M8	09441	6	
13	FOAM STRIP	111-1739	1	0.75m
14	WASHER M8	ZWP1H000U	2	
15	SCREW M8*25	03162	2	
16	SCREW M8*16	ZDH1H016U	4	
17	WASHER M8	ZWP1H000U	4	
18	NUT M8	09441	2	
19	NUT M6	09438	2	
20	WASHER M6	09472	2	
21	SCREW M6*16	09362	2	
22	INSERT	111-1747	2	
23	HOLDER	111-1657	1	REFER TO REAR WINDOW PAGE
24	LOCKING BOLT	111-1662	1	
25	NOZZLE	111-1735	1	
26	PLUG	111-1678	1	
27	COVER	111-1701	1	
28	MOUNTING (GAS SPRING)	111-1658	2	
29	BALL AND SOCKET JOINT	964113	2	
30	DUST FILTER	111-1661	1	
31	COVER	111-1702	2	
32	MIRROR	111-1679	2	
33	MIRROR SUPPORT LH	111-1699	1	
34	PRESSURE SPRING	111-1676	2	
35	MIRROR SUPPORT RH	111-1698	1	
36	SCREW M8*45	ZDH1H045U	1	
37	WASHER	111-1691	2	
38	HOLDER 140mm	111-1707	1	
39	SHIM Dia 8, Dia 25mm	111-1708	1	
40	TERMINAL NIPPLE	111-1704	1	

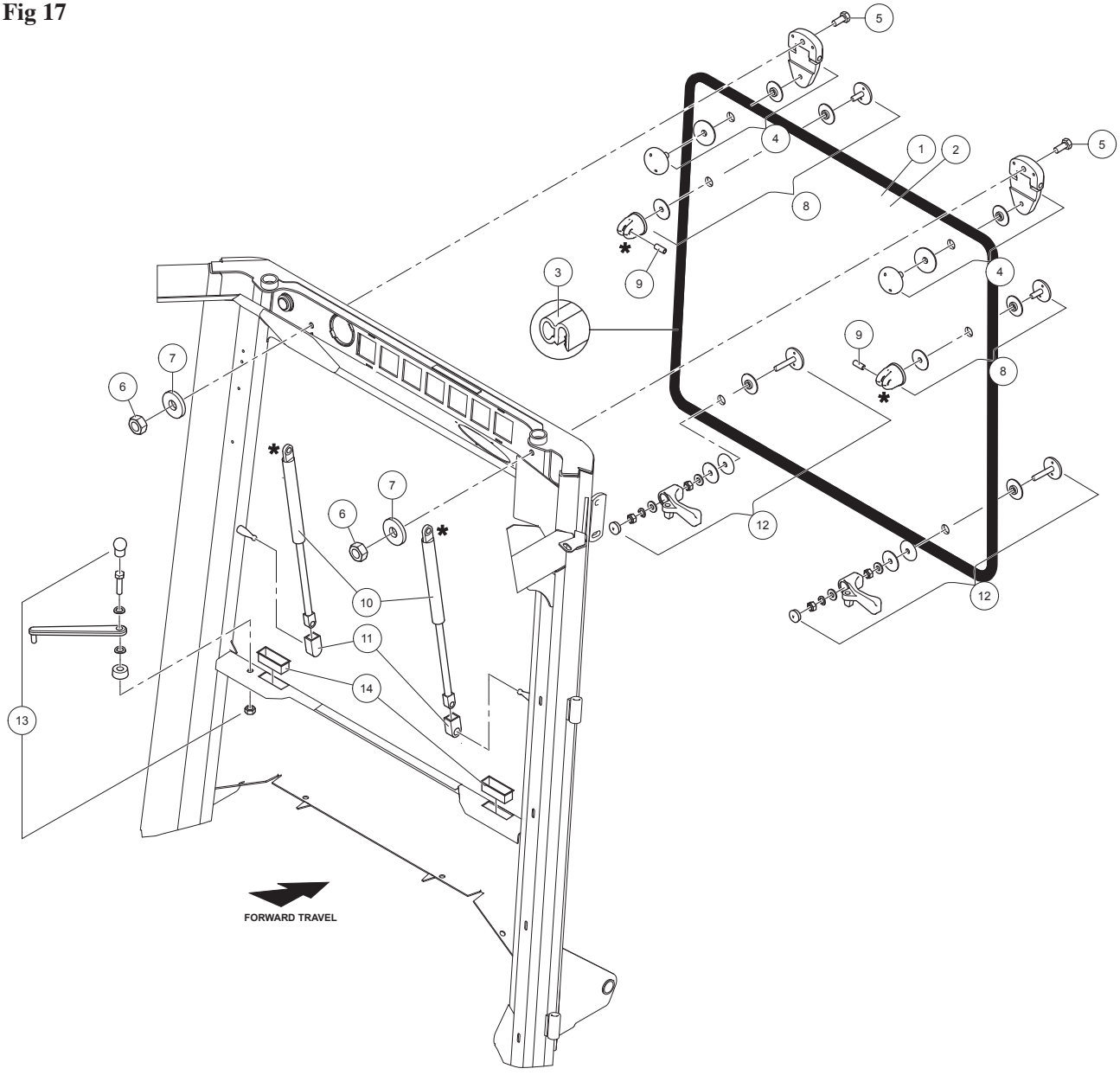
Fig 16



SAFETY CAB - REAR WINDOW (MODEL 02880) - PARTS LIST

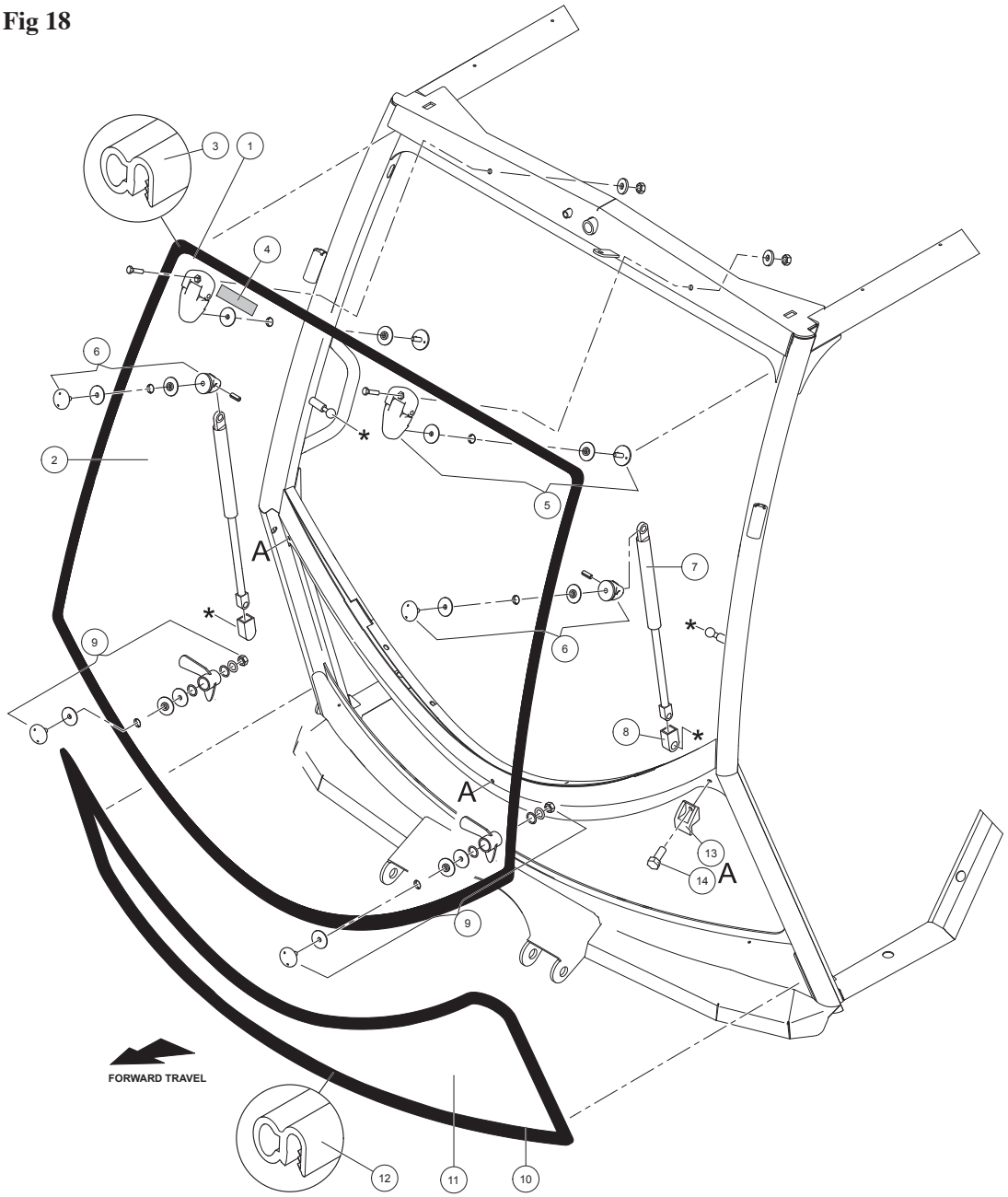
ITEM NO.	DESCRIPTION	PART NO.	QTY	ITEM NOTE
1	GLASS ASSEMBLY	111-1759	1	SET INCLUDE 2 & 3
2	GLASS	964220	1	
3	GASKET	111-1738	1	2.5m
4	HINGE	964150	2	SET
5	SCREW M8*25	03162	2	
6	NUT M8	09441	2	
7	WASHER M8	ZWP1H000U	2	
8	GAS STRUT MOUNTING	111-1756	2	SET
9	CLAMPING SLEEVE	964227	2	
10	GAS STRUT	964228	2	
11	BRACKET	964208	2	
12	BUCKLE	964230	2	SET
13	HOLDER	964111	1	SET
14	INSERT PIECE	111-1747	2	

Fig 17



ITEM NO.	DESCRIPTION	PART NO.	QTY	ITEM NOTE
1	UPPER GLASS ASSEMBLY	111-1757	1	SET INCLUDE 2 & 3
2	UPPER GLASS	964147	1	
3	UPPER GASKET	964215	1	3.84m
4	LABEL	111-1744	1	
5	HINGE	964150	2	SET
6	GAS STRUT MOUNTING	111-1756	2	SET
7	GAS STRUT	964152	2	
8	BRACKET	964229	2	
9	BUCKLE	964154	1	SET
10	LOWER GLASS ASSEMBLY	111-1758	1	SET INCLUDE 11 & 12
11	LOWER GLASS	964180	1	
12	LOWER GASKET	964215	1	3.36m
13	GLASS FIXING	964182	3	
14	SCREW M5*16	964183	3	

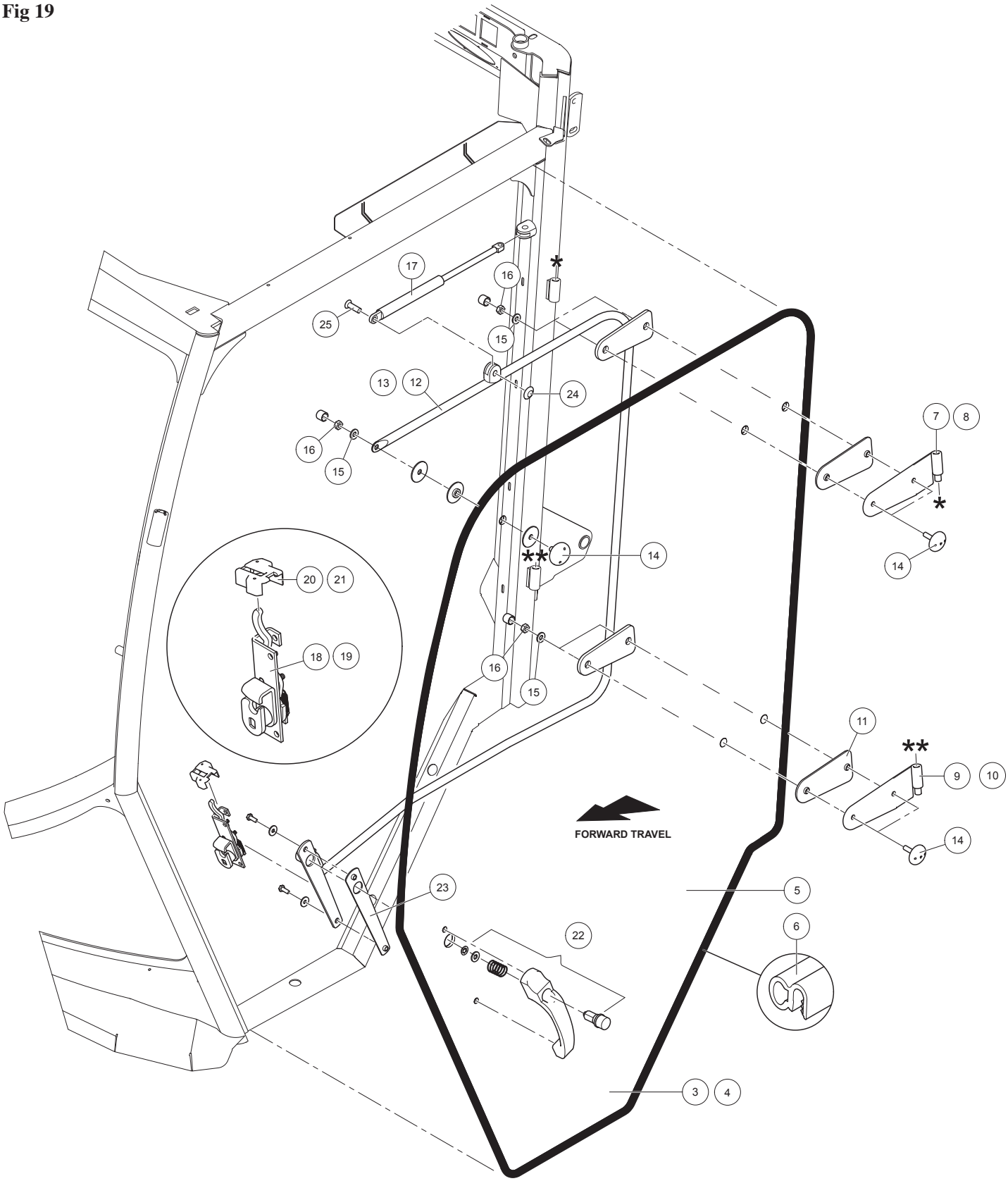
Fig 18



SAFETY CAB - MAIN FRAME/DOORS (MODEL 02880) - PARTS LIST

ITEM NO.	DESCRIPTION	PART NO.	QTY	ITEM NOTE
1	DOOR ASSEMBLY RH	111-1659	1	NOT SHOWN
2	DOOR ASSEMBLY LH	111-1660	1	NOT SHOWN
3	GLASS ASSEMBLY RH	111-1710	1	SET INCLUDE 5 & 6
4	GLASS ASSEMBLY LH	111-1711	1	SET INCLUDE 5 & 6
5	GLASS	111-1675	2	
6	SEAL	964215	1	2*4.2m
7	UPPER HINGE RH	964190	1	
8	UPPER HINGE LH	964191	1	
9	LOWER HINGE RH	964192	1	
10	LOWER HINGE LH	964193	1	
11	RUBBER	111-1749	8	
12	DOOR RAIL RH	111-1666	1	
13	DOOR RAIL LH	111-1667	1	
14	SCREW M8*32 MAUSER SPECIAL	964197	10	
15	WASHER M8	ZWP1H000U	8	
16	NUT M8	09441	8	
17	GAS STRUT	964200	2	
18	SAFETY LOCK RH	964201	1	
19	SAFETY LOCK LH	964202	1	
20	COVER RH	111-1755	1	
21	COVER LH	111-1754	1	
22	BUTTON	111-1753	2	
23	RUBBER	111-1749	2	
24	HOLDER	111-1677	2	
25	PIN	111-1700	2	

Fig 19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FORWARD TRAVEL
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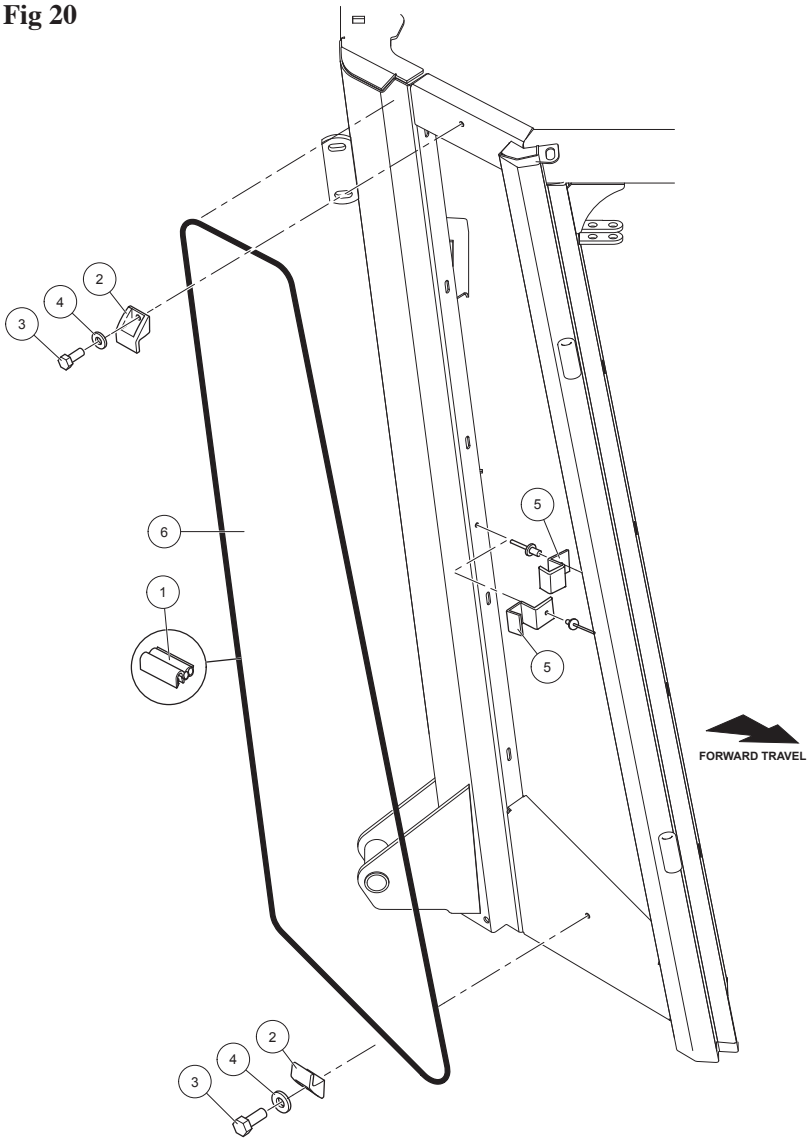
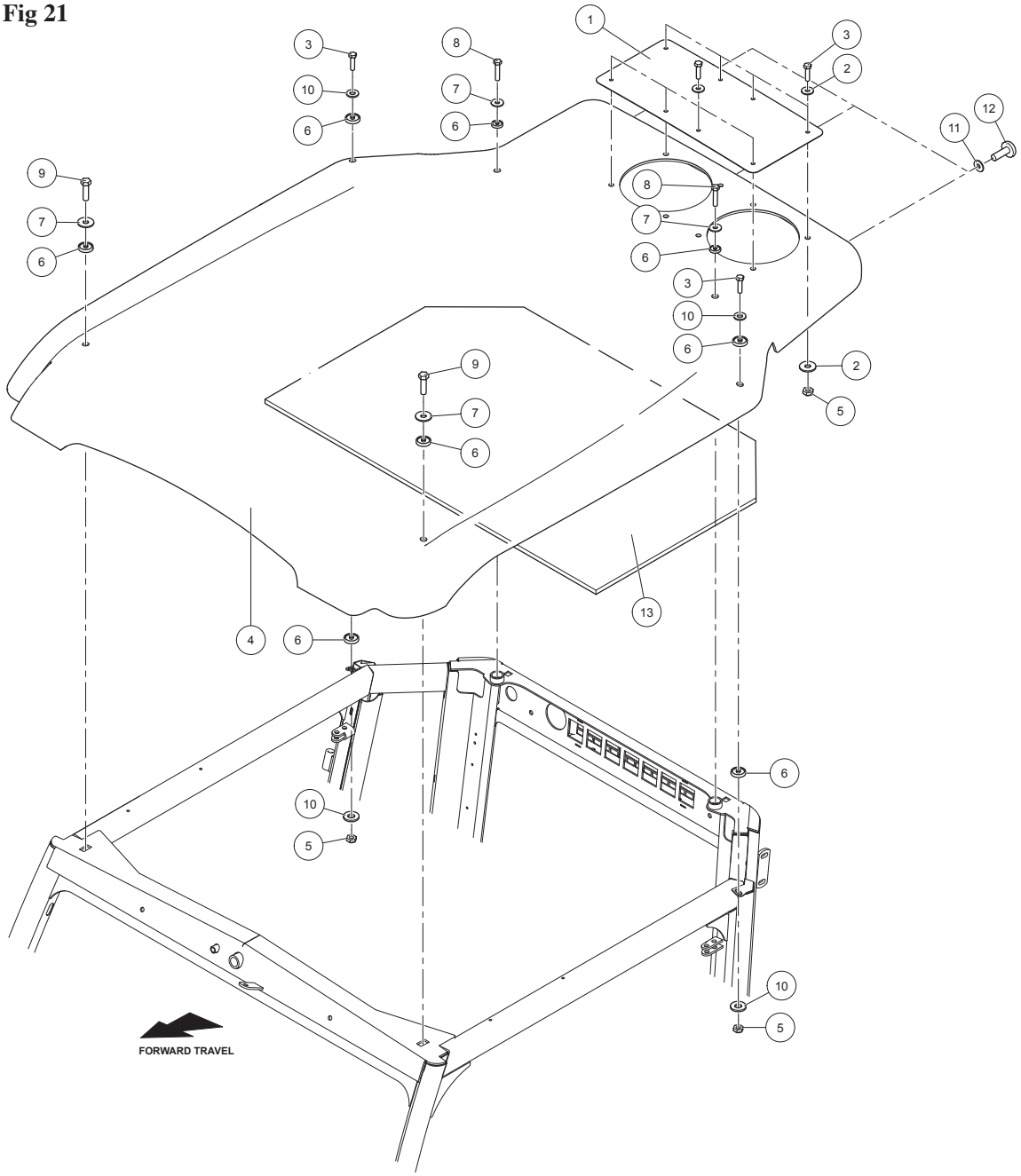
ITEM NO.	DESCRIPTION	PART NO.	QTY	ITEM NOTE
1	Seal	964215	1	2.19m
2	Bezel	964182	2	
3	Screw	964218	2	
4	Washer M6	ZWP1F000U	2	
5	Bracket	964217	2	
6	Glass	111-1674	1	

Fig 20



ITEM NO.	DESCRIPTION	PART NO.	QTY	ITEM NOTE
1	COVER	111-1671	1	
2	WASHER M6	09472	16	
3	SCREW M6*25	09364	10	
4	ROOF	111-1685	1	
5	NUT M6	09438	10	
6	WASHER M6	964131	8	
7	WASHER M8	964130	4	
8	SCREW M8*40	ZDH1H040U	2	
9	SCREW M8*30	09369	2	
10	WASHER M8	ZWP1H000U	4	
11	WASHER M4	09658	3	
12	SCREW 3.5*16 SELF TAP	111-1688	3	
13	FOAM PAD	111-1668	1	

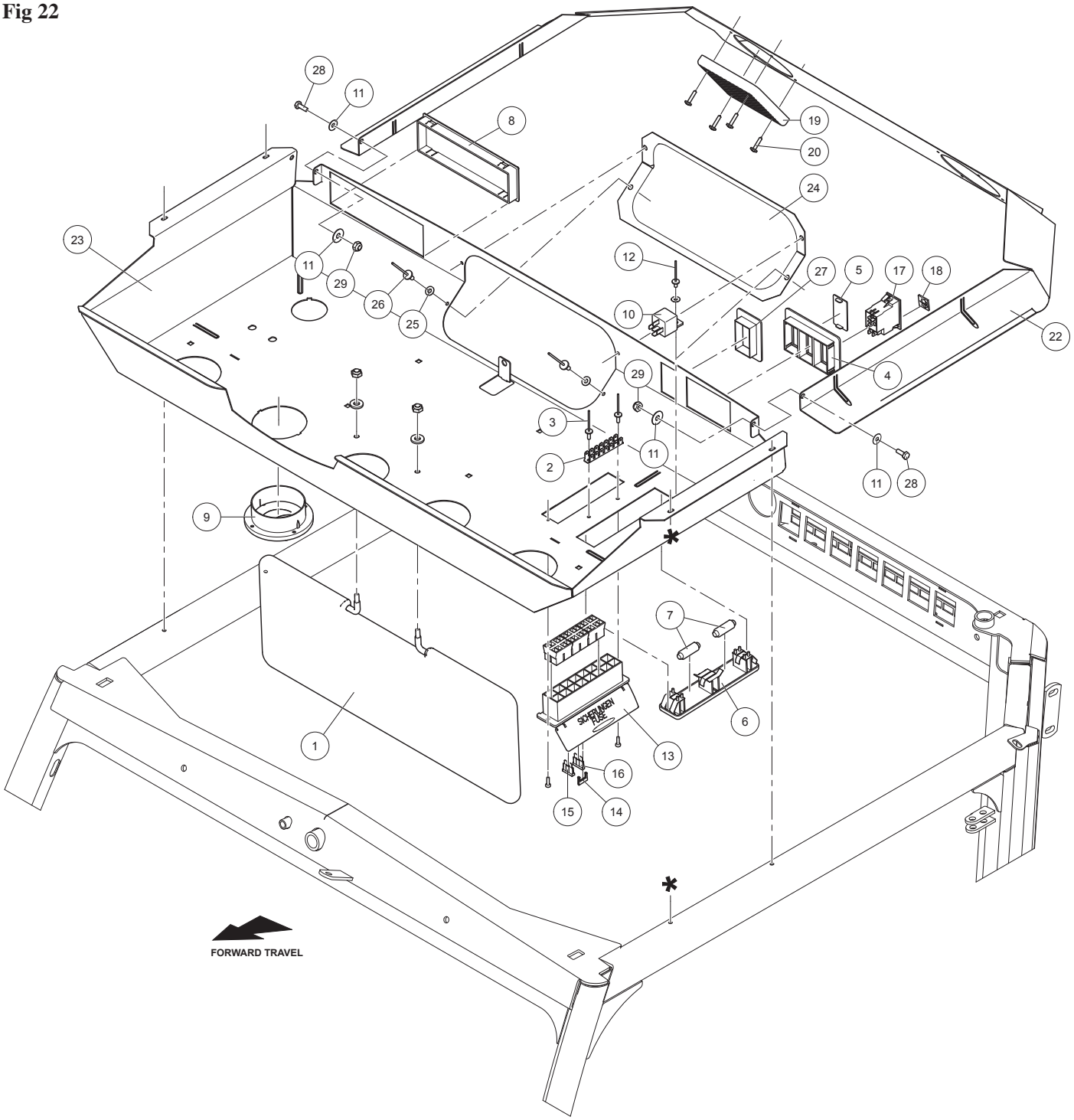
Fig 21



SAFETY CAB - ROOF INSERT (MODEL 02880) - PARTS LIST

ITEM NO.	DESCRIPTION	PART NO.	QTY	ITEM NOTE
1	SUN VISOR	111-1656	1	
2	EARTHING STRIP	111-1697	1	
3	RIVET 4*10	111-1694	2	
4	FRAME	111-1751	1	
5	BLANKING PLATE - SWITCH	111-1752	3	
6	INTERIOR LIGHT	111-1680	1	
7	5W BULB	111-1733	2	
8	BLANKING PLATE - RADIO	111-1750	1	
9	AIR NOZZLE	111-1703	5	
10	RELAY	111-1737	1	
11	WASHER M4	09658	4	
12	RIVET 4*8	111-1693	1	
13	FUSE BOX	111-1709	1	
14	FUSE BRIDGE	111-1682	5	
15	5 AMP FUSE	70-09-025	1	
16	7.5 AMP FUSE	111-1736	1	
17	SWITCH	964158	1	
18	EMBLEM	111-1743	1	
19	COVER	111-1746	2	
20	SCREW 3.5*19 SELF TAP	111-1689	8	
21	WIRING HARNESS	111-1673	1	NOT SHOWN
22	ROOF INSERT REAR + PADDING	111-1713	1	
23	ROOF INSERT FRONT + PADDING	111-1712	1	
24	AIR INTAKE GRILL	111-1672	1	
25	WASHER M4	09658	4	
26	RIVET 4*12	111-1696	4	
27	FRAME	111-1692	1	
28	SCREW M4*16	111-1687	2	
29	NUT M4	09657	2	
30	WIRING HARNESS FOR WINDSCREEN WASHER	111-1663	1	NOT SHOWN
31	MAIN WIRING HARNESS	111-1734	1	NOT SHOWN
32	WIRING HARNESS FOR WINDSCREEN WIPER	111-1732	1	NOT SHOWN
33	WIRING HARNESS FOR INTERIOR LIGHT	111-1669	1	NOT SHOWN

Fig 22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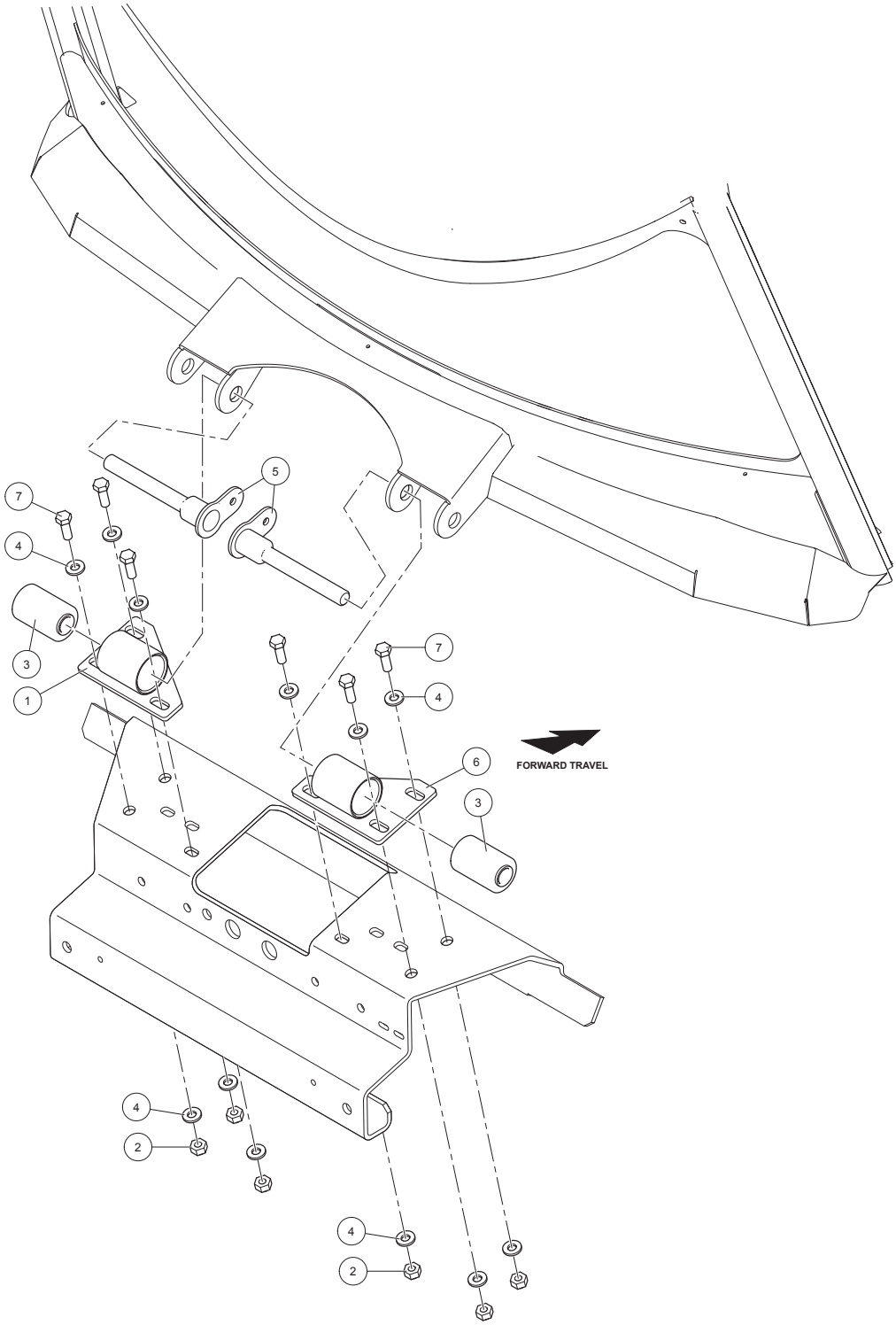
FORWARD TRAVEL

ITEM NO.	DESCRIPTION	PART NO.	QTY	ITEM NOTE
1	SUPPORT LH	964133	1	
2	NUT M10	ZNN1J000U	6	
3	FLEXIBLE BUSH MOUNTING	964135	2	
4	WASHER M10	ZWP1H000U	12	
5	LOCKING PIN	964142	2	
6	SUPPORT RH	964132	1	
7	SCREW M10*30	964134	6	

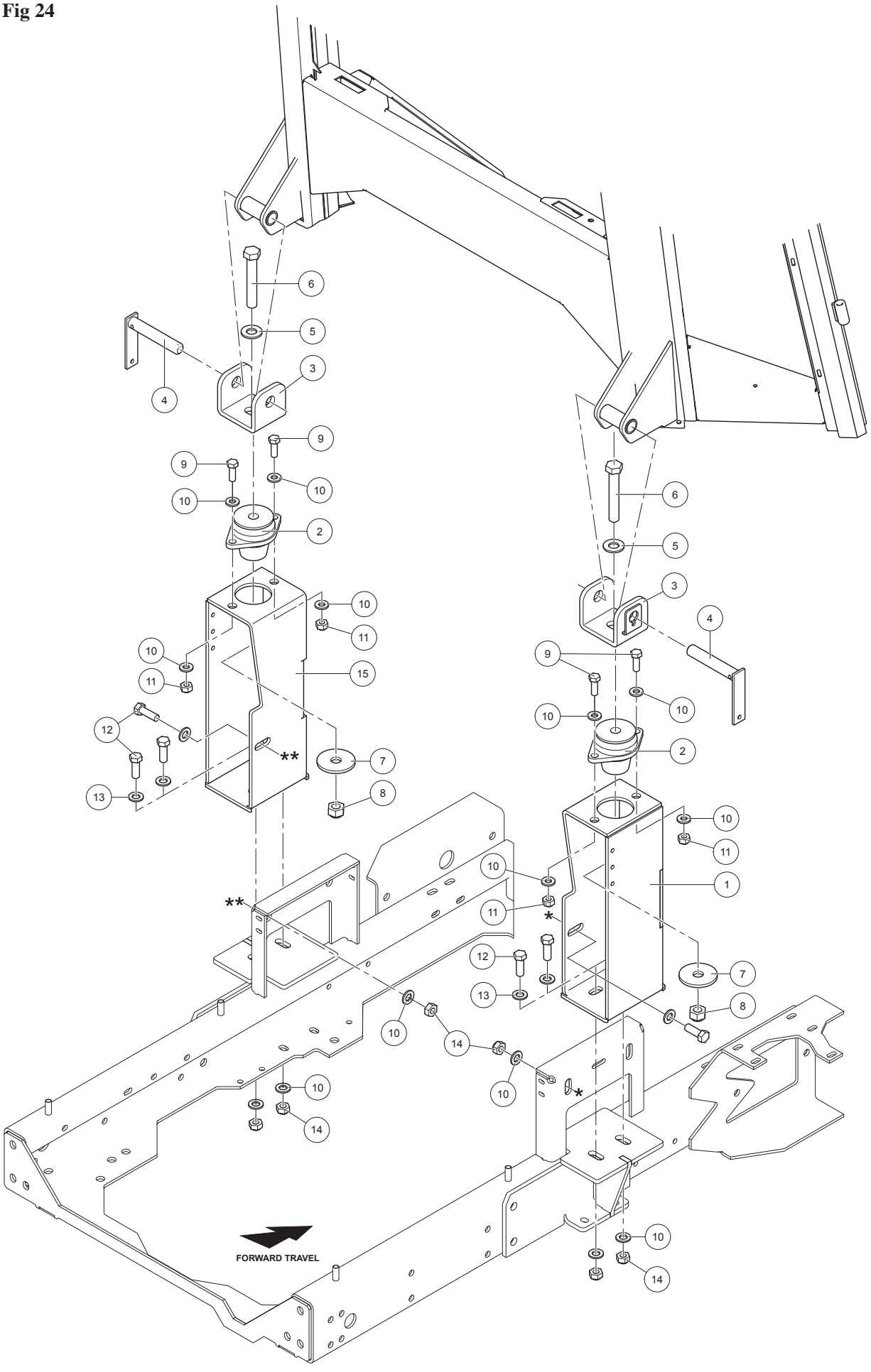
Fig 23



SAFETY CAB - REAR MOUNTING (MODEL 02880) - PARTS LIST

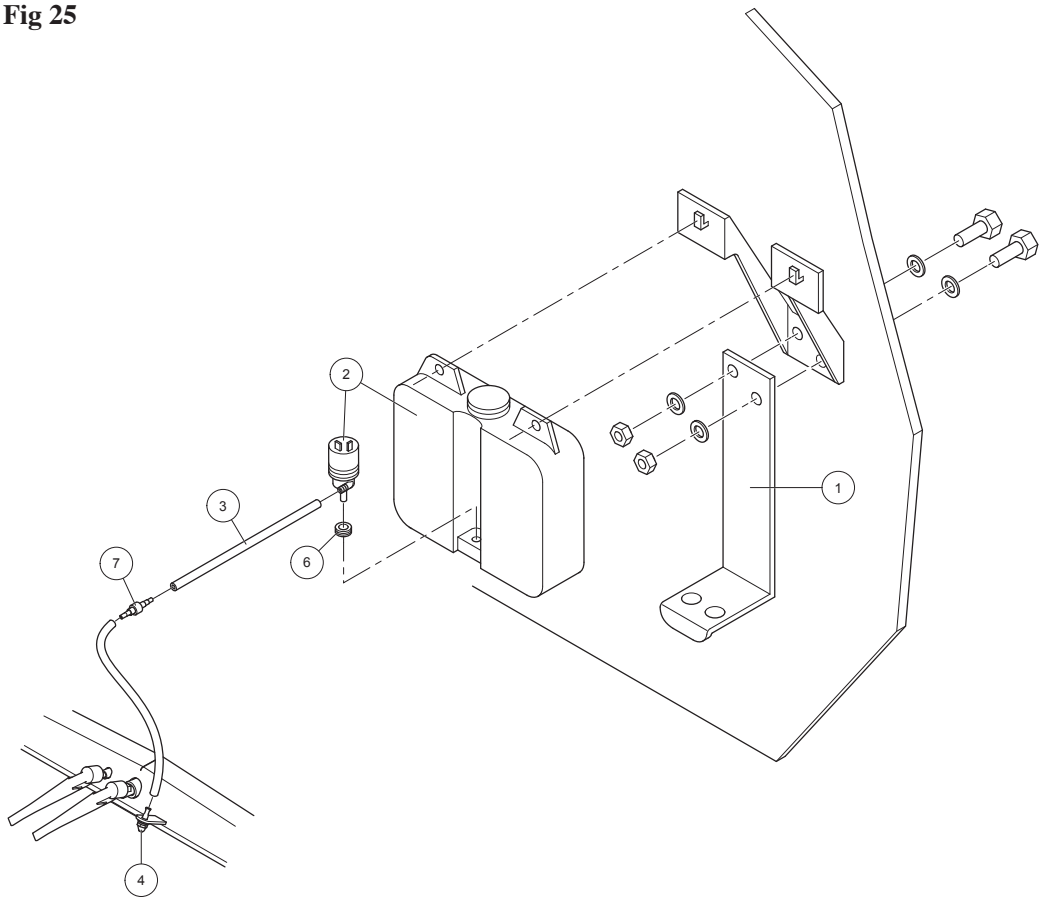
ITEM NO.	DESCRIPTION	PART NO.	QTY	ITEM NOTE
1	SUPPORT POST RH	964137	1	
2	FLEXIBLE MOUNTING	111-1686	2	
3	PIN HOLDER	964141	2	
4	LOCKING PIN	964142	2	
5	WASHER M16	111-1690	2	
6	SCREW M16*100	ZBH1P100U	2	
7	PLATE	111-1745	2	
8	NUT M16	09456	2	
9	SCREW M10*30	964134	4	
10	WASHER M10	ZWP1H000U	8	
11	NUT M10	ZNN1J000U	4	
12	SCREW M12*35	ZDH1L035U	4	
13	WASHER M12	HY09485	8	
14	NUT M12	09650	4	
15	SUPPORT POST LH	964138	1	

Fig 24



ITEM NO.	DESCRIPTION	PART NO.	QTY	ITEM NOTE
1	BRACKET	111-1731	1	
2	RESERVOIR WITH PUMP	964234	1	
3	HOSE	111-1741	1	4.65m
4	NOZZLE	111-1735	1	
5	CABLE TIE	HY3966	7	NOT SHOWN
6	GROMMET	111-1742	2	
7	CHECK VALVE	964239	1	

Fig 25



SAFETY CAB GENERAL ASSEMBLY - INTRODUCTION

Check that all parts have been correctly supplied.

Optional kits are also available for cab mounting, as listed below:

- Beacon Kit - Model 02843 **(T4240 & R3240T Only)**
- Lighting Kit (Includes fitting kit) - Models 02844 & 02846 **(R3240T Only)**
- Lighting Kit (Includes fitting kit) - Models 02844 & 02847 **(LT3240 Only)**
- Lighting Kit (Includes fitting kit) - Models 02844 & 02845 **(T4240 Only)**
- Deluxe Seat - Models 02865 - Vinyl & 02866 - Fabric **(All Machines listed in this Manual)**
- Cab Tilt Kit - Model 02886 **(All Machines listed in this Manual)**

WARNING: PREVENT ACCIDENTS

- **It is essential to have a suitable lifting device with a safe capacity of 350Kg.**
- **Always wear eye protection, gloves and use suitable breathing protection when drilling, cutting or filling glass reinforced plastic or similar materials. Dust particles can cause extreme irritation to skin, eye, etc. Do not inhale.**

The cab must be fitted by an authorised dealer.

SAFETY CAB GENERAL ASSEMBLY - ASSEMBLY

Read and understand the assembly instructions before proceeding. Refer to the Operator's Manual and Spare Parts Book as follows:

1. Lower the cutterheads to the ground.

2. Apply the parking brake, switch off the engine and remove the ignition key.

3. Remove the plastic tool tray from the platform. **Refer to Fig 26**.

4. Disconnect the battery terminals, first the negative (-ve) and then the positive (+ve).

5. Release the padlock securing the locking latch handle with the key provided. Move the locking latch handle towards the front of the mower (position A) until the latch hooks clear the locking bar. Raise the platform. The gas spring will provide assistance. **Refer to Fig 27**.

Fig 26

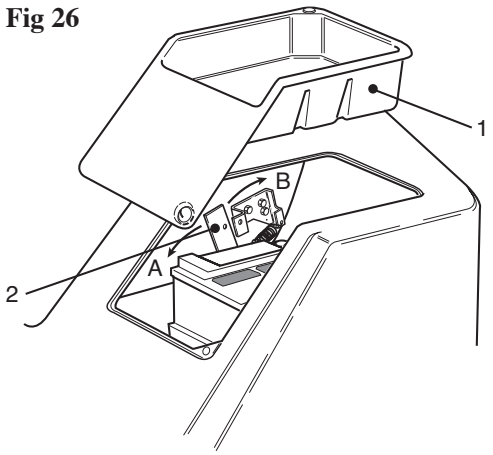
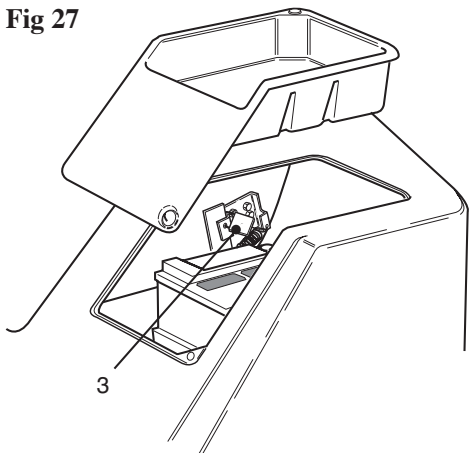


Fig 27



1. Tool tray
2. Locking latch handle
3. Padlock

A. Releasing
B. Securing

SAFETY CAB GENERAL ASSEMBLY - 2 POST ROPS REMOVAL (If applicable)

This cab is a fully tested ROPS cab and is approved to Directive 79/622/EEC as amended. Remove existing ROPS:

1. Support the ROPS by a safe manner. Remove securing bolts and ensure that is safely supported using the harness to hold the weight.

2. Remove the bolts securing the front hoop to the chassis.

3. Remove the front ROPS hoop.

4. Remove the two bolts each side that fix the ROPS to the fuel tank supports.

5. Remove the bolts that secure the lower section of the ROPS to the brackets fixed to the chassis.

6. Remove the complete ROPS frame.

The platform latch must be removed, refer to step 7 below.

7. Remove the platform latch retaining spring. Unbolt the latch pivot plates and remove the latch rod and handle. Replace the latch pivot plates in their original position. **Refer to Fig 28**.

Fig 28

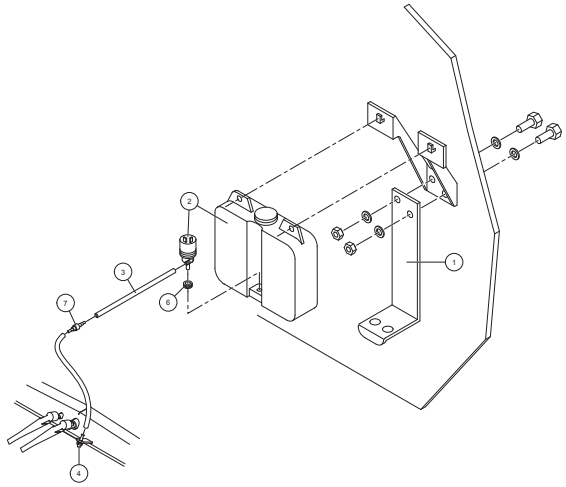
SAFETY CAB GENERAL ASSEMBLY -WATER BOTTLE ASSEMBLY

8. Use the template provided with this manual, (**Refer to page 43**) and drill 2*5.5mm diameter holes in the rear LH side of the platform. **Refer to Fig 29**.

9. Fit the washer bottle mounting bracket with the M5 set screws, nuts and washers provided. Fit the washer bottle assemble to the mounting bracket using the fixing screws provided. **Refer to Fig 30**.

Fig 29

Fig 30



10. Seek assistance to steady the operator platform and remove the gas strut. **Refer to Fig 31**.

11. Seek assistance and carefully lower the operator platform. Fold the seat and arms forwards to provide adequate clearance for the cab assembly. **Refer to Fig 32**.

12. Remove both of the front pivot support plates at the front of the platform. **Refer to Fig 33**.

13. Assemble the pivot support plates to the front of the cab assembly using the pivot retaining pins. **Refer to Fig 33 (A)**.

14. Remove the bolts which will retain the cab assembly to the transport frame. **Refer to Fig 33 (B)**.

Fig 31

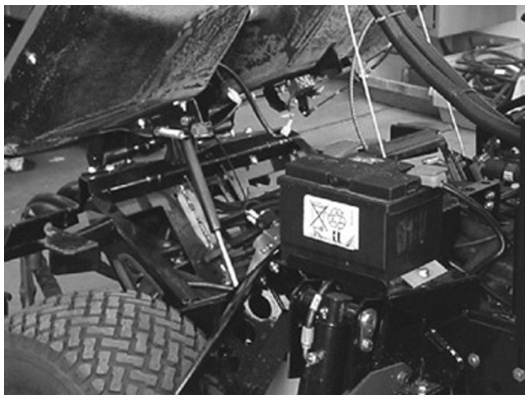
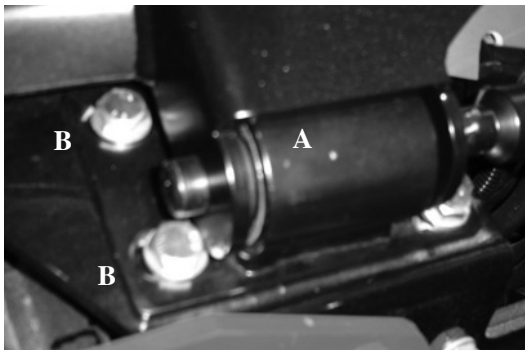


Fig 32

Fig 33



15. Remove both cab doors and the roof, before fitting.

16. Using suitable lifting equipment (minimum safe lifting capacity of 350Kg) raise the cab clear of its transport frame. **Refer to Fig 34**.

Fig 34

17. Ensure straps are positioned to the back of the cab. Allowing the front of the cab to tilt in a forward direction. **Refer to Fig 35**.

18. Carefully guide the cab assembly over the vehicle using the lifting equipment and lower with the front of the cab tilting forward. **Refer to Fig 35 and Fig 36**.

19. Loosely bolt the front pivot plates in position. **Refer to Fig 37**.

20. Lower the cab fully onto the platform and ensure that it is correctly positioned and supported around the base. **Refer to Fig 38**.

Fig 35

Fig 36

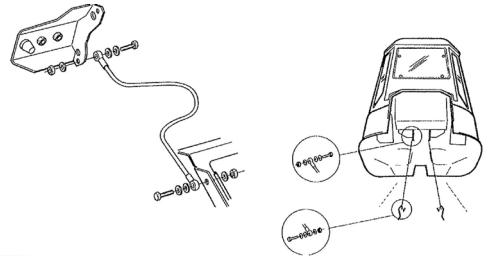


Fig 37

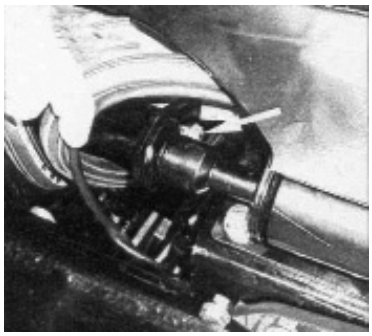
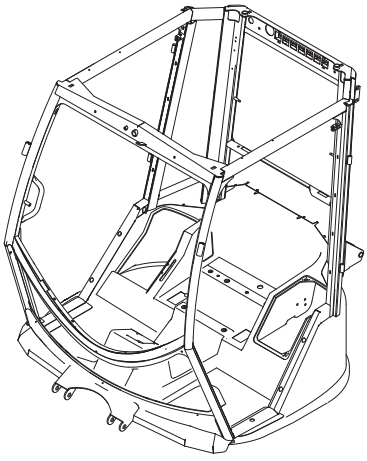


Fig 38



21. Push the pivot retaining pins towards the centre to fully engage with the original platform pivot pin at the front of the cab assembly and retain with the M6 screws, nuts and washers provided.

22. Finally tighten the pivot plate fasteners to the recommended torque. **Refer to page 42**.

23. Drill ten holes 8.5 mm diameter through the operator platform, using the cab frame holes as a template. Three on each side as shown in **Fig 39** and four in the rear frame as shown in **Fig 40**.

CAUTION: PREVENT ACCIDENTS - Take extreme care when drilling at the rear of the cab frame to avoid damage to the fuel tank.

24. Assemble the M8 bolts, nuts and washers provided to secure the six locations around the door apertures to the platform, tighten the fasteners securely and fit the blanking plugs.

25. Using the lifting equipment, carefully raise the cab/ platform assembly to the service position and refit the gas strut. (Note: Where a cab lifting kit has been fitted the gas strut is not required).

26. Fit the 2 platform retaining cable assemblies through the front holes of the pivot brackets located beneath the operator platform and the existing lower M8 setscrews which attach the latching bar assembly to chassis assembly. Use the M8*30 setscrews, nuts and washers to attach the cable upper ends to the pivot brakes. Tighten the nyloc nuts just sufficiently to enable the cable ends to self-align under tension. **Refer to Fig 41**.

27. Assemble the final six bolts, nuts and washers required to secure the rear of the cab to the platform. Tighten the fasteners securely.

28. Drill a 14 mm diameter hold on the LH rear side of the platform and feed the washer bottle wiring and water tubing through. **Refer to Fig 42**.

Fig 39

Fig 40

Fig 41

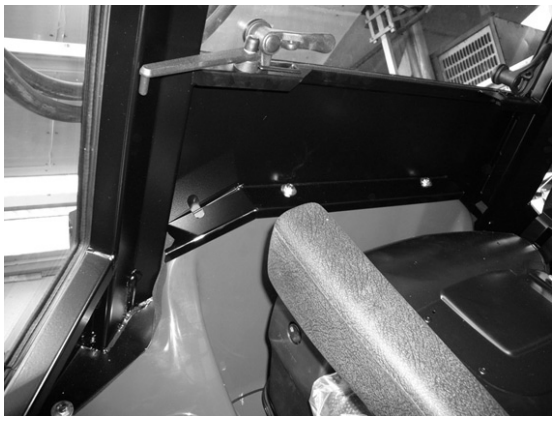


Fig 42

29. Connect the red positive washer bottle wire to the red fuse box positive battery feed. **Refer to Fig 43**.

    Connect the red/black wire from the cab to the other side of the fuse box.

    Connect the brown negative wire tot he frame.

    Connect the short red/black ignition wire assembly connected to the other side of the fuse in the fuse box to terminal 58 on the ignition switch.

    Cable tie the cab wiring connections and the fuse box to secure them safely in place.

30. Lower the cab/platform assembly.

31. Remove the two rearmost M8*30 setscrews (item 43) which secure the fuel tank retaining brackets. Fit the LH and RH cab support bracket assemblies with mounting plates (item 58) beneath the chassis mounting points using 4 M12*40 bolts, nuts and washers. Do not fully tighten at this stage. **Refer to Fig 44**.

32. Lift the loosely bolted cab support 'U' bracket into position and insert the retaining pins. Measure the free vertical clearance in order to make an assessment of the number of spacer plates and or thrust washers required for the final assembly.

33. Replace the four M12*30 setscrews (removed at stage 33) to secure the fuel tank retaining brackets and tighten securely. Fully tighten all fasteners which secure the LH and RH cab support bracket assemblies.

34. Seek assistance and replace the roof panel.

35. Replace the cab doors and fasten securely.

36. Fill the washer bottle.

37. Reconnect the battery terminals.

38. Replace the tool tray to protect the battery.

Fig 43

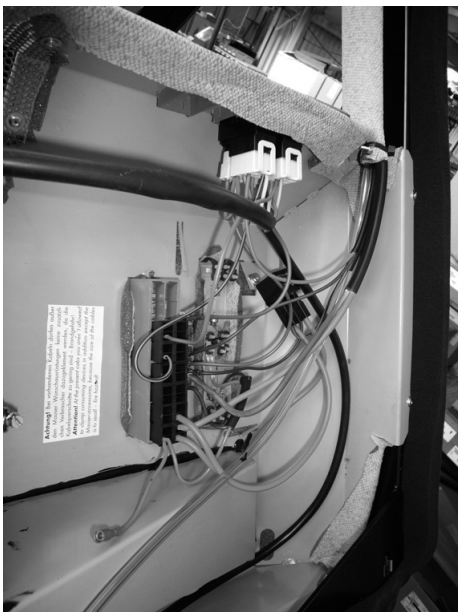
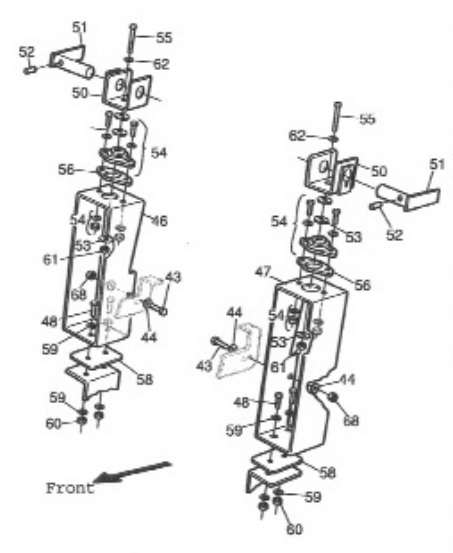


Fig 44



40. For 200 mm MK3 cutterheads proceed as follows:

- Remove the nut caps, M24 nuts and washers which retain each of the front cutterheads and slide both assemblies forward to dismount them from the suspension pins. **Refer to Figs 45, 46 and 47**.

- Remove both suspension pin assemblies.

- Remove the nut caps, M24 nuts and pin retainers from the suspension pins and refit them to longer suspension pins supplied. **Refer to Fig 47**.

- Refit the longer suspension pin assemblies to the front suspension arms.

- Assemble the spacers supplied and refit the cutterheads.

- Re-assemble the M24 nuts, washers and tighten securely. Refit the nut caps. **Refer to Fig 48**.

Torque settings:
Tighten all the fasteners to the recommended torques shown below:

M8	Fasteners	23Nm	M12	Fasteners	75Nm
M10	Fasteners	43Nm	M16	Fasteners	190Nm

Fig 45

Fig 46

Fig 47

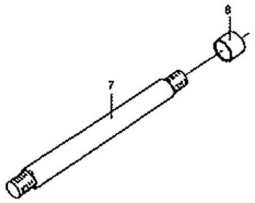
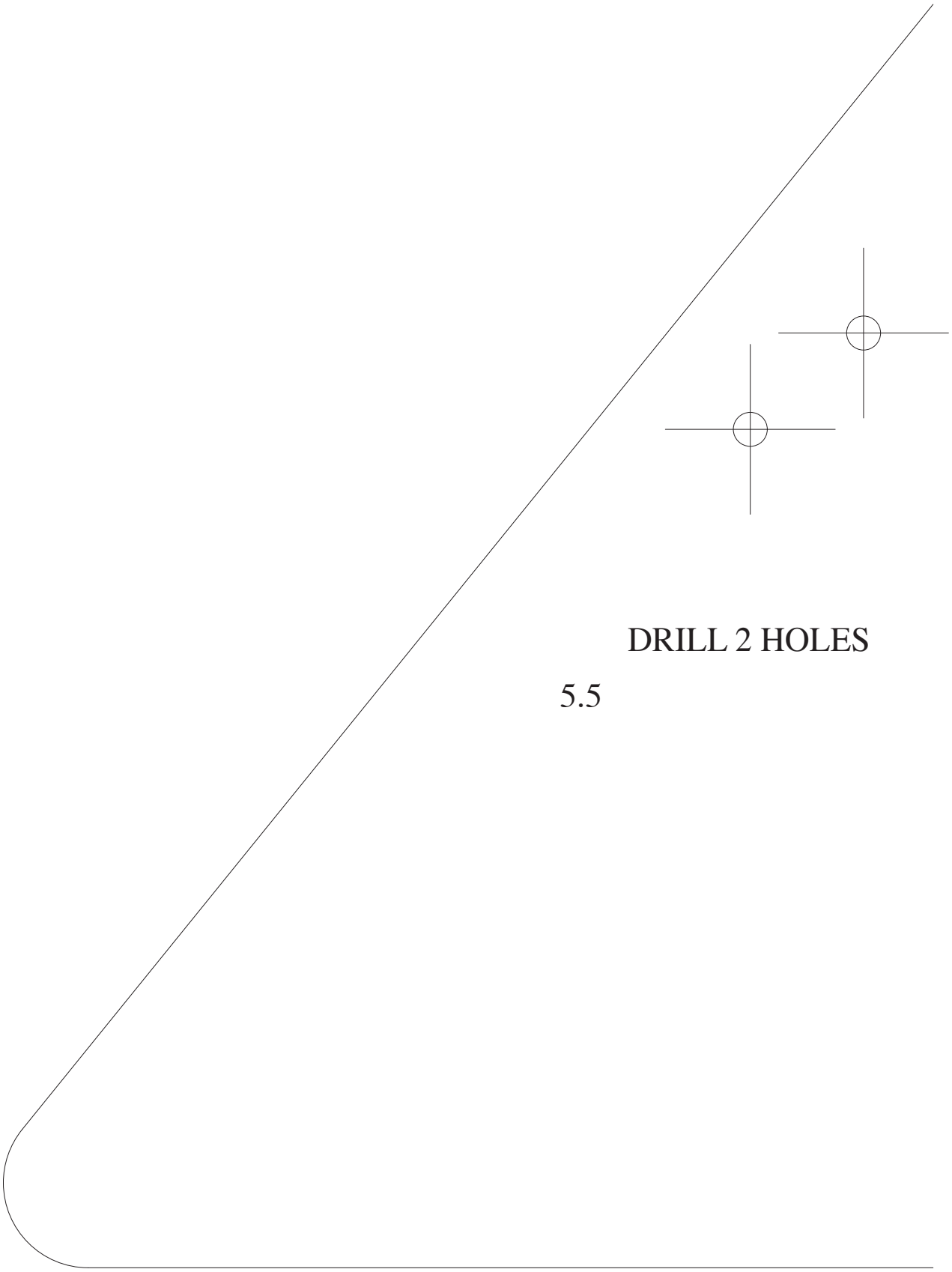


Fig 48


DRILL 2 HOLES
5.5

BEACON INSTALLATION - INTRODUCTION

The wiring loom and mounting bracket are supplied with the cab. The mounting bracket can be attached to the right or left side of the cab as required.

BEACON INSTALLATION - ASSEMBLY

1. Disconnect the negative (-ve) battery lead first and then disconnect the positive (+ve) battery lead.

2. Remove the cab roof to gain access to the beacon wiring loom connector.

3. The beacon mounting bracket utilises the two bolts that secure the air-conditioning assembly to the rear cab posts. If the air-conditioning is not fitted then secure the mounting bracket (item 10) to the air-conditioning mounting lugs using the new bolts (items 11, 12, 13) supplied with the beacon kit.

4. Bolt the upstand (item 2) to the mounting bracket using items 3, 4, 5, 6 and tighten sufficiently so that it can be raised and lowered but is held in position when released.

5. Bolt the beacon to the top plate of the upstand using items 7, 8, 9.

6. Connect the wiring loom (item 16) to the fuse box with the live wire (orange and as shown in **Fig 50**). Connect the black wire the earth terminal (as shown in **Fig 50**). Connect both the switch (item 16) and the connector as shown in **Fig 50**. Connect the leads (A & B shown in **Fig 51**) on the beacon to the wiring loom in the roof space of the cab.

7. Insert the fuse into slot no. 3. **Refer to Fig 50**.

8. Re-fit the cab roof.

9. Re-connect the positive (+ve) battery lead first and then re-connect the negative (-ve).

10. Turn the ignition switch to the 'I' position and depress the beacon switch to check that the beacon illuminates and rotates correctly.

BEACON INSTALLATION - (MODELS 02843 & 02848) - PARTS LIST

ITEM NO.	DESCRIPTION	PART NO.	QTY	ITEM NOTE
1	BEACON ASSEMBLY	70-01-493	1	
2	UPSTAND	952205	1	
3	BOLT M12*55	ZBH1L055U	1	
4	NUT M12 NYLOC	09650	1	
5	DISC SPRING	63-11-007	2	
6	BUSH NYLON FLANGED	924816	1	
7	SETSCREW M6*20	09363	3	
8	WASHER PLAIN	09472	3	
9	NUT NYLON M6	09438	3	
10	BRACKET BEACON MOUNT	111-1465-03	1	WITH CAB
11	SETSCREW M8*25	03162	2	
12	NUT M8 NYLON INSERT T TYPE	09441	2	
13	WASHER PLAIN M8	ZWP1H000U	4	
14	FUSE AMP	70-09-025	1	
15	SWITCH - BEACON	924608	1	
16	LOOM - BEACON KIT	952250	1	
17	LENS - SWITCH	924609	1	

Fig 50

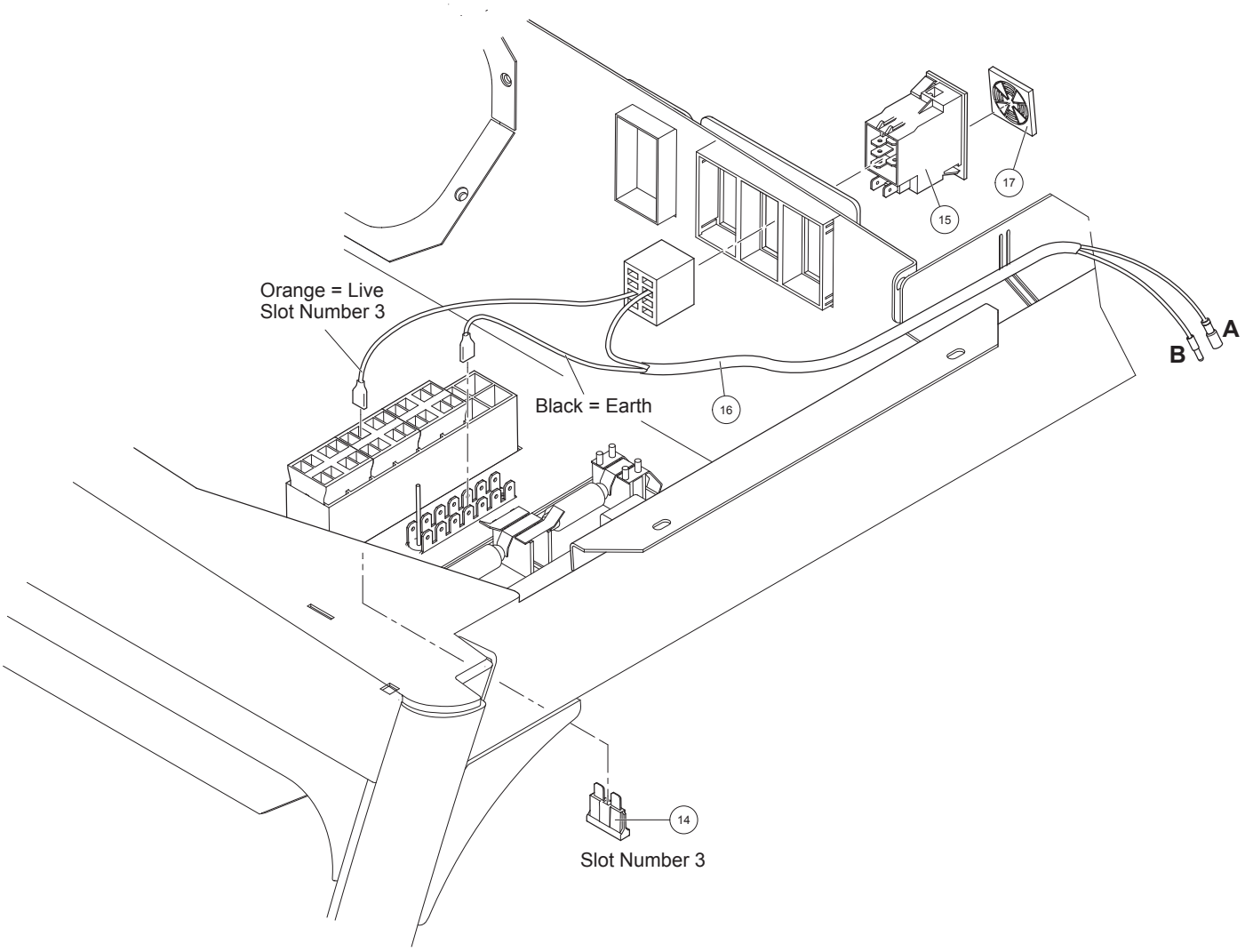
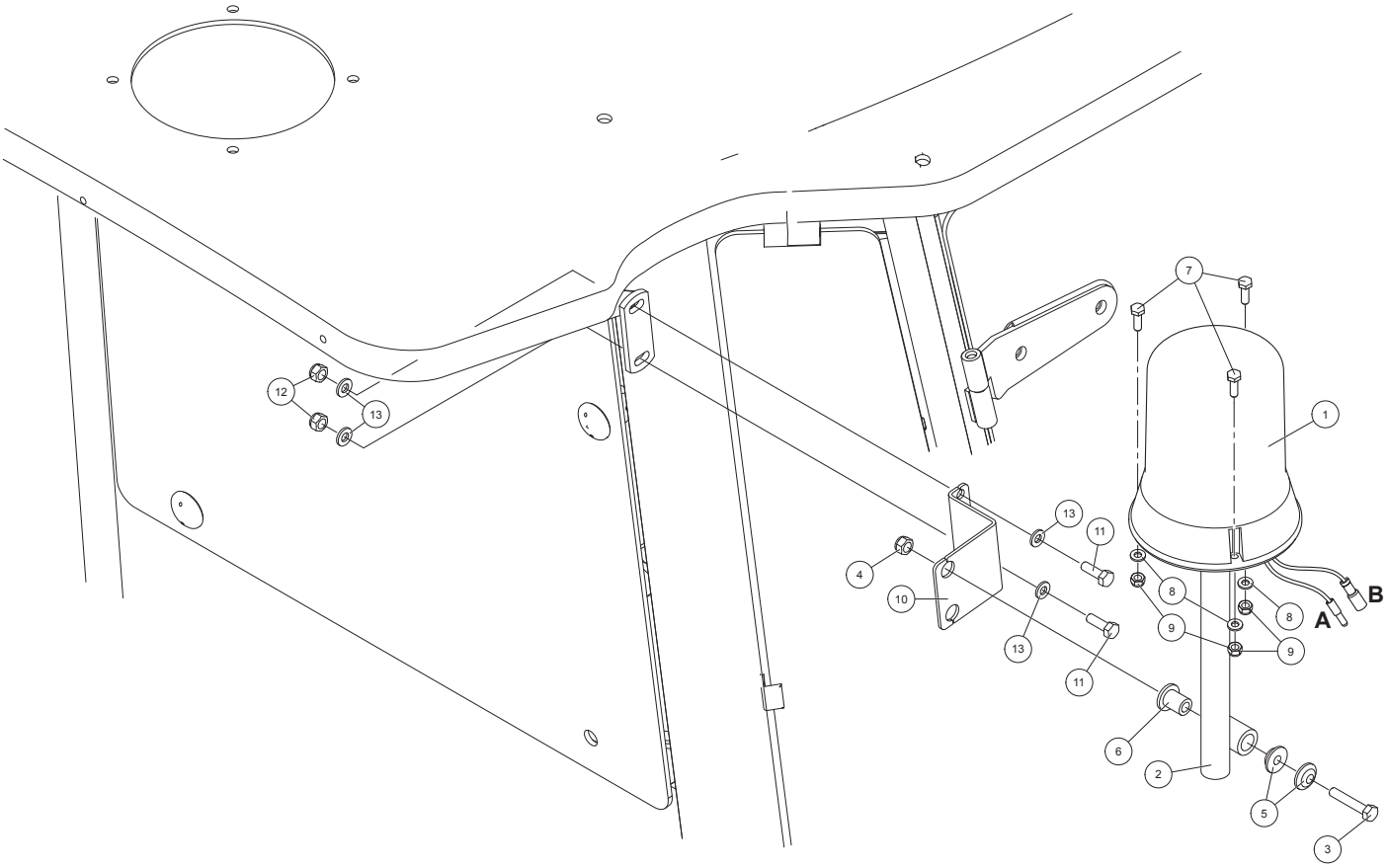


Fig 51

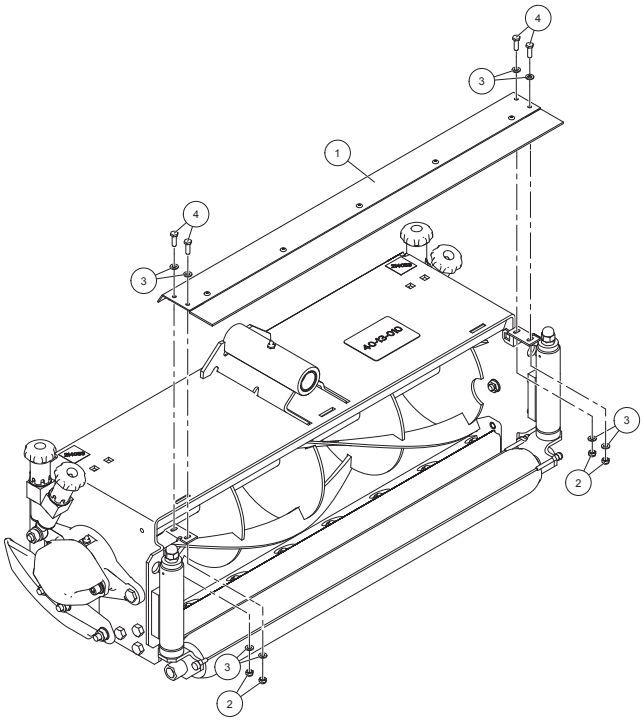


REAR DEFLECTOR - ASSEMBLY

1. Align item 1, the rear deflector with the brackets shown on the cutterhead. **Refer to Fig 52**.

2. Use the fasteners (items 2, 3, 4) to secure the deflector into position. **Refer to Fig 52**.

Fig 52



REAR DEFLECTOR - PARTS LIST

ITEM NO.	DESCRIPTION	PART NO.	QTY	ITEM NOTE
1	DEFLECTOR ASSEMBLY - CAB KIT	111-0177	2	
2	NUT M5 NYLOC	09430	8	
3	WASHER PLAIN M5	09470	16	
4	SETSCREW M5*16	ZDH1E016U	8	

NOISE REDUCTION KIT - ASSEMBLY

Note: Before fitting any of the noise reduction components, ensure that the sticking surfaces are free from dirt and grease by using a suitable cleaner.

1. Inside the cab, fold the seat-back down to gain access to the rear of the cab. Loosen the two M8 bolts holding the cab to the platform and fit the plate (item 14). **Refer to Fig 53**. Tighten bolts.

2. To fit components inside the cab, refer to **Fig 53**. Identify items 10, 11, 12 and 13. Visually confirm locations and verify proper fit before sticking. Remove backing from components and fix into the locations. **Refer to Fig 53**.

3. Use a roller where possible to help adhesion.

4. Remove the retaining pins in the rear cab support brackets. Carefully raise the cab/platform.

5. To fit components under the platform, refer to **Fig 54**. Identify items 1 to 8. Visually confirm locations and verify proper fit before sticking. Remove backing from components and fix into the locations. **Refer to Fig 54**.

6. A roller should be used to press the components where possible to help adhesion (as in step 3). Take special care with making sure the edges are fully adhered. Full adhesion takes up to 24 hours. Suitable additional adhesive should be used where required.

7. Carefully lower cab/platform and ensure it closes correctly and that all noise proofing material is away from moving parts.

8. Replace the retaining pins in the rear cab support brackets to secure platform.

Fig 53 - Internal cab positions

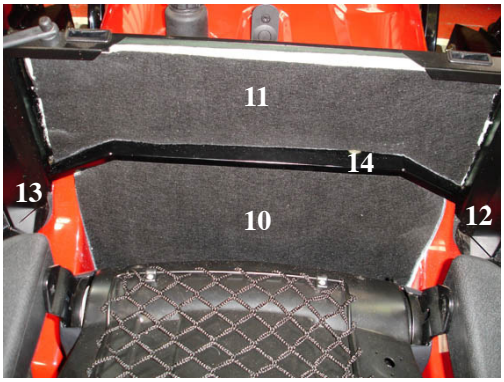


Fig 54 - Under platform positions

AIR-CONDITIONING & HEATING INSTALLATION - INTRODUCTION

The Heater Blower must be fitted by an authorised dealer who is conversant with the installation of air conditioning systems. It is advisable to install the air conditioning before fitting of the cab. Read and understand the assembly instructions before proceeding.

The complete air conditioning installation comprises of the following:

- The evaporator matrix, heater matrix and blower whilst mounted in the front section of the cab roof with the condenser, fans and filter fitted in the rear of the cab roof.

- The compressor and its mounting brackets are mounted on the engine.

- There are separate fitting kits for each machine model.
  LT3240 - Use fitting kit Model No. 02885
  T4240 - Use fitting kit Model No. 02883
  R3240T - Use fitting kit Model No. 02884

AIR-CONDITIONING & HEATING INSTALLATION - ASSEMBLY

The below instructions are for the following machines: LT3240, T4240 and R3240T.

1. Disconnect the battery terminals, first the negative (-ve) and then the positive (+ve).

2. Remove the blanking panel from under the rear extension to the cab roof. Remove the cab roof.

3. Fix the air conditioning and heater blower unit to the roof insert (A). **Refer to Fig 55**.

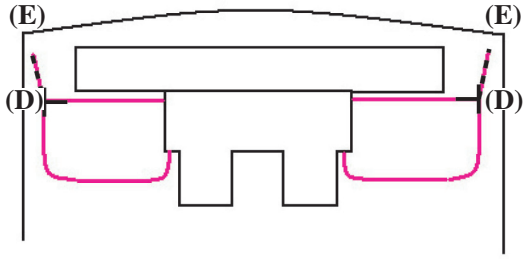
4. Fix the air channel to the roof insert and against the air conditioning and heater blower unit (B). **Refer to Fig 55**.

5. Seal the joint between the air channel and the heater blower unit with a sealing compound (C). **Refer to Fig 55**.

6. Connect the clear condensate water pipes to the air conditioning matrix. Using the T pieces, route (D) the pipes through the cab roof plate and down the inside of the cab front corner posts (E). **Refer to Fig 56**.

Fig 55

Fig 56 - SHOWING PLAN VIEW OF CONDENSER WATER HOSE T PIECE



7. Cut a hole in the roof lining from inside the cab roof to mount the hot water valve. **Refer to Fig 58** (L).

8. Insert the plastic housing for temp switch (H) and snap in position. **Refer to Fig 57**.

9. Cut two holes in the roof lining for the air con control panel (I) and fit the control panel. **Refer to Fig 57**.

10. Screw on the valve and operating handle.

11. Connect the short length of heater hose (K), one end to the heater unit (A) and one end to the hot water valve. **Refer to Fig 56 and 58**.

12. Connect the two long heater hoses (M), one to the other connection on the heater blower unit (A) and one to the other connection on the hot water valve (L).

13. Slide the hose protection sleeves over both hoses.

14. Route both heater hoses with protective sleeves from the rear corner post, through the rear right cab support posts into the engine bay. **Refer to Fig 59**.

15. Lay the capillary pipe (J) from the temperature controller (H) to the air conditioner and plug it in the existing hole (about 50 mm). **Refer to Fig 57 (H) and Fig 58 (J)**.

16. Bolt the air conditioning console to the rear of the cab with the open side uppermost. This console contains the condenser and dryer.

17. Slowly disconnect the climatic hose from the dryer.

18. Open the screw plugs slowly to allow the nitrogen to slowly escape. The parts are filled with nitrogen to prevent corrosion during storage.

19. Lead the hose from the condenser inward through the hole in the rear strut of the cab.

20. Lay the hoses according to the picture and connect the thin hose to the dryer again.

21. Lead the climatic hoses downward through the left hand cab rear post.

Fig 57

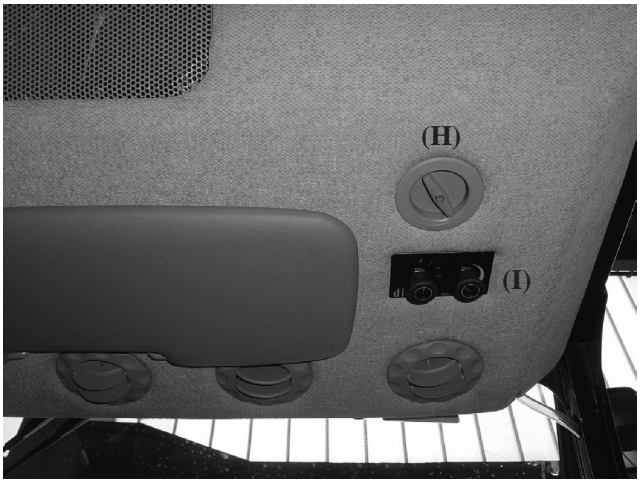


Fig 58

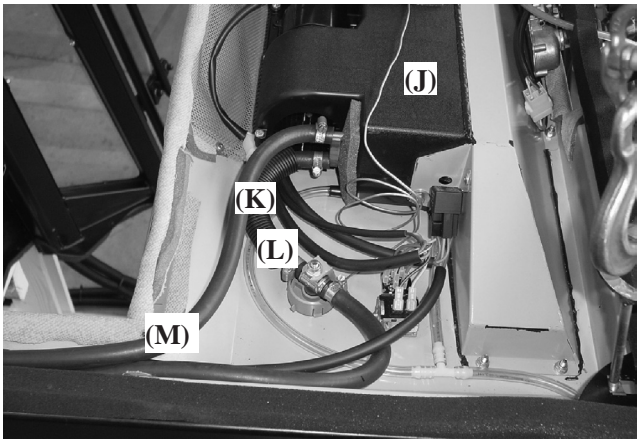
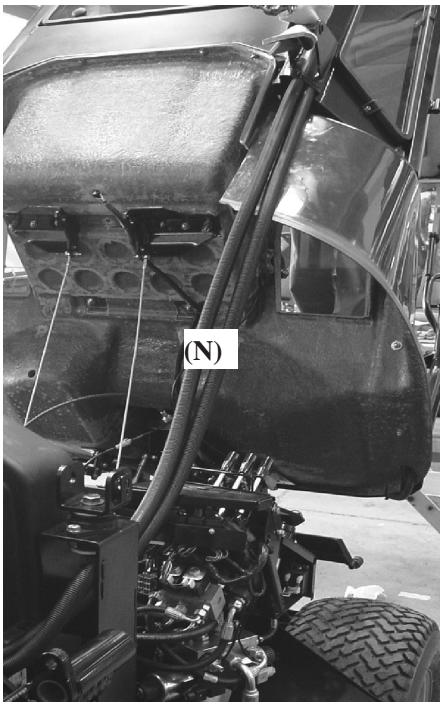


Fig 59



22. Lead the thick hoses with the connections already fitted down inside the rear left hand post. Then tape it carefully with the special tar rich tape. **Refer to Fig 60** (O).

23. Lay the thick and the medium hose down inside the cab rear cross member. **Refer to Fig 60** (P).

Fig 60

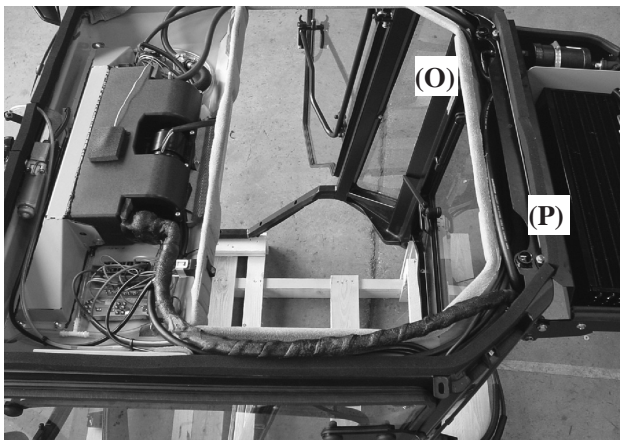
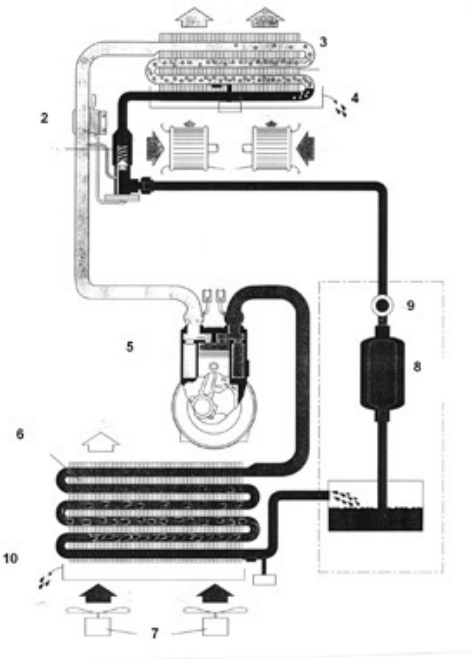


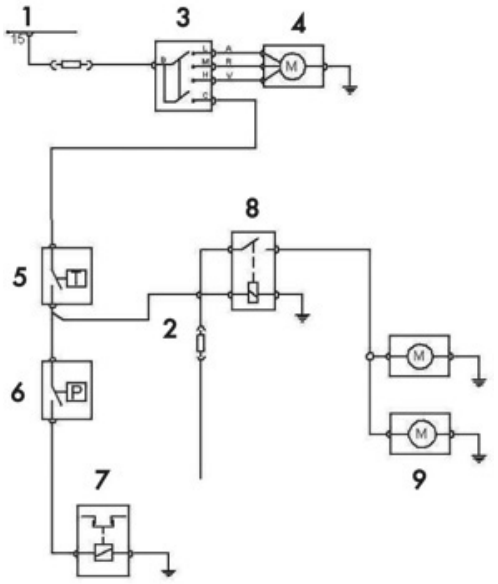
Fig 61



Air Conditioning circuit

Item	Description
1	Radial blower
2	Expansion valve
3	Evaporator combined with heat exchange for heating
4	Condensed water
5	Compressor
6	Condenser
7	Axial fans
8	Dryer filter
9	Sight glass
10	Draining

Fig 62



Electrical circuit

Item	Description
1	Fuse box position 4 (15A)
2	Fuse box position 6 (20A)
3	Blower switch
4	Radial blower control (air conditioning)
5	Thermostat
6	Pressure switch
7	Compressor magnetic clutch
8	Relay
9	Twin axial blower fans

Refer to full electrical circuit diagram at the end of these instructions.

24. Pick up the wiring harness and connect the 2 pole plug with green cable to the pressure plug.

25. Connect the 2 pole plugs (red/brown) (Q) to the fans on the roof (when installed later). **Refer to Fig 63** (Q).

26. Put canvas covering (R) onto tarred hoses to prevent them from sticking to the roof. **Refer to Fig 64** (R).

27. Run the rest of the wiring harness inside the left hand top cab rail to the front of the roof space.

28. Connect the other end of the harness to the blower and switches in accordance with the wiring diagram.

29. Fix the cables to hoses with cable ties.

30. Remove the blanking plate from the top of the roof. **Refer to Fig 65**.

31. Screw the two axial fans to the underside of the roof. At the same time attach the mesh screen to the top surface of the roof. **Refer to Fig 66**.

32. Refit the roof ensuring that the electrical connections are made between harness and axial fans.

33. Ensure that the air conditioning hoses and the water hoses have their protective sleeve fitted. The sleeve should continue 100mm inside cab posts. **Refer to Fig 67**.

34. Cable tie the hoses together to prevent scuffing.

Heater hose connection

Follow the instructions in the relevant section of this manual for installing the Heater only. The connection details are the same for all models of mower for which these parts are suitable.

Fig 63

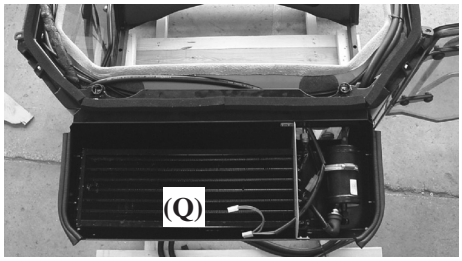


Fig 64

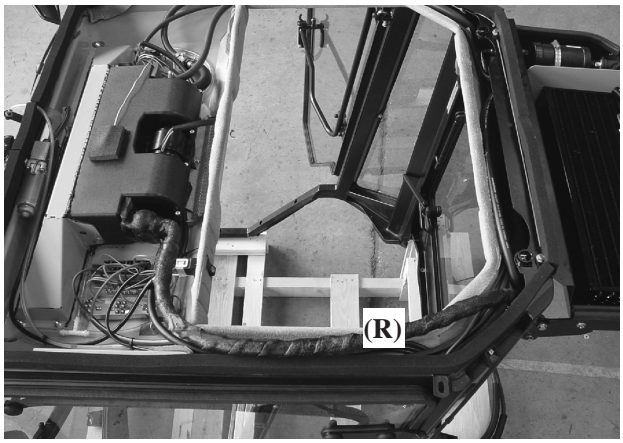


Fig 65

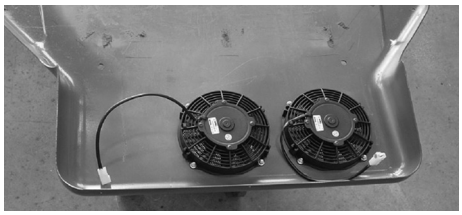


Fig 66

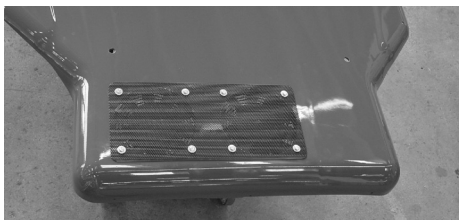
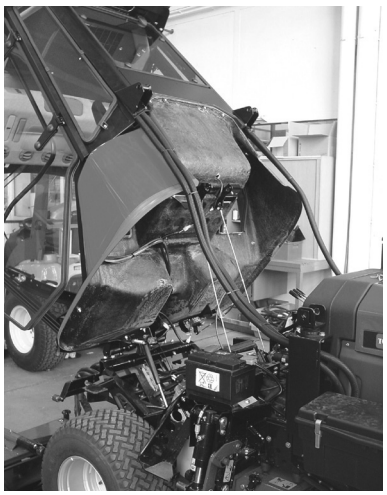


Fig 67



NOTE: The connections on the compressor must be kept blanked off during installation. The refrigerator oil in the compressor is highly hygroscopic.

Mount the bracket for the compressor - Although the parts are different for the basic models, they are sufficiently similar to require only one set of instructions.

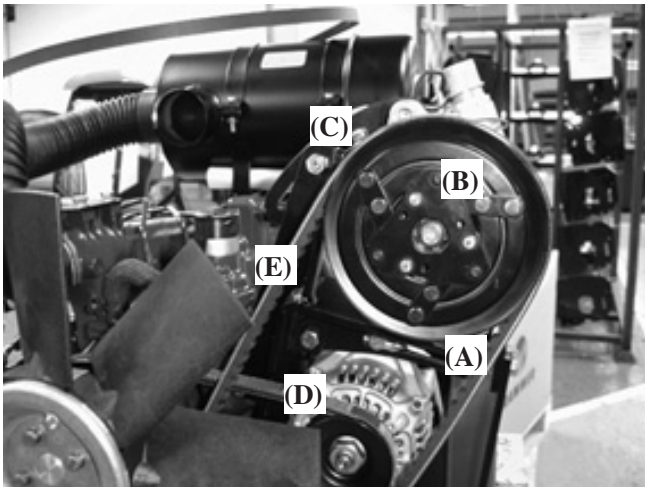
1. Remove the alternator and its adjuster. **Refer to Fig 68**.
2. Remove the screws of the rear engine mount on the right side of the machine. **Refer to Fig 68**.
3. Fix the mounting bracket to the engine using the new screws supplied. T4240 mounting is shown in **Fig 69**.
   Bolt new mounting over engine mount using new bolts. **Refer to Fig 69**.
4. Use longer bolt supplied to fix the alternator and mounting bracket to existing alternator mounting lug on the engine. **Refer to Fig 70**.
5. Bolt the additional pulley for the compressor to the existing engine crankshaft pulley. **Refer to Fig 70**.
6. Fit alternator adjuster strap. **Refer to Fig 71** (A).
7. Fit compressor. **Refer to Fig 71** (B).
8. Fit compressor adjuster strap. **Refer to Fig 71** (C).
9. Refit existing alternator drive belt but do not tension. **Refer to Fig 71** (D).
10. Fit new compressor drive belt but do not tension. **Refer to Fig 71** (E).

Fig 68

Fig 69

Fig 70

Fig 71



11. Fit additional stay straps to ensure that the mounting is rigid. **Refer to Fig 72** (F).

12. Tighten all bolts and set belt tension. **Refer to Fig 72**.

13. If belts are not running true and there is misalignment of compressor and or alternator with the engine pulleys, slacken the mounting bracket fixing screws, adjust and retighten. **Refer to Fig 72**.

14. Run the air conditioning hoses over the engine. **Refer to Fig 75** (G).

15. Connect them to the compressor connections using compressor oil to lubricate the seals. **Refer to Fig 75** (H).

16. Lower and lift the cab and platform to check that the air conditioning hoses and the heater hoses are routed so that they are not pinched or kinked.

17. The system must be filled with refrigerant by a qualified person.

18. The compressor is already filled with refrigerant oil but add an additional 25ml before running.

19. The recommended amount of refrigerant to be added to the system is 850g of R134A.

20. Ensure that the engine coolant has been refilled with the recommended water / antifreeze mix following the fitting of the heater circuit.

21. To test, run air to the air conditioning, refer to the enclosed operating instructions.

Fig 72

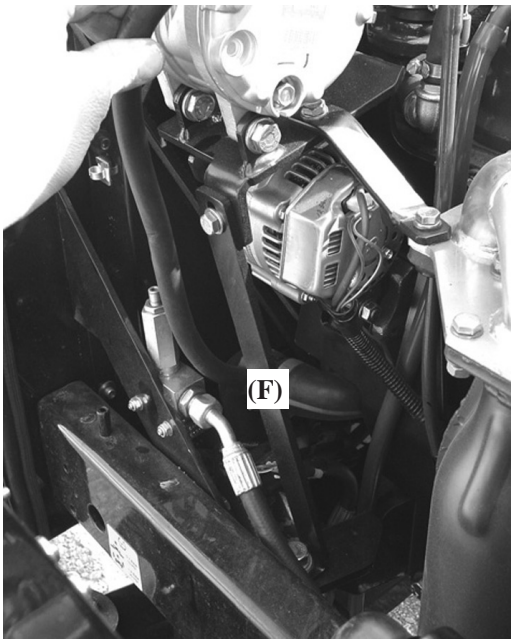


Fig 73

Fig 74

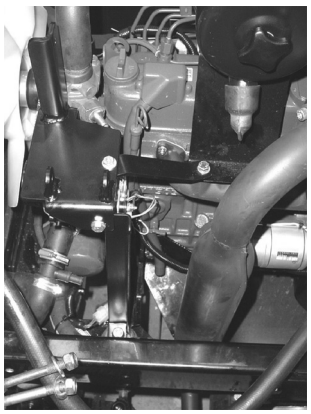
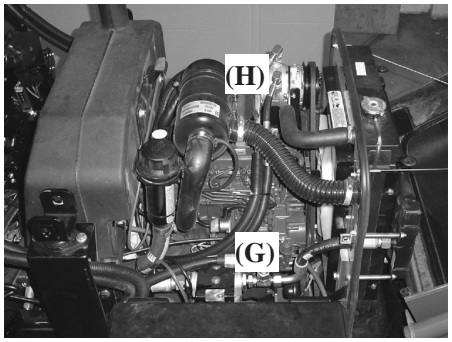
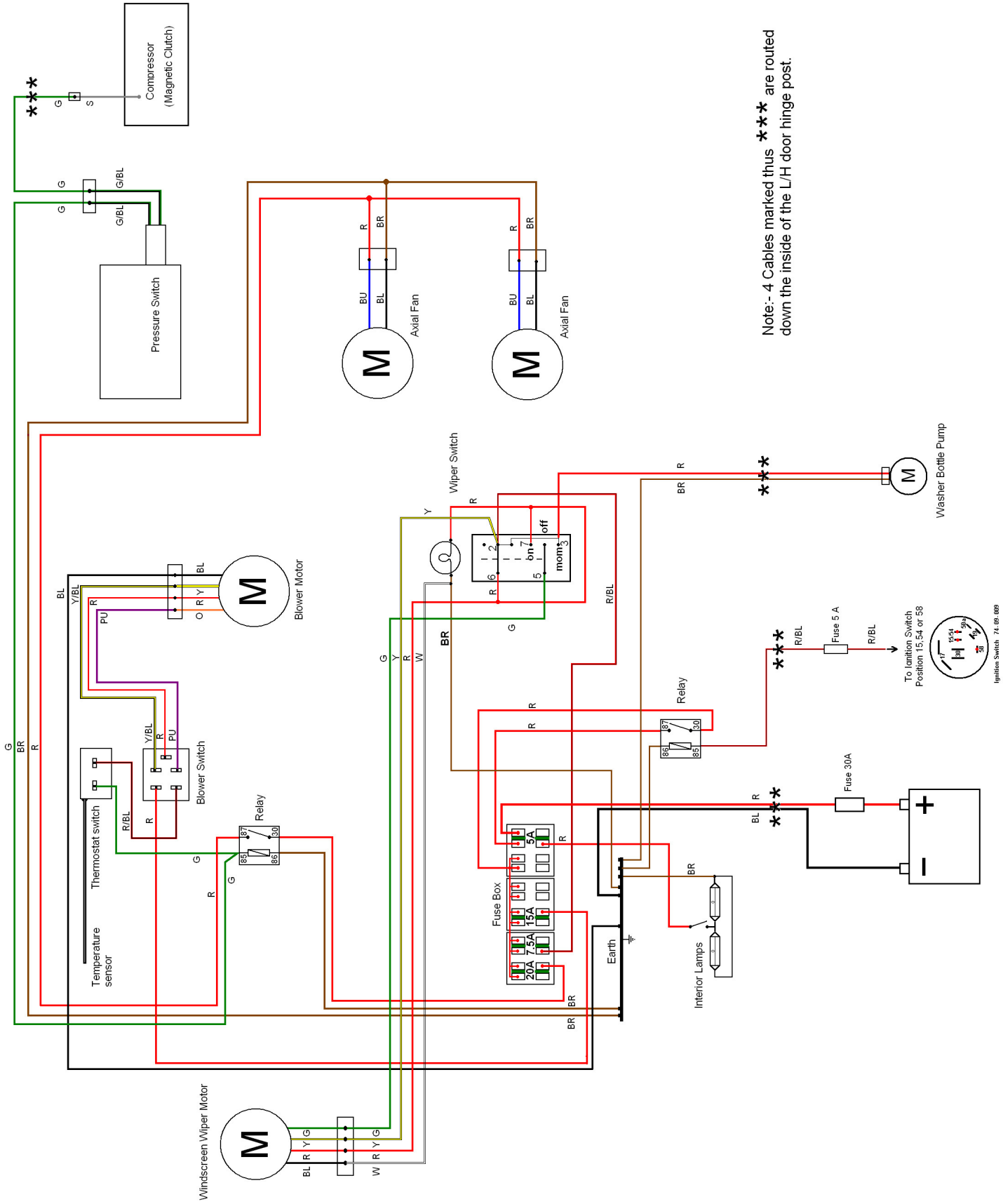


Fig 75



Full electrical circuit diagram



HEATER BLOWER INSTALLATION - ASSEMBLY

The heater blower must be fitted by an authorised dealer.

Read and understand the assembly instructions before proceeding.

Refer to the Spare Parts and the cab installation section of this manual before proceeding.

The installation of the heater blower unit can be carried out with the cab in its lowered position.

1. Disconnect the battery terminals, first the negative (-ve) and then the positive (+ve). **Refer to Fig 77**.
2. Remove the cab roof.
3. Drain the engine cooling system.
4. Fix the heater blower unit to the roof insert.
5. Fix the air channel to the roof insert and against the heater blower unit.
6. Seal the joint between the air channel and the heater blower unit with a sealing compound.
7. Cut a hole in the roof lining for mounting the hot water valve.
8. Insert the plastic housing for the valve from below and snap in position.
9. Screw on the valve and operating handle.
10. Connect the short length of heater hose, one end to the heater unit and ne end to the hot water valve. **Refer to Fig 78**.
11. Connect the two long heater hoses, one to the other connection on the heater blower unit and one to the other connection on the hot water valve. **Refer to Fig 79**.

Fig 77

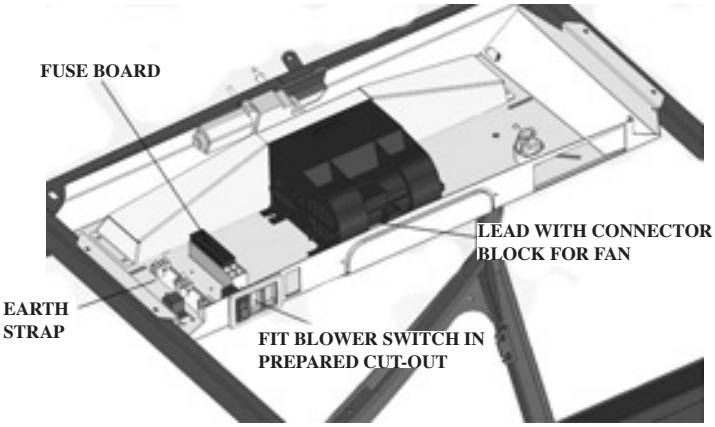
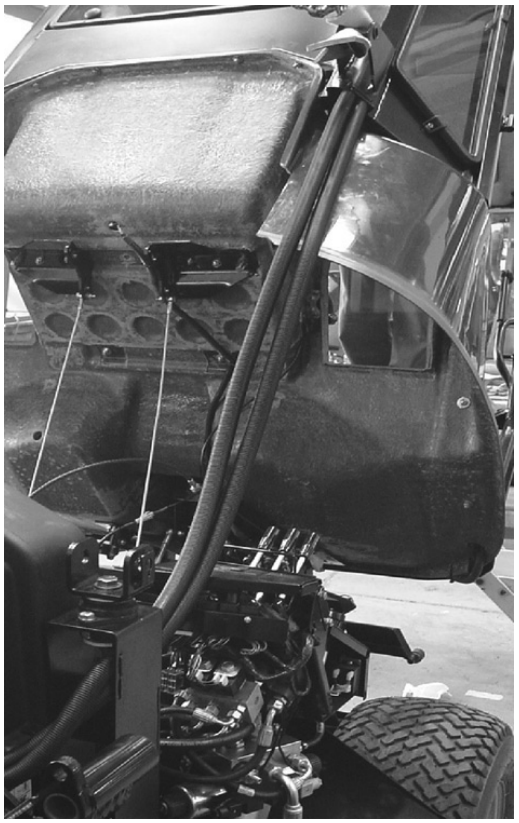


Fig 78

Fig 79



12. Route both heater hoses down and inside the rear cab post. **Refer to Fig 80**.

13. Slide the hose protection sleeves over both hoses.

14. Connect the wiring harness as shown in the electrical wiring section.

15. Tie the hoses together using the cable ties supplied.

16. Route the hoses through the engine compartment down the right side of the engine. Ensure that they are routed away from the engine exhaust silencer and manifold. **Refer to Fig 81**.

17. Remove the drain plug from the thermostat housing.

18. For fitting to the LT3240 - fit adapter B to the thermostat housing. **Refer to Fig 82**.

19. For fitting to the T4240 and R3240T - fit adapter A to the thermostat housing and then adapter B into adapter A . **Refer to Fig 82**.

20. Next, fit the T connector to the bottom radiator house. **Refer to Fig 83 and Fig 86**.

21. For fitting to LT3240 - use 27mm diameter T connector. **Refer to Fig 83**.

22. For fitting to T4240 and R3240T - use 35mm diameter T connector.

23. Cut the bottom hose and remove a 15mm section to allow for the T connector.

    This is important to ensure that the engine cooling house is not distorted.

Fig 80

Fig 81

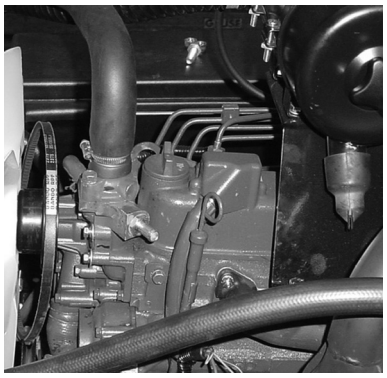


Fig 82

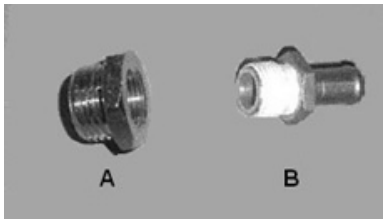
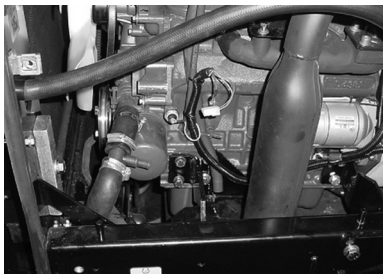


Fig 83

Fig 84



HEATER BLOWER INSTALLATION - ASSEMBLY Continued

24. Connect the heater hoses from the cab, one to the connector on the thermostat housing and the other to the T connector in the bottom hose. Use the hose clips supplied. **Refer to Fig 85 and Fig 86**.

25. Tie hoses back to prevent them from chafing and ensure that they are routed away from rotating parts and exhaust components. **Refer to Fig 86**.

26. Refit the roof.

27. Refill the engine cooling system with the correct mix of water and antifreeze. Refer to machine manual for details.

28. Start the engine.

29. Open the hot water valve in the cab and allow the engine to run at half throttle until warm air comes from the heater. **Refer to Fig 58 (L) on page 49**.

30. Check all connections for leaks and tighten where necessary.

31. Check the engine coolant level and top up if necessary.

Fig 85

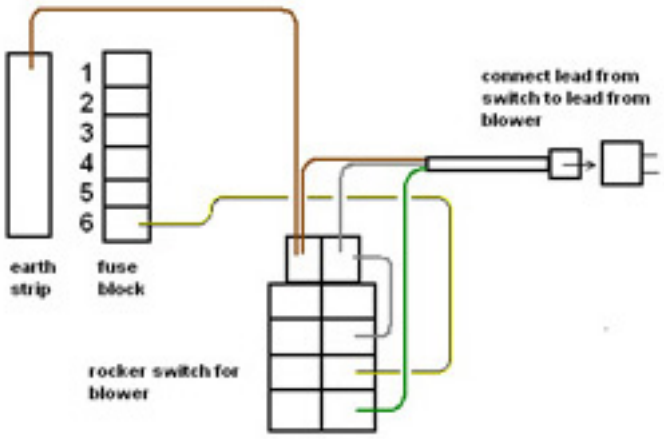
Fig 86

HEATER BLOWER INSTALLATION - MAINTENANCE

1. Check all connections for leaks once a year and tighten if necessary.

HEATER BLOWER INSTALLATION - ELECTRICAL WIRING

Fig 87



HEATER BLOWER ONLY:

1. Rotate the hot water valve mounted in the right hand side of the roof console to achieve the desired air temperature. Anti clockwise to increase temperature, clockwise in reduce temperature.

2. The fan speed is controlled by the rocker switch on the left hand side of the roof console.

3. The five air vents in the roof console can be rotated and angled to achieve the desired air direction.

4. **Fig 88** shows the air conditioning controls which are only fitted with the air conditioning system.

Fig 88

AIR CONDITIONING ONLY:
(Initial start-up)

1. Close the hot water valve by rotating clockwise.

2. Start the engine.

3. Switch on the blower.

4. Set the cooling temperature control to maximum (fully clockwise).

5. After 3 minutes cold air should come from the air outlet vents.

6. Adjust fan speed and temperature control to the desired setting.

Note: It is not advisable to combine minimum blower speed with maximum thermostat cooling.
Do not operate the air conditioning without the engine running as this will drain the battery.
Operation of the blower without the engine running will result in air circulation with no air condition cooling.
If the air conditioning system is not used for long periods it is advisable to run the compressor for 15 minutes every 14 days (if outside temperature is at least 5°C). This will help to prevent leaks from the rotary shaft seals in the compressor.

ROPS CAB, AIR CONDITIONING AND HEATING INSTALLATION - OPERATION Continued

AIR CONDITIONING ONLY Continued:
(Normal operation)

1. Switch the blower switch to achieve the desired airflow.

2. Turn the temperature regulator clockwise to set the desired cooling temperature. When the set temperature in the cab is reached the thermostat will switch off the compressor and the blower will continue to run.
   When the temperature rises above the set temperature, the compressor will automatically restart.

3. If cab heating is required, switch off the air conditioning and turn the hot water valve anti clockwise to increase heating to the desire amount. The blower speed is controlled by the rotary switch as with the air conditioning.

4. If the mower has been left in strong sunlight and the interior has a high temperature, set the blower speed to maximum to provide fast cooling.

ROPS CAB, AIR CONDITIONING AND HEATING INSTALLATION - MAINTENANCE

1. All work on the refrigerant part of the air conditioning system should be carried out by fully qualified personnel.

2. The air conditioning system can be used for many months of the cutting season. The regular prescribed maintenance must be carried out to prolong the life of the system and ensure efficient operation. Failure to carry out the prescribed and documented maintenance could invalidate the warranty on the system and its components.

3. Do not spill compressor oil on the vehicle surface. It can cause discolouration of vehicle paint and deterioration of acrylic or ABS plastic components.

4. After the first four weeks of use check all connections for tightness.

5. Even if the air conditioning system is used infrequently, the maintenance schedule must be followed as ageing and refrigerant loss can occur with time. **Refer to Fig 89**.

6. Clean the condenser and evaporator fins with compressed air in the opposite direction to the normal air flow. If there is a build up of greasy deposit, it can be cleaned with a non abrasive soap solution.

Component	Maintenance Work	Monthly	6 Monthly	Annually
Refrigerant circuit:	Examine for abrasion and condition			
Hose lines	Carry out leak test with leak detector		•	
Connections	Examine refrigerant quantity in the sight glass			•
Refrigerant filling	Examine cleanliness of fins	•		
Condenser	Change every 2 years	•		
Dryer - filter	Ensure that they are clear			
Water drain	Examine all parts for tightness		•	
Climatic unit in roof				•
Compressor:				
Magnetic clutch	Examine starting of compressor		•	
Compressor	Examine for noise - run free and listen		•	
Fan belt	Examine for condition and tension			•
Mounting bracket	Bolt tightness			•
Electrical connections:				
Electrical cables	Examine condition		•	
Plug connections	Examine condition and firmness of connection		•	
General:	Check all bolted connections for tightness	•		

Examine for repair:

To avoid unnecessary dismantling and / or double work, examine the system before beginning repairs.

Visual checks:

- Fastenings, fuses, cable connections, switches.
- Hoses for abrasion, kinking, squeezing, hose connections.
- Air ducts and mesh screens.
- Compressor hose connections, mounting points, drive belt tension, magnetic clutch, electrical connection.

Fault finding and repair:

Some faults can only be diagnosed and repaired by qualified personnel in air conditioning systems e.g., faults with the compressor and filter.

Electrical faults:

- Air ducts and mesh screens.
- Compressor hose connections, mounting points, drive belt tension, magnetic clutch, electrical connection.

Mechanical faults:

- Check the operation of the fins.
- Check the dirty or blocked evaporator or condenser fins and for restricted air intake screen.
- Check loss of refrigerant.
- Check compressor.

General notes for refrigerant filling:

- Low levels of refrigerant can reduce the efficiency of the air conditioning unit.
- Extremely low levels can cause the low pressure switch to shut down the system.
- As a check on refrigerant level, there is an integrated sight glass in the collecting tank. After filling, run the system for 5 minutes to allow all air bubbles to be purged from the system. Check the level after this period and top up is necessary. The occasional air bubble can be accepted.

Examination of refrigerant pressure:

- When using the air conditioning system the operating pressure is different on the suction side and the pressure side of the compressor.
- This pressure difference is influenced by the speed of the compressor, the inside temperature of the vehicle, the outside air temperature and the relative air humidity.
- Pressures that differ from those in the table below indicate a possible fault in the system.
- To check the pressures, set the compressor speed to 2000 rev / min with an air temperature of between 20° and 40° the blower should be operated at position 3 (fastest speed setting).

System refrigerant pressures:

Outside temperature	Low pressure side	High pressure side
20°C	1.9bar ± 0.2bar	12bar ± 2bar
25°C	2.0bar ± 0.2bar	14bar ± 2bar
30°C	2.1bar ± 0.2bar	16bar ± 2bar

- During the pressure test the results can indicate the nature of the fault.
- **Pressure on high pressure side too high indicates:**
  A - Insufficient volume over the condenser
  B - Refrigerant quantity too high
  C - Dryer filter is blocked

- **Pressure on high pressure side too low indicates:**
  A - Refrigerant level too low (check sight glass)
  B - Compressor speed too low (check belt tension)
  C - Fault with the compressor

- **Pressure on low pressure side too high indicates:**
  A - Incorrect expansion valve
  B - Compressor speed too low (check belt tension)
  C - Fault with the compressor

- **Pressure on low pressure side too low indicates:**
  A - Throttling in the suction or pressure pipe, e.g., by line breaks
  B - Incorrect expansion valve
  C - Refrigerant level too low (examine sediment bowl)
  D - Insufficient air volume over evaporator

Serial No: .....

Please note that the serial number if required, can be found at the rear right hand side of the radiator bulk head. See Operator's Manual for visual description.

Date of sale:: .....

Your local Dealer:

Notes:

The Toro Total Coverage Guarantee

A Limited Warranty

Conditions and Products Covered

The Toro® Company and its affiliate, Toro Warranty Company, pursuant to an agreement between them, jointly warrant your Toro Commercial product ("Product") to be free from defects in materials or workmanship for two years or 1500 operational hours*, whichever occurs first. This warranty is applicable to all products with the exception of Aerators (refer to separate warranty statements for these products). Where a warrantable condition exists, we will repair the Product at no cost to you including diagnostics, labor, parts, and transportation. This warranty begins on the date the Product is delivered to the original retail purchaser.
* Product equipped with an hour meter.

Instructions for Obtaining Warranty Service

You are responsible for notifying the Commercial Products Distributor or Authorized Commercial Products Dealer from whom you purchased the Product as soon as you believe a warrantable condition exists. If you need help locating a Commercial Products Distributor or Authorized Dealer, or if you have questions regarding your warranty rights or responsibilities, you may contact us at:

Commercial Products Service Department
Toro Warranty Company
8111 Lyndale Avenue South
Bloomington, MN 55420-1196
E-mail: commercial.warranty@toro.com

Owner Responsibilities

As the Product owner, you are responsible for required maintenance and adjustments stated in your Operator's Manual. Failure to perform required maintenance and adjustments can be grounds for disallowing a warranty claim.

Items and Conditions Not Covered

Not all product failures or malfunctions that occur during the warranty period are defects in materials or workmanship. This warranty does not cover the following:

- Product failures which result from the use of non-Toro replacement parts, or from installation and use of add-on, or modified non-Toro branded accessories and products. A separate warranty may be provided by the manufacturer of these items.
- Product failures which result from failure to perform recommended maintenance and/or adjustments. Failure to properly maintain your Toro product per the Recommended Maintenance listed in the *Operator's Manual* can result in claims for warranty being denied.
- Product failures which result from operating the Product in an abusive, negligent or reckless manner.
- Parts subject to consumption through use unless found to be defective. Examples of parts which are consumed, or used up, during normal Product operation include, but are not limited to, brakes pads and linings, clutch linings, blades, reels, bed knives, tines, spark plugs, castor wheels, tires, filters, belts, and certain sprayer components such as diaphragms, nozzles, and check valves, etc.
- Failures caused by outside influence. Items considered to be outside influence include, but are not limited to, weather, storage practices, contamination, use of unapproved coolants, lubricants, additives, fertilizers, water, or chemicals, etc.
- Normal noise, vibration, wear and tear, and deterioration.
- Normal "wear and tear" includes, but is not limited to, damage to seats due to wear or abrasion, worn painted surfaces, scratched decals or windows, etc.

Parts

Parts scheduled for replacement as required maintenance are warranted for the period of time up to the scheduled replacement time for that part. Parts replaced under this warranty are covered for the duration of the original product warranty and become the property of Toro. Toro will make the final decision whether to repair any existing part or assembly or replace it. Toro may use remanufactured parts for warranty repairs.

Note Regarding Deep Cycle Battery Warranty:

Deep cycle batteries have a specified total number of kilowatt-hours they can deliver during their lifetime. Operating, recharging, and maintenance techniques can extend or reduce total battery life. As the batteries in this product are consumed, the amount of useful work between charging intervals will slowly decrease until the battery is completely worn out. Replacement of worn out batteries, due to normal consumption, is the responsibility of the product owner. Battery replacement may be required during the normal product warranty period at owner's expense.

Maintenance is at Owner's Expense

Engine tune-up, lubrication cleaning and polishing, replacement of Items and Conditions Not Covered filters, coolant, and completing Recommended Maintenance are some of the normal services Toro products require that are at the owner's expense.

General Conditions

Repair by an Authorized Toro Distributor or Dealer is your sole remedy under this warranty.

Neither The Toro Company nor Toro Warranty Company is liable for indirect, incidental or consequential damages in connection with the use of the Toro Products covered by this warranty, including any cost or expense of providing substitute equipment or service during reasonable periods of malfunction or non-use pending completion of repairs under this warranty. Except for the Emissions warranty referenced below, if applicable, there is no other express warranty.

All implied warranties of merchantability and fitness for use are limited to the duration of this express warranty. Some states do not allow exclusions of incidental or consequential damages, or limitations on how long an implied warranty lasts, so the above exclusions and limitations may not apply to you.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

Countries Other than the United States or Canada

Customers should contact their Toro Distributor (Dealer) to obtain guarantee policies for your country, province, or state. If for any reason you are dissatisfied with your Distributor's service or have difficulty obtaining guarantee information, contact the Toro importer. If all other remedies fail, you may contact us at Toro Warranty Company.