

## AMENDMENTS TO COOLING SYSTEM CATALOGUE IN MONTH OF MAY 2016

SR NO	GROUP	SUBGROUP	DIAGRAM NO	PAGE NO IN CAT.	SR NO IN CAT.	DESCRIPTION	DATE OF UPDATE	REVISION
NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL

NIL: NO AMENDMENTS TO THIS CATALOGUE IN MONTH OF MAY 2016

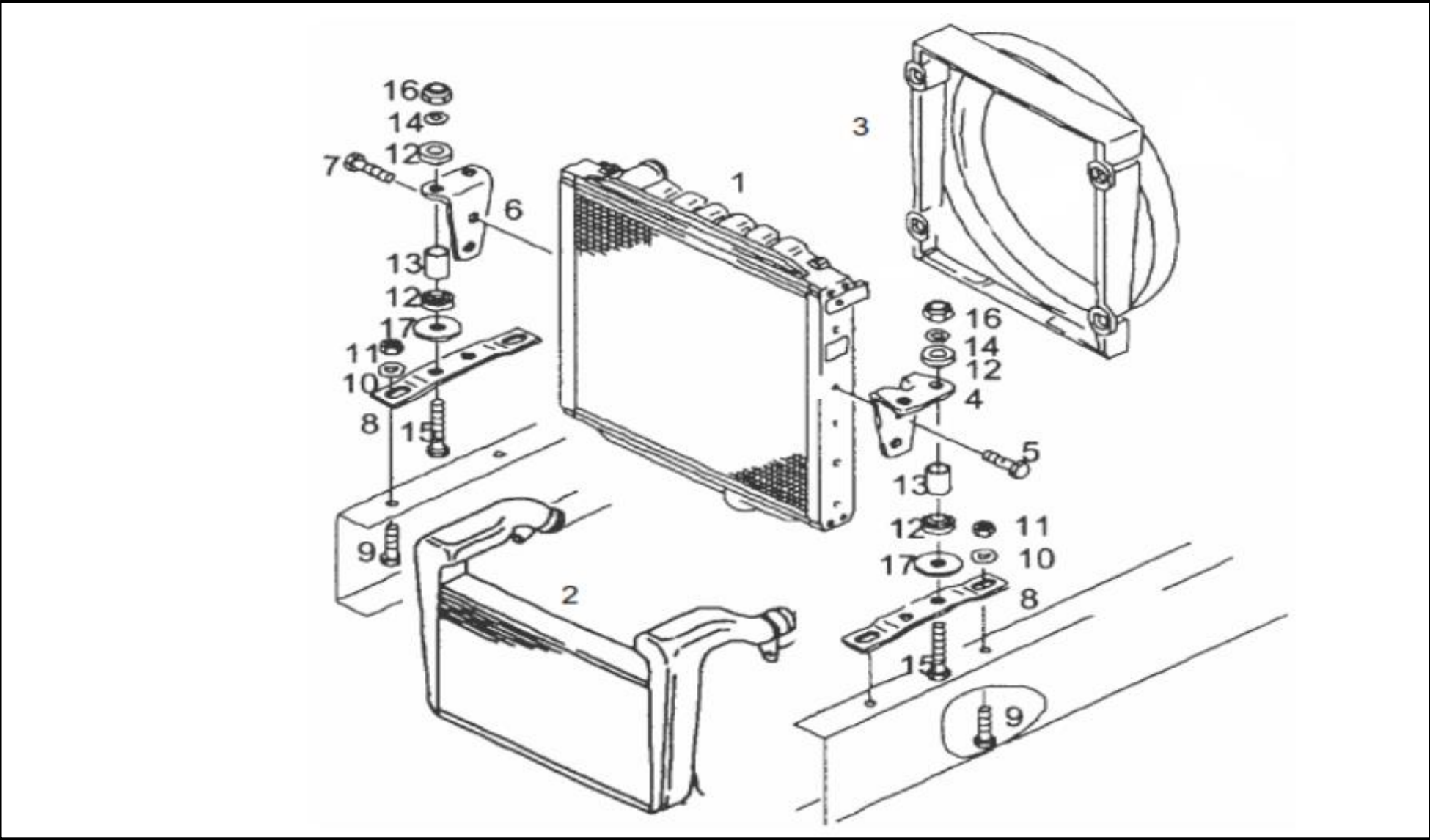
# COOLING SYSTEM

## CONTENTS

SR	DESCRIPTION	DIAGRAM NO.
1	RADIATOR AND INTERCOOLER	01
2	COOLING HOSES	02
3	SURGE TANK & MOUNTING	03 TO 04
4	BLEEDER LINES FROM SURGE TANK	05 TO 06
5	RADIATOR GUARD	07
6	AIR DEFLECTOR	08

RADIATOR & INTERCOOLER

Diagram No. 01



## RADIATOR & INTERCOOLER

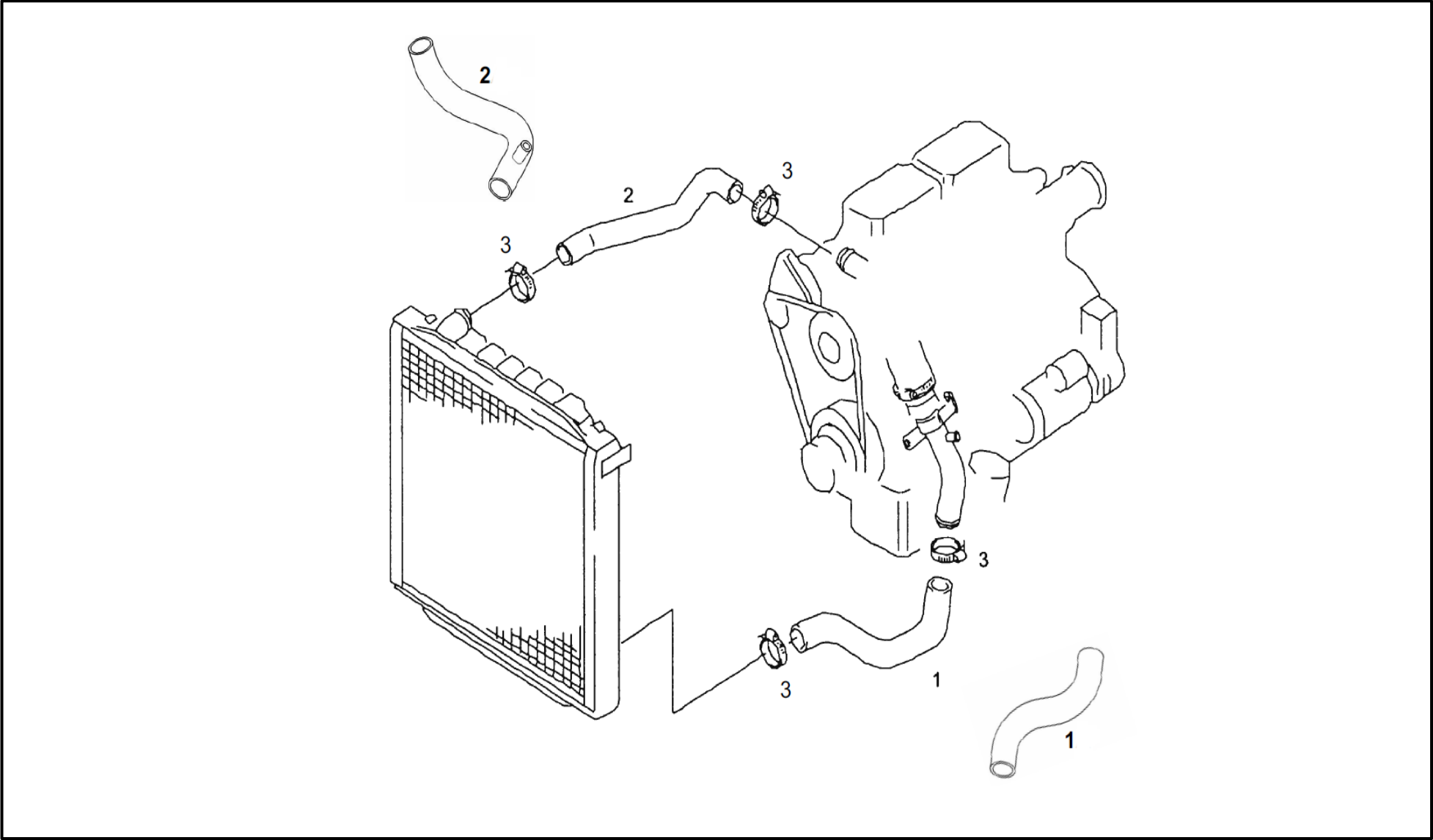
## Diagram No. 01

S R	PART NO.	DESCRIPTION	QTY	APPLICABLE MODEL	REMARKS
A	64.06101-6018	COOLING MODULE (INNER FINS)	1	COMMON FOR ALL MODELS EXCEPT 180 HP MODELS FROM VIN: 10624	CONSISTS OF SR 1 , 2 & 3
A	85.06100-6009	COOLING MODULE FOR 180 HP ENGINE	1	COMMON FOR MODELS WITH 180 HP ENGINES BEFORE VIN : 11601	CONSISTS OF SR 1 , 2 & 3
A	64.06101-6026	COOLING MODULE (BSIV)	1	COMMON FOR MODELS WITH 4 VCR BS IV ENGINES ONLY.	CONSISTS OF SR 1 , 2 & 3
1	64.06101-6002	RADIATOR	1	COMMON FOR ALL MODELS EXCEPT MODELS WITH BS IV ENGINES & 180 HP ENGINES FROM VIN : 10624 .	
1	64.06101-6027	RADIATOR	1	COMMON FOR MODELS WITH 4 VCR BS IV ENGINES ONLY.	
1	64.06101-6009	RADIATOR	1	COMMON FOR ALL MODELS EXCEPT MODELS WITH BS IV ENGINES & 180 HP ENGINES BEFORE VIN : 10624 .	
1	81.06101-6780	RADIATOR	1	COMMON FOR MODELS WITH 180 HP ENGINES BEFORE VIN : 11601	
2	64.06130-0005	ASSLY INTERCOOLER- 6 CYL	1	COMMON FOR ALL MODELS EXCEPT MODELS WITH BS IV ENGINES & 180 HP ENGINES FROM VIN : 10624 .	NOT USED IN MODELS WITH 180 HP ENGINES BEFORE VIN: 11601.
2	64.06130-0008	ASSLY INTERCOOLER- 6 CYL	1	COMMON FOR MODELS WITH 4 VCR BS IV ENGINES ONLY.	
2	64.06130-0001	ASSLY INTERCOOLER- 6 CYL	1	COMMON FOR ALL MODELS EXCEPT MODELS WITH BS IV ENGINES & 180 HP ENGINES BEFORE VIN : 10624 .	
2	81.06130-0133	INTERCOOLER	1	COMMON FOR MODELS WITH 180 HP ENGINES BEFORE VIN : 11601	
3	64.06201-0002	SHROUD FOR RADIATOR (6 CYL)	1	COMMON FOR ALL MODELS EXCEPT MODELS WITH BS IV ENGINES.	NOT USED IN MODELS WITH 180 HP ENGINES BEFORE VIN: 11601.
3	64.06201-0061	SHROUD FOR RADIATOR (6 CYL)	1	COMMON FOR MODELS WITH 4 VCR BS IV ENGINES ONLY.	

3	81.06620-0125	SHROUD FOR RADIATOR	1	COMMON FOR MODELS WITH 180 HP ENGINES BEFORE VIN : 11601	
4	64.06245-0001	RADIATOR MTG BKT LH (ON RADIATOR)	1		
5	64.90020-0023	SCREW M10X16-10.9 M7.012.04 MAN183-B1	2		
6	64.06245-0002	RADIATOR MTG BKT RH (ON RADIATOR)	1		
7	64.90020-0023	SCREW M10X16-10.9 M7.012.04 MAN183-B1	2		
8	64.06245-0003	INTERMEDIATE BRACKET (RADIATOR MTG)	2		
9	64.90020-0022	SCREW M10X30-8.8 DIN 931 MAN183-B1	4		
10	64.90710-0075	WASHER A10.5 DIN125-200HV MAN183-B1	4		
11	64.90501-0015	HEX LOCK NUT AM10-8 M7.112.60 MAN183	4		
12	64.06225-0003	RUBBER BUFFER (RADIATOR MOUNTING)	8		
13	64.93030-0001	SLEEVE (RADIATOR MOUNTING)	4		
14	64.90711-0003	WASHER (RADIATOR MOUNTING)	4		
15	64.90020-0024	SCREW M10X50-8.8 DIN 931 MAN183-B1	4		
16	64.90501-0015	HEX LOCK NUT AM10-8 M7.112.60 MAN1	4		
17	64.90040-0043	WASHER	1		SUPERCEDED BY 64.90020-2001
-	64.06201-0032	MOUNTING BKT LH (RADIATOR ASSY)	1		
-	64.92010-0010	THREADED SPACER RADIATOR MTG	1		
Page No. 01		REVISION NO. 00			VERSION: 01

COOLING HOSES

Diagram No. 02



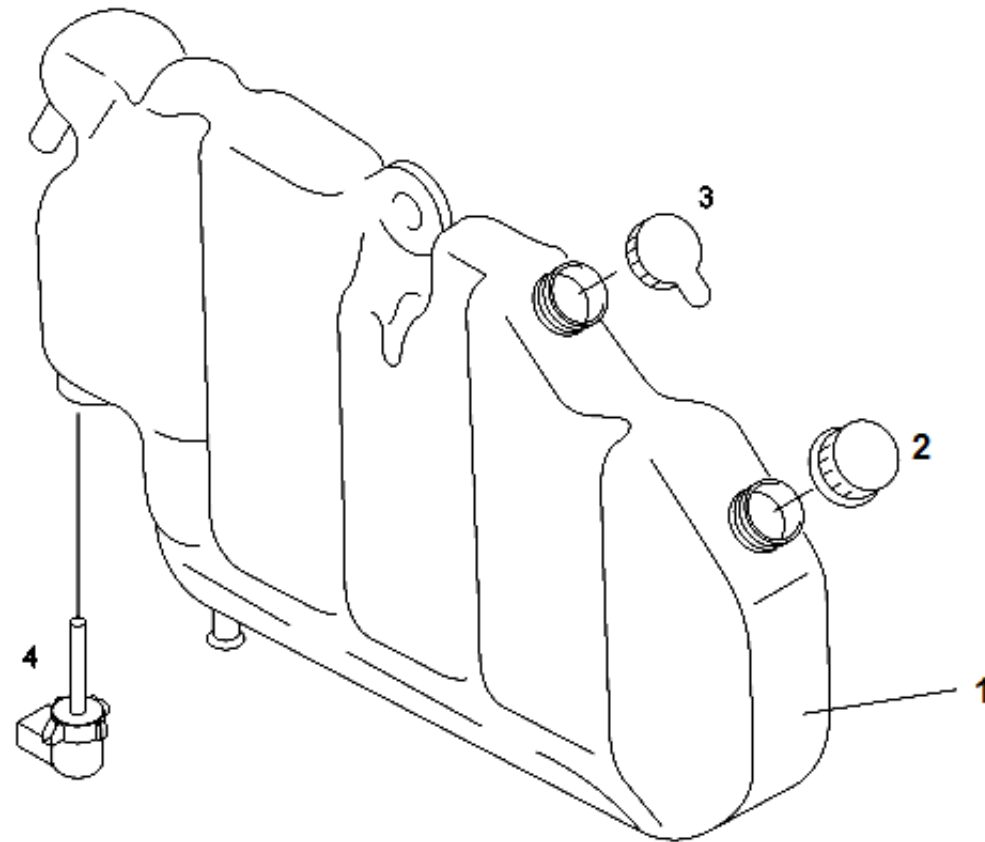
## COOLING HOSES

### Diagram No. 02

S R	PART NO.	DESCRIPTION	QTY	APPLICABLE MODEL	REMARKS
1	64.96301-0014	HOSE FOR RADIATOR (WATER OUT) 25T	1	COMMON FOR ALL MODELS EXCEPT MODELS WITH 2 VCR ENGINES	
1	64.96301-0068	HOSE FOR RADIATOR WATER OUT (2 VCR)	1	COMMON FOR MODELS WITH 2 VCR ENGINES ONLY	
2	64.96301-0010	HOSE FOR RADIATOR (WATER IN)	1	COMMON FOR ALL MODELS EXCEPT MODELS WITH 2 VCR ENGINES	
2	64.96301-0067	HOSE FOR RADIATOR WATER IN (2 VCR)	1	COMMON FOR MODELS WITH 2 & 4 VCR ENGINES ONLY	
3	64.90701-0007	HOSE CLAMP (H50-70), M3259	4	COMMON FOR ALL MODELS	
Page No. 02		REVISION NO. 00			VERSION: 01

## SURGE TANK

Diagram No. 03





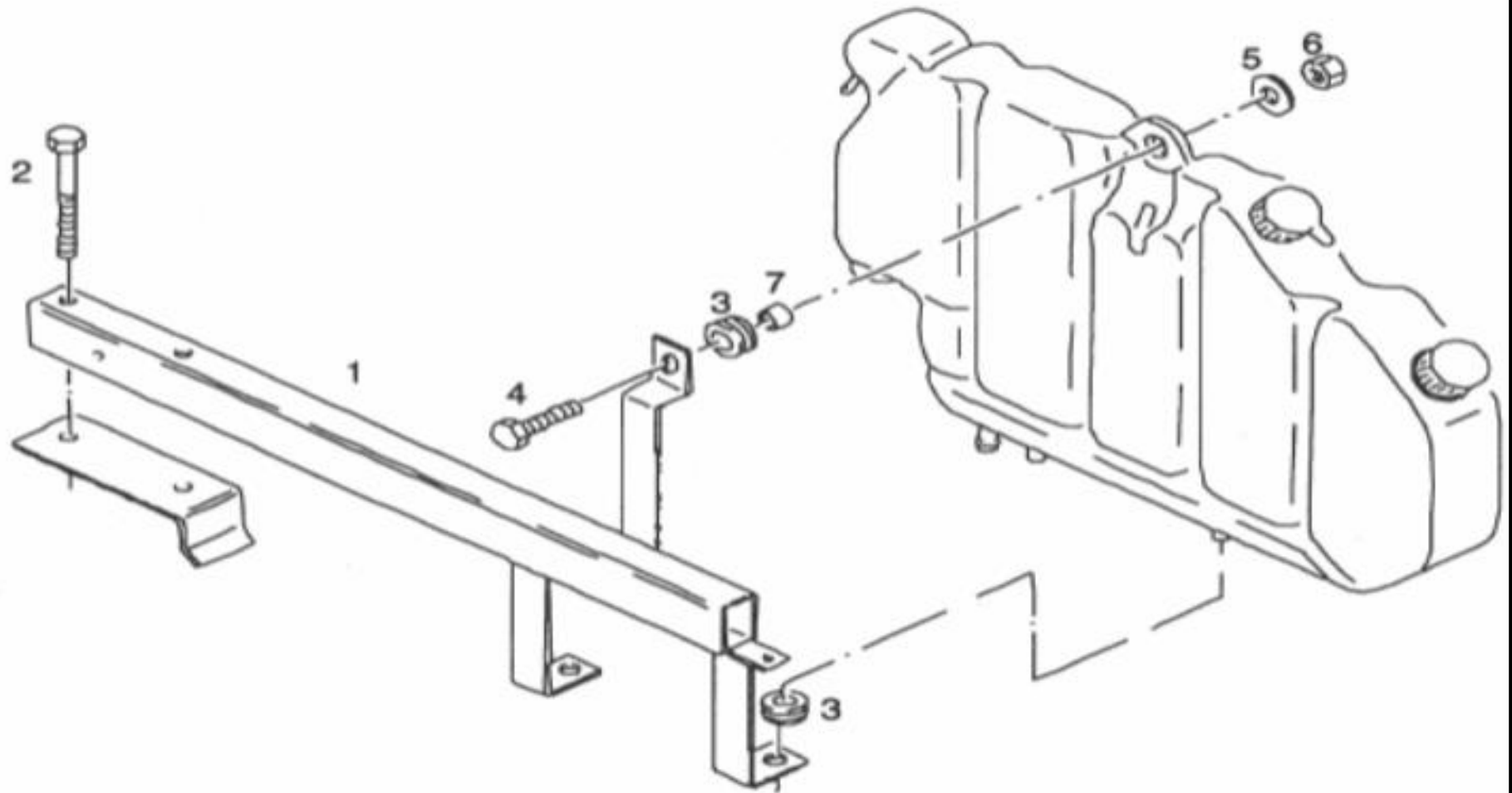
## SURGE TANK

## Diagram No. 03

S R	PART NO.	DESCRIPTION	QTY	APPLICABLE MODEL	REMARKS
1	64.06102-6001	ASSY EXPANSION TANK W FILLER CAP	1	COMMON FOR ALL MODELS EXCEPT BUS MODELS	PART OBSOLETE.NOT SERVICED.USE 64.06102-6005
1	64.06102-6005	HEADER TANK W LEVEL SENSOR & PR. CAP	1	COMMON FOR ALL MODELS EXCEPT BUS MODELS	
1	81.06102-6218	COOLANT EXPANSION TANK	1	COMMON FOR BUS MODEL ONLY	FOR BUS WITH HORIZONTAL COOLANT TANK
1	64.06102-6007	HEADER TANK W LEVEL SENSOR & PR. CAP	1	COMMON FOR MODELS WITH 4 VCR ENGINES ONLY	
2	81.06111-0023	PRESSURE RELIEF CAP	1	COMMON FOR MODELS WITH 4 VCR ENGINES ONLY	
2	81.06111-0020	PRESSURE RELIEF CAP	1	COMMON FOR ALL MODELS EXCEPT MODELS WITH 4 VCR ENGINES	
3	64.06111-0001	FILLER CAP	1	COMMON FOR ALL MODELS	
4	64.27421-0018	STEM LEVEL SWITCH WITH CONNECTOR	1	COMMON FOR ALL MODELS EXCEPT BUS MODEL	
4	81.27421-0181	COOLANT LEVEL SENSOR	1	COMMON FOR BUS MODEL ONLY	FOR BUS WITH HORIZONTAL COOLANT TANK
Page No. 03		REVISION NO. 00			VERSION: 01

## MOUNTINGS FOR SURGE TANK ASSLY

Diagram No. 04



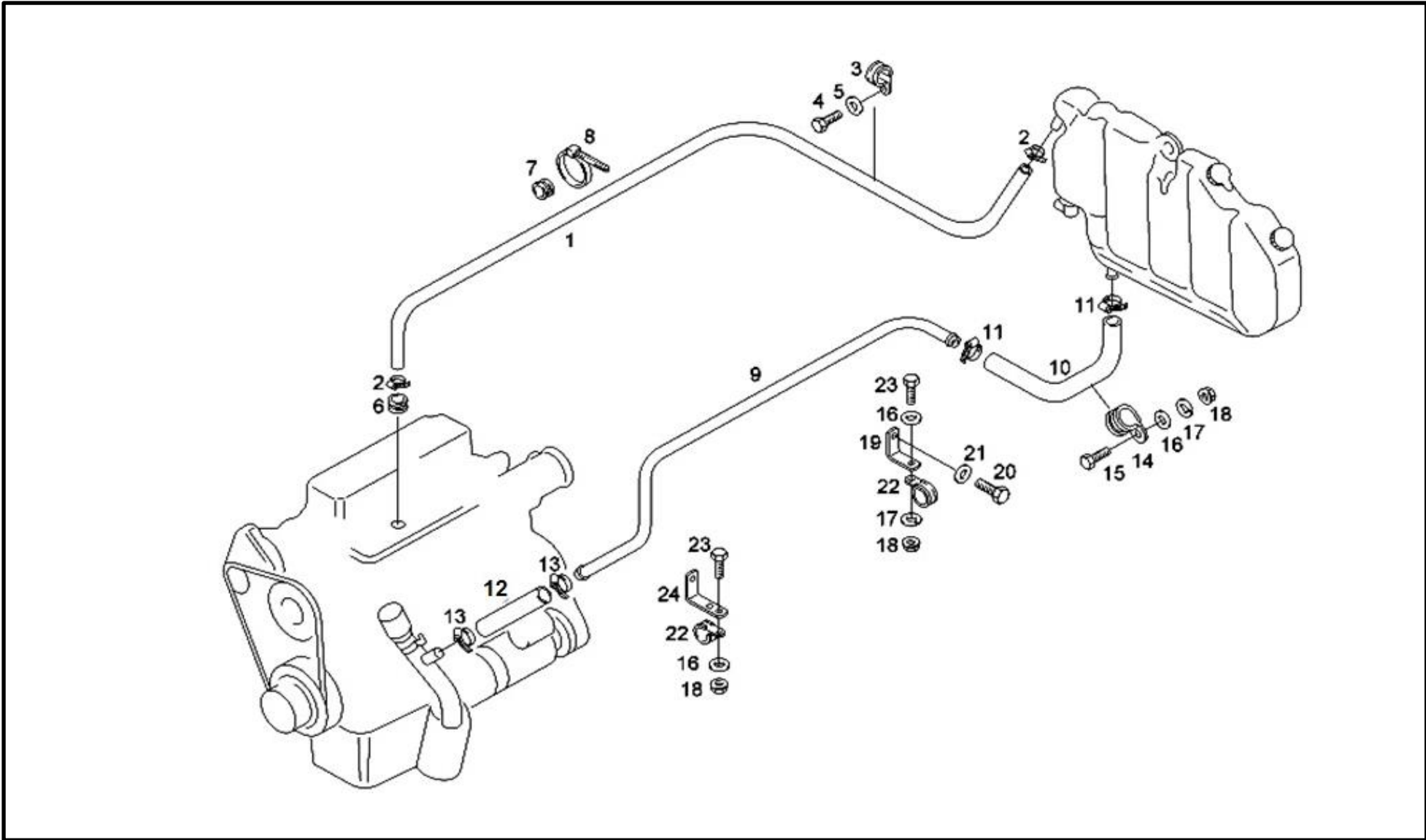
## MOUNTINGS FOR SURGE TANK ASSLY

### Diagram No. 04

S R	PART NO.	DESCRIPTION	QTY	APPLICABLE MODEL	REMARKS
1	64.41701-5013	SURGE TANK BKT ASSLY	1	COMMON FOR ALL MODELS EXCEPT BUS	
2	64.90020-0025	SCREW M10X70-10.9 MAN183-B1 M7.012.04	2	COMMON FOR ALL MODELS EXCEPT BUS	ALTERNATE 06.02813-4419
3	64.96001-0014	RUBBER GROMMET (SURGE TANK MTG)	3	COMMON FOR ALL MODELS EXCEPT BUS	
4	64.90020-0022	SCREW M10X30-8.8 DIN 931 MAN183-B1	1	COMMON FOR ALL MODELS EXCEPT BUS	
5	64.90710-0059	PL WASHER B10.5 DIN9021ST BTS170202.12	1	COMMON FOR ALL MODELS EXCEPT BUS	
6	64.90501-0038	HN M10X1.5 IS1364 PT.III-8 BTS 170202.22	1	COMMON FOR ALL MODELS EXCEPT BUS	
7	64.90713-0006	SPACER (SURGE TANK MTG)	1	COMMON FOR ALL MODELS EXCEPT BUS	
Page No. 04		REVISION NO. 00			VERSION: 01

BLEEDER LINES FROM SURGE TANK

Diagram No. 05



## BLEEDER LINES FROM SURGE TANK

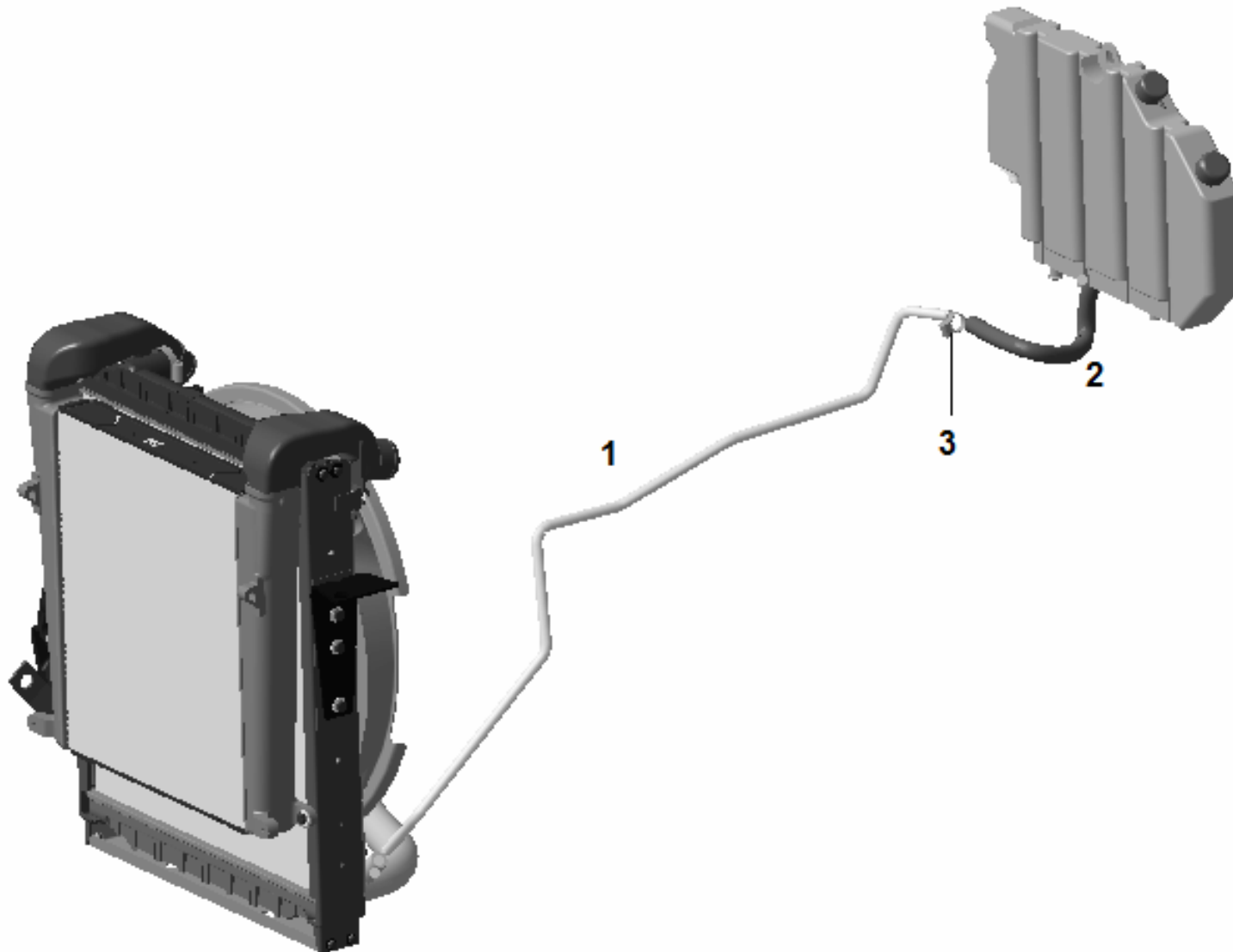
Diagram No. 05

S R	PART NO.	DESCRIPTION	QTY	APPLICABLE MODEL	REMARKS
1	64.96301-0025	COOLING WATER HOSE (10-5) DAY CAB	1	COMMON FOR MODELS WITH DAY CABIN & WITH VP44 , VE6 FIP ONLY	
1	64.96301-0011	COOLING WATER HOSE (L=1520MM)	1	COMMON FOR MODELS WITH HIGH ROOF & FLAT ROOF CABIN & WITH VP44 , VE6 FIP ONLY	
2	64.97201-0006	CLIP KLIPCO /(18-25)	2	COMMON FOR ALL MODELS	
3	64.97445-0021	MOUNTING CLAMP A18 MAN194	1	COMMON FOR ALL MODELS	
4	64.90020-2001	SCREW ST6.3X22-C MAN183-B1 DIN 7976	1	COMMON FOR ALL MODELS	
5	64.90710-0025	PLAIN WASHER A6.4 DIN125-ST A3C	1	COMMON FOR ALL MODELS	
6	64.96001-0014	RUBBER GROMMET	1	COMMON FOR ALL MODELS	
7	64.96001-0014	RUBBER GROMMET	1	COMMON FOR ALL MODELS	
8	NSSP	CABLE TIE	1	COMMON FOR ALL MODELS	NOT SERVICED
9	64.06303-5004	COOLANT PIPE (DAY CAB)	1	COMMON FOR MODELS WITH DAY CABIN & WITH VP44 , VE6 FIP ONLY	
9	64.06303-5003	COOLANT PIPE FOR SL CAB	1	COMMON FOR MODELS WITH HIGH ROOF & FLAT ROOF CABIN & WITH VP44 , VE6 FIP ONLY	
10	64.96301-0047	COOLING WATER HOSE	1	COMMON FOR MODELS WITH DAY CABIN & WITH VP44 , VE6 FIP ONLY	
10	64.96301-0100	COOLING WATER HOSE	1	COMMON FOR MODELS WITH HIGH ROOF & FLAT ROOF CABIN & WITH VP44 , VE6 FIP ONLY	
11	64.97445-0022	HOSE CLIP (22-30)	1	COMMON FOR ALL MODELS	SUPERCEDED BY 64.97201-0006
12	64.96301-0013	COOLING WATER HOSE (L=80MM)	1	COMMON FOR MODELS WITH HIGH ROOF , FLAT ROOF CABIN & DAY CABIN & WITH VP44 , VE6 FIP ONLY	
13	64.97445-0022	HOSE CLIP (22-30)	2	COMMON FOR MODELS WITH HIGH ROOF , FLAT ROOF CABIN & DAY CABIN & WITH VP44 , VE6 FIP ONLY	SUPERCEDED BY 64.97201-0006

14	64.97122-0005	CLAMP DI-28X15-W1-2-CR, DIN 3016	1	COMMON FOR ALL MODELS	
15	64.90020-0028	HHS M6X20-8.8 DIN933 MAN 183-B1	1	COMMON FOR ALL MODELS	
16	64.90710-0025	PLAIN WASHER A6.4 DIN125-ST A3C	3	COMMON FOR ALL MODELS	
17	64.90801-0046	SPRING WASHER B6 DIN127 A3C	2	COMMON FOR ALL MODELS	
18	64.90501-0042	HEX. NUT M6 DIN 934-8 MAN183-B1	3	COMMON FOR ALL MODELS	
19	64.06245-0004	HOLDING BRACKET	1	COMMON FOR ALL MODELS	
20	64.90020-0029	HHS M10X20-8.8 DIN 933 MAN183-B1	1	COMMON FOR ALL MODELS	
21	64.90710-0075	WASHER A10.5 DIN125-200HV MAN183-B1	1	COMMON FOR ALL MODELS	
22	64.97122-0006	CLAMP DI-18X15-W1-2-CR) DIN 3016	2	COMMON FOR ALL MODELS	
23	64.90020-0028	HHS M6X20-8.8 DIN933 MAN 183-B1	2	COMMON FOR ALL MODELS	
24	64.06245-0004	HOLDING BRACKET	1	COMMON FOR ALL MODELS	
<b>Page No. 05</b>		<b>REVISION NO. 00</b>			<b>VERSION: 01</b>

## BLEEDER LINES FROM SURGE TANK 2 VCR & 4 VCR

Diagram No. 06



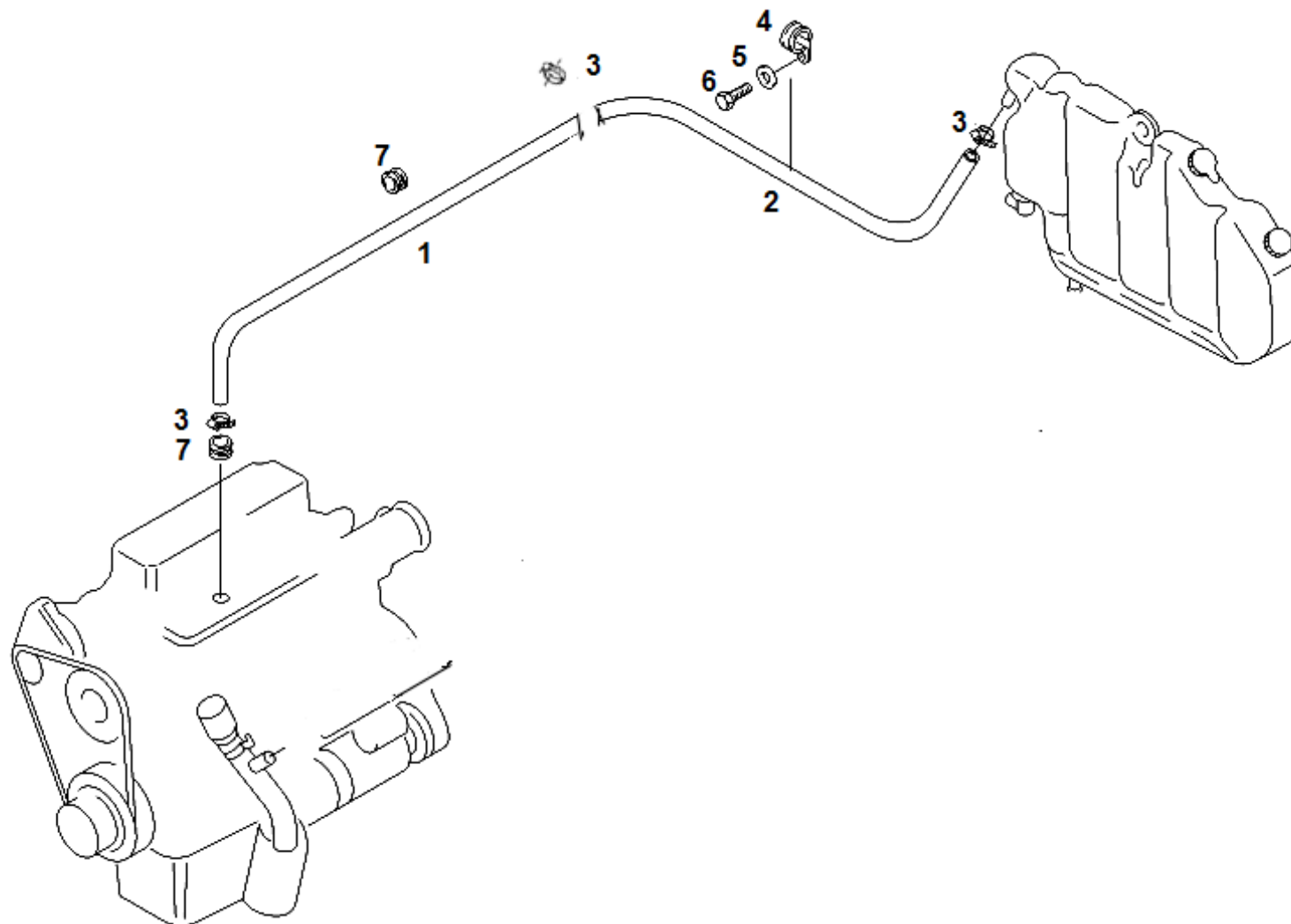
**BLEEDER LINES FROM SURGE TANK 2 VCR & 4 VCR****Diagram No. 06**

<b>S R</b>	<b>PART NO.</b>	<b>DESCRIPTION</b>	<b>QTY</b>	<b>APPLICABLE MODEL</b>	<b>REMARKS</b>
1	64.06303-5017	COOLANT PIPE RADIATOR DY CAB (2VCR)	1	COMMON FOR MODELS WITH DAY CABIN & WITH 2 VCR ENGINES ONLY.	
1	64.06303-5012	COOLANT PIPE (MEDIUM CAB) - 2VCR	1	COMMON FOR MODELS WITH HIGH ROOF & FLAT ROOF CABIN & WITH 2 VCR ENGINES ONLY.	SUPERCEDED BY 64.06303-5017
1	64.06303-5029	COOLANT PIPE FOR DAY CAB E4	1	COMMON FOR MODELS WITH 4 VCR ENGINES & DAY CABIN ONLY	
1	64.06303-5030	COOLANT PIPE FOR SL CAB E4	1	COMMON FOR MODELS WITH 4 VCR ENGINES & SLEEPER & HIGH ROOF CABIN ONLY	
2	64.96301-0012	COOLING WATER HOSE	1	COMMON FOR MODELS WITH 2 VCR ENGINES ONLY	
2	64.96301-0100	COOLING WATER HOSE	1	COMMON FOR MODELS WITH 4 VCR ENGINES ONLY	
3	64.97445-0022	HOSE CLIP (22-30)	3	COMMON FOR ALL MODELS	SUPERCEDED BY 64.97201-0006
<b>Page No. 06</b>		<b>REVISION NO. 00</b>			<b>VERSION: 01</b>



## BLEEDER LINES FROM SURGE TANK 2 VCR & 4 VCR

Diagram No. 06

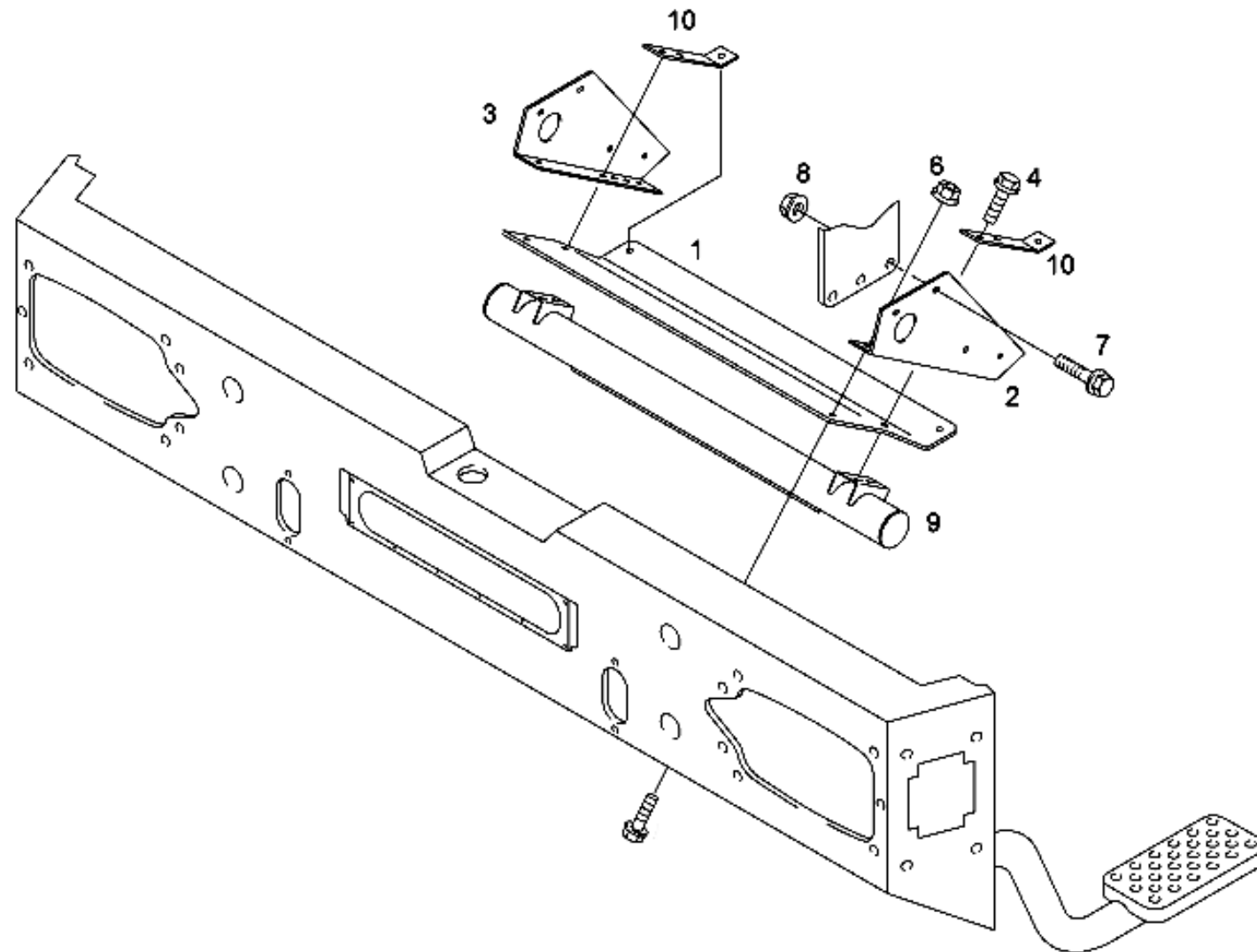


**BLEEDER LINES FROM SURGE TANK 2 VCR & 4 VCR****Diagram No. 06**

<b>S R</b>	<b>PART NO.</b>	<b>DESCRIPTION</b>	<b>QTY</b>	<b>APPLICABLE MODEL</b>	<b>REMARKS</b>
1	64.96301-5015	PIPE DEARIATION	1	COMMON FOR MODELS WITH 2 VCR ENGINES ONLY	
1	64.06303-0193	PIPE DEARIATION	1	COMMON FOR MODELS WITH 4 VCR ENGINES ONLY	64.06303-0210 ALTERNATE
2	64.96301-0079	HOSE PIPE	1	COMMON FOR 2 VCR & 4VCR ENGINES ONLY	
3	64.97201-0006	CLIP KLIPCO /(18-25)	3	COMMON FOR ALL MODELS	
4	64.97445-0021	MOUNTING CLAMP A18 MAN194	1	COMMON FOR ALL MODELS	
5	64.90710-0025	PLAIN WASHER A6.4 DIN125-ST A3C	1	COMMON FOR ALL MODELS	
6	64.90020-2001	SCREW ST6.3X22-C MAN183-B1 DIN 7976	1	COMMON FOR ALL MODELS	
7	64.96001-0014	RUBBER GROMMET	1	COMMON FOR ALL MODELS	
<b>Page No. 07</b>		<b>REVISION NO. 00</b>			<b>VERSION: 01</b>

## RADIATOR GUARD

Diagram No. 07



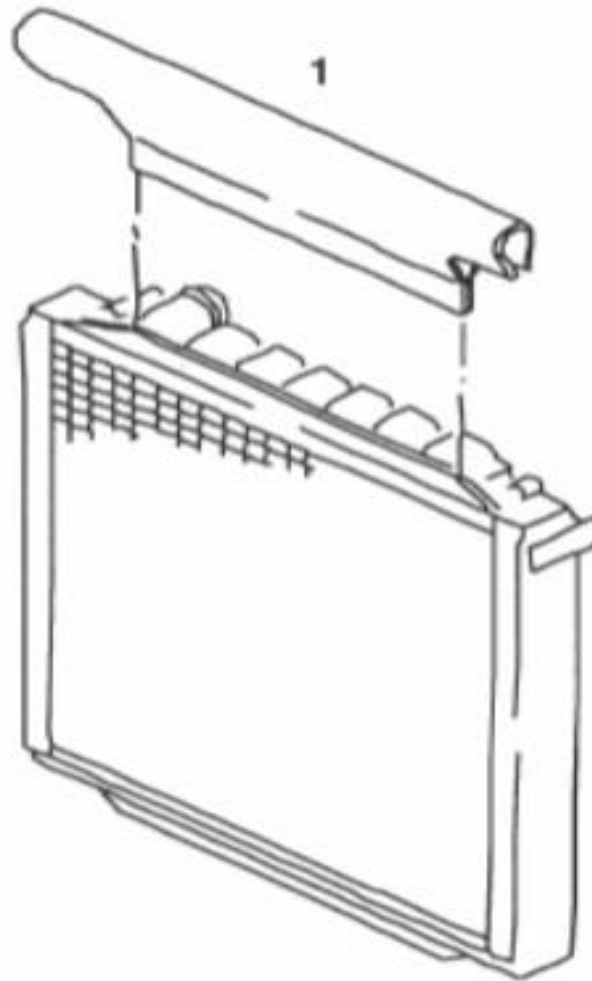
## RADIATOR GUARD

## Diagram No. 07

S R	PART NO.	DESCRIPTION	QTY	APPLICABLE MODEL	REMARKS
1	64.06201-0023	RADIATOR GUARD	1	COMMON FOR TIPPER MODELS ONLY	FOR VEHICLES AFTER VIN: 2258
1	64.06201-0006	RADIATOR GUARD-BUMPER	1	COMMON FOR TIPPER MODELS ONLY	FOR VEHICLES BEFORE VIN: 2258
2	64.06201-0007	SUPPORT BRACKET LH (RADIATOR GUARD)	2	COMMON FOR TIPPER MODELS ONLY	FOR VEHICLES AFTER VIN: 2258
3	64.06201-0008	SUPPORT BRACKET RH (RADIATOR GUARD)	2	COMMON FOR TIPPER MODELS ONLY	FOR VEHICLES AFTER VIN: 2258
4	64.90020-0362	SCREW M14X1.5X25-10.9, M701204	4	COMMON FOR TIPPER MODELS ONLY	
5	64.90020-0017	SCREW M10X20-10.9 M7.012.04, MAN183B1	3	COMMON FOR TIPPER MODELS ONLY	
6	64.90501-0017	NUT M10X1.5-10 , M7.112.40-MAN183B1	3	COMMON FOR TIPPER MODELS ONLY	
7	64.90020-0199	SCREW M14X1.5X30-10.9, M701204	4	COMMON FOR TIPPER MODELS ONLY	
8	64.90501-0011	NUT M14X1.5-10 , M7.112.40-MAN183B1	4	COMMON FOR TIPPER MODELS ONLY	
9	64.06201-0062	TUBE	1	COMMON FOR TIPPER MODELS ONLY	FOR VEHICLES AFTER VIN: 2258
10	64.06201-0011	SUPPORT BKT FOR RADIATOR GUARD	1	COMMON FOR TIPPER MODELS ONLY	FOR VEHICLES BEFORE VIN : 2258
Page No. 08		REVISION NO. 00			VERSION: 01

## AIR DEFLECTOR

Diagram No. 08



## AIR DEFLECTOR

### Diagram No. 08

S R	PART NO.	DESCRIPTION	QTY	APPLICABLE MODEL	REMARKS
1	64.06608-0001	AIR DEFLECTOR FLAP	1		
Page No.09		REVISION NO. 00			VERSION: 01