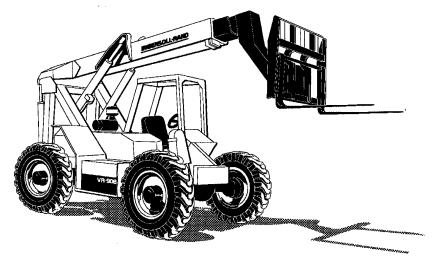
## PARTS MANUAL for VR-90B VARIABLE REACH FORKLIFT

Effective with all serial numbers



CPN 59131508 September 1, 1997

## **HOW TO USE THIS MANUAL**

This Parts Manual applies to all VR-90B Variable Reach Forklifts

#### When the Comm. # is not Known - Use the Word Index:

- Ingersoll-Rand's Word Index will make this item easy to locate. The Word Index is found in the
  very back of the book. The items listed are in alphabetical order and and may be repeated several
  times depending on their functional descriptions.
- Let's assume you need to replace the AIR CLEANER ELEMENT.
- Use any of the functional words in the item description to locate the desired item. Example: The
  first listing for the Air Cleaner Element in the Word Index is: Air Cleaner Element. The index
  shows the component will be found on page I.9..3 which is the Parts List page number for the Air
  Cleaner (59450270) Internal Breakdown.

	WORD	INDEX	
1.3 Cubic Yard Quick Attach Bucket	G.1.7	Cap	_ B.4.3,B.10.3,B.11.3
15' Truss Boom	G.5.3	Cap, Radiator	B.4.3
48" Load Arm	G.1.5	Carriage, 48" Quick Attach	
48" Load Pin	G.1.5	Carriage, 48" Quick Attach Side Tilt	G.1.5
48" Quick Attach Carriage	G.1.5	Carriage, 48" Standard	G.1.5
48" Quick Attach Side Tilt Carriage	G.1.5	Carrier	C.2.3,I.11.3
48" Standard Carriage	G.1.5	Center Floor Plate	A.1.3
Accelerator Pedal	B.9.3	Chain Anchor	G.1.11,G.1.15
Accumulated Pressure Light	E.2.3	Chain, Leaf	G.1.11,G.1.13
Accumulator	A.7.5	Chain, Pin	G.1.11,G.1.15
Air Breather	I.15.3	Chain, Plate	
Air Cleaner	B.5.3,B.6.3	Charging Pump Drive	

The item is also listed as:

Element, AirCleaner

#### Using the Parts Identification Pages:

- The PARTS IDENTIFICATION PAGES consist of the PARTS ILLUSTRATION (even numbered pages) and the PARTS LIST (odd numbered pages).
- The Parts Illustration shows the assembly with its component parts identified by Item Numbers.
- On the Parts List, the components are listed in Item Number order as found in the ITEM column.
  Other information provided by the Parts List is the Comm. Number which will be required to order Genuine Ingersoll-Rand Replacement Parts, a functional description, the quantity required to assemble one complete assembly, and any additional notes/ dimensions required to help place your parts order.
- For the example: The element is Item 2, Comm. Number 35318252, Quantity of 1.

#### When the Comm. # is not known - Use the Table of Contents:

- Turn to the TABLE OF CONTENTS pages in the front of this manual. These pages show the
  major systems of the machine divided into FUNCTIONAL GROUPS (identified by capital letters).
- Find the Functional Group that best describes the area of the machine you are interested in. For example: ENGINE, AND RELATED PARTS.
- See the sample Table of Contents shown below:

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Cooling	
Air Cleaner Assembly (Effective With S/N 149966)	B.5.2
Air Cleaner Assembly (Prior To S/N 149966)	B.6.2
Throttle (Effective With S/N 150967)	B.7.2
Throttle (Prior To S/N 150967)	B.8.2
Throttle Pedal Bracket Assembly	
Fuel System (Effective With S/N 149966)	
Fuel System (Prior To S/N 149966)	B.11.2
AXLE	
c	
Axle Mounting And Cylinder	C.1.2
Wheel And Tire	C22
TRANSMISSION	
D	

- Listed under the Functional Group of Engine are SECTIONS (identified by numbers that describe major repairable components of that group. Find the listing that refers to AIR CLEANER ASSEMBLY.
- Since the Air Cleaner Element is what needs to be replaced, refer to the internal breakdown section for the Air Cleaner. The Air Cleaner used on your machine is found in Functional Group B.; Section 5, this makes up the first part of the page number. Turn to that section of the parts manual and find the parts identification pages B.5.2 & B.5.3 for the Air Cleaner.

#### When the Comm. # is Known - Use the Numerical Index:

- If you already know the Comm. Number (part number) for the item required, a NUMERICAL INDEX is provided in the back of the manual to assist you. Look up the Comm. Number desired and the Numerical Index will show the Functional Group, Section, and Page Number where the item can be found.
- For our Air Filter Element Example: The Comm. Number 35318252 is found in the Numerical Index, it shows that component will be found on page I.9.3 which is the Parts List page number for the Air Cleaner (59450270).

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Main Hydraulic And Steering Pump (59001321) - Internal Breakdown  Main Hydraulic And Steering Pump (59474783) - Internal Breakdown  Hydraulic Kit - Non-Cbc (58973884) - Internal Breakdown  Hose Reel (59456616) - Internal Breakdown  Outrigger Cylinder (59450114) - Internal Breakdown  Tilt Cylinder (59474601) - Internal Breakdown  Boom Cylinder (59450577) - Internal Breakdown  Compensating Cylinder (59450049) - Internal Breakdown  Crowd Cylinder (59450056) - Internal Breakdown  MANUALS  L  Manuals  Numeric Index  Word Index  Warranty	
Main Hydraulic And Steering Pump (59474783) - Internal Breakdown	Main Hydraulic And Steering Pump (59001321) - Internal Breakdown
Hydraulic Kit - Non-Cbc (58973884) - Internal Breakdown - Hose Reel (59456616) - Internal Breakdown - Outrigger Cylinder (59450114) - Internal Breakdown - Hose Reel (59456616) - Internal Breakdown - Hose Reel (59474601) - Internal Breakdown - Hose Reel (5945014) - Internal Breakdown - Hose Reel (59450577) - Internal Breakdown - Hose Reel (59450057) - Internal Breakdown - Hose Reel (59450056) - Internal Breakdown -	
Hose Reel (59456616) - Internal Breakdown	Hydraulic Kit - Non-Cbc (58973884) - Internal Breakdown
Outrigger Cylinder (59450114) - Internal Breakdown	Hose Reel (59456616) - Internal Breakdown
Tilt Cylinder (59474601) - Internal Breakdown	Outrigger Cylinder (59450114) - Internal Breakdown
Boom Cylinder (59450577) - Internal Breakdown	Tilt Cylinder (59474601) - Internal Breakdown
Compensating Cylinder (59450049) - Internal Breakdown	Boom Cylinder (59450577) - Internal Breakdown
Crowd Cylinder (59450056) - Internal Breakdown  MANUALS  L.  Manuals	Compensating Cylinder (59450049) - Internal Breakdown
MANUALS  L  Manuals  Numeric Index  Word Index  Warranty	Crowd Cylinder (59450056) - Internal Breakdown
L  Manuals  Numeric Index  Word Index  Warranty	
Manuals  Numeric Index  Word Index  Warranty	MANUALS
Numeric Index	L
Numeric Index	
Word Index	Manuals
Word Index	Numeric Indox
Warranty	Word Indox
· ·	Womanty.
	Cover

#### STANDARD ABBREVIATIONS

Adj.	Adjustable	Mfg.
AMP	Amperes	mm
a/r	As Required	M.S.
ARC	Authorized Rebuilt Component	mtg
assy	assembly	R.H.M.S.
BSP	British Standard Pipe	N.A.
BTU	British Thermal Unit	No.
C/L	Centerline	NPT
COMM. NO.	Communication Number	NPTF
C.S.F.S.H.	Countersunk Flat Socket Head	N.S.S.
CCW	Counterclockwise	N.SV.A.
CW	Clockwise	O.D.
DDA	Detroit Diesel Allison	ORB
Dia.	Diameter	ORS
EEC	European Economic Community	PGE
exc	except	PRESS.
Eff.	Effective	PSI
EXT	External	Pt.
Fem	Female	Qty.
		Rad.
F.H.C.S.	Flat Head Cap Screw	R.H.
FIL	Fillister	
Fil. Hd.	Fillister Head	ROPS
FLR	Flare	Rot.
FOPS	Falling Object Protection System	RPM
ft.	Feet	SAE
Ftg.	Fitting	SCR
Ga.	Gauge	Sec.
GPH	Gallons Per Hour	S.F.H.
HD	Heavy Duty	S.F.H.M.S.
Hd.	Head	S.H.C.S.
H.H.	Hex Head	S.M.V.
H.H.C.S.	Hex Head Cap Screw	s/n
H.H.M.S.	Hex Head Machine Screw	SPST
H.H.S.	Hex Head Screw	S.T.
hp	horsepower	Std.
H.S.B.H.S.	Hex Socket Button Head Screw	Str.
H.S.H.C.S.	Hex Socket Head Cap Screw	SW
Hyd.	Hydraulic	Tach.
hp	horsepower	Temp.
incl.	included	Thd.
I.D.	Inside Diameter	Thk.
Ign.	Ignition	UNC
incl.	included	UNF
INST	Instrument	Univ.
INT. BRKD.	Internal Breakdown	Var.
I-R	Ingersoll-Rand	V V
лС	Joint Industry Conference	VPM
1	Long	wgt
lg. L.H.	Left Hand	wgt w/
M.H.	Metric	w/o
1	Manual Directional Control	W/O
MDC	Manual Difectional Control	
1		1 1

Mfg.	Manufacturing
mm	millimeter
M.S.	Machine Screw
mtg	mounting
R.H.M.S.	Machine Screw Round Head
N.A.	Not Available
No.	Number
NPT	National Pipe Thread
NPTF	National Pipe Thread Fine
N.S.S.	Not Sold Separately
N.SV.A.	Not Serviceable as an Assembly
O.D.	Outside Diameter
ORB	O-Ring Boss
ORS	O-Ring Seal
PGE	Page
PRESS.	Pressure
PSI	Pounds/Square Inch
Pt.	Point
Qty.	Quantity
Rad.	Radiator
R.H.	Right Hand
ROPS	Roll-Over Protection System
Rot.	Rotary
RPM	Revolutions Per Minute
SAE	Society of Automotive Engineers
SCR	System Check Relief
Sec.	Section
S.F.H.	Slotted Fillister Head
S.F.H.M.S.	Slotted Fillister Head Machine Screw
S.H.C.S.	Socket Head Cap Screw
S.M.V.	Slow Moving Vehicle
s/n	Serial Number
SPST	single pull/single throw
S.T.	Self-Tapping
Std.	Standard
Str.	Straight
SW	Swivel
Tach.	Tachometer
Temp.	Temperature
Thd.	Thread
Thk.	Thick
UNC	Unified Coarse
UNF	Unified Fine
Univ.	Universal
Var.	Variable
Var. V	Volt
V VPM	Vibrations Per Minute
wgt	weight
wgt w/	With
w/o	Without
W/U	WILLIOUL

Revised 1/15/96

#### VR-90B RECOMMENDED SPARE PARTS

NOTE: These recommended spare parts reflect current models.

#### **MAINTENANCE ITEMS**

Spare parts required for one (1) maintenance interval.

1 UNIT	DESCRIPTION	COMM. NO.	PAGE
1	ENGINEASSEMBLY Filter Kit	58919580	B.1.3
1	HYDRAULIC FILTER Hydraulic Filter Element	59438838	F.2.5

#### **RECOMMENDED SPARES**

Spare parts recommended to support a number of units for:

I year or1000 hours

1 UNIT	5-9 UNIT	10+ UNIT	DESCRIPTION	COMM. NO.	PAGE
, , , , ,			MAINFRAME		
1	4	4	Fuel Tank Cap (Effective with s/n: 5338)	59415869	B.10.3
1	4	4	Fuel Tank Cap (Prior to s/n: 5338)	59454587	B.10,3
1	4	4	Hydraulic Oil Tank Filler-Breather Assembly	59414243	I.17.3
2	4	4	Hydraulic Oil Tank Strainer	59013417	I.17.3
2	4	4	Hydraulic Oil Tank Strainer Magnet	59052647	I.17.3
			ENGINEASSEMBLY		
5	10	20	OilFilter	59438820	B.1.3, B.2.3
5	10	20	Fuel Filter	59438812	B.1.3, B.2.3
5	10	20	Water Separator Filter	59486829	B.1.3, B.2.3
2	4	4	Fan Belt Tan Belt	58753898	B.1.3, B.2.3
2	4	4	Alternator Brush Kit	59041806	B.1.3, B.2.3
2	4	4	Starter Motor Ground Brush	58762600	B.1.3, B.2.3
2	4	4	Starter Motor Insulated Brush	58762618	B.1.3, B.2.3
2	4	4	Throttle Cable	59450353	B.8.3

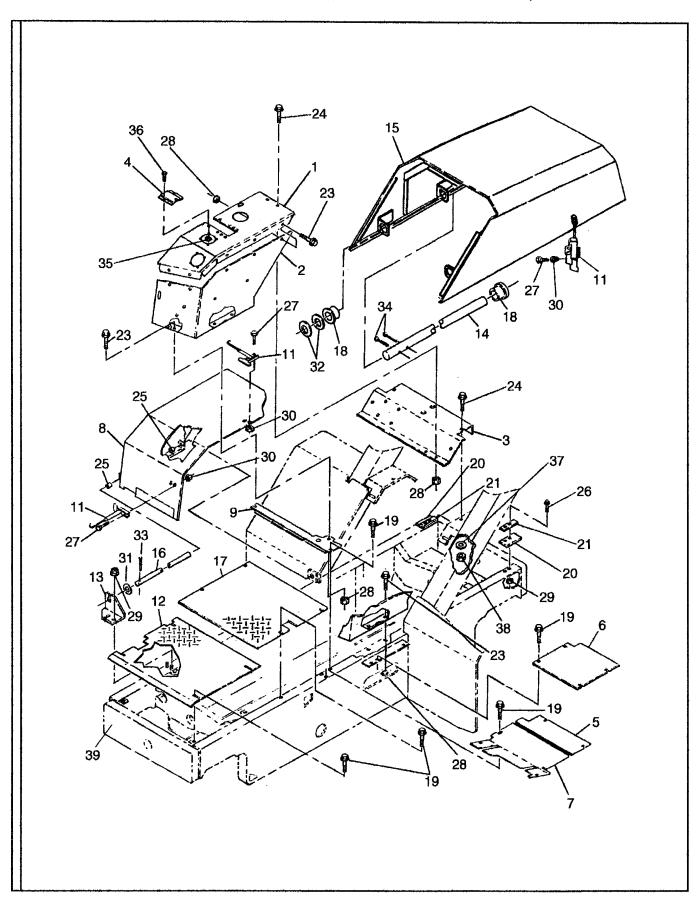
# VR-90B RECOMMENDED SPARE PARTS (CONTINUED)

1	5-9	10+			
	UNITS		DESCRIPTION	COMM. NO.	PAGE
			RADIATORANDOILCOOLER		
1	2	2	Radiator Cap	59455329	B.4.3
1	2	2	Upper Radiator Hose	59450742	B.4.3
1	2	2	Lower Radiator Hose		
1	2	2	Drain Cock	59450759	B.4.3
1	2	2	Dram Cock	95250692	B.4.3
			AIR CLEANER		
5	10	20	Primary Element	35318252	I.9.3
3	10	20	Timaty Element	33316232	1.9.3
			MUFFLERANDHYDRAULICFILTER		
0	0	1	Muffler	59450262	B.3.3
. 1	4	4	Hydraulic Strainer	59013417	I.17.3
2	8	8	Strainer Magnet	59052647	I.17.3
2	8	8	Filler-Breather Assembly	59414243	I.17.3
			•	-7 1-1-0	272.110
			ELECTRICAL		
1	2	2	Battery Cable - Positive	59087213	E.1.3,E.1.7
1	2	2	Battery Cable - Negative	59087205	E.1.3,E.1.7
1	2	2	Battery	59436931	E.1.3,E.1.7
6	6	6	Fuse(20 Amp)	59398016	A.12.3, E.1.5
6	6	6	Fuse (10 Amp)	59325712	E.1.5, E.5.3
6	6	6	Fuse (5 Amp)	59465591	A.9.3, E.1.5
0	1	2	Horn	59455956	E.1.5
1	2	2	Ignition Switch	59450791	E.1.5,E.1.7
4	8	8	Key	59435990	E.1.5 E.1.7
			MAIN HYDRAULIC AND STEERING PUR		•
1	2	4	SealKit	58828880	I.19.3, I.20.5
			GAUGEPANELASSEMBLY		
1	2	3	Oil Pressure Gauge	59455469	E.2.3
1	2	3	Water Temperature Gauge	59455493	E.2.3 E.2.3
1	2	3	Transmission Temperature Gauge	59455303	
1	2	3	Voltmeter		E.2.3
1	2	3	Fuel Level Gauge	59816736	E2.3
<del>-</del>		3	Hourmeter	59731281	E.2.3
1 4	2 8	8	Bulb	59989558	E.2.3
4	٥	8	Builo	59465609	E.2.3
			HYDRAULICSYSTEM		
			Manifold	58905191	I.21.3, I.21.11
1	2	4	Seal Kit	58912338	I.21.11
			Crowd and Boom Control Valve	58887076	I.21.3, I.21.13
1	2	4	Spring Kit	58886649	I.21.13
1	2	4	Cap Kit	58886656	I.21.13
1	2	4	Seal Kit	58912825	I.21.13
			Joystick Controller	58887084	I.21.3,I.21.17
1	2	4	Plug Kit	58886680	1.21.17
_		-	Linear Type Controller	58887092	I.21.3,I.21.19
1	2	4	Tie Rod Kit	58886979	I.21.19
1	2	4	Plug Kit	58886987	I.21.19
•		•		2000/70/	1.41.17

# VR-90B RECOMMENDED SPARE PARTS (CONTINUED)

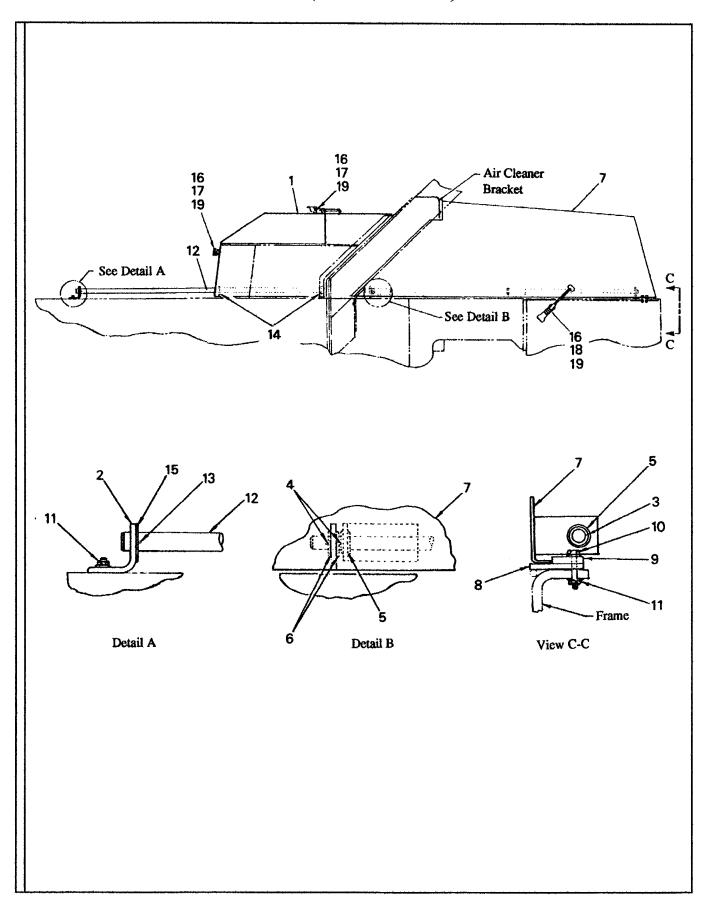
1 UNIT	5-9 UNIT	10+ UNIT	DESCRIPTION	COMM. NO.	PAGE
				,	
			HYDRAULICSYSTEM-Continued		
			Motion Control Valve	59470989	G.1.3
1	2	4	Seal Kit	58753245	G.1.3
			Boom		
1	2	4	Boom Ear Repair Kit	59491480	G.1,9
			Level Valve	59456749	C.1.3, F.4.5
1	2	4	Seal Kit	59480293	C.1.3
			Boom Cylinder	59450577	G.1.9
1	2	4	Seal Kit	59480582	1.25.3
			Tilt Cylinder	59474601	G.1.3
1	2	2	Seal Kit	58754029	I.24.3
			Compensating Cylinder	59450049	G.1.9
1	2	4	Seal Kit	<b>5</b> 94391 <b>5</b> 8	I.26.3
			Crowd Cylinder	59450056	G.1,13
1	2	4	Seal Kit	58753278	I.27.3
			Dual Counterbalance Valve	58841586	F.1.11
1	2	4	Repair Kit	58874827	F.1.11

### HOODS AND COVERS (EFFECTIVE WITH S/N 5240)



## HOODS AND COVERS (EFFECTIVE WITH S/N 5240)

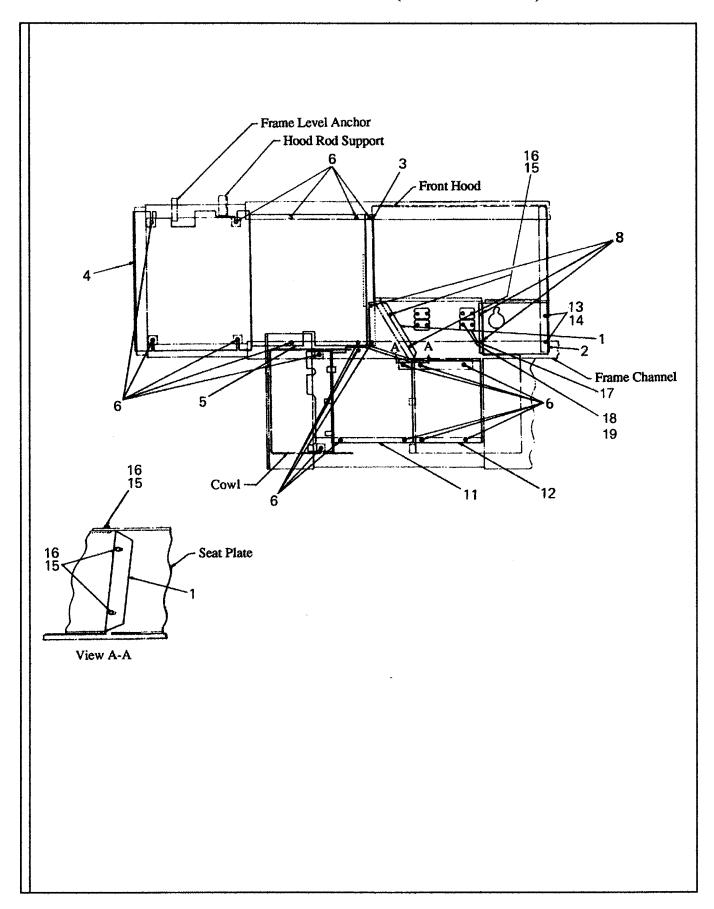
ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1	50006660	Top Copeola Plata (Effactive with S/N 140066)	1	· · · · · · · · · · · · · · · · · · ·
1	59096669	Top Console Plate (Effective with S/N 149966) Top Console Plate (E/N 5240 thm E/N 140065)	1	
~	58827304	Top Console Plate (S/N 5240 thru S/N 149965)	1	
2	58827312	Side Console Plate	$\begin{vmatrix} 1 \\ 1 \end{vmatrix}$	
3	58827346	Engine Cover Plate	$\begin{vmatrix} 1 \end{vmatrix}$	
4	58827361	Cover Plate	1	
5	58883612	Floor Plate - Center	1	
6	58827379	Floor Plate - Back	1	
7	58827387	Floor Plate - Front	1	
8	58827593	Front Hood	1	
9	58827783	Floor Plate Support	1	
11	59450783	Hood Latch	4	
12	59451997	Front Floor Plate	1	
13	59452706	Hood Support Bracket	1	
14	59452714	Hood Rod	2	
15	59452722	Rear Hood	1	
16	59452979	Hood Rod	1	
17	59453068	Center Floor Plate	1	
18	59454926	Bushing	4	
19	59998096	Self-Tapping Screw	23	
20	59456558	Hood Wear Pad	2	
21	59457010	Hood Wear Pad	2	
23	59463703	F.H.C.S.	8	
24	59463711	F.H.C.S.	6	
25	59469288	Grommet	2	
26	58827973	Lock Screw	4	5/16 - 18 x 2.0
27	59787465	Lock Screw	8	1/4 - 20 x 1.0
28	59807941	Lock Nut	14	3/8 - 16
29	59918573	Lock Nut	6	5/16 - 18
30	59941682	Lock Nut	8	1/4 - 20
31	95922308	Flat Washer	1	1.0
32	95922423	Flat Washer	4	3/4
33	95923926	Cotter Pin	1	1/8 x 1.25
34	95923918	Cotter Pin	4	1/8 x 1.0
35	59941682	Lock Nut	12	1/4 - 20
36	59965962	Lock Bolt	12	1/4 - 20 x 0.75
37	95922233	Flat Washer	2	3/8
38	95923322	Lock Nut	2	3/8 - 16
39	59494062	Frame	1	
		VP ONR		



#### **HOODS (PRIOR TO S/N 5240)**

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
		DWG 59470294	<del>                                     </del>	The state of the s
1	59451971	Front Hood	1	
2	59452706	Hood Rod Bracket	1	
3	59452714	Hood Rod	2	
4	95923918	Cotter Pin	4	1/8 X 1"
5	59454926	Bushing	4	
6	95922423	Flat Washer	4	3/4
7	59452722	Rear Hood	1	
8	59456558	Wear Pad	2	
9	59457010	Wear Pad	2	
10	58827973	Lock Screw	4	5/16-18 X 2
11	59918573	Lock Nut	6	5/16-18
12	59452979	Rod Hood	1	
13	95923926	Cotter Pin	1	1/8 X 1.25
14	59469288	Grommet	2	
15	95922308	Flat Washer	1	1"
16	59450783	Hood Latch	4	
17	59998146	Lock Bolt	4	1/4-20 X.50
18	59787465	Lock Screw	4	1/4-20 X 1.0
19	59941682	Lock Nut	8	1/4-20

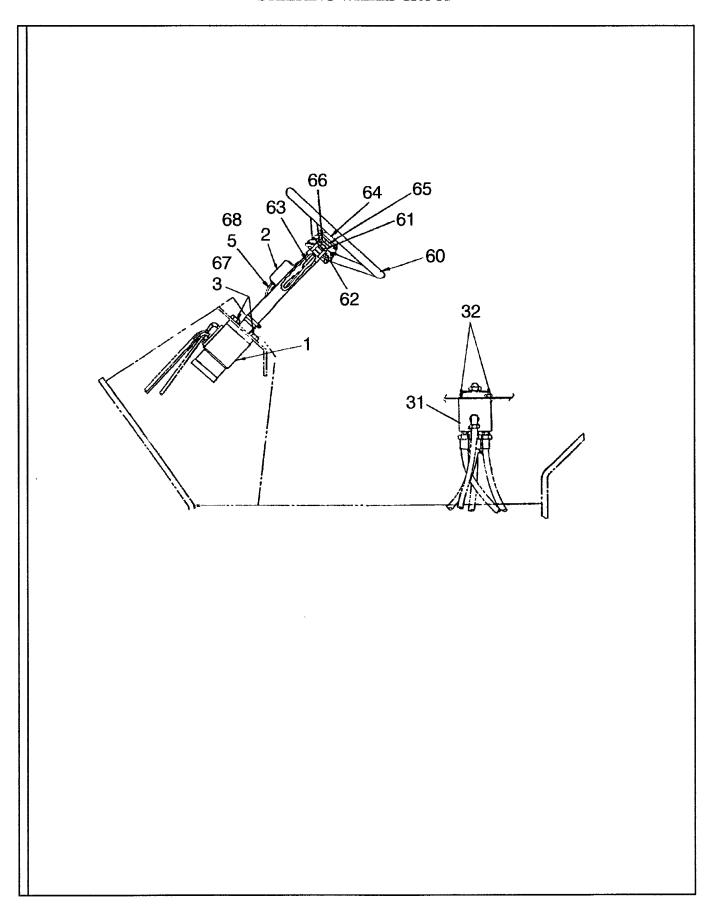
VR-90B



#### FLOOR PLATES AND COVERS (PRIOR TO S/N 5240)

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
		BOM 59459719		
1	59451955	Control Cover Plate	1	
2	59451963	Cover	1	
3	59451989	Floor Plate Support	1	
4	59451997	Front Floor Plate	1	
5	59453068	Rear Floor Plate	1	
6	59998096	Self-Tapping Screw	23	
8	59456244	Self-Tapping Screw	3	
11	58827478	Floor Plate	1	
12	59467001	Rear Floor Plate	1	
13	59456277	Lock Screw	2	5/16 - 18 x 1.0
14	59918573	Lock Nut	2	5/16 - 18
15	59807941	Lock Nut	4	3/8 - 16
16	59680983	Lock Screw	4	3/8 - 16 x 1.0
17	59417766	Cover Plate	2	
18	59655962	Lock Screw	4	1/4 - 20 x 0.75
19	59941682	Lock Nut	4	1/4 - 20
		,		
			-	
		VR-90B		

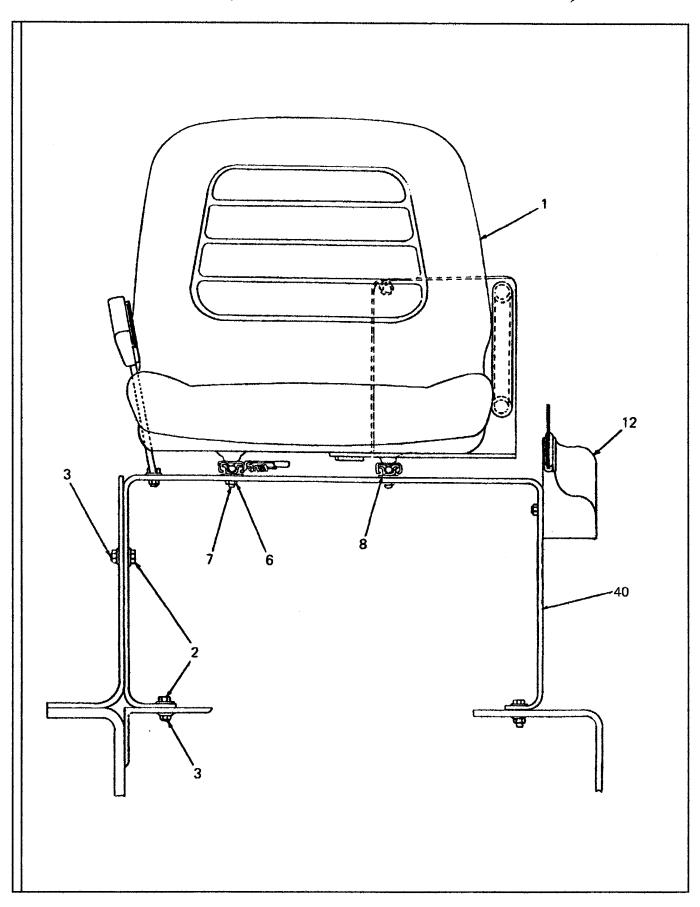
#### STEERING WHEEL GROUP



#### STEERING WHEEL GROUP

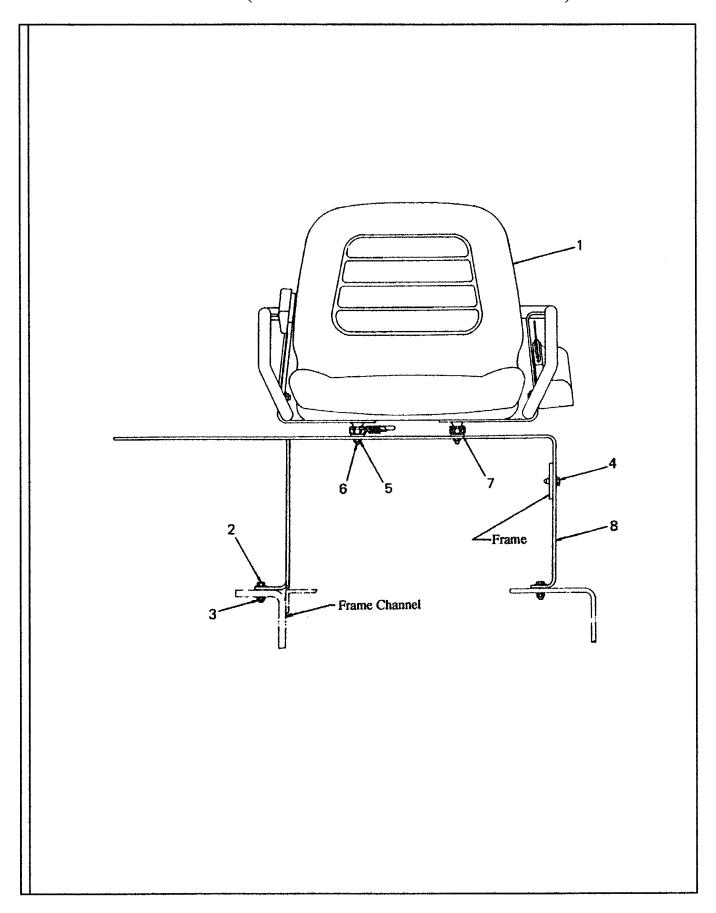
TEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
	#D 4# = = 2 =	BOM 59493551		G. D. 11 T4
1	59455535	Hydraulic Pump (Effective with S/N 146392)	1	See Breakdown-I.1
-	59001354	Hand Pump & Steering Column	1	See Breakdown-I.2
	#04P#000	(Effective with S/N 141714 thru 146391)		
-	59105809	-Steering Column	1	
2	59052480	-Cover, Contact Brush	1	
-	59052506	-Gasket	1	
-	59052480	-Contact Brush	1	
-	59052498	-Screw	4	
1	59455535	Hand Pump & Steering Column	1	See Breakdown-I.3
		(Effective with S/N 5240 thru 141713)		
3	95919254	H.H.C.S. (Effective with S/N 146392)	2	3/8 -16 x 1.5
-	95920401	H.H.C.S. (Effective with S/N 141714	2	5/16 - 18 x 0.625
		thru 146391)		
-	59463729	Flange Head Screw (Prior to S/N 141714)	2	3/8 - 16 x 1.5
5	59396366	Loom Bulk (Effective with S/N 146392)	A/R	
-	59396366	Loom Bulk (Effective with S/N 141714	A/R	
		thru 146391)		
-	59465377	Tubing, Heat Shrink (Prior to S/N 141714)	A/R	
8	59465377	Tube Ht.Shrk (Effective with S/N 146392)	A/R	
31	59455725	Valve, Steering Selector (Prior to S/N 5240)	1	See Breakdown-I.4
		NOTE: For Steering Select Valve Effective with		
		S/N 5240, See Hydraulic Hoses and Adapters, F.1		
32	59680983	Lock Screw (Prior to S/N 5240)	4	3/8 - 16 x 1.0
60	59455709	Steering Wheel	1	
61	59461368	Nut	1	
62	59461335	Terminal, Electrical	1	
63	59461376	Connector, Female	1	
64	59455691	Horn Button	1	
65	59461343	Wire Assembly	1	
66	59461350	Wire Assembly	1	
67	95922373	Washer Flat (Effective with S/N:146392)	2	3/8 Dia.
-	95922365	Washer, Flat (Prior to S/N 146392)	2	5/16 Dia.
68	59001362	Wire Harness	1	
00	37001302	TI LE V RAMARYUU		
		VD 00D		

VR-90B



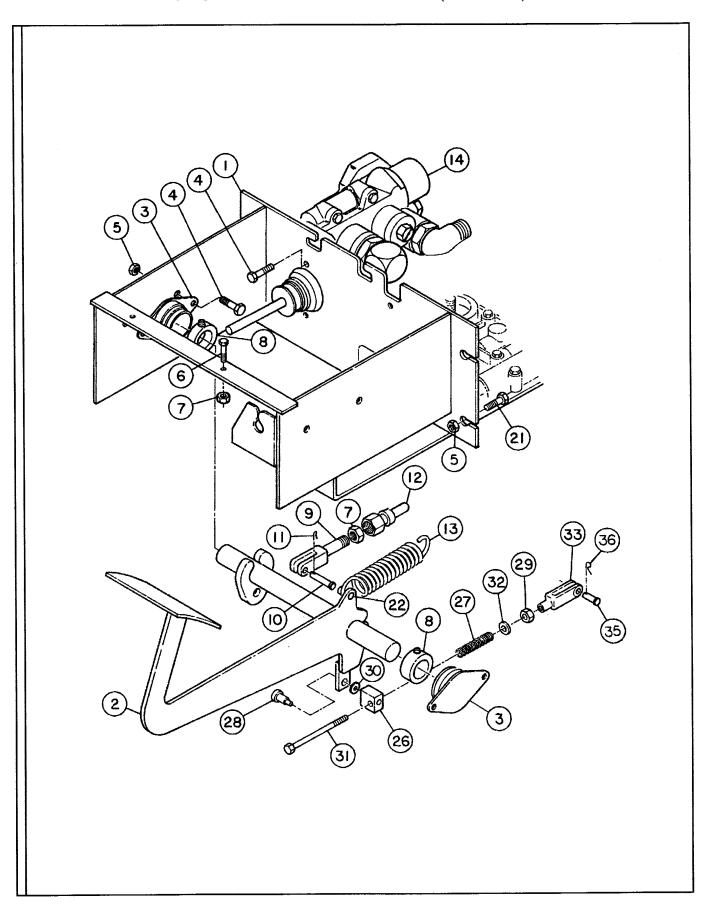
#### SEAT GROUP (EFFECTIVE WITH S/N 5249 PLUS 5232 and 5233)

TEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
		BOM 58850579		
				~
1	N.SV.A.	Seat Assembly	1	See Breakdown-I.5
2	59463711	F.H.C.S.	6	3/8 - 16 x 1.25
3	59807941	Lock Nut	6	3/8 - 16
6	59464610	Lock Nut	4	5/16 - 18
7	95920427	H.H.C.S.	4	5/16 - 18 x 0.875
8	95922324	Washer Flat	4	1/4
12	58850637	Seat Belts	1	
40	58827338	Seat Plate	1	
				:



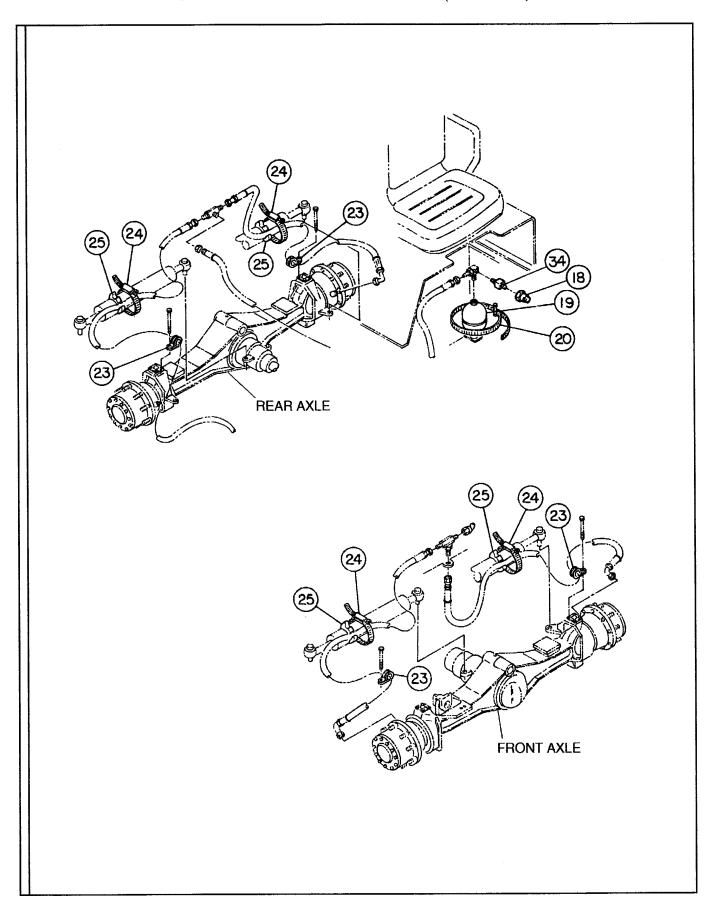
#### SEAT GROUP (PRIOR TO S/N 5249 EXCEPT 5232 AND 5233)

TEM	COMM. NO.	DESCRIPTION BOM 59494179	QTY	DIMENSIONS/NOTES
1	N.SV.A.	Seat Assembly	1	See Breakdown-I.6
2	59463711	F.H.C.S.	4	3/8 - 16 x 1.25
3	59807941	Lock Nut	4	3/8-16
4	59998096	Self-Tapping Screw	1	3/8 - 16 x 1.0
5	59464610	Lock Nut	4	5/16 - 18
6	95920427	H.H.C.S.	4	5/16 - 18 x 0.875
7	95922399	Washer, Flat	4	1/2
8	59494278	Seat Plate	1	
		<u> </u>		
	1	VR-90B	<u> </u>	A



#### SINGLE PEDAL BRAKE ASSEMBLY (Sheet 1 of 2)

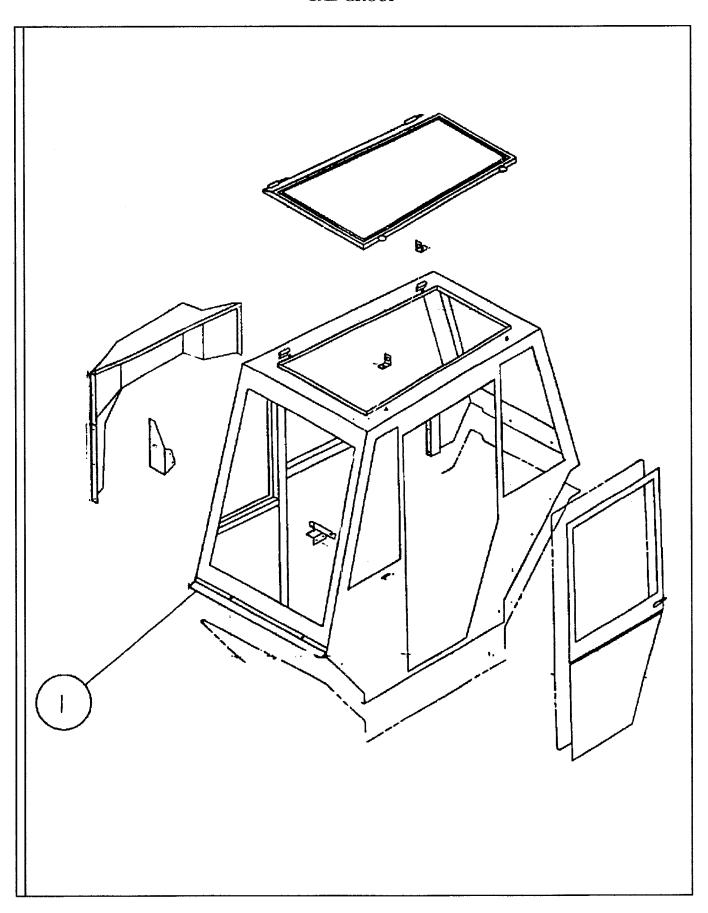
ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
		BOM 58812009		
1	59495168	Bracket, Brake	1	
2	58811977	Pedal, Brake	1	
3	59455931	Bearing Flange	2	
4	59463703	Flange Screw	7	
5	59807941	Lock Nut	8	3/8 - 16
6	95920864	H.H.C.S.	1	1/2 - 20 X 1.5
7	95923090	Hex Jam Nut	2	1/2 - 20
8	59450437	Set Collar	2	
9	59455626	Rod End	1	
10	50266287	Pin Clevis	1	1/2
11	95923918	Cotter Pin	1	1/8 x 1.0
12	59455717	Push Rod	1	
13	59456848	Spring	1	
14	59493866	Brake Valve	1	
_	58875204	-Repair Kit	1	
21	59463729	F.H.C.S.	4	
22	59454363	Groove Pin	1	
26	58811969	Tapped Block	1	
27	58811985	Spring	1	
28	95364030	Hex Socket Shoulder Screw	1	3/8 - 18 x 3.0
29	95923058	Hex Jam Nut	1	1/4 - 28
30	95922183	Flat Washer	1	1/4
31	95932737	H.H.C.S.	1.	1/4 - 28 x 2.5
32	95922324	Flat Washer	2	1/4
33	59929059	Clevis	1	
35	59726034	Clevis Pin	1	
36	95924049	Cotter Pin	1	1/16 x 0.50
		VP 00P		



#### SINGLE PEDAL BRAKE ASSEMBLY (Sheet 2 of 2)

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
18	59450668	Pressure Switch	1	
19	59076042	Accumulator (Effective with S/N 147095)	1	
_	58811332	Accumulator (Prior to S/N 147095)	1	
20	59469486	Clamp Screw	1	
23	59726075	Clamp	4	
24	95426359	Hose Clamp	4	
25	59455600	Spacer Tube	4	
34	95418976	Adapter	1	1/8 - 27 x 1/8 - 27
		•		
			ļ	
		VP OOR		1

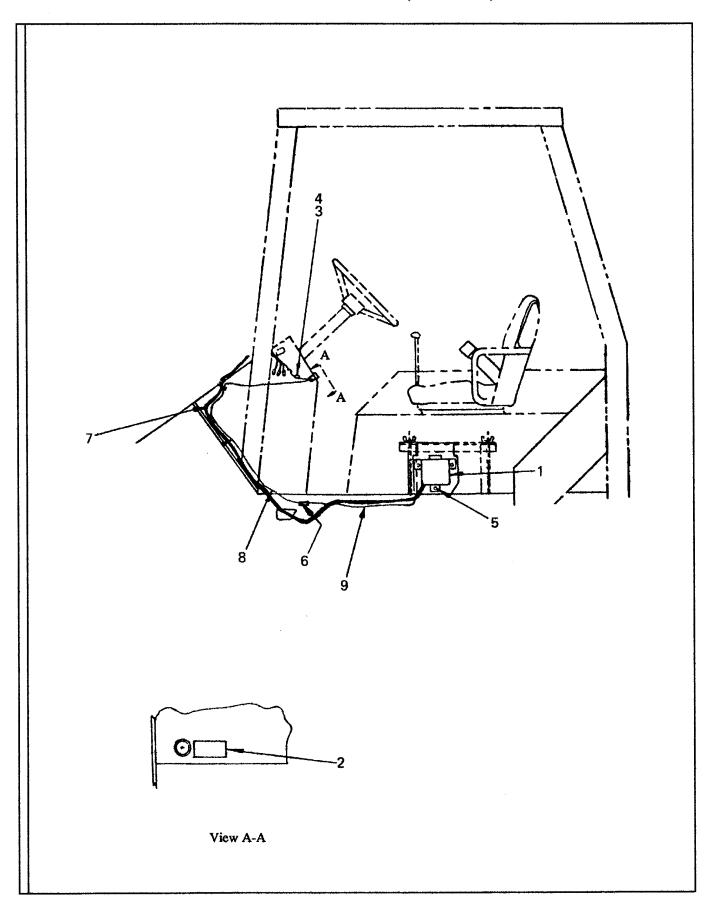
#### **CAB GROUP**



VR-90B

#### **CAB GROUP**

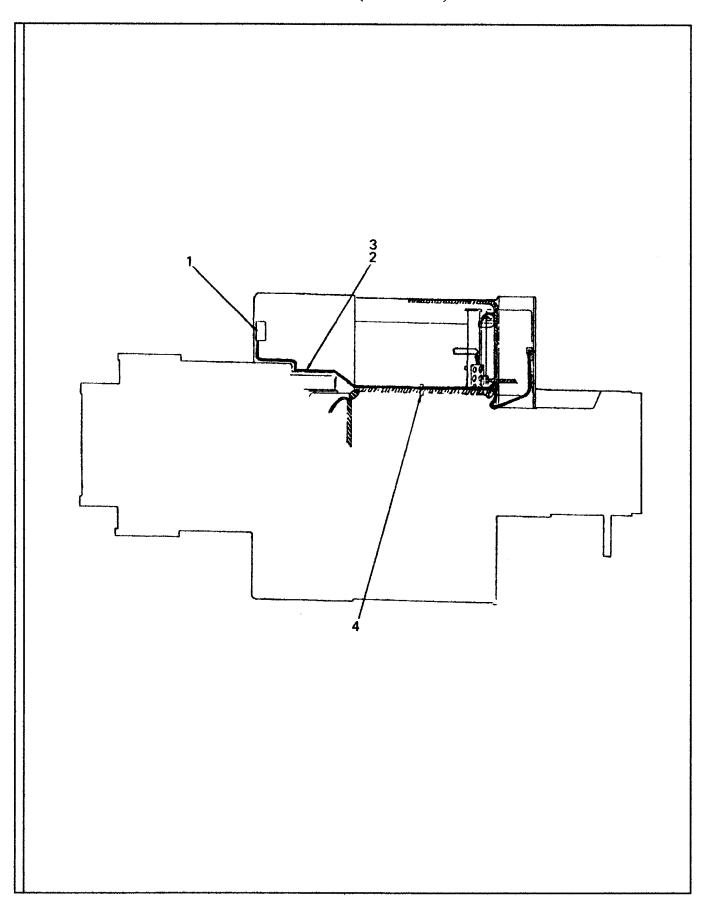
COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
		1 1	See Breakdown - I.7
		1 1	
1		1 1	See Section A.9
i		1	See Section A.10
1		1	See Section A.11
1		1	See Section A.12
58808239	Defroster	1	See Section A.12
-			
:			
•			
i			
	58883232 59473553 59494815 59474080 59494716 58808221 58808239	58883232 Cab Assembly 59473553 Floor Mat (Not Shown) 59494815 Washer Installation 59474080 Rear Wiper 59494716 Dome Light 58808221 Heater Installation	58883232 Cab Assembly         59473553       Floor Mat (Not Shown)       1         59494815       Washer Installation       1         59474080       Rear Wiper       1         59494716       Dome Light       1         58808221       Heater Installation       1



#### WASHER INSTALLATION (OPTIONAL)

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
		BOM 59494815		
1	59494773	Washer Assembly	1	**** 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
2	59494765	Decal	1	Windshield Washer
3	59474049	Fuse Holder	1	_
4	59465591	Fuse	1	5amp
6	59494781	Plate	1	
8	59941682	Nut, Lock	3	1/4-20 Whiz Nut
9	59473660	Butt Splice	1	
10	59494922	Hose	1	
11	59473678	Cable	4	
12	59494666	Conduit	1	
10	59974915	Bulk Loom	7	
:				
		٠		
]				
L	l	1 VID 00D		

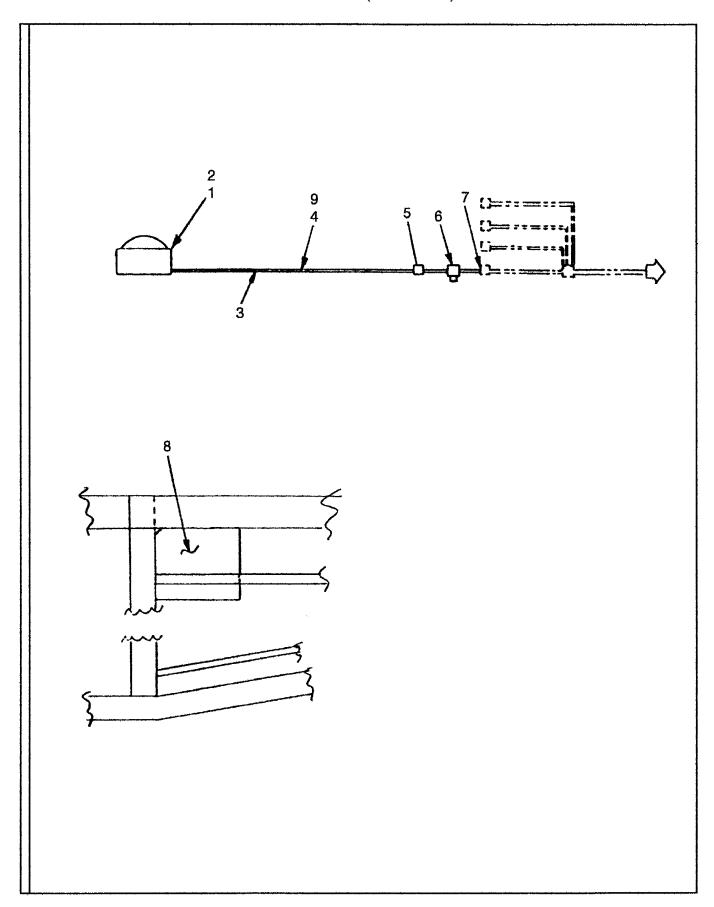
### REAR WIPER (OPTIONAL)



VR-90B

#### REAR WIPER (OPTIONAL)

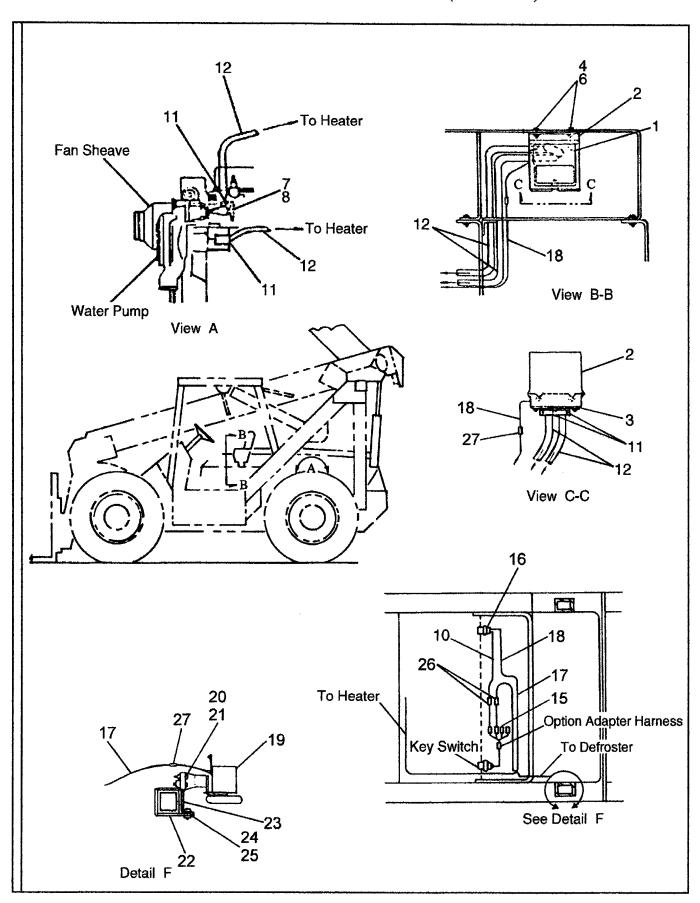
ITEM	COMM, NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
		BOM59474080	<u> </u>	
10	59474056	Wiper Assembly	1	
11	59474064	Wire Assembly	1	
12	59494674	Conduit	1	
13	95713798	Strap	5	
13	93/13/96	Suap	3	
				·
l	L	VP OOB		



#### DOME LIGHT (OPTIONAL)

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
		BOM59494716	1	
1	59494724	Dome Light	1	#6 22 ~ 0.250
2	95074175	Screw	3	#6-32 x 0.250
3	59494740	Wire	#	
4	59670554	Adhesive	5	
5	59473660	Butt Splice	1	
6	59474049	Fuse Holder	1	
7	59494690	Terminal, Bullet	1	
8	59494732	Plate	1	
9	95373973	Tyrap	5	
		VD 00D	1	

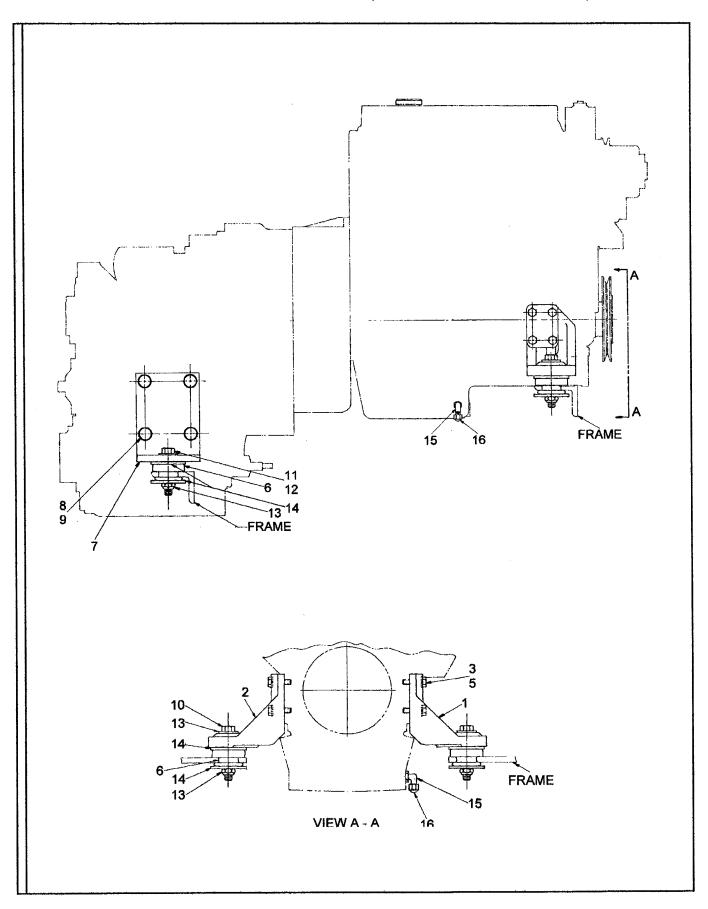
#### **HEATER/DEFROSTER INSTALLATION (OPTIONAL)**



#### HEATER/DEFROSTER INSTALLATION (OPTIONAL)

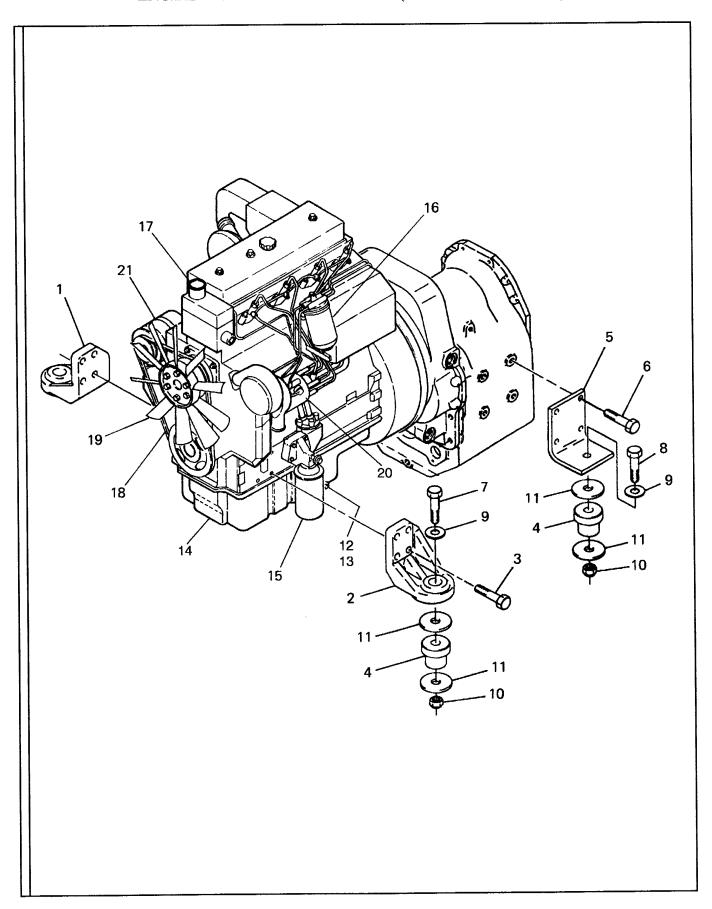
ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
		BOM 58884446		
-	58808221	Heater Assembly		
1	58884446	-Heater	1	
-	58875923	-Fan Assembly	1	
-	58875931	-12V Motor	1	
-	58875949	-Heater Core	1	
2	59473595	-Heater Bracket	1	
3	59918573	-Nut, Lock	3	5/16-18
4	59807941	-Nut, Lock	2	3/8-16
6	59680983	-Screw, Lock	2	3/8-16 X 1.0
7	59392795	-Valve	1	
8	59924241	-Reducer	1	
9	59465518	-Fitting (Not Shown)	1	
10	59096503	-Wiring Harness	1	
11	95090106	-Clamp	4	
12	59473637	-Hose	2	
15	59473652	-Terminal, Electrical	1	
18	59096511	-Wire Harness	1	
27	59473652	-Terminal, Electrical	1	
28	59494641	-Conduit (Not Shown)	1	
-	58808239	Defroster Assembly	1	
17	59109603	-Wire Harness	1	
19	59108308	-Fan Assembly	1	
-	59474106	-Fan	1	See Breakdown-L8
20	95932141	-F.H.M.S. (Effective with S/N 147774)	3	#10-32 x 0.75
-	95932141	-F.H.M.S. (Prior to S/N 147774)	4	#10-32 x 0.75
21	59397042	-Nut, Lock (Effective with S/N 147774)	3	
_	59397042	-Nut, Lock (Prior to S/N 147774)	4	
22	59096552	-Bracket (Effective with S/N 147774)	1	
-	59473710	-Bracket (Prior to S/N 147774)	1	
23	59096545	-Bracket (Effective with S/N 147774)	1	
-	59473728	-Bracket (Prior to S/N 147774)	1	
24	59965962	-Bolt, Lock	2	1/4-20 x 0.75
25	59941682	-Nut, Lock	2	1/4-20
26	59325712	-Fuse	1	
27	59473652	-Terminal, Electrical	1	
28	59494641	-Conduit (Not Shown)	1	
		VR_00B		

#### ENGINE AND ENGINE MOUNTING (EFFECTIVE WITH S/N 149966)



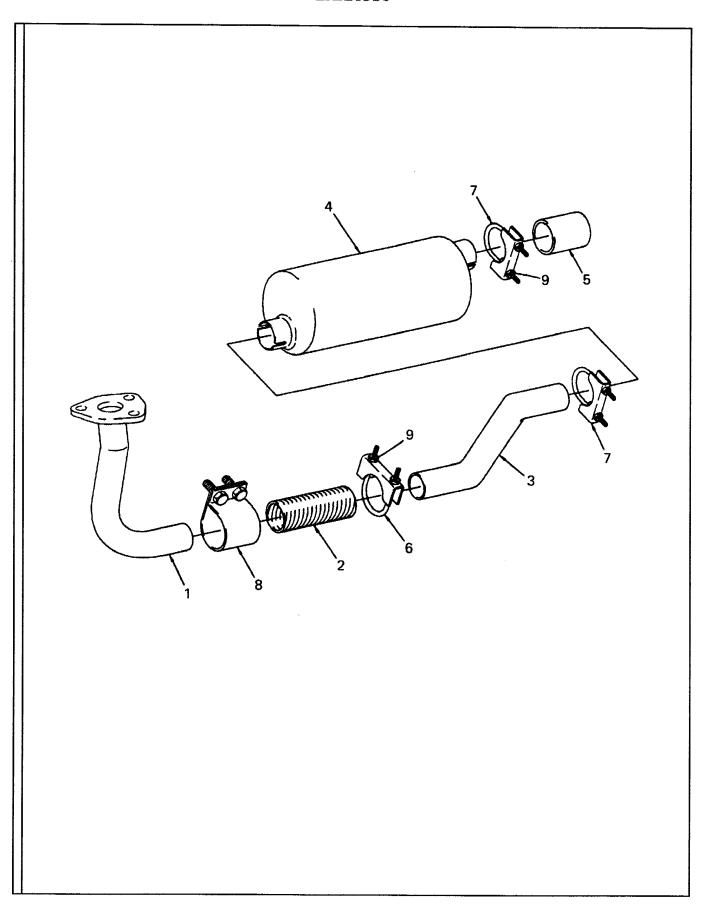
#### ENGINE AND ENGINE MOUNTING (EFFECTIVE WITH S/N 149966)

TEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
		BOM 59457952*		
1	59456509	R.H. Engine Mounting Bracket	1	
2	59456517	L.H. Engine Mounting Bracket	1	
3	96719893	H.H.C.S.	8	M12 x 45 mm
6	59455113	Motor Mount	4	
7	59452847	Plate Mount	2	
8	95920021	H.H.C.S.	8	3/4 - 10 x 1.75
10	95919924	H.H.C.S.	2	5/8 - 11 x 4.5
11	95919908	H.H.C.S.	2	5/8 - 11 X 4.0
12	95922274	Flat Washer	4	5/8
13	95923439	Lock Nut	4	5/8 - 11
14	59465187	Washer	8	
15	95303335	Elbow	1	
16	95257325	Cap Nut	1	1/2
<b></b>	59108522	Engine	1	
-	59486829	-Water Separator Filter	1	
-	58875352	-Heater/Glow Plug	4	
_	58753831	-Oil Filter	1	
	59482653	-Fuel Filter	1	
-	00196162	-Thermostat	1	
-	58753898	-Fan Belt	1	
-	58875360	-Fan Blade	1	
-	59457267	Starter Motor	1	
_	58753294	-Brush Holder Assembly	4	
_	58762600	-Ground Brush	2	
-	58762618	-Insulated Brush	2	
-	58762626	-Brush Spring	4	
_	58875196	-Solenoid	1	
-	58965492	Alternator	1	
-	59041806	-Brush Assembly	4	
_	59041814	-Voltage Regulator	1	
_	59491696	Block Heater Kit	1	
		(Consists of Element and Cord)(Not Shown)		
**	58919580	Filter Kit	1	
-	59438820	-Engine Oil Filter	1	
-	59438812	-Fuel Filter	1	
-	58886136	-Water Separator Filter (Spin-On Element)	1	
-	58791476	-Friction Modifier	1	4oz.



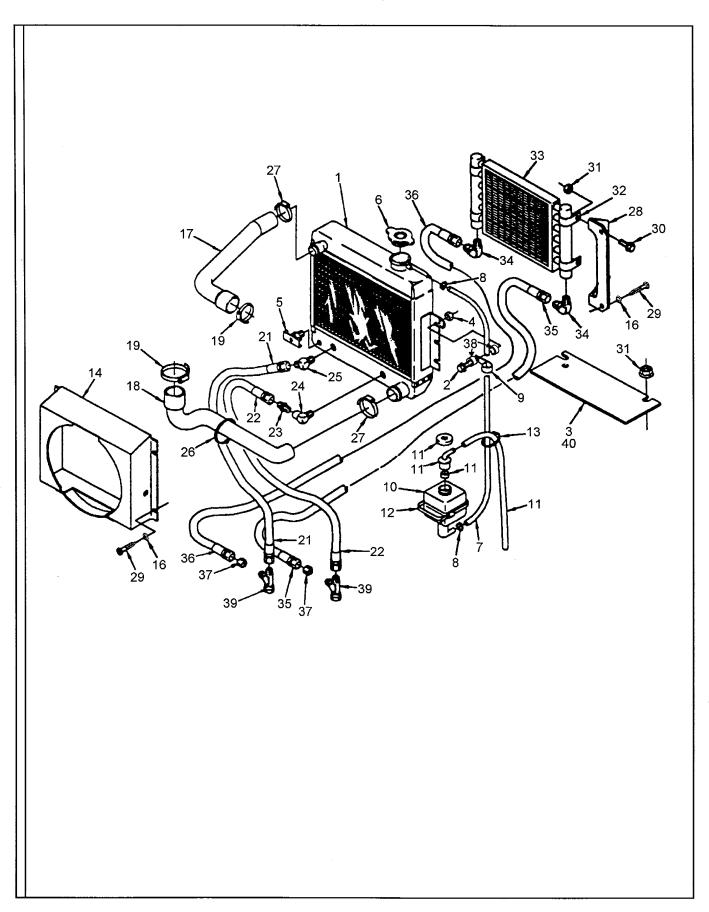
# ENGINE AND ENGINE MOUNTING (PRIOR TO S/N 149966)

1 2 3	59456509	DESCRIPTION  BOM 59456506*	QTY	DIMENSIONS/NOTES
2 3	59456509			
3		R.H. Engine Mounting Bracket	1	
	59456517	L.H. Engine Mounting Bracket	1	
1	96719893	H.H.C.S.	8	M12 x 45 mm
4	59455113	Motor Mount	4	
5	59452847	Plate Mount	2	
6	95920021	H.H.C.S.	8	3/4 - 10 x 1.75
7	95919924	H.H.C.S.	2	5/8 - 11 x 4.5
8	95919908	H.H.C.S.	2	5/8 - 11 X 4.0
9	95922274	Flat Washer	4	5/8
10	95923439	Lock Nut	4	5/8 - 11
11	59465187	Washer	8	
12	95303335	Elbow	1	
13	95257325	Cap Nut	1	1/2
14	58793316	Engine	1	
-	59486829	-Water Separator Filter	1	
_	58875352	-Heater/Glow Plug	4	
15	58753831	-Oil Filter	1	
16	59482653	-Fuel Filter	1	
17	00196162	-Thermostat	1	
18	58753898	-Fan Belt	1	
19	58875360	-Fan Blade	1	
20	59457267	Starter Motor (Not Shown)	1	
-	58753294	-Brush Holder Assembly	4	
-	58762600	-Ground Brush	2	
-	58762618	-Insulated Brush	2	
-	58762626	-Brush Spring	4	
-	58875196	-Solenoid	1	
21	58965492	Alternator	1	
-	59041806	-Brush Assembly	4	
-	59041814	-Voltage Regulator	1	
22	59491696	Block Heater Kit	1	
		(Consists of Element and Cord)(Not Shown)		
**	58919580	Filter Kit	1	
-	59438820	-Engine Oil Filter	1	
-	59438812	-Fuel Filter	1	
-	58886136	-Water Separator Filter	1	
-	58791476	-Friction Modifier	1	4oz.



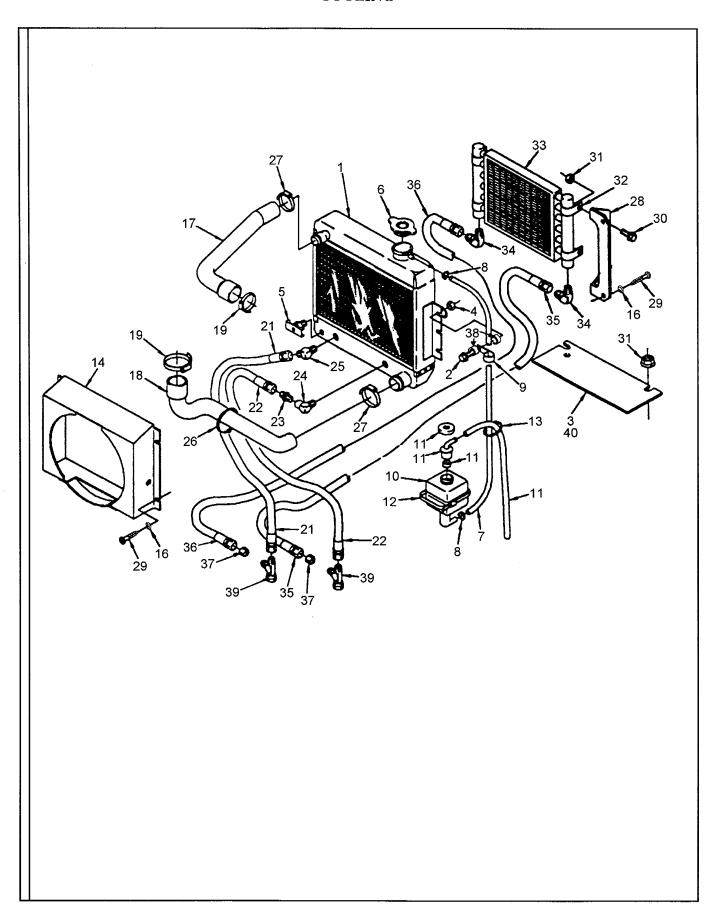
#### **EXHAUST**

1 59452821 Exhaust Pipe 1 1	ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
2       59455964       Flex Pipe       1         3       59456640       Exhaust Pipe       1         4       59450262       Muffler       1         5       59452839       Tail Pipe       1         6       59495028       Clamp       1         7       59495010       Clamp       2         8       59456111       Clamp       1         9       59918573       Lock Nut       4       5/16 - 18         Note: Engine exhaust gasket, studs, nuts, and			BOM 59459644		
2       59455964       Flex Pipe       1         3       59456640       Exhaust Pipe       1         4       59450262       Muffler       1         5       59452839       Tail Pipe       1         6       59495028       Clamp       1         7       59495010       Clamp       2         8       59456111       Clamp       1         9       59918573       Lock Nut       4       5/16 - 18         Note: Engine exhaust gasket, studs, nuts, and	1	59452821	Exhaust Pipe	1	
3       59456640       Exhaust Pipe       1         4       59450262       Muffler       1         5       59452839       Tail Pipe       1         6       59495028       Clamp       1         7       59495010       Clamp       2         8       59456111       Clamp       1         9       59918573       Lock Nut       4       5/16 - 18         Note: Engine exhaust gasket, studs, nuts, and		1		1 1	
4       59450262       Muffler       1         5       59452839       Tail Pipe       1         6       59495028       Clamp       1         7       59495010       Clamp       2         8       59456111       Clamp       1         9       59918573       Lock Nut       4       5/16 - 18         Note: Engine exhaust gasket, studs, nuts, and		l i		1	
6 59495028 Clamp 1 7 59495010 Clamp 2 8 59456111 Clamp 1 9 59918573 Lock Nut 4 5/16 - 18  Note: Engine exhaust gasket, studs, nuts, and				1	
7	5	59452839	Tail Pipe	1	
8	6	59495028	Clamp	1	
9 59918573 Lock Nut  Note: Engine exhaust gasket, studs, nuts, and	7	59495010	Clamp	2	
Note: Engine exhaust gasket, studs, nuts, and	8	59456111	Clamp	1	
	9	59918573	Lock Nut	4	5/16 - 18
VP_00B					



#### COOLING

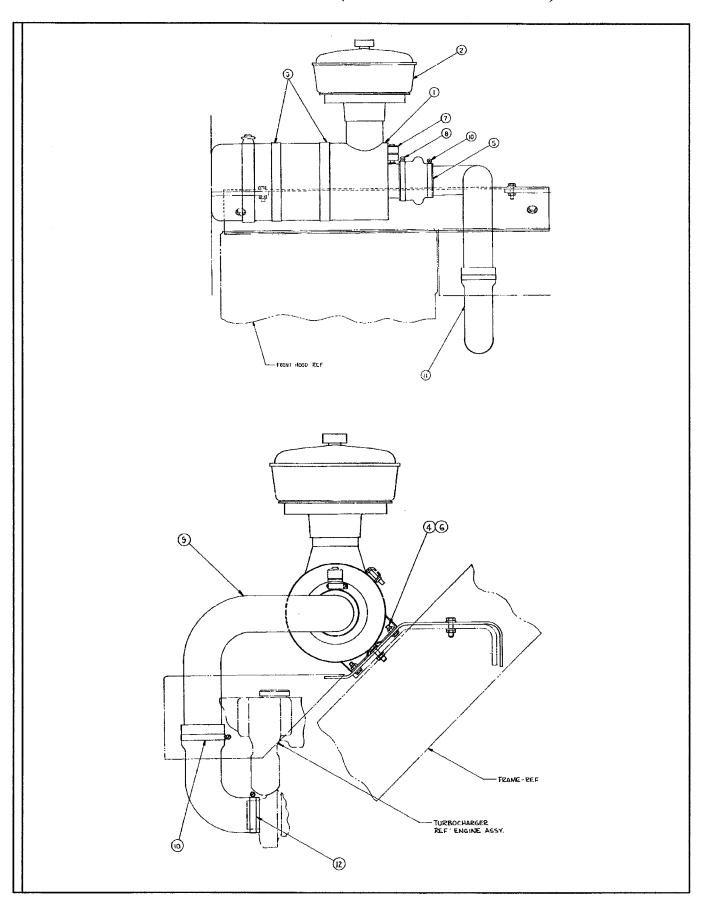
ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
		BOM59459438	-X	
1	59450569	Radiator	1	
2	95919239	H.H.C.S.	4	3/8-16 x 1.25
3	59452987	Plate Baffle	1	
4	95923322	Nut, Lock	4	3/8-16
5	95250692	Drain Cock	1	1/4
6	59455329	Cap, Radiator	1	
7	59465153	Tube	1	
8	50274299	Clamp, Hose	2	
9	59465666	Clamp	1	
10	59455634	Reservoir, Cooling	1	
11	59452698	Outlet Assy	1	
-	59451278	-Hose	1	;
-	59455659	-Reservoir, Outlet	1	
-	59455667	-Cap	1	
-	59455527	-Bushing	1	
12	95302667	Clamp, Hose	1	
13	95373973	Tyrap	1	
14	59109587	Shroud	1	
16	95922324	Washer, Flat	12	1/4 Dia.
17	59450742	Radiator Hose, Upper	1	
18	59450759	Radiator Hose, Lower	1	
19	95286266	Clamp, Hose	2	
21	59451153	Hose Assembly	1	
22	59451161	Hose	1	
23	95219747	Adapter	1	
24	59453167	Adapter	1	
25	59453159	Adapter	1	
26	95846051	Strap	1	
27	95302683	Clamp, Hose	2	
28	59492413	Bracket	2	
29	59469460	H.H.C.S.	8	
30	59869917	Screw, Lock	4	5/16-18 x .75
31	59918573	Nut, Lock	6	5/16-18
32	59465674	Clamp, Hose	4	
33	59456855	Oil Cooler	1	
34	95279386	Elbow	2	
35	59463885	Hose	1	
		VR_90R		



## COOLING

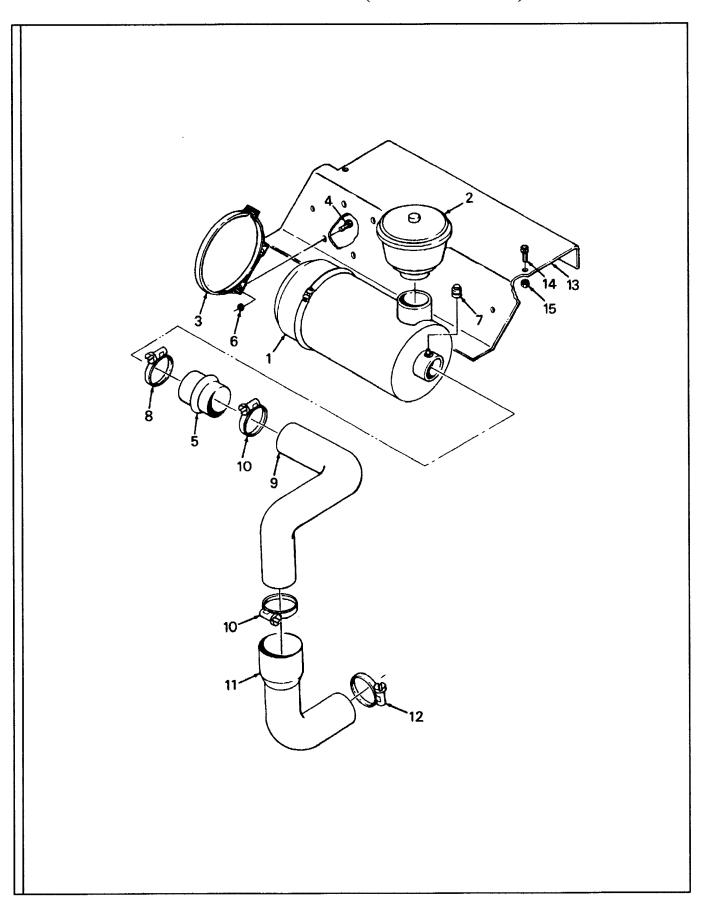
ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONSMOTES
				DIMENSIONS/NOTES
36	59463877	Hose	1	
37	59672709	Adapter Wesher Flot	2	210
38	95922233	Washer, Flat	8	3/8
39	95739306	Tee	2	
40	59471755	Trim	1	
		NOTE: To replace the few ground on machines as		
		NOTE: To replace the fan guard on machines so		
		equipt, use the following parts:		
41	59109579	Fan Guard	2	not shown
42	59965962	Lock Bolt	4	not shown
43	59481069	Lockscrew	2	notshown
44	59941682	Locknut	$\begin{bmatrix} 2 \\ 2 \end{bmatrix}$	not shown
	37741002	Locking		not snown
			:	

## AIR CLEANER ASSEMBLY (EFFECTIVE WITH S/N 149966)



#### AIR CLEANER ASSEMBLY (EFFECTIVE WITH S/N 149966)

ГТЕМ	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
		BOM 59467092		
1	59450270	Air Cleaner	1	See Breakdown-I.9
2	59450213	Pre-Cleaner	1	
-	58753757	-Bowl	1	
3	50931971	Clamp	2	C/1C 10 10
4	59717702	Lock Screw	4	5/16 - 18 x 1.0
5	59456889	Reducer Hump	1	7/1 C 10
6	95922829	Stop Nut	4	5/16 - 18
7	59429035	Service Indicator	1	
8	95325916	Hose Clamp	1	
9	59096495	Tube Air Inlet	1	
10	95426359	Hose Clamp	2	
11	59096487	Hose, Air Inlet	1	
12	95286266	Hose Clamp	1	

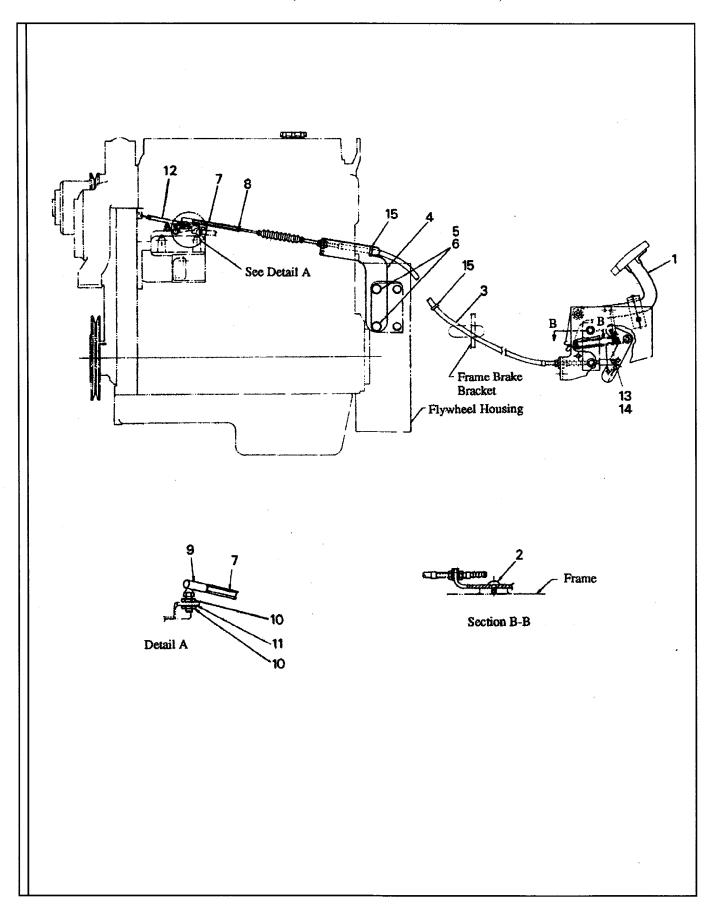


#### AIR CLEANER ASSEMBLY(PRIOR TO S/N 149966)

ITEM	COMM. NO.	DESCRIPTION  BOM 59467092	QTY	DIMENSIONS/NOTES
1	59450270	Air Cleaner	1	See Breakdown-I.9
2	59450213	Pre-Cleaner	1	
_	58753757	-Bowl	1	
3	50931971	Clamp	2	
4	59456277	Lock Screw	4	5/16 - 18 x 1.0
5	59456889	Reducer Hump	1	
6	95922829	Stop Nut	4	5/16 - 18
7	59429035	Service Indicator	1	
8	95325916	Hose Clamp	1	
9	59492546	Inlet Tube	1	
10	95426359	Hose Clamp	2	
11	59453506	Hose, Air Inlet	1	
12	95286266	Hose Clamp	1	
13	59452961	Plate, Air Cleaner	1	
14	59463711	F.H.C.S.	4	
15	59807941	Lock Nut	4	3/8 - 16

VR-90B

B.6.3

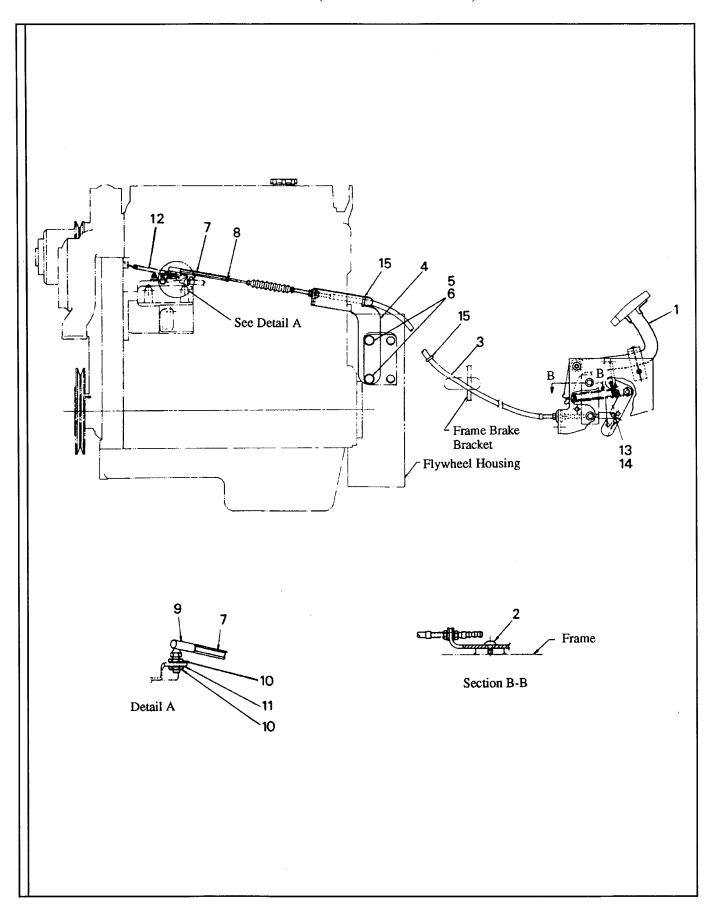


B.7.2 VR-90B

## THROTTLE (EFFECTIVE WITH S/N 150967)

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
IIEWI	COMM. NO.	BOM 59108548	QII	DIMENSIONS/NOTES
,	NIGNA	(T) (d) D 1 1 D 1 (A 11		
$\frac{1}{2}$	N.SV.A.	Throttle Pedal Bracket Assembly	$\left \begin{array}{c}1\\2\end{array}\right $	2/0 16 0.77
2	95889036	H.S.B.H.S.	2	3/8 - 16 x 0.75
3	59113159	Throttle Cable	1	
4	59114215	Throttle Cable Bracket	1	
5	96702311	H.H.C.S.	2	M12 x 30 mm
6	59510073	Lock Washer	2	
7	59457382	Throttle Link	$\begin{vmatrix} 1 \end{vmatrix}$	
8	95923124	Hex Nut	1	10 - 32
9	59374165	Ball Stud (Special)	1	
10	95923058	Jam Nut	3	1/4 - 28
11	95379392	Lock Washer (Internal Toothed)	1	
12	59457192	Spring	1	
13	59455436	Pin Rod End	1	
14	95924023	Cotter Pin	1	3/32 x 0.75
15	95373973	Strap Clamp	A/R	
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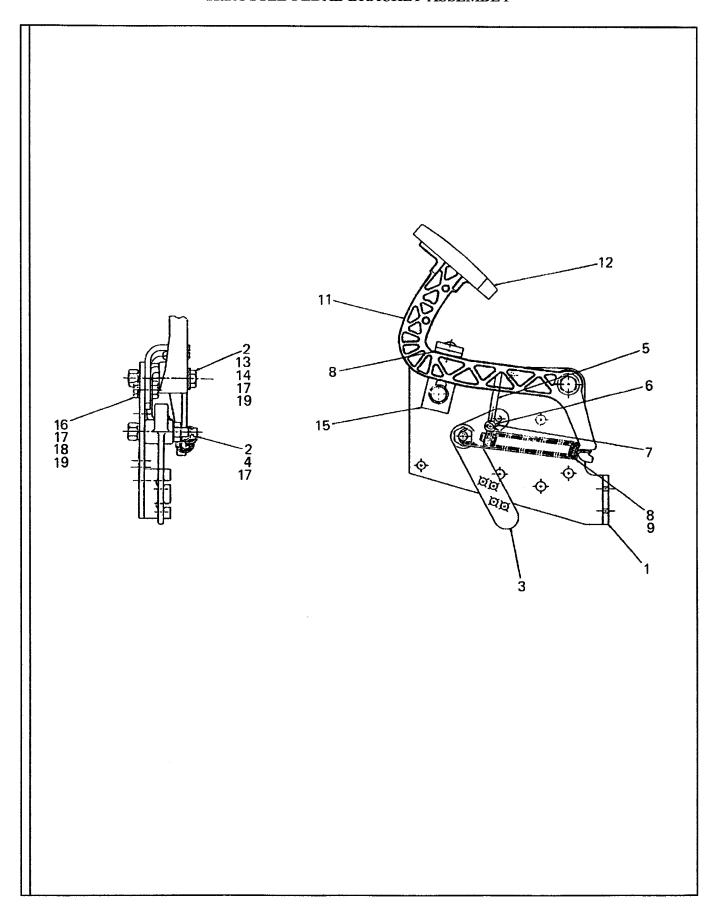
VR-90B B.7.3



## THROTTLE (PRIOR TO S/N 150967)

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
		BOM 59457945		
1	N.SV.A.	Throttle Pedal Bracket Assembly	1	
2	95889036	H.S.B.H.S.	2	3/8 - 16 x 0.75
3	59450353	Throttle Cable	1	
4	59453118	Throttle Cable Bracket	1	
5	96719802	H.H.C.S.	2	M12 x 30 mm
6	59510073	Lock Washer	2	
7	59457382	Throttle Link	1	
8	95923124	Hex Nut	1	10 - 32
9	59455410	Ball Stud	1	
10	95923058	Jam Nut	3	1/4 - 28
11	95379392	Lockwasher (Internal Toothed)	1	
12	59457192	Spring	1	
13	59455436	Pin Rod End	1	
14	95924023	Cotter Pin	1	3/32 x 0.75
15	95373973	Strap Clamp	A/R	
	:	·		

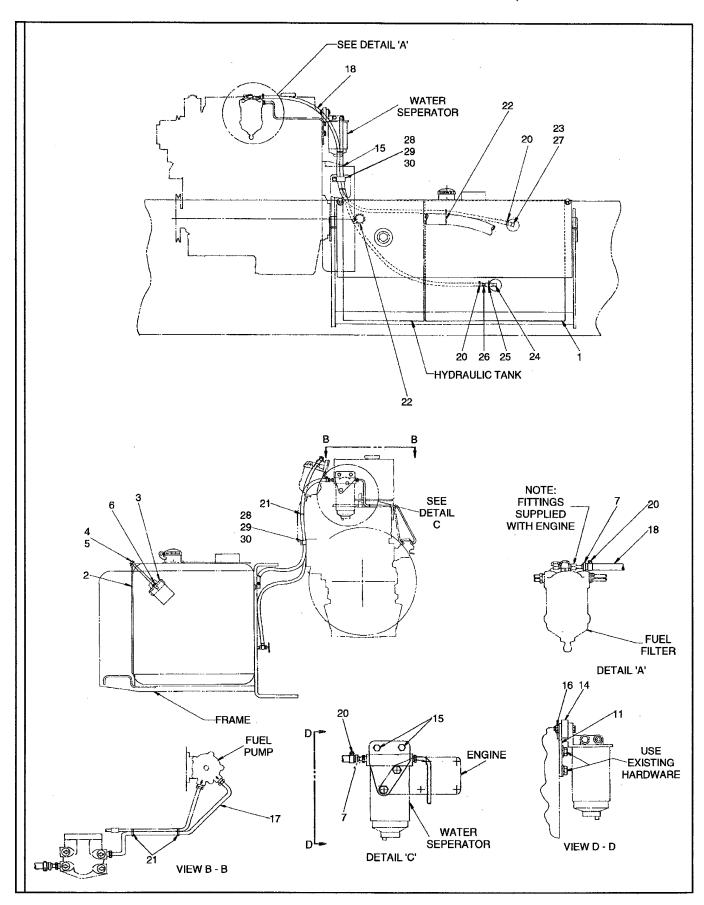
#### THROTTLE PEDAL BRACKET ASSEMBLY



#### THROTTLE PEDAL BRACKET ASSEMBLY

1 - 2 3 4 5 6 7	59114207 59471797 96704812 59471904 59471805 59471854	Throttle Bracket (Effective with S/N 150967) Throttle Bracket (Prior to S/N 150967) Hex Nut Crank	1 1 2 1	M10 - 1.5
2 3 4 5 6	59471797 96704812 59471904 59471805 59471854	Throttle Bracket (Prior to S/N 150967) Hex Nut Crank	1 2	M10 - 1.5
3 4 5 6	59471904 59471805 59471854	Hex Nut Crank	1 1	M10 - 1.5
4 5 6	59471805 59471854		1	
5	59471854	Chaf		
6	i	Shaft	1	
i	0.0000541	Formed Rod	1	
7	96703541	Washer	1	M6
	95924049	Cotter Pin	1	1/16 x 0.50
8	59471839	Bumper	1	
9	59471888	Spring	1	
10	59471813	Spring	1	
11	59471870	Accelerator Pedal	1	
12	59471821	Pedal Pad	1	
13	59471789	Pivot Tube	1	
14	96704713	H.H.C.S	1	M10 - 1.5 x 70 mm
15	59471847	Pedal Stop Bracket	1	
16	96702287	H.H.C.S.	1	M10 x 25 mm
17	59510065	Lock Washer	3	<b>M</b> 10
18	59471938	Jam Nut	1	M10 - 1.5
19	96704655	Flat Washer	2	M10

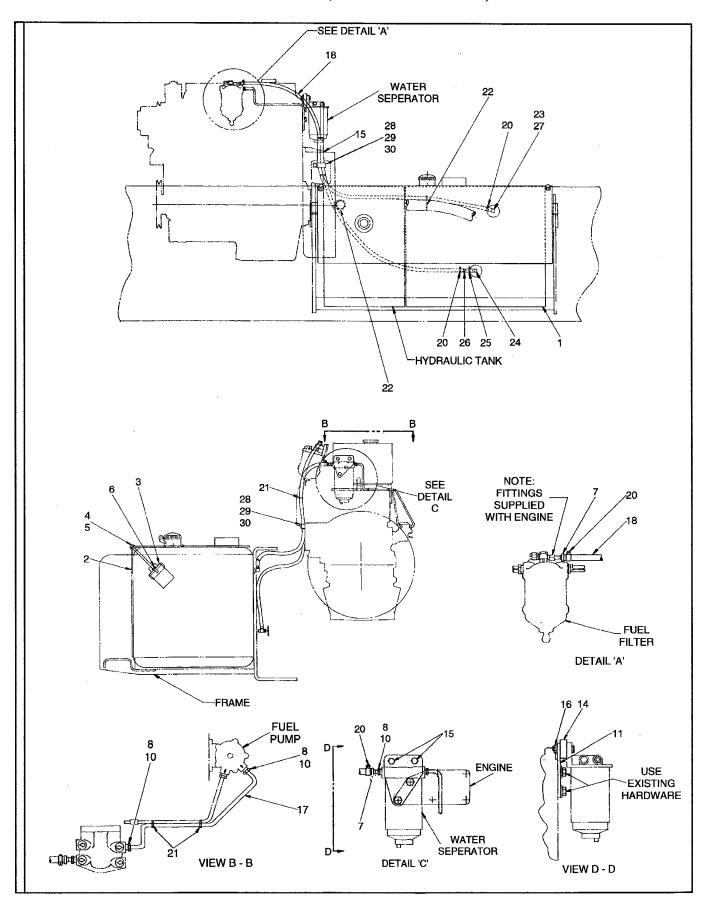
#### FUEL SYSTEM (EFFECTIVE WITH S/N 149966)



## FUEL SYSTEM (EFFECTIVE WITH S/N 149966)

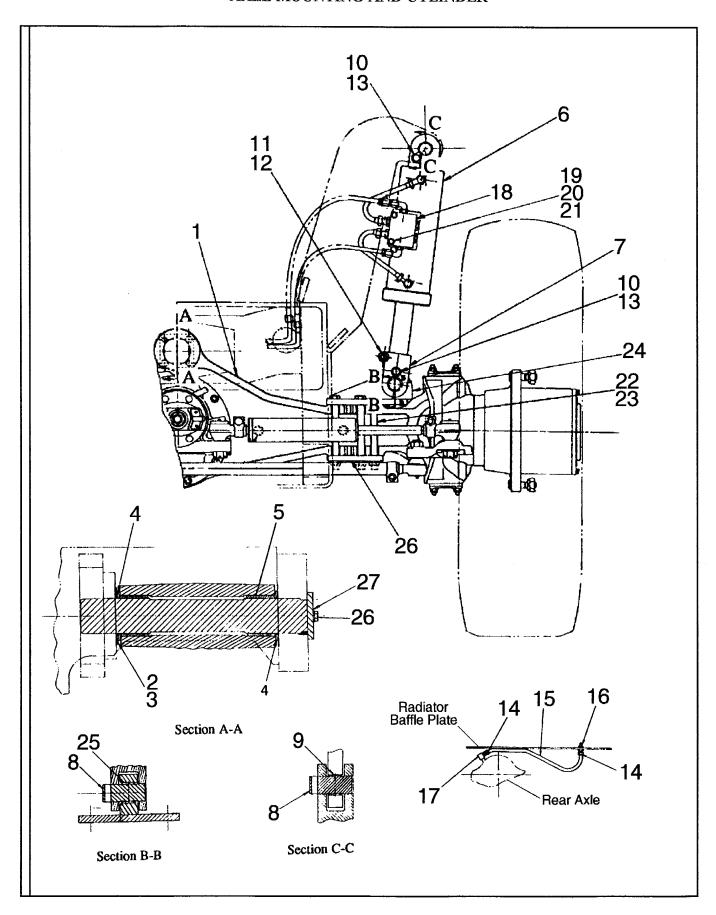
ГТЕМ	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
		BOM 59108530		
1	58884453	Fuel Tank	1	
-	59415869	-Cap	1	Supplied with Fuel Tank
-	59472209	-Fuel Level Sender	1	Supplied with Fuel Tank
	59998070	-Gasket, Fuel Level Sender	1	
2	59495226	Tank Bracket Plate	1	
3	59452870	Plate-Fmd.	2	
4	59465195	H.H.C.S. (Special)	2	
5	95922233	Washer, Flat	2	3/8 Dia.Flat Washer
6	95922977	Nut,Hex	2	3/8-16 Hex Jam Nut
7	59455899	Hose Fitting	2	
11	59096677	Plate, Filter Mounting	1	
14	59452896	Plate, Spacer	1	
15	95920500	H.H.C.S.	2	5/16-18 x 1.5
16	59918573	Whizlock Nut	2	5/16-18
17	59453597	Tube Assembly	1	
18	59451286	Hose Assembly	2	
20	50274299	Clamp Hose	4	
21	95713798	Strap	3	
22	95424586	Tyrap	2	
23	59465427	Hose Fitting	1	
24	95365599	Elbow	1	2089-2-2s
25	59469429	Shut-Off Valve	1	
26	59454389	Ftg Hose Nip	2	
27	59456012	Pipe Adapter	1	
28	59465641	Clamp	1	
29	59973511	H.H.C.S.	1	
30	59510073	Washer, Lock	1	
31	96702279	H.H.C.S.	2	M10 x 20 mm
32	96704655	Washer, Flat	2	
-	59486829	Filter, Water Seperator	1	
		_		

## FUEL SYSTEM (PRIOR TO S/N 149966)



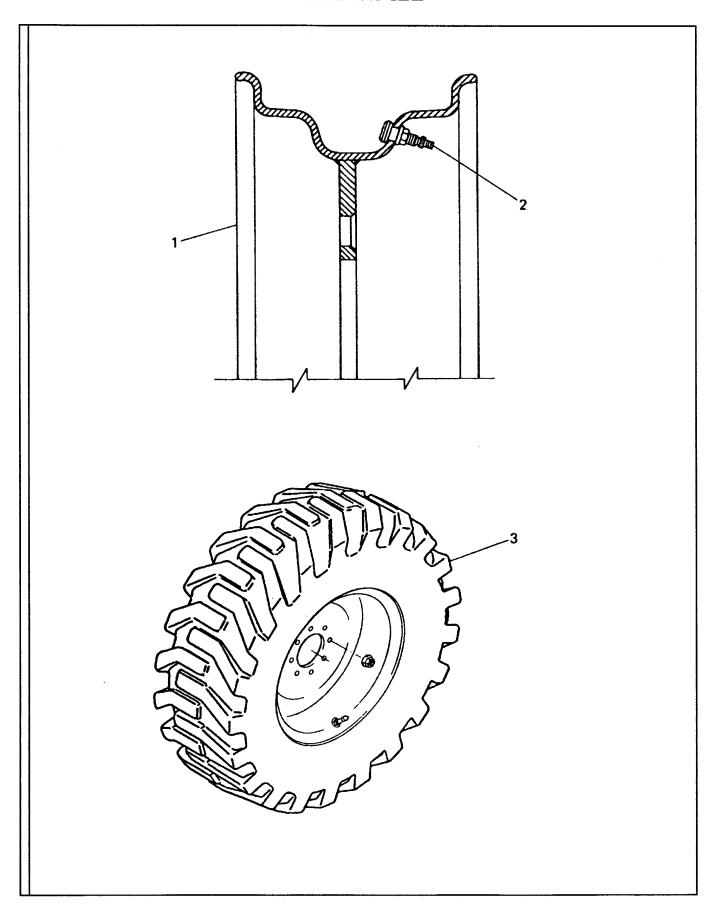
#### FUEL SYSTEM (PRIOR TO S/N 149966)

		and the second s	<del> </del>	DIMENSIONS/NOTES
	E00044E0	Bom 59494203	1	
1	58884453	Fuel Tank (Effective with S/N 5358)		Countied with Evel Tool
-	59415869	-Cap (Effective with S/N 5358)		Supplied with Fuel Tank
-	59472209	-Fuel Level Sender	1	Supplied with Fuel Tank
-	59998070	-Gasket, Fuel Level Sender	1	
-	59450320	Fuel Tank (Prior to S/N 5358)	1	
-	59454587	-Cap Protected Seal (Prior to S/N 5358)	1	
-	59472209	-Fuel Level Sender	1	Supplied with Fuel Tank
	59998070	-Gasket, Fuel Level Sender	1	
2	59495226	Tank Bracket Plate	1	
3	59452870	Plate	2	
4	59465195	Cap Screw (Special)	2	
5	95922233	Washer Flat	2	3/8 Dia.
6	95922977	Hex Jam Nut	2	3/8 - 16
7	59455899	Hose Fitting	2	
8	95230009	Tube Nut Sleeve	3	
9	59469296	Union Nut	3	
10	59469296	Nut	3	
11	59452813	Plate	1	
14	59452896	Plate Spacer	1	
15	95920500	H.H.C.S.	2	5/16-18 x 1.5
16	59918573	Nut, Lock	2	5/16-18
17	59453597	Tube Assembly	1	
18	59451286	Hose Assembly	2	
20	50274299	Clamp Hose	4	
21	95713798	Strap	3	
22	95424586	Cable Tie	2	
23	59465427	Hose Fitting	1	
24	95365599	Elbow	1	2089-2-2s
25	59469429	Shut-Off Valve	1	2007 2 25
26	59454389	Hose Nipple	2	
27	59456012	Pipe Adapter	1	
28	59465641	Clamp	1	
	l .	H.H.C.S. (Effective with S/N 149089)	1	
29	59973511	H.H.C.S. (Prior to S/N 149089)	1	M12 x 30 mm
20	96702311	·		WIIZ A JU IIIII
30	59510073	Washer, Lock	1	
-	59486829	Filter, Water Seperator	1	



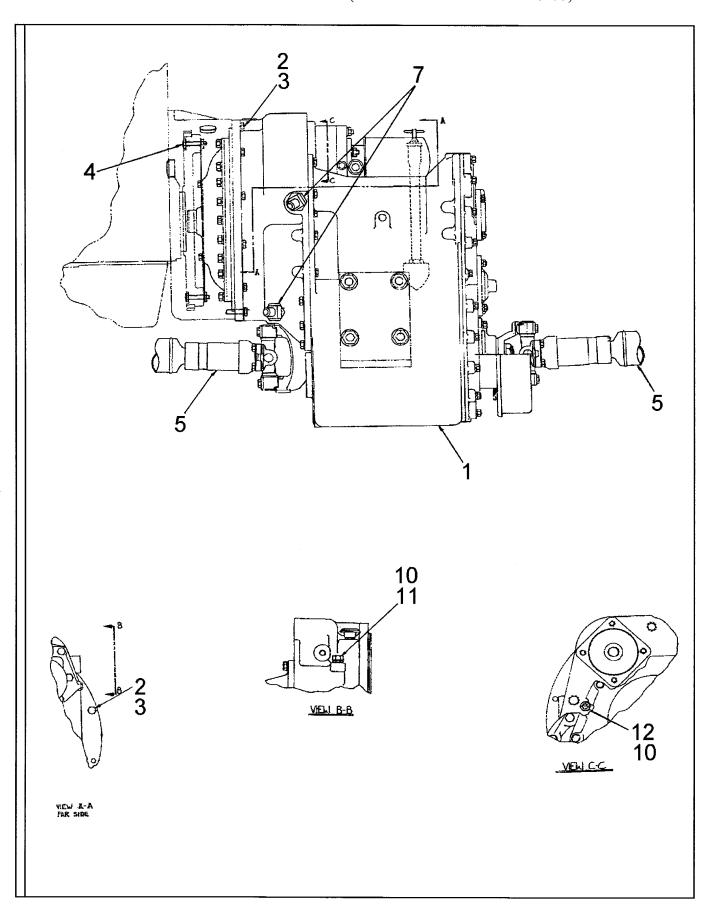
#### AXLE MOUNTING AND CYLINDER

TEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
	N.SV.A.	Drive Axle Assembly	1	
1	59110387	-Axle Assembly Effective with s/n 147136	2	See Breakdown-I.10
1	37110307	plus 146644, 146654, 146693, 146720,		See Dreakuowii-1.10
		146721, 146722, 146803, 146807, 146808)		
	59450502	-Axle Assembly (Prior to S/N 147136 except	2	See Breakdown-I.11
_	37430302	146644, 146654, 146693, 146720, 146721,		See Dreakuowii-1.11
		146722, 146803, 146807, 146808)		
2	59454447	-Shim	10	
3	59454454	-Shim	20	
4	59491878	-Thrust Washer	4	,
5	59491894	-Bushing	4	
6	59450122	-Axle Cylinder	1	See Breakdown-I.12
7	59455014	-Rod End	1	
8	59455162	-Pin	2	
9	59450411	-Bearing	2	
10	59455154	-Anchor	2	
11	59463778	-Flange Head Cap Screw	1	1/2 - 13 x 2.25
12	59726414	-Lock Nut	1	1/2 - 13
13	59463752	-Flange Head Cap Screw	6	1/2
14	59455519	-Compression Fitting	2	
15	59469593	-Hose	1	
16	95912648	-Lube Fitting	1	1/8 NPTF
17	95365599	-Street Elbow	1	90°
-	N.SV.A.	Level Valve Assembly	1	
18	59456749	-Valve	1	
-	59480293	-Seal Kit	1	
-	59480285	-Cartridge	2	
19	95922225	-Flat Washer	2	5/16 x 0.083
20	95920542	-H.H.C.S.	2	5/16 - 18 x 2.0
21	59918573	-Lock Nut	2	5/16 - 18
_	N.SV.A.	Attachment Assembly w/o Outriggers	1	
22	95920161	-H.H.C.S.	6	3/4 - 10 x 8.50
23	95923447	-Lock Nut	6	3/4 - 10
24	59452797	-Anchor Bracket	1	
26	59452805	-Plate	1	
27	59453175	-Axle Pivot Pin	2	



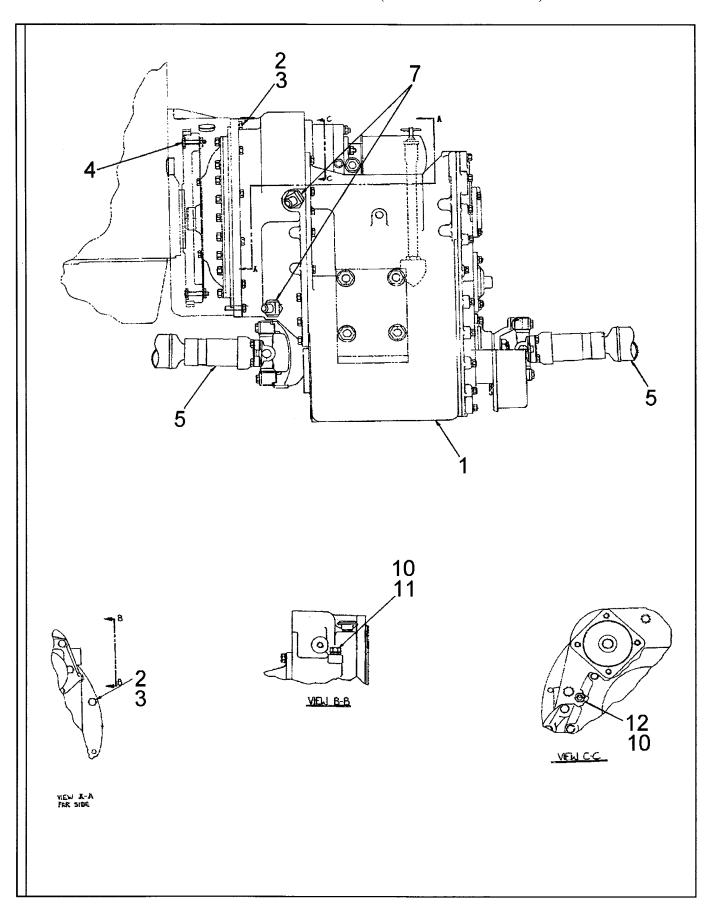
#### WHEEL AND TIRE

ITEM	COMM. NO.	DESCRIPTION  BOM 58857392	QTY	DIMENSIONS/NOTES
1	50455055	A CONTRACTOR OF THE CONTRACTOR	1	9 v 24"
1	59455055	Split-rim Assembly	1 1	8 x 24"
-	59492058	One-piece Rim	1	9 x 24"
2	59524447	Air Valve	1	12 ~ 24"
3	59455063	Tire, 12 Ply	1	13 x 24"
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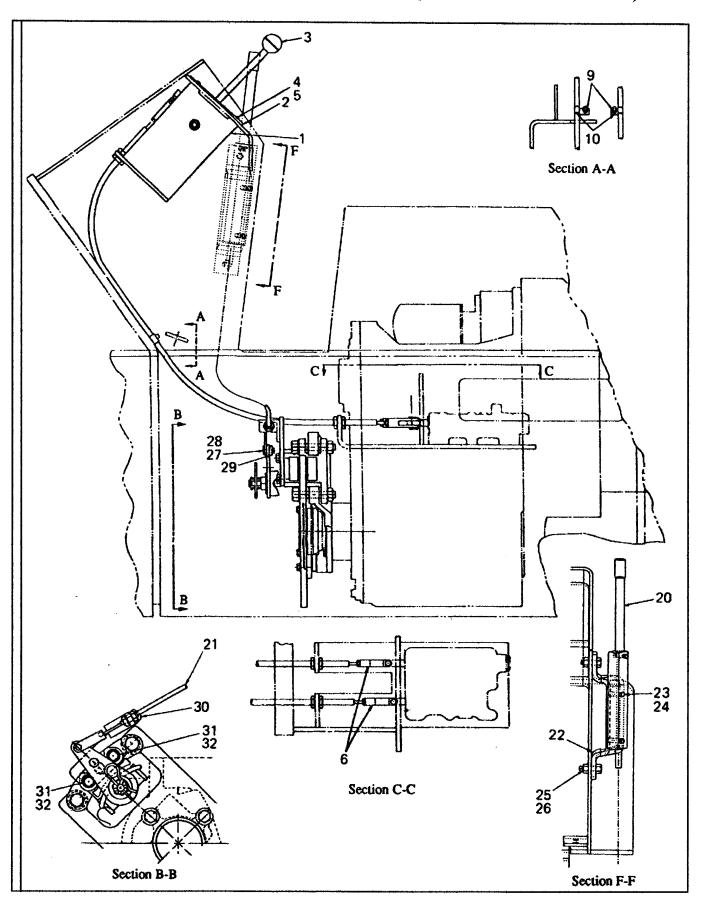
# TRANSMISSION ASSEMBLY (EFFECTIVE WITH S/N 150477)

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
		BOM59111880	×	DAMES TO STATE OF THE STATE OF
1	59111872	Transmission Assembly	1	See Breakdown-I.13
-	59481234	-Dipstick Tube Assembly	1	
2	96704358	H.H.C.S.	11	M10 x 40 mm
3	59510065	Washer, Lock	11	
4	95920815	H.H.C.S.	8	3/8-24 x 1.75
5	59450361	Shaft Assembly	2	See Breakdown-I.14
7	95359410	Elbow (45 Deg.)	2	854-Fso-12x12
10	95257333	Cap	2	1/4 Tube Cap Nut
11	95371258	Adapter	1	9/16 O-Ring To 7/16 Jic
12	95287629	Adapter	1	·
		VD 00D		



# TRANSMISSION ASSEMBLY (PRIOR TO S/N 150477)

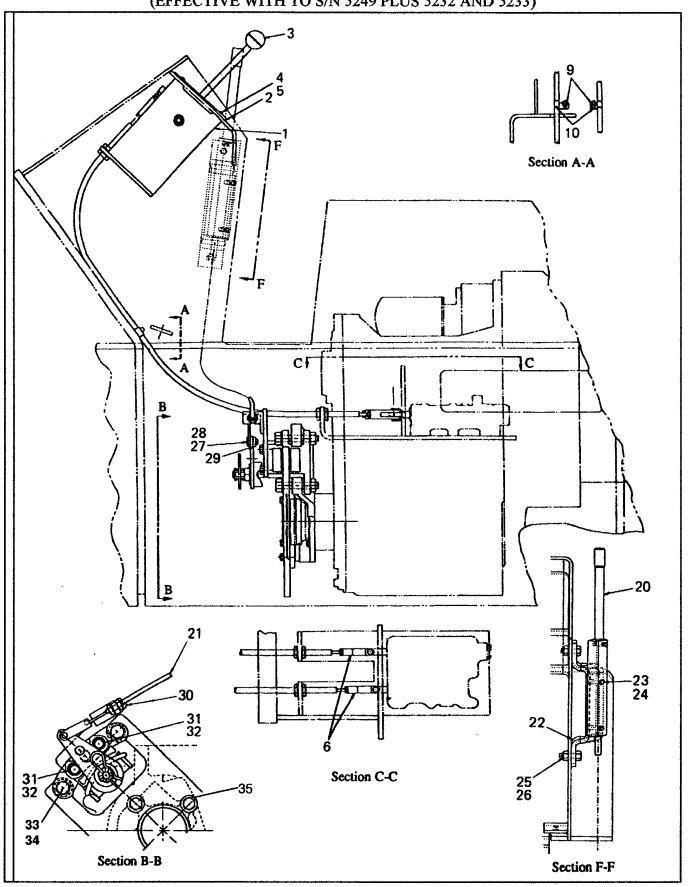
ITEM	COMM. NO.	DESCRIPTION	BOM 59494252	QTY	DIMENSIONS/NOTES
1	59494039	Transmission Assembly	D-G171 37474434	1	See Breakdown-I.15
-	59481259	-Dipstick		1	
2	96704358	H.H.C.S.		11	M10 x 40 mm
3	59510065	Lockwasher		11	
4	95920815	H.H.C.S.		8	3/8 - 24 x 1.75
5	59450361	Shaft Assembly		2	See Breakdown-I.14
7	95359410	Elbow 45°		2	12 x 12
10	95257333	Nut, Tube Cap		2	1/4
11	95371258	Adapter (Effective with S/N 150477)		1	9/16 O-Ring To 7/16 JIC
	95263380	Connector (Prior to S/N 150477)		1	
12	95287629	Adapter		1	
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ŀ					
	-				
		VD 00D		l <u> </u>	



#### TRANSMISSION CONTROLS AND PARK BRAKE (EFFECTIVE WITH S/N 150477)

ТЕМ	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
	~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~	BOM 58882655		
1	N.SV.A.	Transmission Control Lever Assembly	1	See Section D.6
2	59456343	Plate, Shifter	1	
3	59454983	Knob	2	
4	95888996	H.S.B.H.S.	4	
5	59941682	Nut	4	
6	59604835	Rod End	2	
9	59918573	Nut	2	
10	59465658	Insulated Clamp	2	
20	58851320	Brake Lever Assembly	1	
_	58874637	-Cable Clamp	1	
-	58874645	-Spacer	1	
_	58874652	-Spacer	2	
-	58875212	-Cotter Key	1	
<b></b>	58875220	-Flat Washer	1	
-	58875261	-Pin	1	
21	58961707	Cable Assembly	1	
22	59093906	Bracket, Parking Brake	1	
23	59918573	Lock Nut	2	5/16-18
24	58827973	Lock Screw	2	5/16-18 x 2
25	59918573	Lock Nut	2	5/16-18
26	59928606	Lock Screw	2	5/16-18 x 1.25
27	59565705	Clevis Pin	1	
28	95923918	Cotter Pin	1	1/8 x 1"
29	95922373	Washer Flat	1	3/8 Dia
30	59093765	Plate, Cable Bracket	1	
31	95498994	Bolt	2	5/8-11 Unc x 3" lg.
32	59093914	Extension Spring	1	
		<u> </u>		
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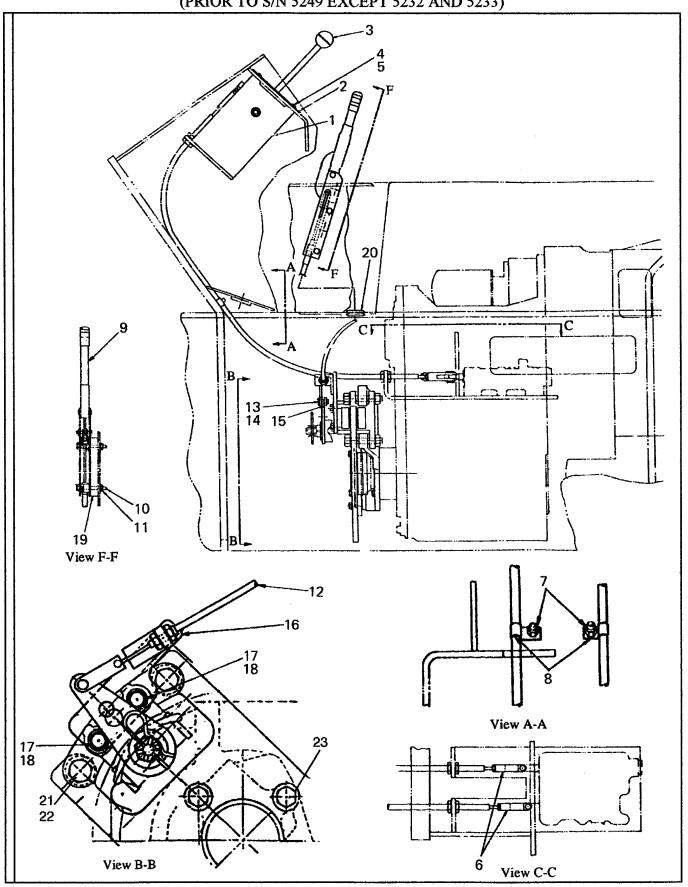
# TRANSMISSION CONTROLS AND PARK BRAKE (EFFECTIVE WITH TO S/N 5249 PLUS 5232 AND 5233)



## TRANSMISSION CONTROLS AND PARK BRAKE (EFFECTIVE WITH S/N 5249 PLUS 5232 AND 5233)

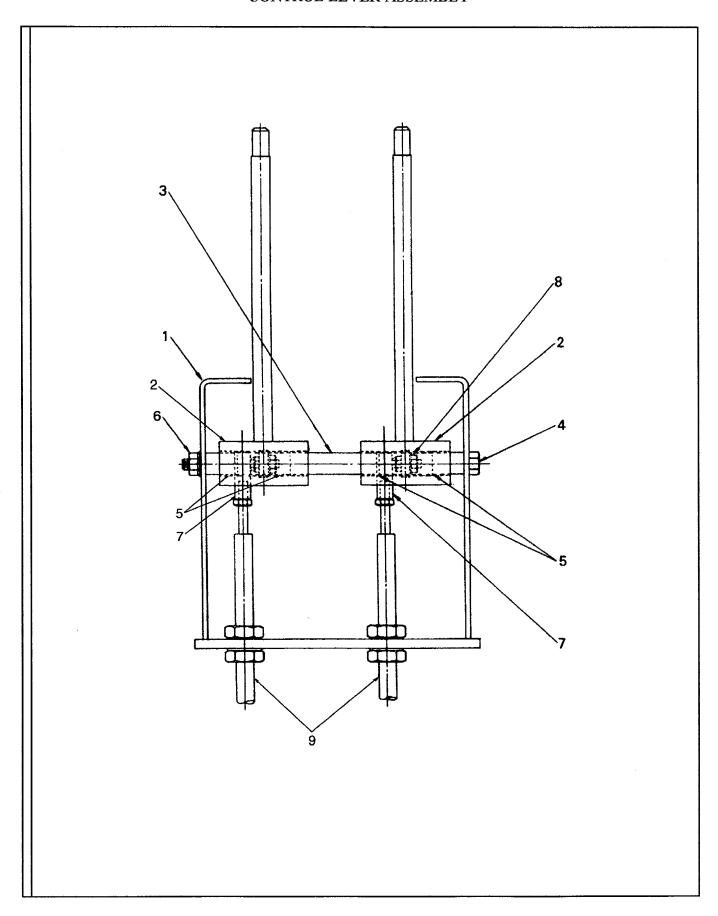
TEM	COMM. NO.	(EFFECTIVE WITH S/N 5249 PLUS 5232 AN DESCRIPTION	D 523	
T TOTAT	COMMINI. NO.	BOM 58882655	V11	10111111111111111111111111111111111111
1	N.SV.A.	Transmission Control Lever Assembly	1	See Section-D.6
2	59456343	Plate, Shifter	1	
3	59454983	Knob	2	
4	95888996	H.S.B.H.S.	4	
5	59941682	Nut	4	
6	59604835	Rod End	2	
9	59918573	Nut	2	
10	59465658	Insulated Clamp	2	
20	58851320	Brake Lever Assembly	1	
-	58874637	-Cable Clamp	1	
-	58874645	-Spacer	1	
-	58874652	-Spacer	2	
-	58875212	-Cotter Key	1	
_	58875220	-Flat Washer	1	
-	58875261	-Pin	1	
21	58961707	Cable Assy (Effective With S/N: 140552)	1	
_	58882648	Cable Assembly (Prior To S/N: 140552)	1	
22	58852724	Bracket	1	
23	59918573	Lock Nut	2	5/16 - 18
24	58827973	Lock Screw	2	5/16 - 18 x 2.0
25	59918573	Lock Nut	2	5/16 - 8
26	59928606	Lock Screw	2	5/16 - 18 x 1.25
27	59565705	Pin Clevis	1	
28	95923918	Cotter Pin	1	1/8 x 1.0
29	95922373	Washer Flat	1	3/8 Dia.
30	59497842	Bracket, Brake	1	
31	95920765	H.H.C.S.	2	1/2 - 13 x 3.5
32	59957134	Washer, Hardened	2	1/2 Dia.
33	59044990	H.H.C.S.	2	
34	59045005	Nut	2	
35	95919742	H.H.C.S.	2	
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# TRANSMISSION CONTROLS AND PARK BRAKE (PRIOR TO S/N 5249 EXCEPT 5232 AND 5233)



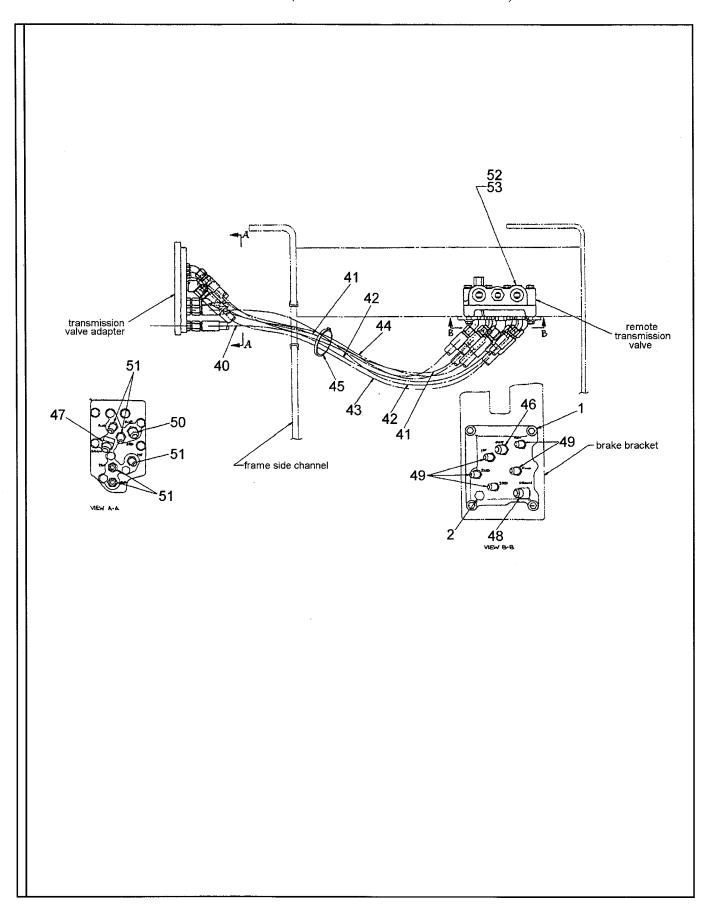
# TRANSMISSION CONTROLS AND PARK BRAKE (PRIOR TO S/N 5249 EXCEPT 5232 AND 5233)

TEM	COMM. NO.	DESCRIPTION  BOM 59492561	QTY	DIMENSIONS/NOTES
1	N.SV.A.	Control Lever Assembly	1	See Section-D.6
2	59456343	Plate Shifter	1	
3	59454983	Knob	2	
4	95888996	H.S.B.H.S.	4	1/4 - 20 x 1.0
5	59941682	Nut	4	1/4 - 20
6	59604835	Rod End	2	
7	59918573	Lock Nut	2	5/16 - 18
8	59465658	Insulated Clamp	2	
9	59492553	Park Brake Lever Assembly	1	Includes Hardware
_	58875212	-Cotter Pin	1	
	58875220	-Washer	1	
-	58875261	-Pin	1	
-	58875238	-Cable Clamp	1	
-	58875246	-Spacer	1	
_	58875253	-Spacer	1	
_	58868878	-Light Switch	1	
10	95920567	H.H.C.S.	2	5/16 - 18 x 2.5
11	59918573	Nut	6	5/16 - 18
12	59450403	Cable	1	
13	59565705	Pin Rod End	1	
14	95931507	Cotter Pin	1	
15	95922373	Washer	1	3/8
16	59497842	Bracket Cable	1	
17	95920765	H.H.C.S.	2	1/2 - 13 x 3.5
18	59957134	Hardened Washer	2	1/2
19	59453035	Spacer	1	
20	59456095	Grommet	1	
21	59044990	H.H.C.S.	2	
22	59045005	Nut	2	
23	95919742	H.H.C.S.	2	
				<u>.</u>
<b>.</b>				



## CONTROL LEVER ASSEMBLY

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
		BOM 59465302		
1	59451831	Control Bracket	1	
2	59453126	Lever Shift	2	
3	59454108	Tube Pivot	1	
4	95919411	H.H.C.S.	1	3/8 - 16 x 8.0
5	59457218	Bushing	4	· ·
6	59807941	Lock Nut	1	3/8 - 16
7	59463786	Balljoint	2	
8	59468413	Lock Nut	2	1/4 - 28
9	59456418	Cable Assembly	2	
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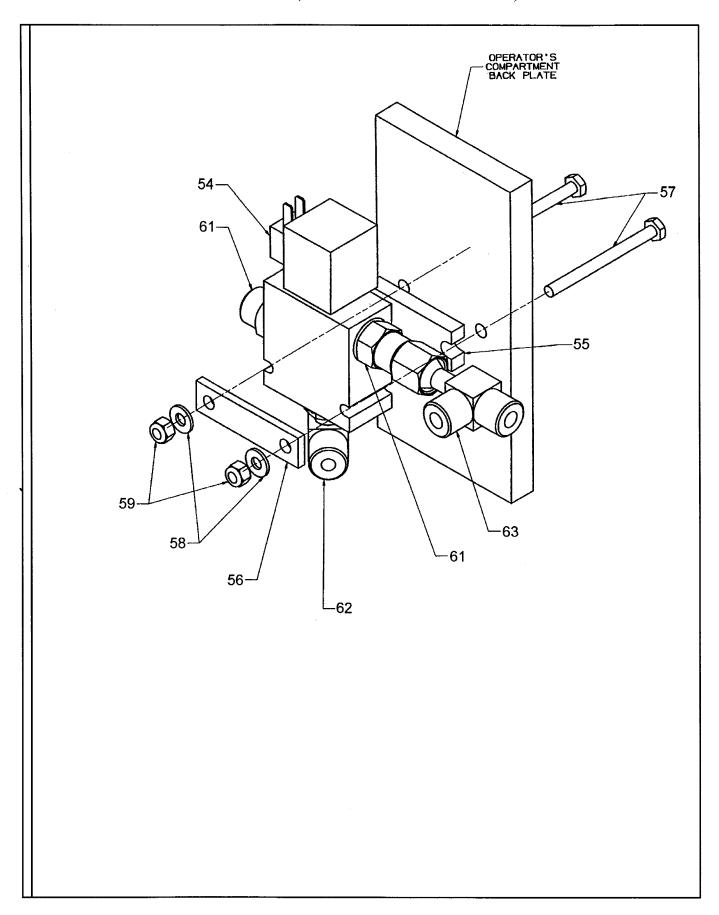


D.7.2 VR-90B

## TRANSMISSION PLUMBING (EFFECTIVE WITH S/N 149089) - SHEET 1 OF 2

ITEM	COMM NO	DESCRIPTION	OTV	DIMENSIONS/NOTES
IIEWI	COMM. NO.	DESCRIPTION  BOM 59096586	QTY	DIMENSIONS/NOTES
1	59463703	Flange Head Cap Screw	4	
2	95666996	Plug	1	
40	59496091	Hose Assembly 6 ORS Str. SW x 6 ORS Str. SW	1	27.5"
41	59496117	Hose Assembly 6 ORS Str. SW x 6 ORS Str. SW	2	30.5"
42	59496083	Hose Assembly 6 ORS Str. SW x 6 ORS Str. SW	2	33"
43	59496125	Hose Assembly 8 ORS Str. SW x 8 ORS Str. SW	1	32"
44	59496109	Hose Assembly 8 ORS Str. SW x 8 ORS Str. SW	1	33"
46	59922260	45° Adapter (8 ORS x 8 ORB)	1	
47	59903138	Str. Adapter (8 ORS x 8 NPTF)	1	
48	59923599	Str. Adapter (8 ORS x 8 NPTF)	1	
49	59918441	45° Adapter (6 ORS x 6 ORB)	5	
50	59922492	Str. Adapter (8 ORS x 8 ORB)	1	
51	59919670	Str. Adapter (6 ORS x 6 ORB)	5	
52	95287629	Adapter	1	
53	95257333	Nut, Tube Cap	1	1/4
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VR-90B D.7.3

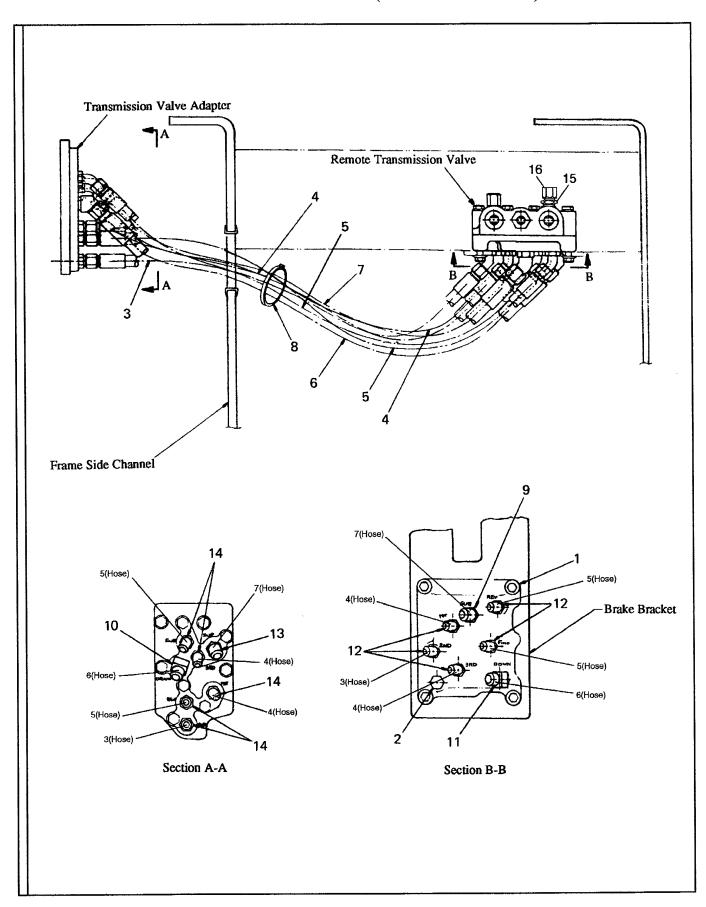


D.7.4 VR-90B

## TRANSMISSION PLUMBING (EFFECTIVE WITH S/N 149089) - SHEET 1 OF 2

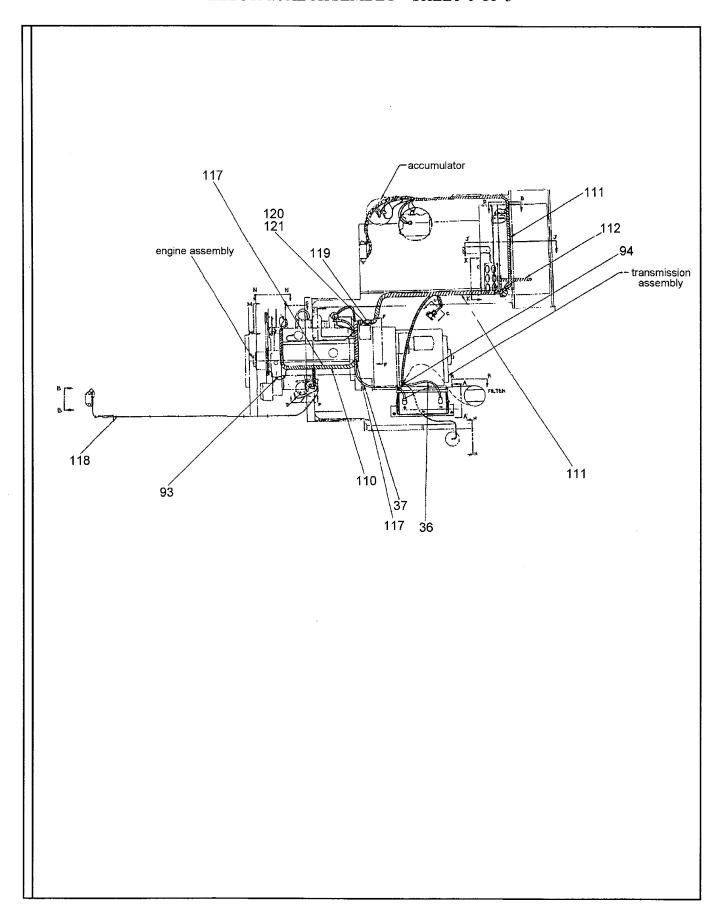
ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
222314	JOHANA 110	DENOMINATION OF THE PROPERTY O	V. 1	DESTRUCTION TO LEG
54	58825464	Brake Valve	1	
55	59090274	Plate Spacer	1	
56	59306522	Cover Plate	1	
57	95919437	H.H.C.S.	2	1/4-20 x 3.0
58	95922324	Washer Flat	2	1/4 Dia.
59	95923199	Nut Lock	2	1/4-20
60	59093898	Hose Assembly	2	24"
61	59922484	Str. Adapter	2	
62	59922880	Adapter	1	
63	59923797	Tee	1	
1				

VR-90B D.7.5



## TRANSMISSION PLUMBING (PRIOR TO S/N 149089)

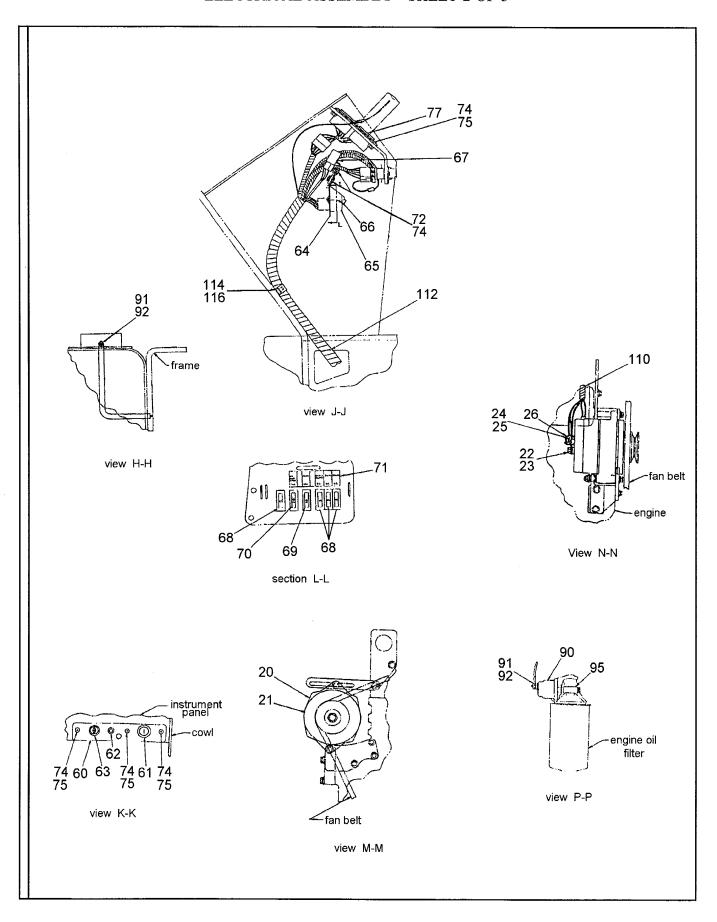
TEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
4	50462702	Elanca Haad Can Carava		A THE TOTAL AND
1	59463703	Flange Head Cap Screw	4	
2	95666996	Plug	1	27.5"
3	59496091	Hose Assembly 6 ORS Str. SW x 6 ORS Str. SW		27.5"
4	59496117	Hose Assembly 6 ORS Str. SW x 6 ORS Str. SW		30.5"
5	59496083	Hose Assembly 6 ORS Str. SW x 6 ORS Str. SW		33" 32"
6	59496125	Hose Assembly 8 ORS Str. SW x 8 ORS Str. SW		
7	59496109	Hose Assembly 8 ORS Str. SW x 8 ORS Str. SW		33"
8	95846051	Strap Clamp	1	
9 10	59922260 59903138	45° Adapter (8 ORS x 8 ORB)	1	
10	59923599	Str. Adapter (8 ORS x 8 NPTF) 45° Adapter (8 ORS x 8 NPTF)	1 1	
12	59923399	45° Adapter (6 ORS x 6 ORB)	5	
13	59918441	Str. Adapter (8 ORS x 8 ORB)	1	
13	59919670	Str. Adapter (6 ORS x 6 ORB)	5	
15	95287629	Adapter (6 OKS x 6 OKB)	1	
16	95257333	Nut, Tube Cap	1	1/4
		VD OOD		



E.1.2 VR-90B

## ELECTRICAL ASSEMBLY - SHEET 1 OF 3

ITEM	COMM.NO.	DESCRIPTION BOM59494120	QTY	DIMENSIONS/NOTES
36	59087205	Cable Battery-Negative	1	
37	59087213	Cable Battery-Positive	1	
93	59602987	Sender	1	
94	59816322	Temperature Sender	1	
110	59093815	Wire Harness-Engine (Effective with	1	
		S/N 149089)		
-	58972928	Wire Harness-Engine (S/N 140076 thru 149089)	1	
-	59456699	Wire Harness-Engine (Prior to S/N 140076)	1	
111	59096537	Wire Harness-Chassis(Effective with	1	
		S/N 149089)		
-	58827577	Wire Harness-Chassis (S/N 5240 thru 149089)	1	
-	59494377	Wire Harness-Chassis (Prior to S/N 5240)	1	
112	59096529	Wire Harness-Instrument Panel (Effective with	1	
		S/N 149089)		
-	58827569	Wire Harness-Instrument Panel (S/N 5240	1	
		thru 149089)		
-	59494385	Wire Harness-Instrument Panel (Prior to	1	
117	05404506	S/N 5240)		
117	95424586	Tyrap	22	
118	95713798	Strap	10	
119	59726075 59973511	Clamp (Effective with S/N 149089)	1	
120	96702535	H.H.C.S. (Effective with S/N 149089) Washer, Flat, Hardened (Effective with	1	M12
121	90102333	S/N 149089)	1	WIIZ
		3/11 149009)		
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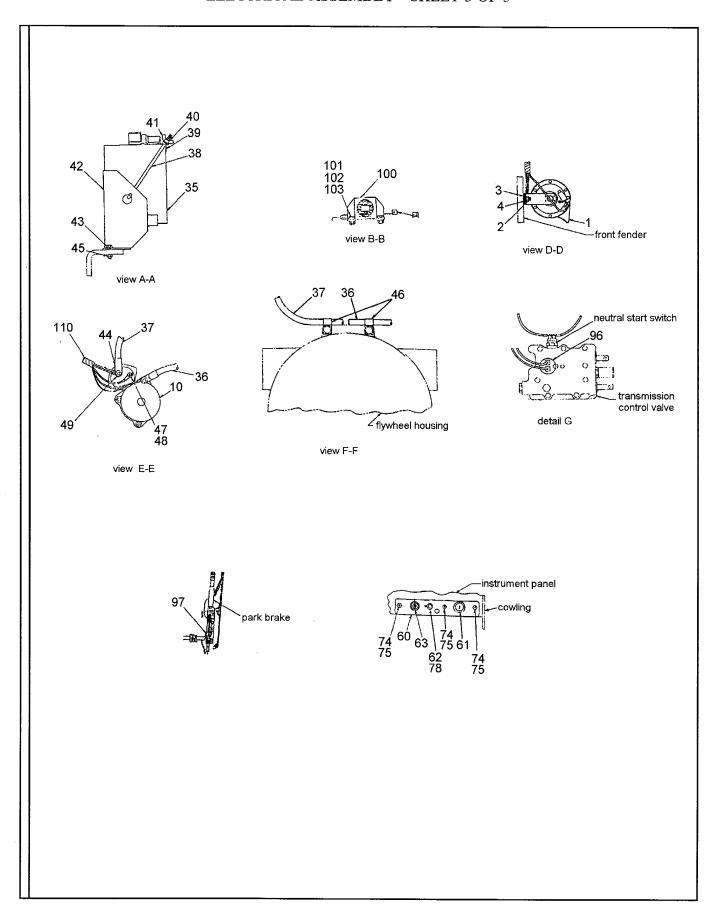


E.1.4

#### ELECTRICAL ASSEMBLY - SHEET 2 OF 3

ITEM	COMM.NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
20	58965492	Alternator	1	
_	59041806	-Brush Kit	1	
21	59879791	Fan Generator (effective with S/N 150297)	1	
-	59454652	Alternator Fan (Prior to S/N 150297)	1	
22	96702824	H.H.C.S.	1	M8 x 20
23	95931408	Washer, Lock	1	5/16 Reg.Lock Washer
24	96704234	Nut	1	M6 x 1mm
25	95922753	Washer, Lock (Internal Tooth)	1	1/4
26	59465286	Boot Protect	1	
60	58846890	Switch Plate (Effective with S/N 5240)	1	
-	59452938	Switch Plate (Prior to S/N 5240)	1	
61	59450791	Ignition Switch	1	
-	59435990	-Ignition Key	1	
62	59680132	Toggle Switch (Effective with S/N 5240)	1	
_	59876201	HeadPlug (Prior to S/N 5240)		
63	59455949	Switch	1	
64	59472191	Fuse Bracket	1	
65	59465856	Cover, Fuses	1	
66	59465864	Latch Cover	1	
67	59450775	Horn Relay	1	
68	59465591	Fuse	4	5 Amp
69	59325712	Fuse	1	10 Amp
70	59398016	Fuse	1	20 Amp
71	59456798	Decal, Fuses	1	
72	59965962	Bolt, Lock	4	1/4-20 x.75 Whiz Bolt
74	59941682	Whiz Nut	10	1/4-20 Whiz Nut
75	95888996	H.S.B.H.S.	9	1/4-20 x1
77	N.SV.A.	Gauge Panel Assembly	1	See Section E.2
110	59093815	Wire Harness-Engine (Effective with	1	
		S/N 149089)		
-	58972928	Wire Harness-Engine (S/N 140076 thru 149089)	1	
-	59456699	Wire Harness-Engine (Prior to S/N 140076)	1	
112	59096529	Wire Harness-Instrument Panel (Effective with	1	
		S/N 149089)		
-	58827569	Wire Harness-Instrument Panel (S/N 5240	1	
	<b>40.</b>	thru 149089)		
-	59494385	Wire Harness-Instrument Panel (Prior to	1	
		S/N 5240)		
114	59918573	Nut, Lock	1	5/16-18
116	95310231	Clamp	1	

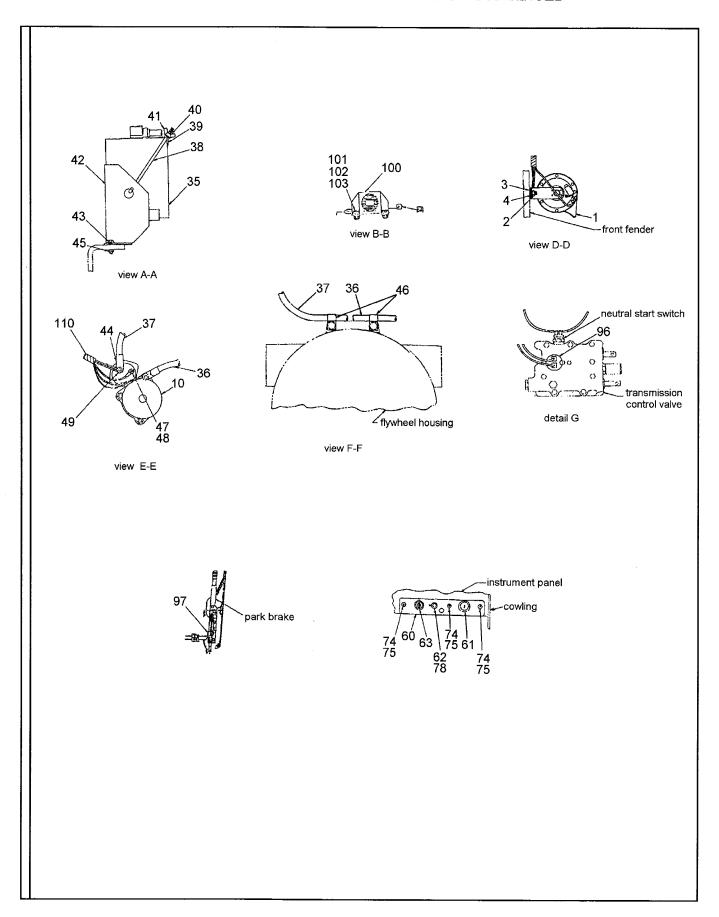
#### ELECTRICAL ASSEMBLY - SHEET 3 OF 3



#### ELECTRICAL ASSEMBLY - SHEET 3 OF 3

ITEM	COMM.NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1	59455956	Horn	1	
2	59327833	Nut	1	5/16-18
3	95922365	Washer, Flat	1	5/16 Dia.
4	95931408	Washer, Lock	4	5/16
10	59457267	Starter Motor	1	
-	58783294	-Brush Holder	4	
-	58762600	-Ground Brush	2	
-	58762618	-Insuated Brush	2	
-	58762626	-Brush Spring	4	
-	58875196	-Solenoid	1	
35	59436931	Battery	1	
36	59087205	Cable Battery-Negative	1	
37	59087213	Cable Battery-Positive	1	
38	59456731	J-Bolt	2	
39	59452904	Battery Hold Down	1	
40	95922837	Wing Nut	2	5/16-18
41	95922365	Washer, Flat	2	5/16 Dia.
42	59452912	Battery Box	1	
43	59463711	H.H.C.S.	3	1/8
44	59396317	Term.Cover	1	
45	59807941	Nut, Lock	3	3/8-16
46	59726075	Clamp	2	
47	96705132	Nut	1	M5 x .08
48	95248084	Washer, Lock	1	#10
49	96704812	Nut	1	
60	58846890	Switch Plate (Effective with S/N 5240)	1	
-	59452938	Switch Plate (Prior to S/N 5240)	1	
61	59450791	Ignition Switch	1	
-	59435990	-Ignition Key	1	
62	59680132	Toggle Switch (Effective with S/N 5240)	1	
-	59876201	HeadPlug (Prior to S/N 5240)		
63	59455949	Switch	1	
74	59941682	Whiz Nut	10	1/4-20 Whiz Nut
75	95888996	H.S.B.H.S.	9	1/4-20 x1
78	59331744	Switch Cover	1	
90	59638478	Sender Oil	1	
91	95923124	Hex Nut	2	#10-32
92	95248084	Washer, Lock	2	#10
95	95279915	Tee	1	

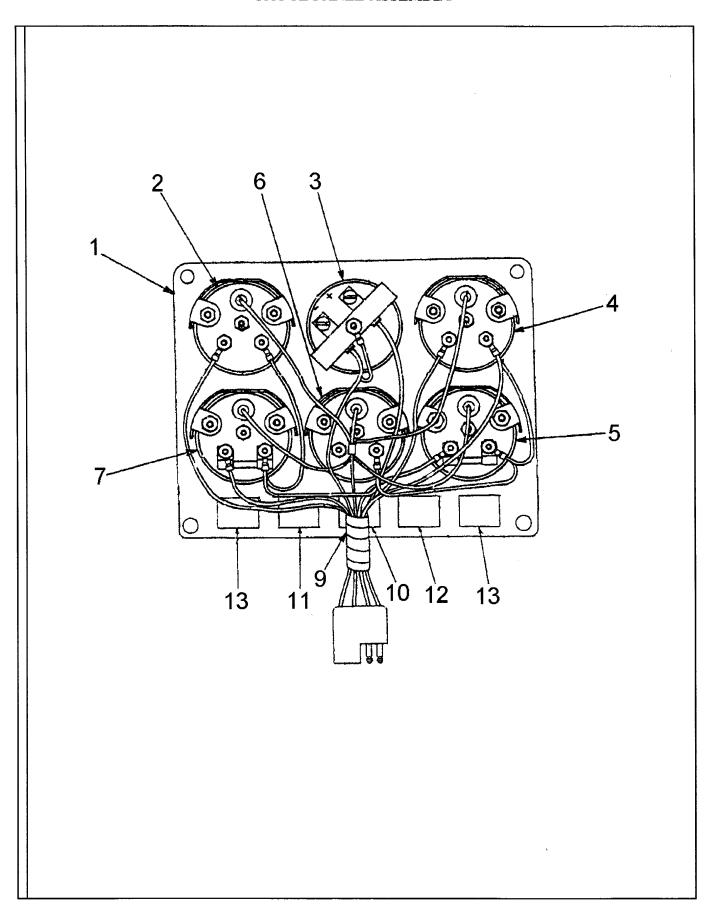
## ELECTRICAL ASSEMBLY - SHEET 3 OF 3 - CONTINUED



E.1.8

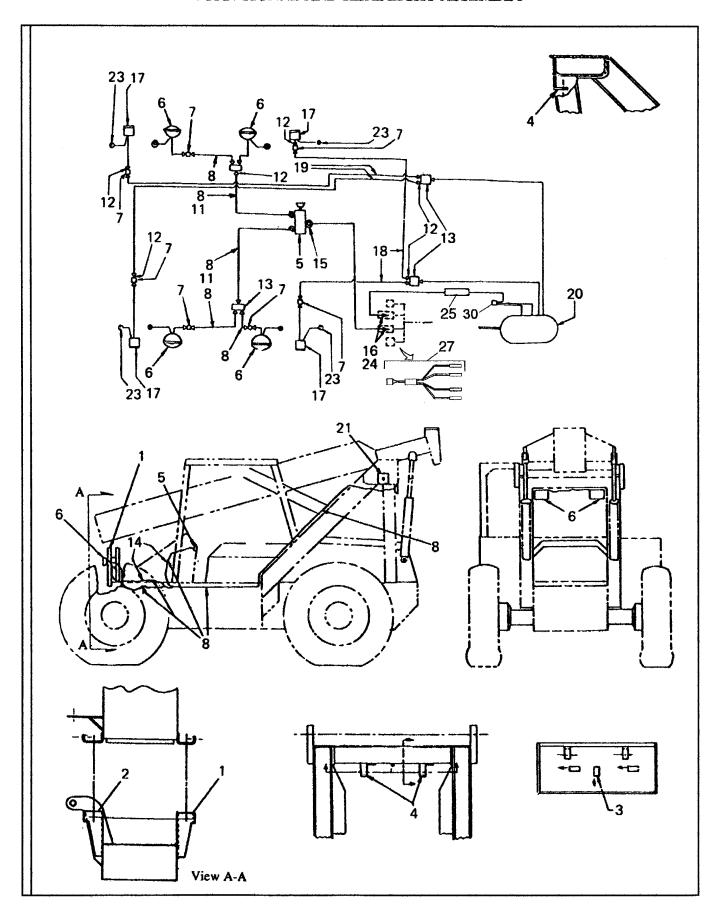
## ELECTRICAL ASSEMBLY - SHEET 3 OF 3 - CONTINUED

ITEM	COMM.NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
96	59090886	Pressure Switch	1	
97	58850991	Switch Assembly (Effective with S/N 5249)	1	
100	59869917	Screw, Lock	1	5/16-18 x .75
101	59918573	Nut, lock	1	5/16-18
100	59465617	Alarm Assembly, Backup	1	
-	59455683	-Alarm Backup	1	
_	95373841	-Eyelet	1	
-	59366971	-Male Terminal	1	
-	59338517	-Male Housing	1	
101	59941682	Nut, Lock	2	1/4-20
102	95919767	H.H.C.S.	2	1/4-20 x .75
103	95922324	Washer, Flat	2	1/4 Dia.
110	59093815	Wire Harness-Engine (Effective with	1	
		S/N 149089)		
-	58972928	Wire Harness-Engine (S/N 140076 thru 149089)	1	
-	59456699	Wire Harness-Engine (Prior to S/N 140076)	1	
		NOTE: The following items are not illustrated:		
79	59096479	Switch Plate	1	
80	59813279	Plug Button	2	
98	59068114	Harness, Jumper Wire	1	
99	59112003	Mounting Plate	1	
		*		
,				



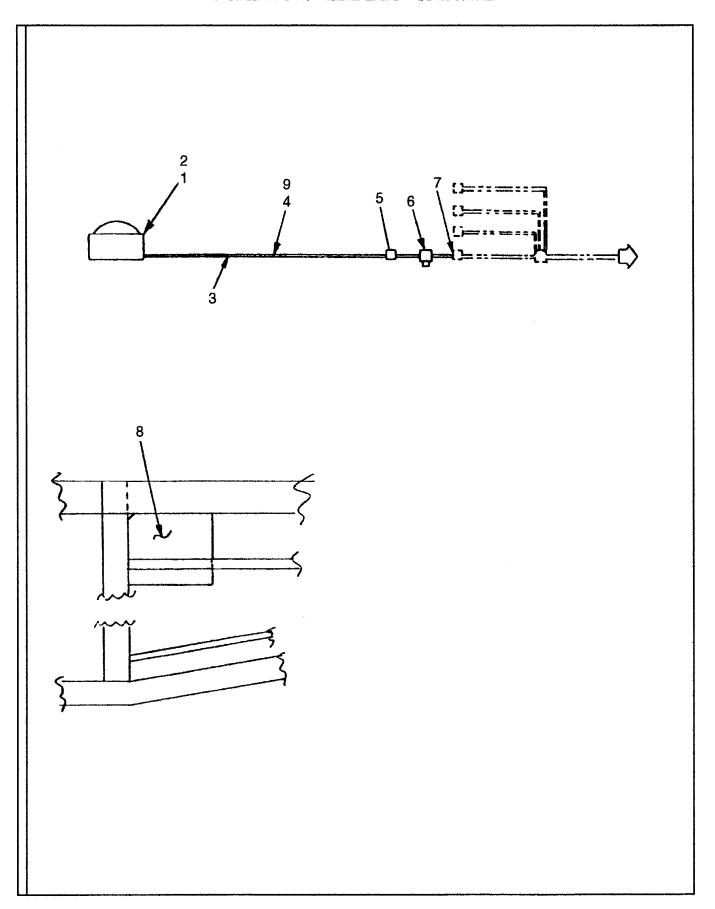
## GAUGE PANEL ASSEMBLY

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
		BOM 59494369		
1	59494344	Gauge Mounting Plate	1	
2	59455303	Transmission Temperature Gauge	1	
3	59989558	Hourmeter Gauge	1	
4	59455493	Water Temperature Gauge	1	
5	59455469	Oil Pressure Gauge	1	
6	59816736	Voltmeter Gauge	1 1	
7	59731281	Fuel Gauge	$\begin{vmatrix} 1 \\ 1 \end{vmatrix}$	
8	59465609	Bulb	5	
9	59456939	Gauge Panel Harness	$\begin{vmatrix} 1 \end{vmatrix}$	
10	59492512	Park Brake Light	1	
11	58788894	Hydraulic Restrict Light	$\begin{vmatrix} \hat{1} \end{vmatrix}$	
12	59492538	Accumulated Pressure Light	1	
13	59417493	Blank Light	2	
	·			
		VR.90B		



## TURN SIGNAL AND HEADLIGHT ASSEMBLY

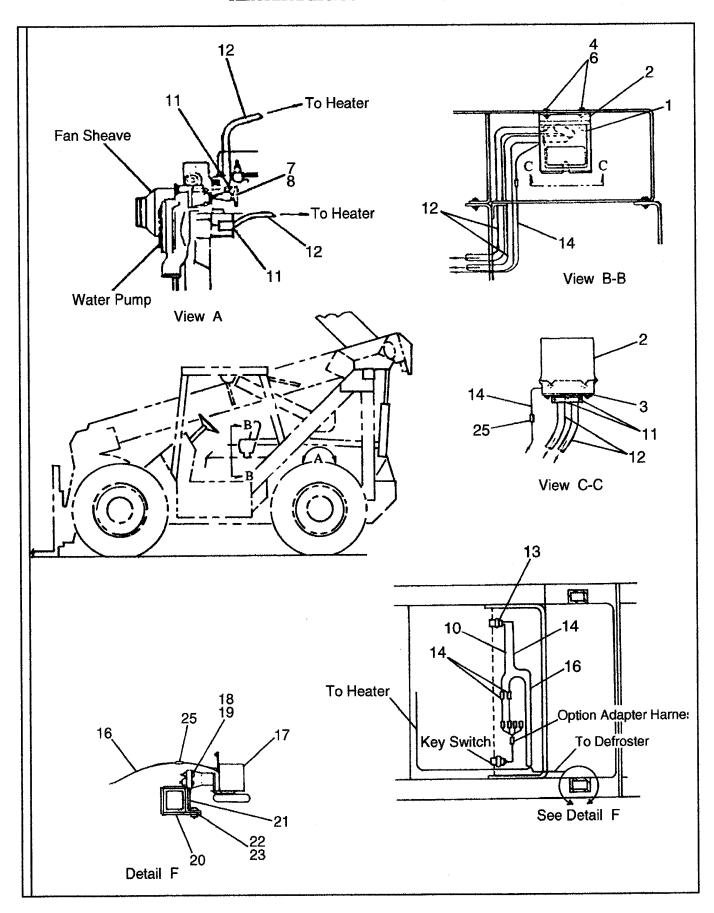
ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
		BOM 59494492		
1	59474460	Bracket	1	
2	59474478	Bracket	1	
3	59670554	Adhesive Mounting Block	6	
4	59494435	Bracket	2	
5	59303800	Switch	1	
6	59494450	Light	4	12V
_	57282063	-Replacement Lamp	1	50W
7	95373882	Splicer Butt	5	
11	95424586	Tyrap	20	
12	51052389	Connector	4	
13	59759712	Flasher Plug	1	
17	59494617	Signal Light	4	
	00267468	-Amber Light	1	
	58889007	-Red Lens	1	
_	N.S.S.	-Bulb (1156)	1	
	58889015	-Wire Assembly	1	
18	59474049	Fuse Holder	1	
19	59366971	Terminal	1	
20	58883703	Switch	1	
21	59474445	Channel	2	
22	59338517	Male Housing	1	
27	59759720	Wire Assembly - Optional	1	
30	58961582	Flasher	1	
			ļ	
		VID. OOD		



## DOME LIGHT ASSEMBLY - OPTIONAL

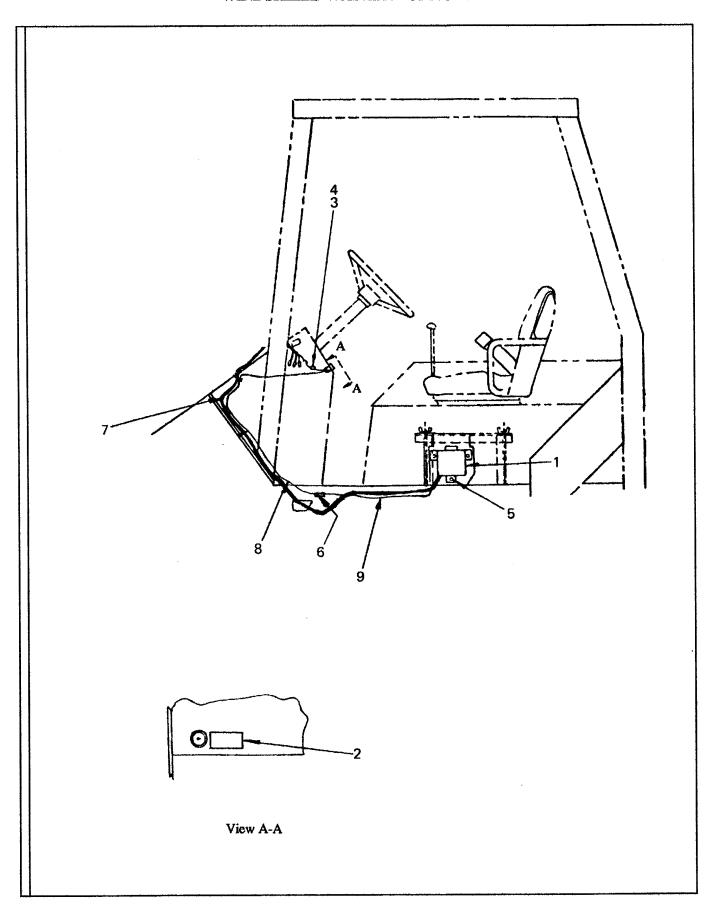
ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
		BOM 59494716		
1	59494724	Dome Light	1	
2	95074175	Hex Head Type F Screw	3	No.6-32 x .250
3	59494740	Wire	AR	
4	59670554	Mounting Adhesive	5	
5	59473660	Butt Splice	1	
6	59474049	Fuse Holder	1	
7	59494690	Bullet Terminal	1	
8	59494732	Plate	1	
9	95373973	Cable	5	
	-			

#### **HEATER/DEFROSTER - OPTIONAL**



## **HEATER/DEFROSTER - OPTIONAL**

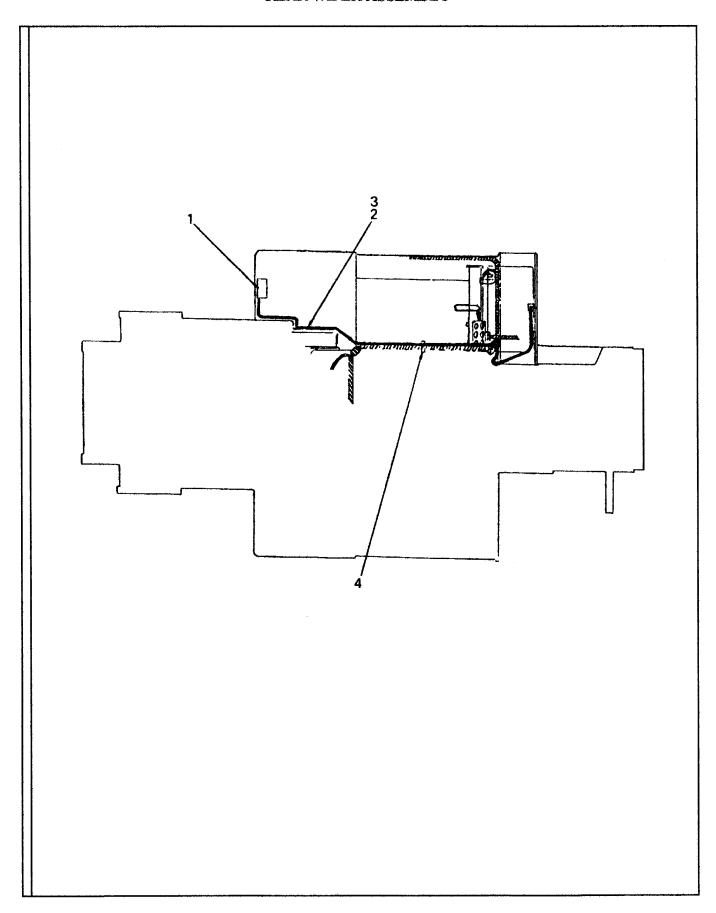
TEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
		DWG. 5947358	<del>-   </del>	
-	58808221	Heater Assembly	1	
1	58884446	-Heater	1	
-	58875923	-Fan Assembly	1 1	
- ,	58875931	-12V Motor	1	
-	58875949	-Heater Core	1 1	
2	59473595	-Heater Bracket	1	
3	59918573	-Nut	3	
4	59807941	-Lock Nut	2	
5	59474130	-Button Plug	2	
6	59680983	-Bolt	2	
7	59392795	-Valve	1	
8	59924241	-Adapter (Special)	1	
9	59465518	-Adapter (Special)	1	
10	59096503	-Wire Harness	1	
11	95090106	-Clamp	4	
12	59473637	-Hose	2	
13	59474031	-Heater Switch	1	
14	58884438	-Wire Harness	1	
15	59473652	-Electrical Terminal	1	
-	58808239	Defroster Assembly	1	
16	58808254	-Wire Assembly	1	
17	59474106	-Defroster Fan	1	See Breakdown-E.6
18	59456202	-Machine Screw	4	
19	59397042	-Lock Nut	4	
20	59473710	-Bracket	1	
21	59473728	-Bracket	1	
22	59965962	-Bolt	2	
23	59941682	-Nut	2	
24	59325712	-Fuse	1	10 AMP
25	59473652	-Electrical Terminal	1	
26	59494641	-Conduit	A/R	0.375 I.D.
		VP GOR		



#### WINDSHIELD WASHER - OPTIONAL

TEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
		BOM 59494815		
1	59494773	Washer Assembly	1	
-	58875501	-Pump Motor	1	
2	59494765	Winshield Washer Decal	1	
3	59474049	Fuse Holder	1	
4	59465591	Fuse	1	5 Amp
5	59941682	Lock Nut	3	1/4 - 20
6	59473660	Butt Splice	1	
7	59494922	Hose	1	84 lg.
8	59473678	Cable	1	16 Ga. x 60 lg.
9	59494666	Conduit	A/R	0.350

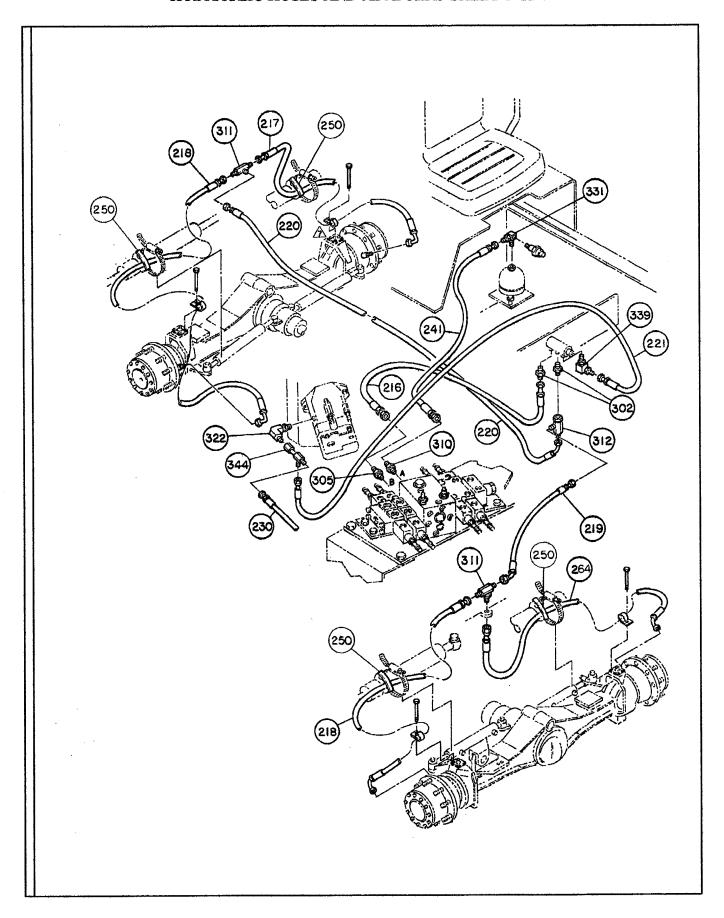
## **REAR WIPER ASSEMBLY**



## **REAR WIPER ASSEMBLY**

ITEM	COMM. NO.	DESCRIPTION	DOM 50 484000	QTY	DIMENSIONS/NOTES
1	59474056	Wiper Assembly	BOM 59474080	1	
1	58889239	-Motor		3	
_	58875402	-Blade		3	
_	58875410	-Arm		3	
_	58875428	-Washer		3	
	58875436	-Washer		1	
	N.S.S.	-Screw		1	
_	N.S.S.	-Washer		$\begin{vmatrix} 1 \\ 1 \end{vmatrix}$	
_	N.S.S.	-Lock Nut		$\begin{bmatrix} 1 \\ 1 \end{bmatrix}$	
2	59474064	Wire Assembly		$\begin{vmatrix} 1 \\ 1 \end{vmatrix}$	
3	59494674	Conduit		$\begin{vmatrix} 1 \\ 1 \end{vmatrix}$	
4	95713798	Strap		5	
	33713770	Suup			
1	1	170,000		.1	

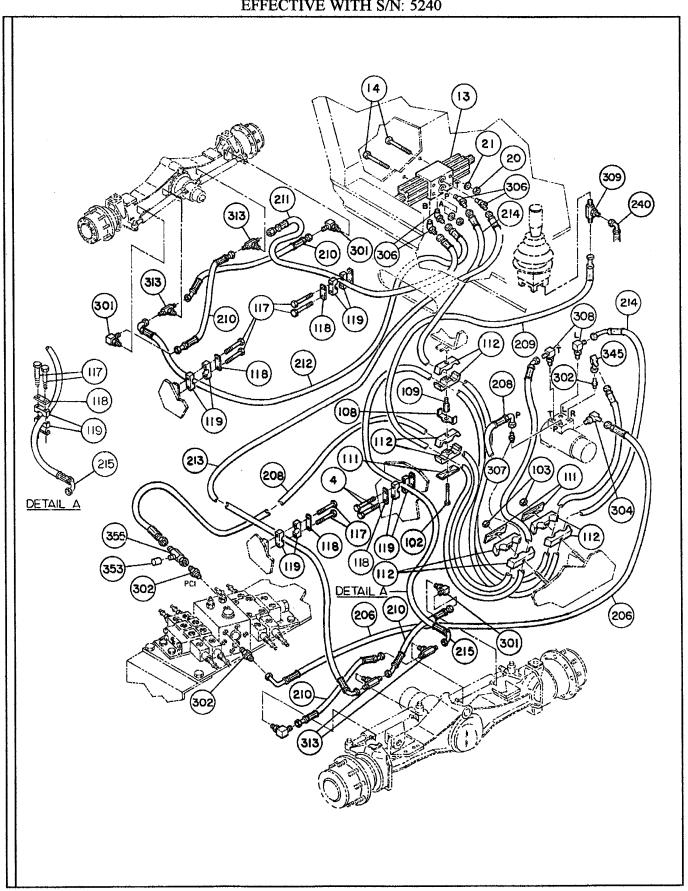
## HYDRAULIC HOSES AND ADAPTERS-SHEET 1 OF 5



## **HYDRAULIC HOSES AND ADAPTERS - SHEET 1 OF 5**

FTEM	COMM.NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
		DWG, 59494138-4		
-		Brake Hoses And Adapters	1	
216	59090118	Hose Assembly 4ORS 45° SW x 6ORS Str. SW	1	43"
218	59092239	Hose Assembly 4JIC 90° SW x 4ORS Str. SW	2	52.5"
219	59090043	Hose Assembly 4ORS 45° SW x 6ORS Str. SW	1	69"
220	59090035	Hose Assembly 4ORS Str. x 6ORS 45°	1	58"
221	58770165	Hose Assembly 8ORS 90° x 8ORB Str.	1	87"
241	59493122	Hose Assembly 6ORS Str. x 6ORS Str.	1	63"
250	59094110	Hose Guard	4	
264	58827817	Hose Assembly 4ORS Str. x 4ЛС 90°	2	48"
302	59918649	Adapter, Straight (Effective with S/N146392)	2	
-	59918649	Adapter, Straight (Prior to S/N 146392)	2	
311	59434761	Tee	2	
312	59918540	Adapter Tee	1	
331	59492595	Adapter	1	
339	59922898	90° Adapter	1	
344	59923797	Tee	1	
-	95426359	Clamp, Brake Hose (Not Shown)	2	
-	95487959	Adapter (Brake Hose to Axle)(Not Shown)	4	
L	<u> </u>	VP DOB	<u> </u>	

#### HYDRAULIC HOSES AND ADAPTERS - SHEET 2 OF 5 EFFECTIVE WITH S/N: 5240

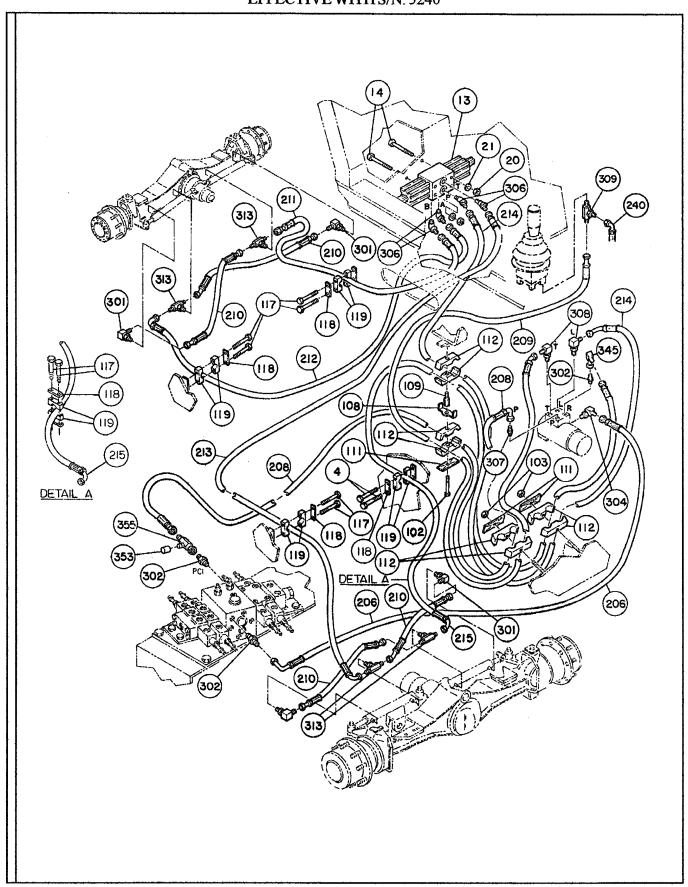


## HYDRAULIC HOSES AND ADAPTERS-SHEET 2 OF 5 EFFECTIVE WITH S/N: 5240

ITEM	COMM.NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
		Steering System With Hoses And Adapters	1	
13	58827544	Steering Selector Valve	1	See Breakdown I.16
14	95919478	H.H.C.S.	2	1/4 - 20 x 3.50
20	95923298	Lock Nut	2	1/4 - 20
21	95922324	Flat Washer	2	1/4
30	59990069	O-Ring (Effective with S/N 150477)	1	
102	95920542	H.H.C.S.	1	5/16 - 18 x 2.0
103	59918573	Lock Nut	1	5/16 - 18
108	59583492	Safety Washer	1	
109	59583484	Stacking Bolt	1	
111	59583500	Cover Plate	3	
112	59587014	Insert Clamp	8	
117	95920641	H.H.C.S.	10	1/4 - 20 x 1.375
118	59587816	Cover Plate	5	
119	59680413	Clamp Insert	10	
206	58827692	Hose 4 ORS Str. x 4 ORS Str.	1	83.0
208	59495515	Hose 6 ORS 90° x 6 ORS Str.	1	101.0
209	58851452	Hose 6 ORS 45° x 6 ORS 45°	1	97.0
210	59417782	Hose 6 ORS 45° x 6 ORS Str.	4	30.0
211	59417790	Hose 6 ORS 90° x 6 ORS Str.	1	58.0
212	59495564	Hose 6 ORS 90° x 6 ORS Str.	1	115.0
213	59495564	Hose 6 ORS 90° x 6 ORS Str.	1	89.50
214	58827551	Hose 6 ORS 45° x 6 ORS Str.	1	68.0
215	59495580	Hose 6 ORS 90° x 6 ORS Str.	1	126.0
240	58851411	Hose 6 ORS 90° x 6 ORS Str.	1	47.50
301	59922864	Adapter 90°	4	
302	59918649	Adapter, Straight (Effective with S/N146392)	2	
-	59918649	Adapter, Straight (Prior to S/N 146392)	2	
304	59922807	Adapter 90° (Effective With S/N 141714)	1	
_	59922807	Adapter 90° (Prior To S/N 141714)	1	
306	59922245	Adapter 45°	4	
307	59493924	Check Valve (Effective With S/N 146392	1	
-	59001388	Check Valve (S/N 141714 thru 146392)	1	
-	59493924	Check Valve (Prior To S/N 141714)	1	
308	59921031	Adapter Tee (Effective With S/N 146392)	2	
-	59918532	Adapter Tee (S/N 141714 thru 146392)	2	
-	59921031	Adapter Tee (Prior To S/N 141714)	2	
309	59918532	Adapter Tee	1	
312	59918540	Adapter Tee	1	
313	59918581	Adapter Tee	4	
	1	Continued VR-90B		1

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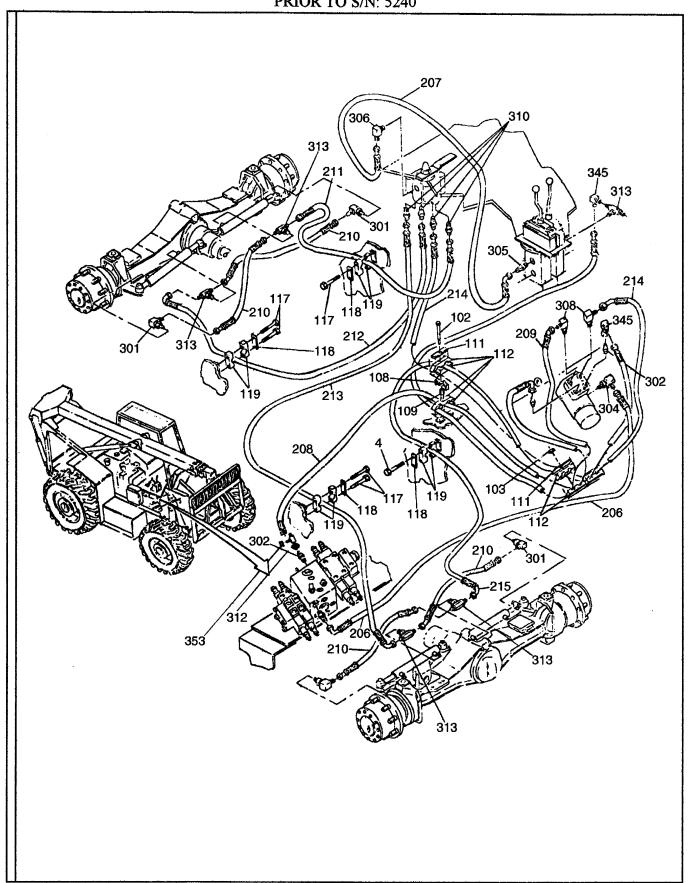
#### HYDRAULIC HOSES AND ADAPTERS-SHEET 2 OF 5 EFFECTIVE WITH S/N: 5240



#### HYDRAULIC HOSES AND ADAPTERS-SHEET 2 OF 5 EFFECTIVE WITH S/N: 5240

ITEM	COMM.NO.	EFFECTIVE WITH S/N: 5240 <b>DESCRIPTION</b>	QTY	DIMENSIONS/NOTES
T T TOTAL	COMMITTING.	DESCRIPTION	QI I	DIMENSIONS/INCIES
245	50021056	Adomton (Ceffo atimo With COT 14/202)		
345	59921056	Adapter (Effective With S/N 146392)		
_	59922864 59921056	Adapter 90°(S/N 141714 thru 146392) Adapter (Prior To S/N 141714)		
353	59921036	Adapter (Effective With S/N 5355)		
333	59924050	Cap (Prior To S/N 5355)		
355	59918615		1 1	
333		Adapter (Effective With S/N 147862)	1	
_	59924043	Cap (S/N 5355 thru 147862)		
_	58850918	Orifice (Prior To S/N 5355)		
L		777 000		

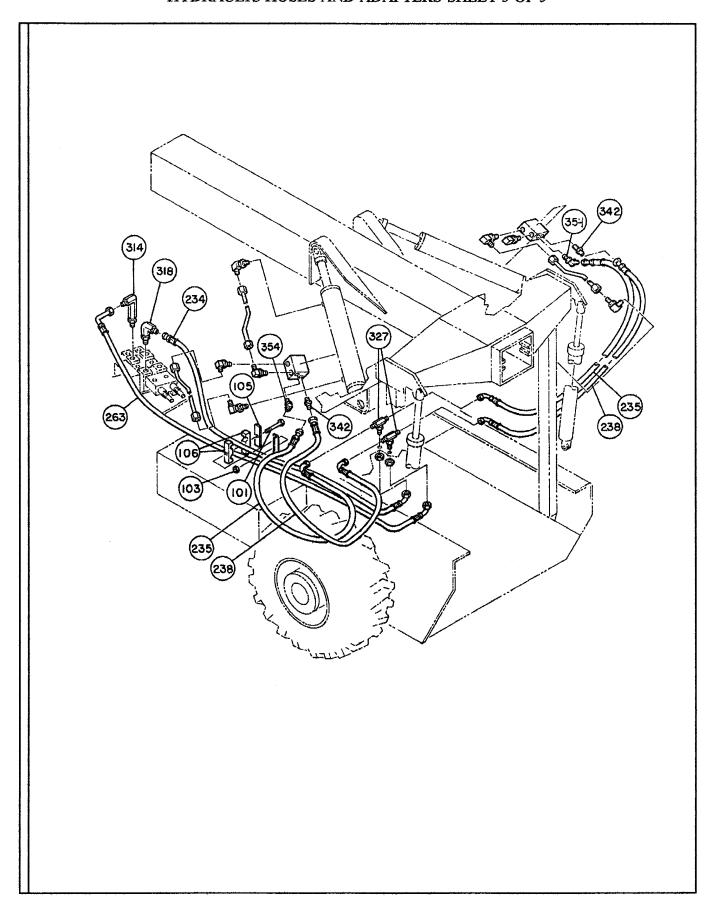
# HYDRAULIC HOSES AND ADAPTERS-SHEET 2 OF 5 PRIOR TO S/N: 5240



#### HYDRAULIC HOSES AND ADAPTERS-SHEET 2 OF 5 PRIOR TO S/N: 5240

- 102 95920534 103 59327833 108 59583492 109 59583484 111 59583500 112 59587014 117 95920641 118 59587816 119 59680413 206 58827692 207 59495507 208 59495515 209 59495523 210 59417782 211 59417790 212 59493114 213 59495564 214 59495572	DESCRIPTION  DWG. 59494138-4  Steering System With Hoses And Adapters Hex Head Bolt	1	DIMENSIONS/NOTES
103       59327833         108       59583492         109       59583484         111       59583500         112       59587014         117       95920641         118       59587816         119       59680413         206       58827692         207       59495507         208       59495515         209       59495523         210       59417782         211       59493114         213       59495564	- Steering System With Hoses And Adapters	1	
103       59327833         108       59583492         109       59583484         111       59583500         112       59587014         117       95920641         118       59587816         119       59680413         206       58827692         207       59495507         208       59495515         209       59495523         210       59417782         211       59493114         213       59495564	-	1 1	
103       59327833         108       59583492         109       59583484         111       59583500         112       59587014         117       95920641         118       59587816         119       59680413         206       58827692         207       59495507         208       59495515         209       59495523         210       59417782         211       59493114         213       59495564	I IICA IICAU DOIL	1	
109       59583484         111       59583500         112       59587014         117       95920641         118       59587816         119       59680413         206       58827692         207       59495507         208       59495515         209       59495523         210       59417782         211       59493114         213       59495564	Hex Nut	3	
111       59583500         112       59587014         117       95920641         118       59587816         119       59680413         206       58827692         207       59495507         208       59495515         209       59495523         210       59417782         211       59493114         213       59495564	Washer	1	
112       59587014         117       95920641         118       59587816         119       59680413         206       58827692         207       59495507         208       59495515         209       59495523         210       59417782         211       59493114         213       59495564	Bolt	1	
117       95920641         118       59587816         119       59680413         206       58827692         207       59495507         208       59495515         209       59495523         210       59417782         211       59497790         212       59493114         213       59495564	Cover Plate	3	
118     59587816       119     59680413       206     58827692       207     59495507       208     59495515       209     59495523       210     59417782       211     5949774       212     59493114       213     59495564	Insert Clamp	8	
119     59680413       206     58827692       207     59495507       208     59495515       209     59495523       210     59417782       211     59417790       212     59493114       213     59495564	Cap Screw	8	
206     58827692       207     59495507       208     59495515       209     59495523       210     59417782       211     59417790       212     59493114       213     59495564	Cover Plate	4	
207     59495507       208     59495515       209     59495523       210     59417782       211     59417790       212     59493114       213     59495564	Clamp Insert	8	
208     59495515       209     59495523       210     59417782       211     59417790       212     59493114       213     59495564	Hose Assembly 4 ORS Str. x 4 ORS Str.	1	83.0
209     59495523       210     59417782       211     59417790       212     59493114       213     59495564	Hose Assembly 4 ORS Str. x 4 ORS 90°	1	17.50
210 59417782 211 59417790 212 59493114 213 59495564	Hose Assembly 6 ORS 90° x 6 ORS Str.	1	101.0
211 59417790 212 59493114 213 59495564	Hose Assembly 6 ORS 45° x 6 ORS Str.	1	92.0
212 59493114 213 59495564	Hose Assembly 6 ORS 45° x 6 ORS Str.	4	30.0
213 59495564	Hose Assembly 6 ORS 90° x 6 ORS Str.	1	58.0
]	Hose Assembly 6 ORS 90° x 6 ORS Str.	1	105.0
214 59495572	Hose Assembly 6 ORS 90° x 6 ORS Str.	1	89.50
	Hose Assembly 6 ORS 45° x 6 ORS Str.	1	89.0
215   59495580	Hose Assembly 6ORS 90° x 6ORS Str.	1	126.0
301 59922864	90° Adapter	4	1
302 59918649	Adapter, Straight (Effective with S/N146392)	2	
- 59918649	Adapter, Straight (Prior to S/N 146392)	2	
304   59922807	Adapter	1	
305   59929182	Adapter	1	
306   59923318	90° Adapter	1	1
308   59921031	Adapter	2	i I
310   59919670	Adapter	4	
312   59918540	Adapter Tee	1	
313   59918581	Adapter Tee	5	I
345 59921056	Adapter	1	
353 59924050	Cap	1	; :
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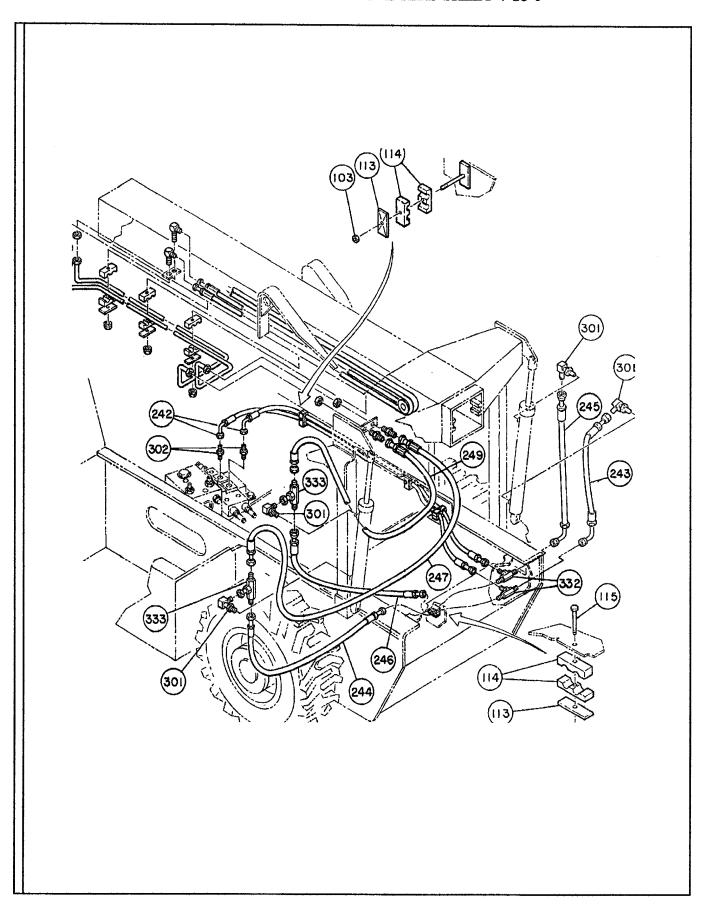
#### HYDRAULIC HOSES AND ADAPTERS-SHEET 3 OF 5



#### HYDRAULIC HOSES AND ADAPTERS-SHEET 3 OF 5

ITEM	COMM.NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
		DWG. 59494138-4		
-		Boom Cylinder Hoses And Adapters	1	
101	95920591	H.H.C.S.	1	5/16 - 18 x 3.75
103	59918573	Lock Nut	1	5/16 - 18
105	59656322	Cover Plate	1	
106	59656330	InsertClamp	2	
234	59090092	Hose Assembly 12 ORS Str. x 12 ORS 90°	1	83.0"
235	59493064	Hose Assembly 12 ORS 90° x 10 ORS Str.	2	44.0"
238	59493056	Hose Assembly 12 ORS 90° x 10 ORS Str.	2	40.5"
263	59417931	Hose Assembly 12 ORS 90° x 12 ORS 90°	1	96.0 x 225°
327	59493890	Tee	2	'
342	59922534	Straight Adapter	2	
354	59922294	45° Adapter	2	
400	58841586	Dual Counterbalance Valve	2	
	58874801	-Dual Counterbalance Block	1	
-	58753849	-Cartridge	1	
-	58874819	-Counterbalance Valve	1	
-	59476713	-Tamperproof Cap	1	
-	58874827	-Repair Kit	1	
401	95081857	Lock Washer (Not Shown)	4	3/8 Dia.
402	95919361	H.H.C.S. (Not Shown)	4	3/8 - 16 x 4.0
403	95303335	O-Ring Fitting	8	
404	59452292	Tube Assembly (Short)	2	
405	59452284	Tube Assembly (Long)	2	
406	59922294	45° Adapter	2	
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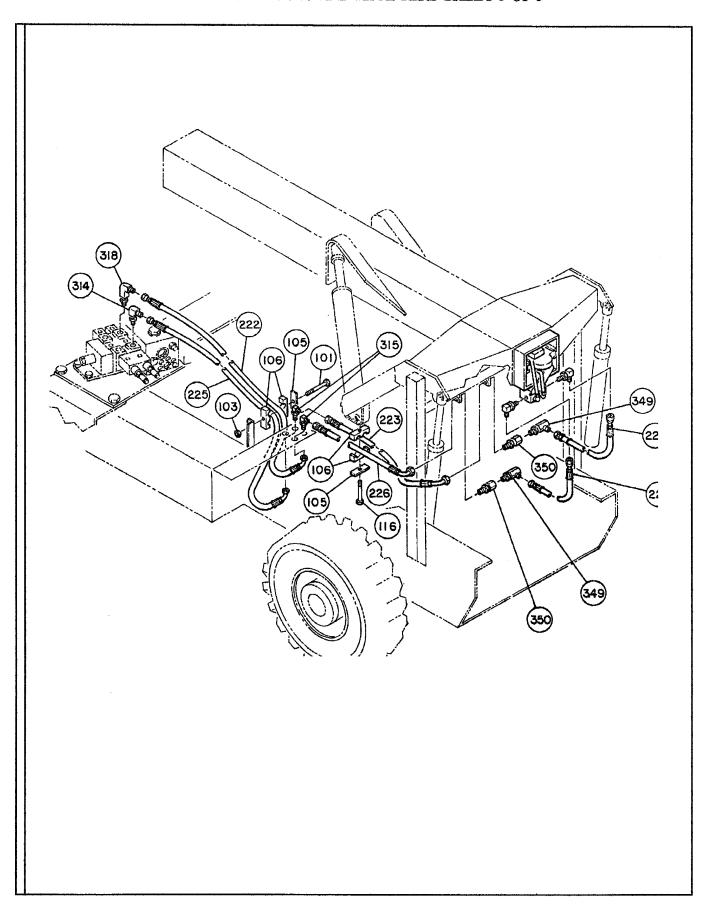
# HYDRAULIC HOSES AND ADAPTERS-SHEET 4 OF 5



## HYDRAULIC HOSES AND ADAPTERS-SHEET 4 OF 5

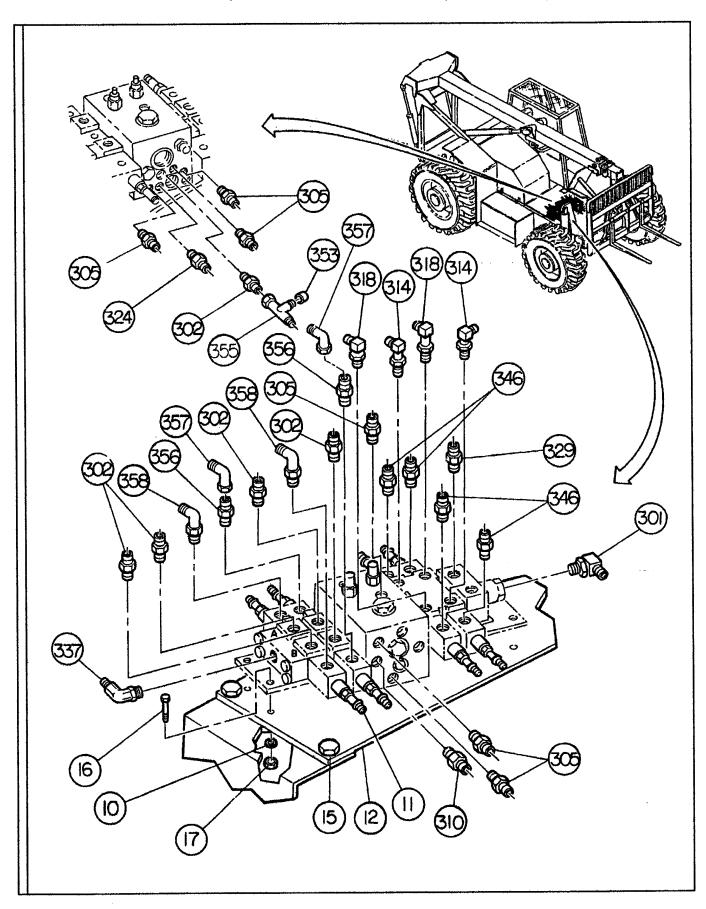
ITEM	COMM.NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
		DWG. 59494138-4	1	
-		Tilt Boom System Hoses And Adapters	1	
103	59918573	Hex Nut	3	5/16 - 18
113	59583450	Cover Plate	3	
114	59929026	ClampInsert	6	
115	95920542	Cap Screw	1	
242	59495796	Hose Assembly 6 ORS 90° x 6 ORS Str.	2	12.50
243	59493049	Hose Assembly 6 ORS 90° x 6 ORS Str.	1	18.0
244	59417915	Hose Assembly 6 ORS Str. x 6 ORS Str.	1	52.0
245	59493031	Hose Assembly 6 ORS 90° x 6 ORS Str.	1	42.25
246	59493023	Hose Assembly 6 ORS Str. x 6 ORS Str.	1	79.0
247	59493015	Hose Assembly 8 JIC Str. x 6 ORS Str.	1	53.0
249	59493007	Hose Assembly 8 ЛС Str. x 6 ORS Str.	1	27.50
301	59922864	90° Adapter	4	
302	59918649	Adapter, Straight (Effective with S/N146392)	2	
-	59918649	Adapter, Straight (Prior to S/N 146392)	2	
332	59962621	Adapter	2	
333	59918557	Adapter Tee	2	
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# HYDRAULIC HOSES AND ADAPTERS-SHEET 5 OF 5



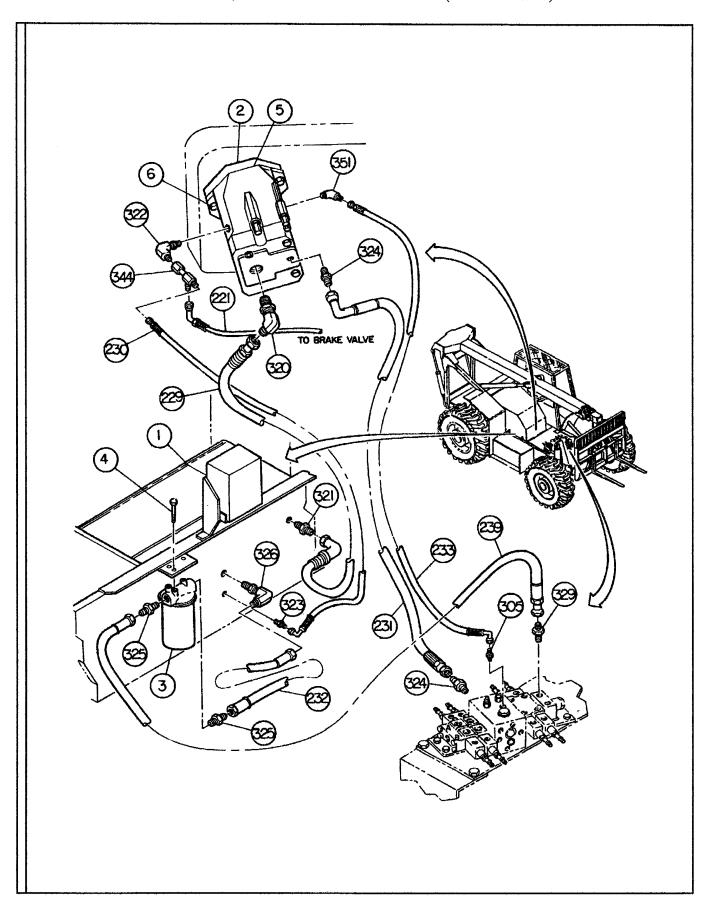
#### **HYDRAULIC HOSES AND ADAPTERS-SHEET 5 OF 5**

FTEM	COMM.NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
		DWG.59494138-4		
-		Boom Extension Cylinder Hoses And Adapters	1	
101	95920591	H.H.C.S.	1	5/8 - 16 x 3.75
103	59918573	Hex Nut	1	5/8 - 16
105	59656322	Cover Plate	2	
106	59656330	InsertClamp	4	
116	95920567	H.H.C.S.	1	5/16 - 18 x 2.5
222	59090068	Hose Assembly 12 ORS 45° x 12 ORS Str.	1	80.5"
223	59493098	Hose Assembly 12 JIC 45° x 12 ORS Str.	1	56.0"
224	59663641	Hose Assembly 12 ЛС Str. x 12 ЛС Str.	2	33.0"
225	59090076	Hose Assembly 12 ORS 45° x 12 ORS Str.	1	72.5"
226	59493072	Hose Assembly 12 ЛС 90° x 12 ORS Str.	1	49.0"
314	59922971	Fitting	1	
315	59962332	Adapter	2	
318	59408567	Adapter	1	
349	59455071	Hydraulic Swivel	2	
-	58974346	-O-Ring Repair Kit	1	
350	59465401	Adapter	2	
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		XTD OOD	1	



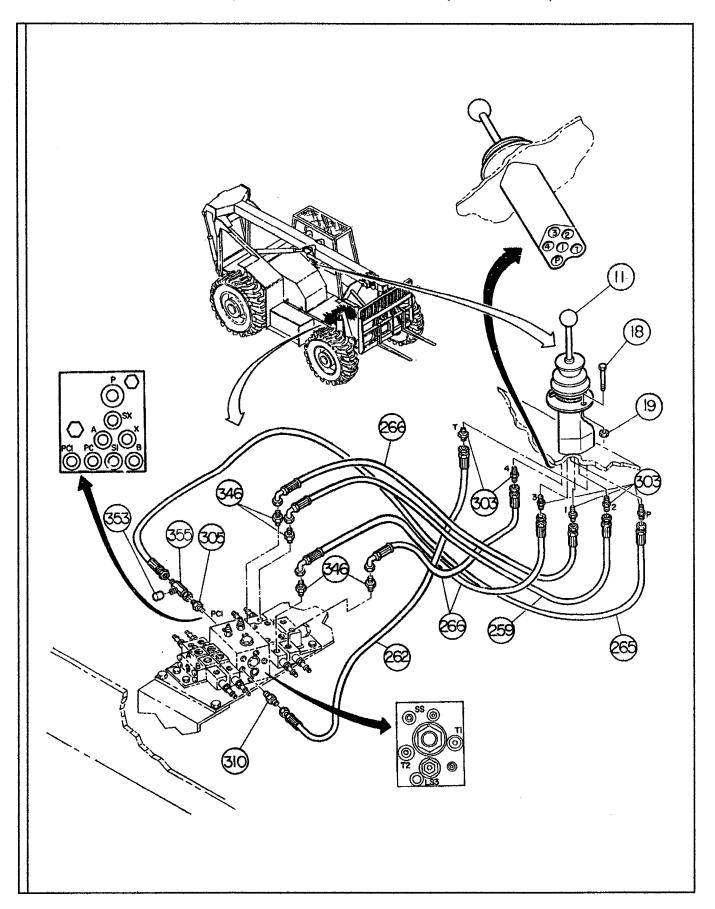
# STEERING, BRAKE AND BOOM HOSES (SHEET 1 OF 6)

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
	2011211101	DWG. 59493528 Sht 1	¥	
10	59565036	Washer, Hard	1	
12	59495234	Plate, Valve Mounting	1	
15	59848424	Screw, Lock	4	1/2 - 13 x 1.0
16	59680983	Screw, Lock	3	3/8 - 16 x 1.0
17	59807941	Nut, Lock	3	3/8 - 16
301	59922864	Adapter, 90°	1	
302	59918649	Adapter, Straight	5	
305	59929182	Adapter, Straight	6	
310	59919670	Adapter, Straight	2	
312	59918540	Adapter, Tee	1	
314	59922971	Adapter, 90°	2	
318	59408567	Adapter, 90°	2	
324	59922617	Adapter, Straight	1	
329	59922641	Adapter, Straight	1	
337	59922872	Adapter, Elbow	1	
346	59922419	Adapter, Straight	2	
353	59924050	Cap	1	
356	95371258	Adapter, Straight	2	
357	95302113	Adapter, 90°	2	
358	95365094	Adapter, 90°	2	
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# STEERING, BRAKE AND BOOM HOSES (SHEET 2 OF 6)

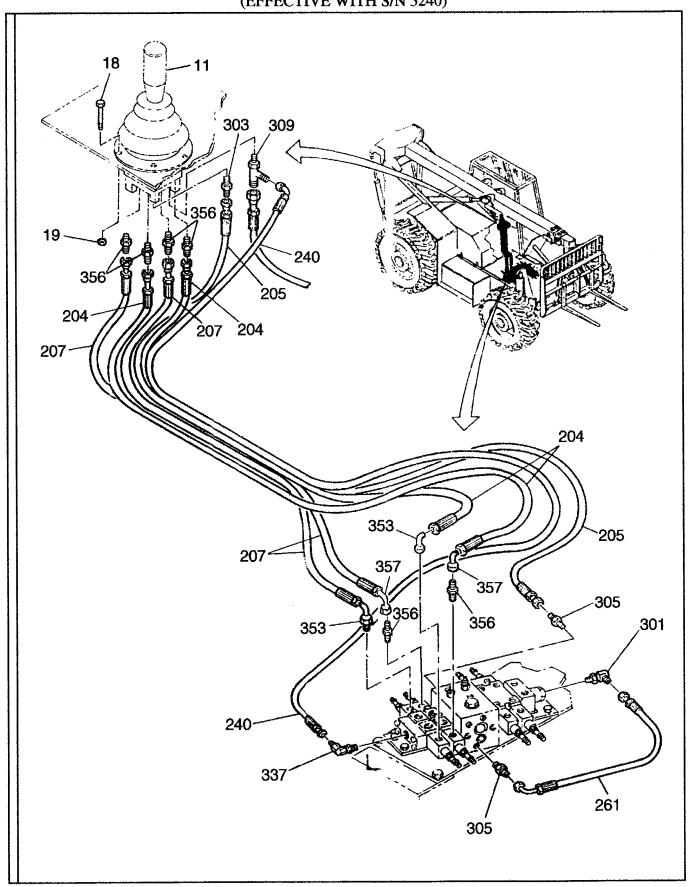
TTEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
		DWG, 59493528 Sht 2		
1	59495069	Hydraulic Tank	1	See Breakdown-I.17
2	59585133	Gasket	1	
3	59456921	Filter	1	
-	59438838	-Replacement Element	1	
	59491175	-Indicator	1	
-	59496943	-Filter Sender	1	
4	59456293	Flange Screw	3	3/8 - 16 x 0.75
5	59090027	MAIN HYDRAULIC AND STEERING		
		PUMP (Effective With S/N 150671)	1	See Breakdown-I-18
-	59001321	MAIN HYDRAULIC AND STEERING		
		PUMP (S/N 142719 thru 150670)	1	See Breakdown-I-19
-	59474783	MAIN HYDRAULIC AND STEERING		
		PUMP (Prior To S/N 142719)	1	See Breakdown-I-20
6	59463752	Flange Screw	2	1/2 - 13 x 1.25
221	58770165	Hose Assembly 8 ORS 90° x 8 ORB	1	87.0
229	59495705	Hose Assembly 24 ORS 90° x 24 ORS Str.	1	26.0
230	59495713	Hose Assembly 8 ORS 90° x 8 ORB Str.	1	29.0
231	59495721	Hose Assembly 12 ORS 90° SW x 12 ORS SW.	1	35.0
232	59495739	Hose Assembly 16 ORS Str. x 16 ORS Str.	1	20.50
233	58787078	Hose Assembly 4 ORS 90° x 4 ORS Str.	1	50.0
239	59495762	Hose Assembly 16 ORS 90° x 16 ORS Str.	1	40.0
305	59929182	Adapter	1	
320	59923052	Adapter	1	
321	59922690	Adapter	1	
322	59922906	Fitting	1	
323	59923185	Adapter	1	
324	59922617	Adapter	1	
325	59922658	Fitting	2	
326	59923011	Fitting	1	
329	59922641	Adapter	1	,
344	59923797	Tee	1	
351	59922203	Adapter	1	



# STEERING, BRAKE AND BOOM HOSES (SHEET 3 OF 6)

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
		DWG. 59493528 Sht 3		
11	N.SV.A.	Hydraulic Kit - Non CBC - Boom Control	1	See Breakdown-I.21
18	59965962	Lock Bolt	8	1/4 - 20 x .75
19	59941682	Lock Nut	8	1/4 - 20
259	59434977	Hose Assembly 4 ORS 90° x 4 ORS Str. SW	2	55.0
262	58851437	Hose Assembly 6 ORS Str. x 6 ORS Str.	1	68.0
265	58930512	Hose Assembly 4 ORS Str. x 4 ORS Str. SW	1	
266	59434993	Hose Assembly 4 ORS 90° x 4 ORS Str. SW	2	72.0
303	59922419	Adapter	6	
305	59929182	Adapter	1	
310	59919670	Adapter	1	
346	59921056	Adapter	4	
353	59924043	Ors Cap	1	
355	59918615	Adapter (Effective with S/N 147862)	1	

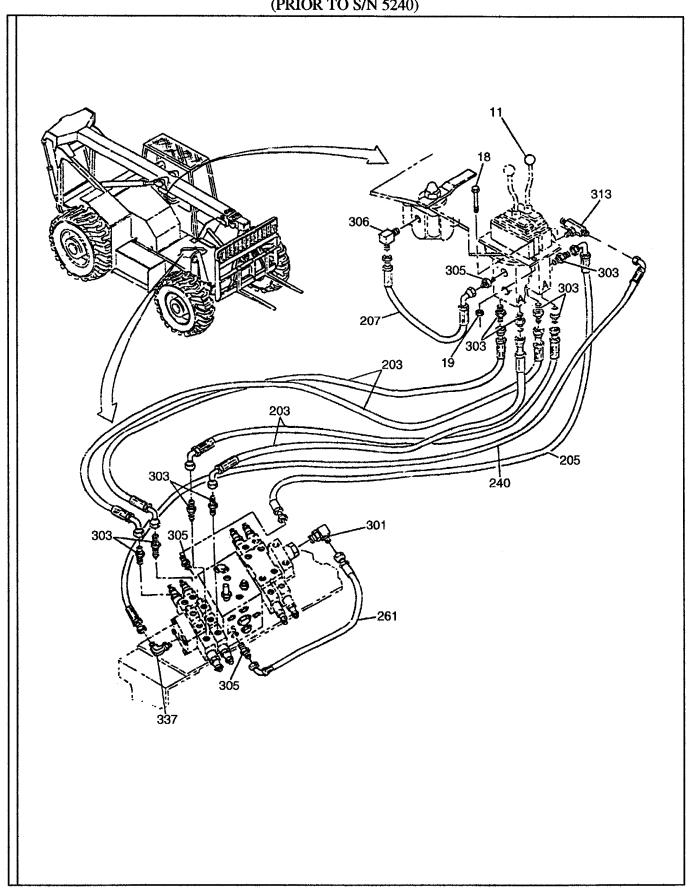
# STEERING, BRAKE AND BOOM HOSES (SHEET 4 OF 6) (EFFECTIVE WITH S/N 5240)



# STEERING, BRAKE AND BOOM HOSES (SHEET 4 OF 6) (EFFECTIVE WITH S/N 5240)

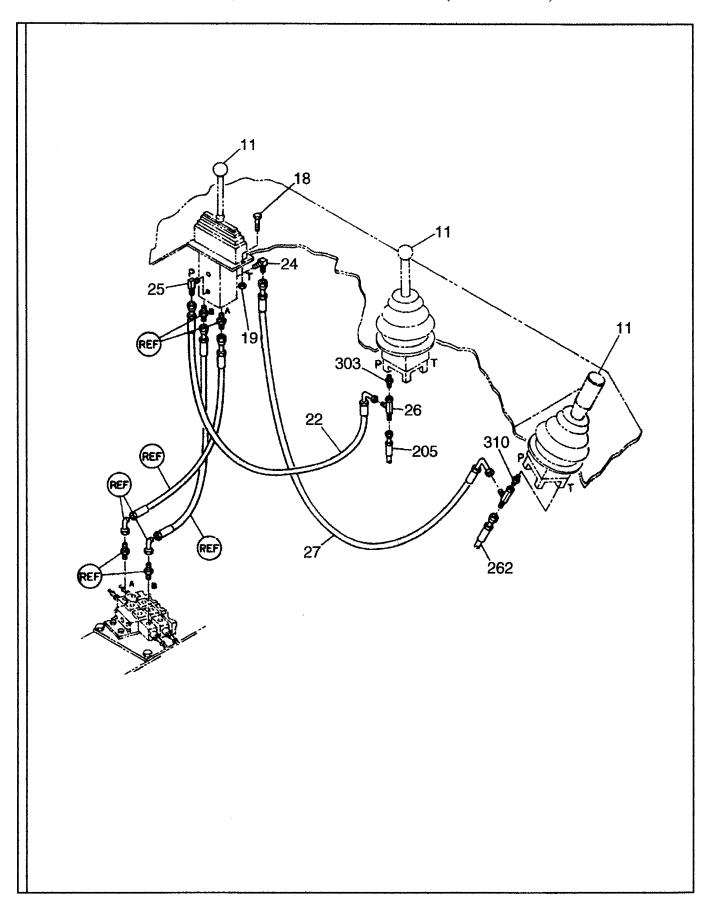
ITEM	COMM. NO.	(EFFECTIVE WITH S/N 5240)  DESCRIPTION	QTY	DIMENSIONS/NOTES
		DWG. 59493528 Sht 4		
11	N.SV.A.	Hydraulic Kit - Non CBC - Fork Tilt/Frame	1	See Breakdown-I.21
		Leveling		
18	59965962	Lock Bolt	8	1/4 - 20 x .75
19	59941682	Lock Nut	8	1/4 - 20
204	58851528	Hose Assembly 4 JIC Str. x 4 JIC Str.	2	62.0
205	59494146	Hose Assembly 4 ORS Str. SW x 4 ORS Str. SW	1	
207	59494146	Hose Assembly 372-2 x 4 JIC Str. SW	2	
240	58851411	Hose Assembly 6 ORS 90° x 6 ORS Str.	2	47.50
261	59494245	Hose Assembly 4 ORS 90° SW x 6 ORS Str. SW	1	24.0
301	59922864	90° Adapter	1	
303	59922419	Adapter	1	#4-6
305	59929182	Adapter	2	#4
309	59918532	Adapter Tee	1	
337	59922872	Adapter	1	#6-10
353	59924050	Cap	2	
356	95371258	Adapter	6	
357	95302113	Adapter	2	

# STEERING, BRAKE AND BOOM HOSES (SHEET 4 OF 6) (PRIOR TO S/N 5240)



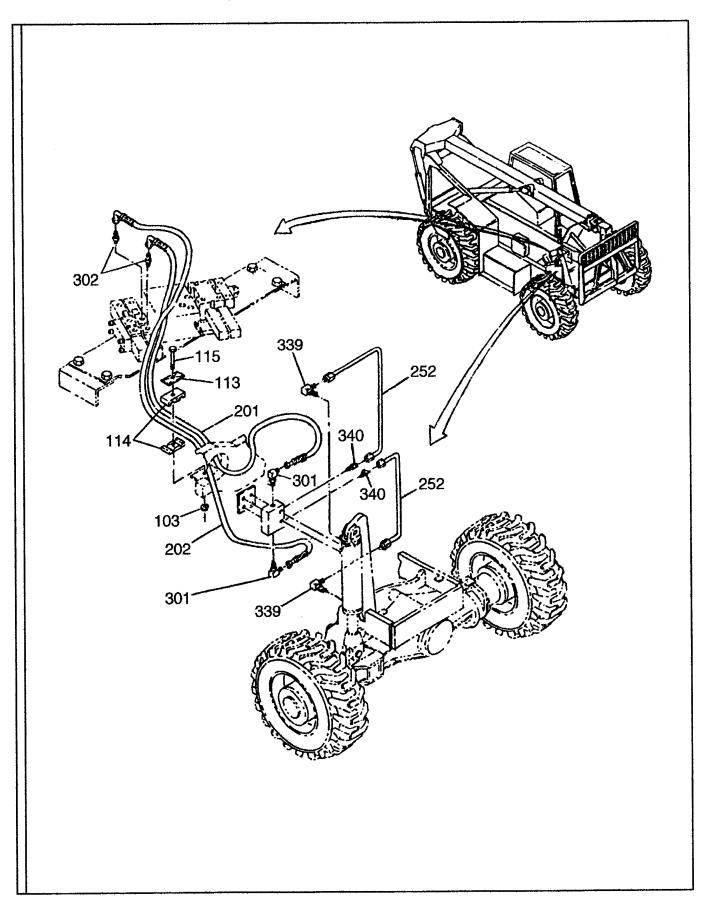
# STEERING, BRAKE AND BOOM HOSES (SHEET 4 OF 6) (PRIOR TO S/N 5240)

ITEM	(PRIOR TO S/N 5240) TIEM COMM. NO. DESCRIPTION QTY DIMENSIONS/NOTES				
T T T71AT	COMMINION	DESCRIF 110N  DWG. 59493528 Sht 4	VII		
11	N.SV.A.	<b>Hydraulic Kit - Non CBC - Fork Tilt/Frame</b> Leveling	1	See Breakdown-I.21	
18	59965962	Bolt	8	1/4 - 20 x .75	
19	59941682	Lock Nut	8	1/4 - 20 X . / 3	
203	59495465	Hose Assembly 4 ORS Str. x 4 ORS 90°	4	48.0	
205	59495481	Hose Assembly 4 ORS Str. x 4 ORS 90°	1	47.0	
207	59495507	Hose Assembly 4 ORS Str. x 4 ORS 90°	1	17.50	
240	59495770	Hose Assembly 6 ORS 90° x 6 ORS Str.	1	52.50	
261	59494245	Hose Assembly 4 ORS 90° x 6 ORS Str.	1	24.0	
301	59922864	90° Adapter	1	24.0	
303	59922419	Adapter	9		
305	59929182	Adapter	3		
306	59923318	90° Adapter	1		
313	59918581	Adapter Tee	1		
337	59922872	Adapter	1		
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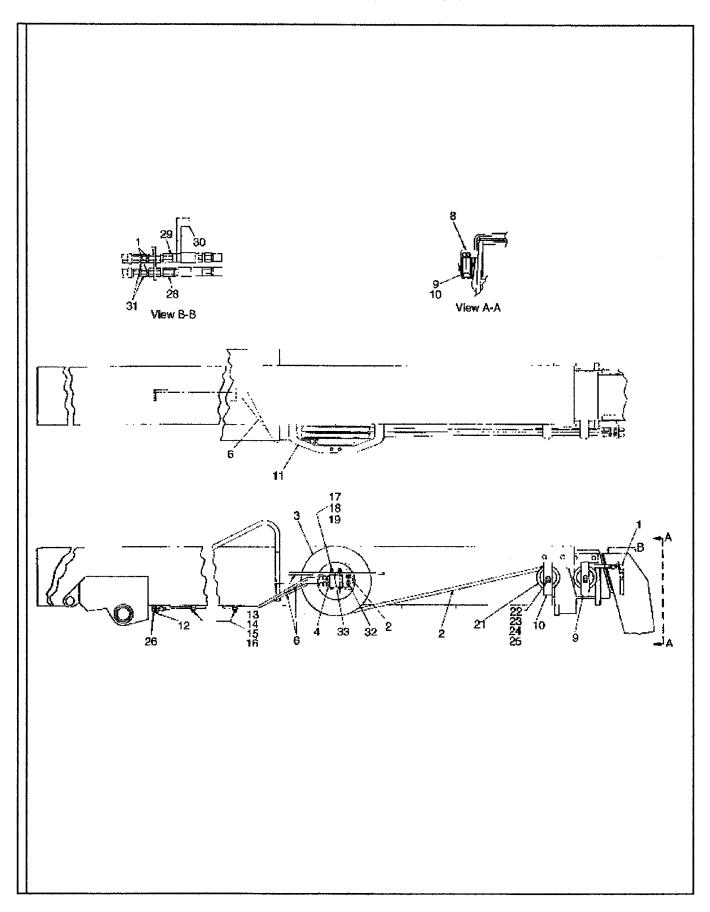
# STEERING, BRAKE AND BOOM HOSES (SHEET 5 OF 6)

ITEM	COMPA NO	DECCRIPTION	OTEST	DIMENIOTONICATOMICS
11EW	COMM. NO.	DESCRIPTION  DWG. 59493528 Sht 5	QTY	DIMENSIONS/NOTES
11	N.SV.A.	Hydraulic Kit - Non CBC - Auxiliary	1	See Breakdown-I.21
		Hydraulic Control		
18	59965962	Lock Bolt	8	1/4 - 20 x .75
19	59941682	Lock Nut	8	1/4 - 20
22	58882622	Hose Assembly	1	
23	59918540	Adapter Tee	1	
24	59922849	Adapter	1	
25	59922823	Adapter	1	
26	59918615	Adapter	1	
27	58802885	Hose Assembly 6 ORS 90° x 6 ORS Str.	1	26.0
205	58930512	Hose Assembly 4 ORS 90° x 4 ORS Str.	4	48.0
262	58851437	Hose Assembly 6 ORS Str. x 6 ORS Str.	1	68.0
		(Effective With S/N 5240)		
_	59417923	Hose Assembly 6 ORS 45° x 6 ORS Str.	1	56.0
		(Prior To S/N 5240)		
303	59922419	Adapter	1	
310	59919670	Adapter	1	:
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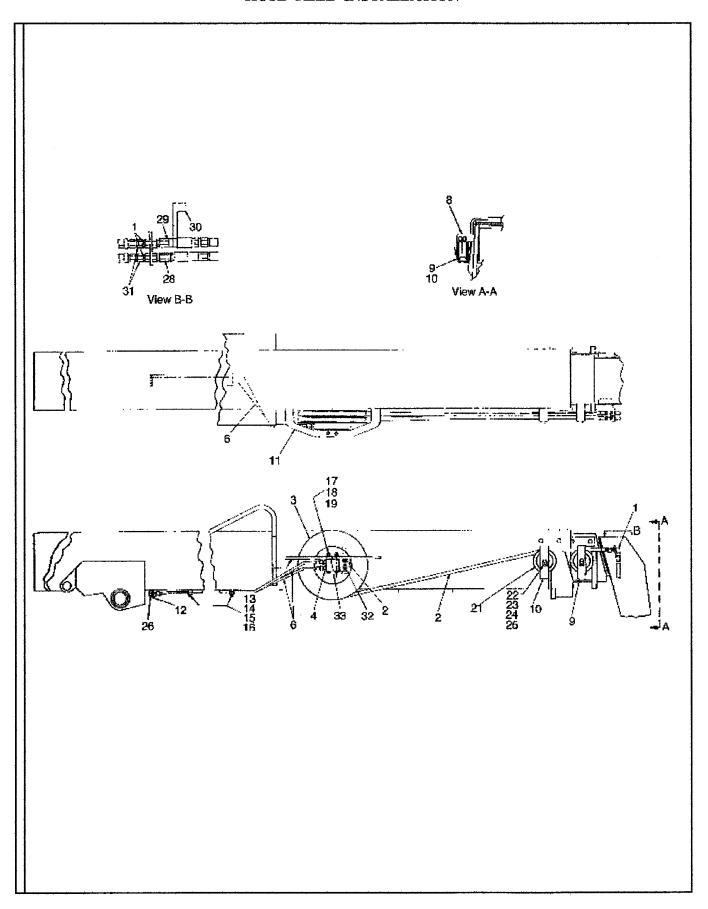


# STEERING, BRAKE AND BOOM HOSES (SHEET 6 OF 6)

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
		DWG. 59493528 Sht 5		
-		FRAME LEVEL HYDRAULIC CYLINDER		
		HOSES	1	
103	59918573	Lock Nut	1	5/16-18
113	59583450	Cover Plate	1	
114	59929026	Clamp Insert	2	
115	95920542	Cap Screw	1	5/16-18 x 2
201	59495440	Hose Assembly	1	
202	59495457	Hose Assembly	1	
252	59495937	Tube Assembly	2	
301	59922864	90° Adapter	2	
302	59918649	Adapter	2	
339	59922898	90° Adapter	2	
340	59922484	Adapter	2	
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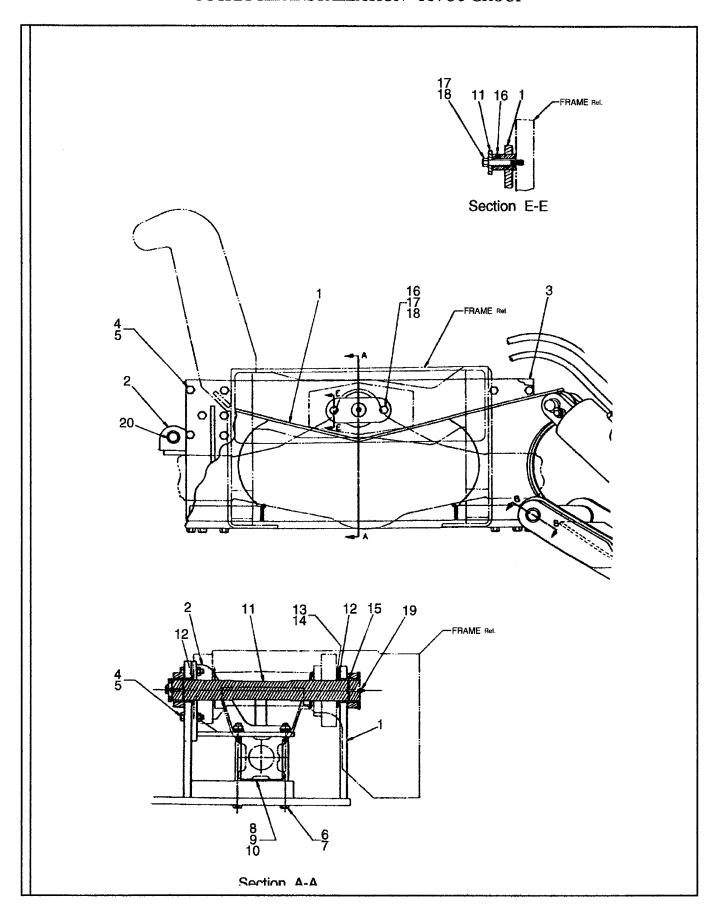


ITEM	COMM. NO.	DESCRIPTION  BOM 58882887	QTY	DIMENSIONS/NOTES
1	59942797	Adapter	2	
2	58883778	Hose Assembly (Effective with 143896)	1	
_	59451260	Hose Assembly (Prior to S/N 143896)	2	
3	58883794	Thinline Hose Reel (Effective with S/N 143896)	1	
<b>-</b>	59080911	-Service Seal Kit	1	
_	59080929	-Spring Assembly	1	
_	59456616	Hose Reel (Prior to S/N143896)	1	See Breakdown-I.22
4	95372173	Adapter (Effective with S/N 143896)	2	
_	95303368	Adapter (Prior to S/N 143896)	4	
6	58883752	Hose (Effective with S/N 143896)	2	84.0
_	59452243	Tube Assembly (Prior to S/N 143896)	1	
8	58882903	Plate	1	
9	59463240	Bracket	1	
10	59463273	Bracket	1	
11	58883802	Hose Reel Mtg Bracket (Eff. with S/N 143896)	1	
-	59465823	Hose Reel Mtg Bracket (Prior to S/N 143896)	1	
12	59465807	Plate	1	
13	59464586	Plate (Effective with S/N 143896)	2	
-	59451302	Stud (Prior to S/N 143896)	2	
14	59746248	Clamp (Effective with S/N 143896)	2	
-	59327833	Hex Nut (Prior to S/N 143896)	2	5/16 - 18
15	59583500	Cover Plate (Effective with S/N 143896)	2	
-	59455105	Clamp (Prior to S/N 143896)	4	
16	59918573	Lock Screw (Effective with S/N 143896)	2	5/16 - 18 x 1.75
-	59451310	Plate (Prior to S/N 143896)	2	
17	95919650	H.H.C.S.	2	1/2 - 13 x 4.0
18	59327866	Hex Nut	2	1/2 - 13
19	95931226	Lock Washer	2	1/2
21	59461988	Sheave Assembly	4	
-	59462069	-Sheave Hose	4	
-	95912671	-Bushing	4	
22	59456376	Pin	2	
23	59451393	Keeper	2	
24	95919171	H.H.C.S.	2	3/8 - 16 x 0.50
25	95931432	Lock Washer	2	3/8
26	95364964	Union	2	
28	59954818	Half Couplng	1	
29	59954826	Half Couplng	1	
		VR-90B	1	



ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
30	59954834	Dust Cover	2	
31	56919004	Tube	2	
32	95365078	Adapter	2	
33	59005595	Spacer	1	
**	59878710	Decal: Ingersoll-Rand Logo	1	
		•		
		VR-90B		

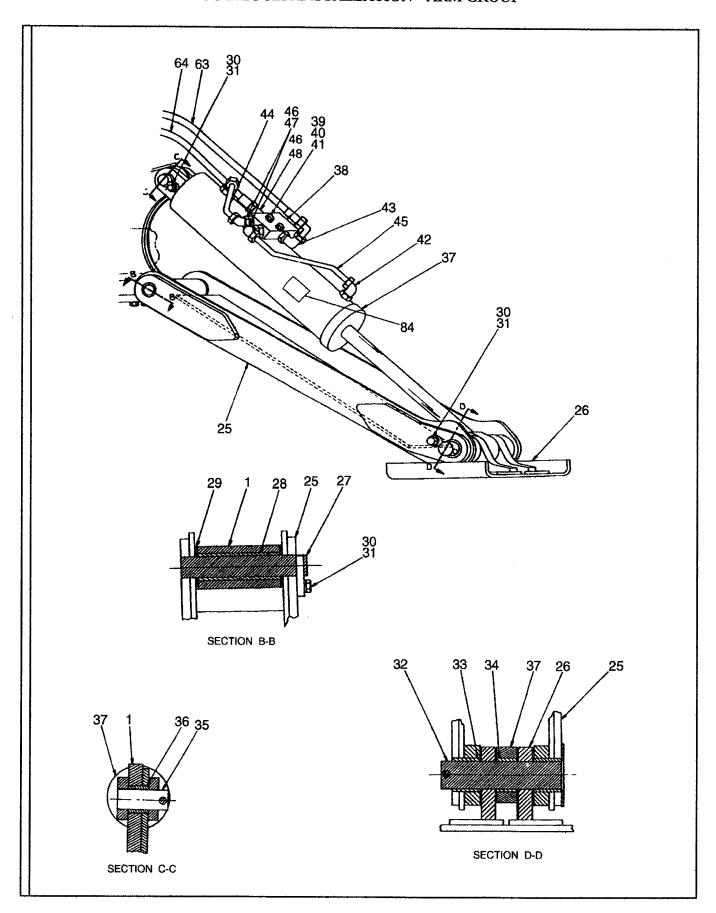
## **OUTRIGGER INSTALLATION - PIVOT GROUP**



# **OUTRIGGER INSTALLATION - PIVOT GROUP**

ITEM	COMM. NO.	DESCRIPTION	OTEX	DIMENCIONGALOGES
T T EVIVE	COMMINI MO	DESCRIPTION  BOM 59460261	QTY	DIMENSIONS/NOTES
1	59469072	Outrigger Body	1	
2	59467209	Clamp Axle	1	
3	59467225	Cylinder Anchor	1	
4	95919601	H.H.C.S.	12	1/2 - 13 x 2.25
5	59726414	Lock Nut	12	1/2 - 13
6	59471292	H.H.C.S.	12	3/4 - 16 x 11.50
7	95349064	Locknut	12	3/4 - 16
8	59454470	Shim	a/r	
9	59454488	Shim	a/r	
10	59454496	Shim	a/r	
11	59467175	Pivot Axle	1	
12	59491878	Flat Washer	2	
13	59454454	Shim	20	
14	59454447	Shim	10	
15	59491894	Bushing	2	
16	59468629	Spacer	2	
17	95919676	H.H.C.S.	2	1/2 - 13 x 4.50
19	95201547	Grease Fitting	2	1610bl
20	59450411	Bearing	1	
		VP.90R		

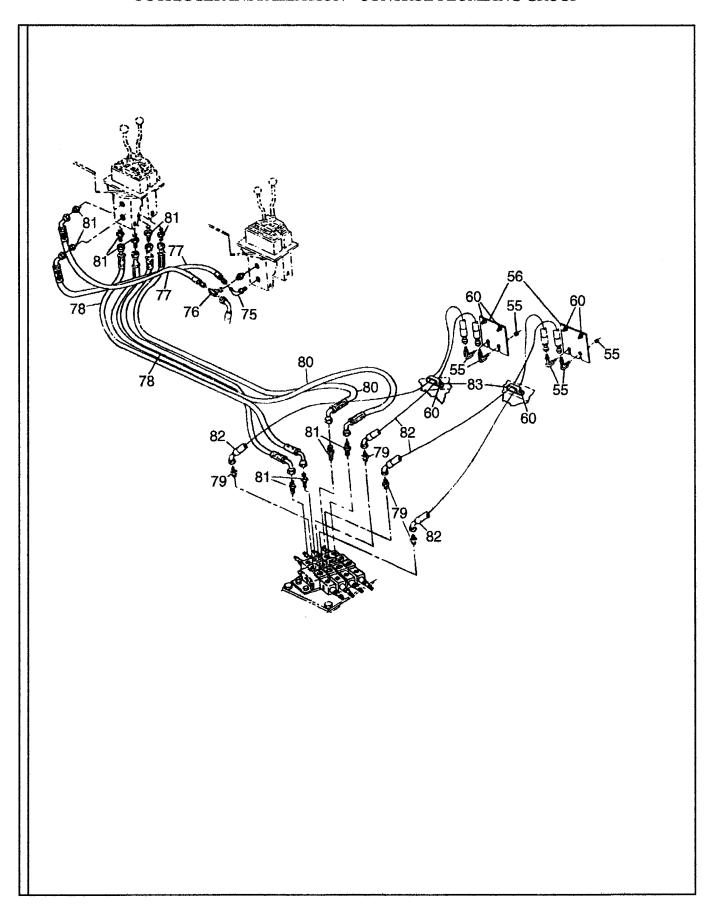
# **OUTRIGGER INSTALLATION - ARM GROUP**



## **OUTRIGGER INSTALLATION - ARM GROUP**

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
		BOM 59460410		
25	59469064	Arm	2	
26	59468769	Foot	2	
27	59467316	Pin	2	
28	59454272	Bushing	4	
29	59463810	Flat Washer	4	
30	59455154	Anchor	6	
31	59463745	Flange Screw	6	1/2
32	59467308	Pin	2	
33	59454256	Bushing	4	
34	59454249	Bushing	2	
35	59467142	Pin	2	
36	59454264	Bushing	2	
37	59450114	Outrigger Cylinder	2	See Breakdown-I.23
38	59456749	Valve	2	
39	95920526	H.H.C.S.	4	5/16 - 18 x 1.75
40	95922365	Flat Washer	4	5/16
41	95931408	Lock Washer	4	5/16
42	95303335	Elbow	4	
43	95480109	Adapter, 90°	2	
44	59452227	Tube Assembly	2	
45	59452219	Tube Assembly	2	
46	95372173	Adapter	2	
46	95372173	Adapter	6	
47	95302121	Elbow	4	
48	95418166	Fitting	2	
84	59766501	Decal: Warning Pinch Point	4	

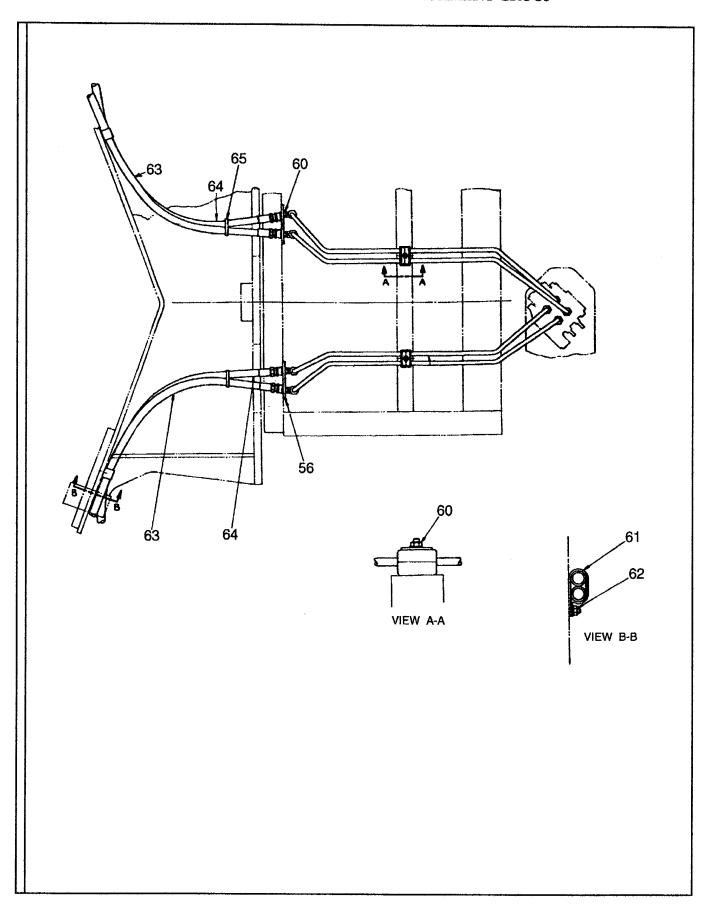
## OUTRIGGER INSTALLATION - CONTROL PLUMBING GROUP



#### **OUTRIGGER INSTALLATION - CONTROL PLUMBING GROUP**

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
		BOM 58852179		
55	95278966	Adapter	4	
56	59468835	Bracket	2	
75	59919654	Straight Adapter	1	
76	59918557	Adapter, Tee	1	
77	58851544	Hose Assembly	2	10.0
78	58922543	Hose Assembly	2	14.0
79	59922492	Straight Adapter	4	
80	59434969	Hose Assembly	2	60.0
81	59922419	Straight Adapter	10	
82	58851486	Hose Assembly	2	
82	58851486	Hose Assembly	4	
83	59465682	Clamp	2	
84	59903153	Adapter	1	
85	59495804	Hose Assembly	1	
86	59919670	Straight Adapter	1	
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# OUTRIGGER INSTALLATION - ATTACHMENT GROUP

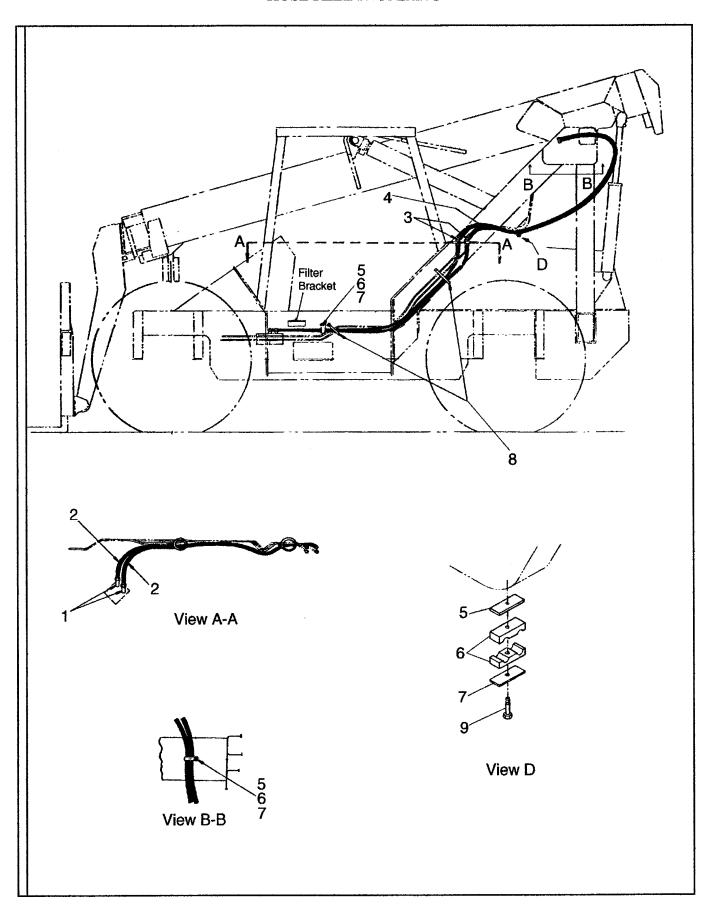


VR-90B

# **OUTRIGGER INSTALLATION - ATTACHMENT GROUP**

TEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
		BOM 59460253		
56	59468835	Bracket	2	
60	59918573	Lock Nut	6	5/16 - 18
61	59465682	Clamp	4	
62	59807941	Lock Nut	2	3/8 - 16
63	59451062	Hose Assembly	2	
64	59451047	Hose Assembly	2	
65	95846051	Wire Tie	4	

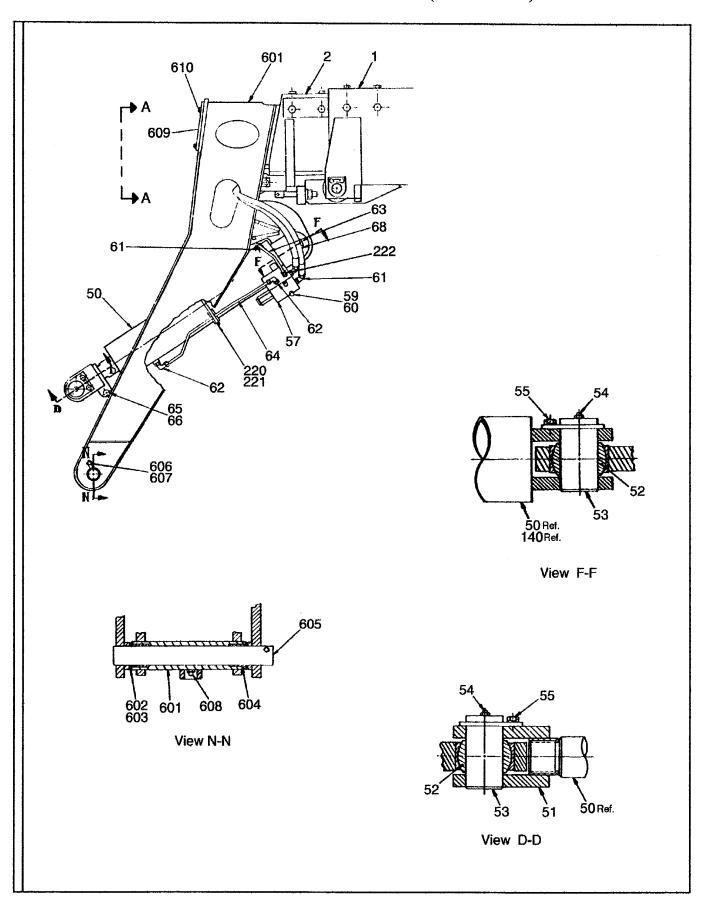
## HOSE REEL PLUMBING



#### HOSE REEL PLUMBING

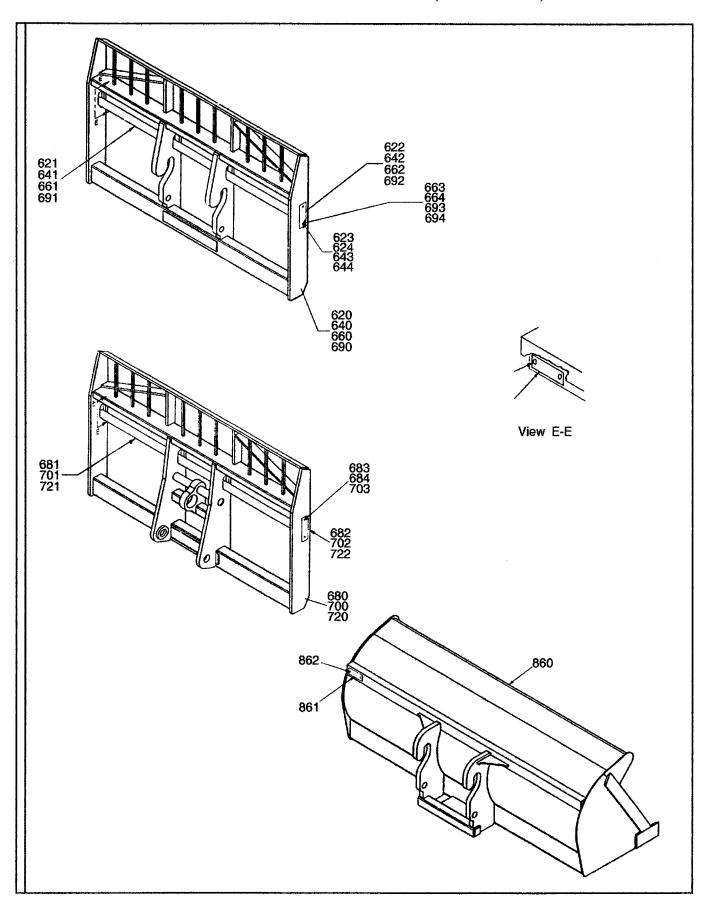
TEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
	50000 100	BOM 58851627		
1	59922492	Straight Adapter	2	00.0
2	58883729	Hose Assembly	2	88.0
3	95278966	Fitting	2	2043-8-8s
4	58883745	Hose Assembly	2	95.0
5	59583476	Weld Plate	2	
6	59465690	Clamp	3	
7	59464628	Lock Nut	3	
8	95846051	Wire Tie	2	
9	5920526	H.H.C.S.	2	5/16-18 x 1.75
		· ·		
		VR-90B	J	

## BOOM AND CARRIAGE ASSEMBLY (SHEET 1 OF 5)



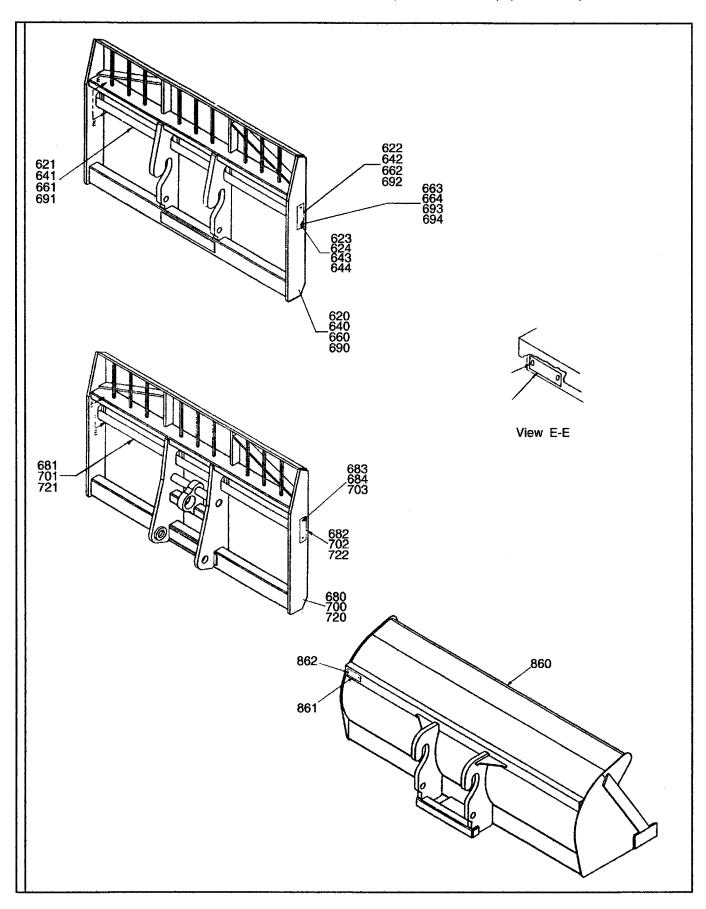
### BOOM AND CARRIAGE ASSEMBLY (SHEET 1 OF 5)

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
	#O.4#4.77	DWG. 59470500 SHT 1		
1	59451625	Outer Boom	1	
2	58964487	Intermediate Boom	1	
50	59474601	Tilt Cylinder	1	See Breakdown-I.24
51	59455576	Rod End	1	
52	59450486	Bushing	2	
53	59451385	Pin	2	
54	95201547	Fitting, Grease	2	
55	59456293	Screw	4	
57	58964578	Valve, Motion Control (Eff. with S/N: 140983)	1	
57	59470989	Valve, Motion Control (Prior to S/N: 140983)	1	
-	58753245	-Seal Kit (Requires one kit per cartridge)	1	
-	58753252	-Cartridge (Long)	1	
-	58753260	-Cartridge (Check)	3	
59	95919346	H.H.C.S.	2	3/8 - 16 x 3.50
60	95931432	Lock Washer	2	3/8
61	95157400	Adapter (Effective with S/N 147136)	1	
•	95157400	Adapter (Prior to S/N 147136)	1	
62	95303335	Elbow (Effective with S/N 147136)	4	2062-8-8s
-	95303335	Elbow (Prior to S/N 147136)	4	
63	59474619	Tube Assy	1	
64	59474627	Tube Assy	1	
65	95919627	H.H.C.S.	1	1/2 - 13 x 2.75
66	59327866	Hex Nut	1	1/2 - 13
68	58826769	Hose Assembly	2	
601	58841545	Narrow Tip Boom	1	
602	59455766	Washer, Thrust	2	
603	59455261	Race, Thrust	3	
604	59454215	Bearing, Inner	2	
605	59474742	Pin	1	
606	59455154	Anchor	1	
607	59463745	Flange Screw	1	1/2
608	95201547	Fitting, Grease	1	
609	59474254	Cover Plate	1	
610	59456277	Lock Screw	2	5/16 - 18 x 1.0
		VR-90B		



## BOOM AND CARRIAGE ASSEMBLY (SHEET 2 OF 5)

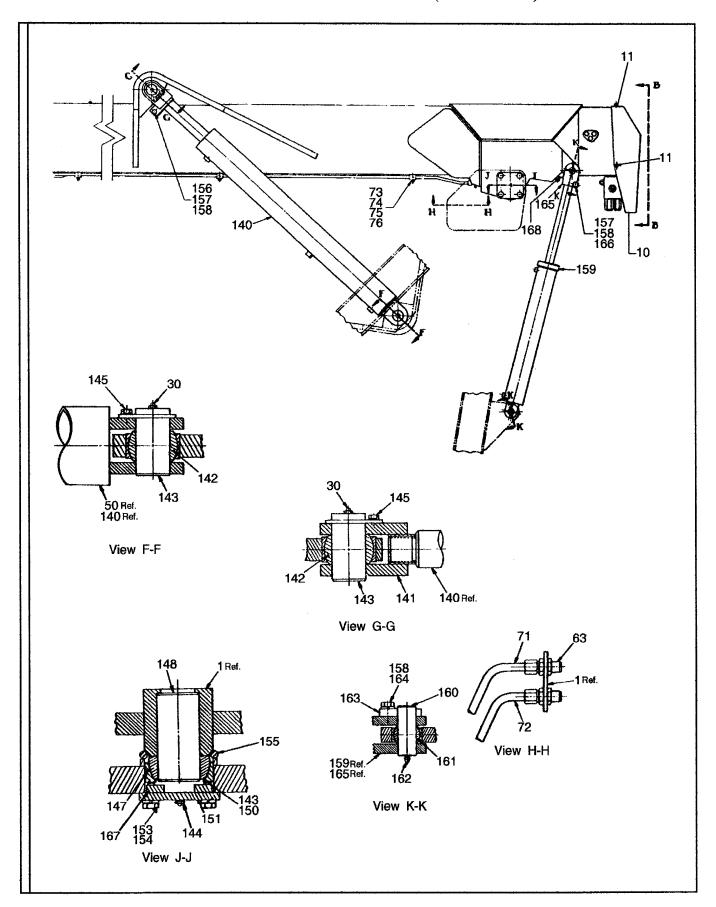
ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
680	58939968	48" Standard Carriage (Effective with	1	
		S/N 147815)		
-	59492728	48" Standard Carriage (Prior to S/N 147815)	1	
681	58793209	48" Load Arm	1	
682	59451815	Plate	2	
683	95919239	H.H.C.S.	4	3/8 - 16 x 1.25
684	95931432	Washer, Lock	4	3/8
685	N.S.S.	Nameplate Decal	1	
686	95921599	Screw	2	#4 x 0.250
620	58884636	48" Quick Attach Carriage (Effective with	1	
		S/N 147185)		
620	59492835	48" Quick Attach Carriage (Prior to S/N 147815)	1	
621	58793209	48" Load Arm	1	
622	59451815	Plate	2	
623	95919239	H.H.C.S.	4	3/8 - 16 x 1.25
624	95931432	Washer, Lock	4	3/8
625	N.S.S.	Nameplate Decal	1	
626	95921599	Screw	2	#4 x 0.250
640	58850298	48" Quick Attach Side Tilt Carriage	1	
641	58882739	48" Load Pin	1	
642	59451815	Plate	2	
643	95919239	H.H.C.S.	4	3/8 - 16 x 1.25
644	95931432	Washer, Lock	4	3/8
645	N.S.S.	Nameplate Decal	1	
646	95921599	Screw	2	#4 x 0.250
700	58884651	60" Standard Carriage	1	
701	58793191	60" Load Arm	1	
702	59451815	Plate	2	
703	95919239	H.H.C.S.	4	3/8 - 16 x 1.25
704	95931432	Washer, Lock	4	3/8
705	N.S.S.	Nameplate Decal	1	
706	95921599	Screw	2	
640	58884610	60" Quick Attach Carriage	1	
641	58793191	60" Load Arm	1	
642	59451815	Plate	2	
643	95919239	H.H.C.S.	4	3/8 - 16 x 1.25
644	95931432	Washer, Lock	4	3/8
645	N.S.S.	Nameplate Decal	1	
646	95921599	Screw	2	#4 x 0.250



## BOOM AND CARRIAGE ASSEMBLY (SHEET 2 OF 5) (Continued)

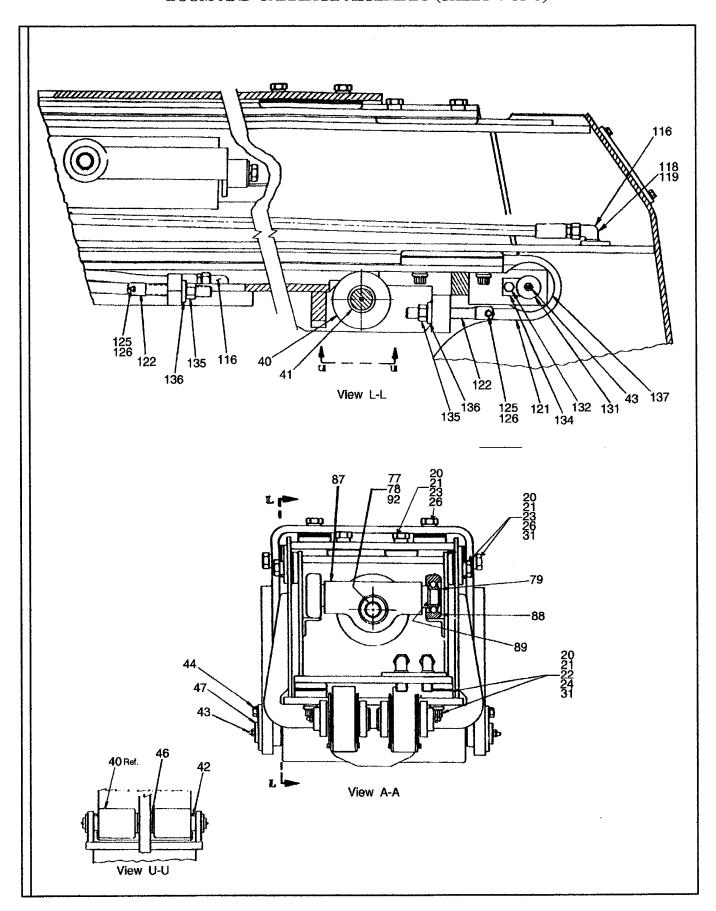
ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
		DWG. 59470500 SHT 1		
720	58884644	72" Standard Cariage (Effective with S/N 147815)	1	
-	59492702	72" Standard Cariage (Prior to S/N 147815)	1	
721	58793183	72" Load Arm	1	
722	59451815	Plate	2	
723	95919239	H.H.C.S.	4	3/8 - 16 x 1.25
724	95931432	Washer, Lock	4	3/8
725	N.S.S.	Nameplate Decal	1	
726	95921599	Screw	2	#4 x 0.250
660	58883935	72" Quick Attach Carriage (Effective with S/N 147815)	1	
_	59492900	72" Quick Attach Carriage (Prior to S/N 147815)	1	
661	58793183	72" Load Arm	1	
662	59451815	Plate	2	
663	95919239	H.H.C.S.	4	3/8 - 16 x 1.25
664	95931432	Washer, Lock	4	3/8
665	N.S.S.	Nameplate Decal	1	
666	95921599	Screw	2	#4 x 0.250
660	58850496	72 " Quick Attach Side Tilt Carriage	1	
661	58793183	72" Load Arm	1	
662	59451815	Plate	2	
663	95919239	H.H.C.S.	4	3/8 - 16 x 1.25
664	95931432	Washer, Lock	4	3/8
665	N.S.S.	Nameplate Decal	1	0,0
666	95921599	Screw	2	#4 x 0.250
860	58882028	1.3 Cubic Yard Quick Attach Bucket	1	
861	N.S.S.	Nameplate Decal	1	
862	95921599	Screw	2	#4 x 0.250
802	93921399	Bolow		11 1 X V.23 V

### BOOM AND CARRIAGE ASSEMBLY (SHEET 3 OF 5)



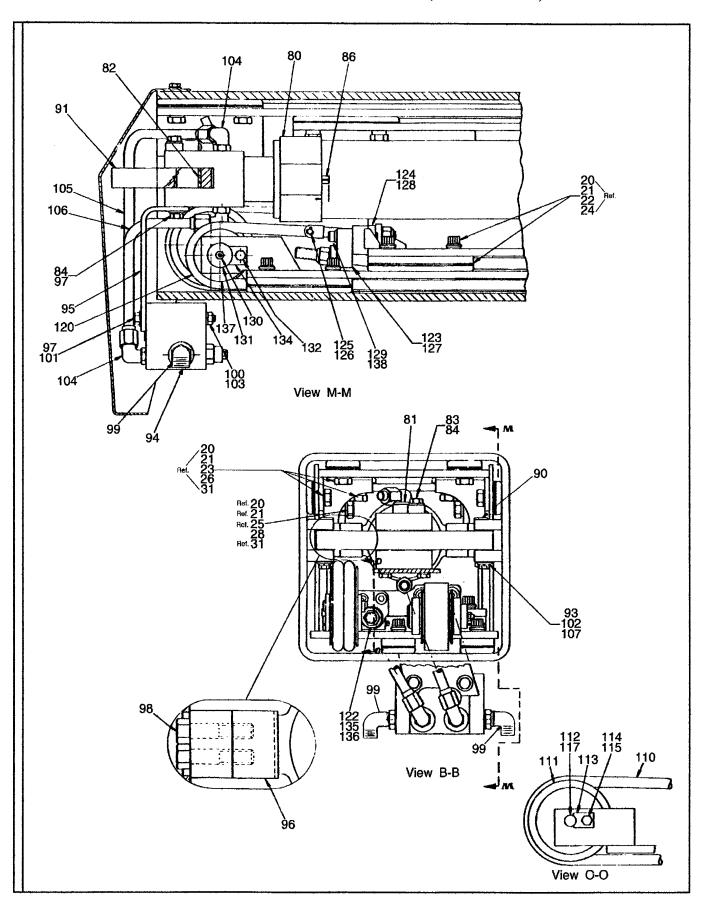
## BOOM AND CARRIAGE ASSEMBLY (SHEET 3 OF 5)

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
		DWG. 59470500 SHT 2		
10	59451450	Cover, Boom	1	
11	59462796	Screw, Lock	4	3/8 - 16 x 0.750
30	95201547	Fitting, Grease	8	
69	95364964	Union	2	
71	59452268	Tube Assembly	1	
72	59452250	Tube Assembly	1	
73	59455105	Clamp	6	
74	59451310	Plate	3	
75	95931408	Washer, Lock	3	5/16
76	59918573	Lock Nut	3	5/16 - 18
140	59450577	Cylinder, Boom	2	See Breakdown-I.25
141	59455568	Rod End	2	
142	59450486	Bushing	4	
143	59451385	Pin Wldt	4	
145	59456293	Screw	8	
147	50268242	Bearing	2	
148	59454884	Pin	2	
149	59454876	Thrust Washer	6	
150	59450536	Thrust Washer	5	
151	59451336	Plate Keeper	2	
153	95919817	H.H.C.S.	8	5/8 - 11 x 1.750
154	95931242	Washer, Lock	8	5/8
155	59465294	Ring Seal	2	
156	95919627	H.H.C.S.	2	1/2 - 13 x 2.750
157	59327866	Hex Nut	4	1/2 - 13
158	95931226	Lock Washer	8	1/2
159	59450049	Cylinder, Compensating	2	See Breakdown-I.26
160	59455030	Pin	4	
161	59450528	Bushing	4	
162	95335311	Fitting, Grease	4	
163	59455154	Anchor	4	
164	95919551	H.H.C.S.	4	1/2 - 13 x 1.250
165	59455022	Rod End	2	
166	95919601	H.H.C.S.	2	1/2 - 13 x 2.250
167	59452888	Spacer	2	
168	59491480	Ear Repair Kit	A/R	
		VR 00B	1	



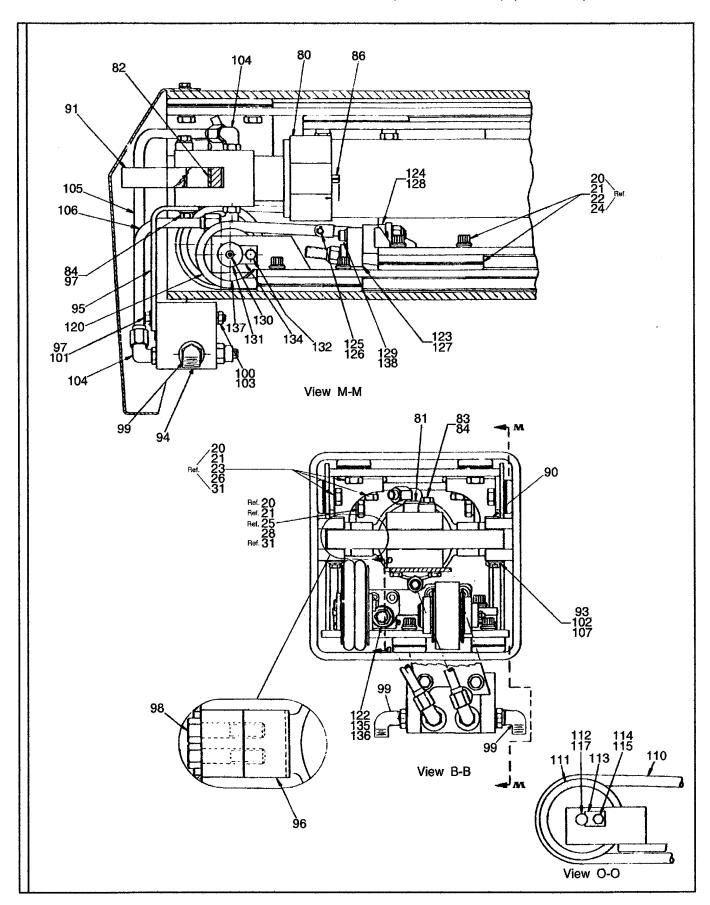
### BOOM AND CARRIAGE ASSEMBLY (SHEET 4 OF 5)

ITEM	COMM. NO.	DESCRIPTION DWG, 59470500 SHT 3	QTY	DIMENSIONS/NOTES
20	59451468	Wear Shoe	22	
21	59454413	Shim	40	1/16
22	59454421	Shim	6	1/2
23	59454827	Collar, Compression	28	0.920 lg.
24	59454835	Collar, Compression	12	1.170 lg.
26	95920906	H.H.C.S.	28	5/8 - 18 x 1.250
31	59454439	Shim	10	1/32
40	59451427	Roller	2	
41	59455584	Bushing	4	
42	59451633	Spacer	2	
43	95201547	Grease Fitting	5	
44	59456293	Flange Screw	4	
46	95922803	Washer	1	1 3/8
47	59451435	Pin, Locking	2	
77	95922274	Washer	1	5/8
78	95931242	Washer, Lock	1	5/8
79	95207593	Snap Ring	2	
87	59451666	Support, Roller	1	
88	59455923	Roller	2	
89	59462887	Washer	8	
92	95920906	H.H.C.S.	1	5/8 - 18 x 1.250
116	95278966	Adapter	2	
118	95364964	Union	2	
119	95302121	Elbow	2	
121	59450551	Leaf Chain	2	
122	59450460	Chain Anchor	6	
125	59455733	Pin Chain	6	
126	95924007	Cotter Pin	6	3/32 x 1.0
131	59455980	Pin	3	
132	59456293	Screw	3	
134	59451344	Keeper	3	
135	59456178	Nut, Self Aligning	6	
136	59462895	Base Ring	6	
137	59451351	Sheave Assembly	2	
-	59454819	-Sheave Chain	3	
-	59461962	-Ring, Snap	6	
-	59454603	-Washer, Lock	3	
		VR-90B		



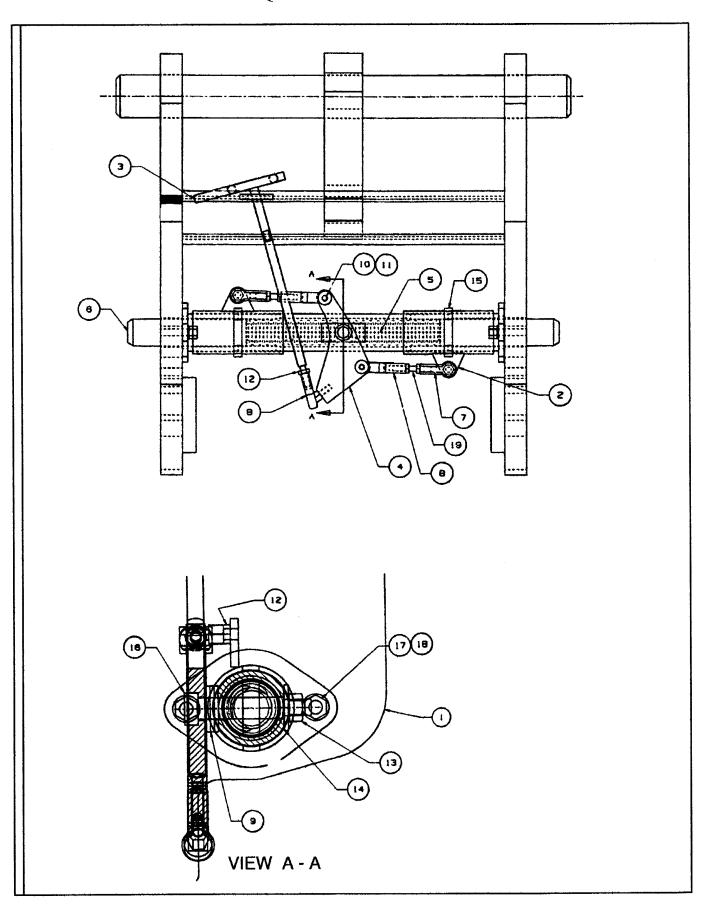
# BOOM AND CARRIAGE ASSEMBLY (SHEET 5 OF 5 )

ITEM	COMM. NO.	DESCRIPTION DWG. 59470500 SHT 3	QTY	DIMENSIONS/NOTES
28	95920922	H.H.C.S.	4	5/8 - 18 x 1.750
80	59450056	Crowd Cylinder	1	See Breakdown-I.28
81	59454801	Pin	1	
82	59455204	Bushing	1	7
83	59455402	Anchor	1	
84	59463745	Flange Screw	3	
86	95246088	Pin, Roll	2	1/2 x 1 1/2
90	59451641	Block	2	
91	59451484	Plate, Cylinder	1	
93	95919197	H.H.C.S.	2	3/8 - 16 x 0.750
94	59455907	Motor Control Valve	1	
_	59480202	-Cartridge	1	
-	59480210	-Seal Kit	1	
95	59494336	Plate, Valve Mounting	1	
96	59451443	Block	2	
97	95922399	Washer, Flat	4	1/2
98	95919593	H.H.C.S.	6	1/2 - 13 x 2.0
99	95376141	Adapter	2	
100	59327858	Hex Nut	2	7/16 - 14
101	95919502	H.H.C.S.	2	7/16 - 14 x 5.0
102	95922233	Washer Flat	2	3/8
103	95931457	Washer, Lock	2	7/16
104	95303343	Adapter	4	
105	59096685	Tube Assembly (Effective with S/N 150307)	1	
-	59493148	Tube Assembly (Prior to S/N 150307)	1	
106	59493155	Tube Assembly	1	
107	95931432	Washer, Lock	2	3/8
110	59491233	Twin Hose	1	
111	59461988	Sheave Assembly	1	
-	59462069	-Sheave Hose	1	
-	95912671	-Bushing	1	
112	59456376	Pin	1	
113	59451393	Keeper	1	
114	95919171	H.H.C.S.	1	3/8 - 16 x 0.50
115	95931432	Lockwasher	1	3/8
116	95278966	Adapter	2	
117	59457580	Washer, Thrust	2	
120	59450544	Leaf Chain	1	
121	59450551	Leaf Chain	2	



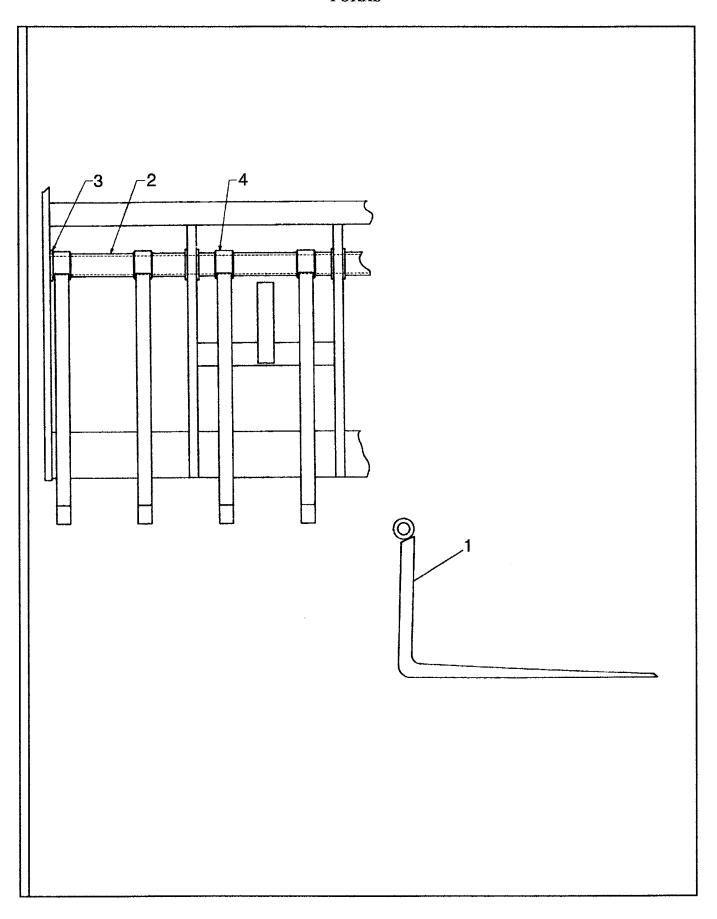
# BOOM AND CARRIAGE ASSEMBLY (SHEET 5 OF 5 ) (Continued)

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
TTENT	COMMINI- NO.	DESCRIPTION DWG, 59470500 SHT 3	VII	Diviensions/NOTES
122	59450460	Chain Anchor	6	
123	59451492	Plate Chain	1	
124	59451609	Plate	1	
125	59455733	Pin Chain	6	
126	95924007	Cotter Pin	6	3/32 x 1.0
127	59451617	Plate, Chain Anchor	1	
128	59453191	Plate	1	
129	95055067	H.H.C.S.	4	1/2 - 13 x 2.75
131	59455980	Pin	3	
132	59456293	Screw	3	,
133	95931432	Washer, Lock	3	3/8
134	59451344	Keeper	3	
135	59456178	Nut, Self Aligning	6	
136	59462895	Base Ring	6	
137	59451351	Sheave Assembly	$\begin{vmatrix} 1 \\ 2 \end{vmatrix}$	
-	59454819	-Sheave Chain	3	
-	59461962	-Ring, Snap	6	
-	59454603	-Washer, Lock	3	4.0
138	95931226	Washer, Lock	4	1/2
ļ				
	<u> </u>	VD 00D		



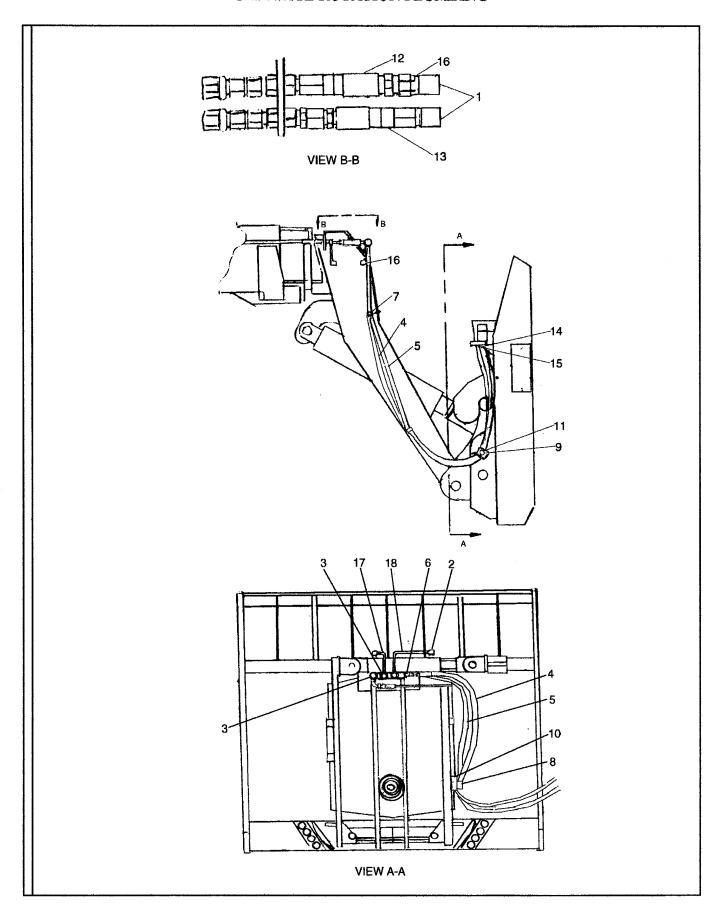
## QUICK ATTACH APRON

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
		BOM 58847302		
1	59096701	Apron (Effective with S/N 150307)		
-	58850488	Apron (Prior to S/N 150307)	1	
2	58847005	Tube Assembly	1	
3	58846981	Handle	1	
4	58842261	Bell Crank	1	
5	58817610	Spring	2	
6	58846924	Pin	2	
7	59929059	Clevis	2	
8	59463786	Balljoint	3	
9	59539569	Washer, Hard	3	
10	95924049	Cotter Pin	2	
11	59726034	Clevis Pin	2	
12	95923058	Nut, Jam	5	
13	95923322	Locknut	3	
14	95922373	Washer, Flat	1	
15	95919296	Capscrew	2	
16	95234845	Bolt	1	
17	95931416	Washer, Lock	4	
18	95920443	Capscrew	4	
19	95923488	Stud	2	
		,		
		VD OOD		



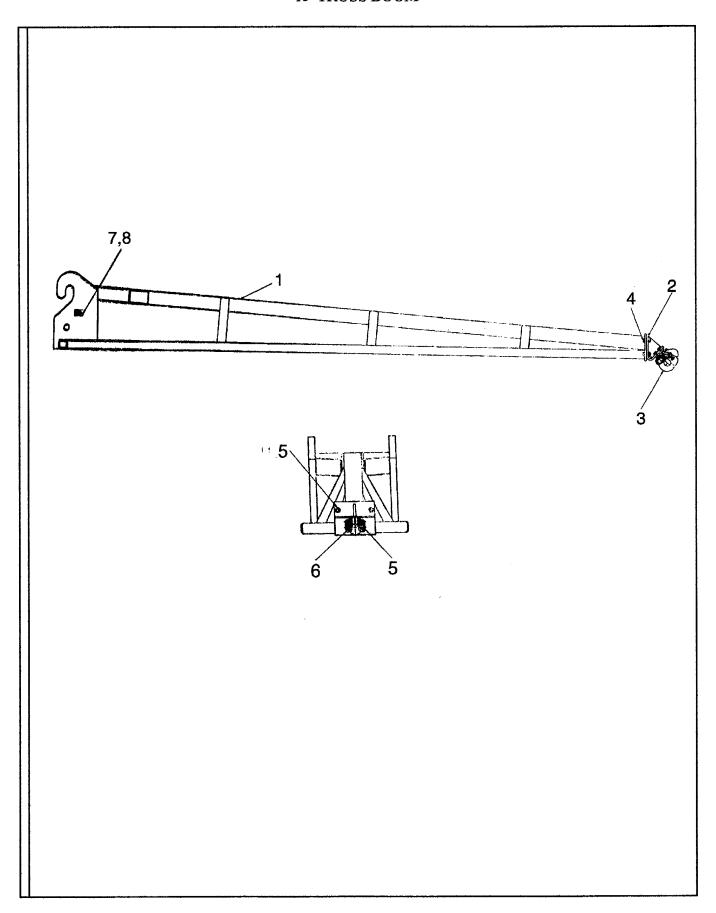
#### **FORKS**

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
		BOM 58857376		
1	59450189	Fork, Pin-type	2	2 x 5 x 48
-	59463406	Fork, Pin-type	2	2 x 5 x 60
<b>-</b>	58793340	Fork, Pin-type	2	2 x 7 x 48
- ,	58793399	Fork, Pin-type	2	2 x 7 x 60
_	59491910	Fork, Pin-type	2	2 x 4 x 48
_	58977166	Fork, Pin-type	2	2 x 6 x 48
-	58977174	Fork, Pin-type	2	2 x 6 x 60
		NOTE: The below listed parts are for block-type		
		forks. Quantities shown are for 48" block-type		
ı		carriages only. 60" block-type carriages use 3		
		each of item #2.		
2	59493304	Spacer	2	
3	59491936	Washer	6	
4	59461152	Fork, Block-type	6	
		-	ļ	
		7/D 000	<u> </u>	



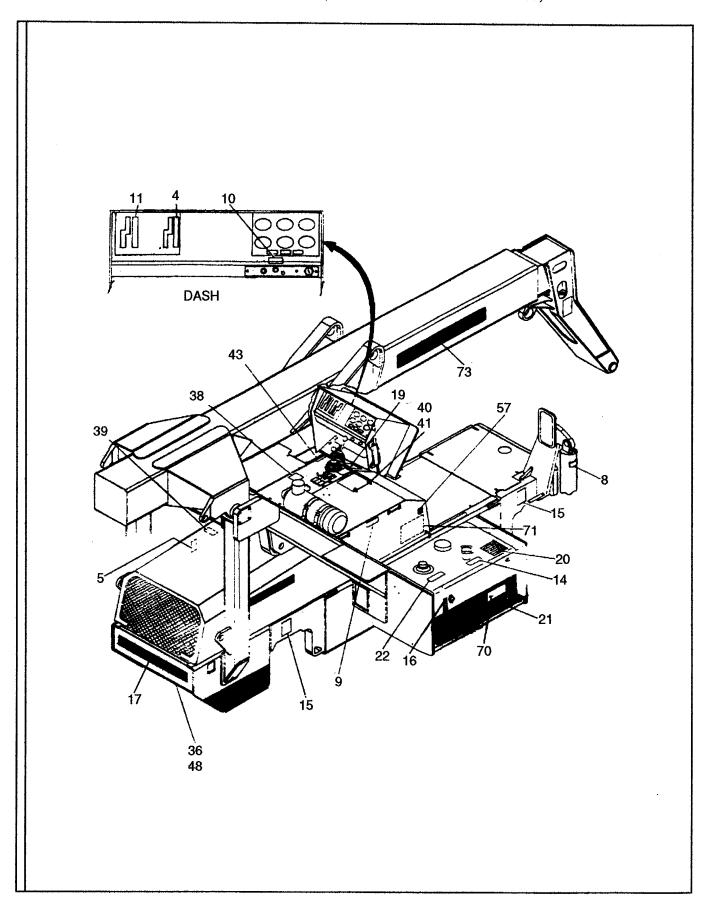
### CARRIAGE ROTATION PLUMBING

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
	05005000	BOM 58882796		
1	95335980	Adapter	2	
2	95341665	Adapter	3	
3	95365094	Adapter	3	
4	58882804	Hose Assembly	1	
5	58882754	Hose Assembly	1	0/1/CODS 7/1/CHC
6	95371258	Adapter	1	9/16 ORS - 7/16 JIC
7	95373973	Wire Tie	3	
8	59583468	Insert Clamp	2	1/4 20 1.0
9	95920377	H.H.C.S.	1	1/4 - 20 x 1.0
10	13024765	Plate	1	
11	13024757	Cover	1	
12	59954818	Half Coupling	1	
13	59954826	Half Coupling	1	
14	58857095	Counterbalance Valve	1	144 20 - 150
15	95920658	H.H.C.S.	2	1/4 - 20 x 1.50
16	59954834	Dust Cover	2	
17	58882770	Tube Assembly	1	
18	58882788	Tube Assembly	1	
			1	

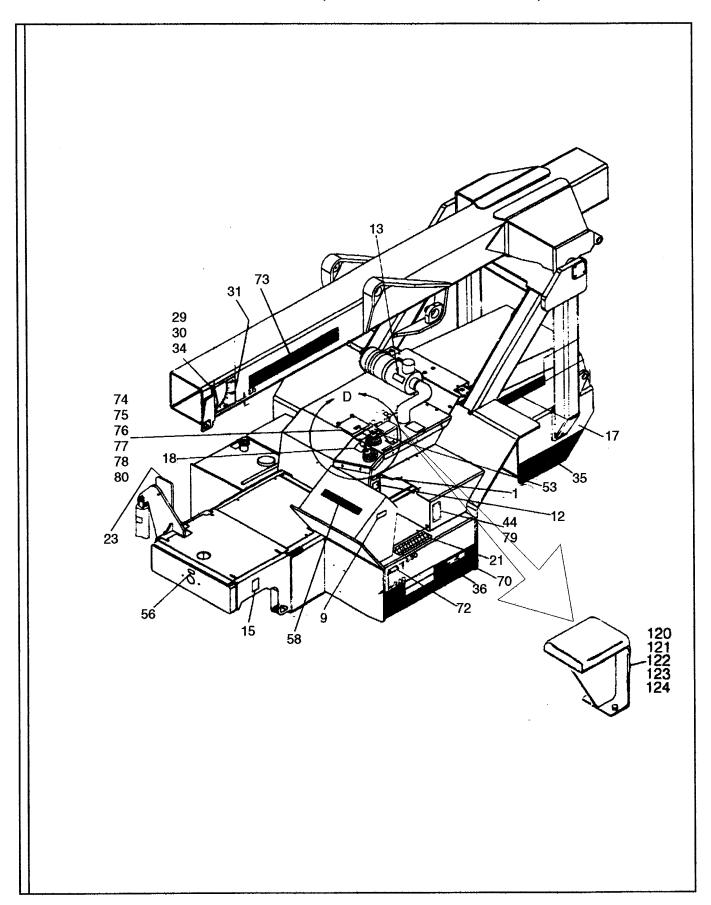


#### 15' TRUSS BOOM

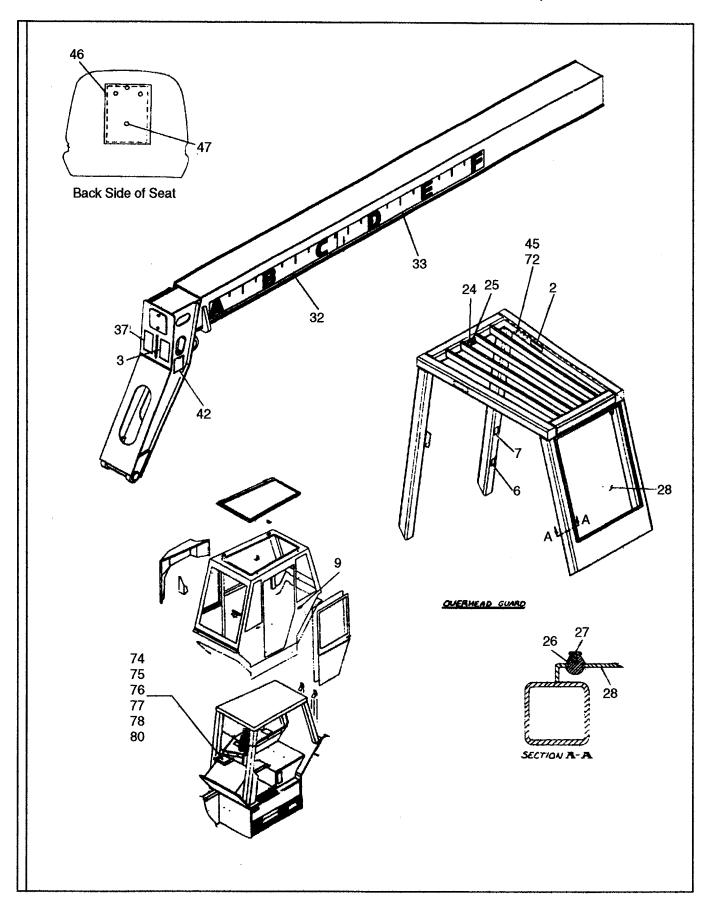
ITEM	COMM. NO.	DESCRIPTION  BOM 59001305	QTY	DIMENSIONS/NOTES
	50000045			
1	59000943	15' Truss Boom	1	
2	59001230	Pintle	1	
3	59001263	Pintle Hitch	1	1/0 10 - 2.0
4	95919593	H.H.C.S.	8	1/2 - 13 x 2.0
5	59537266	Flat Washer, Hardened	16	.515 x 1.12 x .194
6	59327866	Hex Nut	8	1/2 - 13
7	58841214	Decal: Nameplate	1	
8	95921599	Screw, Round Head Self-tapping	2	#4 x 0.250
		VR-90B		



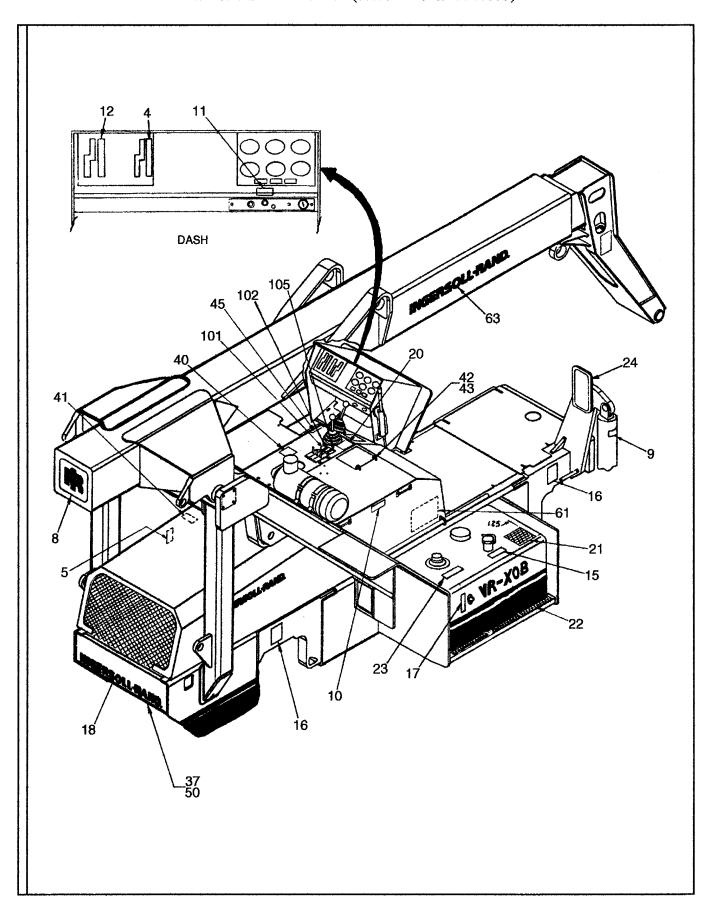
ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
		BOM59083063		
1	59048934	Decal: OSHA	1	
4	59454728	Decal: Xmsn Shift	1	
5	58999103	Decal: Rotating	2	
8	59455097	Decal: Frame Tipping	1	
9	59048959	Decal: No Riders	2	
10	58850348	Decal: Speed Selector	1	Steering Selector
11	59454710	Decal: Forward & Reverse	1	
14	59731257	Decal: Fuel	1	
15	58965526	Decal: Crush Warning	4	
16	59795161	Decal: Fuel Level	1	
17	59050864	Decal: Signature	3	
19	58852096	Decal: Hyd Controls	1	
20	59468389	Safety Tread	1	
21	59468397	Safety Tread	4	
22	59615872	Decal: Hydraulic Oil	1	
36	59083089	Decal Stripe	1	13.5"
38	58965559	Decal: Electricial Hazard	1	
39	59020040	Decal: Pressure Hazard Warning	1	
40	58850975	U-Bolt	2	
41	59941682	Nut, Lock	4	1/4-20
43	59454769	Decal: Frame Level	1	
48	95920609	H.H.C.S.	1	1/4-20 x 1.25
57	59048967	Decal: Operation Warning	2	
70	59086579	Decal: VR-90B	2	
71	58850629	Decal: Servicing	1	
73	59050856	Decal: Signature	2	



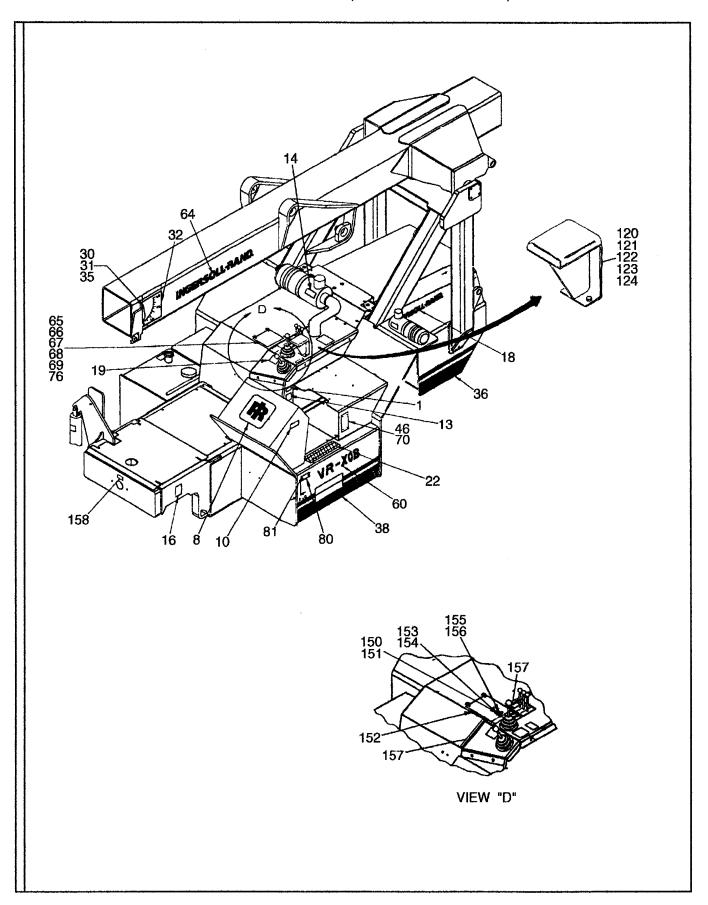
9   590 12   590 13   590 15   589 17   590 18   583 21   594 23   594 29   583 30   583 31   583 34   953 35   590 - 590 36   590 44   593 56   590 58   590 70   590 73   590 74   58 76   58 77   58 78   78 78   58 79   590 - 58 80   58 120   590 121   590 122   590 123   590 123   590 124   590 125   590 126   590 127   590 128   590 129   590 120   590 121   590 122   590 123   590 123   590 124   590 125   590 126   590 127   590 128   590 129   590 120   590 120   590 121   590 122   590 123   590 124   590 125   590 126   590 127   590 127   590 128   590 129   590 120   590 120   590 121   590 122   590 123   590 124   590 125   590 126   590 127   590 127   590 128   590 129   590 120   590 120   590 121   590 122   590 123   590 124   590 125   590 126   590 127   590 127   590 128   590 129   590 120   590	OMM. NO.	M. NO. DESCRIPTION	QTY	DIMENSIONS/NOTES
12       590         13       590         15       580         17       590         18       580         21       594         23       594         29       580         30       580         31       580         34       950         36       590         44       590         53       580         56       590         58       590         70       590         73       590         74       580         75       580         76       580         77       580         78       580         79       590         120       590         121       590         122       590         123       590	59048934	48934 Decal; OSHA	1	
13       590         15       589         17       590         18       589         21       594         23       594         29       581         30       581         31       581         34       951         35       590         44       591         53       581         56       591         58       591         70       591         73       591         74       581         75       582         76       583         77       583         78       583         79       591         120       591         121       591         122       591         123       591	59048959	48959 Decal: No Riders	2	
15       58         17       59         18       58         21       59         23       59         29       58         30       58         31       58         34       95         35       59         44       59         53       58         56       59         58       59         70       59         73       59         74       58         75       58         76       58         77       58         78       58         79       59         -       58         120       59         121       59         122       59         123       59	59048967	48967 Decal: Operation Warning	1	
17       590         18       583         21       594         23       594         29       583         30       583         31       583         34       953         35       596         44       593         53       583         56       594         58       596         70       596         73       597         74       588         76       588         77       588         78       58         79       59         120       59         121       59         122       59         123       59	59048926	48926 Decal: Unmetered Ether	1	
18       58         21       59         23       59         29       58         30       58         31       58         34       95         35       59         44       59         53       58         56       59         58       59         70       59         73       59         74       58         76       58         77       58         78       58         79       59         -       58         80       58         120       59         121       59         122       59         123       59	58965526	65526 Decal: Crush Warning	4	
21	59050864	50864 Decal: Signature	3	
23   594 29   583 30   583 31   583 34   953 35   596 - 596 36   596 44   596 53   586 56   596 58   596 70   596 73   596 74   58 75   58 76   58 77   58 78   58 79   59 - 58 80   58 120   59 121   59 122   59 123   59	58882630	82630 Decal: Fork Controls	1	
29     58       30     58       31     58       34     95       35     59       -     59       36     59       44     59       53     58       56     59       73     59       74     58       75     58       76     58       77     58       78     58       79     59       120     59       121     59       122     59       123     59	59468397	68397 Safety Tread	4	
30	59450734	50734 Mirror	1	
31 583 34 953 35 599 36 599 44 59 53 58 56 59 58 59 70 59 73 59 74 58 75 58 76 58 77 58 78 58 79 59 - 58 80 58 120 59 121 59 122 59 123 59	58817990	17990 Bearing	1	
34       95         35       59         -       59         36       59         44       59         53       58         56       59         78       59         74       58         75       58         76       58         77       58         78       58         79       59         -       58         80       58         120       59         121       59         122       59         123       59	58812173	12173 Pointer	1	
35   596 - 596 36   596 44   596 53   586 56   596 58   596 70   596 74   58 75   58 76   58 77   58 78   58 79   59 - 58 80   58 120   59 121   59 122   59 123   59	58827155	27155 Decal: Angle	1	
- 59 36 59 44 59 53 58 56 59 58 59 70 59 73 59 74 58 75 58 76 58 77 58 78 58 79 59 - 58 80 58 120 59 121 59 122 59 123 59	95365425	65425   Screw	1	
36       59         44       59         53       58         56       59         58       59         70       59         73       59         74       58         75       58         76       58         77       58         78       58         79       59         -       58         80       58         120       59         121       59         122       59         123       59	59083071	83071   Stripe 10.5"	1	
44       59         53       58         56       59         58       59         70       59         73       59         74       58         75       58         76       58         77       58         78       58         79       59         120       59         121       59         122       59         123       59	59051375	51375 Bulk Stripe	12	
53       58         56       59         58       59         70       59         73       59         74       58         75       58         76       58         78       58         79       59         -       58         80       58         120       59         121       59         122       59         123       59	59083089	83089 Decal Stripe 13.5"	1	
56       59         58       59         70       59         73       59         74       58         75       58         76       58         77       58         78       58         79       59         -       58         80       58         120       59         121       59         122       59         123       59	59579078	79078 Pop Rivet	4	
58       59         70       59         73       59         74       58         75       58         76       58         77       58         78       58         79       59         -       58         80       58         120       59         121       59         122       59         123       59	58961624	61624 Decal: Open Cover Plate	1	
70   59 73   59 74   58 75   58 76   58 77   58 78   58 79   59 - 58 80   58 120   59 121   59 122   59 123   59	59605915	05915 Decal: Grease	1	
73   59 74   58 75   58 76   58 77   58 78   58 79   59 - 58 80   58 120   59 121   59 122   59 123   59	59050880	50880 Decal: Signature	1	
74 58 75 58 76 58 77 58 78 58 79 59 - 58 80 58 120 59 121 59 122 59 123 59	59086579	86579 Decal: VR-90B	2	
75   58 76   58 77   58 78   58 79   59 - 58 80   58 120   59 121   59 122   59 123   59	59050856	50856 Decal: Signature	2	
76 58 77 58 78 58 79 59 - 58 80 58 120 59 121 59 122 59 123 59	58841248	41248 Decal: Load Chart	1	
77   58   78   58   79   59   59   120   59   121   59   122   59   123   59	58963638	63638 Decal: Load Chart	1	
78 58 79 59 - 58 80 58 120 59 121 59 122 59 123 59	58850280	50280 Decal: Load Chart	1	
79 59  - 58  80 58  120 59  121 59  122 59  123 59	58850801	50801 Decal: Loadchart	1	
- 58 80 58 120 59 121 59 122 59 123 59	58882929	82929 Decal: Load Chart	1	
80 58 120 59 121 59 122 59 123 59	59117184	17184 Nameplate Serial No. (Effective with S/N 149987)	1	
80 58 120 59 121 59 122 59 123 59	58827965	Nameplate Serial No. (Prior to S/N 149987)	1	
120   59 121   59 122   59 123   59	58882937	_	1	
121 59 122 59 123 59	59429464		1	
122 59 123 59	59976548		1	
123 59	59998146	<u> </u>	4	1/4-20 X.50
1 1	59965962		2	1/4-20 X.75
	95923199	, and the second	2	1/4-20



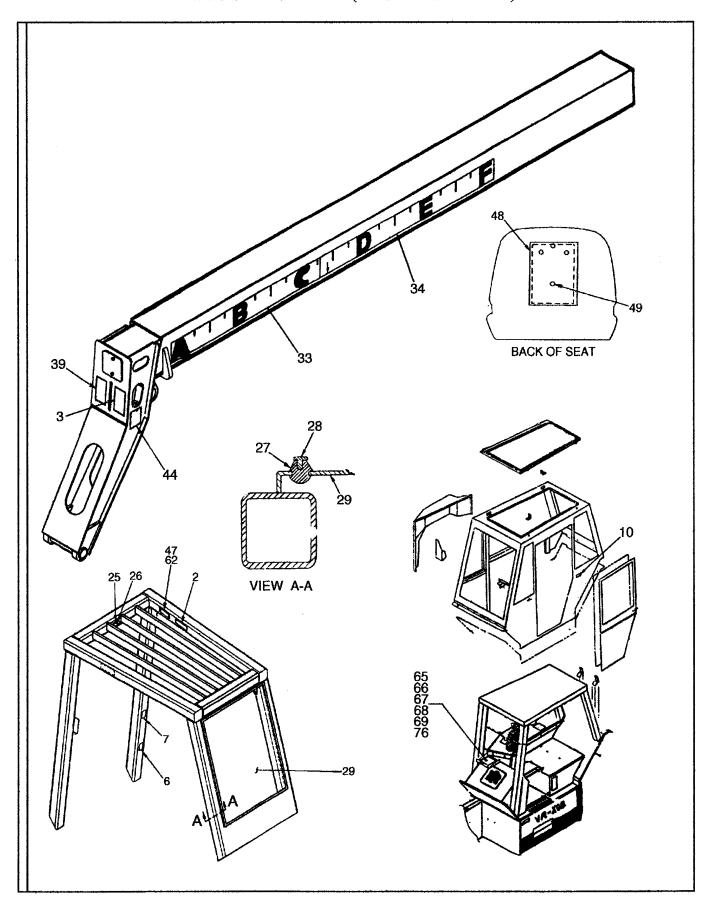
ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
2	59012773	Decal: Rollover	2	
3	58965583	Decal: Falling Object	1	
6	59454744	Decal: Park Brk Off	1	
7	59680421	Decal: Brake On	1	
9	59048959	Decal: No Riders	2	
24	59462846	Level Guage	1	
25	59456210	Screw, Button Head	1	#10-32 X.625
26	59465278	Seal, Rear Glass	1	
27	59469270	Lock, Seal	7	
28	59456426	Glass Rear	1	
32	58812116	Decal: Boom Length	1	
33	58812108	Decal: Boom Length	1	
37	58965617	Decal: Falling Off	1	
42	58851551	Decal: Carriage Shift	2	
45	95921599	Screw	4	#4 X.250 Lg Rnd Hd
46	59491332	Info Case	1	
_	59496182	Manual Case	1	
	58782392	Decal: Operators Manual	1	
47	59491357	Alum Rivet	4	
72	59472357	Decal: Guard Ser No	1	
74	58841248	Decal: Load Chart	1	
75	58963638	Decal: Load Chart	1	
76	58850280	Decal: Load Chart	1	
77	58850801	Decal: Load Chart	1	
78	58882929	Decal: Load Chart	1	
80	58882937	Decal: Load Chart	1	
**	59947507	Beige Paint	a/r	1 Gal
**	12977021	Black Paint, Semi-gloss	a/r	1 Gal
**	59506501	Black Paint, Abrasive	a/r	1 Gal
**	35304286	Beige Paint	a/r	Spray Can
**	58917550	Black Paint, Semi-gloss	a/r	Spray Can
		-		



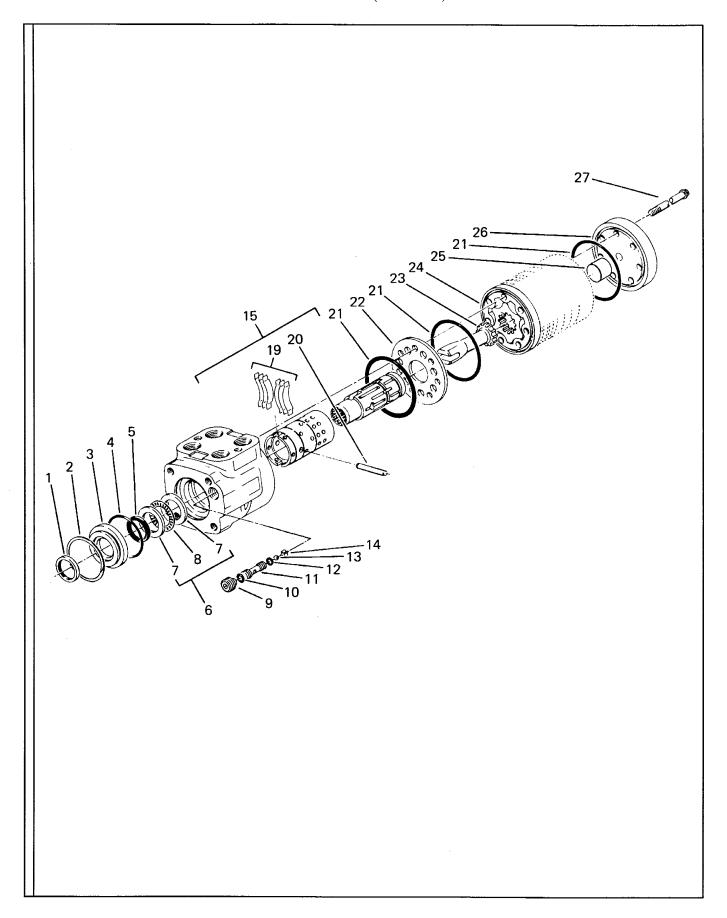
ITEM	COMM. NO.	DESCRIPTION  BOM 58882317*	QTY	DIMENSIONS/NOTES
4	59454728	Decal: Transmission Shift	$\begin{vmatrix} 1 \end{vmatrix}$	
5	59491464	Decal: Danger - Rotating Fan and Belts	2	
8	58878976	Decal: I-R Corporate Monogram	2	
9	59455097	Decal: Warning F/L Disconnect	$\begin{vmatrix} 2 \\ 1 \end{vmatrix}$	
10	59306340	Decal: Notice - No Riders	$\begin{vmatrix} 1 \\ 2 \end{vmatrix}$	
11	58850348	Decal: Steering Selector	$\begin{vmatrix} 2 \\ 1 \end{vmatrix}$	
12	59454710	Decal: Forward and Reverse	1	
15	59731257	Decal: Diesel Fuel	1	
16	59344192	Decal: Danger - Crush Area	4	
17	59795161	Decal: Fuel Level		
18	59878728	Decal: Ingersoll-Rand Logo	3	
20	58852096	Decal: Tilt Controls	$\begin{vmatrix} 1 \\ 1 \end{vmatrix}$	
21	59468389	Safety Tread	$\begin{vmatrix} 1 \\ 1 \end{vmatrix}$	
22	59468397	Safety Tread	4	
23	59615872	Decal: Warning - Fluid Under Pressure	1	
24	59450734	Mirror	1	
37	59409045	Stripe	1	
_	58782327	-Bulk Stripe	3	
40	59472365	Decal: Danger - Voltage Lines	1	
41	59326728	Decal: Caution - Hot and Pressurized	1	
42	58850975	U-Bolt	2	
43	59941682	Lock Nut	4	1/4 - 20
45	59454769	Decal: Warning - Frame Leveling Controls	1	
50	58899014	Bulk Stripe	2	
61	58850629	Decal: Lubechart	1	
63	59892109	Decal: Ingersoll-Rand Logo	1	
101	59457523	Decal: RH	1	
102	59457531	Decal: LH	1	
105	59456574	Decal: Hydraulic	1	
1	59455147	Decal: Nameplate	1	



ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
8	58878976	Decal: I-R Corporate Monogram	2	
10	59306340	Decal: Notice - No Riders	2	
13	58778796	Decal: Warning - Misoperation	1	
14	59455238	Decal: Warning - Starting Aid	1	
16	59344192	Decal: Danger - Crush Area	4	
18	59878728	Decal: Ingersoll-Rand Logo	3	
19	58882630	Decal: Fork Controls	1	
22	59468397	Safety Tread	4	
30	58817990	Bearing	1	
31	58812173	Pointer	1	
32	58827155	Decal: Angle	1	
35	95365425	Shoulder Screw	1	1/2 x 0.750
36	59409037	Stripe	2	
38	59409052	Stripe	2	
-	58782327	-Bulk Stripe	A/R	
46	59579078	Pop Rivet	4	
60	58811761	Decal: VR-90B	2	
64	59878710	Decal: Ingersoll-Rand Logo	1	
65	58841248	Decal: Load Chart	1	
66	58963638	Decal: Capacity Chart	1	
67	58850280	Decal: Load Chart	1	
68	58850801	Decal: Load Chart	1	
69	58882929	Decal: Load	1	
70	N.S.S.	Nameplate	1	
76	58882937	Decal: Load	1	
80	N.S.S.	Serial Number Plate	1	
81	N.S.S.	Screw	4	#4 x 0.250
120	59429464	Arm Rest	1	
121	59976548	Pad, Control	1	
122	59998146	Bolt, Lock	4	İ
123	59965962	Bolt, Lock	2	
124	95923199	Nut, Lock	2	
150	95920609	H.H.C.S.	1	1/4 - 20 x 1.250
151	95922936	Nut, Hex Jam	1	1/4 - 20
152	58961608	Cover	1	
153	95922183	Flat Washer	1	1/4
154	95924247	Wing Nut	1	1/4 - 20
155	58961624	Decal: Notice	1	
156	59634550	Bulk Rubber U-channel	2	
157	59000562	Tape	2	
-	59000638	-Bulk Tape	1	
158	59605915	Decal: Grease	1	
2	59455865	Decal: Danger - Rollover	2	



ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
3	59969980	Decal: Do Not Stand Under Forks	1	
6	59454744	Decal: Parking Brake	1	
7	59680421	Decal: Brake On	1	
10	59306340	Decal: Notice - No Riders	2	
25	59455642	Level Gauge	1	
26	59456210	Button Head Socket Capscrew	1	#10 - 32 x 0.625
27	59465278	Rear Window Seal	1	
28	59469270	Lock Seal Bulk	7	
29	59456426	Glass Rear	1	
33	58812116	Decal: Boom Length (Front)	1	
34	58812108	Decal: Boom Length (Rear)	1	
39	59969972	Decal: Warning - Do Not Stand On Forks	1	
44	58851551	Decal: Warning - Carriage Shifting	2	
47	95921599	Screw	4	#4 x 0.250
48	59491332	Information Case	1	
-	59496182	-Manual Case	1	
_	58782392	-Decal: Operator's Manual	1	
49	59491357	Aluminum Rivet	4	
62	59472357	Decal: Test	1	
65	58841248	Decal: Load Chart	1	
66	58963638	Decal: Capacity Chart	1	
67	58850280	Decal: Load Chart	1	
68	58850801	Decal: Load Chart	1	
69	58882929	Decal: Load	1	
76	58882937	Decal: Load	1	
**	59947507	Beige Paint	a/r	1 Gal
**	12977021	Black Paint, Semi-gloss	a/r	1 Gal
**	59506501	Black Paint, Abrasive	a/r	1 Gal
**	35304286	Beige Paint	a/r	Spray Can
**	58917550	Black Paint, Semi-gloss	a/r	Spray Can
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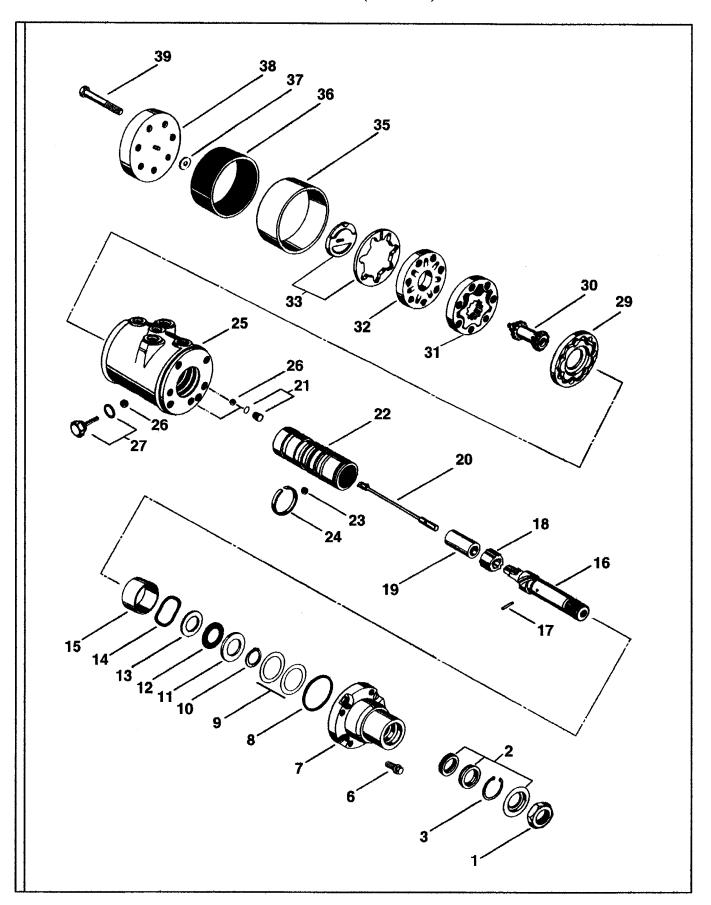
I.1.2 VR-90B

#### HAND PUMP AND STEERING COLUMN (59455535) - INTERNAL BREAKDOWN

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1	N.S.S.	-Seal (1.0 ID)	1	Included in Seal Kit
2	59596544	-Ring, Retaining	1	
3	59596551	-Bushing, Seal Gland	1	
4	N.S.S.	-Seal (1.875 ID)	1	Included in Seal Kit
5	N.S.S.	-Seal, Quad Ring (1.063 ID)	1	Included in Seal Kit
6	59596577	-Needle Bearing Kit	1	
		(Contains items 7 and 8)		
7	N.S.S.	-Race, Bearing	2	
8	N.S.S.	-Bearing, Needle Thrust	1	
9	59596585	-Screw, Set	1	
10	N.S.S.	-Seal (.375 ID)	1	Included in Seal Kit
11	59596593	-Seat, Check Ball	1	
12	N.S.S.	-Seal (.312 ID)	1	Included in Seal Kit
13	59596601	-Ball, Check	1	·
14	59596619	-Retainer, Check Ball	1	
15	50916857	-Control Parts Assembly	1	
		(Contains items 1 thru 20)		
19	59393389	-Centering Spring Kit (6 Springs)	1	
20	50806496	-Pin, Centering	1	
21	N.S.S.	-Seal	3	Included in Seal Kit
22	59596635	-Plate, Spacer	1	
23	50280403	-Drive	1	
24	59480608	-Gerotor	1	
25	59518670	-Spacer	1	
26	59596668	-Cap, End	1	
27	59480616	-Screw, Cap	7	
**	59596569	-Seal Kit	1	
	39390309		1	
		(Comprised of items 1,4,5,10,12 and 21)		

VR-90B

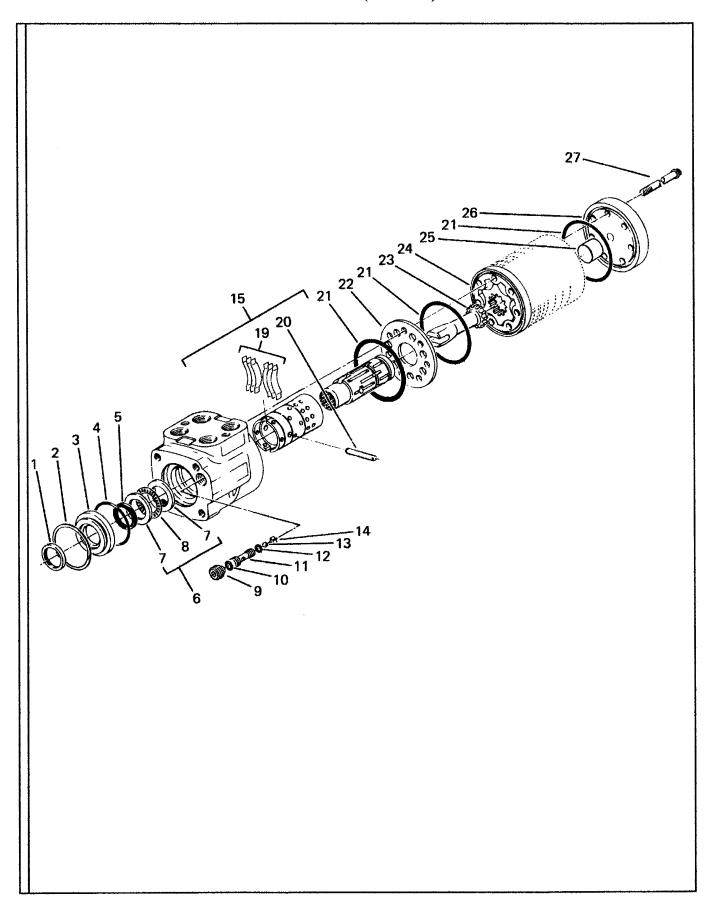
I.1.3



# HAND PUMP AND STEERING COLUMN (59001354) - INTERNAL BREAKDOWN

TEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
	#O###2201	BOM 5945587		
1	59752394	Wheel Nut	1	
2	59752634	Seal Kit	1	
3	59725267	Snap Ring	1	
6	59050583	Screw	4	
7	59050591	Upper Cover	1	
8	59049023	Seal	1	
9	59049031	Shim Kit	1	
10	59752451	Snap Ring	1	
11	59752501	Thrust Washer	1	
12	59725135	Thrust Bearing	1	
13	59725143	Thrust Washer	1	
14	59752519	Spring Washer	1 1	
15	59752543	Spacer Washer	1	
16	59752386	Wheel Mount Shaft	1	
17	59752444	Needle Roller	1	
18	59752428	Drive Ring	1	
19	59051425	Spacer	1	
20	59051417	Torsion Bar	1	
21	59049049	Plug & O-Ring	1	
22	N.S.S.	Spool	1	
23	59752527	Ball	1	15/16
24	59752535	Spring Kit	1	
25	N.S.S.	Housing	1	
26	59752352	Ball	1	1/4
27	58951047	Plug Assembly	1	
29	59752568	Spacer	1	
30	58966615	Drive Link	1	
31	59049064	Rotor Set	1	
32	59752584	Manifold	1	
33	59752592	Commutator Assembly	1	
35	59049072	Retainer, Seal	1	
36	59049080	Seal	1	
37	59752345	Washer	1	
38	59049056	End Washer	1	
39	59049098	Bolt - Coarse Thread	7	
_	59051409	Bolt - Fine Thread	7	
		VR-90B		

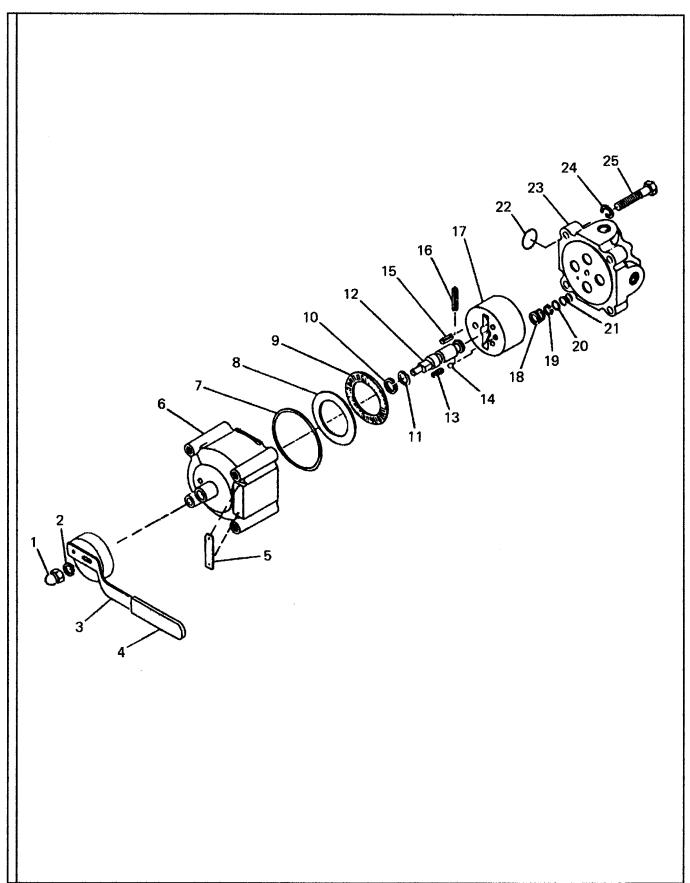
#### HAND PUMP AND STEERING COLUMN (59455535) - INTERNAL BREAKDOWN



# HAND PUMP AND STEERING COLUMN (59455535) - INTERNAL BREAKDOWN

ITEM	COMM. NO.	DESCRIPTION  BOM 59001354	QTY	DIMENSIONS/NOTES
1	N.S.S.	-Seal (1.0 ID)	1	Included in Seal Kit
2	59596544	-Ring, Retaining	1	
3	59596551	-Bushing, Seal Gland	1	
4	N.S.S.	-Seal (1.875 ID)	1	Included in Seal Kit
5	N.S.S.	-Seal, Quad Ring (1.063 ID)	1	Included in Seal Kit
6	59596577	-Needle Bearing Kit	1	
		(Contains items 7 and 8)		
7	N.S.S.	-Race, Bearing	2	
8	N.S.S.	-Bearing, Needle Thrust	1	
9	59596585	-Screw, Set	1	
10	N.S.S.	-Seal (.375 ID)	1	Included in Seal Kit
11	59596593	-Seat, Check Ball	1	
12	N.S.S.	-Seal (.312 ID)	1	Included in Seal Kit
13	59596601	-Ball, Check	1	
14	59596619	-Retainer, Check Ball	1	
15	50916857	-Control Parts Assembly	1	
		(Contains items 19 and 20)		
19	59393389	-Centering Spring Kit (6 Springs)	1	
20	50806496	-Pin, Centering	1	
21	N.S.S.	-Seal	3	Included in Seal Kit
22	59596635	-Plate, Spacer	1	
23	50280403	-Drive	1	
24	59480608	-Gerotor	1	
25	59518670	-Spacer	1	
26	59596668	-Cap, End	1	
27	59480616	-Screw, Cap	7	
_	59596569	-Seal Kit	1	
		(Comprised of items 1,4,5,10,12 and 21)		

## STEERING SELECTOR VALVE (59455725) - INTERNAL BREAKDOWN

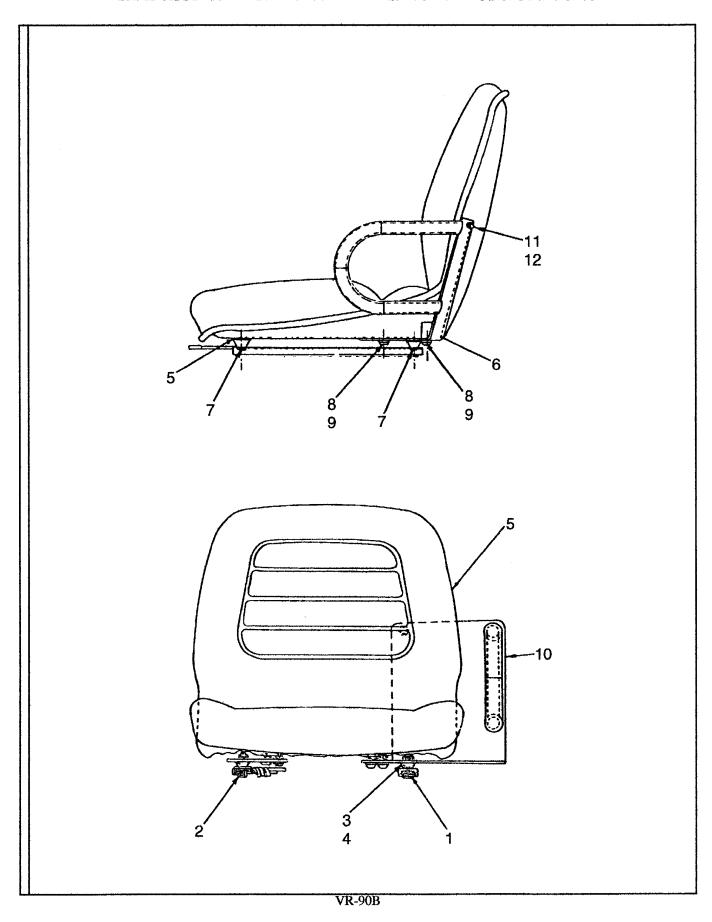


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#### STEERING SELECTOR VALVE (59455725) - INTERNAL BREAKDOWN

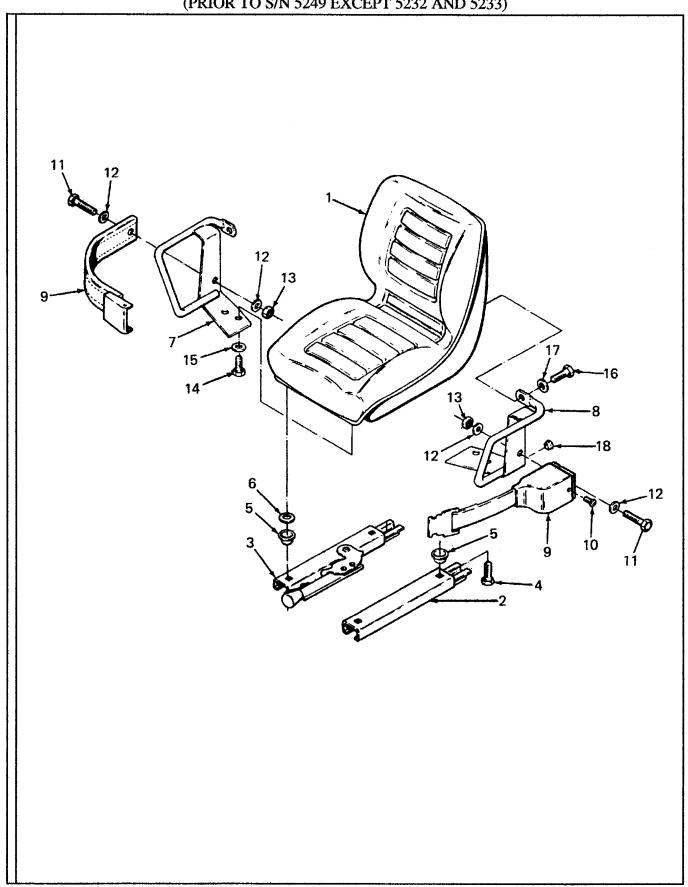
TEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
		BOM 59455725	1	
1	59348268	Acorn Nut	1	
2	59348276	Lock Washer	1	
3	59348284	Handle Assembly	1	
4	59480343	Handle Grip	1	
5	N.S.S.	Name Plate	1	
6	59480350	Housing	1	
7	N.S.S.	Housing O-Ring	1	Included in Seal Kit
8	59480376	Thrust Washer	1	
9	59480384	Thrust Bearing	1	
10	N.S.S.	Shaft Backup Ring	1	Included in Seal Kit
11	N.S.S.	Shaft O-Ring	1	Included in Seal Kit
12	58875170	Shaft	1	
13	59480426	Detent Spring	1	
14	59480434	Detent Ball	1	
15	59348367	Stop Roll Pin	1	
16	59348375	Drive Roll Pin	1	
17	59480442	Standard 6-Hole Rotor	1	
18	59480459	Oil Std.Seal	3	
19	N.S.S.	Seal Backup Ring	3	Included in Seal Kit
20	N.S.S.	Seal O-Ring	3	Included in Seal Kit
21	59480483	Seal Spring	3	
22	59348417	Warning Decal	1	
23	58875188	Vertical Body (SAE)	1	
24	59480509	Lock Washer	4	
25	59480517	Cap Screw	4	
-	58875162	Seal Kit (Includes items 7, 10, 11, 19, and 20)	1	
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VR-90B



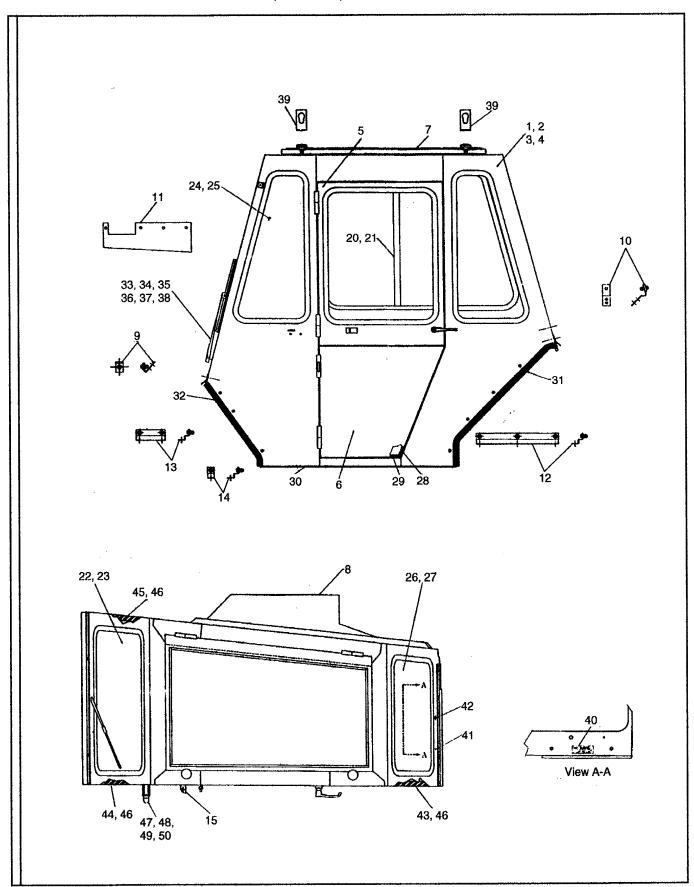
## SEAT ASSEMBLY-EFFECTIVE WITH S/N: 5249 PLUS 5232 and 5233

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
		BOM 58850587		
1	59455006	Seat Rail	1	
2	59455196	Seat Rail	1	
3	59463414	Washer	2	
4	59463422	Spacer	4	
5	59491571	Seat	1	
6	59887000	Dome Plug	2	
7	95912606	H.S.H.C.S.	4	5/16 - 18 x 1.25
8	95912614	B.H.C.S.	4	5/16 - 8 x 0.625
9	95922365	Washer, Flat	4	5/16 Dia.
10	59090142	Arm Rest (Effective with S/N 174136)	1	
-	58852773	Arm Rest (Prior to S/N 174136)	1	
11	59465260	H.S.B.H.C.S.	2	5/16 - 18 x 0.625
12	59465252	Washer, Special	2	
	†			



# SEAT ASSEMBLY - INTERNAL BREAKDOWN (PRIOR TO S/N 5249 EXCEPT 5232 AND 5233)

TATED A	COMPANO	(PRIOR TO S/N 5249 EXCEPT 5232 AND : DESCRIPTION		
TEM	COMM. NO.	BOM 59455873	QTY	DIMENSIONS/NOTES
4	E0 401 E51	G4	1	
1	59491571	Seat Pell (P. H.)	1	
2	59455006	Seat Rail (R.H.)	1	
3	59455196	Seat Rail (L.H.)	$\begin{vmatrix} 1 \\ 4 \end{vmatrix}$	EU.C. 10 . 10E
4	95912606	H.S.B.H.S.	4	5/16 - 18 x 1.25
5	59463422	Spacer	4	
6	59463414	Washer, Flat	2	
7	59455824	Hip Restraint (R.H.)	1	
8	59455832	Hip Restraint (L.H.)	1	
9	59455840	Seat Belt	1	
10	59465237	Screw	1	
11	59465245	H.H.C.S.	2	1/2 - 13 x 1.25
12	59471151	Washer	4	
13	95285243	Lock Nut	2	1/2 - 13
14	95912614	B.H.C.S.	4	5/16 - 18 x 0.625
15	95922365	Washer, Flat	4	5/16 Dia.
16	59465260	H.S.B.H.S.	2	5/16 - 18 x 0.625
17	59465252	Washer	2	
18	59887000	Dome Plug	2	

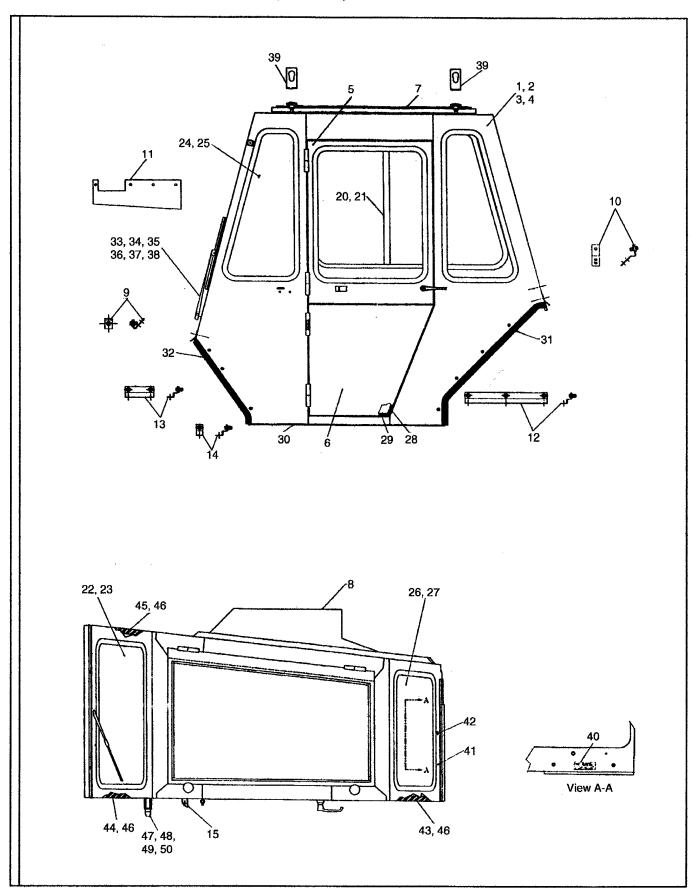


#### CAB ASSEMBLY (58883232) - INTERNAL BREAKDOWN

ITEM	COMM NO.	DESCRIPTION	QTY	DIMENSION/NOTES
1	59051771	Bom 58883232 Cab	1	
5	59051771	Upper Door	$\begin{vmatrix} 1 \\ 1 \end{vmatrix}$	
6	59051904	Lower Door	1	
7	58914805	Skylight	$\begin{vmatrix} 1 \\ 1 \end{vmatrix}$	
8	59051912	Control Cover	1	
9	59052472	Front Mount	2	
10	59051920	Rear Mount	2	
11	59051938	RH Mount	1	
12	59051946	LH Mount	2	3 Hole
13	59051953	LH Mount	1	2 Hole
14	59051961	LH Mount	$\begin{vmatrix} 1 \end{vmatrix}$	1 Hole
15	59051979	Door Holdback	$\begin{bmatrix} -1 \end{bmatrix}$	
20	59051987	Sliding Window	1	
21	59051995	Window Gasket	1	127"
22	59052001	Front Glass	1	
23	59052019	Window Gasket	1	134"
24	59052027	Side Glass	3	
25	59052035	Window Gasket	3	84"
26	59052043	Rear Glass	1	
27	59052050	Window Gasket	1	107"
28	59052068	Door Seal	1	161"
29	59052076	Door Seal	1	17"
30	59052084	Cab Seal	1	40"
31	59052092	Cab Seal	1	80"
32	59052100	Cab Seal	1	90"
33	58889239	Wiper Motor	1	
34	59052118	Wiper Blade	1	18"
35	59052126	Wiper Arm	1	16"
36	59052373	Screw	1	#10-32 x 1
37	58969130	Flat Washer	1	#10
38	59052381	Nylon Lock Nut	1	#10-32
39	59052159	Roof Hook	2	
40	59052167	Serial Plate	1	
41	59052175	Nylon Hole Plug	1	3/16"
42	59052183	Nylon Hole Plug	1	5/8"
43	59052191	LH Rear Insulation	1	29 13/32 x 31 1/32 1/2"
44	59052209	LH Front Insulation	1	15 3/8 x 31 1/32 1/2"
45	59052217	RH Front Insulation	1	23 25/64 x 30 3/16 1"
		VR_90R		

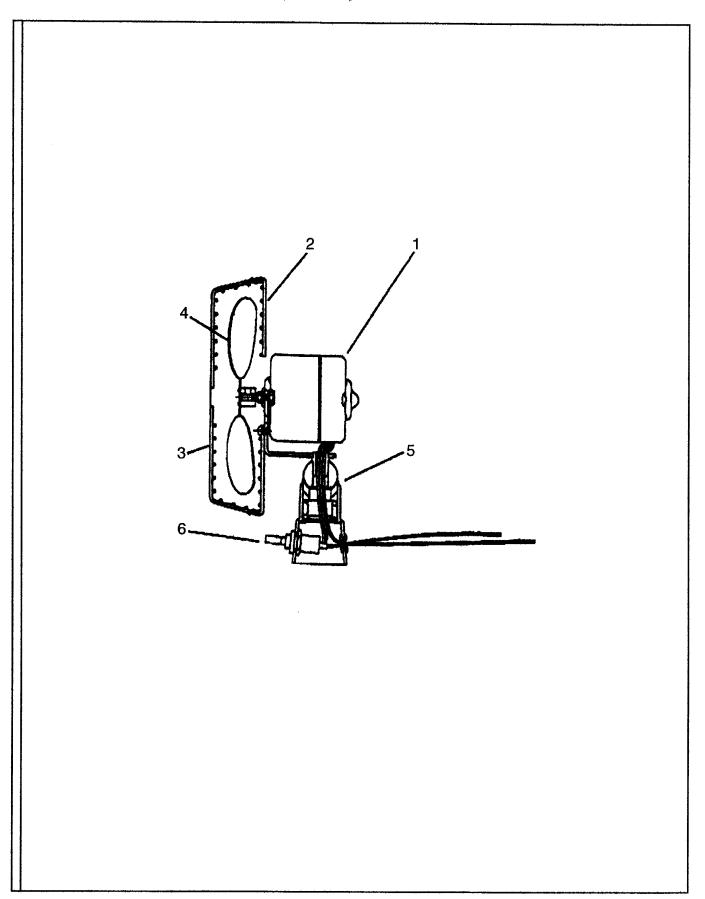
VR-90B

## CAB ASSEMBLY (58883232) - INTERNAL BREAKDOWN



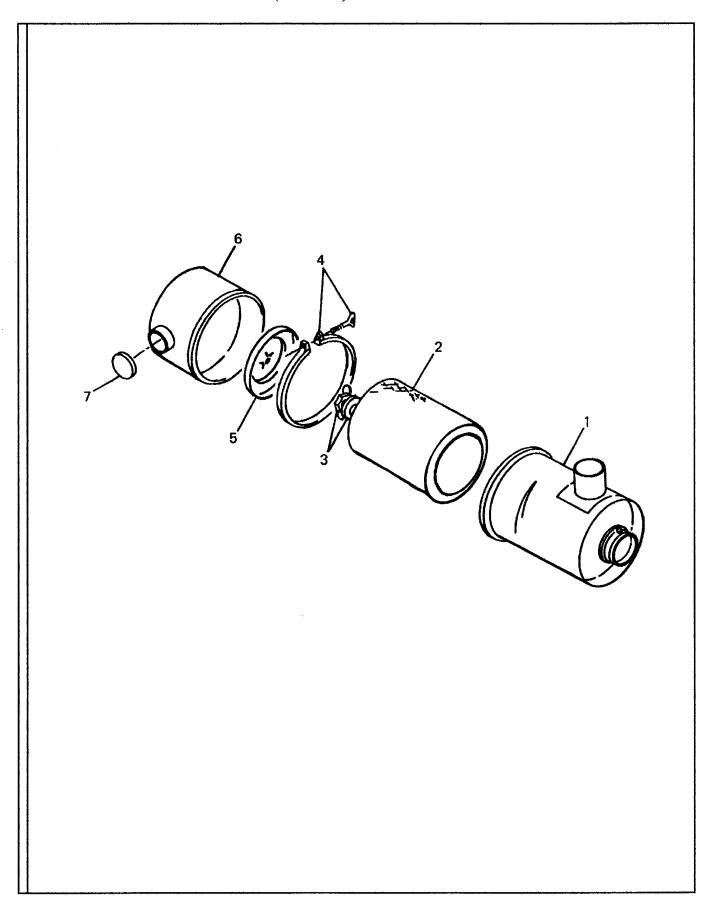
#### CAB ASSEMBLY (58883232) - INTERNAL BREAKDOWN

ITEM	COMM NO.	DESCRIPTION	QTY	DIMENSION/NOTES
47	59052233	Rubber Door Bumper	1	
48	59052241	Recessed Bumper	1	
49	59052258	Hex Nut	1	#10-32
50	59052266	Screw	1	#10-32 x 1 1/4
		-		
		VP_00B	<u></u>	



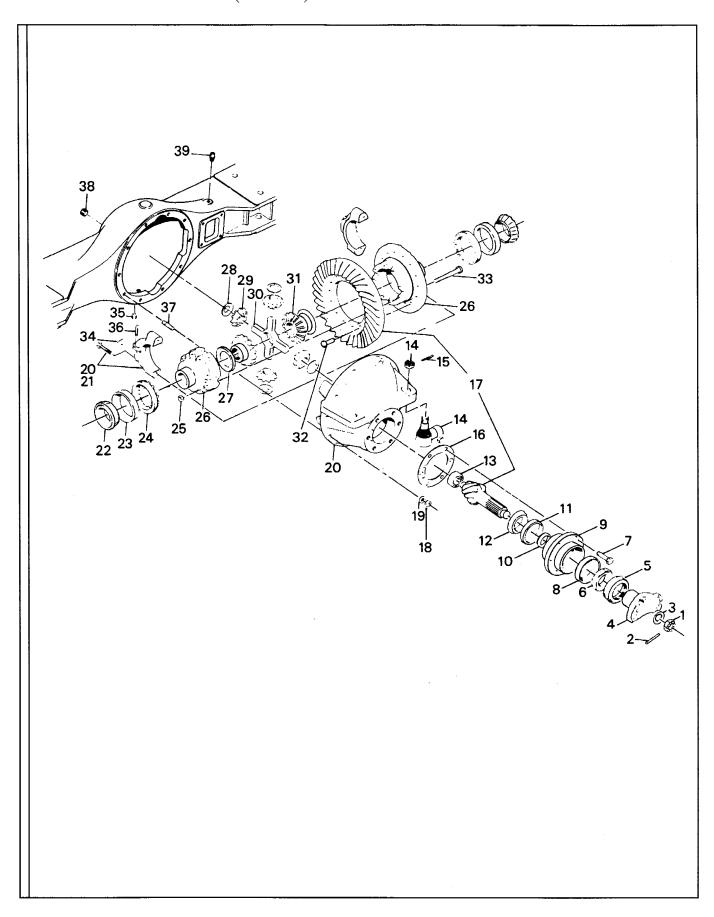
#### DEFROSTER FAN (59474106) - INTERNAL BREAKDOWN

h	i	BOM 59474106		DIMENSIONS/NOTES
1 1	58875097	Motor	1	12 Volt
2	58875105	Rear Grill Guard Assembly	1	
3	58875113	Front Grill Guard Assembly	1	
4	58875121	Fan Blade Assembly	1	
5	58875139	Base Assembly	1	
6	58875147	Switch Assembly	1	
7	58875154	Thumb Screw (Not Shown)	1	
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## AIR CLEANER (59450270) - INTERNAL BREAKDOWN

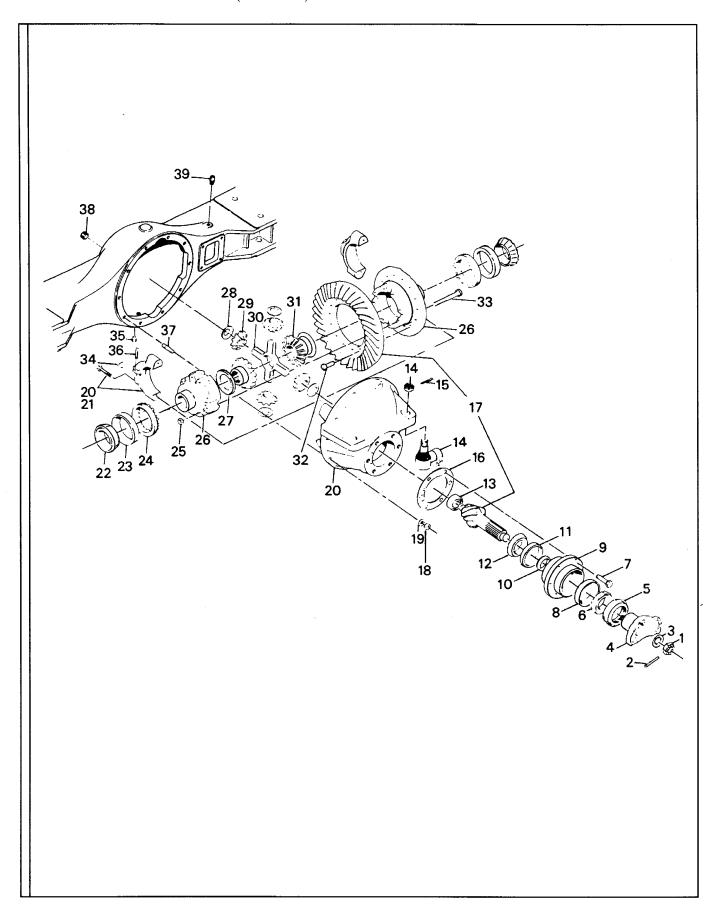
ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
		BOM 59450270		
1	N.S.S.	Body Assembly	1	
2	35318252	Element	1	
3	50938935	Nut	1	·
4	50938943	Clamp	1	
5	50938950	Baffle	1	
6	50938968	Cup	1	
7	50938976	Cap	1	
		<del>-</del>		
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I.10.2 VR-90B

#### AXLE ASSEMBLY (59110387) - INTERNAL BREAKDOWN - SHEET 1 OF 4

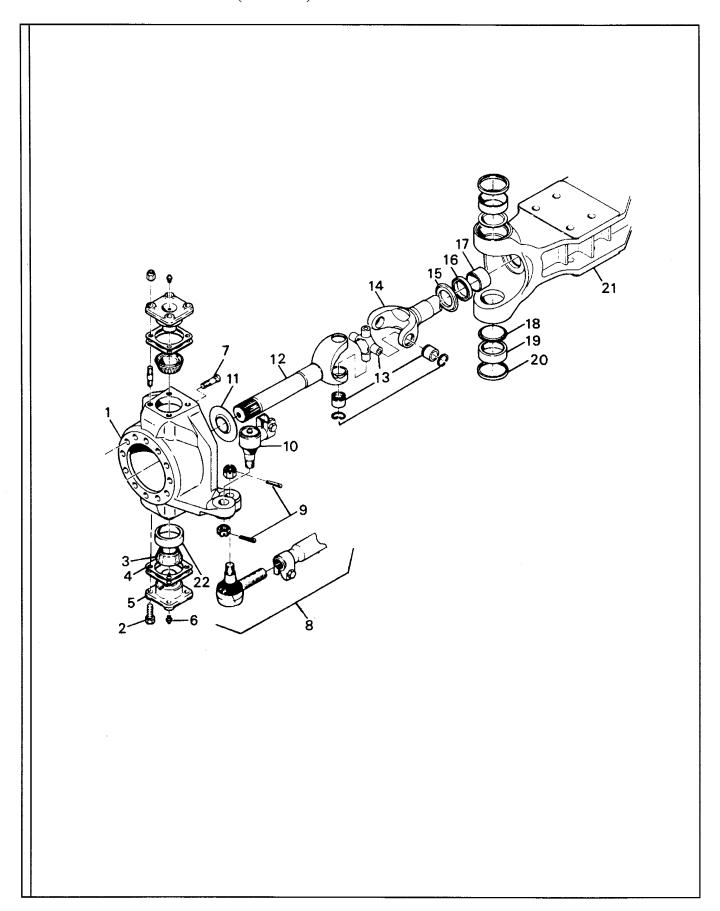
ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
	50705066	Comian Assamble:	BOM 59450502	
-	58785866	Carrier Assembly		
1	58800608	Pinion Nut		
2	59483511	Cotter Pin		
3	59349928	Flat Washer		
4	59488858	End Yoke		
5	59349936	Oil Seal		
6	59349944	Bearing Cone (Pinion Outer)	1	
7	59349951	Hex Bolt	6	
8	58800624	Bearing Cup (Pinion Outer)	1	
9	58785874	Bearing Retainer Cap	1	
10	<del></del>	Pinion Bearing Spacer	1	
	59349977	5135 Thk.	1	
_	58801416	5165 Thk.	1 1	
-	58801424	5195 Thk.	1	
	58801432	5225 Thk.	1	
	58801440	5245 Thk.	1	
	58801457	5255 Thk.	1	
	58801465	5265 Thk.		
	58801473	5275 Thk.	1	
	58801481	5285 Thk.	1	
_	58801499	5295 Thk.	1	
	58801507	5305 Thk.	1	
l —	58801515	5315 Thk.	1	
<u> </u>	58801523	5325 Thk.	1	
	58801531	5335 Thk.	1	
	58801549	5345 Thk.	1	
	58801556	5355 Thk.	1 1	
	58801564	5375 Thk.	1	
	58801572	5395 Thk.	1 1	
	58801580	5405 Thk.	1 1	
_	58801598	5435 Thk.	1 1	
_	58801606	5485 Thk.	1 1	
11	58800624	Bearing Cup (Pinion Inner)		
12	59349944	Bearing Cone (Pinion Inner)		
13	58800640	Bearing Assembly (Straight Roller)		
14	59489930	Steering Cylinder Socket Assembly		
15	59483511	Cotter Pin (One Per Socket Assembly)		
		Court Im (one I of booker I issumbly)		
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I.10.4 VR-90B

#### AXLE ASSEMBLY (59110387) - INTERNAL BREAKDOWN - SHEET 1 OF 4

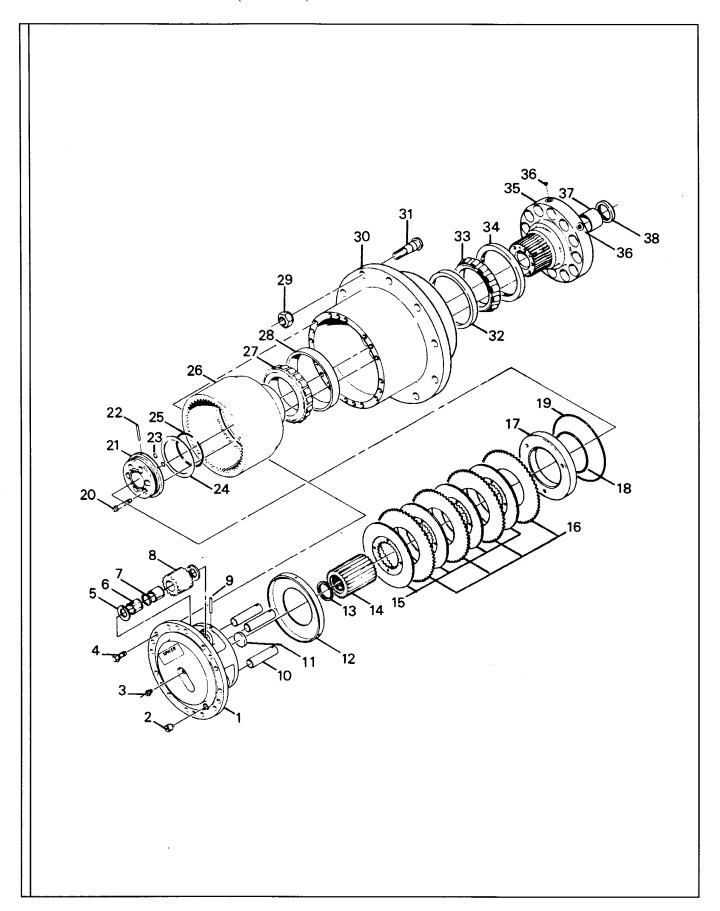
ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
		BOM 59450502		
16		Shim (Pinion Bearing Retainer Position)		
-	58766023	-Shim (.10)	A/R	
-	58800665	-Shim (.030)	A/R	
-	58800673	-Shim (.005)	A/R	
17	58801309	Ring Gear and Pinion Assembly	1	
18	58785841	Lock Nut (Steering Axle Only)	10	
19	59564153	Flat Washer	10	
20	58785882	Carrier Sub-Assembly and Cap	1	
		(Steering Axle Only)		
22	58800616	Adjusting Ring (Differential)	2	
23	58800624	Bearing Cup (Differential)	2	
24	58800582	Bearing Cone (Differential)	2	
26	58800509	Differential Case Assembly Kit	1	
27	58800533	Thrust Washer (Differential Gear)	2	
28	58800541	Thrust Washer (Differential Pinion)	4	
29	58800566	Differential Pinion	4	
30	58800525	Differential Shaft	1	
31	58800574	Differential Gear	2	
32	58800632	Solid Rivet	14	
33	58800517	Hex Bolt	8	
34	59488841	Bearing Adjuster Ring Lock	2	
35	59526426	Pipe Recessed Drive Plug	1 1	
		(Magnetic Drain)		
36	58800657	Cotter Pin	2	
37		Stud (Steering Axle Only)		
	58801614	-2.00" O.A.L.	6	
	58801622	38" O.A.L.	2	
_	58801630	81" O.A.L.	2	
38	59564021	Pipe Recessed Drive Plug	1	
39	59525568	Vent	1	



I.10.6 VR-90B

#### AXLE ASSEMBLY (59110387) - INTERNAL BREAKDOWN - SHEET 2 OF 4

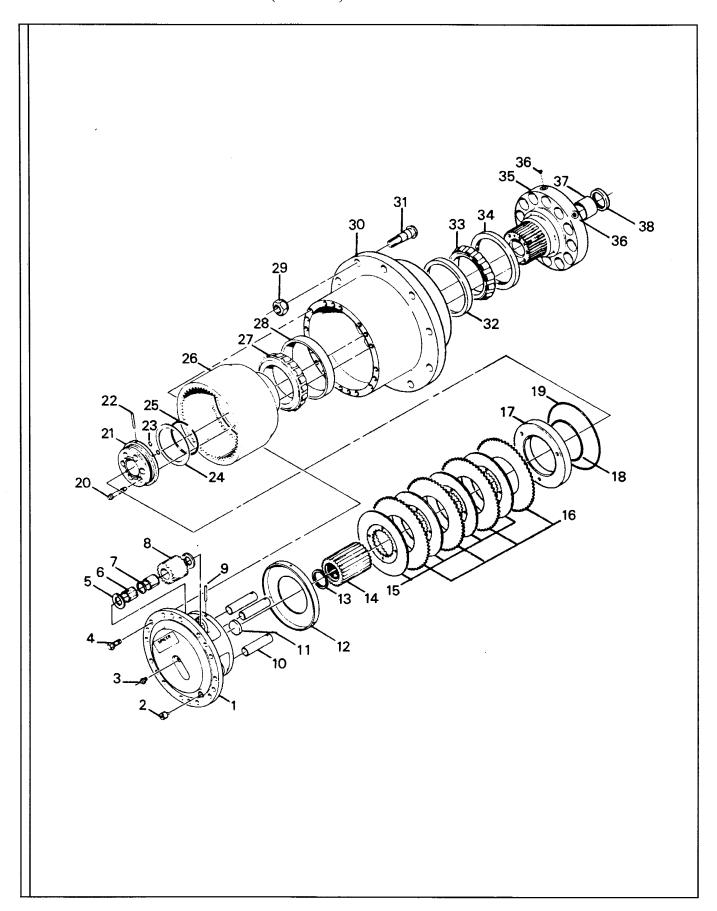
ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
		BOM 59450502		
-		Outer End	1	
1	59486852	Steering Knuckle (L.F./R.R.)	1	
_	59486845	Steering Knuckle (R.F./L.R.)	1	
2	58785833	-H.H.C.S. (.50)	8	
3	59483446	-Cone Bearing (King Pin Cap)	2	
4	59483412	-Shim (.005)(King Pin Cap)	A/R	
-	59490888	-Shim (.010)(King Pin Cap)	A/R	
5	59483453	-King Pin Cap	2	
6	58785858	-Grease Fitting	2	
7	58800707	-Stud (Spindle Mounting with Disc Brake)	12	'
8	58800749	-Tie Rod	1	
9	59483511	Cotter Pin (One Per Socket Assembly)	6	
10	58774241	Steering Cylinder Socket Assembly	1	
-	58774225	-Socket (L.F./R.R.)	1	16" Fine Thread
_	58774233	-Socket (R.F./L.R.)	1	12" Coarse Thread
11	58784570	-Deflector	1	
12	58784588	-Spindle Yoke Outer Shaft	1	
13	58784539	-U-Joint Cross Assembly	1	
14	58800699	-Inner Yoke Shaft (R.H.)	1	
15	58784562	-Deflector	1	
16	58767997	-Seal Oil	1	
17	59496927	Bushing	1	
18	59476002	Grease Retainer	2	
19	59483438	Cup Bearing	2	
20	59496935	King Pin Seal	2	
21	58800681	Steering Axle Housing	1	



I.10.8 VR-90B

#### AXLE ASSEMBLY (59110387) - INTERNAL BREAKDOWN - SHEET 3 OF 4

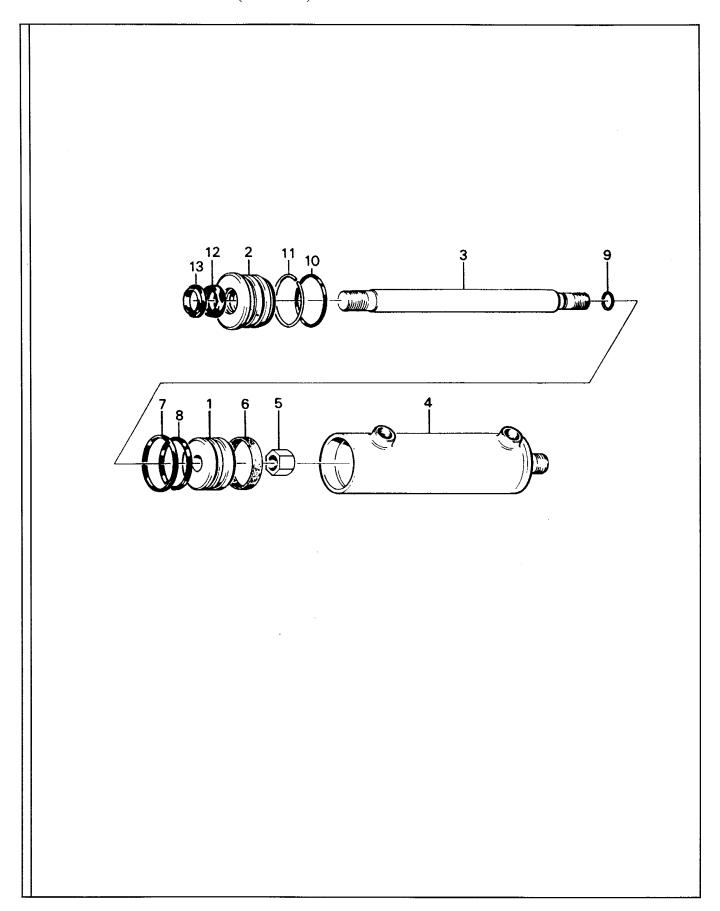
ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
		BOM 59450502		
-	59123778	Wheel End	1	
-	58974890	Planetary Gear Assembly	1	Includes Items 1 - 12
1	59487983	Drive Planetary Flange	1	Included in Gear Assy.
2	59526426	Pipe Recessed Drive Plug (Magnetic)	1	Included in Gear Assy.
3	59498188	Vent	1	Included in Gear Assy.
4	59490334	Hex Self-Locking Screw	18	Included in Gear Assy.
5	59526079	Keyed Washer	6	Included in Gear Assy.
6	59619502	Needle Roller Bearing	150	Included in Gear Assy.
7	59526087	Planet Gear Washer	3	Included in Gear Assy.
8	59488866	Spur Planet Gear	3	Included in Gear Assy.
9	59490714	Roll Pin	3	Included in Gear Assy.
10	59498212	Planet Fear Shaft	3	Included in Gear Assy.
11	59564229	Drive Flange Washer	1	Included in Gear Assy.
12	59487991	Plate-Lining Stop	1	Included in Gear Assy.
13	58800772	Snap Ring (Steering Axle)	1	
14	59487553	Spur Gear (Steering Axle)	1	
15	59123752	Friction Disc Assembly	4	
16	58773763	Plate-Lining Stop	4	
17	59490722	Piston	1	
18	59488106	O-Ring	1	
19	59486936	O-Ring	1	
20	59488890	Cap Screw (12 Pt.)	6	
21	59123760	Bearing Adjusting Ring Retainer	1	
22	59497024	Brake Tubing	1	
23	59438937	O-Ring	2	
24	59490565	Adjusting Shim (.010)	A/R	
_	59490599	Adjusting Shim (.011)	A/R	
_	59490607	Adjusting Shim (.012)	A/R	
-	59490615	Adjusting Shim (.013)	A/R	
_	59490623	Adjusting Shim (.014)	A/R	
_	59490516	Adjusting Shim (.015)	A/R	
	59490573	Adjusting Shim (.020)	A/R	
-	59490581	Adjusting Shim (.030)	A/R	
25	59488098	O-Ring	1	
26	59487561	Planetary Gear	1	
27	58800780	Cone Bearing (Outer)	1	
28	59490839	Cup Bearing (Outer)	1	
29	58800764	Wheel Mounting Nut	10	



I.10.10 VR-90B

#### AXLE ASSEMBLY (59110387) - INTERNAL BREAKDOWN - SHEET 3./,ml,mklk OF 4

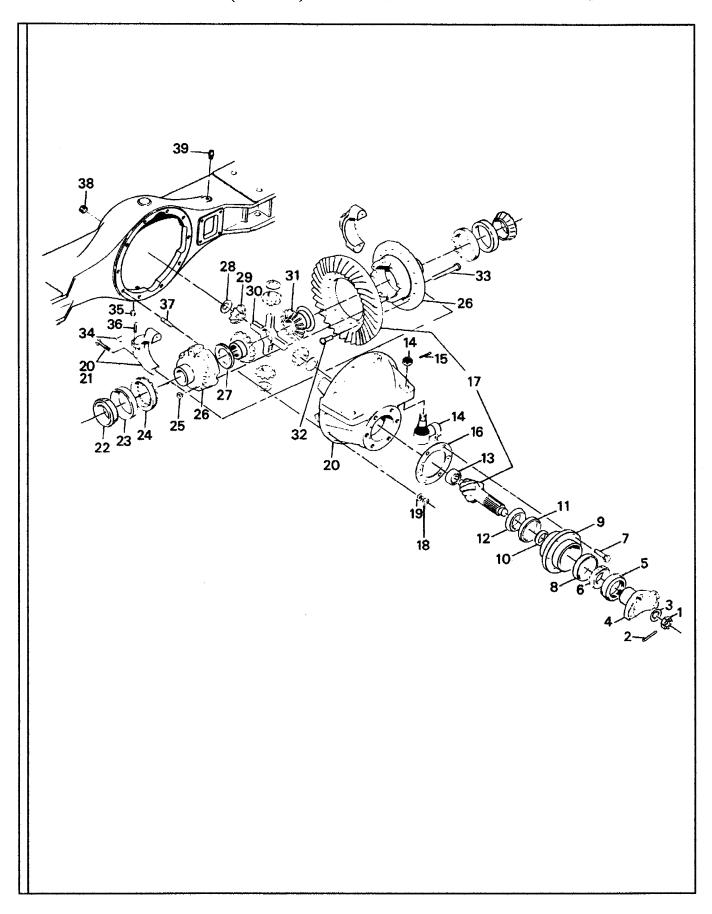
ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
		BOM 59450502	¥	
30	58800822	Planetary Hub	1	
31	58800814	Wheel Mounting Bolt	10	
32	59487975	Cup Bearing (Inner)	1	
33	59486878	Cone Bearing (Inner)	1	
34	59438945	Oil Seal	1	:
35	59123745	Wheel Spindle (Steering Axle)	1	
36	59488882	Insert Seat	2	
37	59564120	Spindle Bushing (Steering Axle)	1	
38	59490896	Oil Seal (Steering Axle)	1	
39	59487942	Bleeder (Not Shown)	1	
40	59487959	Fitting, Brake Line Hose (Not Shown)	12	:
		Note: Items 39 and 40 are installed in Item 35.		
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	1			



I.10.12 VR-90B

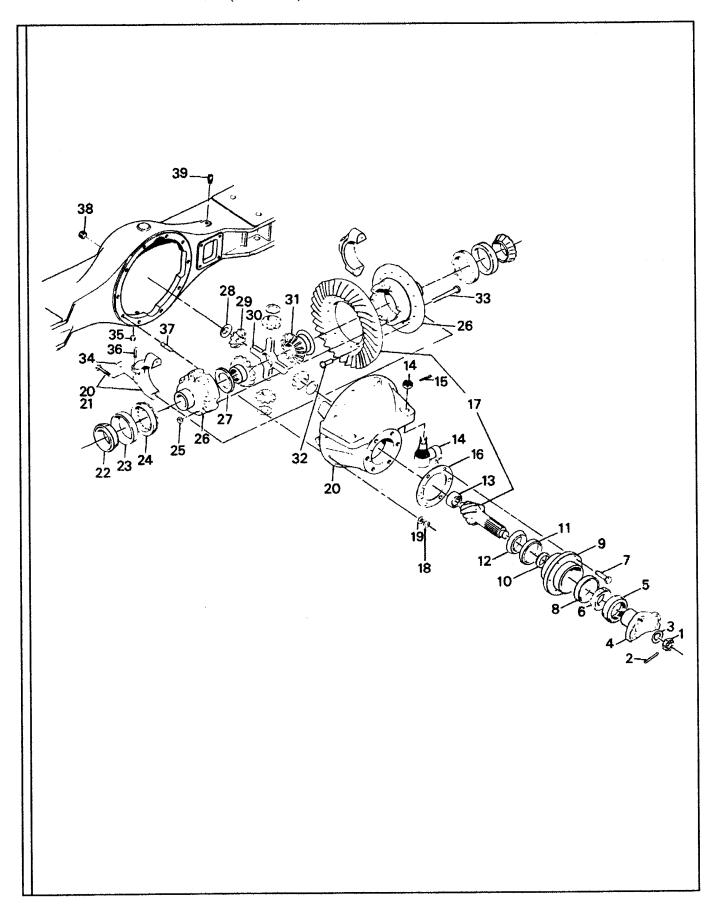
#### AXLE ASSEMBLY (59110387) - INTERNAL BREAKDOWN - SHEET 4 OF 4

TEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
		BOM 59450502		
-	59123786	Steering Cylinder	1	
-	59123794	-Seal Kit (Includes items 1 thru 8)	1	
1	N.S.S.	-Wear Strip	1	
2	N.S.S.	-Seal,Slipper	1	
3	N.S.S.	-O-Ring	1	
4	N.S.S.	-Static Rod Seal	1	
5	N.S.S.	-Static Gland Seal	1	
6	N.S.S.	-Lock Wire	1	
7	N.S.S.	-Rod Seal U-Cup		
8	N.S.S.	-Rod Wiper	1	
9	N.S.S	Piston	1	
10	N.S.S.	Gland	1	
11	N.S.S.	Rod	1	
12	N.S.S.	Barrel Assembly	1	
13	N.S.S.	Lock Nut	1	
		,		
				1



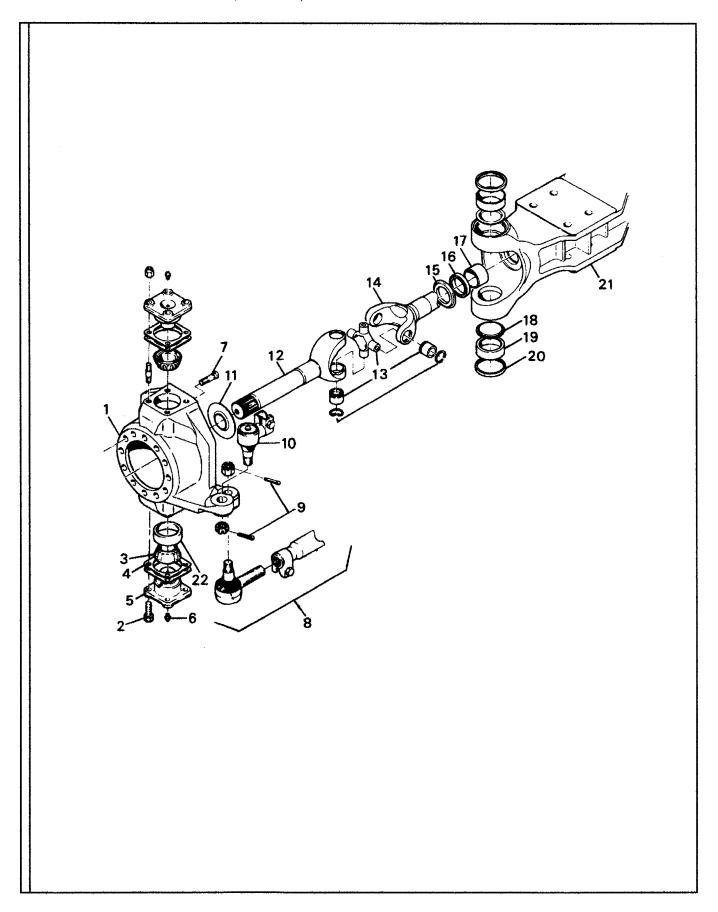
# AXLE ASSEMBLY (59450502) - INTERNAL BREAKDOWN - SHEET 1 OF 4

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
	50705066	BOM 59450502	1	
1	58785866	Carrier Assembly	$\left \begin{array}{c}1\\1\end{array}\right $	
1	58800608	Pinion Nut	1	
2	59483511	Cotter Pin	1	
3	59349928	Flat Washer	1	
4	59488858	End Yoke	1	
5	59349936	Oil Seal	1	
6	59349944	Bearing Cone (Pinion Outer)	1	
7	59349951	Hex Bolt	6	
8	58800624	Bearing Cup (Pinion Outer)	1	
9	58785874	Bearing Retainer Cap	1	
10		Pinion Bearing Spacer	1	
—	59349977	5135 Thk.	1	
	58801416	5165 Thk.	1	
	58801424	5195 Thk.	1	
	58801432	5225 Thk.	1	
	58801440	5245 Thk.	1	
	58801457	5255 Thk.	1	
	58801465	5265 Thk.	1	
	58801473	5275 Thk.	1	
	58801481	5285 Thk.	1	
	58801499	5295 Thk.	1 1	
	58801507	5305 Thk.	1	
	58801515	5315 Thk.	1	
	58801523	5325 Thk.	1 1	
	58801531	5335 Thk.	1	
	58801549	5345 Thk.	1	
	58801556	5355 Thk.	1	
	58801564	5375 Thk.	1	
	58801572	5395 Thk.	1	
	58801580	5405 Thk.	1	
	58801598	5435 Thk.	1	
	58801606	5485 Thk.	1	
11	58800624	Bearing Cup (Pinion Inner)	1	
12	59349944	Bearing Cone (Pinion Inner)	1	
13	58800640	Bearing Assembly (Straight Roller)	1	
14	59489930	Steering Cylinder Socket Assembly	*	
15	59483511	Cotter Pin (One Per Socket Assembly)	2	
	37.03311	Commanda Com	-	



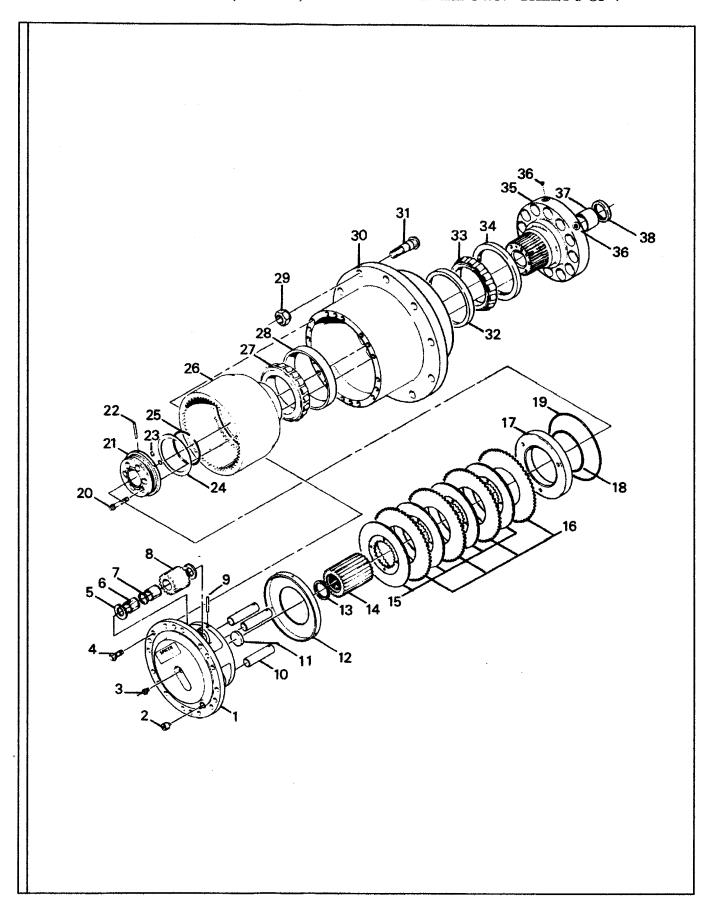
#### AXLE ASSEMBLY (59450502) - INTERNAL BREAKDOWN - SHEET 1 OF 4

ITEM	COMM. NO.	DESCRIPTION  BOM 59450502	QTY	DIMENSIONS/NOTES
16		Shim (Pinion Bearing Retainer Position)		· · · · · · · · · · · · · · · · · · ·
-	58766023	-Shim (.10)	A/R	
-	58800665	-Shim (.030)	A/R	
_	58800673	-Shim (.005)	A/R	
17	58801309	Ring Gear and Pinion Assembly	1	
18	58785841	Lock Nut (Steering Axle Only)	10	
19	59564153	Flat Washer	10	
20	58785882	Carrier Sub-Assembly and Cap	1	
		(Steering Axle Only)		
22	58800616	Adjusting Ring (Differential)	2	
23	58800624	Bearing Cup (Differential)	2	
24	58800582	Bearing Cone (Differential)	2	
26	58800509	Differential Case Assembly Kit	1	
27	58800533	Thrust Washer (Differential Gear)	2	
28	58800541	Thrust Washer (Differential Pinion)	4	
29	58800566	Differential Pinion	4	
30	58800525	Differential Shaft	1	
31	58800574	Differential Gear	2	
32	58800632	Solid Rivet	14	
33	58800517	Hex Bolt	8	
34	59488841	Bearing Adjuster Ring Lock	2	
35	59526426	Pipe Recessed Drive Plug	1	
		(Magnetic Drain)		
36	58800657	Cotter Pin	2	
37		Stud (Steering Axle Only)		
	58801614	-2.00" O.A.L.	6	
	58801622	38" O.A.L.	2	
	58801630	81" O.A.L.	2	
38	59564021	Pipe Recessed Drive Plug	1	
39	59525568	Vent	1	



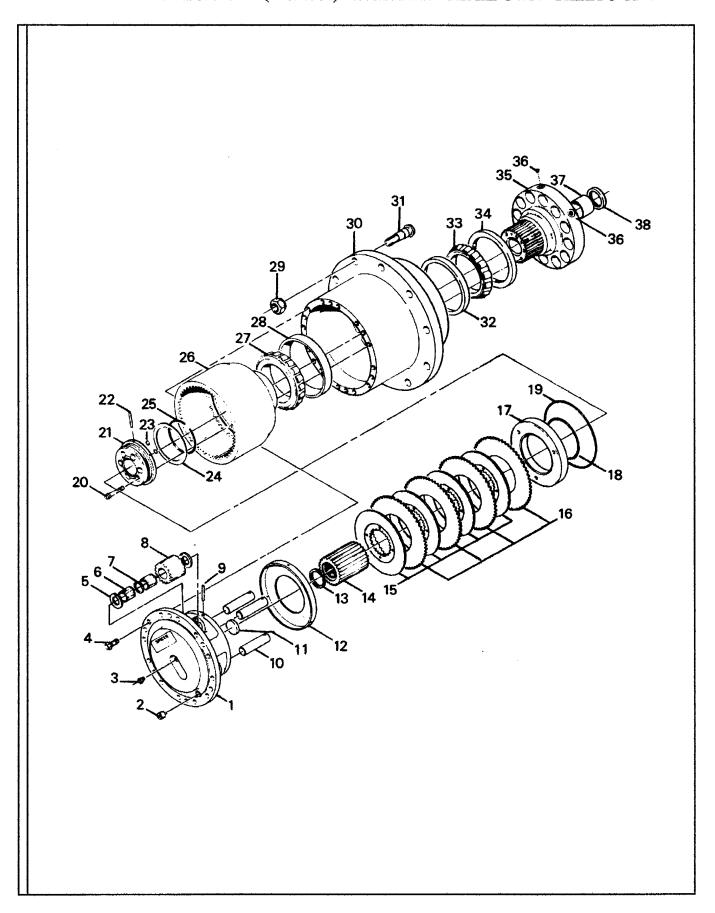
### AXLE ASSEMBLY (59450502) - INTERNAL BREAKDOWN - SHEET 2 OF 4

TEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
		BOM 59450502		
-		Outer End	1	
1	59486852	Steering Knuckle (L.F./R.R.)	1	•
-	59486845	Steering Knuckle (R.F./L.R.)	$\mid 1 \mid$	
2	58785833	-H.H.C.S. (.50)	8	
3	59483446	-Cone Bearing (King Pin Cap)	2	
4	59483412	-Shim (.005)(King Pin Cap)	A/R	
-	59490888	-Shim (.010)(King Pin Cap)	A/R	
5	59483453	-King Pin Cap	2	
6	58785858	-Grease Fitting	2	
7	58800707	-Stud (Spindle Mounting with Disc Brake)	12	
8	58800749	-Tie Rod	1	
-	58774225	-Socket (L.F./R.R.)	1	16" Fine Thread
-	58774233	-Socket (R.F./L.R.)	1	12" Coarse Thread
9	59483511	Cotter Pin (One Per Socket Assembly)	6	
10	58774241	Steering Cylinder Socket Assembly	1	
11	58784570	-Deflector	1	
12	58784588	-Spindle Yoke Outer Shaft	1	
13	58784539	-U-Joint Cross Assembly	1	
14	58800699	-Inner Yoke Shaft (R.H.)	1	
15	58784562	-Deflector	1	
16	58767997	-Seal Oil	1	
17	59496927	Bushing	1	
18	59476002	Grease Retainer	2	
19	59483438	Cup Bearing	2	
20	59496935	King Pin Seal	2	
21	58800681	Steering Axle Housing	1	



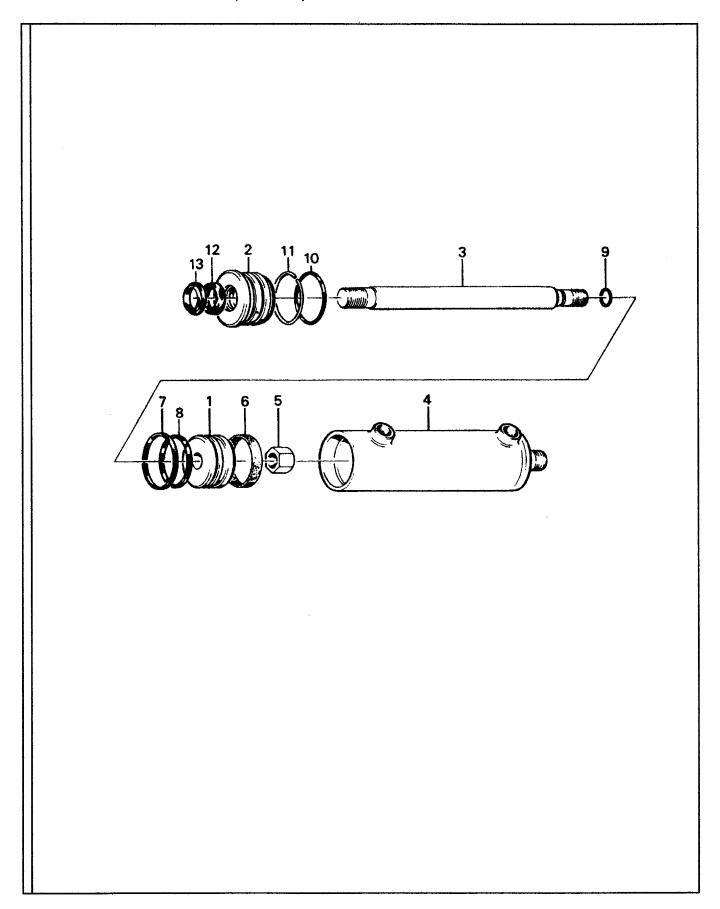
### AXLE ASSEMBLY (59450502) - INTERNAL BREAKDOWN - SHEET 3 OF 4 $\,$

TEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
		BOM 59450502		
-	59022038	Wheel End	1	
•	58974890	Planetary Gear Assembly	1	Includes Items 1 - 12
1	59487983	Drive Planetary Flange	1	Included in Gear Assy.
2	59526426	Pipe Recessed Drive Plug (Magnetic)	1	Included in Gear Assy.
3	59498188	Vent	1	Included in Gear Assy.
4	59490334	Hex Self-Locking Screw	18	Included in Gear Assy.
5	59526079	Keyed Washer	6	Included in Gear Assy.
6	59619502	Needle Roller Bearing	150	Included in Gear Assy.
7	59526087	Planet Gear Washer	3	Included in Gear Assy.
8	59488866	Spur Planet Gear	3	Included in Gear Assy.
9	59490714	Roll Pin	3	Included in Gear Assy.
10	59498212	Planet Fear Shaft	3	Included in Gear Assy.
11	59564229	Drive Flange Washer	1	Included in Gear Assy.
12	59487991	Plate-Lining Stop	1	Included in Gear Assy.
13	58800772	Snap Ring (Steering Axle)	1	- -
14	59487553	Spur Gear (Steering Axle)	1	
15	59438952	Friction Disc Assembly	4	
16	58773763	Plate-Lining Stop	4	
17	59490722	Piston	1	
18	59488106	O-Ring	1	
19	59486936	O-Ring	1	
20	59488890	Cap Screw (12 Pt.)	6	
21	58800806	Bearing Adjusting Ring Retainer	1	
22	59497024	Brake Tubing	1	
23	59438937	O-Ring	2	
24	59490565	Adjusting Shim (.010)	A/R	
	59490599	Adjusting Shim (.011)	A/R	
	59490607	Adjusting Shim (.012)	A/R	•
	59490615	Adjusting Shim (.013)	A/R	
	59490623	Adjusting Shim (.014)	A/R	
<del></del>	59490516	Adjusting Shim (.015)	A/R	
<del></del>	59490573	Adjusting Shim (.020)	A/R	
<u></u>	59490581	Adjusting Shim (.030)	A/R	
25	59488098	O-Ring	1	
26	59487561	Planetary Gear	1	
27	58800780	Cone Bearing (Outer)	1	
28	59490839	Cup Bearing (Outer)	1	
29	58800764	Wheel Mounting Nut	10	



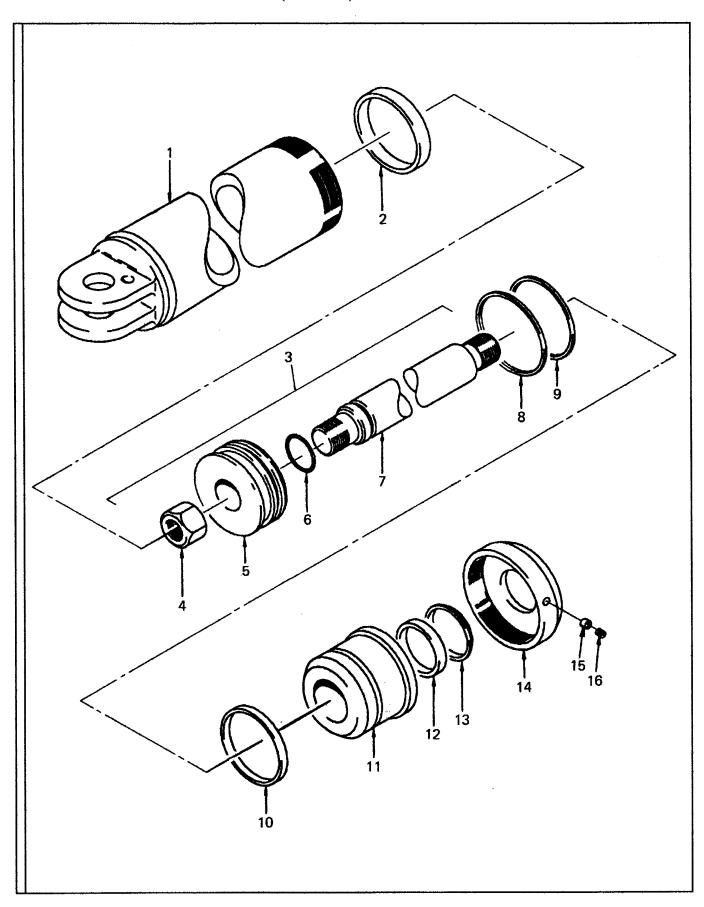
## AXLE ASSEMBLY (59450502) - INTERNAL BREAKDOWN - SHEET 3 OF 4

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
TILAVI	COMM. NO.	BOM 59450502		
30	58800822	Planetary Hub	1	
31	58800814	Wheel Mounting Bolt	10	
32	59487975	Cup Bearing (Inner)	1	
33	59486878	Cone Bearing (Inner)	1	
34	59438945	Oil Seal	1	
35	58800855	Wheel Spindle (Steering Axle)	1	
36	59488882	Insert Seat	2	
37	59564120	Spindle Bushing (Steering Axle)	1	
38	59490896	Oil Seal (Steering Axle)	1	
39	59487942	Bleeder (Not Shown)	1	
40	59487959	Fitting, Brake Line Hose (Not Shown)	12	
		Note: Items 39 and 40 are installed in Item 35.		



### AXLE ASSEMBLY (59450502) - INTERNAL BREAKDOWN - SHEET 4 OF 4

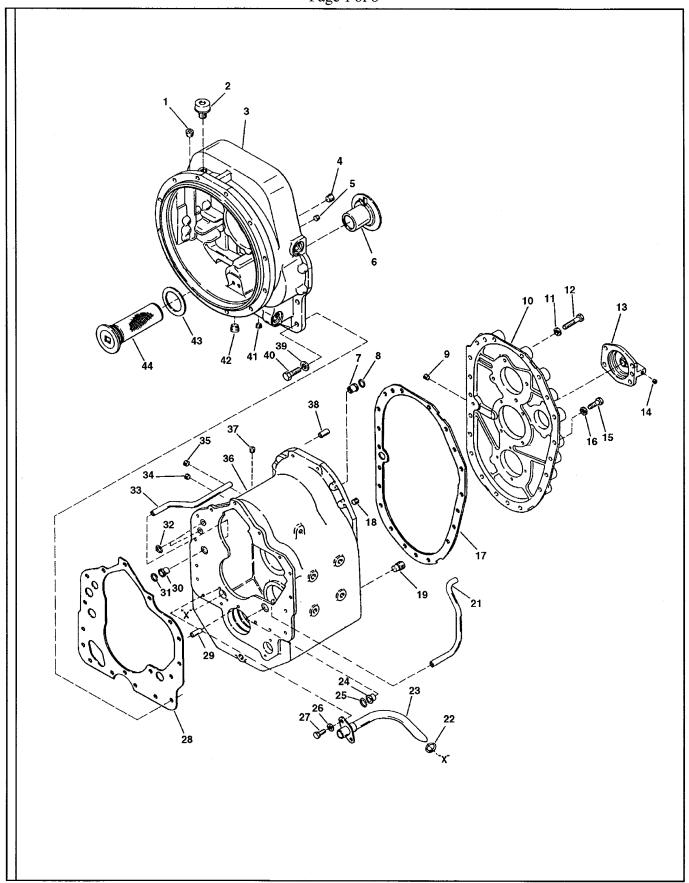
TEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
		BOM 59450502		
-	58792136	Steering Cylinder	1	
-	59484246	-Seal Kit (Includes items 1 thru 8)	1	
1	N.S.S.	-Wear Strip	1	
2	N.S.S.	-Seal,Slipper	1	
3	N.S.S.	-O-Ring	1	
4	N.S.S.	-Static Rod Seal	1	
5	N.S.S.	-Static Gland Seal	1	
6	N.S.S.	-Lock Wire	1	
7	N.S.S.	-Rod Seal U-Cup	1	
8	N.S.S.	-Rod Wiper	1	
9	N.S.S	Piston	1	
10	N.S.S.	Gland	1	
11	N.S.S.	Rod	1	
12	N.S.S.	Barrel Assembly	1	
13	N.S.S.	Lock Nut	1	



VR-90B

### AXLE CYLINDER (59450122) - INTERNAL BREAKDOWN

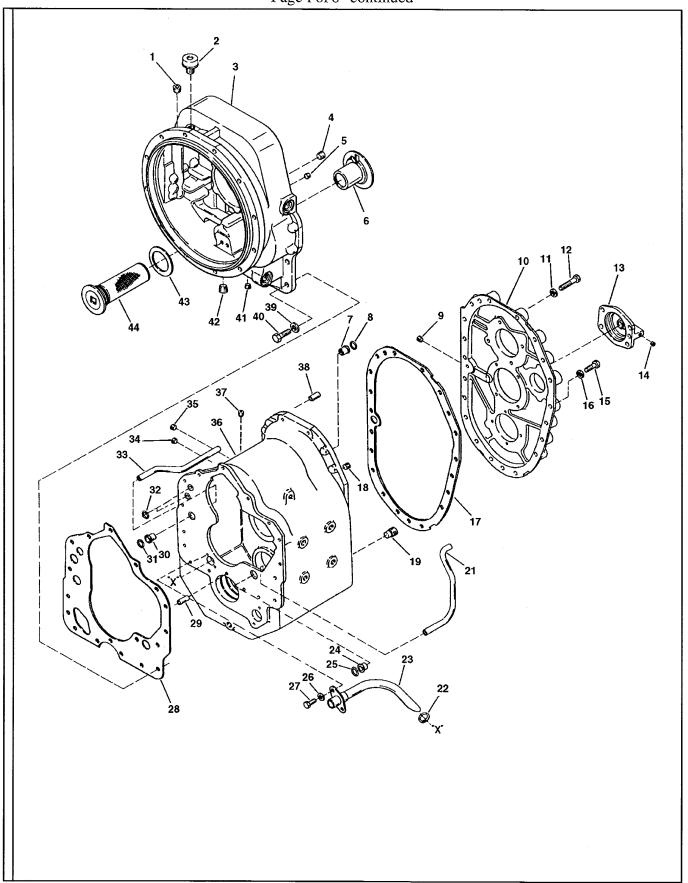
ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
		BOM 59450122		
1	N.S.S.	Barrel	1	
2	N.S.S.	Wear Ring	1	Included with Item A
3	58753971	Rod Assembly (Includes items 11 thru 14)	1	
4	59476432	Nut	1	
5	59446344	Piston	1	
6	58753989	O-Ring (Included with item 2)	1	
7	58753997	Rod	1	
8	N.S.S.	Piston Seal	1	Included with Item A
9	N.S.S.	O-Ring	1	Included with Item A
10	N.S.S.	Gland Static Seal	1	Included with Item A
11	59476572	Gland	1	Included with Item 3
12	N.S.S.	Rod Seal	1	Included w/ Items 3 & A
13	N.S.S.	Rod Wiper	1	Included w/ Items 3 & A
14	59476580	Collar	1	Included with Item 3
15	59477026	Nylon Insert	1	
16	59477018	Set Screw	1	
Α	59439141	Seal Kit (Includes items 2, 8, 9, 10, 12, and 13)	1	
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Page 1 of 8

ITEM	COMM. NO.	Page 1 of 8  DESCRIPTION	QTY	DIMENSIONS/NOTES
		BOM 59111872		
_	_	Converter Housing, Transmission Case, and		
		Rear Cover Group		
1	51009108	Pipe Plug	1	
2	51009116	Air Breather	1	
3	59481275	Converter Housing	1	
4	59481309	Pipe Plug	1	
5	51009132	Pipe Plug	1	
6	50959949	Converter Housing Sleeve	1	
7	50755024	Tube Sleeve	1	
8	50847425	Pressure Tube O-Ring	1	
9	51009132	Cover Pipe Plug	1	
10	59481317	Rear Cover and Plug Assembly (Includes Item 9)	1	
11	58885989	Rear Cover to Case Screw Lockwasher	10	
12	58885997	Rear Cover to Case Screw	10	
13	59481325	Low Shaft Rear Bearing Cap Assembly	1	
		(Includes Item 14)		
14	59481333	Plug	1	
15	58885997	Rear Cover to Case Screw	10	
16	58885989	Rear Cover to Case Screw Lockwasher	10	
17	59481341	Rear Cover to Case Gasket	1	
18	50754753	Pipe Plug	1	
19	59121152	Magnetic Drain Plug	2	
21	59481358	Clutch Lube Tube	1	
22	51009165	Suction Line O-Ring	1	
23	59481366	Suction Tube Assembly	1	
24	51009181	Tube Sleeve	1	
25	50847425	Pressure Tube O-Ring	1	
26	50756337	Retainer Screw Lockwasher	2	
27	50753920	Suction Line Retainer Screw	2	
28	59481374	Converter Housing to Transmission Case Gasket	1	
29	50754878	Dowel	1	
30	50755024	Tube Sleeve	$\mid 1 \mid$	
31	50847425	Pressure Tube O-Ring	1	
32	59481382	Clutch Pressure O-Ring	2	
33	50959964	Low Speed Clutch Pressure Tube	1	
34	50754753	Pipe Plug	1	
35	51009157	Pipe Plug	1	

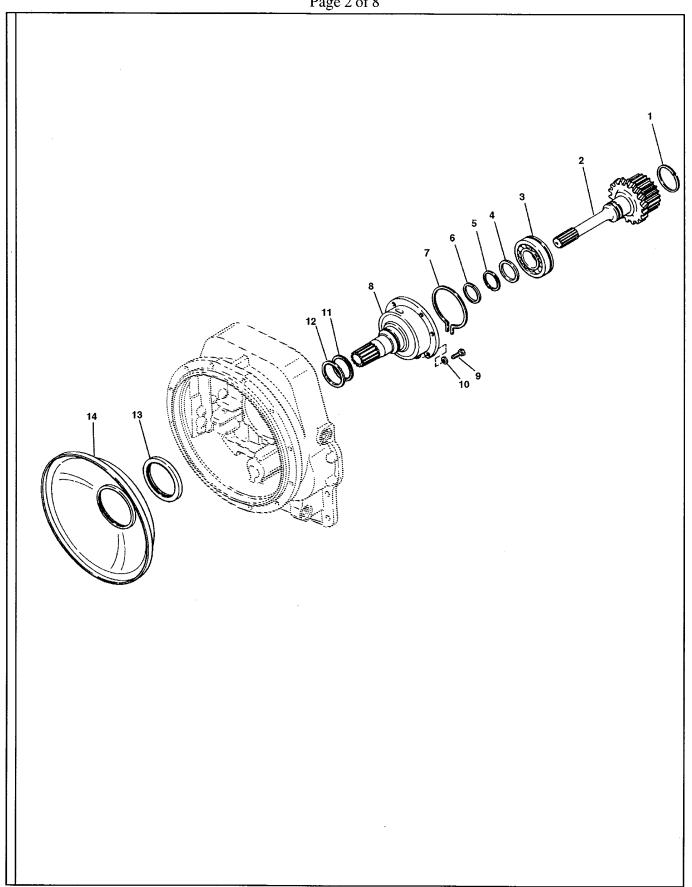
### TRANSMISSION - (59111872) - INTERNAL BREAKDOWN Page 1 of 8 - continued



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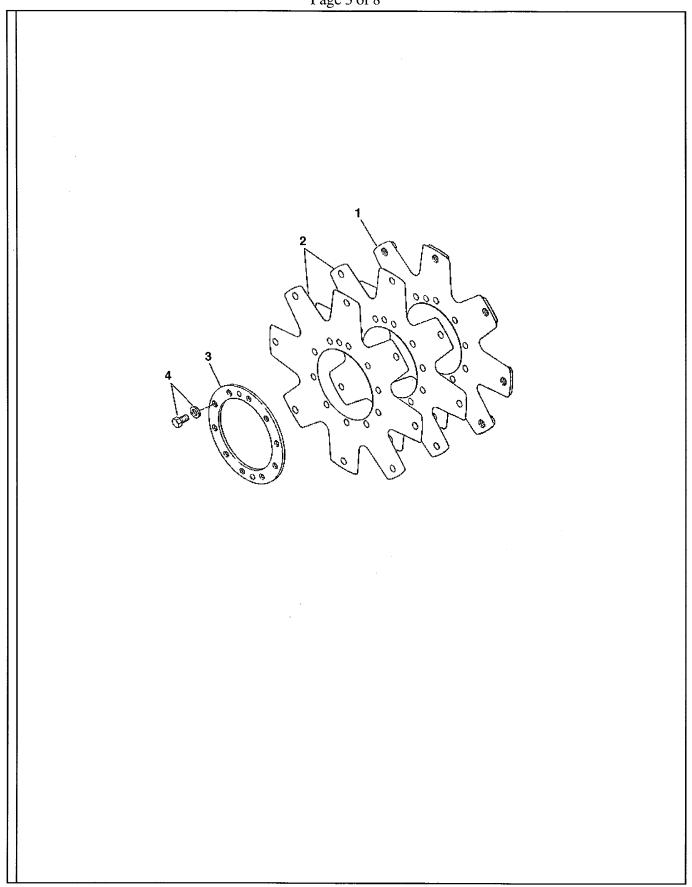
Page 1 of 8 - continued

ITEM	COMM. NO.	Page 1 of 8 - continued  DESCRIPTION	QTY	DIMENSIONS/NOTES
			<b>L</b>	
36	59481390	Transmission Case Assembly	1	
		(Includes Items 7,21,22,23,24,26,27,30,33)		
37	50801257	Dipstick Hole Plug	1	
38	50754878	Case to Cover Dowel Pin	2	
39	58885989	Housing to Case Screw Lockwasher	16	
40	59121160	Housing to Case Screw	16	
41	51009132	Pipe Plug	1	
42	59481309	Pipe Plug	1	
43	50848373	Screen Assembly Gasket	1	
44	50756055	Screen Assembly	1	·
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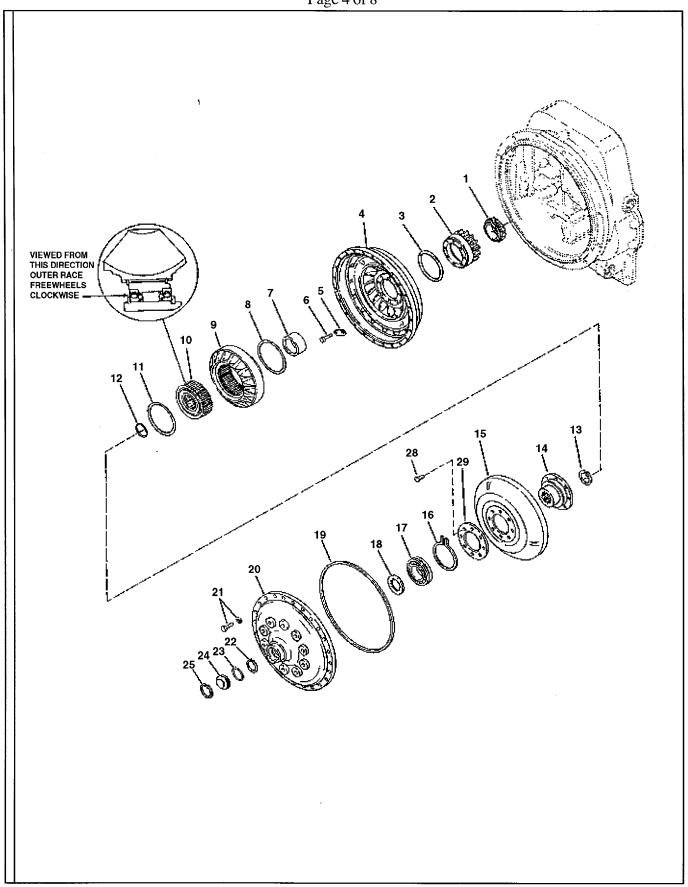
Page 2 of 8

COMM. No.   DESCRIPTION   OTY   DIMENSIONS/NOTES	Page 2 of 8						
Group   1   59481218   Retaining Ring - (Included in Item 2)   1   1   2   59481416   Turbine Shaft and Retaining Ring Assembly   1   3   51008969   Turbine Shaft Bearing   1   1   4   50958388   Bearing Locating Washer   1   1   1   1   1   1   1   1   1	<u>TEM</u>	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES		
Group   1   59481218   Retaining Ring - (Included in Item 2)   1   1   2   59481416   Turbine Shaft and Retaining Ring Assembly   1   3   51008969   Turbine Shaft Bearing   1   1   4   50958388   Bearing Locating Washer   1   1   1   1   1   1   1   1   1	-	_	Turbine Shaft Stator Suport, and Oil Baffle				
2       59481416       Turbine Shaft and Retaining Ring Assembly       1         3       51008969       Turbine Shaft Bearing       1         4       50958388       Bearing Locating Washer       1         5       50959519       Bearing Retaining Ring       1         6       50959527       Piston Ring       1         7       50958362       Bearing Snap Ring       1         8       58886011       Stator Support       1         9       59481440       Stator Support Screw       6         10       50756345       Stator Support Screw Lockwasher       6         11       50959568       Piston Ring Expander Spring       1         12       50959550       Piston Ring       1         13       50959592       Oil Seal       1							
3       51008969       Turbine Shaft Bearing       1         4       50958388       Bearing Locating Washer       1         5       50959519       Bearing Retaining Ring       1         6       50959527       Piston Ring       1         7       50958362       Bearing Snap Ring       1         8       58886011       Stator Support       1         9       59481440       Stator Support Screw       6         10       50756345       Stator Support Screw Lockwasher       6         11       50959568       Piston Ring Expander Spring       1         12       50959550       Piston Ring       1         13       50959592       Oil Seal       1	1	59481218	Retaining Ring - (Included in Item 2)	1			
4       50958388       Bearing Locating Washer       1         5       50959519       Bearing Retaining Ring       1         6       50959527       Piston Ring       1         7       50958362       Bearing Snap Ring       1         8       58886011       Stator Support       1         9       59481440       Stator Support Screw       6         10       50756345       Stator Support Screw Lockwasher       6         11       50959568       Piston Ring Expander Spring       1         12       50959550       Piston Ring       1         13       50959592       Oil Seal       1	2	59481416	Turbine Shaft and Retaining Ring Assembly	1			
5       50959519       Bearing Retaining Ring       1         6       50959527       Piston Ring       1         7       50958362       Bearing Snap Ring       1         8       58886011       Stator Support       1         9       59481440       Stator Support Screw       6         10       50756345       Stator Support Screw Lockwasher       6         11       50959568       Piston Ring Expander Spring       1         12       50959550       Piston Ring       1         13       50959592       Oil Seal       1	3	51008969	Turbine Shaft Bearing	1			
6       50959527       Piston Ring       1         7       50958362       Bearing Snap Ring       1         8       58886011       Stator Support       1         9       59481440       Stator Support Screw       6         10       50756345       Stator Support Screw Lockwasher       6         11       50959568       Piston Ring Expander Spring       1         12       50959550       Piston Ring       1         13       50959592       Oil Seal       1	4	50958388		1			
7       50958362       Bearing Snap Ring       1         8       58886011       Stator Support       1         9       59481440       Stator Support Screw       6         10       50756345       Stator Support Screw Lockwasher       6         11       50959568       Piston Ring Expander Spring       1         12       50959550       Piston Ring       1         13       50959592       Oil Seal       1	5	50959519	Bearing Retaining Ring	1			
8       58886011       Stator Support       1         9       59481440       Stator Support Screw       6         10       50756345       Stator Support Screw Lockwasher       6         11       50959568       Piston Ring Expander Spring       1         12       50959550       Piston Ring       1         13       50959592       Oil Seal       1	6	50959527	Piston Ring	1			
9       59481440       Stator Support Screw       6         10       50756345       Stator Support Screw Lockwasher       6         11       50959568       Piston Ring Expander Spring       1         12       50959550       Piston Ring       1         13       50959592       Oil Seal       1	7	50958362		1			
10       50756345       Stator Support Screw Lockwasher       6         11       50959568       Piston Ring Expander Spring       1         12       50959550       Piston Ring       1         13       50959592       Oil Seal       1	8	58886011	Stator Support	1			
10       50756345       Stator Support Screw Lockwasher       6         11       50959568       Piston Ring Expander Spring       1         12       50959550       Piston Ring       1         13       50959592       Oil Seal       1	9	59481440	<del></del>	6			
12     50959550     Piston Ring     1       13     50959592     Oil Seal     1	10	50756345		6			
12     50959550     Piston Ring     1       13     50959592     Oil Seal     1	11	50959568		1			
13   50959592   Oil Seal   1		50959550		1			
14   50959600   Oil Baffle Assembly   1	13	50959592	-	1			
	14	50959600	Oil Baffle Assembly	1			
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I.13.8 VR-90B

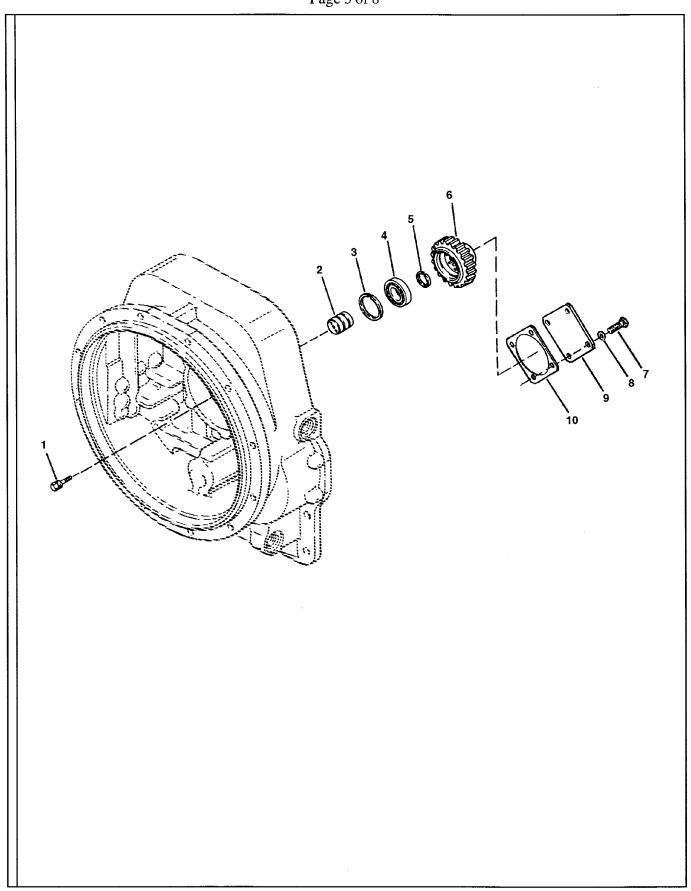
ITEM	COMM.NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
-	_	Drive Plate Group		
1	59481457	Driveplate Assembly Kit	1	
}		(Includes Items 2,3,and 4)		
2	N.S.S.	Driveplate	1	
3	58886029	Driveplate Backing Ring	1	
4	58886284	Driveplate Mounting Screw	10	
-	58886292	-Driveplate Mounting Screw Lockwasher	10	
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I.13.10 VR-90B

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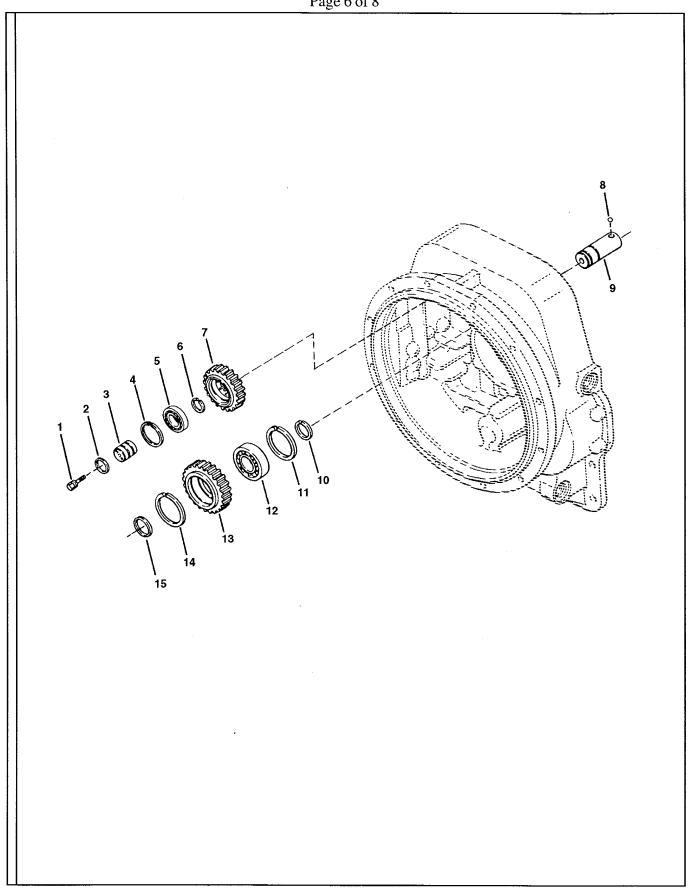
ITEM	COMM. NO.	Page 4 of 8  DESCRIPTION	QTY	DIMENSIONS/NOTES
1 1 1514	COMMITTO.	DESCRIPTION	VII	DIMENSIONS/NOTES
-	_	Torque Converter Assembly		
1	50959675	Impeller Hub Gear Bearing	1 1	
2	50959683	Impeller Hub Gear	1	
3	50959691	Impeller Hub O-Ring	1	
4	59050450	Impeller	1	
5	50959717	Impeller to Hub Screw Lock Tab	4	
6	59481580	Impeller to Hub Screw	8	
7	59481465	Reaction Member Spacer	1	
8	59481473	Freewheel Outer Race Snap Ring	1	
9	59481481	Reaction Member	1 1	
10	59481523	Freewheel Assembly	1	
11	59481473	Freewheel Outer Race Snap Ring	1	
12	58886037	Inner Race Retaining Ring	1	
13	58886045	Turbine Retaining Ring	1	
14	59481549	Turbine Hub		
15	59481556	Turbine		
16	50959774	Turbine Hub Bearing Locating Ring	1	
17	50959782	Turbine Hub Bearing	1	
18	50959790	Bearing Retaining Washer	1 1	
19	50847490	Impeller to Cover O-Ring	1	•
20	59481564	Impeller Cover (Includes Item 25)	1	
21	59481440	Impeller to Cover Screw	24	
-	50756345	-Impeller to Cover Screw Lockwasher	24	
22	N.S.S.	Turbine Retaining Ring	1	
23	59121178	Impeller Cover Bore Plug O-Ring	1	
24	50959824	Bore Plug	1	
25	58886052	Bore Plug Retaining Ring	1	
28	N.S.S.	Turbine to Hub Screw	12	
29	N.S.S.	Turbine to Hub Screw Ring	1	



I.13.12 VR-90B

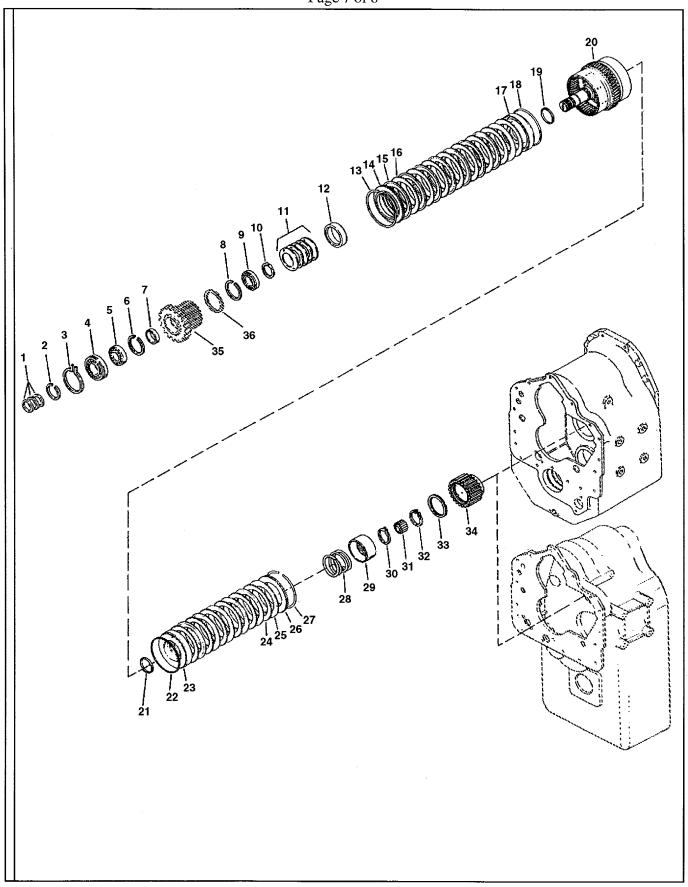
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		Page 5 of 8		
TEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
		Auxilliary Pump Drive Parts Group	:	
1	N.S.S.	Bearing Support Screw	2	
-	N.S.S.	-Bearing Suport Screw Lockwasher	$\begin{vmatrix} 2 \\ 2 \end{vmatrix}$	
2	50958263	Auxiliary Pump Drive Bearing Support		
3	50958305	Bearing Retaining Ring	$\begin{vmatrix} 1 \\ 1 \end{vmatrix}$	
4	50958321	Pump Drive Gear Bearing		
5	50958255	Bearing Locating Ring		
6	50959873	Auxiliary Pump Drive Gear		
7	N.S.S.	Pump Mtg. Cover Capscrew	2	
8	N.S.S.	Pump Mtg. Cover Capscrew Lockwasher	2	
9	N.S.S.	Pump Mtg. Cover		
10	N.S.S.	Pump Mft. Cover Gasket		
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I.13.14 VR-90B

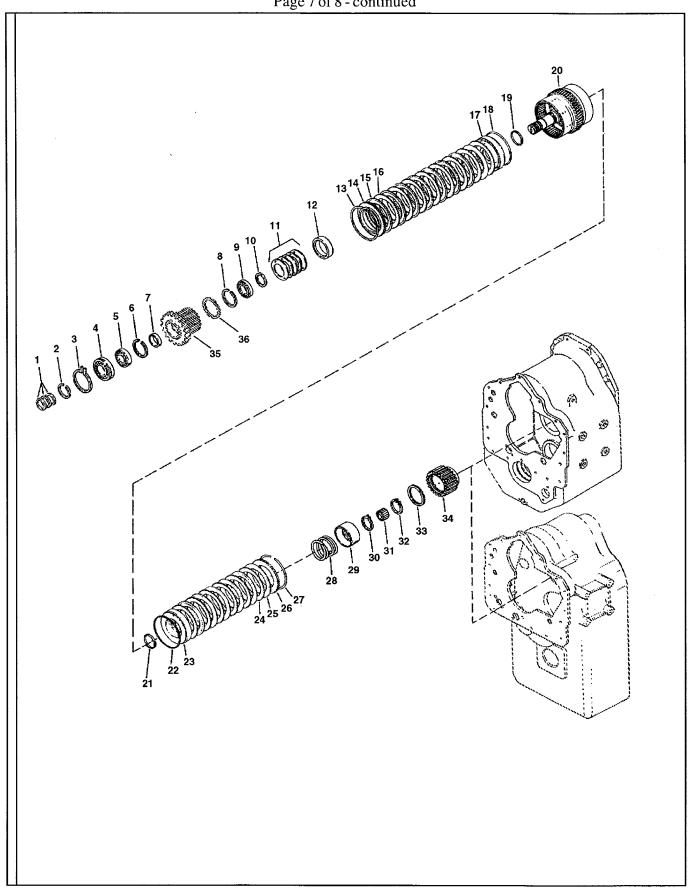
		Page 6 of 8		
ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
		Charging Pump Drive Group		
1	N.S.S.	Bearing Support Screw	2	
_	N.S.S.	-Bearing Support Screw Lockwasher	$\begin{bmatrix} 2 \\ 2 \end{bmatrix}$	
2	50958255	Bearing Locating Ring		
3	50958263	Pump Drive Bearing Support		
4	50958271	Bearing Retaining Ring		
5	50958289	Pump Drive Gear Bearing	1	
6	50958255	Bearing Locating Ring		
7	50958297	Pump Drive Gear		
8	N.S.S.	Stub Shaft Lock Ball		
9	50958339	Idler Gear Stub Shaft		
10	N.S.S.	Bearing Locating Ring		
11	50958305	Bearing Retaining Ring		
12	50958321	Idler Stub Shaft Bearing		
13	50958313	Pump Drive Idler Gear	1	
14	N.S.S.	Idler Gear Bearing Retaining Ring	1 1	
15	N.S.S.	Idler Gear Bearing Locating Ring	1	
		•		



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ITEM	COMM.NO.	Page 7 of 8  DESCRIPTION	QTY	DIMENSIONS/NOTES
		Reverse and 2nd Shaft Group		
1	59050294	Reverse and 2nd Shaft Piston Ring	3	
-	N.S.S.	Piston Ring Expander Spring	3	
2	58886086	Front Bearing Retaining Ring	1	
3	50755446	Front Bearing Snap Ring	1	
4	50755065	Reverse and 2nd Shaft Front Bearing	1	
5	50848431	Clutch Driven Gear Bearing	1	
6	50960186	Bearing Retaining Ring	1	
7	50960194	Clutch Driven Gear Bearing Spacer	1	
8	N.S.S.	Bearing Retaining Ring	1	
9	N.S.S.	Clutch Driven Gear Bearing	1	
10	50960210	Spring Retainer Snap Ring	1	
11	N.S.S.	Piston Return Belleville Springs Assembly	1	
12	50960236	Piston Return Spring Spacer	1	
13	N.S.S.	Backing Plate Snap Ring	1	
14	N.S.S.	Clutch Disc Backing Plate	1	
15	N.S.S.	Clutch Inner Disc	8	
16	N.S.S.	Clutch Outer Disc	8	
17	N.S.S.	Clutch Piston	1	
18	N.S.S.	Outer Clutch Piston Seal	1	
19	N.S.S.	Inner Clutch Piston Seal	1	
20	59481622	Reverse and 2nd Shaft, Drum and Plug Assembly	1	
21	N.S.S.	Inner Clutch Piston Seal	1	
22	N.S.S.	Outer Clutch Piston Seal	1	
23	N.S.S.	Clutch Piston	1	
24	N.S.S.	Clutch Outer Disc	6	
25	N.S.S.	Clutch Inner Disc	6	
26	N.S.S.	Clutch Disc Backing Plate	1	
27	N.S.S.	Backing Plate Snap Ring	1	
28	N.S.S.	Piston Return Spring	1	
29	N.S.S.	Spring Retainer	1	
30	N.S.S.	Spring Retainer Snap Ring	1	
31	50960269	Reverse and 2nd Shaft Rear Bearing	1	
32	50960277	2nd Clutch Disc Hub Snap Ring	1	
33	N.S.S.	Retaining Ring	1	
34	59481648	2nd Clutch Disc Hub and Retaining Ring	1	
		Assembly (Includes Item 33)		
		3 ( /		

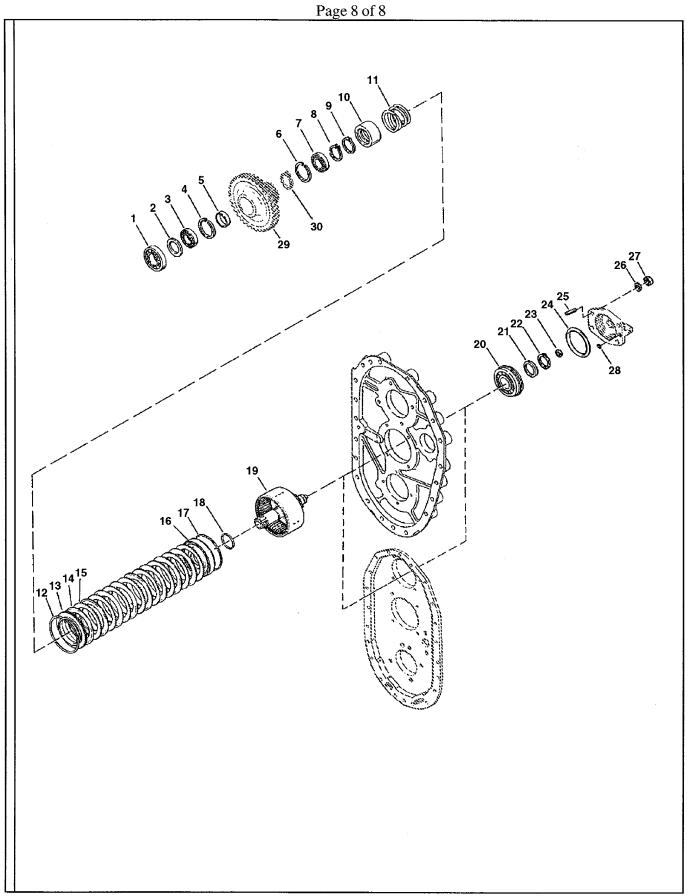
## TRANSMISSION - (59111872) - INTERNAL BREAKDOWN Page 7 of 8 - continued



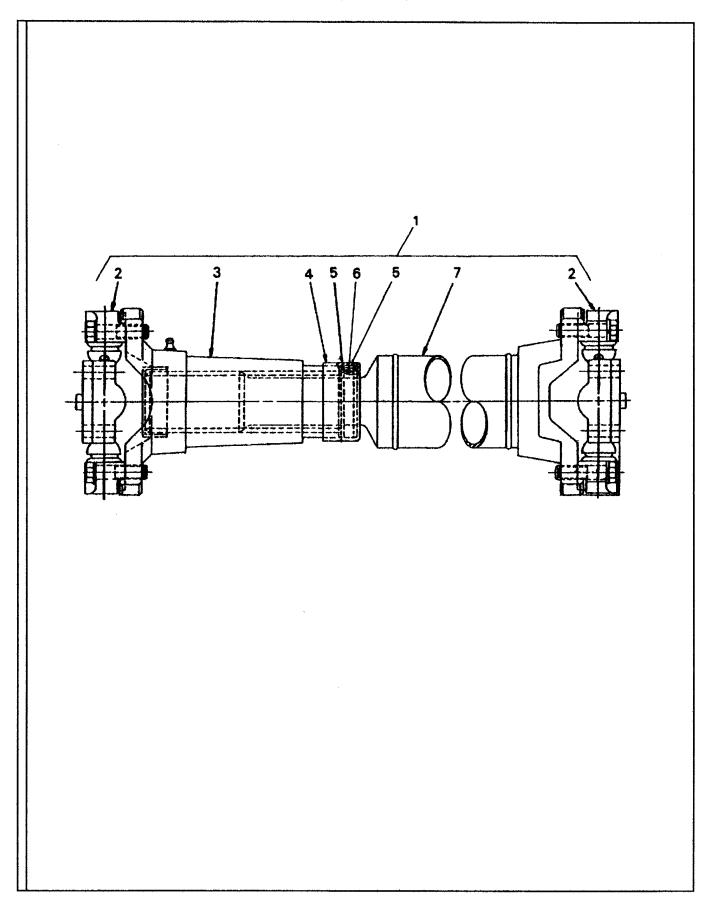
I.13.18 VR-90B

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ITEM	COMM. NO.	Page / of 8 - continued  DESCRIPTION	QTY	DIMENSIONS/NOTES
-	59121186	Reverse Clutch Gear and Retaining Ring	1	
	50404005	Assembly (Includes Item 36)		
-	59481226	Retaining Ring	1	·
	1			
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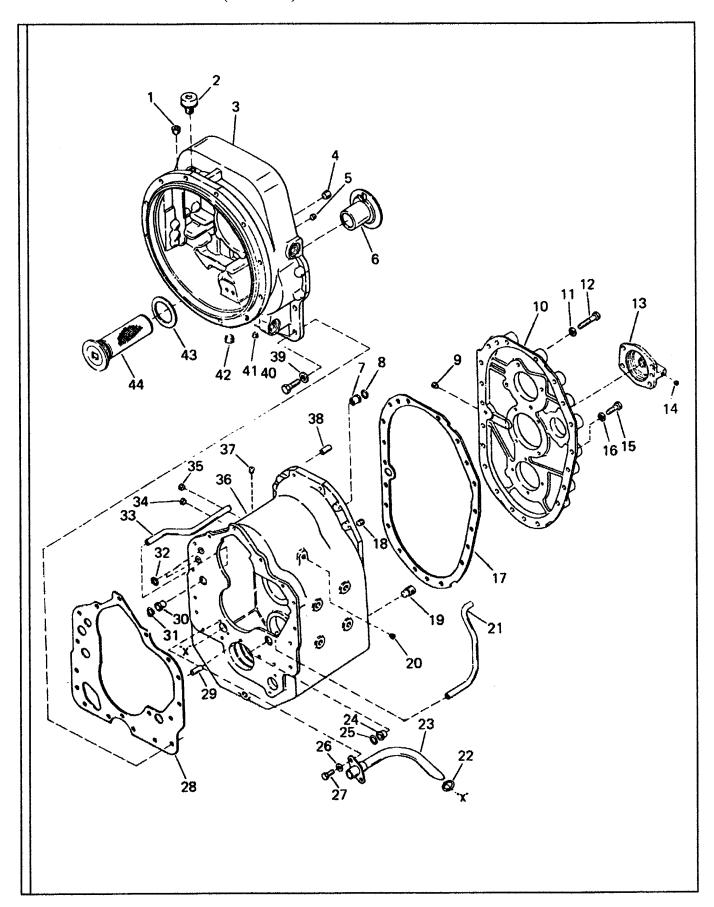


ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
		Low Speed Shaft Group		
1	50960335	Low Speed Clutch Shaft Front Bearing	1 1	
2	50960343	Front Bearing Spacer		
3	50755420	Low Speed Gear Bearing	1	
4	50755107	Low Speed Gear Bearing Locating Ring	1	
5	50960350	Low Speed Gear Spacer	1	
6	N.S.S.	Low Speed Gear Bearing Locating Ring		
7	N.S.S.	Low Speed Gear Bearing	1 1	
8	N.S.S.	Low Speed Gear Bearing Retaining Ring	1	
9	N.S.S.	Spring Retainer Snap Ring	1	
10	N.S.S.	Spring Retainer	1	
11	N.S.S.	Piston Return Spring	1 1	
12	50960665	Backing Plate Snap Ring	1	
13	50960673	Clutch Disc Backing Plate	1	
14	50960681	Clutch Inner Disc	8	
15	50960699	Clutch Outer Disc	8	
16	50960707	Clutch Piston	1	
17	50960715	Outer Clutch Piston Ring	1	
18	50960723	Inner Clutch Piston Seal	1	
19	50960731	Low Clutch Shaft Drum and Bleed	1 1	
		Valve Assembly		
20	51008928	Low Speed Shaft Rear Bearing	1	
21	N.S.S.	Rear Bearing Support Washer	1	
22	N.S.S.	Rear Bearing Retaining Ring	1	
23	50960517	Low Shaft Piston Ring	1	
24	59481408	Rear Bearing Cap O-Ring	1	
25	N.S.S.	Bearing Cap Stud	4	
26	N.S.S.	Bearing Cap Stud Lockwasher	4	
27	N.S.S.	Bearing Cap Stud Nut	4	
28	59481432	Bearing Cap O-Ring	1	
-	59481226	Low Shaft Gear, Hub and Retaining Ring	1	
		Assembly		
-	59481218	Retaining Ring	1 1	



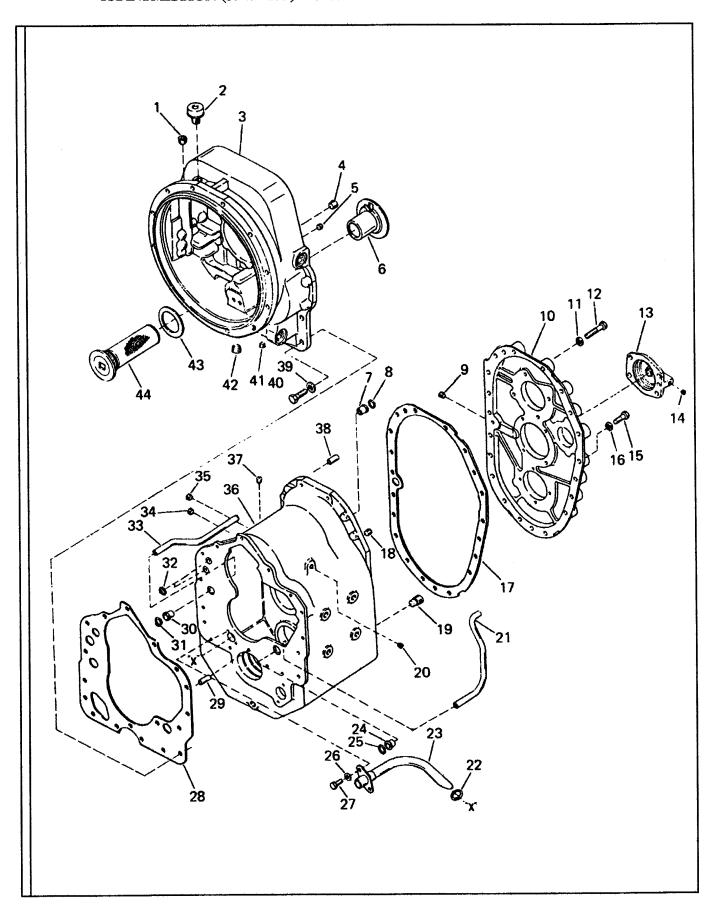
### UNIVERSAL SHAFT ASSEMBLY (59450361) - INTERNAL BREAKDOWN

ІТЕМ	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
		BOM 59450361		
1	59450361	Universal Shaft Assembly	1	Includes Items 2 thru 7
2	59446153	- Cross and Bearing Assembly	2	
3	59446161	- Slip Yoke	1	
4	59446179	- Dust Cap	1	
5	59446187	- Steel Washer	2	
6	59446195	- Felt Washer	1	
7	59446377	- Tubing Assembly	1	
			İ	
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l		VR-90B		I.14.3



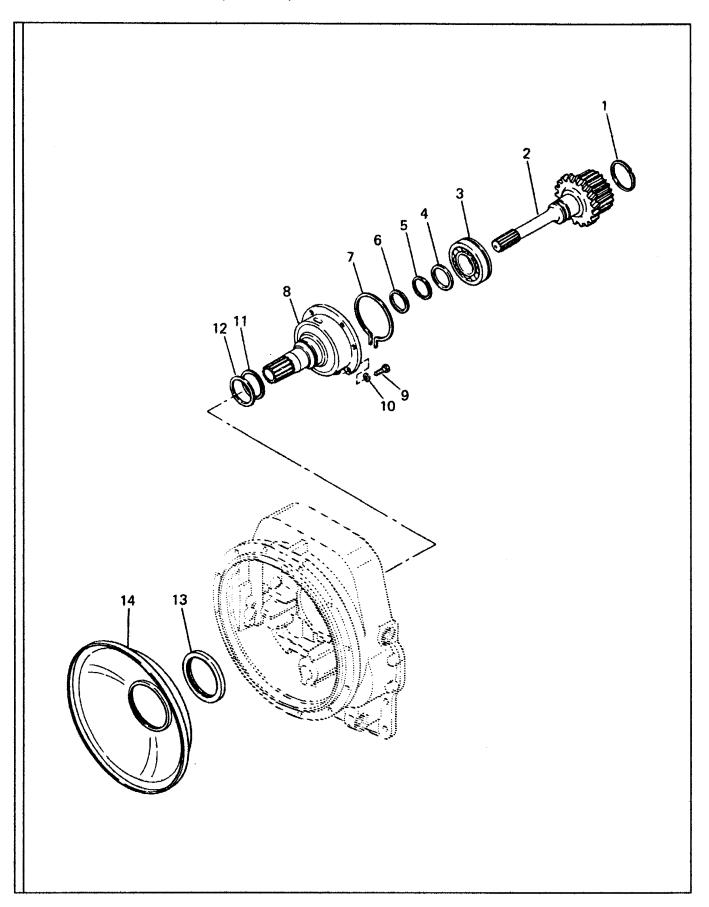
### TRANSMISSION (59494039) - INTERNAL BREAKDOWN SHEET $\,1$ OF 18

ITEM	COMM. NO.	DESCRIPTION  BOM 59494039-SHT. 1	QTY	DIMENSIONS/NOTES
		Converter Housing, Transmission Case, and		
		Rear Cover Group	1	
1	51009108	Pipe Plug	1	
2	51009116	Air Breather	1	
3	59481275	Converter Housing	1	
4	59481309	Pipe Plug	1	
5	51009132	Pipe Plug	1	
6	50959949	Converter Housing Sleeve	1	
7	50755024	Tube Sleeve	1	
8	50847425	Pressure Tube O-Ring	1	
9	51009132	Cover Pipe Plug	1	
10	59481317	Rear Cover and Plug Assembly	1	(Includes item 9)
11	58885989	Rear Cover to Case Screw Lock Washer	10	
12	58885997	Rear Cover to Case Screw	10	
13	59481325	Low Shaft Rear Bearing Cap Assembly	1	(Includes item 14)
14	59481333	Plug	1	(Includes item 13)
15	50753987	Rear Cover to Case Screw	10	
16	58885989	Rear Cover to Case Screw Lock Washer	10	
17	59481341	Rear Cover to Case Gasket	1	
18	58886003	Pipe Plug	1	
19	50754977	Magnetic Drain Plug	2	
21	59481358	Clutch Lube Tube	1	
22	51009165	Suction Line O-Ring	1	
23	59481366	Suction Tube Assembly	1	
24	51009181	Tube Sleeve	1	
25	50847425	Pressure Tube O-Ring	1	
26	50756337	Retainer Screw Lock Washer	2	
27	50753920	Suction Line Retainer Screw	2	
28	59481374	Converter Housing to Trans. Case Gasket	1	
29	50754878	Dowel Pin	1	
30	50755024	Tube Sleeve	1	
31	50847425	Pressure Tube O-Ring	1	
32	59481382	Clutch Pressure O-Ring	2	
33	50959964	Low Speed Clutch Pressure Tube	1	
34	58886003	Pipe Plug	1	
35	51009157	Pipe Plug	1	
36	59481390	Trans. Case Assembly	1	(Includes 7, 21, 22, 23, 24, 26, 27, 30, and 33)



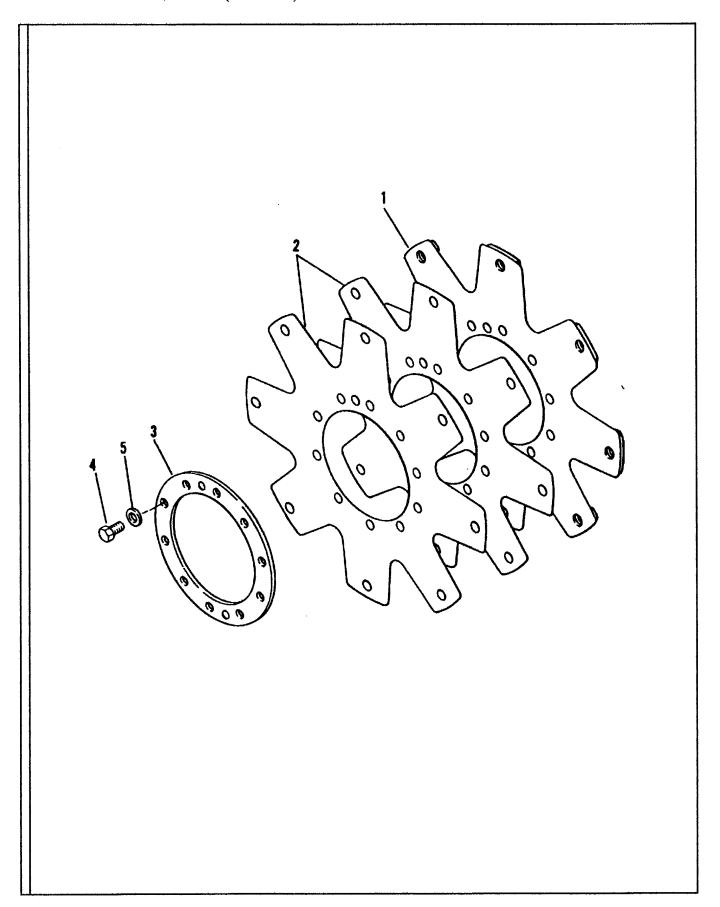
### TRANSMISSION (59494039) - INTERNAL BREAKDOWN SHEET 1 OF 18

TEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
	332277	BOM 59494039-SHT. 1	*	
37	50801257	Dipstick Hole Plug	1	
38	50754878	Case to Cover Dowel Pin	2	
39	58885989	Housing to Case Screw Lock Washer	16	
40	50753961	Housing to Case Screw	16	
41	51009132	Pipe Plug	1	
42	50959931	Pipe Plug	1	
43	50848373	Screen Assembly Gasket	1	
44	50756055	Screen Assembly	1	
		`		



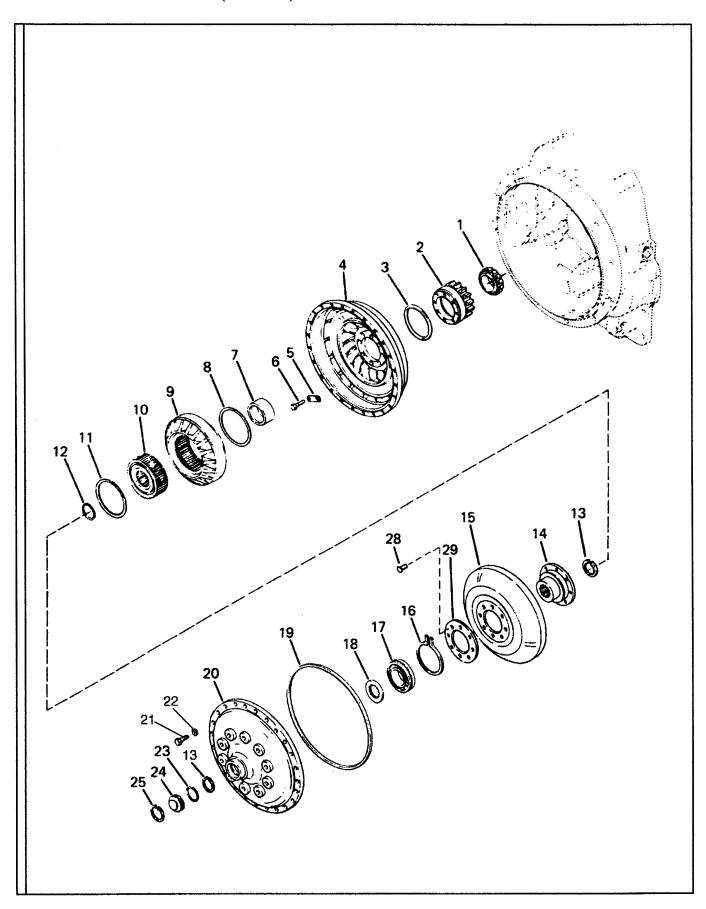
#### TRANSMISSION (59494039) - INTERNAL BREAKDOWN SHEET 2 OF 18

TEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
		BOM 59494039-SHT. 2		
-	<del></del>	Turbine Shaft, Stator Support,	1	
		and Oil Baffle Group		
1	59481218	Retaining Ring	1	
2	59481416	Turbine Shaft and Return Ring Assembly	1	(Includes item 1)
3	51008969	Turbine Shaft Bearing	1	
4	50958388	Bearing Locating Washer	1	
5	50959519	Bearing Retaining Ring	1	
6	50959527	Piston Ring	1	
7	50958362	Bearing Snap Ring	1	
8	58886011	Stator Support	1	
9	59481440	Stator Support Screw	6	
10	50756345	Stator Support Screw Lock Washer	6	
11	50959568	Piston Ring Expander Spring	1	
12	50959550	Piston Ring	1	
13	50959592	Oil Seal	1	
14	50959600	Oil Baffle Assembly	1	



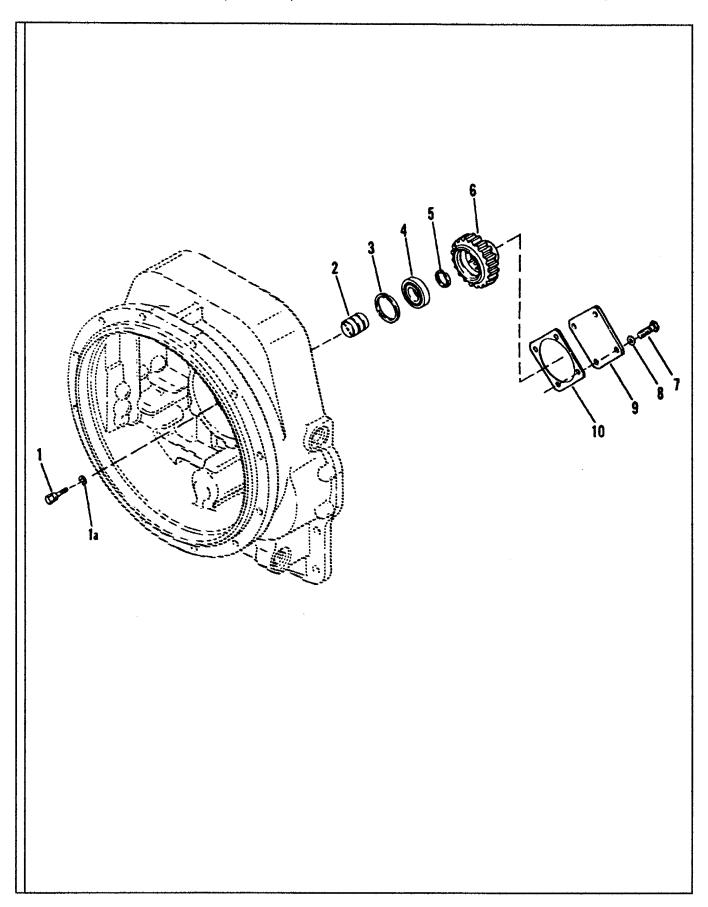
## TRANSMISSION (59494039) - INTERNAL BREAKDOWN SHEET 3 OF 18

TEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
		BOM 59494039-SHT		
-		Drive Plate Group	1	
1	59481457	Drive Plate Assembly Kit	1	
		(includes items 2 thru 5)		
2	N.S.S.	-Drive Plate	1	
3	58886029	-Drive Plate Backing Ring	1	
4	58886284	-Drive Plate Mounting Screw	10	
5	58886292	-Lock Washer	10	
5	30000272	Door Waller		
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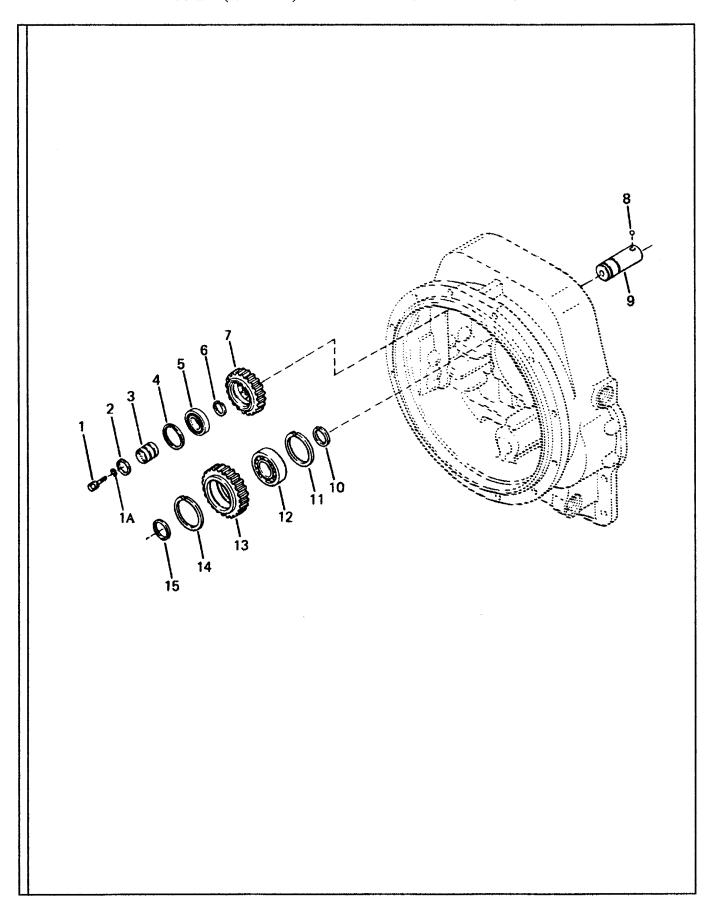
## TRANSMISSION (59494039) - INTERNAL BREAKDOWN SHEET 4 OF 18

ГГЕМ	COMM. NO.	DESCRIPTION	OTES	DIMENCIONICALOPER
T TOTAT	COMINI. NO.	DESCRIPTION  BOM 59494039-SHT. 4	QTY	DIMENSIONS/NOTES
_		Torque Converter Assembly with Freewheel	1	
		and Steel Turbine Hub		
1	50959675	Impeller Hub Gear Bearing	1	
2	50959683	Impeller Hub Gear	1	
3	50959691	Impeller Hub O-Ring	1	
4	59050450	Impeller	1	
5	50959717	Impeller to Hub Screw Lock Tab	4	
6	59481580	Impeller to Hub Screw	8	
7	59481465	Reaction Member Spacer	1	
8	59481473	Freewheel Outer Race Snap Ring	1	·
9	59481481	Reaction Member	1	
10	59481523	Freewheel Assembly	1	
11	59481473	Freewheel Outer Race Snap Ring	1	
12	58886037	Inner Race Retaining Ring	1	
13	58886045	Turbine Retaining Ring	2	
14	59481549	Turbine Hub	1	
15	59481556	Turbine	1	
16	50959774	Turbine Hub Bearing Locating Ring	1	
17	50959782	Turbine Hub Bearing	1	
18	50959790	Bearing Retaining Washer	1	
19	50847490	Impeller to Cover O-Ring	1	
20	59481564	Impeller Cover	1	(Includes item 25)
21	59481440	Impeller to Cover Screw	24	
22	50756345	Lockwasher, Impeller to Cover	24	
23	59481572	Impeller Cover Bore Plug O-Ring	1	
24	50959824	Bore Plug	1	
25	58886052	Bore Plug Retaining Ring	1	
28	59481580	Turbine To Hub Screw	12	
29	59481598	Turbine To Hub Screw Ring	1	
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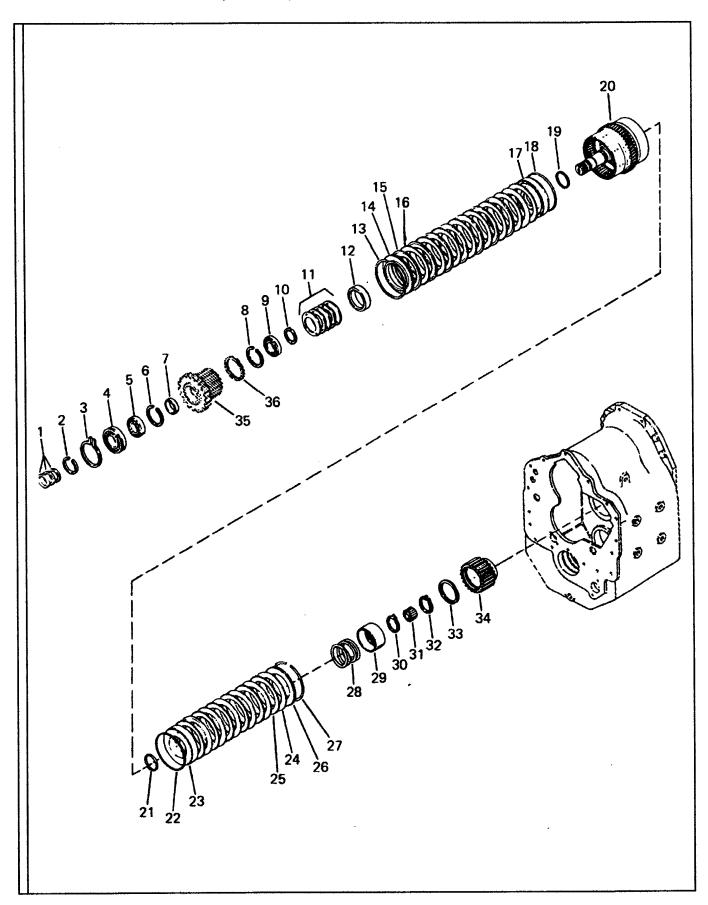
### TRANSMISSION (59494039) - INTERNAL BREAKDOWN SHEET 5 OF 18

TEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
		BOM 59494039-SHT.5		
-	<del></del>	Auxiliary Pump Drive Group	1	
1	58886318	Bearing Support Screw	2	
1 <b>A</b>	58886300	Bearing Support Screw Lock Washer	2	
2	50958263	Auxiliary Pump Drive Bearing Support	1	
3	50958305	Bearing Retaining Ring	1	
4	50958321	Pump Drive Gear Bearing	1	
5	50958255	Bearing Locating Ring	1	
6	50959873	Auxiliary Pump Drive Gear	1	
7	58886060	Cap Screw	2	
8	50756360	Lock Washer	2	
9	58886078	Pump Mounting Cover	1	
10	58886326	Pump Mounting Cover Gasket	1	
		<b>`</b>		
	1			



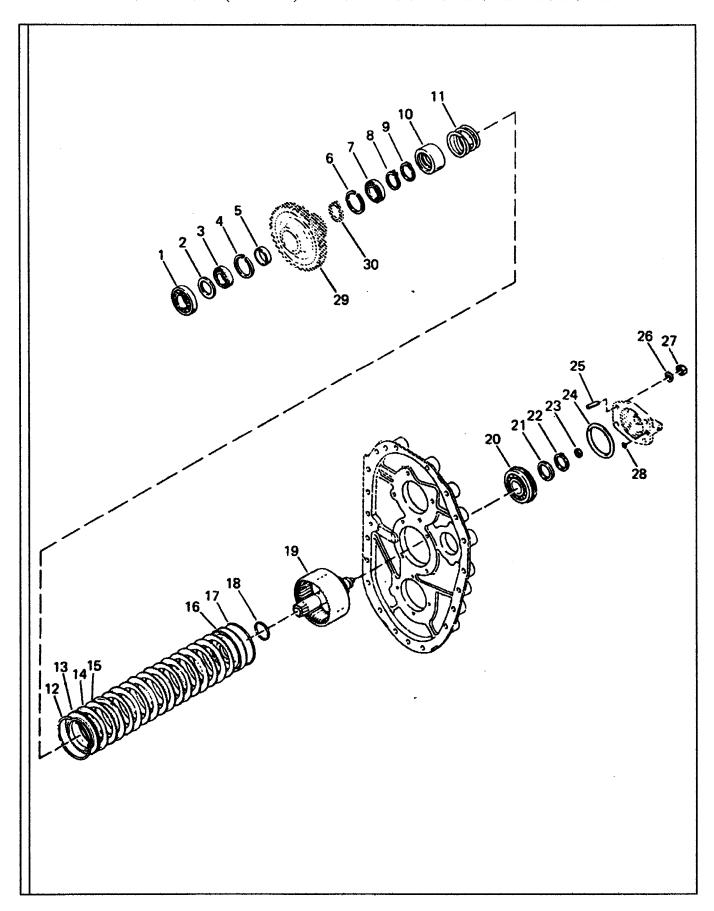
# TRANSMISSION (59494039) - INTERNAL BREAKDOWN SHEET 6 OF 18

TEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
		BOM 59494039-SHT. 6		
-		Charging Pump Drive Group	1	
1	58886318	Bearing Support Screw	2	
1 <b>A</b>	58886300	Bearing Support Screw Lock Washer	2	
2	50958255	Bearing Locating Ring	1	
3	50958263	Pump Drive Bearing Support	1	
4	50958271	Bearing Retaining Ring	1	
5	50958289	Pump Drive Gear Bearing	1	
6	50958255	Bearing Locating Ring	1	
7	50958297	Pump Drive Gear	1	
8	59481614	Stub Shaft Lock Ball	1	
9	50958339	Idler Gear Stub Shaft	1	
10	50958255	Bearing Locating Ring	1	
11	50958305	Bearing Retaining Ring	1	
12	50958321	Idler Stub Shaft Bearing	1	
13	50958313	Pump Drive Idler Gear	1	
14	50958305	Idler Gear Bearing Retaining Ring	1	
15	50958255	Idler Gear Bearing Locating Ring	1	
	:	,		



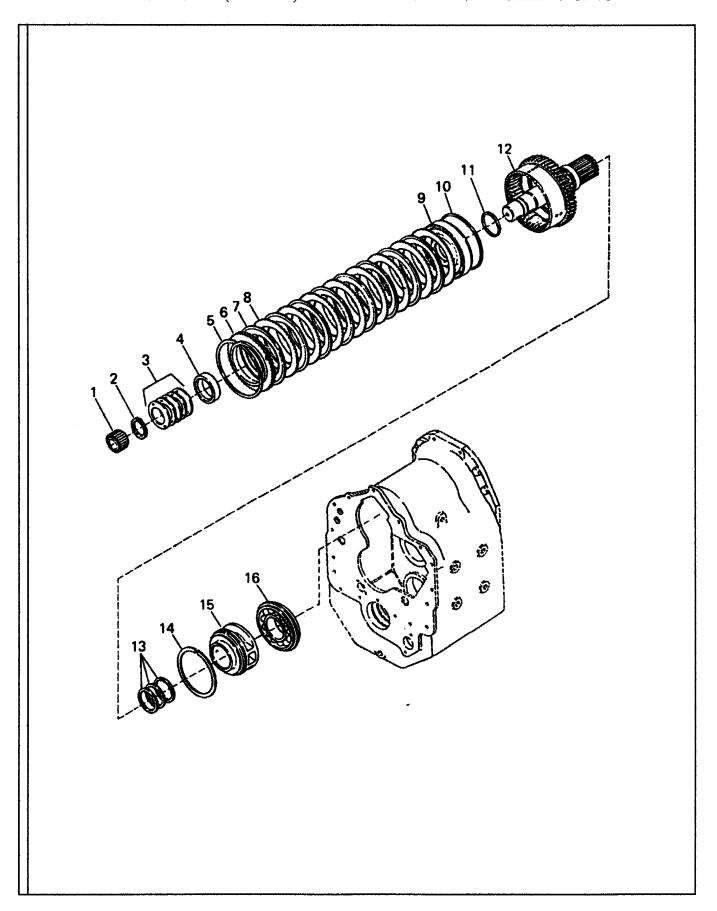
### TRANSMISSION (59494039) - INTERNAL BREAKDOWN SHEET 7 OF 18

TEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
		BOM 59494039-SHT. 7		
-		Reverse and 2nd Shaft Group	1	
1	59050294	Reverse & 2nd Shaft Piston Ring	3	
1 <b>A</b>	59050302	Spring, PistonRing Expander (Not Shown)	3	
2	58886086	Front Bearing Retaining Ring	1	
3	50755446	Front Bearing Snap Ring	1	
4	50755065	Reverse & 2nd Shaft Front Bearing	1	
5	50848431	Clutch Driven Gear Bearing	1	
6	50960186	Bearing Retaining Ring	1	
7	50960194	Clutch Driven Gear Bearing Spacer	1	
8	50960186	Bearing Retaining Ring	1	
9	50755354	Clutch Driven Gear Bearing	1	
10	50960210	Spring Retainer Snap Ring	1	
11	58886094	Piston Return Belleville Springs	5	
12	50960236	Piston Return Spring Spacer	1	
13	50960665	Backing Plate Snap Ring	1	
14	50960673	Clutch Disc Backing Plate	1	
15	50960749	Clutch Inner Disc	8	
16	50960699	Clutch Outer Disc	8	
17	50960756	Clutch Piston	1	
18	50960715	Outer Clutch Piston Seal	1	
19	50960723	Inner Clutch Piston Seal	1	
20	59481622	Reverse & 2nd Shaft, Drum & Plug Assembly	1	
21	50960723	Inner Clutch Piston Seal	1	
22	50960715	Outer Clutch Piston Seal	1	
23	50960772	Clutch Piston	1	
24	50960699	Clutch Outer Disc	6	
25	50960749	Clutch Inner Disc	6	
26	50960673	Clutch Disc Backing Plate	1	
27	50960665	Backing Plate Snap Ring	1	
28	50960244	Piston Return Spring	1	
29	50960251	Spring Retainer	1	
30	50960376	Spring Retainer Snap Ring	1	
31	50960269	Reverse & 2nd Shaft Rear Bearing	1	
32	50960277	2nd Clutch Disc Hub Snap Ring	1	
33	59481218	Retaining Ring	1	(Includes item 34)
34	59481648	2nd Clutch Disc Hub & Retaining Ring Assy	1	(Includes item 33)
35	59481200	Reverse Clutch Gear & Retaining Ring Assy	1	(Includes item 36)
36	59481218	Retaining Ring	1	,
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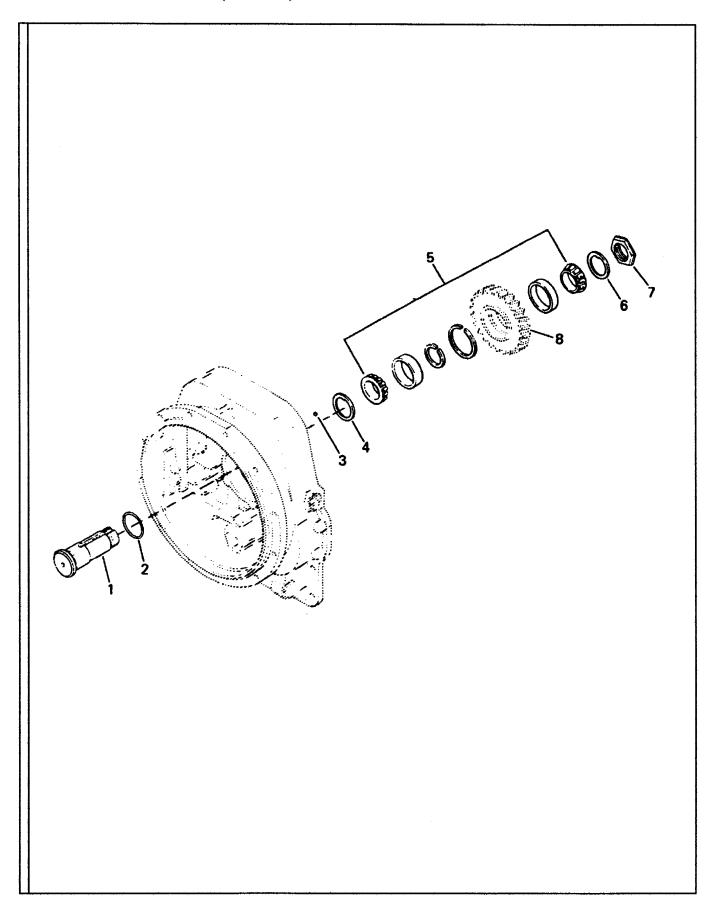
#### TRANSMISSION (59494039) - INTERNAL BREAKDOWN SHEET 8 OF 18

TEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
		BOM 59494039-SHT. 8		
-		Low Speed Shaft Group	1	
1	50960335	Low Speed Clutch Shaft Front Bearing	1	
2	50960343	Front Bearing Spacer	1	
3	50755420	Low Speed Gear Bearing	1	
4	50755107	Low Speed Gear Bearing Locating Ring	1	
5	50960350	Low Speed Gear Spacer	1	
6	50755107	Low Speed Gear Bearing Locating Ring	1	
7	50755420	Low Speed Gear Bearing	1	
8	50960277	Low Speed Gear Bearing Retaining Ring	1	
9	50960376	Spring Retainer Snap Ring	1	
10	50960251	Spring Retainer	1	
11	50960244	Piston Return Spring	1	
12	50960665	Backing Plate Snap Ring	1	
13	50960673	Clutch Disc Backing Plate	1	
14	50960681	Clutch Inner Disc	8	
15	50960699	Clutch Outer Disc	8	
16	50960707	Clutch Piston	1	
17	50960715	Outer Clutch Piston Ring	1	
18	50960723	Inner Clutch Piston Seal	1	
19	50960731	Low Clutch Shaft Drum & Bleed Valve Assy	1	
20	51008928	Low Speed Shaft Rear Bearing	1	
21	50958388	Rear Bearing Support Washer	1	
22	50960277	Rear Bearing Retaining Ring	1	
23	50960517	Low Shaft Piston Ring	1	
24	59481408	Rear Bearing Cap O-Ring	1	
25	58886102	Bearing Cap Stud	4	
26	50756352	Bearing Cap Stud Lock Washer	4	
27	50756451	Bearing Cap Stud Nut	4	
28	59481432	Bearing Cap O-Ring	1	
29	59481226	Low Shaft Gear, Hub & Retaining Ring Assy	1	(Includes item 30)
30	59481234	Retaining Ring	1	
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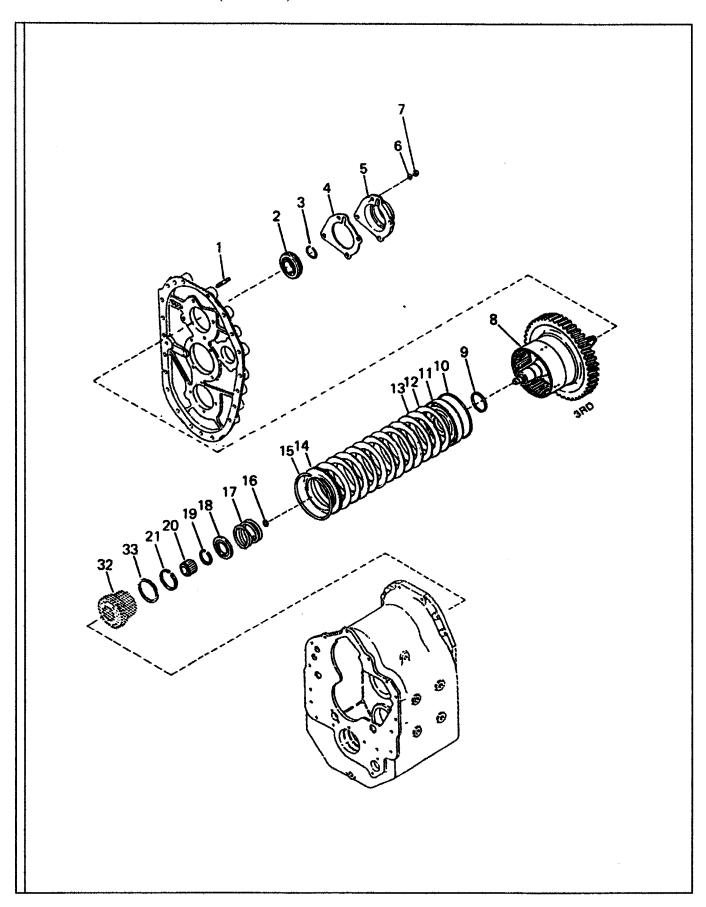
## TRANSMISSION (59494039) - INTERNAL BREAKDOWN SHEET 9 OF 18

#*#*#** #	COMMANO!	NECODIMINAL	077-1	
ITEM	COMM. NO.	DESCRIPTION  BOM 59494039-SHT. 9	QTY	DIMENSIONS/NOTES
-		Forward Shaft Group	1	
1	50960327	Forward Shaft Pilot Bearing	1	
2	50960210	Spring Retaining Snap Ring	1	
3	58886094	Piston Return Spring	$\begin{vmatrix} 1 \end{vmatrix}$	
4	50960236	Piston Return Spring Spacer	1	
5	50960665	Backing Plate Snap Ring	1	
6	50960673	Clutch Disc Backing Plate	1	
7	50960749	Clutch Inner Disc	8	
8	50960699	Clutch Outer Disc	8	
9	50960756	Clutch Piston	1	
10	50960715	Clutch Piston Ring (Outer)	1	
11	50960723	Clutch Piston Seal (Inner)	1	
12	59481655	Forward Shaft, Drum & Plug Assembly	1	
13	58886334	Forward Shaft Piston Ring	4	
13A	58886342	Piston Ring Expander Spring (Not Shown)	4	
14	50960475	Piston Ring Sleeve Retaining Ring	1	
15	59481663	Piston Ring Sleeve	1	
16	59481671	Forward Shaft Rear Bearing	1	
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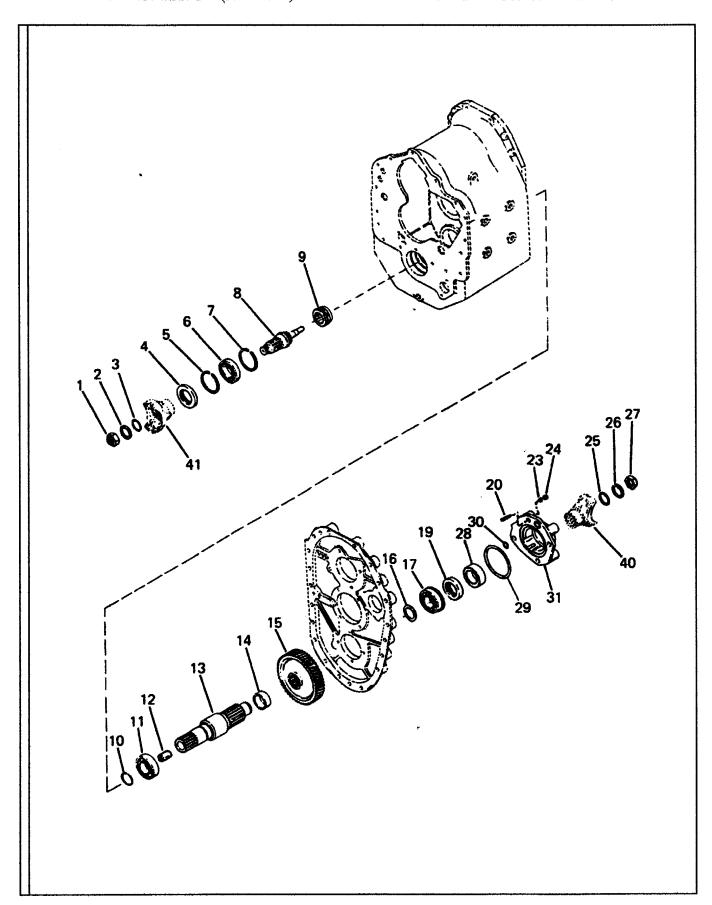
## TRANSMISSION (59494039) - INTERNAL BREAKDOWN SHEET $10~\mathrm{OF}~18$

ГТЕМ	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
		BOM 59494039-SHT. 10		
_	·	Reverse Idler Group	1	
1	59481689	Reverse Idler Shaft	1	
2	59481697	Idler Shaft O-Ring	$\begin{vmatrix} 1 \\ 1 \end{vmatrix}$	
3	59481630	Idler Shaft Lockball	$\begin{vmatrix} 1 \\ 1 \end{vmatrix}$	
4	59481705	Reverse Idler Gear Bearing Thrust Plate	1	
5	58886110	Reverse Idler Gear Bearing Assembly	1	
6	59481705	Reverse Idler Gear Bearing Thrust Plate	$\begin{vmatrix} 1 \\ 1 \end{vmatrix}$	
7	59481713	Bearing Retaining Plate Nut	1	
8	51009041	Reverse Idler Gear	1	
	31007011	Activities added Code	1 1	
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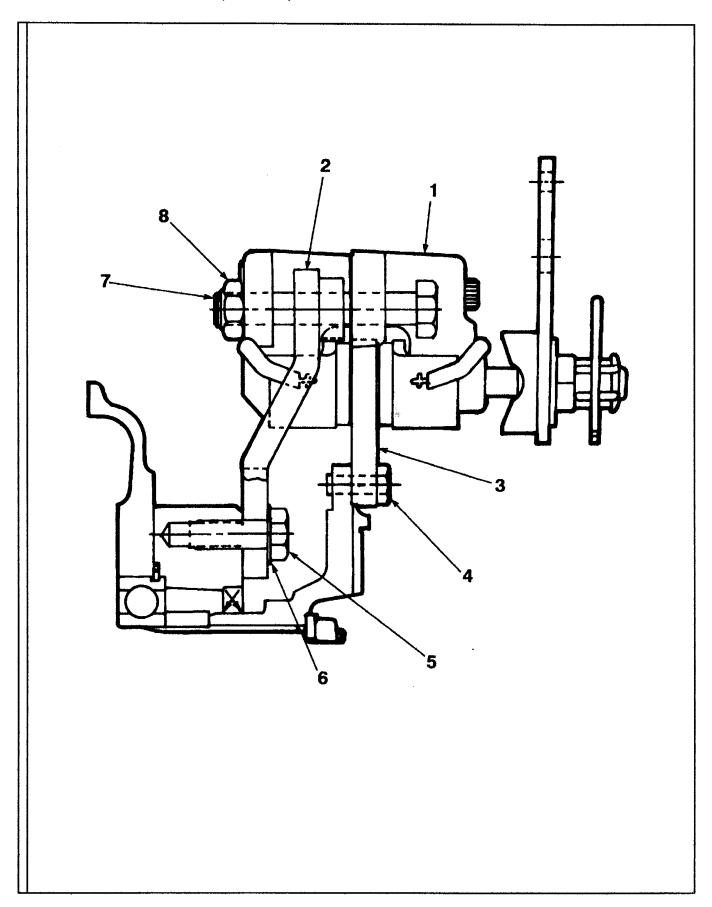
### TRANSMISSION (59494039) - INTERNAL BREAKDOWN SHEET 11 OF 18

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
		BOM 59494039-SHT. 11		
-		3rd Shaft Clutch Group	1	
1	59481721	3rd Shaft Rear Bearing Cap Stud	4	
2	59481739	3rd Shaft Rear Bearing	1	
3	58886128	3rd Shaft Rear Bearing Retaining Ring	1	
4	59481515	3rd Shaft Rear Bearing Cap Gasket	1	
5	59481747	3rd Shaft Rear Bearing Cap (Closed End)	1	
6	50756345	Bearing Cap Stud Lock Washer	4	
7	59481754	Bearing Cap Stud Nut	4	
8	59481762	3rd Clutch Shaft, Drum & Hub Assembly	1	
9	50960723	Inner Clutch Piston Seal	1	
10	50960715	Outer Clutch Piston Seal	1	
11	50960772	Clutch Piston Assembly	1	
12	50960699	Clutch Outer Disc	6	
13	50960749	Clutch Inner Disc	6	
14	50960673	Clutch Disc Backing Plate	1	
15	50960665	Backing Plate Snap Ring	1	
16	50960517	3rd Shaft Piston Ring	1	
17	50960244	Piston Return Spring	1	
18	50960251	Spring Retainer	1	
19	50960376	Spring Retainer Snap Ring	1	
20	59481788	Pilot Bearing	1	
21	51009207	3rd Gear and Hub Retainer Ring	1	
32	59481242	3rd Gear & Hub Assembly	1	(Includes item 33)
33	59481218	Retaining Ring	1	
		,		
		1/D 00D		



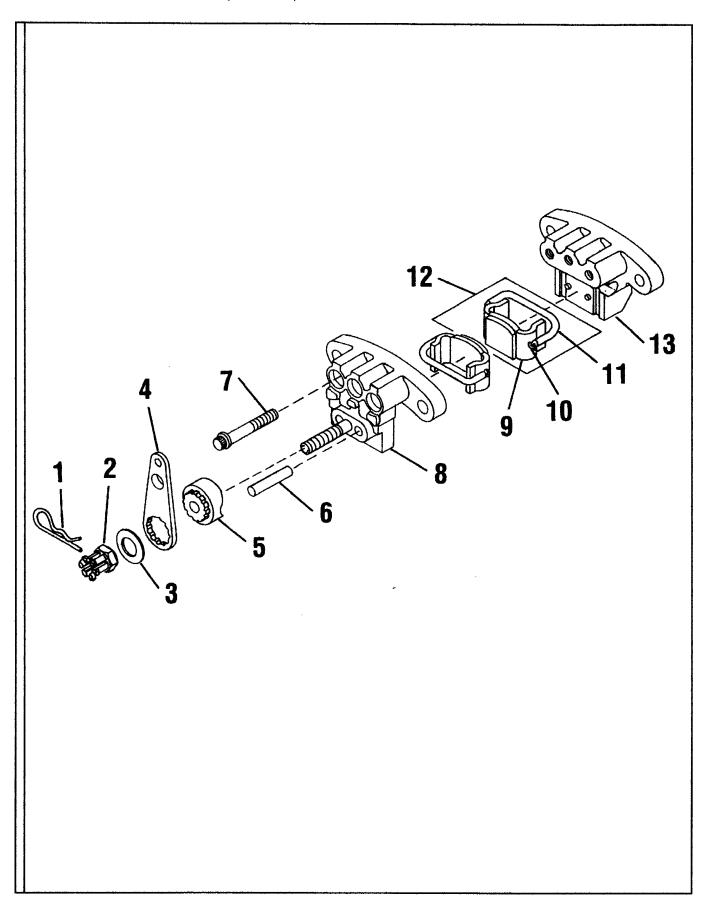
## TRANSMISSION (59494039) - INTERNAL BREAKDOWN SHEET 12 OF 18

ITEM	COMM. NO.	DESCRIPTION  BOM 59494039-SHT, 12	QTY	DIMENSIONS/NOTES
		Output Shaft Group	1	
1	50848407	Flange Nut	1 1	
2	50755032	Flange Washer	1	
3	59481796	Flange O-Ring	1	
4	50847599	Output Oil Seal	1	
5	59481770	Bearing Retainer Ring	1	
6	50755230	Bearing Retainer King  Bearing	1	
7	59481770	Bearing Retainer Ring	1	
8	59481804	Disconnect Shaft	1	
9	59481812	Drive Coupling	1	
10	50959519	Output Shaft Bearing Retainer Ring	1	
11	50960335	Output Shaft Front Bearing	1	
12	59481820	Output Shaft Bushing	1	
13	59481838	Output Shaft & Bushing Assy	1	(Includes item 12)
14	51009256	Output Gear Spacer	1	(11101111111111111111111111111111111111
15	59481846	Output Shaft Gear	1	
16	59481853	Gear Thrust Washer	1	
17	59481739	Output Shaft Rear Bearing	1	
19	59481879	Output Shaft Rear Bearing Cap Oil Seal	1	
20	51009231	Bearing Cup Stud	4	
23	50756378	Bearing Cap Stud Lock Washer	1	
24	59481887	Bearing Cap Stud Nut	4	
25	59481895	Flange O-Ring	1	
26	59481861	Flange Washer	1	
27	59481903	Flange Nut	1	
28	59481911	Bearing to Flange Spacer	1	
29	59481507	Output Bearing Cap O-Ring	1	
30	59481937	Output Bearing Cap O-Ring	1	
31	51037240	Output Shaft Rear Bearing Cap	1	
40	59482703	Brake Flange	1	
41	59482711	Output Flange	1	



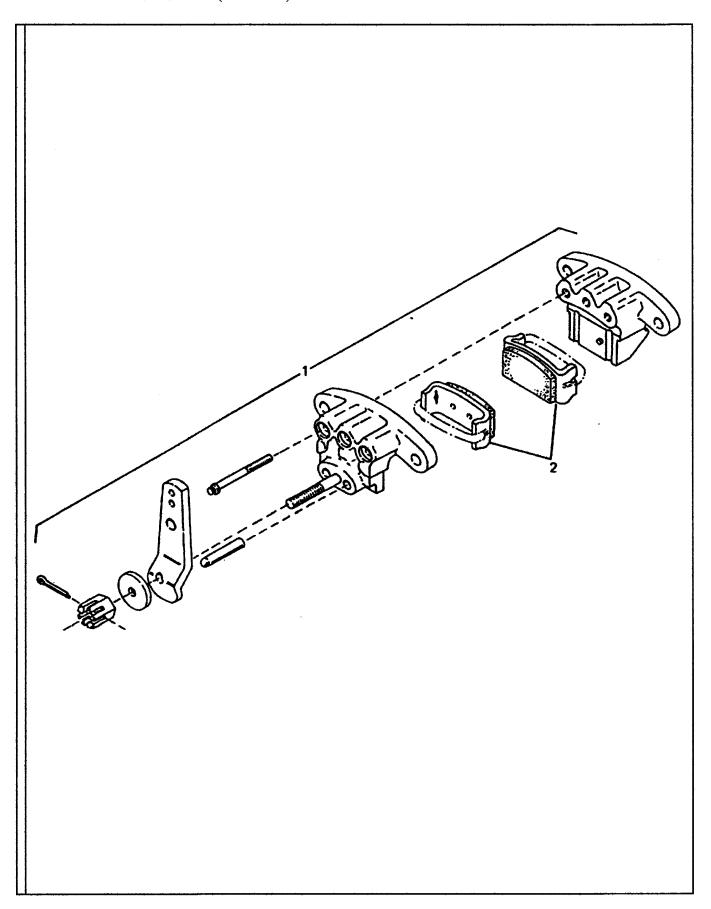
# TRANSMISSION (59494039) - INTERNAL BREAKDOWN SHEET 13 OF 18

1 2 3 4 5 6	58866534 58923186 58944372 58961210 95839379	DESCRIPTION  BOM 59494039-SHT. 13  Caliper Disc Brake Assembly  Caliper Parking Brake  Mounting Bracket Assembly  Brake Disc	1 1 1	See Page D.2.30
2 3 4 5	58866534 58923186 58944372 58961210	Caliper Parking Brake Mounting Bracket Assembly	1	See Page D.2.30
2 3 4 5	58923186 58944372 58961210	Mounting Bracket Assembly	1 1	See Page D.2.30
3 4 5	58944372 58961210		1	' I
5	58961210	Rrake Disc		
5		DIAKC DISC	1	.450" Min.
1	05830370	Screw, Disc to Flange	6	
- 1	73037317	Cap Screw, Bracket To Bearing	4	
6	59050310	Washer, Bracket To Bearing Cap Screw	4	
7	58966763	Screw, Caliper To Bracket	2	
8	58966771	Nut, Caliper To Bracket Screw	2	
-	58867128	Disc Brake Relining Kit	2	
	1			
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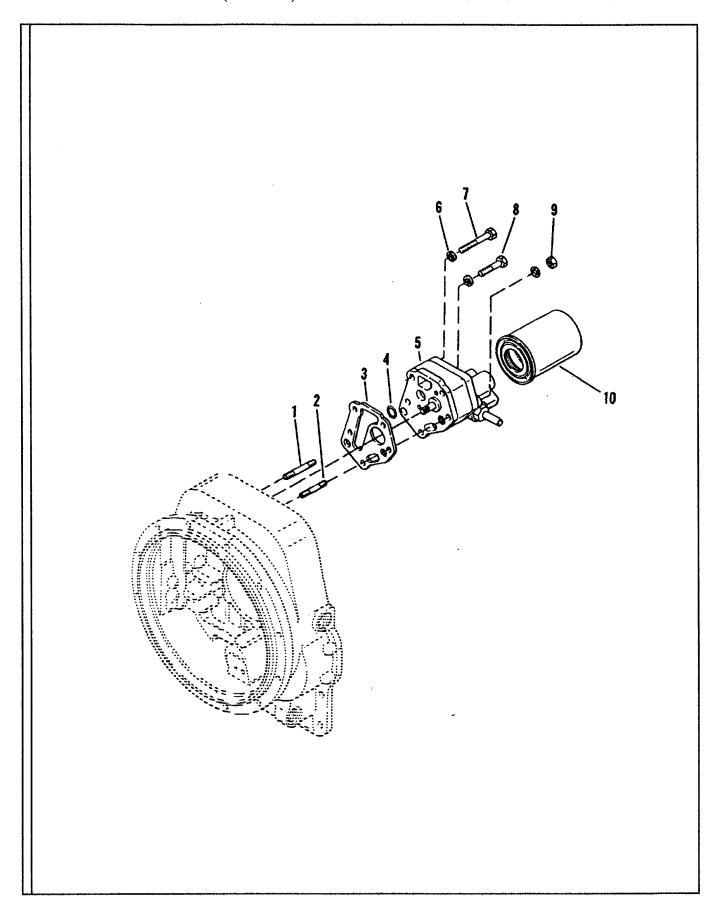
## TRANSMISSION (59494039) - INTERNAL BREAKDOWN SHEET 14 OF 18

TEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
		BOM 59494039-SHT. 14		
-		Caliper Parking Brake-New Style		
1	59050328	Pin, Hitch	1	
2	59050336	Nut, Castle	1	
3	59050344	Washer	1	
4	59050351	Lever	1	
5	59050369	Cam	1	
6	59050377	Pin, Push	1	
7	59050385	Bolt	3	
8	59050393	Casting, Cam Side	1	
9	59050419	Pad and Holder assembly	1	
10	59050401	Retainer, Spring	2	
11	59050427	Spring	2	
12	59050435	Pad, Holder, And Spring Assembly	2	
13	59050443	Carrier Side Sub Assembly	1	
	:			



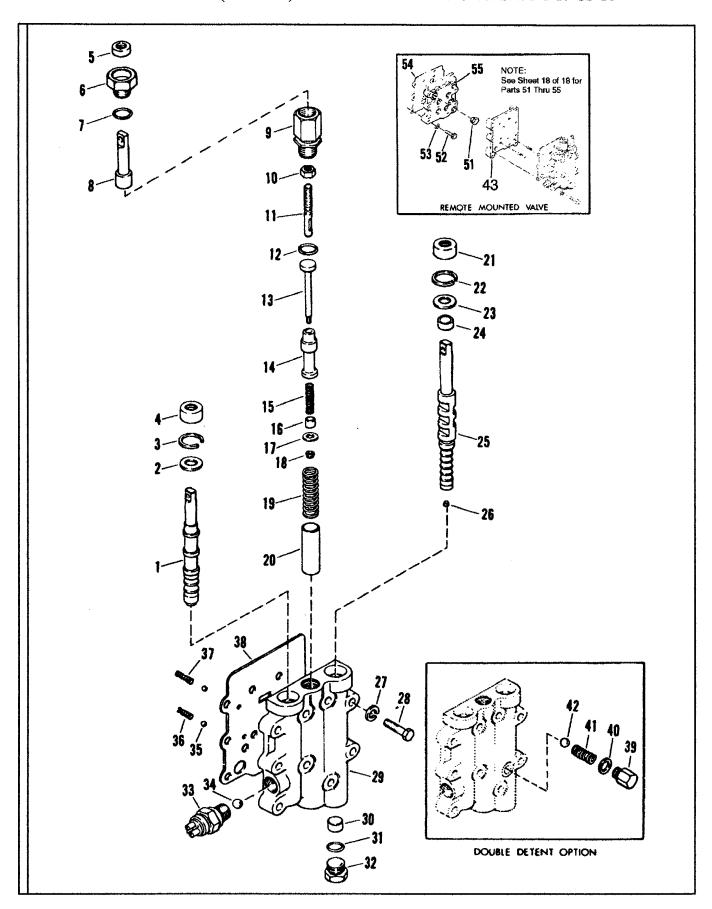
# TRANSMISSION (59494039) - INTERNAL BREAKDOWN SHEET 15 OF 18

TEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
		BOM 59494039-SHT. 15		
-		Caliper Parking Brake Assembly-Old Style	1	
1	58866534	Parking Brake Assembly (Includes item 2)	1	
2	58866526	-Disc Brake Relining Kit	1	
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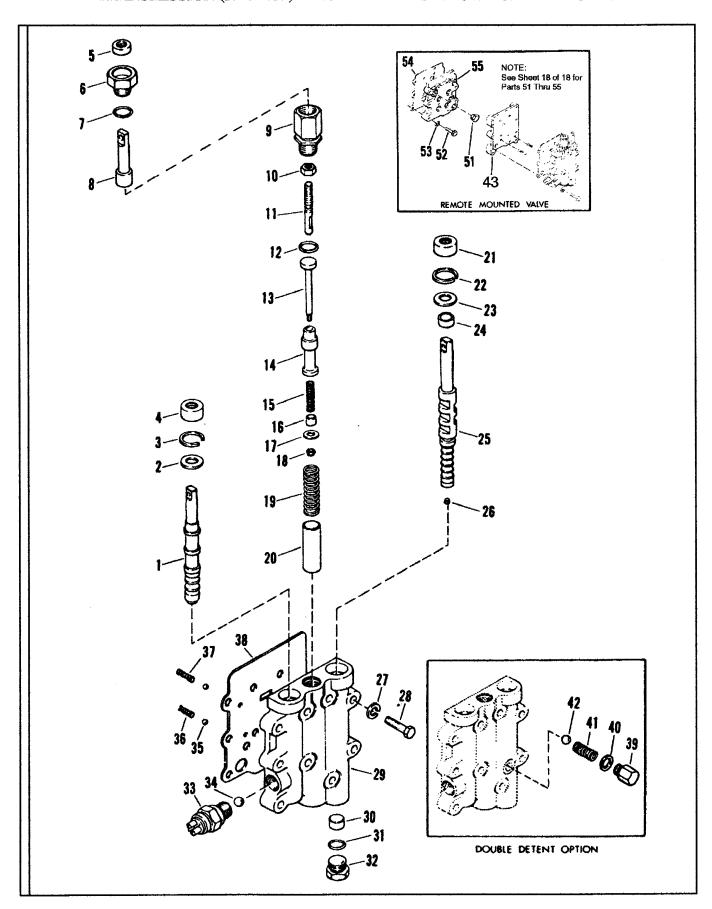
## TRANSMISSION (59494039) - INTERNAL BREAKDOWN SHEET 16 OF 18

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
		BOM 59494039-SHT. 16	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	
-		Charging Pump and Filter Assembly Group	1	
1	51009009	Pump Mounting Stud	1	
2	51009017	Pump Mounting Stud	1	
3	50958198	Pump Assembly to Conv. Housing Gasket	1	
4	59481382	O-Ring	1	
5	50958214	Charging Pump Assembly	1	
6	50756352	Pump Mounting Screw Lock Washer	5	
7	59482026	Pump Mounting Screw	1	
8	59482034	Pump Mounting Screw	2	
9	50756451	Pump Mounting Stud Nut	2	
10	58886136	Filter	1	
	:			
	1			



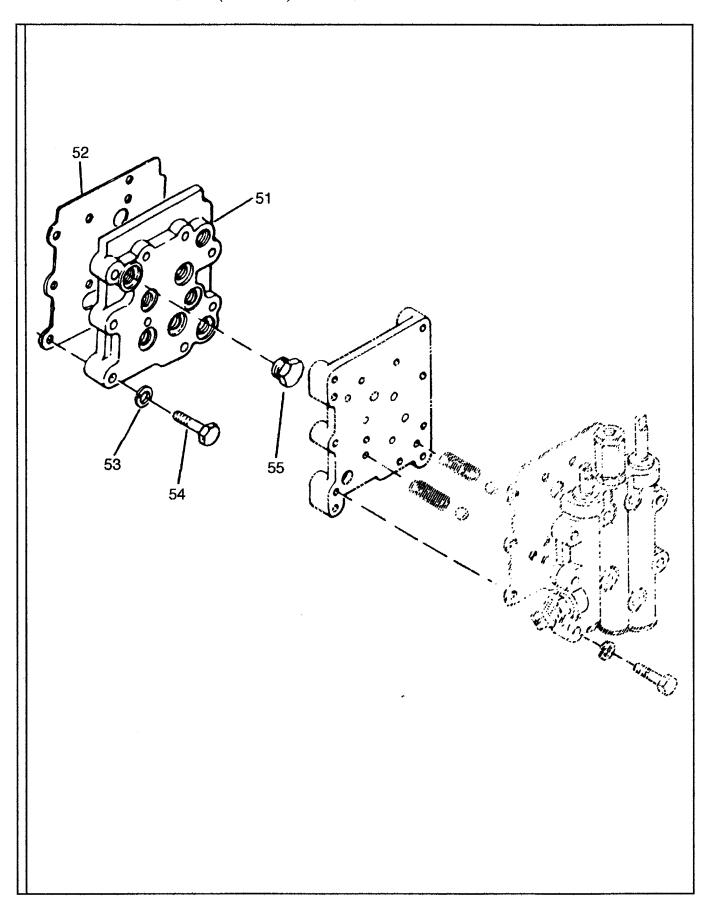
#### TRANSMISSION (59494039) - INTERNAL BREAKDOWN SHEET 17 OF 18

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
		BOM 59494039-SHT. 17		
-		Control Valve with Mechanical Inching		
		Double Detent - Remote Mounted	1	
1	50755974	Forward and Reverse Valve Spool	1	
2	50754993	Valve Spool Oil Seal Washer	1	
3	50756493	Valve Spool Oil Seal Retainer Ring	1	
4	50756998	Valve Spool Oil Seal	1 1	
5	59482059	Inching Valve Oil Seal	1	
6	59482067	Inching Valve Stop Plug	1	
7	59482075	Inching Valve O-Ring	1 1	
8	58886144	Inching Valve Spool	1	
9	58886151	Inching Valve Assembly	1	(Includes items 5 thru 12)
10	58886359	Nut	1	
11	58886367	Inching Valve Spool Rod	1	
12	50847631	Inching Valve O-Ring	1	
13	59482133	Inching Valve Piston	1	
14	59482141	Inching Regulator Spool	1	
15	58886169	Balance Spring	1	
16	59482166	Balance Spring Spacer	1	
17	59482174	Balance Spring Washer	1	
18	59482182	Stop Nut	1	
19	59482190	Return Spring	1	
20	59482208	Regulator Spool Spacer	1	
21	50756998	Valve Spool Oil Seal	1	
22	58886177	Valve Spool Oil Seal Retainer Ring	1	
23	50754993	Valve Spool Oil Seal Washer	1	
24	50756113	Overshift Spacer	1	
25	59482216	Speed Selector Spool	1	(Includes item 26)
26	51009405	Speed Selector Spool Pipe Plug	1	
27	50756345	Valve to Conv. Housing Screw Lock Washer	9	
28	50753953	Valve to Conv. Housing Screw	9	
29	58886185	Control Valve Housing Assembly	1	(Includes items 1 thru 26 30 thru 34, and 39 thru
30	50756105	Overshift Spacer	1	42)
31	50847706	Valve Housing Plug O-Ring	1	
32	50756253	Valve Housing Plug	1	
33	59445155	Neutral Switch	1	
34	50754696	Detent Ball	1	
35	50754696	Detent Ball	2	
	20,0.00	VR_OOR		<u></u>



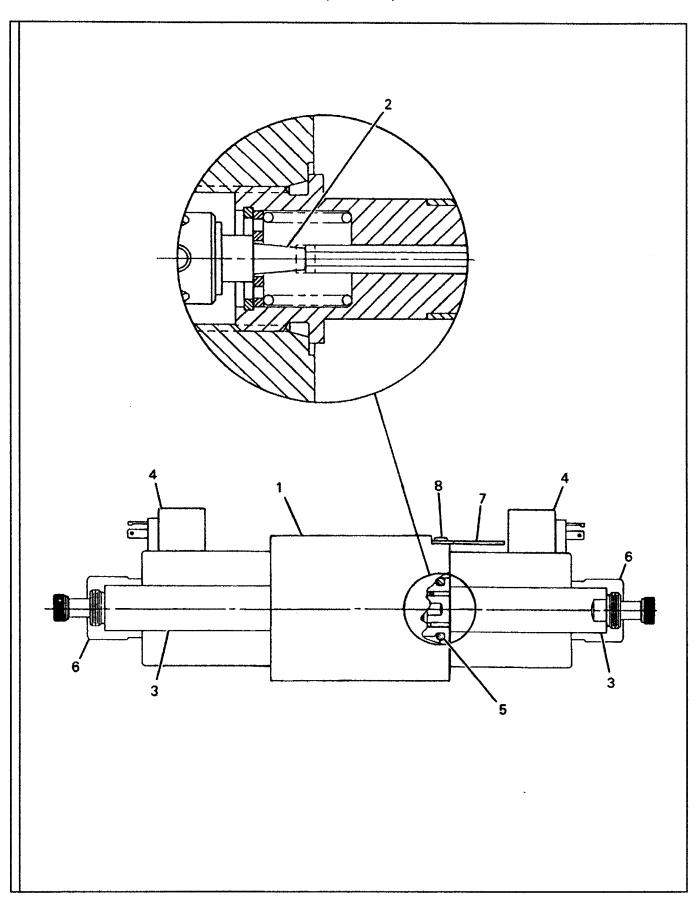
# TRANSMISSION (59494039) - INTERNAL BREAKDOWN SHEET 17 OF 18

TEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
		BOM 59494039-SHT. 17		
36	50754829	Detent Spring	1	
37	50754829	Detent Spring	1	
38	58886193	Control Valve to Plate Gasket	1	
39	50757079	Detent Spring Plug	1	
40	50757087	Detent Spring Plug Washer	$\begin{vmatrix} 1 \\ 1 \end{vmatrix}$	
41	50754829	Detent Spring	1	
42	50754696	Detent Ball	$\begin{vmatrix} 1 \\ 1 \end{vmatrix}$	
43	50755982	Control Valve Mounting Plate	1	
	23,32332		*	
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### TRANSMISSION (59494039) - INTERNAL BREAKDOWN SHEET 18 OF 18

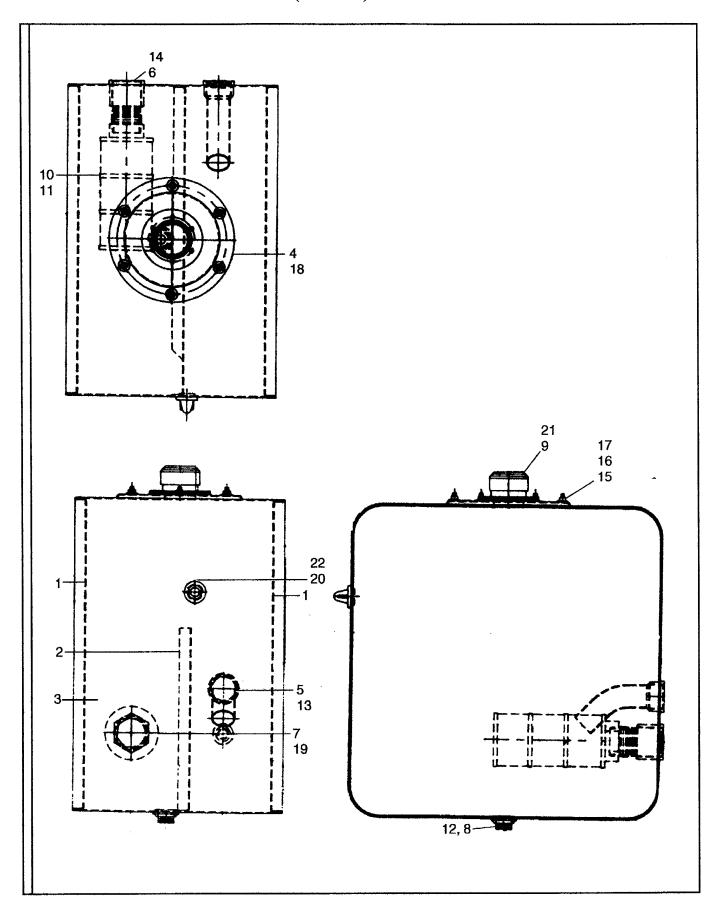
ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
		BOM 59494039-SHT. 18		
-		Remote Valve Adapter Plate Group	1	
51	58886201	Remote Control Valve Adapter Plate	1	
52	58886219	Adapter Plate Gasket	1	
53	58886227	Adapter Plate Mounting Screw Lock Washer	9	
54	58886235	Adapter Plate Mounting Screw	9	
55	58886243	Supply Plug	1	
56	58886250	Drain Plug (Not Shown)	1	
		VR_90R		



#### STEERING SELECTOR VALVE (58827544) - INTERNAL BREAKDOWN

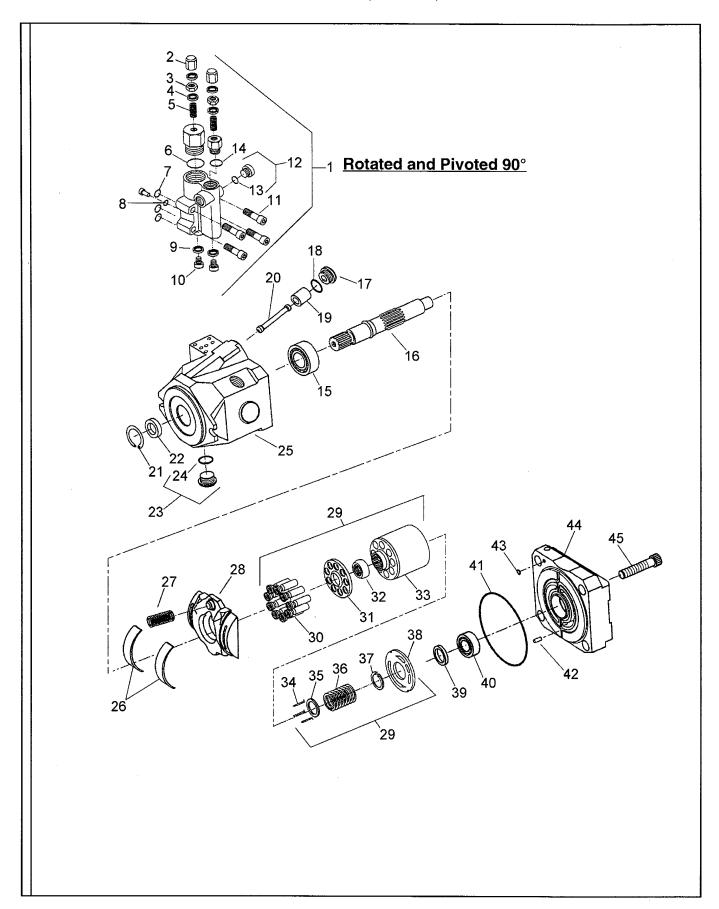
ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
	50015051	BOM. 58827544		
1	58912064	Block	1	
2	58912056	Spool	1	
3	58912155	Tube	2	
- ,	58912072	-Spring	1	
-	58912080	-Retainer	1	
-	58912098	-Retainer Ring	1	
4	58912049	Coil	2	
-	58814831	-Harness Connector	2	
5	58912148	O-Ring	2	
6	58912106	Nut	2	
7	N.S.S.	Nameplate	1	
8	58912122	Screw	1	Pan Head
1		VID OOD		

### HYDRAULIC TANK (59495069) - INTERNAL BREAKDOWN



### HYDRAULIC TANK (59495069) - INTERNAL BREAKDOWN

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
		BOM 59052621		
1	N.S.S.	Head	2	
2	N.S.S.	Baffle	1	
3	N.S.S.	Shell	1	
4	59052639	Cover	1	
5	N.S.S.	Tube Assembly	1	
6	N.S.S.	Pipe Assembly	1	
7	N.S.S.	Forged Flange	1	3/8 NPTF
8	N.S.S.	Forged Flange	1	3/4 NPTF
9	59414243	Fill-Breather Assembly	1	3.0 Screen
10	59013417	Strainer	1	
11	59052647	Strainer Magnet	2	
12	N.S.S.	Plug	1	3/4 NPTF
13	N.S.S.	Plug	1	1 5/8 -12
14	N.S.S.	Plug	1	1 7/8 - 12
15	N.S.S.	Weld Stud	1	1/4 - 20
16	59052654	Nut, Hex	6	1/4 - 20
17	59052662	Washer, Std. Flat	6	1 1/4
18	59416321	O'Ring	1	6.0 I.D. x 6.5 O.D.
19	N.S.S.	Plastic Closure	1	
20	59414201	Sight Bulb	1	
21	N.S.S.	Screw	6	10-32 x 0.50
22	N.S.S.	O'Ring		
			į	

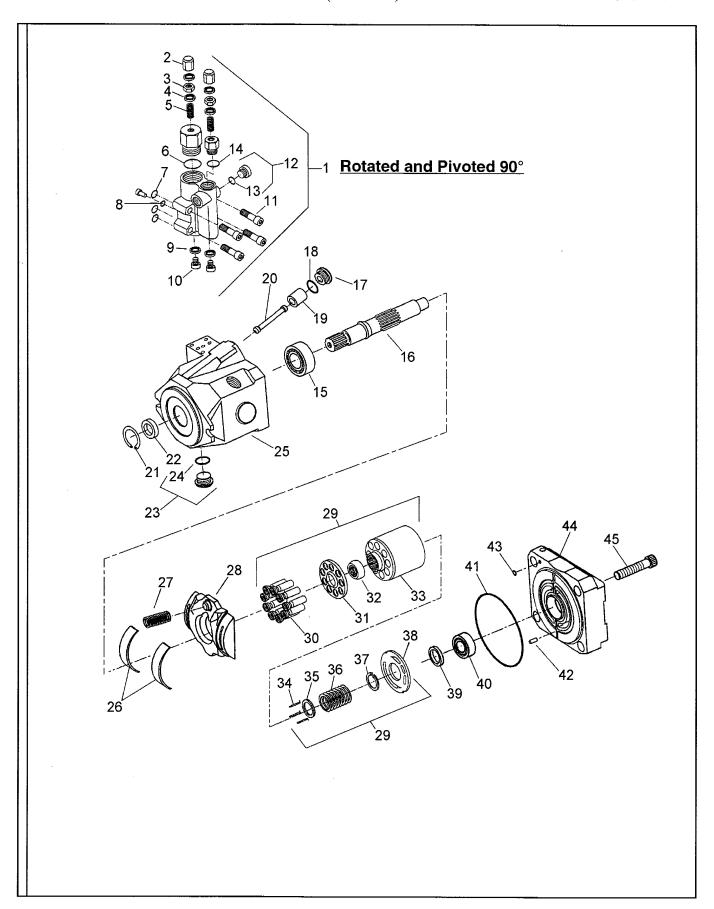


I.18.2 VR-90B

#### MAIN HYDRAULIC & STEERING PUMP (59090027) - INTERNAL BREAKDOWN

ITEM	COMM. NO.	DESCRIPTION  BOM 59090027	QTY	DIMENSIONS/NOTES
1	58876095	DFR1 Control (includes items 2 - 14)	1	
2	58876137	-Acorn Nut	2	M8
3	58818964	-Jam Nut	2	M8
4	N.S.S.	-Usit Ring	4	Included in Seal Kit
5	58818972	-Adjusting Screw	2	M8
6	N.S.S.	-O-ring	1	Included in Seal Kit
7	N.S.S.	-O-ring	3	Included in Seal Kit
8	N.S.S.	-O-ring	1	Included in Seal Kit
9	N.S.S.	-Usit Ring	2	Included in Seal Kit
10	58819574	-Plug	2	M8
11	59404202	-Cap Screw	4	M6 x 30
12	59404160	-Plug (includes item 13)	1	7/16 - 20
13	N.S.S.	-O-ring	1	Included in Seal Kit
14	N.S.S.	-O-ring	1	Included in Seal Kit
15	N.S.S.	Tapered Roller Bearing	1	Contained in Bearing Kit
16	58819335	Shaft	1	13T-"U"
17	59123687	Plug	1	
18	N.S.S.	O-ring	1	Included in Seal Kit
19	59123679	Piston	1	
20	58876087	Rod	1	
21	59348508	Seeger-V-Ring	1	J 40 x 1.75 V
22	N.S.S.	Shaft Seal (28 x 40 x 6/6.5-FPM)	1	Included in Seal Kit
23	51050532	Plug (includes item 24)	1	7/8 - 14
24	N.S.S.	-O-ring	1	Included in Seal Kit
25	N.S.S.	Housing	1	
26	N.S.S.	Swash Plate Bearing	2	Contained in Bearing Kit
27	58828815	Spring	1	
28	58828799	SwashPlate	1	
29	59404210	Rotary Group CW (includes items 30 - 38)	1	
30	59123695	-Piston	9	
31	59123703	-Retaining Plate	1	
32	59050567	-Retaining Ball	1	
33	58819384	-Barrel	1	
34	13090857	-Pressure Pin	3	
35	58818949	-Disc-Retaining Clip	1	M27.5 x 36.5
36	58819426	-Spring	1	
37	58818931	-Snap Ring	1	M38 x 1.5
38	59348557	-Lens Plate	1	

VR-90B I.18.3

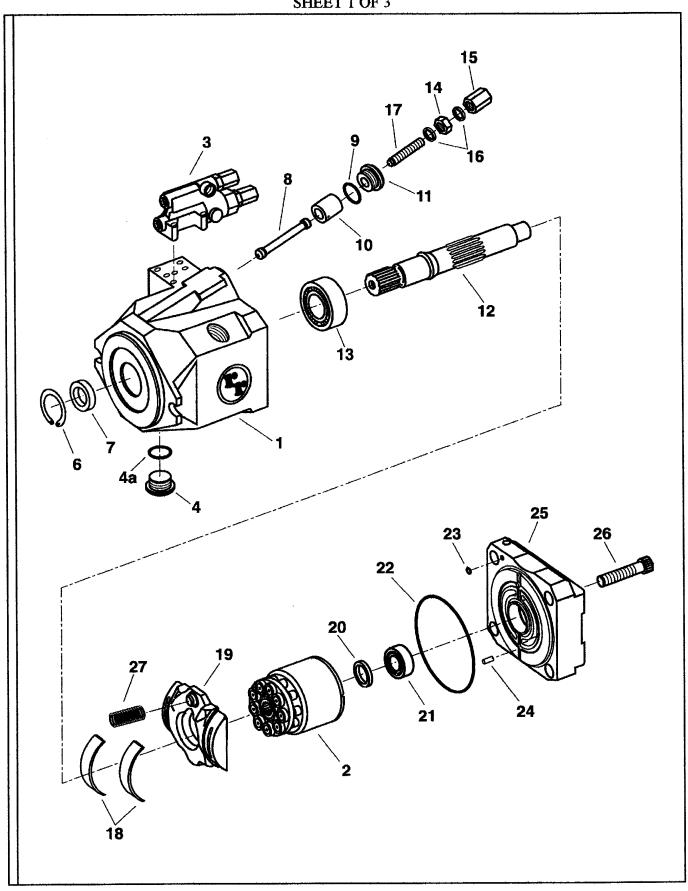


I.18.4 VR-90B

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
39	58818782	Preload Shim	1	3.00mm
40	N.S.S.	Tapered Roller Bearing	1	Contained in Bearing Kit
41	N.S.S.	O-ring	1	Included in Seal Kit
42	N.S.S.	DowellPin	1	M6 x 18 DIN
43	N.S.S.	O-ring	1	Included in Seal Kit
44	N.S.S.	Block Port Assembly	1	
45	58818824	Cap Screw	4	M12 x 45
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**	58828880	Seal Kit	A/R	
**	58828898	Bearing Kit	A/R	'
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VR-90B I.18.5

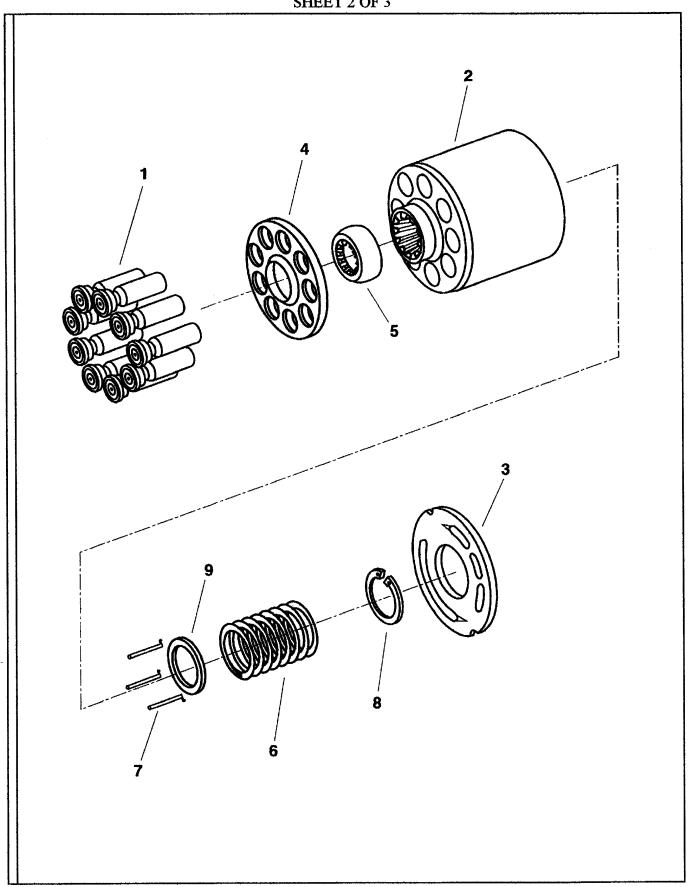
# MAIN HYDRAULIC AND STEERING PUMP (59001321) - INTERNAL BREAKDOWN SHEET 1 OF 3



### MAIN HYDRAULIC AND STEERING PUMP (59001321) - INTERNAL BREAKDOWN SHEET 1 OF 3

TEM	COMM. NO.	DESCRIPTION BOM	QTY	DIMENSIONS/NOTES
				<u></u>
		NOTE: THIS PUMP IS USED ON MACHINES		
		EFFECTIVE WITH S/N: 142719		
1	59050492	Housing	1	
2	59404210	Rotary Group CW	1	See Breakdown
3	58876095	Control DFR1	$\begin{vmatrix} 1 \end{vmatrix}$	<b></b>
4	51050532	Plug	1	7/8-14
4a	59050500	O-Ring	1	Contained in Seal Kit
6	59348508	Seeger-V-Ring	1	
7	59050518	Shaft Seal	1	Contained in Seal Kit
8	58876087	Rod	1	
9	58876111	O-Ring	1	Contained in Seal Kit
10	58876079	Piston	1	
11	58828807	Plug	1	
12	59050526	Shaft (15 Tooth)	1	
13	58818790	Tapered Roller Bearing	1	
14	58876129	Jam Nut	1	
15	58828856	Nut	1	
16	58815853	O-Ring	2	Contained in Seal Kit
17	58828849	Stroke Limit Screw	1	
18	59050534	Swash Plate Bearing	2	
19	58828799	Swash Plate CW	1	
20	58818782	Preload Shim	1	
21	59348581	Tapered Roller Bearing	1	
22	58876103	O-Ring	1	Contained in Seal Kit
23	13090816	O-Ring	1	Contained in Seal Kit
24	59404335	Dowell Pin	1	
25	59050542	Port Block	1	
26	58818824	Cap Screw	4	
27	58828815	Spring	1	
-	58828880	Seal Kit	1	
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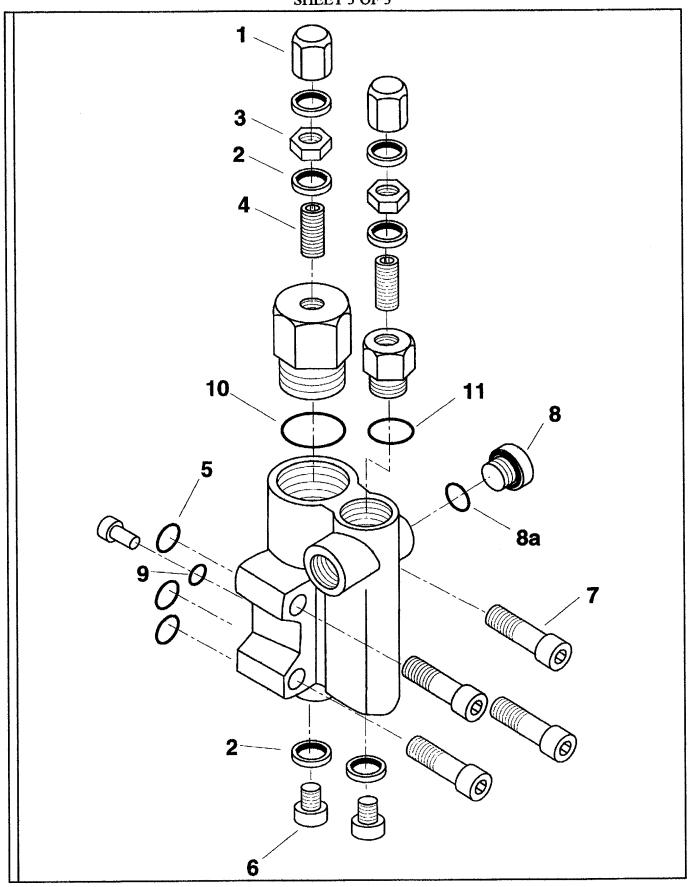
# MAIN HYDRAULIC AND STEERING PUMP (59001321) - INTERNAL BREAKDOWN SHEET 2 OF 3



# MAIN HYDRAULIC AND STEERING PUMP (59001321) - INTERNAL BREAKDOWN SHEET 2 OF 3

		SHEET 2 OF 3		
	12000022	Distan	9	
1	13090832	Piston Barrel	1	
2	58819384		1	
3	59348557	Lens Plate	1	
4	59050559	Retaining Plate	1	
5	59050567	Retaining Ball	1	
6 7	58819426 13090857	Spring Pressure Pin	3	
8	58818931	Snap Ring	1	3/8 x 1.5
9	58818949	Disc Retaining Clip	1	27.50 x 36.50
9	J00107 <del>4</del> 7	Disc Retaining Cup	1	27.30 x 30.30
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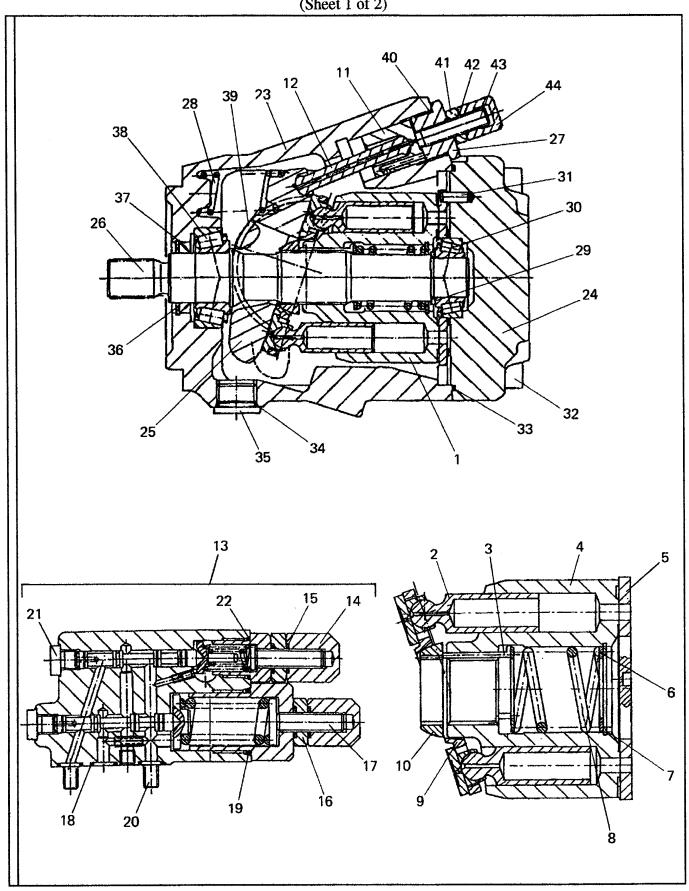
# MAIN HYDRAULIC AND STEERING PUMP (59001321) - INTERNAL BREAKDOWN SHEET 3 OF 3



### MAIN HYDRAULIC AND STEERING PUMP (59001321) - INTERNAL BREAKDOWN SHEET 3 OF 3

	<u> </u>	SHEEL 3 QF 3	,	
1	58876137	Acorn Nut	2	M8
2	59404178	Usit Ring	6	Contained in Seal Kit
3	58818964	Jam Nut	2	M8
4	58818972	Adjusting Screw	2	M8
5	59977306	O-Ring	3	Contained in Seal Kit
6	58819574	Plug	2	M8
7	59404202	Cap Screw	4	M6 x 30 mm
8	59404160	Plug	1	
8a	51055465	O-Ring	1	Contained in Seal Kit
9	13090865	O-Ring	1	Contained in Seal Kit
10	59305680	O-Ring	1	Contained in Seal Kit
11	59349423	O-Ring	1	Contained in Seal Kit
-	58828880	Seal Kit		
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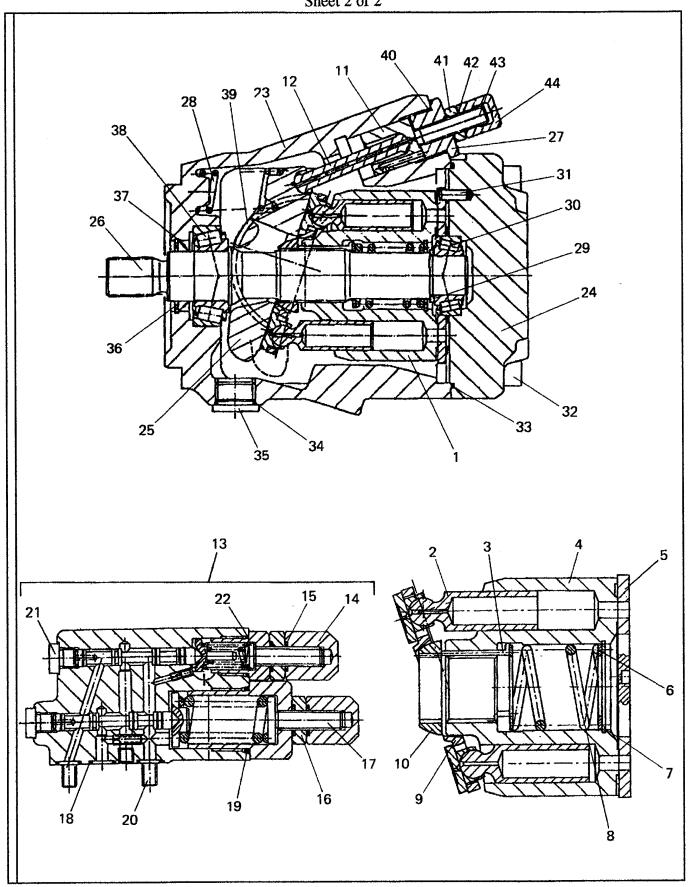
# MAIN HYDRAULIC AND STEERING PUMP (59474783) - INTERNAL BREAKDOWN (Sheet 1 of 2)



#### MAIN HYDRAULIC AND STEERING PUMP (59474783) - INTERNAL BREAKDOWN (Sheet 1 of 2)

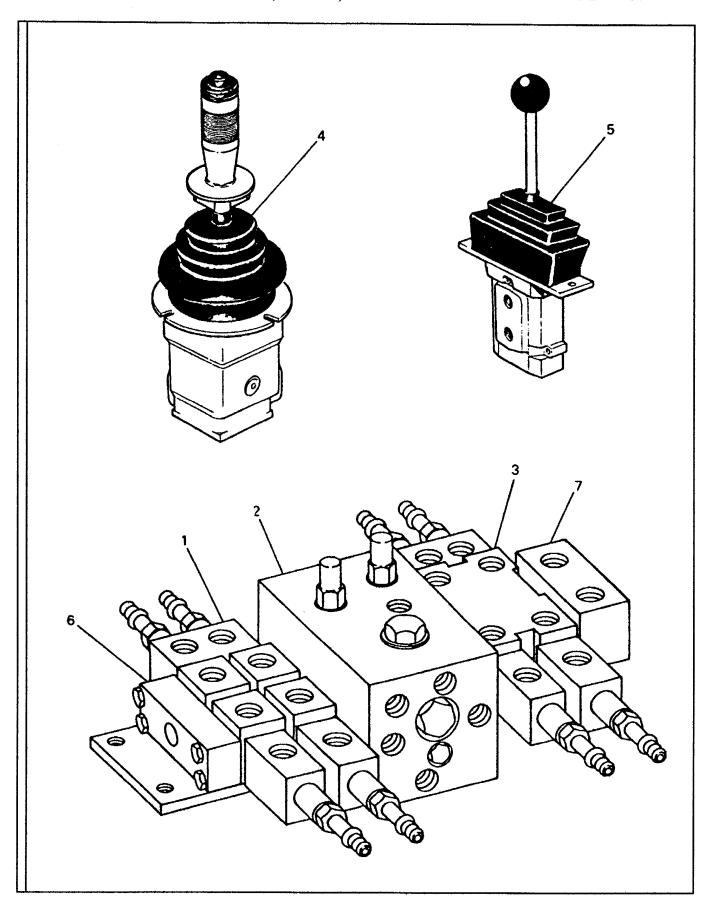
ITEM	COMM. NO.	(Sheet 1 of 2)  DESCRIPTION	QTY	DIMENSIONS/NOTES
	E0404040	BOM 59474783		
1	59404210	Rotary Group (Includes items 2 thru 10)	$\begin{vmatrix} 1 \\ 0 \end{vmatrix}$	
2	58819376	-Piston	9	
3	58819434	-Pressure Pin	3	
4	58819384	-Barrel	1 1	
5	58819392	-Lens Plate	1	
6	58818949	-Retainer Clip Disc	1	
7	58818931	-Seeger V-Ring	1	
8	58819426	-Spring	1	
9	58819400	-Retaining Plate	1	
10	58819418	-Retaining Ball	1	
11	58876079	Piston	1	
12	58876087	Rod	1	
13	58876095	Control Valve (Includes items 14 thru 22)	1	
14	58876137	-Acorn Nut	2	
15	59404178	-Usit Ring	4	
16	58818964	-Jam Nut	2	
17	58818972	-Adjusting Screw	2	
18	59977306	-O-Ring	3	
19	59305680	-O-Ring	1	
20	58818980	-Cap Screw	4	
21	59404152	-Plug	2	
22	59349423	-O-Ring	1	
23	58828773	Housing	1	
24	58828781	Port Plate CW	1	
25	58828799	Swash Plate Assembly CW	1	
26	58819335	Shaft	1	
27	58828807	Adapter Nut	1	
28	58828815	Spring	1	
29	58818782	Preload Shim	1	
30	59348581	Rear Tapered Roller Bearing	1	
31	59404335	Dowel Pin	4	
32	58818824	Cap Screw	1	
33	58876103	O-Ring	1	
34	59350165	O-Ring	1	
35	51050532	Plug	1	
36	59346510	Shaft Seal	1	
37	58818816	Seeger V-Ring	1	
38	58818790	Front Tapered Roller Bearing	1	
39	58828823	Cradle Bearing	2	
40	58876111	O-Ring	1	
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# MAIN HYDRAULIC AND STEERING PUMP (59474783) - INTERNAL BREAKDOWN Sheet 2 of 2



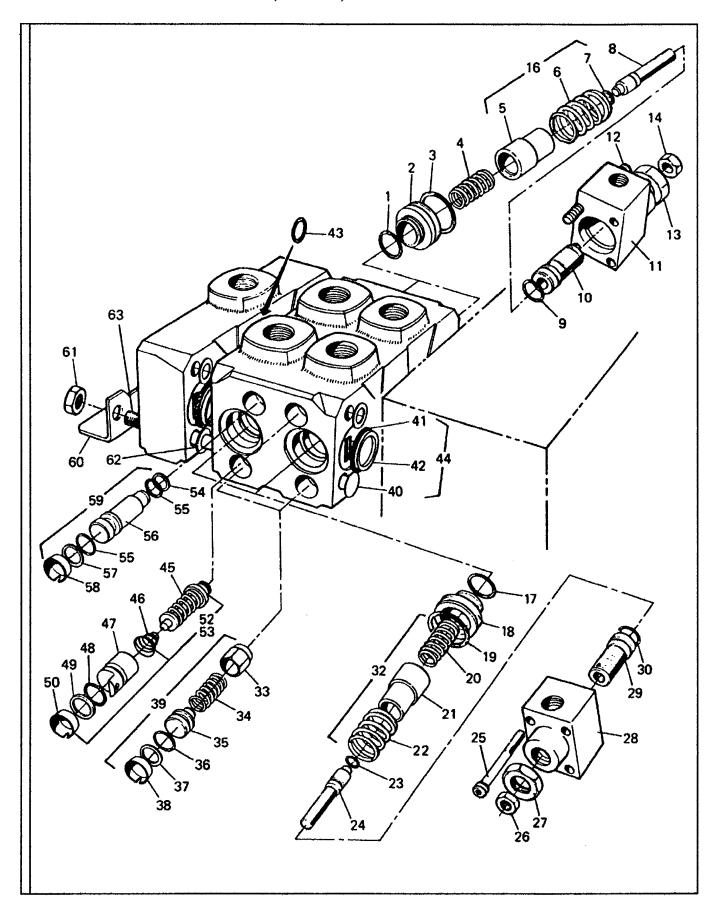
# MAIN HYDRAULIC AND STEERING PUMP (59474783) - INTERNAL BREAKDOWN Sheet 2 of 2

TOTAL E	COMMANO	Sheet 2 of 2 DESCRIPTION	QTY	DIMENSIONS/NOTES
ITEM	COMM. NO.	DESCRIPTION	VII	DIVIENSIONS/NOTES
41	58876129	Lock Nut	1	
42	58815853	O-Ring	1	
43	58828849	Adjusting Screw	1	
44	58828856	Acorn Nut	1	
	58828880	Seal Kit (Includes items 15,18,19,22,33,34,40,	1	
-	30020000	and 42)	1	
	50000000		1	
-	58828898	Bearing Kit (Includes items 30,38, and 39)	1	
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	1	VR-90B		<u> </u>



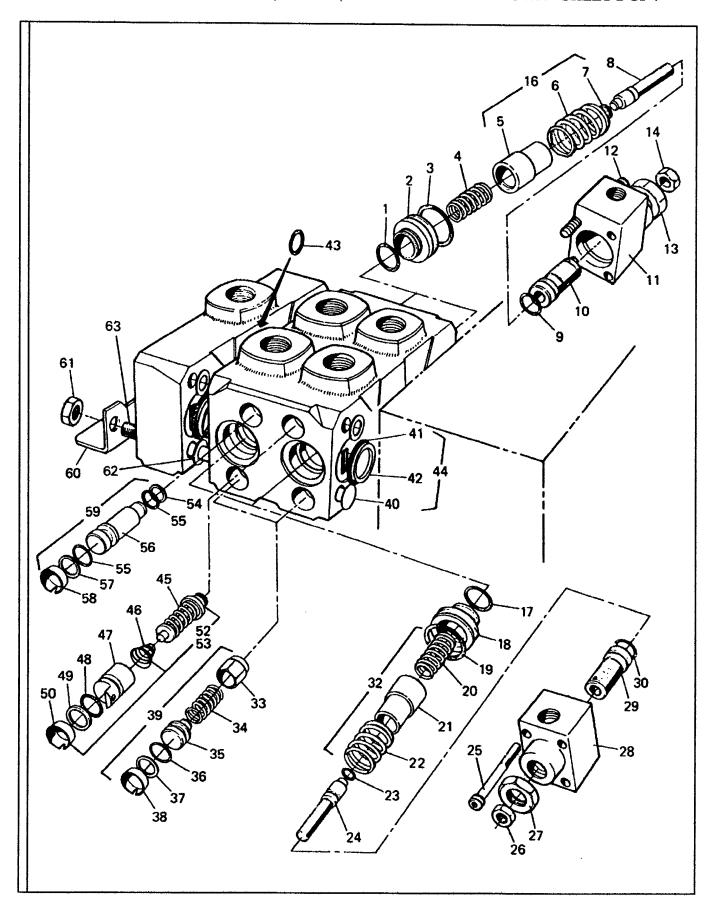
### HYDRAULIC KIT - NON-CBC (58973884) - INTERNAL BREAKDOWN - SHEET 10F 7

TEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
		58973884		
1	58905175	TILT AND LEVEL CONTROL VALVE	2	See Breakdown-F.7.4
2	59003939	MANIFOLD (Effective with S/N 5356)	1	See Breakdown-F.7.8
3	58905191	MANIFOLD (Prior to S/N 5340)	1	See Breakdown-F.7.10
<b>3</b>	58905167	CROWD AND BOOM CONTROL VALVE	2	See Breakdown-F.7.12
4	58887084	JOYSTICK TYPE CONTROLLER	1	See Breakdown-F.7.16
5	58887092	LINEAR TYPE CONTROLLER	2	See Breakdown-F.7.18
6	58905324	Outlet Section	1	
7	58905159	Inlet Section	1	
		•		



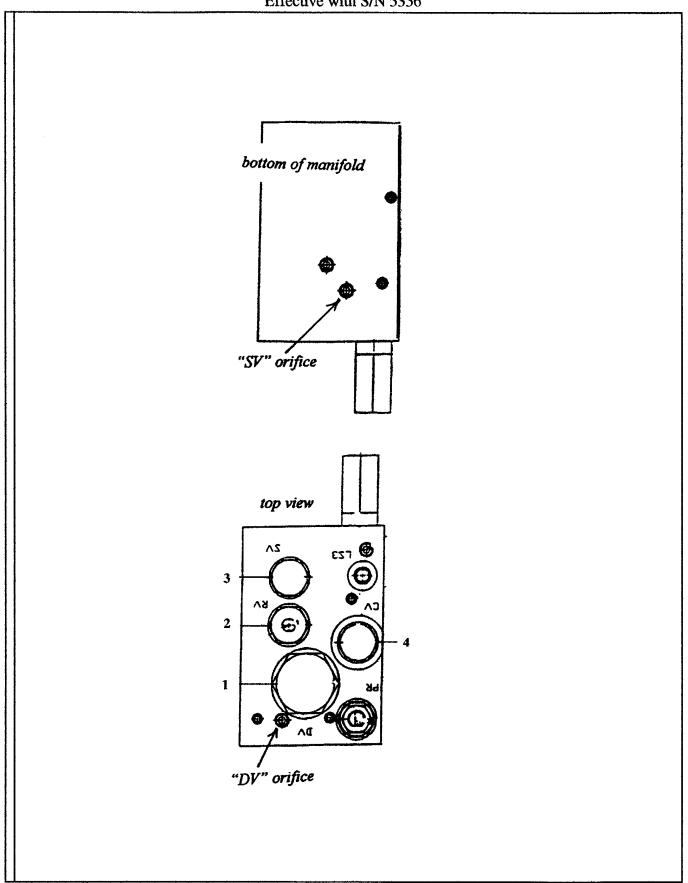
### HYDRAULIC KIT - NON-CBC (58973884) - INTERNAL BREAKDOWN - SHEET 2 OF 7

TEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
~	58905175	TILT AND LEVEL CONTROL VALVE	2	
	30703173	(Includes items 1 thru 64)		
1	58912411	O-Ring	2	
2	N.S.S.	Support Ring	2	
3	58912429	O-Ring	2	
4	58912395	Spring	2	
5	N.S.S.	Casing	2	
6	58912403	Spring	2	
7	58912437	O-Ring	2	
8	N.S.S.	Adjusting Screw	$\begin{bmatrix} 2 \\ 2 \end{bmatrix}$	
9	58912478	O-Ring	2	
10	N.S.S.	Stroke Limitation Screw	2	
11	N.S.S.	Cap	2	
12	58912445	Screw	2	
13	58912452	Nut	2	
14	58912460	Nut	2	
15	58886474	Cap Kit (Includes items 1 thru 3 and 7 thru 14)	2	
16	58886458	Spring Kit (Includes items 4 thru 6)	2	
17	58912411	O-Ring	2	
18	N.S.S.	Support Ring	2	
19	58912429	O-Ring	2	
20	58912395	Spring	2	
21	N.S.S.	Casing	2	
22	58912403	Spring	2	
23	58912437	O-Ring	2	
24	N.S.S.	Adjusting Screw	2	
25	58912445	Screw	2	
26	58912452	Nut	2	
27	58912460	Nut	2	
28	N.S.S.	Cap	2	
29	N.S.S.	Stroke Limitation Screw	2	
30	58912478	O-Ring	2	
31	58886482	Cap Kit (Includes items 17 thru 19 & 23 thru 30)	2	
32	58886466	Spring Kit (Includes items 20 thru 22)	2	
33	N.S.S.	Poppet	4	
34	58912239	Spring	4	
35	N.S.S.	Spring Guide	4	
36	58912221	O-Ring	4	



### HYDRAULIC KIT - NON-CBC (58973884) - INTERNAL BREAKDOWN - SHEET 2 OF 7

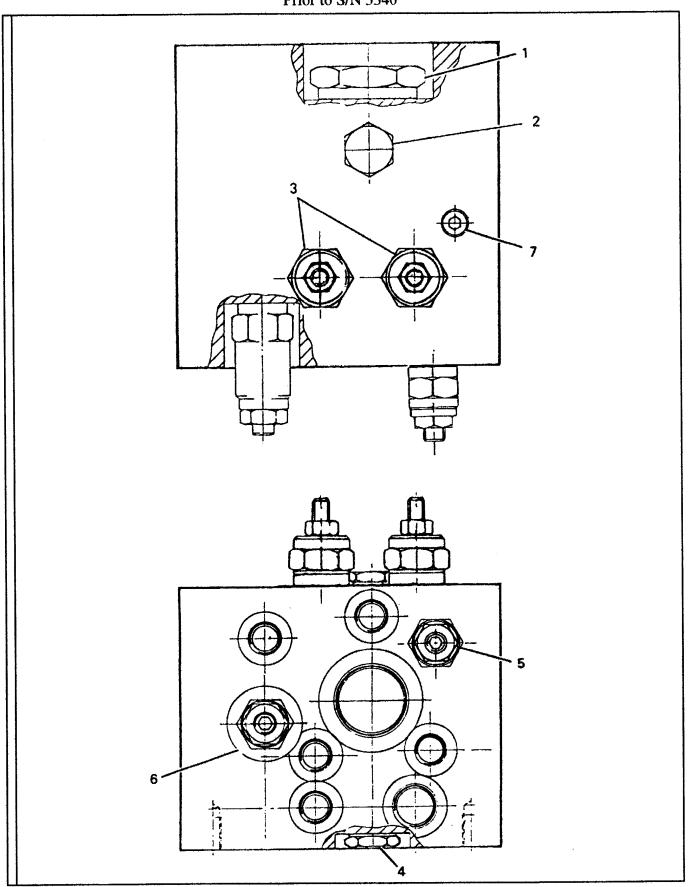
ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
		58973884		
37	58912189	Back up Ring	4	
38	58912213	Protective Cap	4	
39	58886532	Check Valve Assembly	4	
		(Includes items 33 thru 38)		
40	58912353	Spacer Ring	8	
41	58912379	O-Ring	4	
42	58912387	Backup Ring	4	
43	58912361	O-Ring	2	
44	58886573	Intersection Seal Kit (Includes items 40 thru 43)	2	
45	N.S.S.	Cartridge	2	
46	58912262	Spring for Anticavitation	2	
47	N.S.S.	Plug	2	
48	58912197	O-Ring	2	
49	58912189	Backup Ring	2	
50	58912171	Protective Cap	2	
52	58912254	Relief Valve - Side A (Includes items 45, 46,	1 1	:
		and 50)		
53	58912247	Relief Valve - Side B (Includes items 45, 46,	1 1	
		and 50)		
54	58912189	Backup Ring	2	
55	58912205	O-Ring	4	
56	N.S.S.	Y-Plug	2	
57	58912189	Backup Ring	2	
58	58912171	Protective Cap	2	
59	58912163	Y-Plug Assembly	2	
60	58912270	Mounting Plate	1 1	
61	58886557	Nut	2	
62	58912346	Washer	4	
63	58905357	Tie Rod	4	



#### HYDRAULIC KIT - NON-CBC (58973884) - INTERNAL BREAKDOWN - SHEET 3 OF 7 Effective with S/N 5356

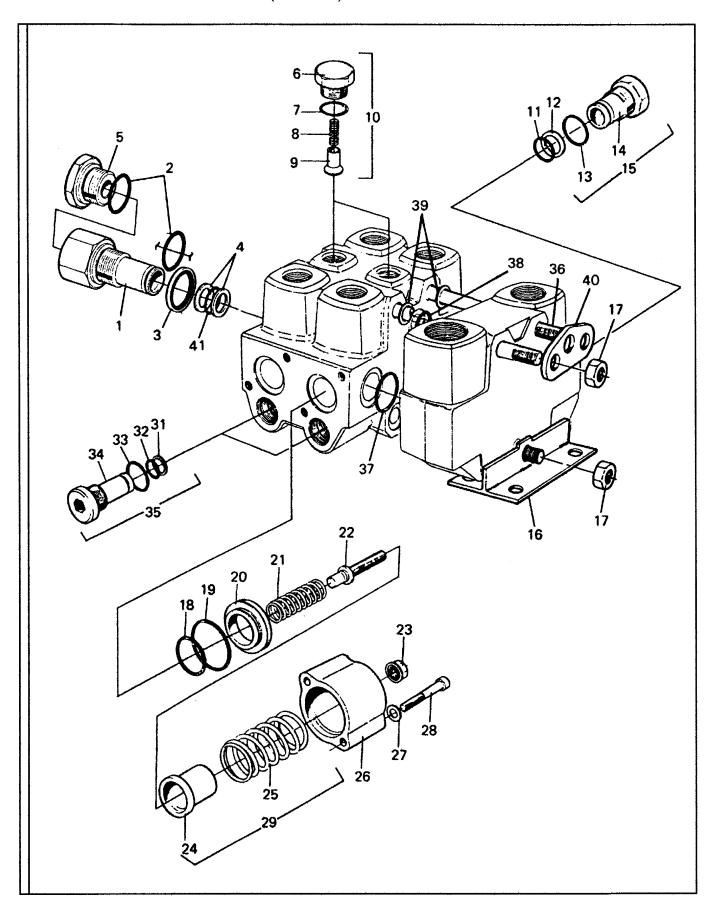
COMMINI. INU.	DESCRIPTION 58973884	VII	DIMENSIONS/NOTES		
59003939	Manifold	1			
58996075	-Pilot operated three-way valve	1			
59004291		1			
58996091	-Shuttle Valve	2			
58996109	-Check Valve	1			
58996117	-Pressure Reducing Valve	1			
58996125	-Four-Way Sequence Valve	1			
59052613	-Orifice	1			
	,				
1		1 1			
	58996075 59004291 58996091 58996109 58996117 58996125	59003939 Manifold 58996075 -Pilot operated three-way valve 59004291 -Steering Relief Valve 58996091 -Check Valve 58996117 -Pressure Reducing Valve 58996125 -Four-Way Sequence Valve 59052613 -Orifice	COMM. No.   DESCRIPTION   58973884   759003939   Manifold   1   1   1   1   1   1   1   1   1		

#### HYDRAULIC KIT - NON-CBC (58973884) - INTERNAL BREAKDOWN - SHEET 4 OF 7 Prior to S/N 5340



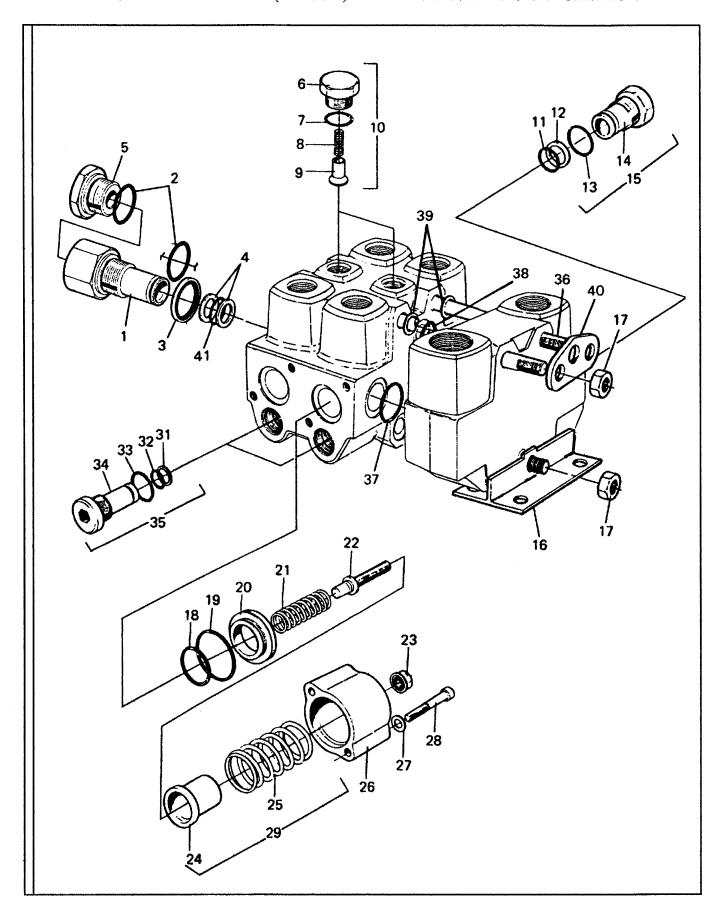
#### HYDRAULIC KIT - NON-CBC (58973884) - INTERNAL BREAKDOWN - SHEET 4 OF 7 Prior to S/N 5340

( <del></del>		Prior to S/N 5340	1	<u> </u>
**	58905191	Manifold	-	
1	59379917	-N.C. Diverter Valve	1	100 NM
2	58912288	-Check Valve	1	50 NM
3	58912296	-Reducing Valve	2	60 NM
4	58912304	-Check Valve (Poppet)	1	50 NM
5	58912312	-Relief Valve	1	50 NM
6	58912320	-Load Sensing Valve	1	50 NM
7	N.S.S.	-Shuttle	1	
**	58912338	Seal Kit	1	
	•			
:				
		*		
		VP_00B	<u> </u>	



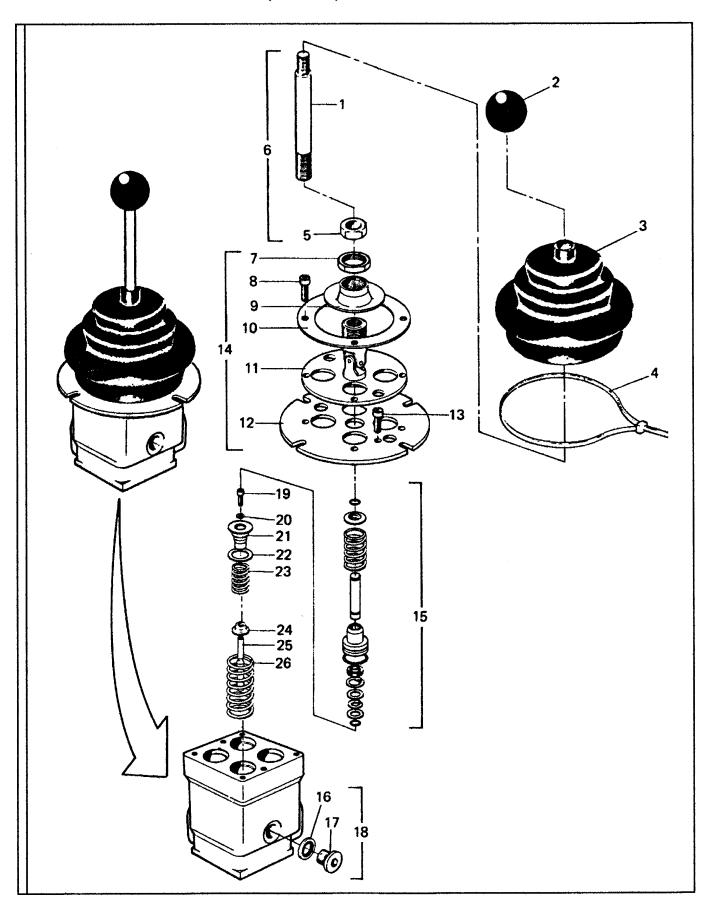
### HYDRAULIC KIT - NON-CBC (58973884) - INTERNAL BREAKDOWN - SHEET 5 OF 7

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
		58973884		
-	58905167	CROWD AND BOOM CONTROL VALVE	2	
		(Includes items 1 thru 35)		
1	58912486	Inlet Plug	1	
2	58912494	O-Ring	1	
3	58912536	Backup Ring	1	
4	58912502	O-Ring	2	
5	58912528	Reducing Plug	1	
6	58912700	Plug	2	
7	58912692	O-Ring	2	
8	58912718	Spring	2	
9	58912726	Poppet	2	
10	58886599	Check Valve (Includes items 6 thru 9)	2	
11	58912544	O-Ring	1	
12	58912551	O-Ring	1	
13	58912569	O-Ring	1	
14	58912557	Plug	1	
15	58886615	Y-Plug (Includes items 11 thru 14)	1	
16	58905290	Mounting Plate	1	
17	58912783	Nut	2	
18	58912585	O-Ring	4	
19	58912593	O-Ring	4	
20	58912601	Support Ring	4	
21	58912668	Spring	4	
22	58912619	Adjusting Screw	4	
23	58912635	Nut	4	
24	58912676	Casing	4	
25	58912684	Spring	4	
26	58912627	Cap	4	
27	58912643	Washer	4	
28	58912650	Screw	4	
29	58886649	Spring Kit (Includes items 21, 24, and 25)	4	
30	58886656	Cap Kit (Includes items 18 thru 20, 22, 23,	4	
		and 26 thru 28)		
31	58912759	Backup Ring	4	
32	58912767	O-Ring	4	
33	58912775	O-Ring	4	
34	58912742	Plug	4	
35	58912734	Plug Assembly (Includes items 31 thru 34)	4	



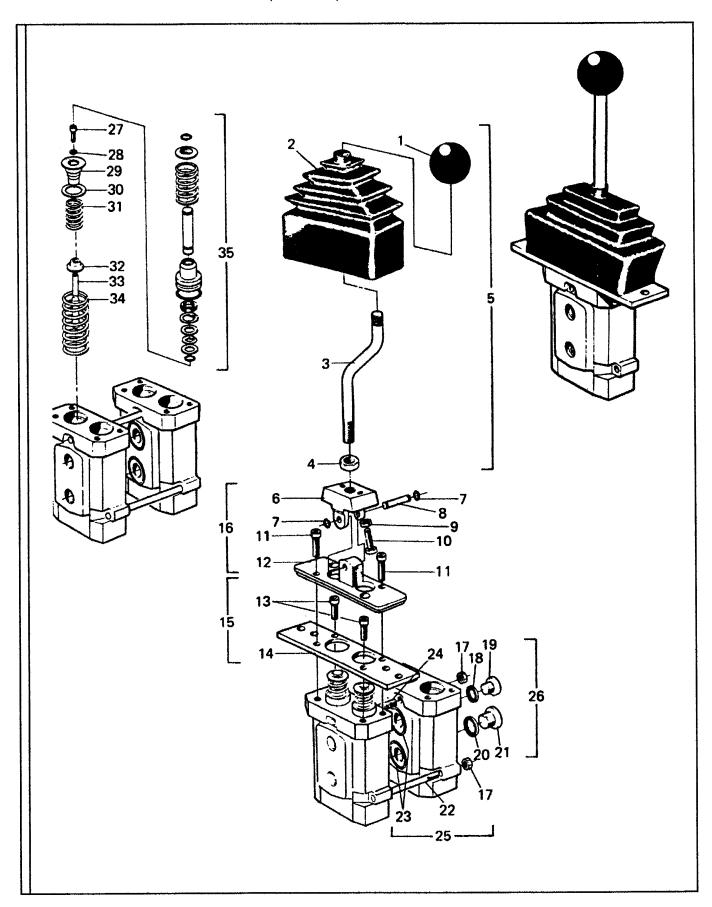
### HYDRAULIC KIT - NON-CBC (58973884) - INTERNAL BREAKDOWN - SHEET5 OF 7

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
		58973884		
36	58905241	Tie Rod	3	
37	58912817	O-Ring	2	
38	58912809	O-Ring	1	
39	58912791	Spacer Ring	2	
40	58905308	Lifting Lug	1	
41	58912510	O-Ring	1	
-	58912825	Seal Kit (Includes Items 37,38 and 39)	1	
	1			
		•		
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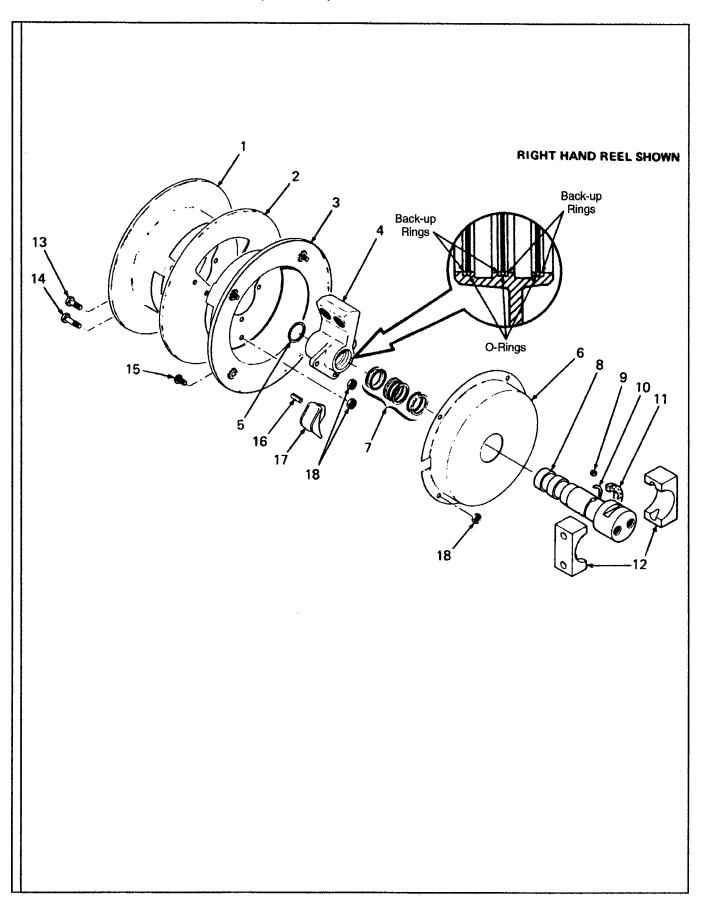
#### HYDRAULIC KIT - NON-CBC (58973884) - INTERNAL BREAKDOWN - SHEET 6 OF 7

TEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
		58973884		
-	58887084	JOYSTICK TYPE CONTROLLER	1	
		(Includes items 1 thru 26)		
1	N.S.S.	Control Rod	1 1	
2	N.S.S.	Ball	1	
3	N.S.S.	Bellows	1	
4	N.S.S.	Clamping Ring	1 1	
5	N.S.S.	Nut	1	
6	58886664	Hand Lever w/Threaded Ball (Includes items 1 thru 5)	1	
7	N.S.S.	Nut	1 1	
8	N.S.S.	Screw	4	
9	N.S.S.	Pressure Plate	1	
10	N.S.S.	Plate	1 1	
11	N.S.S.	Plate	1	
12	58887084	Plate	1	
13	N.S.S.	Screw	2	
14	58886672	Mounting Plate Assembly (Includes items 7 thru 13)	1	
15	58886839	Pressure Pin Set	4	
16	N.S.S.	O-Ring	2	
17	N.S.S.	Plug	2	
18	58886680	Plug Kit (Includes items 16 and 17)	$\begin{vmatrix} -1 \\ 1 \end{vmatrix}$	
19	58886730	Screw	$\begin{vmatrix} 1 \\ 1 \end{vmatrix}$	
20	58886722	Washer	$\begin{vmatrix} 1 \\ 1 \end{vmatrix}$	
21	N.S.S.	Guide	1	
22	58886714	Spacer Ring	1 1	
23	58886706	Spring	$\begin{vmatrix} 1 \\ 1 \end{vmatrix}$	
24	N.S.S.	Guide	1	
25	N.S.S.	Pin	1	
26	58886698	Return Spring	1	
20	30000030	Rotuin Spring	1	



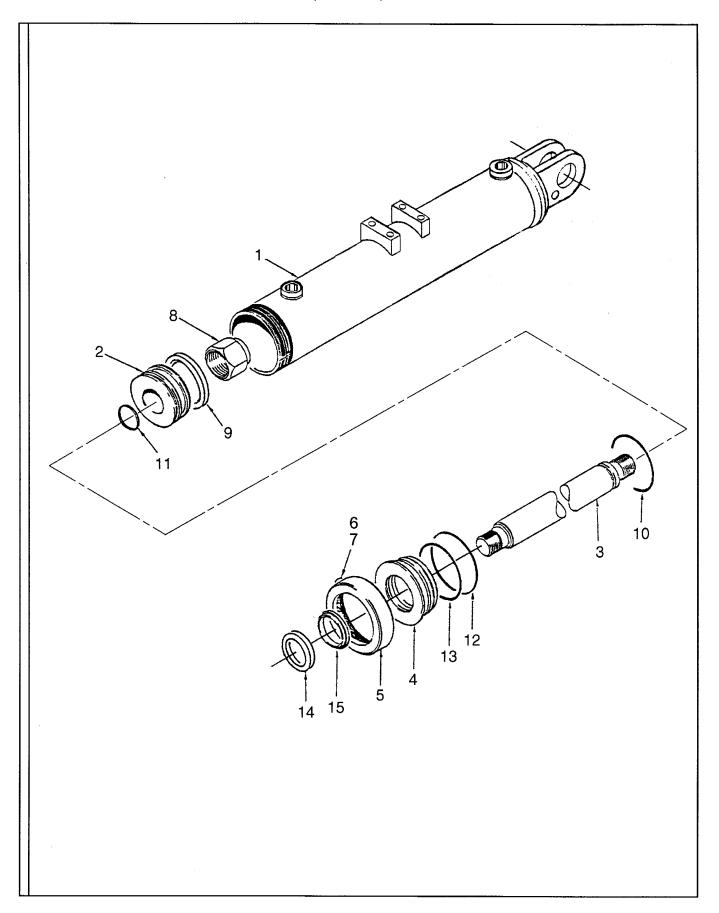
TEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
	58887092	LINEAR TYPE CONTROLLER (Includes	2	<u>,, , , , , , , , , , , , , , , , , , ,</u>
-	3000/094	items 1 thru 35)	4	
1	58886870	Ball		
1 2	58886862	Bellows	1	
3	N.S.S.	Control Rod	1	
<i>3</i>	58886854	Nut	$\begin{vmatrix} 1 \\ 1 \end{vmatrix}$	
5	58886888	Hand Lever Assembly (Includes items 1 thru 4)	$\begin{vmatrix} 1 \\ 1 \end{vmatrix}$	
6	N.S.S.	Cap	$\begin{vmatrix} 1 \\ 1 \end{vmatrix}$	
7	N.S.S.	Lock Ring	$\begin{vmatrix} 1 \\ 2 \end{vmatrix}$	
8	N.S.S. N.S.S.	Shaft	1	
9	N.S.S. N.S.S.	Nut	$\begin{vmatrix} 1 \\ 2 \end{vmatrix}$	
	i		$\begin{vmatrix} 2 \\ 2 \end{vmatrix}$	
10	N.S.S. N.S.S.	Adjusting Screw Screw	$\begin{vmatrix} 2 \\ 2 \end{vmatrix}$	
11		Pressure Plate	1	
12	N.S.S.		2	
13	N.S.S.	Screw Mounting Plate	$\begin{vmatrix} 2 \\ 1 \end{vmatrix}$	
14	N.S.S.	Mounting Plate  Mounting Plate Assembly (Includes items 13)	$\begin{vmatrix} 1 \\ 1 \end{vmatrix}$	
15	58886904	Mounting Plate Assembly (Includes items 13	1	
1.6	50002002	and 14)  Procesure Plate Assembly (Includes items 6)	1	
16	58886896	Pressure Plate Assembly (Includes items 6	1	
17	50007012	thru 12)	6	
17	58886912	Nut O Bina		
18	58886938	O-Ring	1	
19	58886946	Plug	1 1	
20	58886953	O-Ring	1	
21	58886961	Plug	$\begin{vmatrix} 1 \\ 2 \end{vmatrix}$	
22	N.S.S.	Tie Rod	$\begin{vmatrix} 2 \\ 2 \end{vmatrix}$	
23	58886920	O-Ring	2	
24	N.S.S.	Tie Rod	1	
25	58886979	Tie Rod Kit (Includes items 17 and 22 thru 24)	1	
26	58886987	Plug Kit (Includes items 18 thru 21)	1 1	
27	58887035	Screw	1 1	
28	58887027	Washer	1	
29	N.S.S.	Guide	1 1	
30	58887019	Spacer Ring	1	
31	58887001	Spring	1 1	
32	N.S.S.	Guide	1	
33	N.S.S.	Pin	1 1	
34	58886995	Return Spring	$\begin{vmatrix} 1 \\ 1 \end{vmatrix}$	
35	58887043	Pressure Pin Set	1	

### HOSE REEL (59456616) - INTERNAL BREAKDOWN



# HOSE REEL (59456616) - INTERNAL BREAKDOWN

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
		BOM 59460261		
1	58875758	Outboard Flange	1	
2	58875766	Divider	1	
3	58875774	Inboard Flange	1	
4	58875782	Hub	1	
5	58875790	Snap Ring	1	
6	58875808	Spring Assembly	1	
7	58881871	Shaft Seal Kit	1	
8	58875816	Shaft	1	
9	58875824	Spring Retained	1	
10	58875832	Snap Ring	1	
11	58875840	Felt Seal	1	
12	58875857	Mounting Block	2	
13	58875865	H.H.C.S.	3	1/4 - 20 x 0.625
14	58875873	H.H.C.S.	3	1/4 - 20 x 1.0
15	58875881	H.H.C.S.	4	
16	58875899	Roll Pin	1	
17	58875907	Hose Guide	2	
18	58875915	Nut	10	1/4 - 20
:				
L	1	VID OOD		<u> </u>

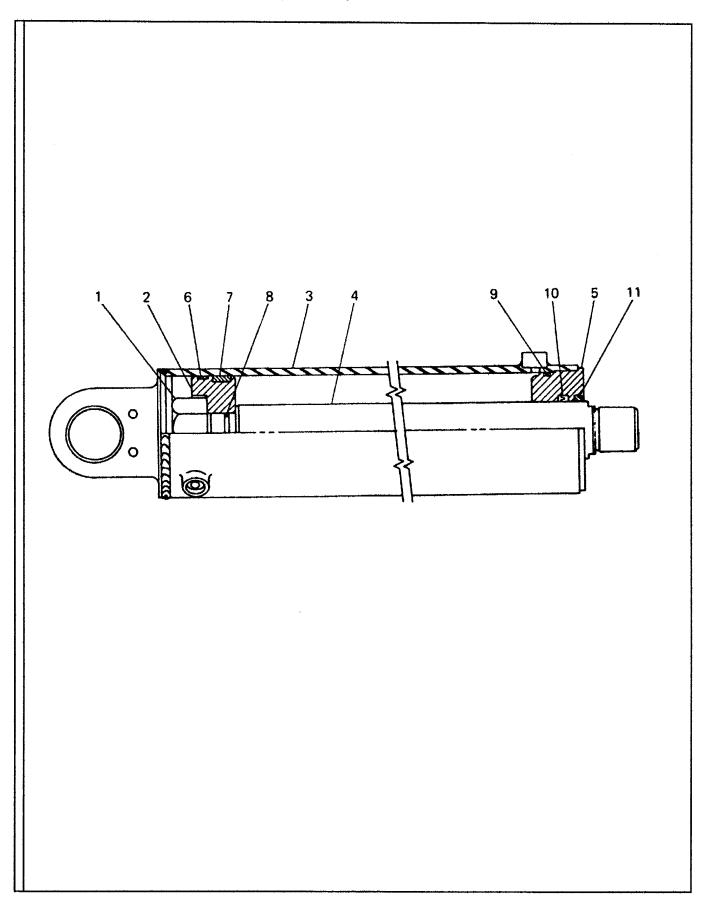


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# OUTRIGGER CYLINDER (59450114) - INTERNAL BREAKDOWN

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
		BOM 59450114		
1	N.S.S.	Barrel	1	
2	59477042	Piston	1	
3	59477059	Rod	1	
4	59477067	Gland	1	
5	59477075	Collar	1	
6	59477018	Set Screw	1	
7	59477026	Nylon Insert	1	
8	N.S.S.	Lock Nut	1	
9	N.S.S.	Wear Ring	1	
10	N.S.S.	Piston Seal	1	
11	N.S.S.	O-ring	1	
12	N.S.S.	O-ring	1	
13	N.S.S.	Backup	1	
14	N.S.S.	Rod Seal	1	
15	N.S.S.	Rod Wiper	1	
**	59477034	Seal Kit (Includes items 8 thru 15)	1	
	35477054	Sear Kit (merades terms o tiru 13)	1	
		•		
			:	

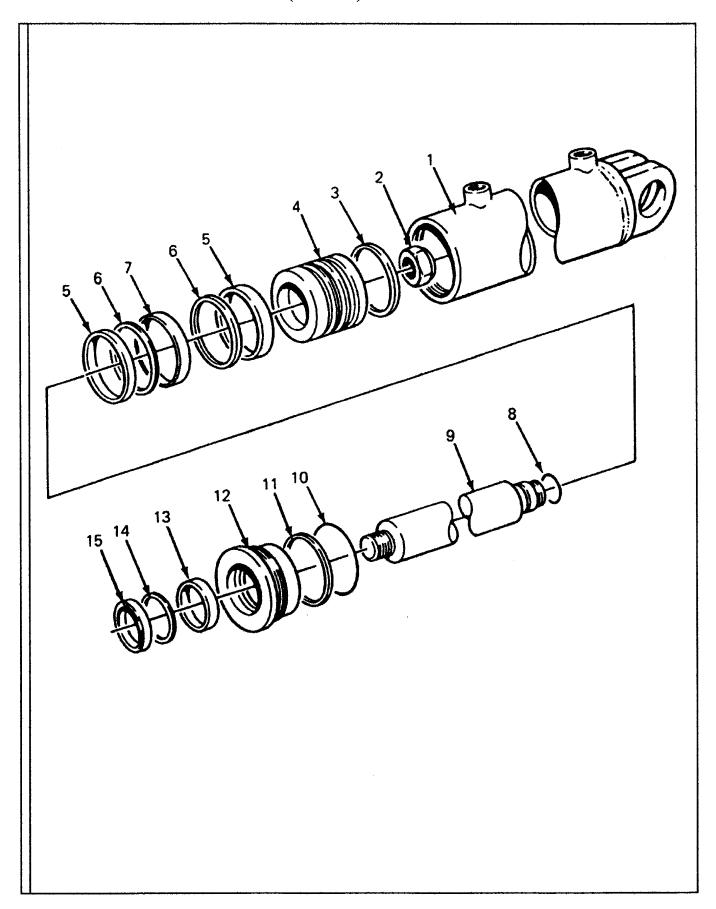
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# TILT CYLINDER (59474601) - INTERNAL BREAKDOWN

TEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
		BOM 59474601		
1	58766007	Lock Nut	1	
2	58765991	Piston	1	
3	58889049	Barrel Assembly	1	:
4	59487710	Rod	1	
5	59498196	Gland	1	
6	58875444	Wear Ring	1	
7	58875451	Piston Seal Assembly	1	
8	58875469	O-Ring	1	
9	58875477	O-Ring	1	
10	58875485	Rod Seal	1	
11	58875493	Wiper	1	
-	58754029	Seal Kit (Includes items 6-11)	1	
	;			
		,		
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# BOOM CYLINDER (59450577) - INTERNAL BREAKDOWN

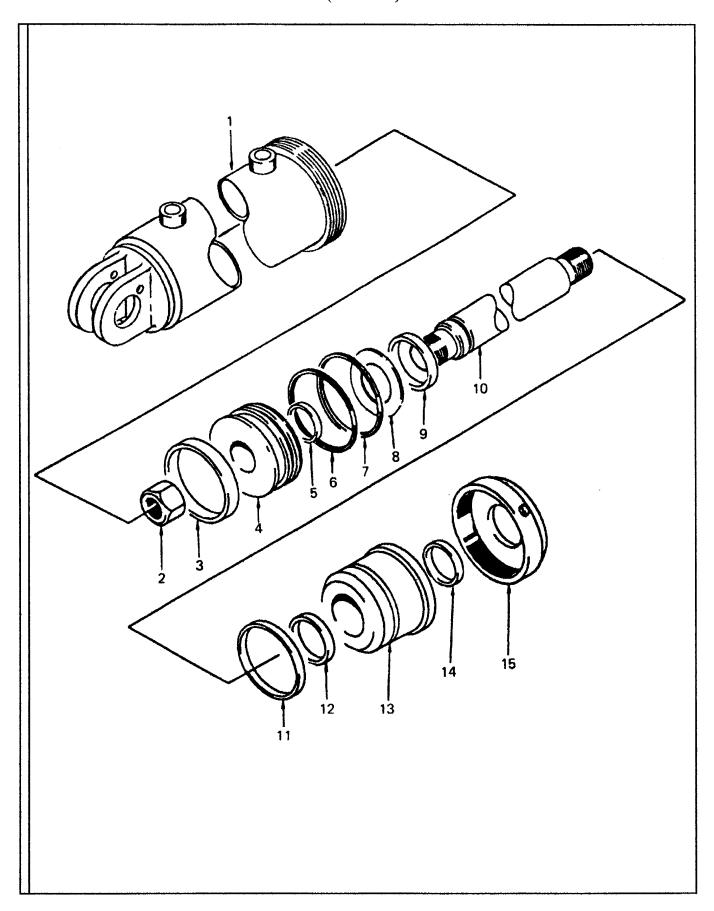


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# BOOM CYLINDER (59450577) - INTERNAL BREAKDOWN

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
******		BOM 59450577		
1	N.S.S.	Barrel Assembly	1	
2	59480566	Nut	1	
3	59480558	Piston Ring	2	
4	59480541	Piston	1	
5	N.S.S.	Seal Kit	2	
6	N.S.S.	Nylon Ring	2	
7	N.S.S.	Bearing	1	
8	N.S.S.	O-Ring	1	
9	59480533	Rod	1	
10	N.S.S.	Ring	1	
11	N.S.S.	Backup Ring	1	
12	59480574	Retainer	1	
13	N.S.S.	Seal	1	
14	N.S.S.	Nylon Ring	1	
15	N.S.S.	Wiper Ring	1	
-	59480582	Seal Kit (Includes items 5-8, 10-11, and 13-15)	1	
		•		
		VD OOD		

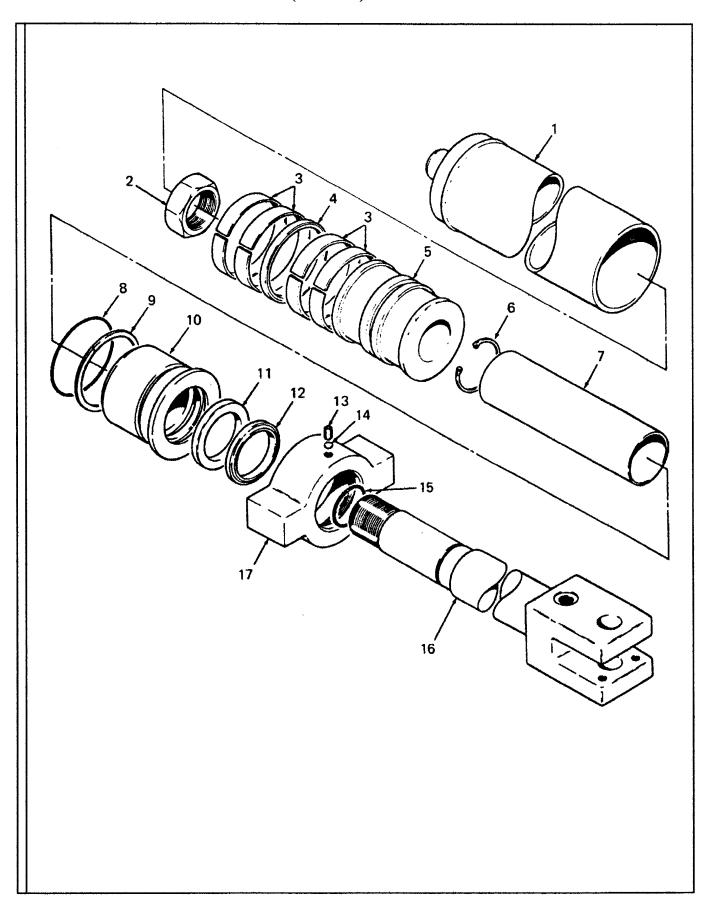
# COMPENSATING CYLINDER (59450049) - INTERNAL BREAKDOWN



# COMPENSATING CYLINDER (59450049) - INTERNAL BREAKDOWN

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
		BOM 59450049	1-1	
1	N.S.S.	Barrel Assembly	1	
2	59476952	Self-Locking Lock Nut	1	
3	N.S.S.	Wear Ring	1	
4	58754003	Piston	1	
5	N.S.S.	Rod Static Seal	1	
6	N.S.S.	Piston Seal	1	
7	N.S.S.	O-Ring	1	
8	58754011	Washer	1	
9	59496216	Piston Seal	1	
10	59490904	Rod	1	
11	N.S.S.	Gland Static Seal	1	
12	N.S.S.	Rod Seal	1	
13	59496695	Gland	1	
14	N.S.S.	Rod Wiper	1	
15	59477000	Collar	1	
-	59439158	Seal Kit (Includes items 3, 5-7, 11-12, and 14)	1	
		*		

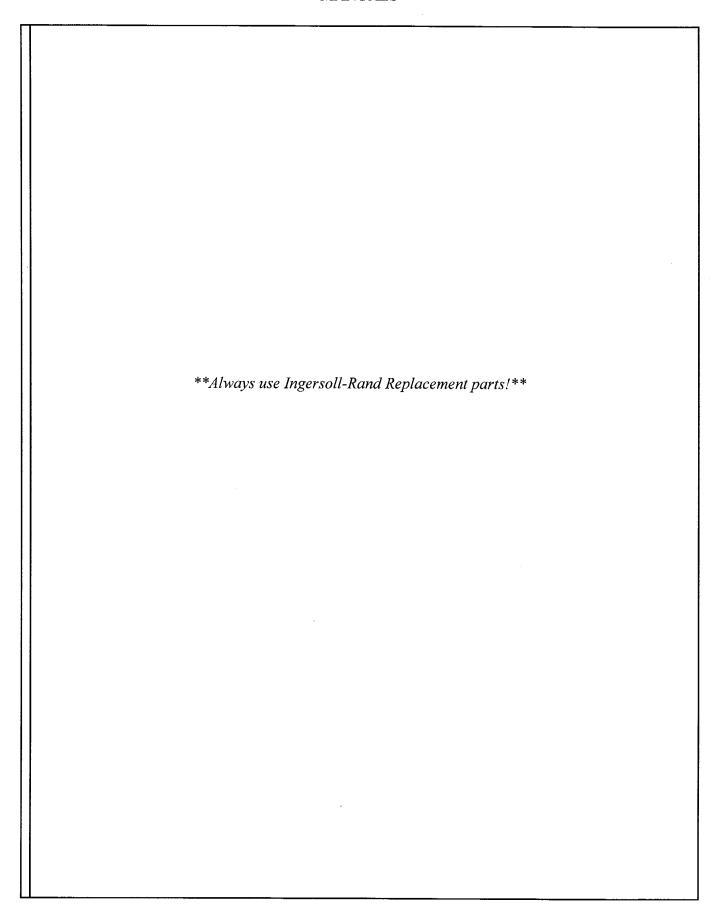
# CROWD CYLINDER (59450056) - INTERNAL BREAKDOWN



# CROWD CYLINDER (59450056) - INTERNAL BREAKDOWN

TEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
		BOM 59450056		
1	N.S.S.	Barrel Assembly	1	
2	58754060	Jam Nut	1	
3	N.S.S.	Wear Ring	4	
4	N.S.S.	Seal Assembly	1	
5	58754078	Piston	1	
6	58754086	Snap Ring	1	
7	58754094	Spacer	1	
8	N.S.S.	O-Ring	1	
9	N.S.S.	Backup Ring	1	
10	58753229	Gland	1	
11	N.S.S.	Rod Seal	1	
12	N.S.S.	Wiper	1	
13	59477018	Set Screw	1	
14	59477026	Nylon Insert	1	
15	N.S.S.	O-Ring	1	
16	58753211	Rod Assembly	1	
17	58753237	Trunnion	1	
_	58753278	Seal Kit (Includes items 3-4, 8-9, 11-12, and 15)	1	
		, ,		
		VP OOR	11	

# MANUALS



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### **MANUALS**

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1	59067801	орегаtor's/Maintainence Manual	1	
2	59131508	Parts Manual	$\begin{bmatrix} 1 \\ 1 \end{bmatrix}$	
3	59985069	Field Saftey Manual	1	
4	59483024	Perkins T4.40 Engine Operation Manual	$\left \begin{array}{c} 1\\1\end{array}\right $	
5	59131516	Parts Microfiche	1	
	37131310	Tatts Wilefoliche	1	
		``````````````````````````````````````		
		VR_90B	<u> </u>	

COMM. NO.	PAGE NO.	COMM. NO.	PAGE NO.	COMM. NO.	PAGE NO.	COMM. NO.	PAGE NO
		50754993	I.15.37	50757087	I.15.39	50958271	I.13.15
00196162	B.1.3	50755024	I.13.3	50801257	I.13.5		I.15.15
	B.2.3		I.15.3		I.15.5	50958289	I.13.15
00267468	E.3.3	50755032	I.15.27	50806496	I.1.3		I.15.15
12977021	H.1.7	50755065	I.13.17		I.3.3	50958297	I.13.15
	H.2.7		I.15.17	50847425	I.13.3		I.15.15
13024757	G.4.3	50755107	I.15.19		I.15.3	50958305	I.13.13
13024765	G.4.3	50755230	I.15.27	50847490	I.13.11		I.13.15
13090816	I.19.3	50755354	I.15.17		I.15.11		I.15.13
13090832	I.19.5	50755420	I.15.19	50847599	I.15.27		I.15.15
13090857	I.19.5	50755446	I.13.17	50847631	I.15.37	50958313	I.13.15
13090865	I.19.7		I.15.17	50847706	I.15.37		I.15.15
35304286	H.1.7	50755974	I.15.37	50848373	I.13.5	50958321	I.13.13
	H.2.7	50755982	I.15.39		I.15.5		I.13.15
35318252	I.9.3	50756055	I.13.5	50848407	I.15.27		I.15.13
50266287	A.7.3		I.15.5	50848431	I.13.17		I.15.15
50268242	G.1.9	50756105	I.15.37		I.15.17	50958339	I.13.15
50274299	B.4.3	50756113	I.15.37	50916857	I.1.3		I.15.15
	B.10.3	50756253	I.15.37		I.3.3	50958362	I.13.7
	B.11.3	50756337	I.13.3	50931971	B.5.3		I.15.7
50280403	I.1.3		I.15.3		B.6.3	50958388	I.13.7
	I.3.3	50756345	I.13.7	50938935	I.9.3		I.15.7
50753920	I.13.3		I.13.11	50938943	1.9.3		I.15.19
	I.15.3		I.15.7	50938950	I.9.3	50959519	I.13.7
50753953	I.15.37		I.15.11	50938968	I.9.3		I.15.7
50753961	I.15.5		I.15.25	50938976	I.9.3		I.15.27
50753987	I.15.3		I.15.37	50958198	I.15.35	50959527	I.13.7
50754696	I.15.37	50756352	I.15.19	50958214	I.15.35		I.15.7
	I.15.39		I.15.35	50958255	I.13.13	50959550	I.13.7
50754753	I.13.3	50756360	I.15.13		I.13.15		I.15.7
50754829	I.15.39	50756378	I.15.27		I.15.13	50959568	I.13.7
50754878	I.13.3	50756451	I.15.19		I.15.15		I.15.7
	I.13.5		I.15.35	50958263	I.13.13	50959592	I.13.7
	I.15.3	50756493	I.15.37		I.13.15		I.15.7
	I.15.5	50756998	I.15.37		I.15.13	50959600	I.13.7
50754977	I.15.3	50757079	I.15.39		I.15.15		I.15.7

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COMM. NO.	PAGE NO.	COMM. NO.	PAGE NO.	COMM. NO.	PAGE NO.	COMM. NO.	PAGE NO.
50959675	I.13.11	50960251	I.15.17		I.15.25	51009405	I.15.37
	I.15.11		I.15.19	50960723	I.15.17	51037240	I.15.27
50959683	I.13.11		I.15.25	i	I.15.19	51050532	I.19.3
	I.15.11	50960269	I.13.17		I.15.21		I.20.3
50959691	I.13.11		I.15.17		I.15.25	51052389	E.3.3
	I.15.11	50960277	I.13.17	50960731	I.15.19	51055465	I.19.7
50959717	I.13.11		I.15.17	50960749	I.15.17	56919004	F.3.5
	I.15.11		I.15.19		I.15.21	57282063	E.3.3
50959774	I.13.11	50960327	I.15.21		I.15.25	58753211	I.27.3
	I.15.11	50960335	I.15.19	50960756	I.15.17	58753229	I.27.3
50959782	I.13.11		I.15.27		I.15.21	58753237	I.27.3
	I.15.11	50960343	I.15.19	50960772	I.15.17	58753245	G.1.3
50959790	I.13.11	50960350	I.15.19		I.15.25	58753252	G.1.3
	I.15.11	50960376	I.15.17	51008928	I.15.19	58753260	G.1.3
50959824	I.13.11		I.15.19	51008969	I.13.7	58753278	I.27.3
	I.15.11		I.15.25		I.15.7	58753294	B.1.3
50959873	I.13.13	50960475	I.15.21	51009009	I.15.35		B.2.3
	I.15.13	50960517	I.15.19	51009017	I.15.35	58753757	B.5.3
50959931	I.15.5		I.15.25	51009041	I.15.23		B.6.3
50959949	I.13.3	50960665	I.15.17	51009108	I.13.3	58753831	B.1.3
	I.15.3		I.15.19		I.15.3		B.2.3
50959964	I.13.3		I.15.21	51009116	I.13.3	58753849	F.1.11
	I.15.3		I.15.25		I.15.3	58753898	B.1.3
50960186	I.13.17	50960673	I.15.17	51009132	I.13.3		B.2.3
	I.15.17		I.15.19		I.13.5	58753971	I.12.3
50960194	I.13.17		I.15.21		I.15.3	58753989	I.12.3
	I.15.17		I.15.25		I.15.5	58753997	I.12.3
50960210	I.13.17	50960681	I.15.19	51009157	I.13.3	58754003	I.26.3
	I.15.17	50960699	I.15.17		I.15.3	58754011	I.26.3
	I.15.21		I.15.19	51009165	I.13.3	58754078	I.27.3
50960236	I.13.17		I.15.21		I.15.3	58754086	I.27.3
	I.15.17		I.15.25	51009181	I.13.3	58754094	I.27.3
	I.15.21	50960707	I.15.19		I.15.3	58762600	B.1.3
50960244	I.15.17	50960715	I.15.17	51009207	I.15.25		B.2.3
	I.15.19		I.15.19	51009231	I.15.27		E.1.7
	I.15.25		I.15.21	51009256	I.15.27	58762618	B.1.3

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	B.2.3		I.11.5	58800608	C.2.3		I.11.11
	E.1.7	58785858	C.2.7		I.11.3	58800855	I.11.11
58762626	B.1.3		I.11.7	58800616	C.2.5	58801309	C.2.5
	B.2.3	58785866	C.2.3		I.11.5		I.11.5
	E.1.7		I.11.3	58800624	C.2.3	58801416	C.2.3
58766023	C.2.5	58785874	C.2.3		C.2.5		I.11.3
	I.11.5		I.11.3		I.11.3	58801424	C.2.3
58767997	C.2.7	58785882	C.2.5		I.11.5		I.11.3
	I.11.7		I.11.5	58800632	C.2.5	58801432	C.2.3
58770165	F.1.3	58787078	F.2.5		I.11.5		I.11.3
	F.2.5	58788894	E.2.3	58800640	C.2.3	58801440	C.2.3
58773763	C.2.9	58791476	B.1.3		I.11.3		I.11.3
	I.11.9		B.2.3	58800657	C.2.5	58801457	C.2.3
58774225	C.2.7	58792136	I.11.13		I.11.5		I.11.3
	I.11.7	58793183	G.1.7	58800665	C.2.5	58801465	C.2.3
58774233	C.2.7	58793191	G.1.5		I.11.5		I.11.3
	I.11.7	58793209	G.1.5	58800673	C.2.5	58801473	C.2.3
58774241	C.2.7	58793316	B.2.3		I.11.5		I.11.3
	I.11.7	58793340	G.3.3	58800681	C.2.7	58801481	C.2.3
58778796	H.2.5	58793399	G.3.3	:	I.11.7		I.11.3
58782327	H.2.3	58800509	C.2.5	58800699	C.2.7	58801499	C.2.3
	H.2.5		I.11.5		I.11.7		I.11.3
58782392	H.1.7	58800517	C.2.5	58800707	C.2.7	58801507	C.2.3
	H.2.7		I.11.5		I.11.7		I.11.3
58783294	E.1.7	58800525	C.2.5	58800749	C.2.7	58801515	C.2.3
58784539	C.2.7		I.11.5		I.11.7		I.11.3
	I.11.7	58800533	C.2.5	58800764	C.2.9	58801523	C.2.3
58784562	C.2.7		I.11.5		I.11.9		I.11.3
	I.11.7	58800541	C.2.5	58800772	C.2.9	58801531	C.2.3
58784570	C.2.7		I.11.5		I.11.9		I.11.3
	I.11.7	58800566	C.2.5	58800780	C.2.9	58801549	C.2.3
58784588	C.2.7		I.11.5		I.11.9		I.11.3
	I.11.7	58800574	C.2.5	58800806	I.11.9	58801556	C.2.3
58785833	C.2.7		I.11.5	58800814	C.2.11		I.11.3
	I.11.7	58800582	C.2.5		I.11.11	58801564	C.2.3
58785841	C.2.5		I.11.5	58800822	C.2.11		I.11.3

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58801572	C.2.3	58817990	H.1.5	58827346	A.1.3	58828898	I.20.5
	I.11.3		H.2.5	58827361	A.1.3	58841214	G.5.3
58801580	C.2.3	58818782	I.19.3	58827379	A.1.3	58841248	H.1.5
	I.11.3		I.20.3	58827387	A.1.3		H.1.7
58801598	C.2.3	58818790	I.19.3	58827478	A.3.3		H.2.5
	I.11.3		I.20.3	58827544	F.1.5		H.2.7
58801606	C.2.3	58818816	I.20.3	58827551	F.1.5	58841545	G.1.3
	I.11.3	58818824	I.19.3	58827569	E.1.3	58841586	F.1.11
58801614	C.2.5		I.20.3		E.1.5	58842261	G.2.3
	I.11.5	58818931	I.19.5	58827577	E.1.3	58846890	E.1.5
58801622	C.2.5		I.20.3	58827593	A.1.3		E.1.7
	I.11.5	58818949	I.19.5	58827692	F.1.5	58846924	G.2.3
58801630	C.2.5		I.20.3		F.1.9	58846981	G.2.3
	I.11.5	58818964	I.19.7	58827783	A.1.3	58847005	G.2.3
58802885	F.2.13		I.20.3	58827817	F.1.3	58850280	H.1.5
58808221	A.8.3	58818972	I.19.7	58827965	H.1.5		H.1.7
	A.12.3		I.20.3	58827973	A.1.3		H.2.5
	E.5.3	58818980	I.20.3		A.2.3		H.2.7
58808239	A.8.3	58819335	I.20.3		D.3.3	58850298	G.1.5
	A.12.3	58819376	I.20.3		D.4.3	58850348	H.1.3
	E.5.3	58819384	I.19.5	58828773	I.20.3		H.2.3
58808254	E.5.3		I.20.3	58828781	I.20.3	58850488	G.2.3
58811332	A.7.5	58819392	I.20.3	58828799	I.19.3	58850496	G.1.7
58811761	H.2.5	58819400	I.20.3		I.20.3	58850629	H.1.3
58811969	A.7.3	58819418	I.20.3	58828807	I.19.3		H.2.3
58811977	A.7.3	58819426	I.19.5		I.20.3	58850637	A.5.3
58811985	A.7.3		I.20.3	58828815	I.19.3	58850801	H.1.5
58812108	H.1.7	58819434	I.20.3		I.20.3		H.1.7
	H.2.7	58819574	I.19.7	58828823	I.20.3	,	H.2.5
58812116	H.1.7	58825464	D.7.3	58828849	I.19.3		H.2.7
	H.2.7	58826769	G.1.3		I.20.5	58850918	F.1.7
58812173	H.1.5	58827155	H.1.5	58828856	I.19.3	58850975	H.1.3
	H.2.5		H.2.5		I.20.5		H.2.3
58815853	I.19.3	58827304	A.1.3	58828880	I.19.3	58850991	E.1.9
	I.20.5	58827312	A.1.3		I.19.7	58851320	D.3.3
58817610	G.2.3	58827338	A.5.3		I.20.5		D.4.3

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58851411	F.1.5	58875170	I.4.3	58875832	I.22.3	58882739	G.1.5
	F.2.9	58875188	I.4.3	58875840	I.22.3	58882754	G.4.3
58851437	F.2.7	58875196	B.1.3	58875857	I.22.3	58882770	G.4.3
	F.2.13		B.2.3	58875865	I.22.3	58882788	G.4.3
58851452	F.1.5		E.1.7	58875873	I.22.3	58882804	G.4.3
58851486	F.4.7	58875204	A.7.3	58875881	I.22.3	58882903	F.3.3
58851528	F.2.9	58875212	D.3.3	58875899	I.22.3	58882929	H.1.5
58851544	F.4.7		D.4.3	58875915	I.22.3		H.1.7
58851551	H.1.7		D.5.3	58875923	A.12.3		H.2.5
	H.2.7	58875220	D.3.3		E.5.3		H.2.7
58852096	H.1.3		D.4.3	58875931	A.12.3	58882937	H.1.5
	H.2.3		D.5.3		E.5.3		H.1.7
58852724	D.4.3	58875238	D.5.3	58875949	A.12.3		H.2.5
58852773	I.5.3	58875246	D.5.3		E.5.3		H.2.7
58857095	G.4.3	58875253	D.5.3	58876079	I.19.3	58883232	A.8.3
58866526	I.15.33	58875261	D.3.3		I.20.3	58883612	A.1.3
58866534	I.15.29		D.4.3	58876087	I.19.3	58883703	E.3.3
	I.15.33		D.5.3		I.20.3	58883729	F.5.3
58868878	D.5.3	58875352	B.1.3	58876095	I.19.3	58883745	F.5.3
58874637	D.3.3		B.2.3		I.20.3	58883752	F.3.3
	D.4.3	58875360	B.1.3	58876103	I.19.3	58883778	F.3.3
58874645	D.3.3		B.2.3		I.20.3	58883794	F.3.3
	D.4.3	58875402	E.7.3	58876111	I.19.3	58883802	F.3.3
58874652	D.3.3	58875410	E.7.3		I.20.3	58883935	G.1.7
	D.4.3	58875428	E.7.3	58876129	I.19.3	58884438	E.5.3
58874801	F.1.11	58875436	E.7.3		I.20.5	58884446	A.12.3
58874819	F.1.11	58875501	E.6.3	58876137	I.19.7		E.5.3
58874827	F.1.11	58875519	B.1.3		I.20.3	58884453	B.10.3
58875097	I.8.3		B.2.3	58878976	H.2.3		B.11.3
58875105	I.8.3	58875766	I.22.3		H.2.5	58884610	G.1.5
58875113	I.8.3	58875774	I.22.3	58881871	I.22.3	58884636	G.1.5
58875121	I.8.3	58875782	I.22.3	58882028	G.1.7	58884644	G.1.7
58875139	I.8.3	58875790	I.22.3	58882622	F.2.13	58884651	G.1.5
58875147	I.8.3	58875808	I.22.3	58882630	H.1.5	58885989	I.13.3
58875154	I.8.3	58875816	I.22.3		H.2.5		I.13.5
58875162	I.4.3	58875824	I.22.3	58882648	D.4.3	•	I.15.3

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	I.15.5	58886243	I.15.41	58886706	I.21.17	58899014	H.2.3
58885997	I.13.3	58886250	I.15.41	58886714	I.21.17	58905159	I.21.3
	I.15.3	58886284	I.13.9	58886722	I.21.17	58905175	I.21.3
58886003	I.15.3		I.15.9	58886730	I.21.17	58905191	I.21.3
58886011	I.13.7	58886292	I.13.9	58886839	I.21.17		I.21.11
	I.15.7		I.15.9	58886854	I.21.19	58905241	I.21.15
58886029	I.13.9	58886300	I.15.13	58886862	I.21.19	58905308	I.21.15
	I.15.9		I.15.15	58886870	I.21.19	58905324	I.21.3
58886037	I.13.11	58886318	I.15.13	58886888	I.21.19	58905357	I.21.7
	I.15.11		I.15.15	58886896	I.21.19	58912049	I.16.3
58886045	I.13.11	58886334	I.15.13	58886904	I.21.19	58912056	I.16.3
	I.15.11		I.15.21	58886912	I.21.19	58912064	I.16.3
58886052	I.13.11	58886342	I.15.21	58886920	I.21.19	58912072	I.16.3
	I.15.11	58886359	I.15.37	58886938	I.21.19	58912080	I.16.3
58886060	I.15.13	58886367	I.15.37	58886946	I.21.19	58912098	I.16.3
58886078	I.15.13	58886458	I.21.5	58886953	I.21.19	58912106	I.16.3
58886086	I.13.17	58886466	I.21.5	58886961	I.21.19	58912122	I.16.3
	I.15.17	58886482	I.21.5	58886979	I.21.19	58912148	I.16.3
58886094	I.15.17	58886490	I.21.7	58886987	I.21.19	58912155	I.16.3
	I.15.21	58886508	I.21.7	58886995	I.21.19	58912171	I.21.7
58886102	I.15.19	58886516	I.21.7	58887001	I.21.19	58912189	I.21.7
58886110	I.15.23	58886524	I.21.7	58887019	I.21.19	58912197	I.21.7
58886128	I.15.25	58886540	I.21.7	58887027	I.21.19	58912205	I.21.7
58886136	B.1.3	58886557	I.21.7	58887035	I.21.19	58912213	I.21.7
	B.2.3	58886573	I.21.7	58887043	I.21.19	58912221	I.21.5
	I.15.35	58886581	I.21.13	58887050	I.21.5	58912239	I.21.5
58886144	I.15.37	58886599	I.21.13	58887076	I.21.3	58912262	I.21.7
58886151	I.15.37	58886615	I.21.13		I.21.13	58912288	I.21.9
58886169	I.15.37	58886623	I.21.13	58887084	I.21.3		I.21.11
58886177	I.15.37	58886631	I.21.13		I.21.17	58912296	I.21.9
58886185	I.15.37	58886649	I.21.13	58887092	I.21.3		I.21.11
58886193	I.15.39	58886656	I.21.13		I.21.19	58912304	I.21.9
58886201	I.15.41	58886664	I.21.17	58889007	E.3.3		I.21.11
58886219	I.15.41	58886672	I.21.17	58889015	E.3.3	58912312	I.21.9
58886227	I.15.41	58886680	I.21.17	58889239	E.7.3		I.21.11
58886235	I.15.41	58886698	I.21.17		I.7.3	58912320	I.21.9

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	I.21.11	58912692	I.21.13	58964487	G.1.3	59013417	I.17.3
58912338	I.21.11	58912700	I.21.13	58964578	G.1.3	59020040	H.1.3
58912346	I.21.7	58912718	I.21.13	58965492	B.1.3	59022038	I.11.9
58912353	I.21.7	58912726	I.21.13		B.2.3	59041806	E.1.5
58912361	I.21.7	58912734	I.21.13		E.1.5	59041921	M.1.3
58912379	I.21.7	58912742	I.21.13	58965526	H.1.3	59044990	D.4.3
58912387	I.21.7	58912759	I.21.13		H.1.5		D.5.3
58912395	I.21.5	58912767	I.21.13	58965559	H.1.3	59045005	D.4.3
58912403	I.21.5	58912775	I.21.13	58965583	H.1.7		D.5.3
58912411	I.21.5	58912791	I.21.15	58965617	H.1.7	59048926	H.1.5
58912429	I.21.5	58912809	I.21.15	58966615	I.2.3	59048934	H.1.3
58912437	I.21.5	58912817	I.21.15	58966763	I.15.29		H.1.5
58912445	I.21.5	58912825	I.21.15	58966771	I.15.29	59048959	H.1.3
58912452	I.21.5	58914805	1.7.3	58969130	I.7.3		H.1.5
58912460	I.21.5	58917550	H.1.7	58972928	E.1.3		H.1.7
58912478	I.21.5		H.2.7		E.1.5	59048967	H.1.3
58912486	I.21.13	58919580	B.1.3		E.1.9		H.1.5
58912494	I.21.13		B.2.3	58974346	F.1.15	59049023	I.2.3
58912502	I.21.13	58922543	F.4.7	58974890	C.2.9	59049031	I.2.3
58912510	I.21.15	58923186	I.15.29		I.11.9	59049049	I.2.3
58912536	I.21.13	58930512	F.2.7	58977166	G.3.3	59049056	I.2.3
58912544	I.21.13		F.2.13	58977174	G.3.3	59049064	I.2.3
58912551	I.21.13	58939968	G.1.5	58996075	I.21.9	59049072	I.2.3
58912557	I.21.13	58944372	I.15.29	58999103	H.1.3	59049080	I.2.3
58912569	I.21.13	58951047	I.2.3	59000562	H.2.5	59049098	I.2.3
58912585	I.21.13	58961210	I.15.29	59000638	H.2.5	59050294	I.13.17
58912593	I.21.13	58961582	E.3.3	59000943	G.5.3		I.15.17
58912601	I.21.13	58961608	H.2.5	59001230	G.5.3	59050302	I.15.17
58912619	I.21.13	58961624	H.1.5	59001263	G.5.3	59050310	I.15.29
58912627	I.21.13		H.2.5	59001321	F.2.5	59050328	I.15.31
58912635	I.21.13	58961707	D.3.3	59001354	A.4.3	59050336	I.15.31
58912643	I.21.13		D.4.3	59001362	A.4.3	59050344	I.15.31
58912650	I.21.13	58963638	H.1.5	59001388	F.1.5	59050351	I.15.31
58912668	I.21.13		H.1.7	59003939	I.21.9	59050369	I.15.31
58912676	I.21.13		H.2.5	59005595	F.3.5	59050377	I.15.31
58912684	I.21.13		H.2.7	59012773	H.1.7	59050385	I.15.31

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59050393	I.15.31	59051979	I.7.3	59052654	I.17.3	59096495	B.5.3
59050401	I.15.31	59051987	I.7.3	59052662	I.17.3	59096503	A.12.3
59050419	I.15.31	59051995	I.7.3	59068114	E.1.9		E.5.3
59050427	I.15.31	59052001	I.7.3	59076042	A.7.5	59096511	A.12.3
59050435	I.15.31	59052019	I.7.3	59080911	F.3.3	59096529	E.1.3
59050443	I.15.31	59052027	I.7.3	59080929	F.3.3		E.1.5
59050450	I.13.11	59052035	I.7.3	59083071	H.1.5	59096537	E.1.3
	I.15.11	59052043	I.7.3	59083089	H.1.3	59096545	A.12.3
59050492	I.19.3	59052050	I.7.3		H.1.5	59096552	A.12.3
59050500	I.19.3	59052068	I.7.3	59086579	H.1.3	59096669	A.1.3
59050518	I.19.3	59052076	I.7.3		H.1.5	59096677	B.10.3
59050526	I.19.3	59052084	I.7.3	59087205	E.1.3	59096685	G.1.13
59050534	I.19.3	59052092	I.7.3		E.1.7	59096701	G.2.3
59050542	I.19.3	59052100	I.7.3	59087213	E.1.3	59105809	A.4.3
59050559	I.19.5	59052118	I.7.3		E.1.7	59108308	A.12.3
59050567	I.19.5	59052126	I.7.3	59090027	F.2.5	59108522	B.1.3
59050583	I.2.3	59052134	I.7.3	59090035	F.1.3	59109579	B.4.5
59050591	I.2.3	59052142	I.7.3	59090043	F.1.3	59109587	B.4.3
59050856	H.1.3	59052159	I.7.3	59090068	F.1.15	59109603	A.12.3
	H.1.5	59052167	I.7.3	59090076	F.1.15	59110387	C.1.3
59050864	H.1.3	59052175	I.7.3	59090092	F.1.11	59111872	D.1.3
	H.1.5	59052183	I.7.3	59090118	F.1.3	59112003	E.1.9
59050880	H.1.5	59052191	I.7.3	59090142	I.5.3	59113159	B.7.3
59051375	H.1.5	59052209	I.7.3	59090274	D.7.3	59114207	B.9.3
59051409	I.2.3	59052217	I.7.3	59090886	E.1.9	59114215	B.7.3
59051417	I.2.3	59052233	I.7.5	59092239	F.1.3	59117184	H.1.5
59051425	I.2.3	59052241	I.7.5	59093765	D.3.3	59121152	I.13.3
59051771	I.7.3	59052258	I.7.5	59093815	E.1.3	59121160	I.13.5
59051797	I.7.3	59052266	I.7.5		E.1.5	59121178	I.13.11
59051904	I.7.3	59052472	I.7.3		E.1.9	59121186	I.13.19
59051912	I.7.3	59052480	A.4.3	59093898	D.7.3	59123745	C.2.11
59051920	I.7.3	59052498	A.4.3	59093906	D.3.3	59123752	C.2.9
59051938	I.7.3	59052506	A.4.3	59093914	D.3.3	59123760	C.2.9
59051946	I.7.3	59052613	I.21.9	59094110	F.1.3	59123778	C.2.9
59051953	I.7.3	59052639	I.17.3	59096479	E.1.9	59123786	C.2.13
59051961	I.7.3	59052647	I.17.3	59096487	B.5.3	59123794	C.2.13

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5920526	F.5.3	59348581	I.19.3		I.20.3	59438937	C.2.9
59303800	E.3.3		I.20.3	59408567	F.1.15		I.11.9
59305680	I.19.7	59349423	I.19.7		F.2.3	59438945	C.2.11
	I.20.3		I.20.3	59409037	H.2.5		I.11.11
59306340	H.2.3	59349928	C.2.3	59409045	H.2.3	59438952	I.11.9
	H.2.5		I.11.3	59409052	H.2.5	59439141	I.12.3
	H.2.7	59349936	C.2.3	59414201	I.17.3	59439158	I.26.3
59306522	D.7.3		I.11.3	59414243	I.17.3	59445155	I.15.37
59320960	B.1.3	59349944	C.2.3	59415869	B.10.3	59446153	I.14.3
	B.2.3		I.11.3		B.11.3	59446161	I.14.3
59325712	A.12.3	59349951	C.2.3	59416321	I.17.3	59446179	I.14.3
	E.1.5		I.11.3	59417493	E.2.3	59446187	I.14.3
	E.5.3	59349977	C.2.3	59417766	A.3.3	59446195	I.14.3
59326728	H.2.3		I.11.3	59417782	F.1.5	59446344	I.12.3
59327833	E.1.7	59350165	I.20.3		F.1.9	59446377	I.14.3
	F.1.9	59366971	E.1.9	59417790	F.1.5	59450049	G.1.9
	F.3.3		E.3.3		F.1.9	59450056	G.1.13
59327858	G.1.13	59374165	B.7.3	59417915	F.1.13	59450114	F.4.5
59327866	F.3.3	59379917	I.21.11	59417923	F.2.13	59450122	C.1.3
	G.1.3	59392795	A.12.3	59417931	F.1.11	59450189	G.3.3
	G.1.9		E.5.3	59429035	B.5.3	59450213	B.5.3
	G.5.3	59393389	I.1.3		B.6.3		B.6.3
59331744	E.1.7		I.3.3	59429464	H.1.5	59450262	B.3.3
59338517	E.1.9	59396317	E.1.7		H.2.5	59450270	B.5.3
	E.3.3	59396366	A.4.3	59434761	F.1.3		B.6.3
59344192	H.2.3	59397042	A.12.3	59434969	F.4.7	59450320	B.11.3
	H.2.5		E.5.3	59434977	F.2.7	59450353	B.8.3
59346510	I.20.3	59398016	E.1.5	59434993	F.2.7	59450361	D.1.3
59348268	I.4.3	59404152	I.20.3	59435990	E.1.5		D.2.3
59348276	I.4.3	59404160	I.19.7		E.1.7		I.14.3
59348284	I.4.3	59404178	I.19.7	59436931	E.1.7	59450403	D.5.3
59348367	I.4.3		I.20.3	59438812	B.1.3	59450411	C.1.3
59348375	I.4.3	59404202	I.19.7		B.2.3		F.4.3
59348417	I.4.3	59404210	I.19.3	59438820	B.1.3	59450437	A.7.3
59348508	I.19.3		I.20.3		B.2.3	59450460	G.1.11
59348557	I.19.5	59404335	I.19.3	59438838	F.2.5		G.1.15

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59450486	G.1.3	59451385	G.1.3	59452714	A.1.3	59454108	D.6.3
	G.1.9		G.1.9		A.2.3	59454215	G.1.3
59450502	C.1.3	59451393	F.3.3	59452722	A.1.3	59454249	F.4.5
59450528	G.1.9		G.1.13		A.2.3	59454256	F.4.5
59450536	G.1.9	59451427	G.1.11	59452797	C.1.3	59454264	F.4.5
59450544	G.1.13	59451435	G.1.11	59452805	C.1.3	59454272	F.4.5
59450551	G.1.11	59451443	G.1.13	59452813	B.11.3	59454363	A.7.3
	G.1.13	59451450	G.1.9	59452821	B.3.3	59454389	B.10.3
59450569	B.4.3	59451468	G.1.11	59452839	B.3.3		B.11.3
59450577	G.1.9	59451484	G.1.13	59452847	B.1.3	59454413	G.1.11
59450668	A.7.5	59451492	G.1.15		B.2.3	59454421	G.1.11
59450734	H.1.5	59451609	G.1.15	59452870	B.10.3	59454439	G.1.11
	H.2.3	59451617	G.1.15		B.11.3	59454447	C.1.3
59450742	B.4.3	59451625	G.1.3	59452888	G.1.9		F.4.3
59450759	B.4.3	59451633	G.1.11	59452896	B.10.3	59454454	C.1.3
59450775	E.1.5	59451641	G.1.13		B.11.3		F.4.3
59450783	A.1.3	59451666	G.1.11	59452904	E.1.7	59454470	F.4.3
	A.2.3	59451815	G.1.5	59452912	E.1.7	59454488	F.4.3
59450791	E.1.5		G.1.7	59452938	E.1.5	59454496	F.4.3
	E.1.7	59451831	D.6.3		E.1.7	59454587	B.11.3
59451047	F.4.9	59451955	A.3.3	59452961	B.6.3	59454603	G.1.11
59451062	F.4.9	59451963	A.3.3	59452979	A.1.3		G.1.15
59451153	B.4.3	59451971	A.2.3		A.2.3	59454652	E.1.5
59451161	B.4.3	59451989	A.3.3	59452987	B.4.3	59454710	H.1.3
59451260	F.3.3	59451997	A.1.3	59453035	D.5.3		H.2.3
59451278	B.4.3		A.3.3	59453068	A.1.3	59454728	H.1.3
59451286	B.10.3	59452219	F.4.5		A.3.3		H.2.3
	B.11.3	59452227	F.4.5	59453118	B.8.3	59454744	H.1.7
59451302	F.3.3	59452243	F.3.3	59453126	D.6.3		H.2.7
59451310	F.3.3	59452250	G.1.9	59453159	B.4.3	59454769	H.1.3
	G.1.9	59452268	G.1.9	59453167	B.4.3		H.2.3
59451336	G.1.9	59452284	F.1.11	59453175	C.1.3	59454819	<b>G</b> .1.11
59451344	G.1.11	59452292	F.1.11	59453191	G.1.15		G.1.15
	G.1.15	59452698	B.4.3	59453506	B.6.3	59454827	G.1.11
59451351	G.1.11	59452706	A.1.3	59453597	B.10.3	59454835	G.1.11
	G.1.15		A.2.3		B.11.3	59454876	G.1.9

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59454884	G.1.9	59455469	E.2.3	59456012	B.10.3		E.1.5
59454926	A.1.3	59455493	E.2.3		B.11.3		E.1.9
	A.2.3	59455519	C.1.3	59456095	D.5.3	59456731	E.1.7
59454983	D.3.3	59455527	B.4.3	59456111	B.3.3	59456749	C.1.3
	D.4.3	59455535	A.4.3	59456178	G.1.11		F.4.5
	D.5.3	59455568	G.1.9		G.1.15	59456798	E.1.5
59455006	I.5.3	59455584	G.1.11	59456202	E.5.3	59456848	A.7.3
	I.6.3	59455600	A.7.5	59456210	H.1.7	59456855	B.4.3
59455022	G.1.9	59455626	A.7.3		H.2.7	59456889	B.5.3
59455030	G.1.9	59455634	B.4.3	59456244	A.3.3		B.6.3
59455055	C.2.3	59455642	H.2.7	59456277	A.3.3	59456921	F.2.5
59455063	C.2.3	59455659	B.4.3		B.6.3	59456939	E.2.3
59455071	F.1.15	59455667	B.4.3		G.1.3	59457010	A.1.3
59455097	H.1.3	59455683	E.1.9	59456293	F.2.5		A.2.3
	H.2.3	59455691	A.4.3		G.1.3	59457192	B.7.3
59455105	F.3.3	59455709	A.4.3		G.1.9		B.8.3
	G.1.9	59455717	A.7.3		G.1.11	59457218	D.6.3
59455113	B.1.3	59455725	A.4.3		G.1.15	59457267	B.1.3
	B.2.3	59455733	G.1.11	59456343	D.3.3		B.2.3
59455147	H.2.3		G.1.15		D.4.3		E.1.7
59455154	C.1.3	59455766	G.1.3		D.5.3	59457382	B.7.3
	F.4.5	59455824	I.6.3	59456376	F.3.3		B.8.3
:	G.1.3	59455832	I.6.3		G.1.13	59457523	H.2.3
	G.1.9	59455840	I.6.3	59456418	D.6.3	59457531	H.2.3
59455162	C.1.3	59455865	H.2.5	59456426	H.1.7	59457580	G.1.13
59455196	1.5.3	59455899	B.10.3		H.2.7	59461152	G.3.3
	I.6.3		B.11.3	59456509	B.1.3	59461335	A.4.3
59455204	G.1.13	59455907	G.1.13		B.2.3	59461343	A.4.3
59455238	H.2.5	59455923	G.1.11	59456517	B.1.3	59461350	A.4.3
59455261	G.1.3	59455931	A.7.3		B.2.3	59461368	A.4.3
59455303	E.2.3	59455949	E.1.5	59456558	A.1.3	59461376	A.4.3
59455329	B.4.3		E.1.7		A.2.3	59461962	G.1.11
59455402	G.1.13	59455956	E.1.7	59456574	H.2.3		G.1.15
59455410	B.8.3	59455964	B.3.3	59456616	F.3.3	59461988	F.3.3
59455436	B.7.3	59455980	G.1.11	59456640	B.3.3		G.1.13
	B.8.3		G.1.15	59456699	E.1.3	59462069	F.3.3

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	G.1.13	59465153	B.4.3	59465823	F.3.3	59471292	F.4.3
59462796	G.1.9	59465187	B.1.3	59465856	E.1.5	59471755	B.4.5
59462846	H.1.7		B.2.3	59465864	E.1.5	59471789	B.9.3
59462887	G.1.11	59465195	B.10.3	59467001	A.3.3	59471797	B.9.3
59462895	G.1.11		B.11.3	59467142	F.4.5	59471805	B.9.3
	G.1.15	59465237	I.6.3	59467175	F.4.3	59471813	B.9.3
59463240	F.3.3	59465245	I.6.3	59467209	F.4.3	59471821	B.9.3
59463273	F.3.3	59465252	I.5.3	59467225	F.4.3	59471839	B.9.3
59463406	G.3.3		I.6.3	59467308	F.4.5	59471847	B.9.3
59463414	I.5.3	59465260	I.5.3	59467316	F.4.5	59471854	B.9.3
	I.6.3		I.6.3	59468389	H.1.3	59471870	B.9.3
59463422	I.5.3	59465278	H.1.7		H.2.3	59471888	B.9.3
	I.6.3		H.2.7	59468397	H.1.3	59471904	B.9.3
59463703	A.1.3	59465286	E.1.5		H.1.5	59471938	B.9.3
	A.7.3	59465294	G.1.9		H.2.3	59472191	E.1.5
	D.7.3	59465377	A.4.3		H.2.5	59472209	B.10.3
	D.8.3	59465401	F.1.15	59468413	D.6.3		B.11.3
59463711	A.1.3	59465427	B.10.3	59468629	F.4.3	59472357	H.1.7
	B.6.3		B.11.3	59468769	F.4.5		H.2.7
	E.1.7	59465518	A.12.3	59468835	F.4.7	59472365	H.2.3
59463729	A.4.3		E.5.3		F.4.9	59473553	A.8.3
	A.7.3	59465591	A.9.3	59469064	F.4.5	59473595	A.12.3
59463745	F.4.5		E.1.5	59469072	F.4.3		E.5.3
	G.1.3		E.6.3		I.22.3	59473637	A.12.3
	G.1.13	59465609	E.2.3	59469270	H.1.7		E.5.3
59463752	C.1.3	59465617	E.1.9		H.2.7	59473652	A.12.3
59463778	C.1.3	59465641	B.10.3	59469288	A.1.3		E.5.3
59463786	D.6.3		B.11.3		A.2.3	59473660	A.9.3
	G.2.3	59465658	D.3.3	59469296	B.11.3		A.11.3
59463810	F.4.5		D.4.3	59469429	B.10.3		E.4.3
59463877	B.4.5	59465666	B.4.3		B.11.3		E.6.3
59463885	B.4.3	59465674	B.4.3	59469460	B.4.3	59473678	A.9.3
59464586	F.3.3	59465682	F.4.7	59469486	A.7.5		E.6.3
59464610	A.5.3		F.4.9	59469593	C.1.3	59473710	A.12.3
	A.6.3	59465690	F.5.3	59470989	G.1.3		E.5.3
59464628	F.5.3	59465807	F.3.3	59471151	I.6.3	59473728	A.12.3

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	E.5.3	59477026	I.12.3	59481069	B.4.5	59481408	I.15.19
59474031	E.5.3		I.23.3	59481200	I.15.17	59481416	I.13.7
59474049	A.9.3		I.27.3	59481218	I.13.7		I.15.7
	A.11.3	59477034	I.23.3		I.15.7	59481432	I.15.19
	E.3.3	59477042	I.23.3		I.15.17	59481440	I.13.7
	E.4.3	59477059	I.23.3	59481226	I.13.19		I.13.11
	E.6.3	59477067	I.23.3		I.15.19		I.15.7
59474056	A.10.3	59477075	I.23.3	59481234	D.1.3		I.15.11
	E.7.3	59480202	G.1.13		I.15.19	59481457	I.13.9
59474064	A.10.3	59480210	G.1.13	59481242	I.15.25		I.15.9
	E.7.3	59480285	C.1.3	59481259	D.2.3	59481465	I.13.11
59474080	A.8.3	59480293	C.1.3		I.15.25		I.15.11
59474106	A.12.3	59480343	I.4.3	59481275	I.13.3	59481473	I.13.11
	E.5.3	59480350	I.4.3		I.15.3		I.15.11
59474130	E.5.3	59480376	I.4.3	59481309	I.13.3	59481481	I.13.11
59474254	G.1.3	59480384	I.4.3		I.13.5		I.15.11
59474445	E.3.3	59480392	I.4.3		I.15.3	59481507	I.15.27
59474460	E.3.3	59480426	I.4.3	59481317	I.13.3	59481515	I.15.25
59474478	E.3.3	59480434	I.4.3		I.15.3	59481523	I.13.11
59474601	G.1.3	59480442	I.4.3	59481325	I.13.3		I.15.11
59474619	G.1.3	59480459	I.4.3		I.15.3	59481549	I.13.11
59474627	G.1.3	59480467	I.4.3	59481333	I.13.3		I.15.11
59474742	G.1.3	59480475	I.4.3		I.15.3	59481556	I.13.11
59474783	F.2.5	59480483	I.4.3	59481341	I.13.3	:	I.15.11
59476002	C.2.7	59480509	I.4.3		I.15.3	59481564	I.13.11
	I.11.7	59480517	I.4.3	59481358	I.13.3		I.15.11
59476432	I.12.3	59480533	I.25.3		I.15.3	59481572	I.15.11
59476572	I.12.3	59480541	I.25.3	59481366	I.13.3	59481580	I.13.11
59476580	I.12.3	59480558	I.25.3		I.15.3		I.15.11
59476713	F.1.11	59480566	I.25.3	59481374	I.13.3	59481598	I.15.11
59476952	I.26.3	59480574	I.25.3		I.15.3	59481614	I.15.15
	I.27.3	59480582	I.25.3	59481382	I.13.3	59481622	I.13.17
59477000	I.26.3	59480608	I.1.3		I.15.3		I.15.17
59477018	I.12.3		I.3.3		I.15.35	59481630	I.15.23
	I.23.3	59480616	I.1.3	59481390	I.13.5	59481648	I.13.17
	I.27.3		I.3.3		I.15.3		I.15.17

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59481655	I.15.21	59482166	I.15.37	59487553	C.2.9	59490573	C.2.9
59481663	I.15.21	59482174	I.15.37		I.11.9		I.11.9
59481671	I.15.21	59482182	I.15.37	59487561	C.2.9	59490581	C.2.9
59481689	I.15.23	59482190	I.15.37		I.11.9		I.11.9
59481697	I.15.23	59482208	I.15.37	59487942	C.2.11	59490599	C.2.9
59481705	I.15.23	59482216	I.15.37		I.11.11		I.11.9
59481713	I.15.23	59482653	B.1.3	59487959	C.2.11	59490607	C.2.9
59481721	I.15.25		B.2.3		I.11.11		I.11.9
59481739	I.15.25	59482703	I.15.27	59487975	C.2.11	59490615	C.2.9
	I.15.27	59482711	I.15.27		I.11.11		I.11.9
59481747	I.15.25	59483024	M.1.3	59487983	C.2.9	59490623	C.2.9
59481754	I.15.25	59483412	C.2.7		I.11.9		I.11.9
59481762	I.15.25		I.11.7	59487991	C.2.9	59490714	C.2.9
59481770	I.15.27	59483438	C.2.7		I.11.9		I.11.9
59481788	I.15.25		I.11.7	59488098	C.2.9	59490722	C.2.9
59481796	I.15.27	59483446	C.2.7		I.11.9		I.11.9
59481804	I.15.27		I.11.7	59488106	C.2.9	59490839	C.2.9
59481812	I.15.27	59483453	C.2.7		I.11.9		I.11.9
59481820	I.15.27		I.11.7	59488841	C.2.5	59490888	C.2.7
59481838	I.15.27	59483511	C.2.3		I.11.5		I.11.7
59481846	I.15.27		C.2.7	59488858	C.2.3	59490896	C.2.11
59481853	I.15.27		I.11.3		I.11.3		I.11.11
59481861	I.15.27		I.11.7	59488866	C.2.9	59490904	I.26.3
59481879	I.15.27	59484246	I.11.13		I.11.9	59491175	F.2.5
59481887	I.15.27	59486829	B.1.3	59488882	C.2.11	59491233	G.1.13
59481895	I.15.27		B.2.3		I.11.11	59491332	H.1.7
59481903	I.15.27		B.10.3	59488890	C.2.9		H.2.7
59481911	I.15.27		B.11.3		I.11.9	59491357	H.1.7
59481937	I.15.27	59486845	C.2.7	59489930	C.2.3		H.2.7
59482026	I.15.35		I.11.7		I.11.3	59491464	H.2.3
59482034	I.15.35	59486852	C.2.7	59490334	C.2.9	59491480	G.1.9
59482059	I.15.37		I.11.7		I.11.9	59491571	I.5.3
59482067	I.15.37	59486878	C.2.11	59490516	C.2.9		I.6.3
59482075	I.15.37		I.11.11		I.11.9	59491696	B.1.3
59482133	I.15.37	59486936	C.2.9	59490565	C.2.9		B.2.3
59482141	I.15.37		I.11.9		I.11.9	59491878	C.1.3

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	F.4.3	59494245	F.2.9	59495069	F.2.5	59496125	D.7.3
59491894	C.1.3		F.2.11	59495168	A.7.3		D.8.3
	F.4.3	59494278	A.6.3	59495226	B.10.3	59496182	H.1.7
59491910	G.3.3	59494336	G.1.13		B.11.3		H.2.7
59491936	G.3.3	59494344	E.2.3	59495234	F.2.3	59496216	I.26.3
59492058	C.2.3	59494377	E.1.3	59495440	F.2.15	59496695	I.26.3
59492413	B.4.3	59494385	E.1.3	59495457	F.2.15	59496927	C.2.7
59492512	E.2.3		E.1.5	59495465	F.2.11		I.11.7
59492538	E.2.3	59494435	E.3.3	59495481	F.2.11	59496935	C.2.7
59492546	B.6.3	59494450	E.3.3	59495507	F.1.9		I.11.7
59492553	D.5.3	59494617	E.3.3		F.2.11	59496943	F.2.5
59492595	F.1.3	59494641	A.12.3	59495515	F.1.5	59497024	C.2.9
59492702	G.1.7		E.5.3		F.1.9		I.11.9
59492728	G.1.5	59494666	A.9.3	59495523	F.1.9	59497842	D.4.3
59492835	G.1.5		E.6.3	59495564	F.1.5		D.5.3
59492900	G.1.7	59494674	A.10.3		F.1.9	59498188	C.2.9
59493007	F.1.13	3	E.7.3	59495572	F.1.5		I.11.9
59493015	F.1.13	59494690	A.11.3		F.1.9	59498212	C.2.9
59493023	F.1.13		E.4.3	59495580	F.1.9		I.11.9
59493031	F.1.13	59494716	A.8.3	59495705	F.2.5	59506501	H.1.7
59493049	F.1.13	59494724	A.11.3	59495713	F.2.5		H.2.7
59493056	F.1.11		E.4.3	59495721	F.2.5	59510065	B.9.3
59493064	F.1.11	59494732	A.11.3	59495739	F.2.5		D.1.3
59493072	F.1.15		E.4.3	59495762	F.2.5		D.2.3
59493098	F.1.15	59494740	A.11.3	59495770	F.2.11	59510073	B.7.3
59493114	F.1.9		E.4.3	59495796	F.1.13		B.8.3
59493122	F.1.3	59494765	A.9.3	59495804	F.4.7		B.10.3
59493148	G.1.13		E.6.3	59495937	F.2.15		B.11.3
59493155	G.1.13	59494773	A.9.3	59496083	D.7.3	59518670	I.1.3
59493304	G.3.3		E.6.3		D.8.3		I.3.3
59493866	A.7.3	59494781	A.9.3	59496091	D.7.3	59524447	C.2.3
59493890	F.1.11	59494815	A.8.3		D.8.3	59525568	C.2.5
59493924	F.1.5	59494922	A.9.3	59496109	D.7.3		I.11.5
59494039	D.2.3		E.6.3		D.8.3	59526079	C.2.9
59494062	A.1.3	59495010	B.3.3	59496117	D.7.3		I.11.9
59494146	F.2.9	59495028	B.3.3		D.8.3	59526087	C.2.9

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	I.11.9	59596544	I.1.3		F.1.15	59752428	I.2.3
59526426	C.2.5		I.3.3	59663641	F.1.15	59752444	I.2.3
	C.2.9	59596551	I.1.3	59670554	A.11.3	59752451	I.2.3
	I.11.5		I.3.3		E.3.3	59752501	I.2.3
	I.11.9	59596569	I.1.3		E.4.3	59752519	I.2.3
59537266	G.5.3		I.3.3	59672709	B.4.5	59752527	I.2.3
59539569	G.2.3	59596577	I.1.3	59680132	E.1.5	59752535	I.2.3
59564021	C.2.5		I.3.3		E.1.7	59752543	I.2.3
	I.11.5	59596585	I.1.3	59680413	F.1.5	59752568	I.2.3
59564120	C.2.11		I.3.3		F.1.9	59752584	I.2.3
	I.11.11	59596593	I.1.3	59680421	H.1.7	59752592	I.2.3
59564153	C.2.5		I.3.3		H.2.7	59752634	I.2.3
	I.11.5	59596601	I.1.3	59680983	A.3.3	59759712	E.3.3
59564229	C.2.9		I.3.3		A.4.3	59759720	E.3.3
	I.11.9	59596619	I.1.3		A.12.3	59766501	F.4.5
59565036	F.2.3		I.3.3		E.5.3	59787465	A.1.3
59565705	D.3.3	59596635	I.1.3		F.2.3		A.2.3
	D.4.3		I.3.3	59717702	B.5.3	59795161	H.1.3
	D.5.3	59596668	I.1.3	59725135	I.2.3		H.2.3
59579078	H.1.5		I.3.3	59725143	I.2.3	59807941	A.1.3
	H.2.5	59602987	E.1.3	59725267	I.2.3		A.3.3
59583450	F.1.13	59604835	D.3.3	59726034	A.7.3		A.5.3
	F.2.15		D.4.3		G.2.3		A.6.3
59583468	G.4.3		D.5.3	59726075	A.7.5		A.7.3
59583476	F.5.3	59605915	H.1.5		E.1.3		A.12.3
59583484	F.1.5		H.2.5		E.1.7		B.6.3
	F.1.9	59615872	H.1.3	59726414	C.1.3		D.6.3
59583492	F.1.5		H.2.3		F.4.3		E.1.7
	F.1.9	59619502	C.2.9	59731257	H.1.3		E.5.3
59583500	F.1.5		I.11.9		H.2.3		F.2.3
	F.1.9	59634550	H.2.5	59731281	E.2.3		F.4.9
	F.3.3	59638478	E.1.7	59746248	F.3.3	59813279	E.1.9
59587014	F.1.5	59655962	A.3.3	59752345	I.2.3	59816322	E.1.3
	F.1.9	59656322	F.1.11	59752352	I.2.3	59816736	E.2.3
59587816	F.1.5		F.1.15	59752386	I.2.3	59848424	F.2.3
	F.1.9	59656330	F.1.11	59752394	I.2.3	59869917	B.4.3

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	E.1.9		E.1.5	59922203	F.2.5	59922872	F.2.3
59876201	E.1.5		E.1.9	59922245	F.1.5		F.2.9
	E.1.7		E.5.3	59922260	D.7.3		F.2.11
59878710	F.3.5		F.1.5		D.8.3	59922880	D.7.3
	H.2.5		F.1.11	59922294	F.1.11	59922898	F.1.3
59878728	H.2.3		F.1.13	59922419	F.2.3		F.2.15
	H.2.5		F.1.15		F.2.7	59922906	F.2.5
59879791	E.1.5		F.2.15		F.2.9	59922971	F.1.15
59887000	I.5.3		F.3.3		F.2.11		F.2.3
	I.6.3		F.4.9		F.2.13	59923011	F.2.5
59892109	H.2.3		G.1.9		F.4.7	59923052	F.2.5
59903138	D.7.3	59918581	F.1.5	59922484	D.7.3	59923185	F.2.5
	D.8.3		F.1.9		F.2.15	59923318	F.1.9
59903153	F.4.7		F.2.11	59922492	D.7.3		F.2.11
59918441	D.7.3	59918615	F.1.7		D.8.3	59923599	D.7.3
	D.8.3		F.2.7		F.4.7		D.8.3
59918532	F.1.5		F.2.13		F.5.3	59923797	D.7.3
	F.2.9	59918649	F.1.3	59922534	F.1.11		F.1.3
59918540	F.1.3		F.1.5	59922617	F.2.3		F.2.5
	F.1.9		F.1.9		F.2.5	59924043	F.1.7
	F.2.3		F.1.13	59922641	F.2.3		F.2.7
	F.2.13		F.2.3		F.2.5	59924050	F.1.7
59918557	F.1.13		F.2.15	59922658	F.2.5		F.1.9
	F.4.7	59919654	F.4.7	59922690	F.2.5		F.2.3
59918573	A.1.3	59919670	D.7.3	59922807	F.1.5	:	F.2.9
	A.2.3		D.8.3		F.1.9	59924241	A.12.3
	A.3.3		F.1.9	59922823	F.2.13		E.5.3
	A.12.3		F.2.3	59922849	F.2.13	59928606	D.3.3
	B.3.3		F.2.7	59922864	F.1.5		D.4.3
	B.4.3		F.2.13		F.1.7	59929026	F.1.13
	B.10.3		F.4.7		F.1.9		F.2.15
	B.11.3	59921031	F.1.5		F.1.13	59929059	A.7.3
	C.1.3		F.1.9		F.2.3		G.2.3
	D.3.3	59921056	F.1.7		F.2.9	59929182	F.1.9
	D.4.3		F.1.9		F.2.11		F.2.3
	D.5.3		F.2.7		F.2.15		F.2.5

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	F.2.7	59965962	A.1.3	G.1.5			G.1.13
	F.2.9		A.12.3	72 " Quick A	Attach Side	95279386	B.4.3
	F.2.11		B.4.5	Tilt	G.1.7	95279915	E.1.7
59941682	A.1.3	į	E.1.5	72" Load Ar	m G.1.7	95285243	I.6.3
37741002	A.2.3		E.5.3	72" Quick A		95286266	B.4.3
	A.3.3		F.2.7	riage	G.1.7		B.5.3
	A.9.3		F.2.9	72" Standard	d Cariage		B.6.3
	A.12.3		F.2.11	G.1.7	C 1 15	95287629	D.1.3
	B.4.5		F.2.13	95055067	G.1.15		D.2.3
	D.3.3		H.1.5	95074175	A.11.3		D.7.3
	D.3.3 D.4.3		H.2.5	05001057	E.4.3		D.8.3
	D.5.3	59969972	H.2.7	95081857	F.1.11	95302113	F.2.3
	E.1.5	59969980	H.2.7	95090106	A.12.3		F.2.9
	E.1.7	59973511	B.10.3	05157400	E.5.3	95302121	F.4.5
	E.1.9		B.11.3	95157400 95201547	G.1.3		G.1.11
	E.5.3		E.1.3	93201347	F.4.3 G.1.3	95302667	B.4.3
	E.6.3	59974915	A.9.3		G.1.3 G.1.9	95302683	B.4.3
	F.2.7	59976548	H.1.5		G.1.9 G.1.11	95303335	B.1.3
	F.2.9		H.2.5	95207593	G.1.11		B.2.3
	F.2.11	59977306	I.19.7	95219747	B.4.3		F.1.11
	H.1.3		I.20.3	95230009	B.11.3		F.4.5
	H.2.3	59985069	M.1.3	95234845	G.2.3		G.1.3
59942797	F.3.3	59989558	E.2.3	95246088	G.1.13	95303343	G.1.13
59947507	H.1.7	59990069	F.1.5	95248084	E.1.7	95303368	F.3.3
	H.2.7	59998070	B.10.3	95250692	B.4.3	95310231	E.1.5
59954818	F.3.3		B.11.3	95257325	B.1.3	95325916	B.5.3
	G.4.3	59998096	A.1.3	75251525	B.2.3		B.6.3
59954826	F.3.3		A.3.3	95257333	D.1.3	95335311	G.1.9
	G.4.3		A.6.3	75251555	D.1.3 D.2.3	95335980	G.4.3
59954834	F.3.5	59998146	A.2.3		D.7.3	95341665	G.4.3
	G.4.3		H.1.5		D.7.3 D.8.3	95349064	F.4.3
59957134	D.4.3		H.2.5	95263380	D.8.3 D.2.3	95359410	D.1.3
	D.5.3	60" Load A	rm G.1.5	95278966	D.2.3 F.4.7	95364030	A.7.3
59962332	F.1.15	60" Quick A		75210900	F.5.3	95364964	F.3.3
59962621	F.1.13	Carriage	G.1.5		G.1.11		G.1.9
	<b></b>	60" Standar	d Carriage		0.1.11		G.1.11

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95365078	F.3.5	95487959	F.1.3	95919296	G.2.3	95920542	C.1.3
95365094	F.2.3	95498994	D.3.3	95919346	G.1.3		F.1.5
	G.4.3	95666996	D.7.3	95919361	F.1.11		F.1.13
95365425	H.1.5		D.8.3	95919411	D.6.3		F.2.15
	H.2.5	95713798	A.10.3	95919437	D.7.3	95920567	D.5.3
95365599	B.10.3		B.10.3	95919478	F.1.5		F.1.15
	B.11.3		B.11.3	95919502	G.1.13	95920591	F.1.11
	C.1.3		E.1.3	95919551	G.1.9		F.1.15
95371092	D.5.3		E.7.3	95919593	G.1.13	95920609	H.1.3
95371258	D.1.3	95739306	B.4.5		G.5.3		H.2.5
	F.2.3	95839379	I.15.29	95919601	F.4.3	95920641	F.1.5
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# **Road Development**

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