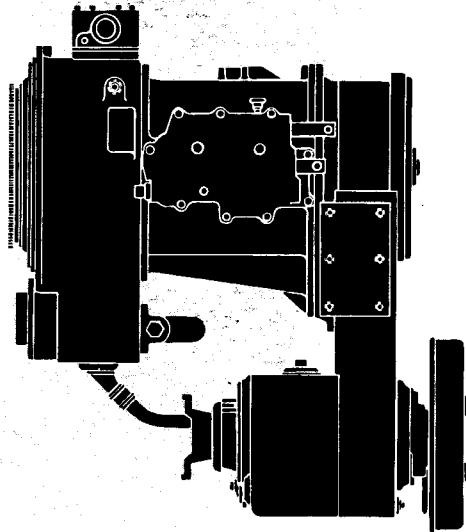


SA 1102B

SERIES

3531-1 and 3531-3

Allison
TORQMATIC
TRANSMISSIONS



PARTS CATALOG



Allison
SERVICE KITS

**ENGINEERED
FOR YOUR
CONVENIENCE**

Complete Parts Kits for Faster Routine Overhauls

ORDER ONE PART NUMBER

One kit, including
seals, gaskets, other
expendable items.

GET THE JOB MOVING

with factory-protected,
packaged parts.

ELIMINATE

"parts-bin-guess"

SIMPLIFY

parts storage

You can make parts procurement and storage easier
and simpler by ordering KITS instead of many assorted parts.

Renew critical items at normal overhaul rather than risk
special rebuild. These kits supply all special seals and gaskets
needed for a routine overhaul. Certain expendable items
such as shims and washers are also included.

See reverse side for listing of Service Kits for your Torqmatic Drive.



ALLISON DIVISION • GENERAL MOTORS CORPORATION • BOX 894 • INDIANAPOLIS 6, INDIANA

**LISTED BELOW ARE THE SERVICE KITS
AVAILABLE FOR THE SERIES 3531 TORQMATIC TRANSMISSION**

SEAL AND GASKET KIT - P/N 6772003

Used on Engine Mounted assemblies only. Contains all seals and gaskets necessary for complete transmission rebuild.

SEAL AND GASKET KIT - P/N 6772004

Used on Remote Mounted assemblies only. Contains all seals and gaskets necessary for complete transmission rebuild.

PARKING BRAKE LINING KIT - P/N 6758258

Contains linings for 2 brake shoes and 28 rivets.

CONVERTER DRIVE RING KIT - P/N 6769913

Used on Engine Mounted assemblies only. Contains drive adaption parts between engine flywheel and converter pump cover.

STATOR SPRING AND ROLLER KIT - P/N 6770733

Contains complete set of converter stator springs and rollers.

OIL COOLER KIT - P/N 6759901

Contains the necessary parts to mount an integral oil cooler on the converter housing.

Designed especially for you . . .



You won't be guessing in your selecting

FOREWORD

This catalog contains parts information for the 3531-1 and 3531-3 series Allison Torqmatic transmissions.

Information not covered in this catalog can be obtained by writing to the Transmissions Service Manager, Allison Division, GMC, Indianapolis 6, Indiana.

February 20, 1962

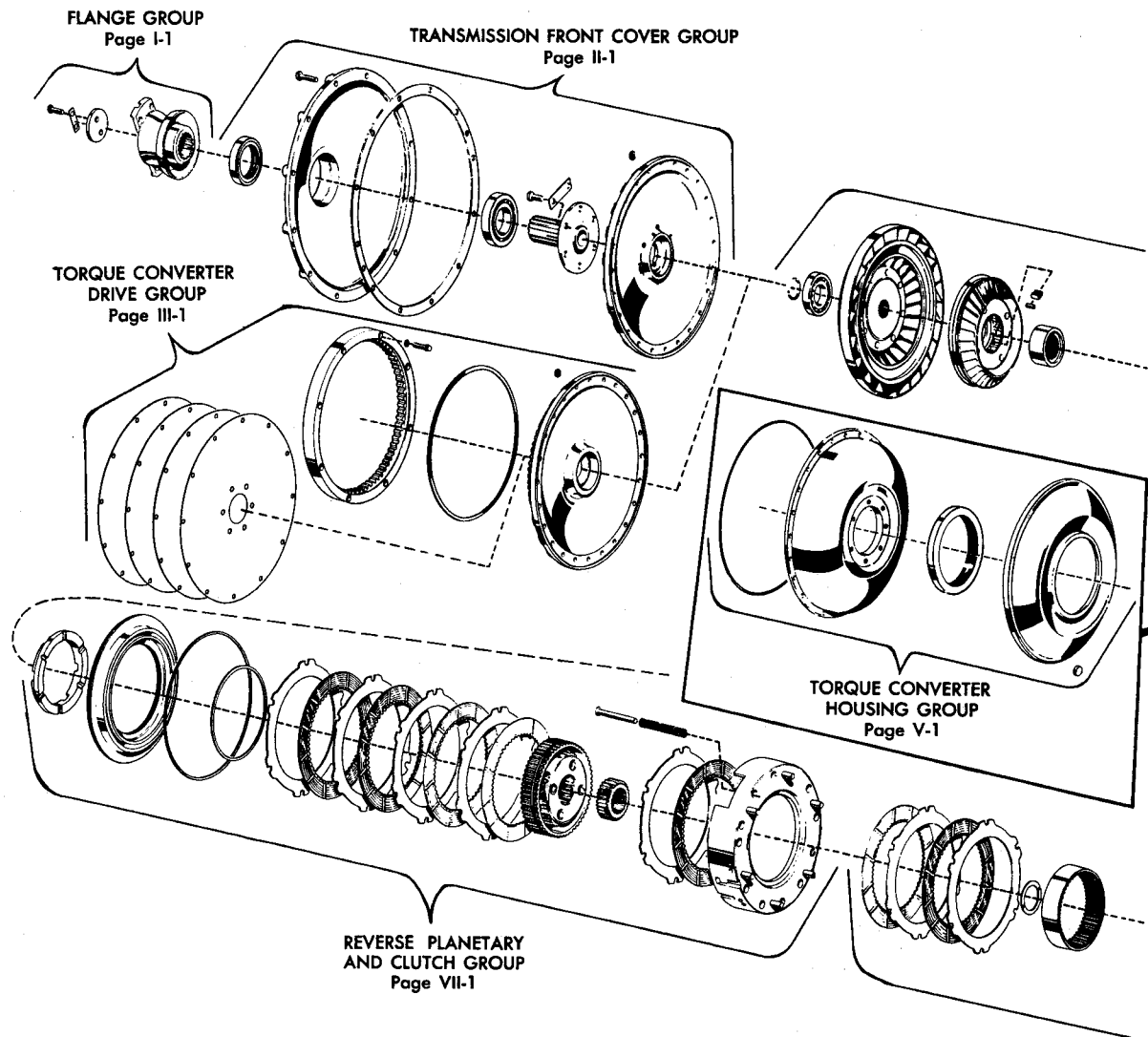
Copyright 1962



The complete line of Allison Torqmatic Drives includes the Allison Torqmatic Converter, the Allison Torqmatic Transmission and the Allison Marine Transmission. Literature on these products is available. Address requests for this information to the Commercial Sales Department.

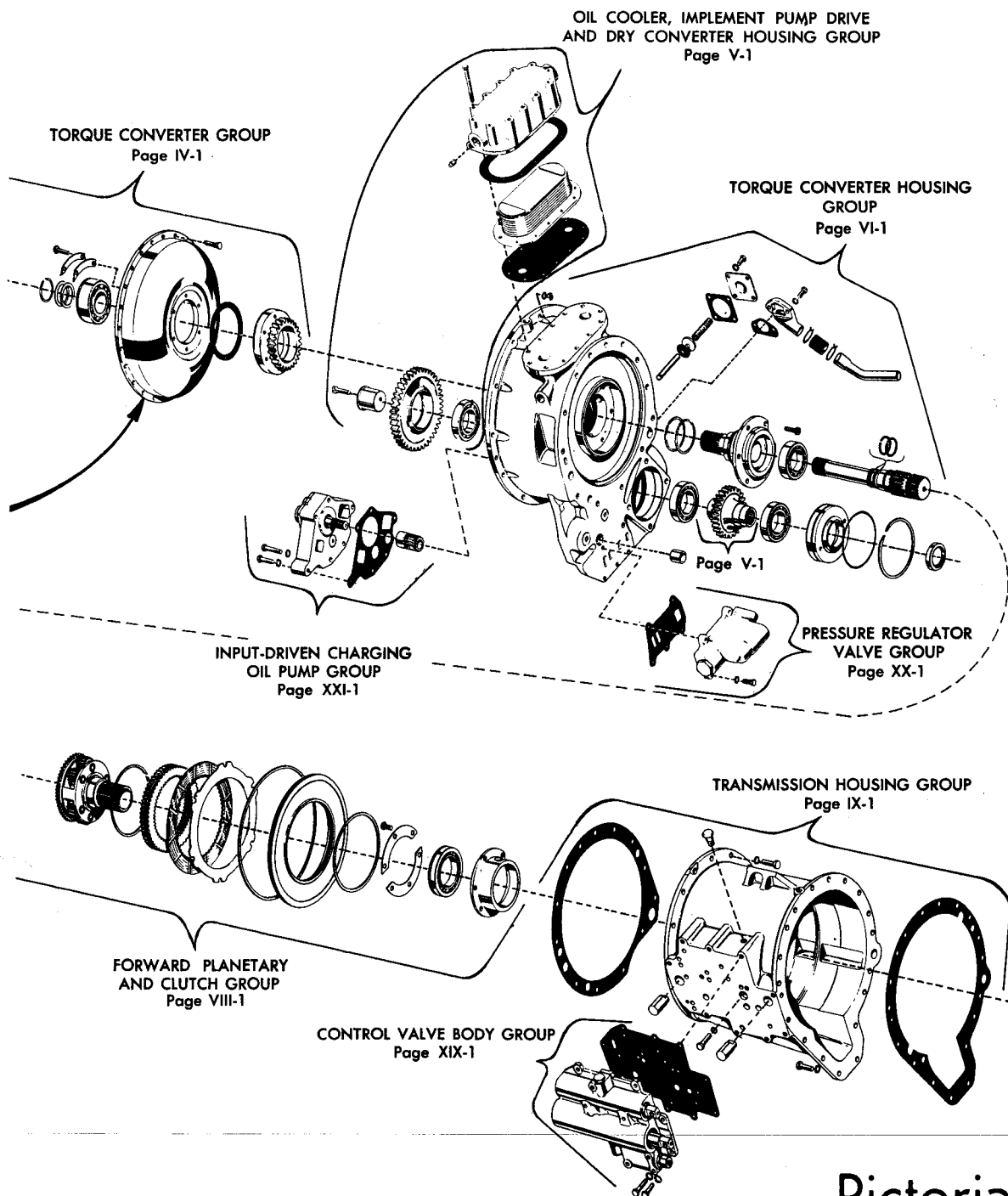
ALLISON DIVISION
GENERAL MOTORS CORPORATION
Indianapolis 6, Indiana

TO GET THE RIGHT PART YOU MUST KNOW YOUR TRANSMISSION



To Get the Right Part
You Must Know Your
Transmission Assembly
Number Found on the
Transmission Name Plate

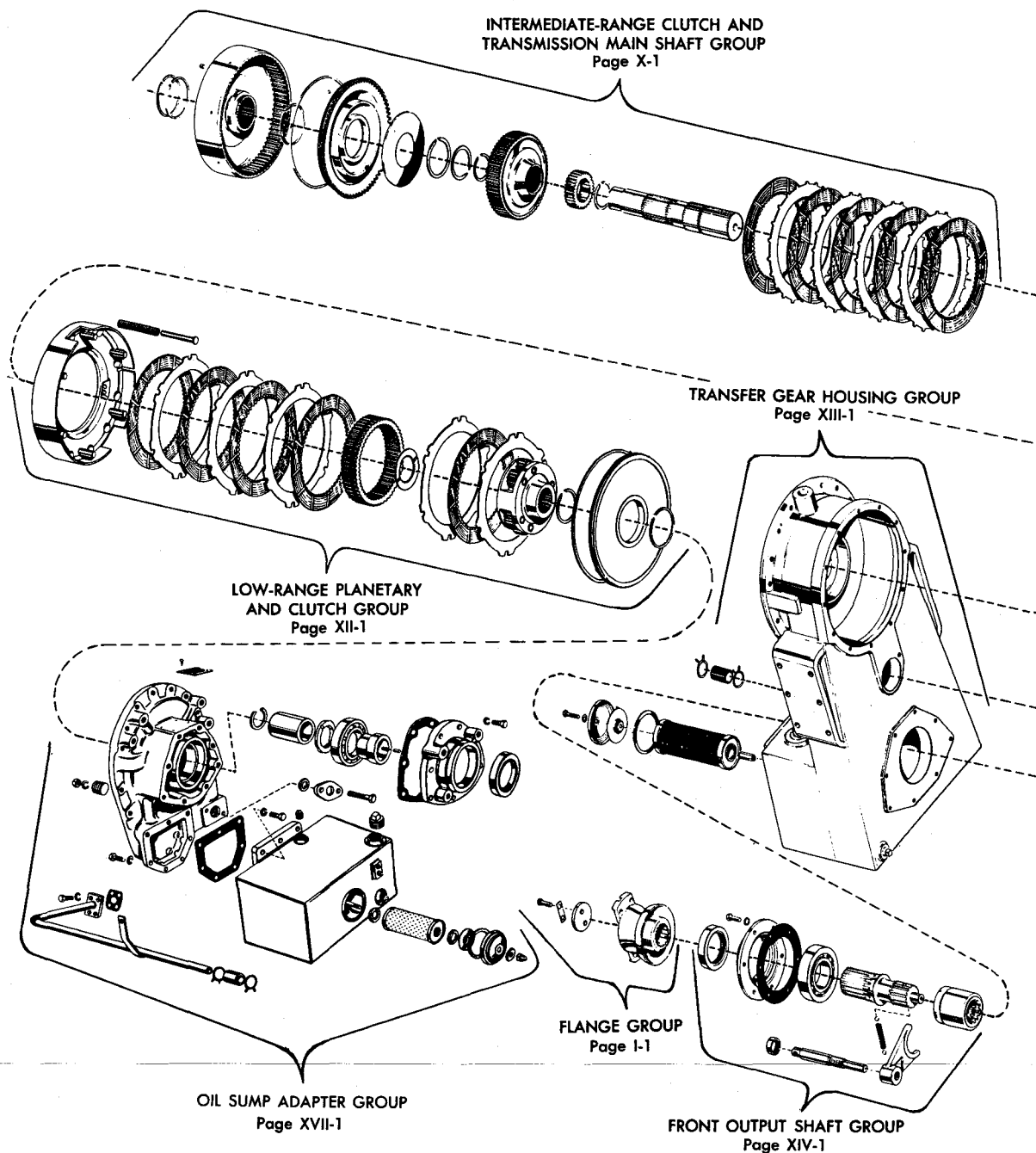
ASSEMBLY NUMBER FOUND ON THE TRANSMISSION NAME PLATE



Pictorial Index
continued next page

TO GET THE RIGHT PART YOU MUST KNOW YOUR TRANSMISSION

Continued from
preceding page



ASSEMBLY NUMBER FOUND ON THE TRANSMISSION NAME PLATE

To Get the Right Part
You Must Know Your
Transmission Assembly
Number Found on the
Transmission Name Plate

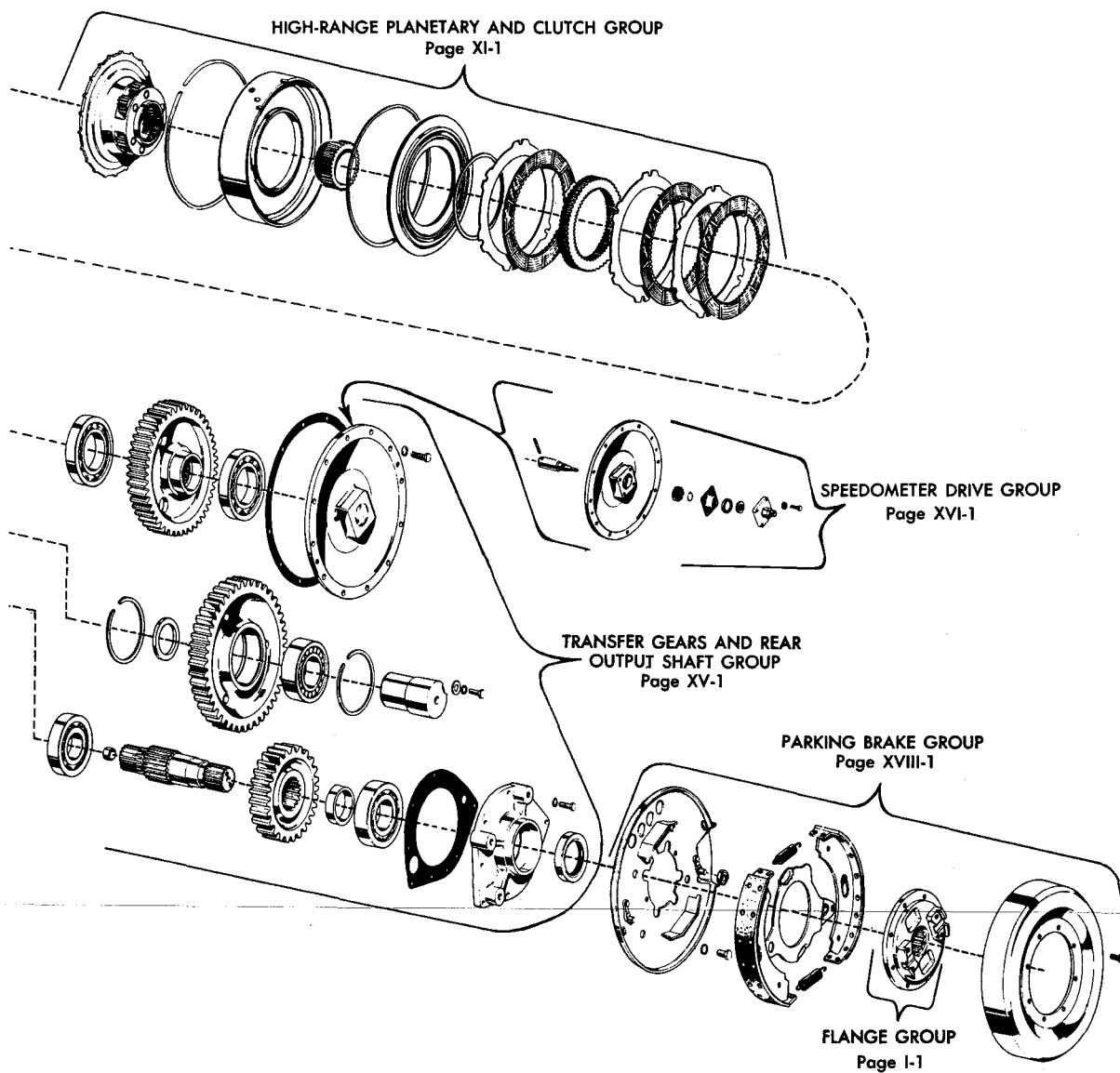


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HOW TO FIND THE RIGHT PARTS WITH THIS PARTS CATALOG

→ **FIRST**, you must know the assembly part number of your Torqmatic Transmission in order to find the correct part number of the part you require.

This Torqmatic Transmission assembly part number appears on the name plate attached to the housing. The name plate is illustrated below.

USING PICTORIAL INDEX

Note that the pictorial index is only a guide to the group in which the particular part you want may be found. The part as shown in the index may not appear in its exact configuration or quantity. Its detail will be shown in the group listed. Each group listing is preceded by the Torqmatic Transmission assembly part numbers. Be sure the parts you want are right for your model transmission. Check your Torqmatic Transmission assembly part number with the numbers preceding each group listing. Do not use the figure reference numbers when ordering parts. Pages 8, 9 and 10 will further help you in ordering correctly the parts you need.

				
MODEL NO.		PART NO.		
SERIAL NO.				
USE HYDRAULIC TRANSMISSION FLUID TYPE "C1"				
MFG. UNDER ONE OR MORE OF THE FOLLOWING U.S. PATENTS:				
2193304	2362418	2380680	2430258	2433052
2521239	2596931	2612754	2696171	2699074
2732727	2736412	2737824		
MANUFACTURED BY				
ALLISON DIVISION, G.M.C.				
INDIANAPOLIS, INDIANA				

MODEL DESIGNATION CODE
(Stamped on the transmission name plate)

The letters "CRT" show the arrangement of the transmission components and the type of transmission. The digits (3531) indicate the size of the converter used, the transmission capacity, the transmission basic speed ranges and the model change. The example below illustrates the meaning of the letters and numbers.

"CRT" means a transmission with a converter placed first and a transmission with three speeds forward and three speeds reverse connected to the converter. The first digit (3) indicates the converter size, Series 300. The second digit (5) indicates the approximate transmission torque capacity. The third digit (3) indicates the transmission has three basic speed ranges. The fourth digit (1) indicates the model change. The suffix (-1) indicates that the unit has transfer gearing with both front and rear outputs. The (-3) indicates a straight-thru drive.

Code Explanation

- C - indicates Converter
- RT - indicates Transmission with 3 speeds forward,
3 speeds reverse
- 3 - indicates converter size
- 5 - indicates transmission capacity
- 3 - indicates transmission basic speed ranges
- 1 - indicates model change
- 1 - indicates transfer gearing, front and rear outputs
- 3 - indicates straight-thru drive

EXAMPLE OF PARTS LIST ORGANIZATION

Here is an example of the parts list organization used in this catalog. Understanding this example will help you to order the right parts.

REF	NOMENCLATURE	PART NO	REQ
1	Assembly	6700001	1
2	Subassembly	6754002	1
3	Detail part	676003	1
4	Detail part	67543004	1
5	Detail part	67090005	2
6	Detail part	4597006	3
7	Detail part	3285007	1
8	Subassembly	6765008	1
9	Detail part	5950009*	4
10	Detail part	6759010*	1
11	Subassembly	67521011	1
12	Detail part	67573012	1
13	Subassembly	67094013	1
14	Detail part	67048014	1
15	Detail part	6750015	2
16	Detail part	67076016	1
17	Detail part	67854017	1
18	Assembly	5759018	1
19	Subassembly	4399019	1
20	Detail part	7550020	1

*Serviced in assembly only - not as a detail part.

Explanation

If you order part number 6700001, you will receive parts 6754002 through 6750015.

If you order part number 6754002, you will receive parts 676003 through 67090005.

If you order part number 676003, you will receive part 676003 only.

If you order part numbers 5950009 or 6759010, you will receive part 6765008 which is the assembly composed of parts 5950009 and 6759010. The star after part numbers 5950009 and 6759010 indicates that these parts are not serviced alone.

If you order part number 4597006, you will receive part 4597006 only.

If you order part number 67076016, you will receive part 67076016 only.

The numbers appearing in the column under REF are the item reference numbers appearing in the illustrations.

Summary

If an assembly or subassembly is ordered, all subassemblies and detail parts indented beneath it will be included.

If a detail part is ordered, only the detail part will be sent unless its part number is starred (*). A starred (*) part number means that such a part is not serviced alone. This is necessary because certain parts require factory installation or adjustment. If an order is received for a starred (*) part, the assembly or subassembly under which it is indented will be sent.

HOW TO ORDER PARTS

Be sure to give the Torqmatic Transmission Assembly Part Number, the Model, and the Serial Number found on the Torqmatic Transmission name plate.

Always give the part name and quantity desired as well as the part number.

CAUTION

Do not order parts directly from the numerical index.

NOTE

→ All parts orders should be placed with the distributor or dealer from whom you purchased your equipment. Do not place orders directly with Allison Division.

Important

GLOSSARY OF ABBREVIATIONS

These abbreviations are formed by omitting the vowels.
Exceptions are standard accepted abbreviations.

adptr	adapter	lng	long
&	and	mnfld	manifold
assy	assembly	med	medium
A/N	Assembly Number	mntg	mounting
ar	as required	NC	National Coarse Thread
avail	available	NF	National Fine Thread
brng	bearing	NPT	National Taper Pipe Thread
brkt	bracket	ND	New Departure number
brk	brake	no	number
bshng	bushing	OD	outside diameter
ctr	center	OL	overall length
cls	class	OS	oversize
cl	cluster	pack	packing
clu	clutch	pinn	pinion
C/o	consists of	pln	plain
c-pin	cotter pin	plnt	planetary
c'sunk	countersunk	presr	pressure
dia	diameter	regltr	regulator
div	division	rtnr	retainer
drv	drive	rnd	round
drvn	driven	S/N	Serial Number
drvng	driving	srvc	service
ea	each	SIL	Service Information Letter
exc	except	SK	Service Kit
exch	exchange	sltd	slotted
expn	expansion	spr	spacer
extrnl	external	spcl	special
fil hd	fillister head	speedo	speedometer
flng	flange	sq	square
flx	flexible	sq-sckt	square socket
flywhl	flywheel	std	standard
frt	front	temp	temperature
gskt	gasket	thrd	thread
gov	governor	trns	transmission
hd	head	undrsz	undersize
hx	hexagon	upr	upper
hsng	housing	wshr	washer
hydr	hydraulic	W/	with
incl	includes	W/out	without
ID	inside diameter		
instr	instrument		
inter	intermediate		
intrnl	internal		

QUICK REFERENCE LISTING
FOR YOUR TORQMATIC DRIVE

Fill In Now

ALLISON TORQMATIC TRANSMISSION

1. Model No. _____ Assy Part No. _____
Serial No. _____ Installation _____

ALLISON TORQMATIC TRANSMISSION

2. Model No. _____ Assy Part No. _____
Serial No. _____ Installation _____

ALLISON TORQMATIC TRANSMISSION

3. Model No. _____ Assy Part No. _____
Serial No. _____ Installation _____

ALLISON TORQMATIC TRANSMISSION

4. Model No. _____ Assy Part No. _____
Serial No. _____ Installation _____

ALLISON TORQMATIC TRANSMISSION

5. Model No. _____ Assy Part No. _____
Serial No. _____ Installation _____

ALLISON TORQMATIC TRANSMISSION

6. Model No. _____ Assy Part No. _____
Serial No. _____ Installation _____

ALLISON TORQMATIC TRANSMISSION

7. Model No. _____ Assy Part No. _____
Serial No. _____ Installation _____

ALLISON TORQMATIC TRANSMISSION

8. Model No. _____ Assy Part No. _____
Serial No. _____ Installation _____

ALLISON TORQMATIC TRANSMISSION

9. Model No. _____ Assy Part No. _____
Serial No. _____ Installation _____

FLANGE GROUP

To find detail parts for your Allison Torqmatic Transmission, turn to the group and page listed opposite the assembly part number of your transmission.

A/N*	MODEL	LOCATION	GROUP	PAGE
6771074	CRT 3531-1	(a)	D	I-3
"	"	(b)	D	I-3
"	"	(c)	B	I-3
6771321	CRT 3531-1	(a)	D	I-3
"	"	(b)	C	I-3
"	"	(c)	B	I-3
6771392	CRT 3531-1	(b)	F	I-3
"	"	(c)	G	I-3
6771647	CRT 3531-1	(b)	F	I-3
"	"	(c)	G	I-3
6771924	CRT 3531-1	(a)	D	I-3
"	"	(b)	C	I-3
"	"	(c)	B	I-3
6771940	CRT 3531-1	(a)	D	I-3
"	"	(b)	C	I-3
"	"	(c)	B	I-3
6772034	CRT 3531-1	(b)	A	I-3
"	"	(c)	A	I-3
6772118	CRT 3531-1	(a)	H	I-4
"	"	(b)	A	I-3
"	"	(c)	B	I-3
6772456	CRT 3531-1	(a)	E	I-3
"	"	(b)	C	I-3
"	"	(c)	J	I-4
6773267	CRT 3531-3	(d)	K	I-4
6773297	CRT 3531-1	(b)	A	I-3
"	"	(c)	B	I-3
6773323	CRT 3531-3	(d)	K	I-4
6773505	CRT 3531-1	(b)	A	I-3
"	"	(c)	B	I-3
6773629	CRT 3531-1	(b)	A	I-3
"	"	(c)	A	I-3
6773706	CRT 3531-3	(d)	K	I-4
6773852	CRT 3531-1	(a)	E	I-3
"	"	(b)	C	I-3
"	"	(c)	J	I-4

*A/N (Assembly number) found on your transmission name plate.

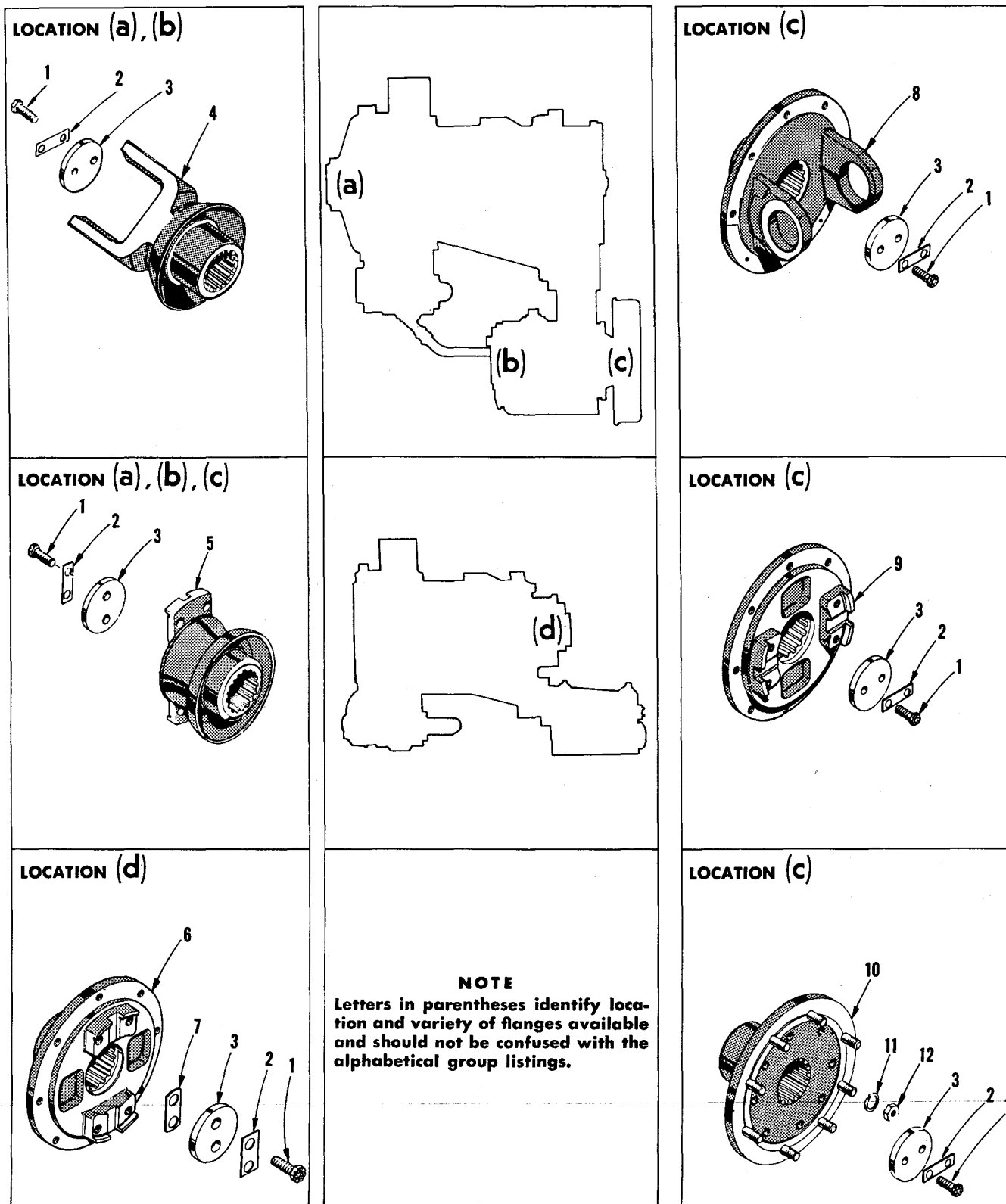


FIG I. FLANGE, EXPLODED VIEW

GROUP A
FLANGE, Figure I

REF	NOMENCLATURE	PART NO	REQ
1	BOLT, Hx hd, self-locking, 3/8-24 x 1 1/8 . . .	9409036	2
2	STRIP, Locking	6757243	1
3	WASHER, Flange retainer	6757184	1
4	Not used in this group.		
5	FLANGE, Fixed (M7C)	6758148	1
6-12	Not used in this group.		

GROUP B
FLANGE, Figure I

Same as Group A, except for parts listed below.

4-8	Not used in this group.		
9	FLANGE, Brake mounting fixed, (M7C)	6769178	1
10-12	Not used in this group.		

GROUP C
FLANGE, Figure I

Same as Group A, except for parts listed below.

5	FLANGE, Fixed (M7C)	6759025	1
---	-------------------------------	---------	---

GROUP D
FLANGE, Figure I

Same as Group A, except for parts listed below.

5	FLANGE, Fixed (M6C)	6771855	1
---	-------------------------------	---------	---

GROUP E
FLANGE, Figure I

Same as Group A, except for parts listed below.

4	FLANGE, Fixed, yoke type (5N)	6769843	1
5-12	Not used in this group.		

GROUP F
FLANGE, Figure I

Same as Group A, except for parts listed below.

4	FLANGE, Fixed, yoke type (6N)	6769226	1
5-12	Not used in this group.		

GROUP G
FLANGE, Figure I

Same as Group A, except for parts listed below.

4-7	Not used in this group.		
8	FLANGE, Fixed, brake mounting (6N)	6769197	1
9-12	Not used in this group.		

GROUP H

FLANGE, Figure I

Same as Group A, except for parts listed below.

REF	NOMENCLATURE	PART NO	REQ
4	FLANGE, Fixed, yoke type (S 1600)	6770172	1
5-12	Not used in this group.		

GROUP J

FLANGE, Figure I

Same as Group A, except for parts listed below.

4-9	Not used in this group.		
10	FLANGE, Fixed brake mounting (S 1600)	6771148	1
11	WASHER, Lock, 7/16	103321	8
12	NUT, Hx hd, 3/8-24	103026	8

GROUP K

FLANGE, Figure I

1	BOLT, Hx hd, 3/8-24 x 1 1/4	9409059	1
2	STRIP, Locking.	6755269	1
3	WASHER, Flange retainer	6768324	1
4-5	Not used in this group.		
6	FLANGE.	6773275	1
7	SHIM, 0.025 thick	6772140	AR
7	SHIM, 0.005 thick	6772141	AR
8-12	Not used in this group.		

TRANSMISSION FRONT COVER GROUP
(Transmission Remote Mounted)

To find detail parts for your Allison Torqmatic Transmission, turn to the group and page listed opposite the assembly part number of your transmission.

A/N*	MODEL	GROUP	PAGE
6771074	CRT 3531-1	A	II-3
6771321	CRT 3531-1	A	II-3
6771924	CRT 3531-1	A	II-3
6771940	CRT 3531-1	A	II-3
6772118	CRT 3531-1	A	II-3
6772456	CRT 3531-1	A	II-3
6773852	CRT 3531-1	A	II-3

*A/N (Assembly number) found on your transmission name plate.

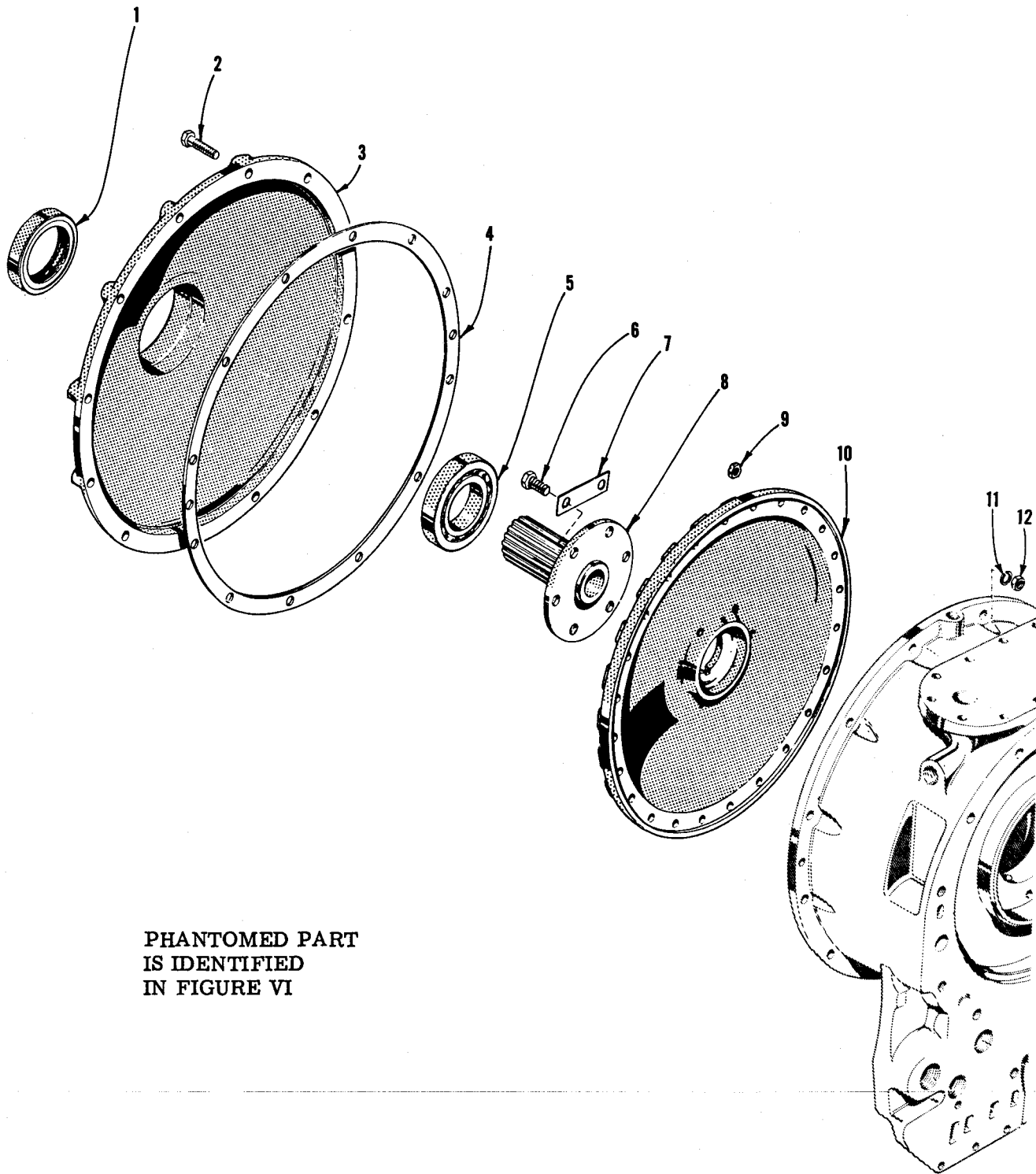


FIG II. TRANSMISSION FRONT COVER, EXPLODED VIEW

GROUP A
TRANSMISSION FRONT COVER, Figure II
(Transmission Remote Mounted)

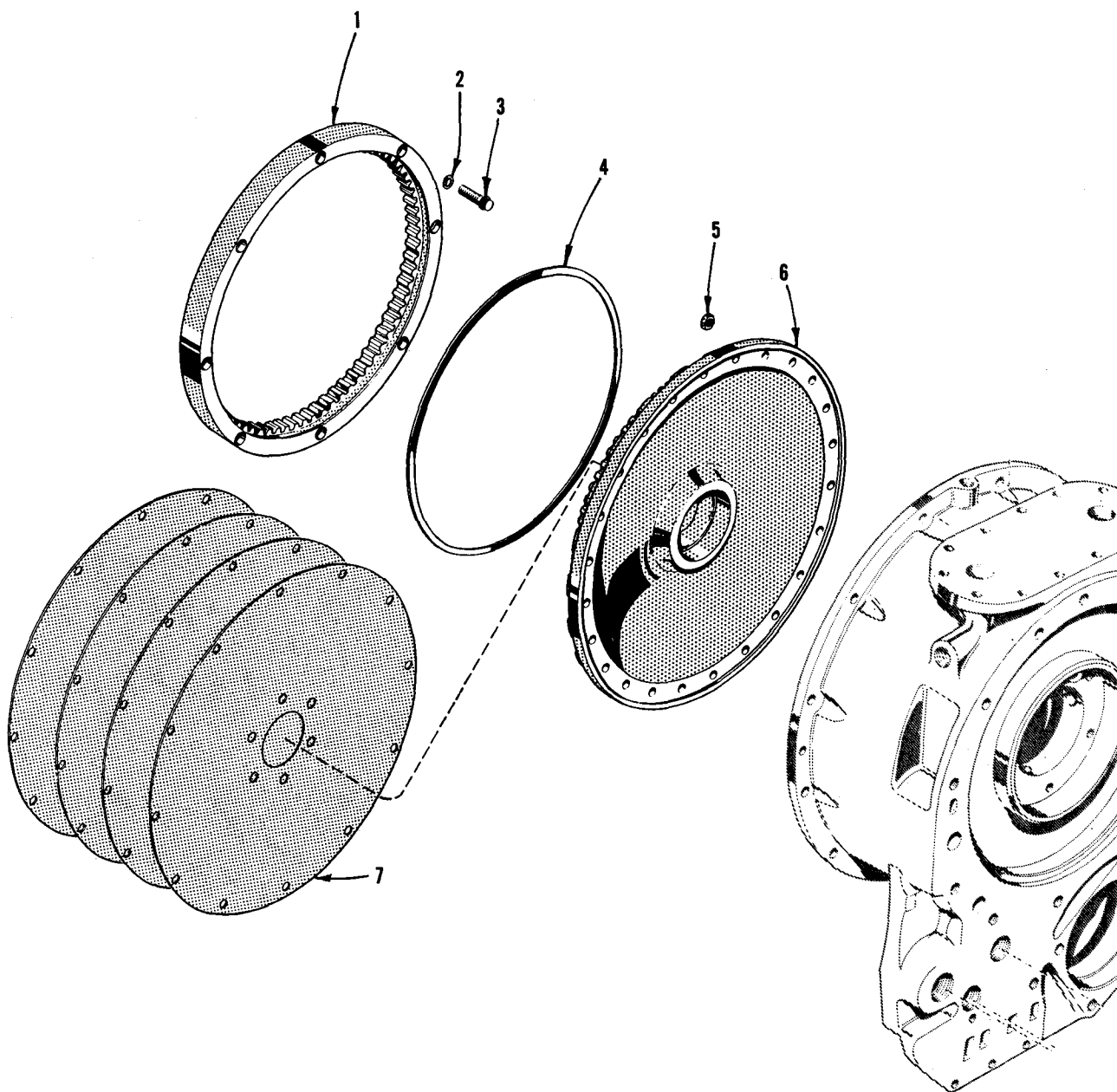
REF	NOMENCLATURE	PART NO	REQ
1	SEAL (Avail also in SK 6772004)	6773373	1
2	BOLT, Hx hd, 3/8-24 x 2	181379	12
3	COVER, Transmission front	6757254	1
4	GASKET (Avail also in SK 6772004)	6758030	1
5	BEARING, Single row ball (ND 3211-1A)	903211	1
6	BOLT, Hx hd, 1/2-13 x 1 1/8	179882	6
7	STRIP, Locking (Avail also in SK 6772004)	6757230	3
8	SHAFT, Converter drive	6757256	1
9	NUT, Hx, 5/16-24	451006	24
10	COVER, Converter pump	6772407	1
11	WASHER, Lock, 3/8	103321	12
12	NUT, Hx, 3/8-24	103026	12

TORQUE CONVERTER DRIVE GROUP
(Transmission Engine Mounted)

To find detail parts for your Allison Torqmatic Transmission, turn to the group and page listed opposite the assembly part number of your transmission.

A/N*	MODEL	GROUP	PAGE
6771392	CRT 3531-1	A	III-3
6771647	CRT 3531-1	A	III-3
6772034	CRT 3531-1	A	III-3
6773267	CRT 3531-3	A	III-3
6773297	CRT 3531-1	B	III-3
6773323	CRT 3531-3	A	III-3
6773505	CRT 3531-1	B	III-3
6773629	CRT 3531-1	A	III-3
6773706	CRT 3531-3	A	III-3

* A/N (Assembly number) found on your transmission name plate.



PHANTOMED PART
IS IDENTIFIED
IN FIGURE VI

FIG III. TORQUE CONVERTER DRIVE, EXPLODED VIEW

GROUP A
TORQUE CONVERTER DRIVE, Figure III
(Transmission Engine Mounted)

REF	NOMENCLATURE	PART NO	REQ
1	RING, Converter drive (Avail also in SK 6769913)	6769876	1
2	WASHER, Internal tooth lock, 3/8 (Avail also in SK 6769913)	6769878	8
3	BOLT, 12 Point head, 3/8-16 x 1 1/4 (Avail also in SK 6769913)	9412270	8
4	RING, Seal (Avail also in SK 6769913 & 6772003)	6769818	1
5	NUT, Hx, 5/16-24	451006	24
6	COVER, Converter pump	6772408	1
7	Not used in this group.		

GROUP B
TORQUE CONVERTER DRIVE, Figure III
(Transmission Engine Mounted)

Same as Group A, except for parts listed below.

1-4	Not used in this group.		
6	COVER, Converter pump	6773296	1
7	DISK, Flexible flywheel	6773456	4

TORQUE CONVERTER GROUP

To find detail parts for your Allison Torqmatic Transmission, turn to the group and page listed opposite the assembly part number of your transmission.

A/N*	MODEL	GROUP	PAGE
6771074	CRT 3531-1	A	IV-3
6771321	CRT 3531-1	B	IV-3
6771392	CRT 3531-1	A	IV-3
6771647	CRT 3531-1	B	IV-3
6771924	CRT 3531-1	A	IV-3
6771940	CRT 3531-1	A	IV-3
6772034	CRT 3531-1	A	IV-3
6772118	CRT 3531-1	A	IV-3
6772456	CRT 3531-1	A	IV-3
6773267	CRT 3531-3	B	IV-3
6773297	CRT 3531-1	B	IV-3
6773323	CRT 3531-3	B	IV-3
6773505	CRT 3531-1	B	IV-3
6773629	CRT 3531-1	A	IV-3
6773706	CRT 3531-3	B	IV-3
6773852	CRT 3531-1	A	IV-3

*A/N (Assembly number) found on your transmission name plate.

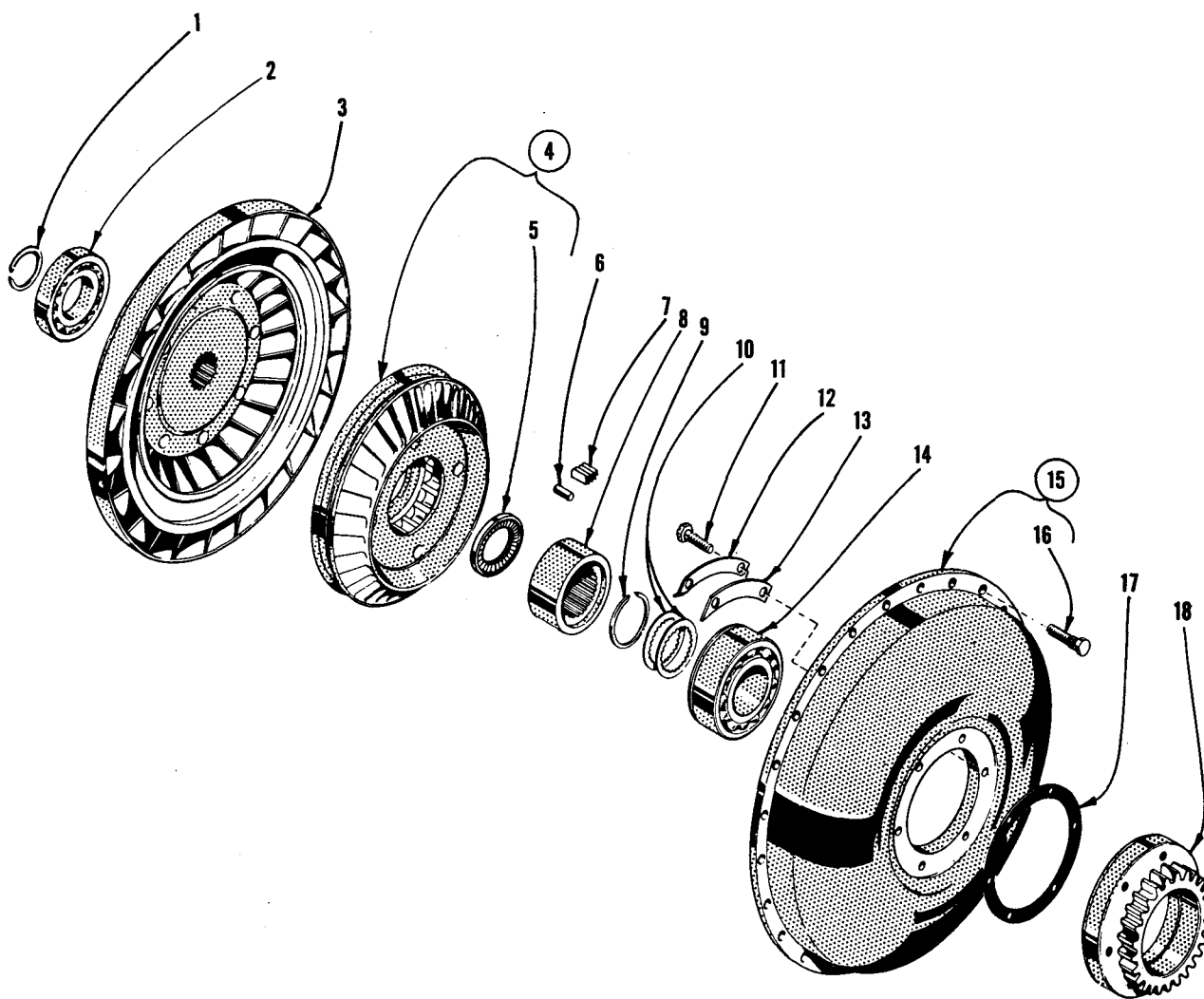


FIG IV. TORQUE CONVERTER, EXPLODED VIEW

GROUP A
TORQUE CONVERTER, Figure IV

REF	NOMENCLATURE	PART NO	REQ
1	RING, External snap	6770919	1
2	BEARING, Single row ball (ND 3L10X1A)	903010	1
3	TURBINE	6770885	1
4	STATOR ASSY (See SIL 473)	6772203	1
5	BEARING, Needle roller thrust (Hyatt AFB-29009)	9417499	1
6	ROLLER, Freewheel	6769987	10
7	SPRING, Freewheel roller (See SIL 470)	6772109	10
8	RACE, Freewheel roller	6770088	1
9	RING, External snap	6755897	1
10	SPACER, Freewheel roller race	6759967	2
11	BOLT, Hx hd, self-locking, 5/16-24 x 1 1/4	9409021	6
12	STRIP, Tab lock	6770882	3
13	RETAINER, Bearing	6770881	3
14	BEARING, Double row ball (MRC 5309-G-2)	9417967	1
15	PUMP ASSY (TC-350 Converter performance)	6770903	1
16	BOLT, Spec, 5/16-24 x 1.30	6755988	24
17	GASKET, Drive gear (Avail also in SK 6772003 & 6772004)	6770888	1
18	GEAR, Accessory drive	6770898	1

GROUP B
TORQUE CONVERTER Figure IV
Same as Group A, except for parts listed below.

15	PUMP ASSY (TC-370 Converter performance).	6771380	1
----	---	---------	---

OIL COOLER, IMPLEMENT PUMP DRIVE AND WET OR DRY CONVERTER HOUSING GROUP

To find detail parts for your Allison Torqmatic Transmission, turn to the group and page listed opposite the assembly part number of your transmission.

A/N*	MODEL	GROUP	PAGE
6771074	CRT 3531-1	C	V-3
6771321	CRT 3531-1	C	V-3
6771392	CRT 3531-1	B	V-3
6771647	CRT 3531-1	B	V-3
6771924	CRT 3531-1	D	V-3
6771940	CRT 3531-1	C	V-3
6772034	CRT 3531-1	A	V-3
6772118	CRT 3531-1	C	V-3
6772456	CRT 3531-1	C	V-3
6773267	CRT 3531-3	B	V-3
6773297	CRT 3531-1	B	V-3
6773323	CRT 3531-3	A	V-3
6773505	CRT 3531-1	B	V-3
6773629	CRT 3531-1	B	V-3
6773706	CRT 3531-3	A	V-3
6773852	CRT 3531-1	D	V-3

* A/N (Assembly number) found on your transmission name plate.

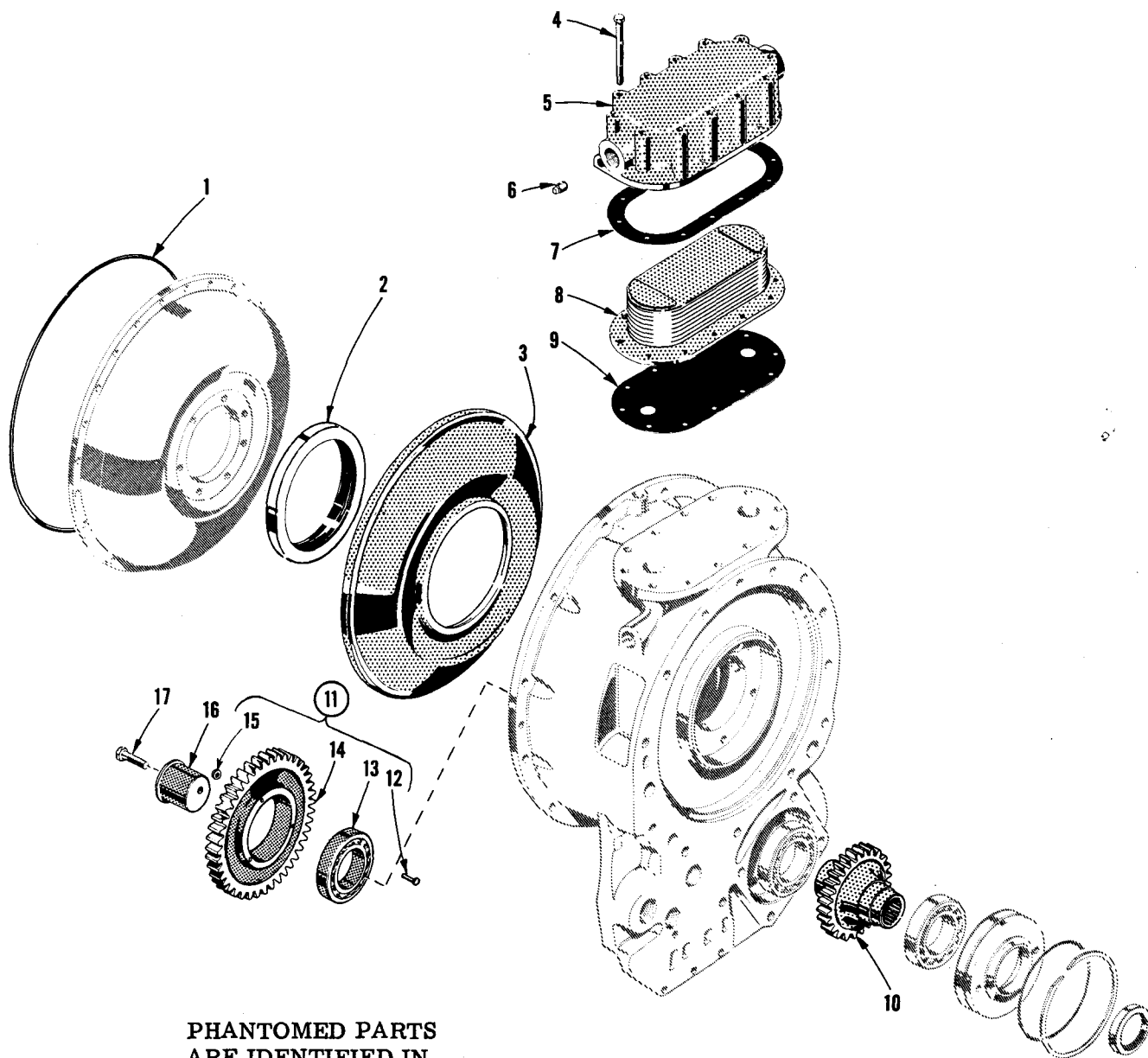


FIG V. OIL COOLER, IMPLEMENT PUMP DRIVE AND WET OR DRY
CONVERTER HOUSING, EXPLODED VIEW

GROUP A

OIL CONVERTER, IMPLEMENT PUMP DRIVE AND DRY CONVERTER HOUSING, Figure V

REF	NOMENCLATURE	PART NO	REQ
1	RING, Converter seal (Avail also in SK 6772003)	6753866	1
2	SEAL, Oil (Avail also in SK 6772003)	6771273	1
3	DIAPHRAGM	6769681	1
4	BOLT, Hex hd, 5/16-18 x 3 3/4	186271	12
5	COVER, Oil cooler	6755488	1
6	PLUG, 1/4 NPTF	444576	1
7	GASKET, Oil cooler cover	6754299	1
8	CORE ASSY, Oil cooler	8522609	1
9	GASKET, Oil cooler	6754314	1
10	GEAR, Charging oil pump drive	6769584	1
11	GEAR ASSY, Accessory drive idler	6773857	1
12	RIVET	6773842	3
13	BEARING, Single row ball (ND 1210)	901210	1
14	GEAR, Accessory drive idler	6773858*	1
15	WASHER	6773859	3
16	SPINDLE, Accessory drive idler	6759480	1
17	BOLT, Hx hd, self-locking, 7/16-14 x 1 3/4	9409513	1

GROUP B

OIL COOLER, IMPLEMENT PUMP DRIVE AND DRY CONVERTER HOUSING, Figure V
Same as Group A except for parts listed below.

4-9 Not used in this group.

GROUP C

OIL COOLER, IMPLEMENT PUMP DRIVE AND WET CONVERTER HOUSING, Figure V
Same as Group A, except for parts listed below.

1-9 Not used in this group.

GROUP D

OIL COOLER, IMPLEMENT PUMP DRIVE AND WET CONVERTER HOUSING, Figure V
Same as Group A, except for parts listed below.

1-3 Not used in this group.

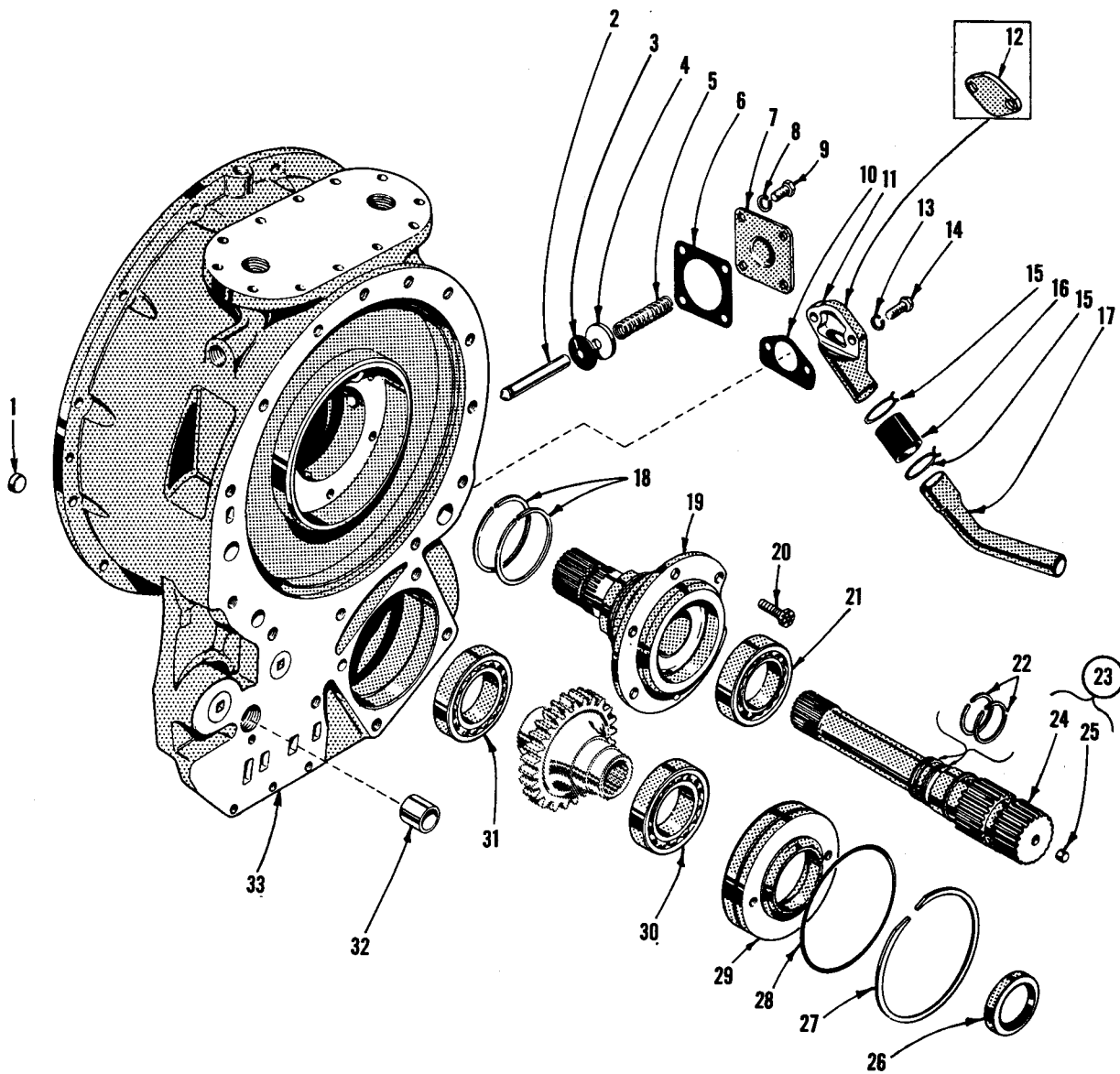
* Serviced as an assy only - not as a detail part.

TORQUE CONVERTER HOUSING GROUP

To find detail parts for your Allison Torqmatic Transmission, turn to the group and page listed opposite the assembly part number of your transmission.

A/N*	MODEL	GROUP	PAGE
6771074	CRT 3531-1	A	VI-3
6771321	CRT 3531-1	B	VI-4
6771392	CRT 3531-1	B	VI-4
6771647	CRT 3531-1	B	VI-4
6771924	CRT 3531-1	B	VI-4
6771940	CRT 3531-1	B	VI-4
6772034	CRT 3531-1	B	VI-4
6772118	CRT 3531-1	B	VI-4
6772456	CRT 3531-1	B	VI-4
6773267	CRT 3531-3	C	VI-4
6773297	CRT 3531-1	B	VI-4
6773323	CRT 3531-3	C	VI-4
6773505	CRT 3531-1	B	VI-4
6773629	CRT 3531-1	B	VI-4
6773706	CRT 3531-3	D	VI-4
6773852	CRT 3531-1	B	VI-4

* A/N (Assembly number) found on your transmission name plate.



PHANTOMED PART
IS IDENTIFIED
IN FIGURE V

FIG VI. TORQUE CONVERTER HOUSING, EXPLODED VIEW

GROUP A
TORQUE CONVERTER HOUSING, Figure VI

REF	NOMENCLATURE	PART NO	REQ
1	PLUG, Expansion	6758042	1
2	PIN, Lube pressure regulator valve guide . . .	6755403	1
3	WASHER, Lube pressr regltr valve rubber seal. .	6771323	1
4	VALVE, Lube pressr regltr	6753544	1
5	SPRING, Lube pressr regltr valve	6772661	1
6	GASKET, Valve cover (Avail also in SK 6772003 & 6772004)	6755378	1
7	COVER, Valve	6758216	1
8	WASHER, Lock, 3/8	103321	4
9	BOLT, Hx hd, 3/8-16 x 3/4	179837	4
10	GASKET, Drain tube flange (Avail also in SK 6772003 & 6772004)	6759547	1
11	FLANGE, Drain tube	6758236	1
12	Not used in this group.		
13	WASHER, Lock, 3/8	103321	2
14	BOLT, Hx hd, 3/8-16 x 2 1/2	179843	2
15	CLAMP, Drain tube hose, type "E"	272858	2
16	HOSE, Drain tube	6758235	1
17	TUBE, Drain	6758237	1
18	RING, Hook-type seal (Avail also in SK 6772003 & 6772004)	8347398	2
19	SLEEVE, Converter ground	6770902	1
20	BOLT, Hx hd, self-locking, 3/8-16 x 7/8	9409079	6
21	BEARING, Single row ball (ND 3209XR1A). . . .	903209	1
22	RING, Hook-type seal (Avail also in SK 6772003 & 6772004)	6770887	2
23	SHAFT ASSY, Torque converter	6771915	1
24	SHAFT, Torque converter	*	1
25	PLUG, Lube orifice (Use 6758391 prior to S/N 18116. Starting with S/N 18116 use 6756030)	6756030	1
26	SEAL, Lip type oil (Avail also in SK 6772003 & 6772004)	6769590	1
27	RING, Internal snap	6759541	1
28	RING "O" type seal (Avail also in SK 6772003 & 6772004)	6764780	1
29	RETAINER, Bearing	6769585	1
30	BEARING, Single row ball (ND 3209XR1A). . . .	903209	1
31	BEARING, Single row ball (ND 3209XR1A). . . .	903209	1
32	Not used in this group.		
33	HOUSING ASSY, Converter	6769910	1

* Serviced as an assy only - not as a detail part.

GROUP B

TORQUE CONVERTER HOUSING, Figure VI
Same as Group A, except for parts listed below.

REF	NOMENCLATURE	PART NO	REQ
32	TUBE, Oil transfer	6769851	1

GROUP C

TORQUE CONVERTER HOUSING, Figure VI
Same as Group B, except for parts listed below.

11	Not used in this group.		
12	COVER, Converter housing drain	6758125	1
14	BOLT, Hx hd, 3/8-16 x 7/8	179838	2
15-17	Not used in this group.		

GROUP D

TORQUE CONVERTER HOUSING, Figure VI
Same as Group C, except for parts listed below..

26	Not used in this group.		
28	Not used in this group.		

REVERSE PLANETARY AND CLUTCH GROUP

To find detail parts for your Allison Torqmatic Transmission, turn to the group and page listed opposite the assembly part number of your transmission.

A/N*	MODEL	GROUP	PAGE
6771074	CRT 3531-1	A	VII-3
6771321	CRT 3531-1	A	VII-3
6771392	CRT 3531-1	A	VII-3
6771647	CRT 3531-1	A	VII-3
6771924	CRT 3531-1	A	VII-3
6771940	CRT 3531-1	A	VII-3
6772034	CRT 3531-1	A	VII-3
6772118	CRT 3531-1	A	VII-3
6772456	CRT 3531-1	A	VII-3
6773267	CRT 3531-3	A	VII-3
6773297	CRT 3531-1	A	VII-3
6773323	CRT 3531-3	A	VII-3
6773505	CRT 3531-1	A	VII-3
6773629	CRT 3531-1	A	VII-3
6773706	CRT 3531-3	A	VII-3
6773852	CRT 3531-1	A	VII-3

* A/N (Assembly number) found on your transmission name plate.

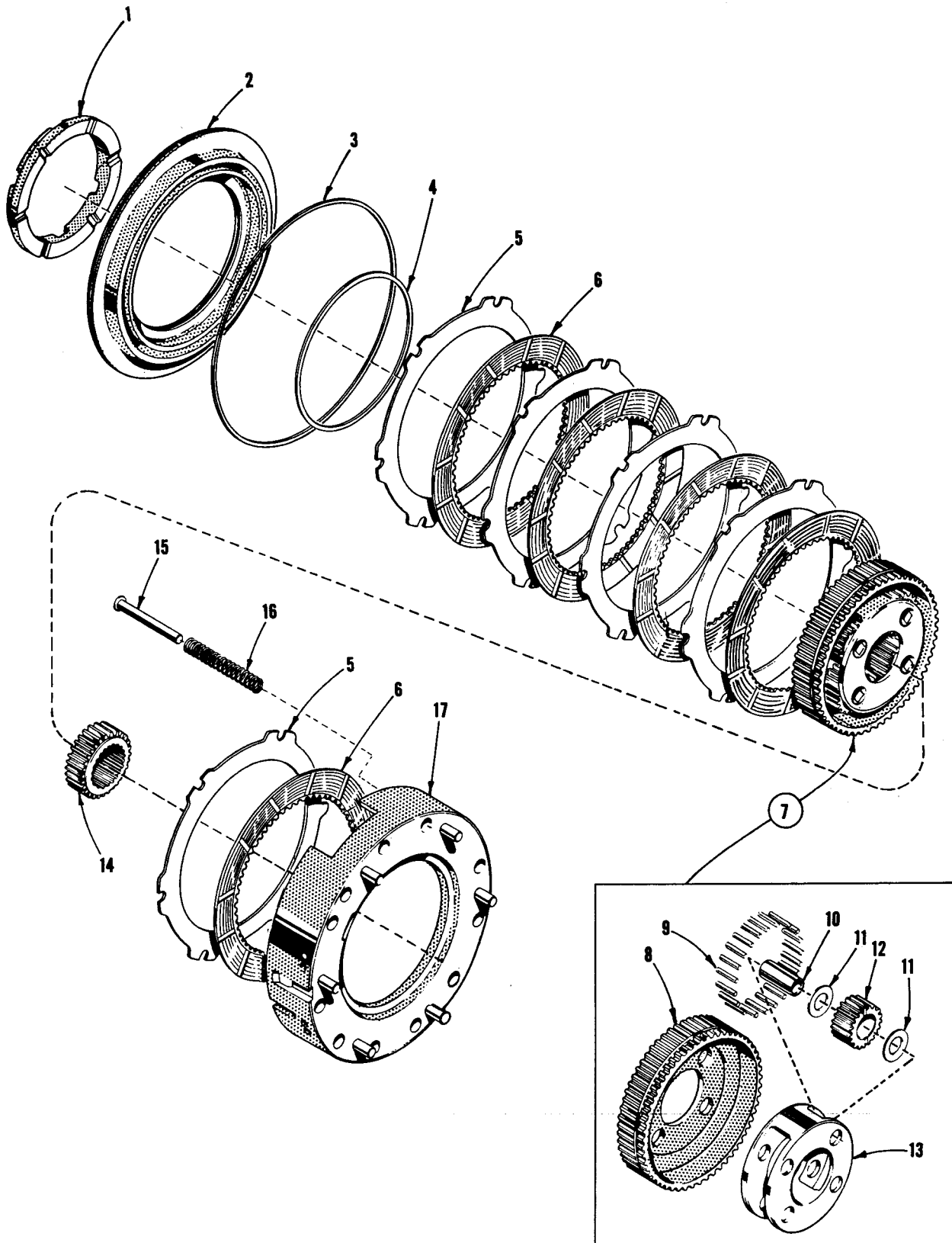


FIG VII. REVERSE PLANETARY AND CLUTCH, EXPLODED VIEW

GROUP A
REVERSE PLANETARY AND CLUTCH, Figure VII

REF	NOMENCLATURE	PART NO	REQ
1	SPACER	6768450	1
2	PISTON, Clutch apply	6768445	1
3	RING, Reverse clutch piston outer seal (Avail also in SK 6772003 and 6772004)	6773206	1
4	RING, Reverse clutch piston inner seal (Avail also in SK 6772003 and 6772004)	6757788	1
5	PLATE, External splined clutch	6759504	5
6	PLATE, Internal splined clutch	6768446	5
7	CARRIER ASSY, Reverse planetary	6768808	1
8	HUB, Reverse planetary	6768806	1
9	ROLLER, Planetary pinion	6700213	88
10	PIN, Planetary spindle	6757152	4
11	WASHER, Pinion thrust	6756586	8
12	PINION, Plnt (Matched set of 4).	6769716	1 set
13	CARRIER, Planetary	*	1
14	GEAR, Forward sun	6770868	1
15	PIN, Spring guide	6768988	12
16	SPRING, Piston return (Do not mix with spring 6754882 in this clutch. See SIL 467)	6772068	12
17	ANCHOR, Reverse clutch	6759560	1

* Serviced as an assy only - not as a detail part.

FORWARD PLANETARY AND CLUTCH GROUP

To find detail parts for your Allison Torqmatic Transmission, turn to the group and page listed opposite the assembly part number of your transmission.

A/N*	MODEL	GROUP	PAGE
6771074	CRT 3531-1	A	VIII-3
6771321	CRT 3531-1	A	VIII-3
6771392	CRT 3531-1	A	VIII-3
6771647	CRT 3531-1	A	VIII-3
6771924	CRT 3531-1	A	VIII-3
6771940	CRT 3531-1	A	VIII-3
6772034	CRT 3531-1	A	VIII-3
6772118	CRT 3531-1	A	VIII-3
6772456	CRT 3531-1	A	VIII-3
6773267	CRT 3531-3	A	VIII-3
6773297	CRT 3531-1	A	VIII-3
6773323	CRT 3531-3	A	VIII-3
6773505	CRT 3531-1	A	VIII-3
6773629	CRT 3531-1	A	VIII-3
6773706	CRT 3531-3	A	VIII-3
6773852	CRT 3531-1	A	VIII-3

*A/N (Assembly number) found on your transmission name plate.

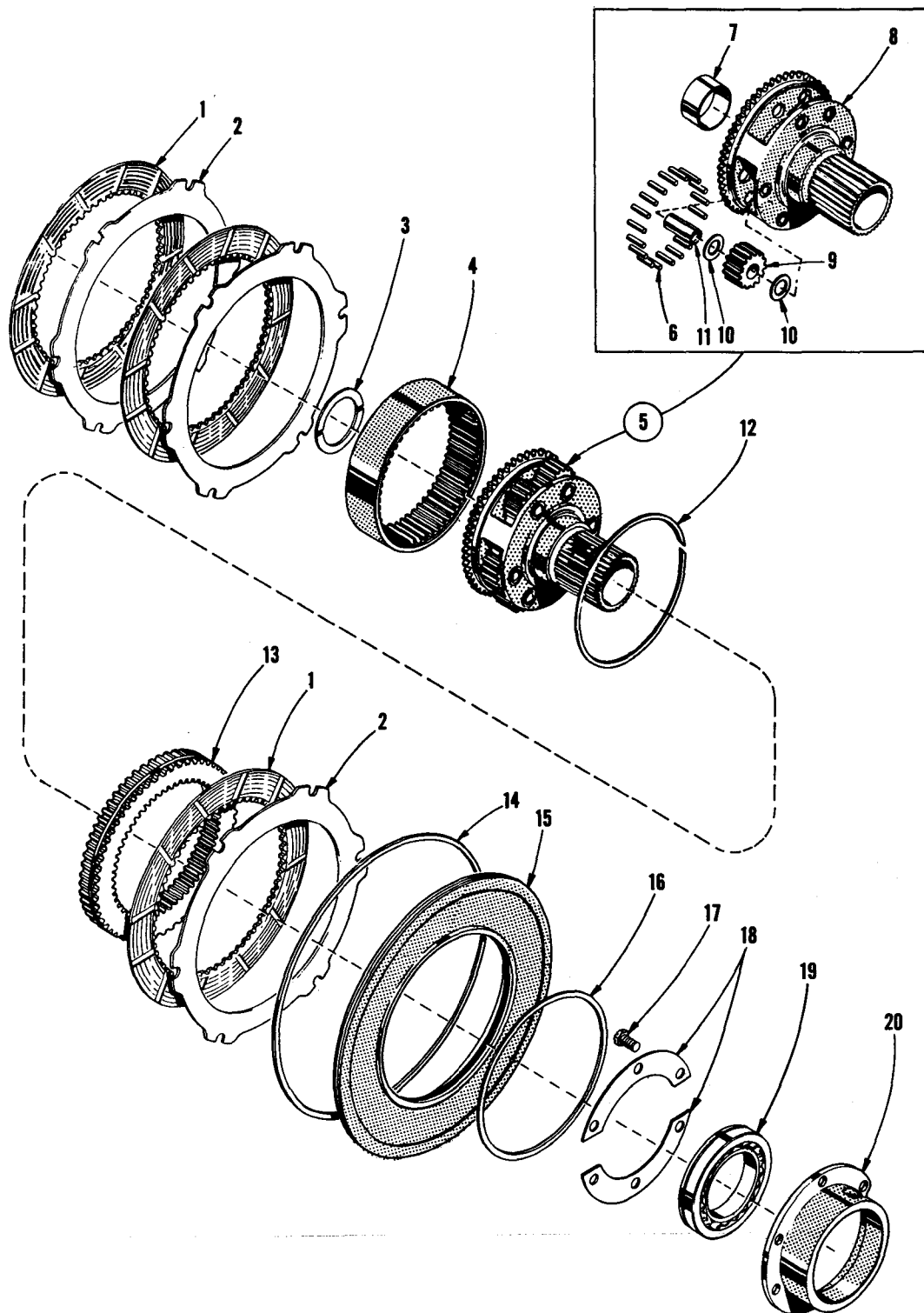


FIG VIII. FORWARD PLANETARY AND CLUTCH, EXPLODED VIEW

GROUP A
FORWARD PLANETARY AND CLUTCH, Figure VIII

REF	NOMENCLATURE	PART NO	REQ
1	PLATE, Internal splined forward clutch	6768446	3
2	PLATE, External splined forward clutch	6759504	3
3	WASHER, Thrust	6757233	1
4	GEAR, Reverse ring	6757164	1
5	CARRIER ASSY, Forward planetary	6770897	1
6	ROLLER, Planetary pinion	6754867	120
7	BUSHING	6757227	1
8	CARRIER, Forward planetary	*	1
9	PINION, Forward plnt (Matched set of 6). . .	6769715	1 set
10	WASHER, Pinion thrust	6754866	12
11	PIN, Planetary spindle	6754852	6
12	RING, Internal snap	6755007	1
13	GEAR, Forward ring	6768804	1
14	RING, Forward clutch piston outer seal (Avail also in SK 6772003 and 6772004)	6773206	1
15	PISTON, Forward clutch apply	6768445	1
16	RING, Forward clutch piston inner seal (Avail also in SK 6772003 and 6772004)	6757788	1
17	BOLT, Hx hd, self-locking, 3/8-16 x 7/8	9409079	4
18	RETAINER, Bearing	6757157	2
19	BEARING, Single row ball (ND 43L14X1241A) . . .	954924	1
20	HUB, Oil transfer	6757148	1

* Serviced as an assv only - not as a detail part.

TRANSMISSION HOUSING GROUP

To find detail parts for your Allison Torqmatic Transmission, turn to the group and page listed opposite the assembly part number of your transmission.

A/N*	MODEL	GROUP	PAGE
6771074	CRT 3531-1	A	IX-3
6771321	CRT 3531-1	A	IX-3
6771392	CRT 3531-1	A	IX-3
6771647	CRT 3531-1	A	IX-3
6771924	CRT 3531-1	A	IX-3
6771940	CRT 3531-1	A	IX-3
6772034	CRT 3531-1	A	IX-3
6772118	CRT 3531-1	A	IX-3
6772456	CRT 3531-1	A	IX-3
6773267	CRT 3531-3	A	IX-3
6773297	CRT 3531-1	A	IX-3
6773323	CRT 3531-3	A	IX-3
6773505	CRT 3531-1	A	IX-3
6773629	CRT 3531-1	A	IX-3
6773706	CRT 3531-3	A	IX-3
6773852	CRT 3531-1	A	IX-3

*A/N (Assembly number) found on your transmission name plate.

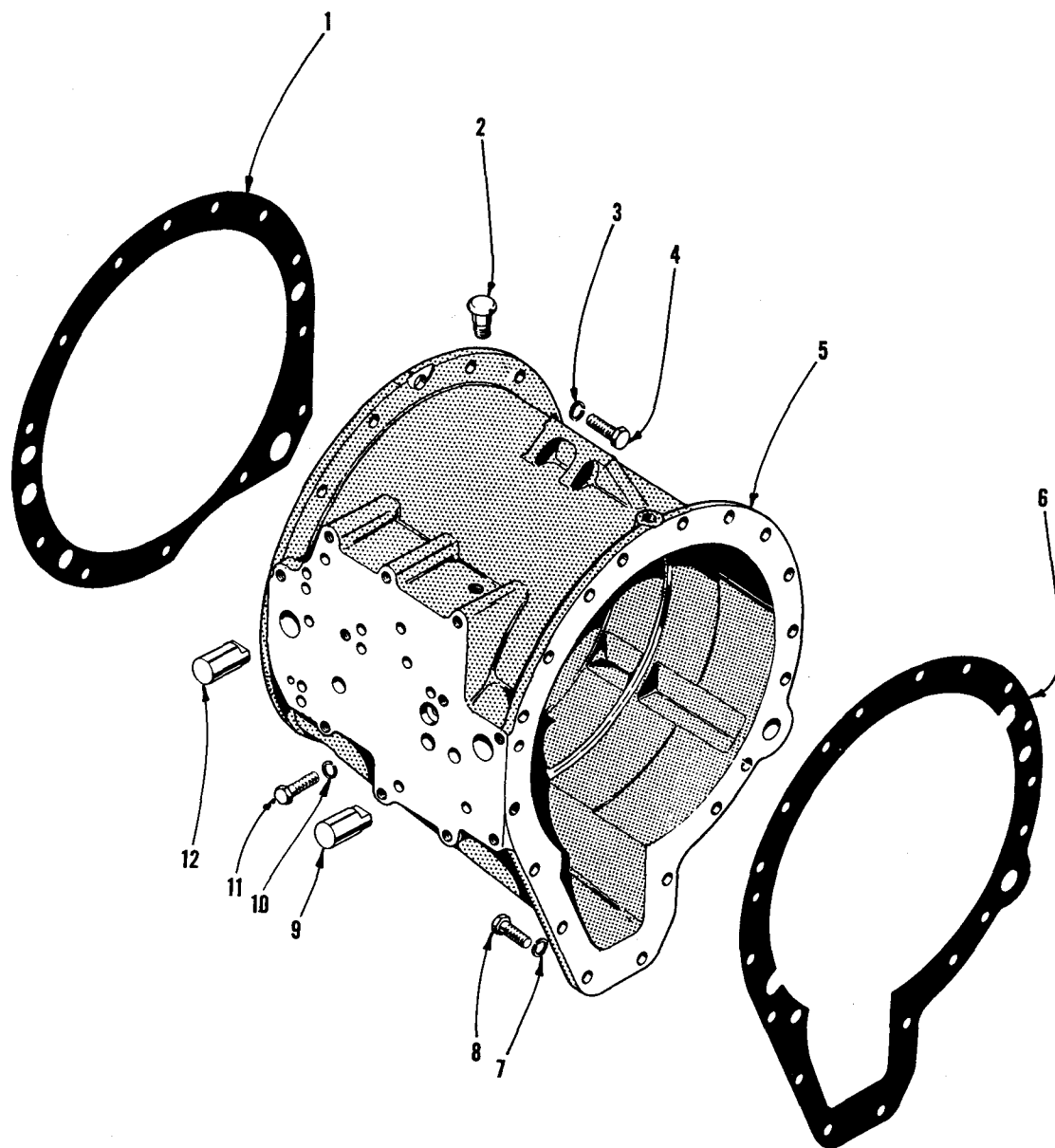


FIG IX. TRANSMISSION HOUSING, EXPLODED VIEW

GROUP A
TRANSMISSION HOUSING, Figure IX

REF	NOMENCLATURE	PART NO	REQ
1	GASKET, Converter housing (Avail also in SK 6772003 & 6772004)	6757178	1
2	BREATHER	6769936	1
3	WASHER, Lock, 7/16	103322	13
4	BOLT, Hx hd, 7/16-14 x 1 3/8	179861	13
5	HOUSING, Transmission	6759513	1
6	GASKET, Trns hsnq (Avail also in SK 6772003 & 6772004)	6757219	1
7	WASHER, Lock, 7/16	103322	18
8	BOLT, Hx hd, 7/16-14 x 1 3/8	179861	18
9	PIN, Low & high range clutch anchor	6769558	1
10	WASHER, Lock, 3/8	103321	1
11	BOLT, Hx hd, 3/8-16 x 1 1/2 (high range clu).	186628	1
12	PIN, Forward & reverse range clu anchor	6769558	1

INTERMEDIATE-RANGE CLUTCH AND TRANSMISSION MAIN SHAFT GROUP

To find detail parts for your Allison Torqmatic Transmission, turn to the group and page listed opposite the assembly part number of your transmission.

A/N*	MODEL	GROUP	PAGE
6771074	CRT 3531-1	A	X-3
6771321	CRT 3531-1	A	X-3
6771392	CRT 3531-1	A	X-3
6771647	CRT 3531-1	A	X-3
6771924	CRT 3531-1	A	X-3
6771940	CRT 3531-1	A	X-3
6772034	CRT 3531-1	A	X-3
6772118	CRT 3531-1	A	X-3
6772456	CRT 3531-1	A	X-3
6773267	CRT 3531-3	B	X-3
6773297	CRT 3531-1	C	X-3
6773323	CRT 3531-3	B	X-3
6773505	CRT 3531-1	C	X-3
6773629	CRT 3531-1	A	X-3
6773706	CRT 3531-3	B	X-3
6773852	CRT 3531-1	A	X-3

*A/N (Assembly number) found on your transmission name plate.

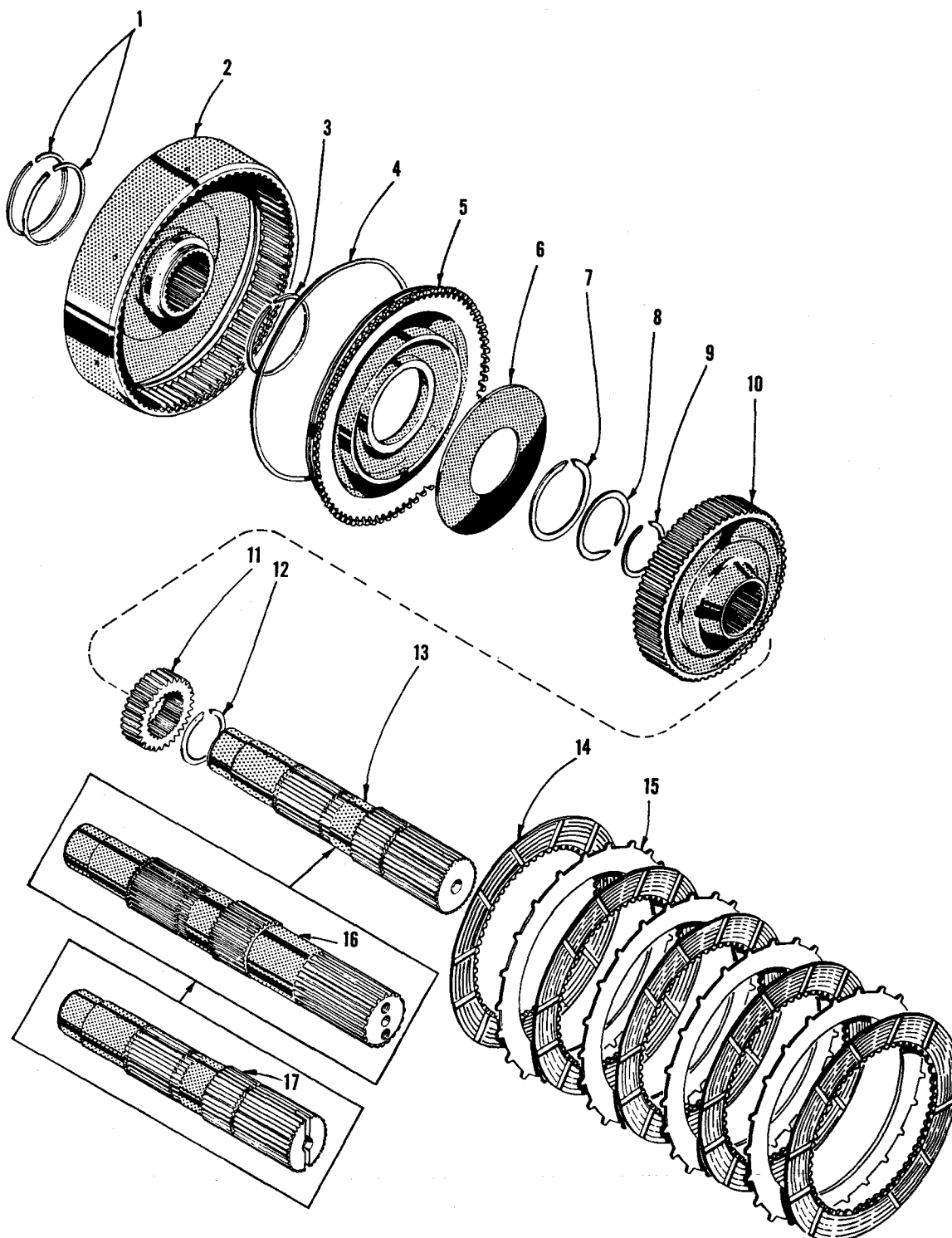


FIG X. INTERMEDIATE-RANGE CLUTCH AND TRANSMISSION
MAIN SHAFT, EXPLODED VIEW

GROUP A
INTERMEDIATE-RANGE CLUTCH AND TRANSMISSION MAIN SHAFT, Figure X

REF	NOMENCLATURE	PART NO	REQ
1	RING, Hook type seal (Avail also in SK 6772003 & 6772004)	6757229	2
2	DRUM, Intermediate range clutch	6771337	1
3	RING, Hook type piston inner seal (Avail also in SK 6772003 and 6772004)	6757229	1
4	RING, Piston outer seal (Avail also in SK 6772003 & 6772004)	6757854	1
5	PISTON, Intermediate clutch apply	6770894	1
6	SPRING, Piston belleville type return	6759491	1
7	RING, Spring retainer, external snap	6750337	1
8	RING, Drum retainer, external snap	6750259	1
9	RING, Hub retainer, external snap	6754815	1
10	HUB, Intermediate range clutch	6770873	1
11	GEAR, High range sun	6754832	1
12	RING, Sun gear retainer, external snap	6754815	1
13	SHAFT, Transmission main	6770889	1
14	PLATE, Internal splined clutch	6768446	5
15	PLATE, External splined clutch	6759509	4
16-17	Not used in this group.		

GROUP B
INTERMEDIATE-RANGE CLUTCH AND TRANSMISSION MAIN SHAFT, Figure X
Same as Group A, except for parts listed below.

13	Not used in this group.		
16	SHAFT, Transmission main.	6773272	1
17	Not used in this group.		

GROUP C
INTERMEDIATE-RANGE CLUTCH AND TRANSMISSION MAIN SHAFT, Figure X
Same as Group A, except for parts listed below.

13	Not used in this group.		
16	Not used in this group.		
17	SHAFT, Transmission main.	6773685	1

* Serviced as an assy only - not as a detail part.

HIGH-RANGE PLANETARY AND CLUTCH GROUP

To find detail parts for your Allison Torqmatic Transmission, turn to the group and page listed opposite the assembly part number of your transmission.

A/N*	MODEL	GROUP	PAGE
6771074	CRT 3531-1	A	XI-3
6771321	CRT 3531-1	A	XI-3
6771392	CRT 3531-1	A	XI-3
6771647	CRT 3531-1	A	XI-3
6771924	CRT 3531-1	A	XI-3
6771940	CRT 3531-1	A	XI-3
6772034	CRT 3531-1	A	XI-3
6772118	CRT 3531-1	A	XI-3
6772456	CRT 3531-1	A	XI-3
6773267	CRT 3531-3	A	XI-3
6773297	CRT 3531-1	A	XI-3
6773323	CRT 3531-3	A	XI-3
6773505	CRT 3531-1	A	XI-3
6773629	CRT 3531-1	A	XI-3
6773706	CRT 3531-3	A	XI-3
6773852	CRT 3531-1	A	XI-3

* A/N (Assembly number) found on your transmission name plate.

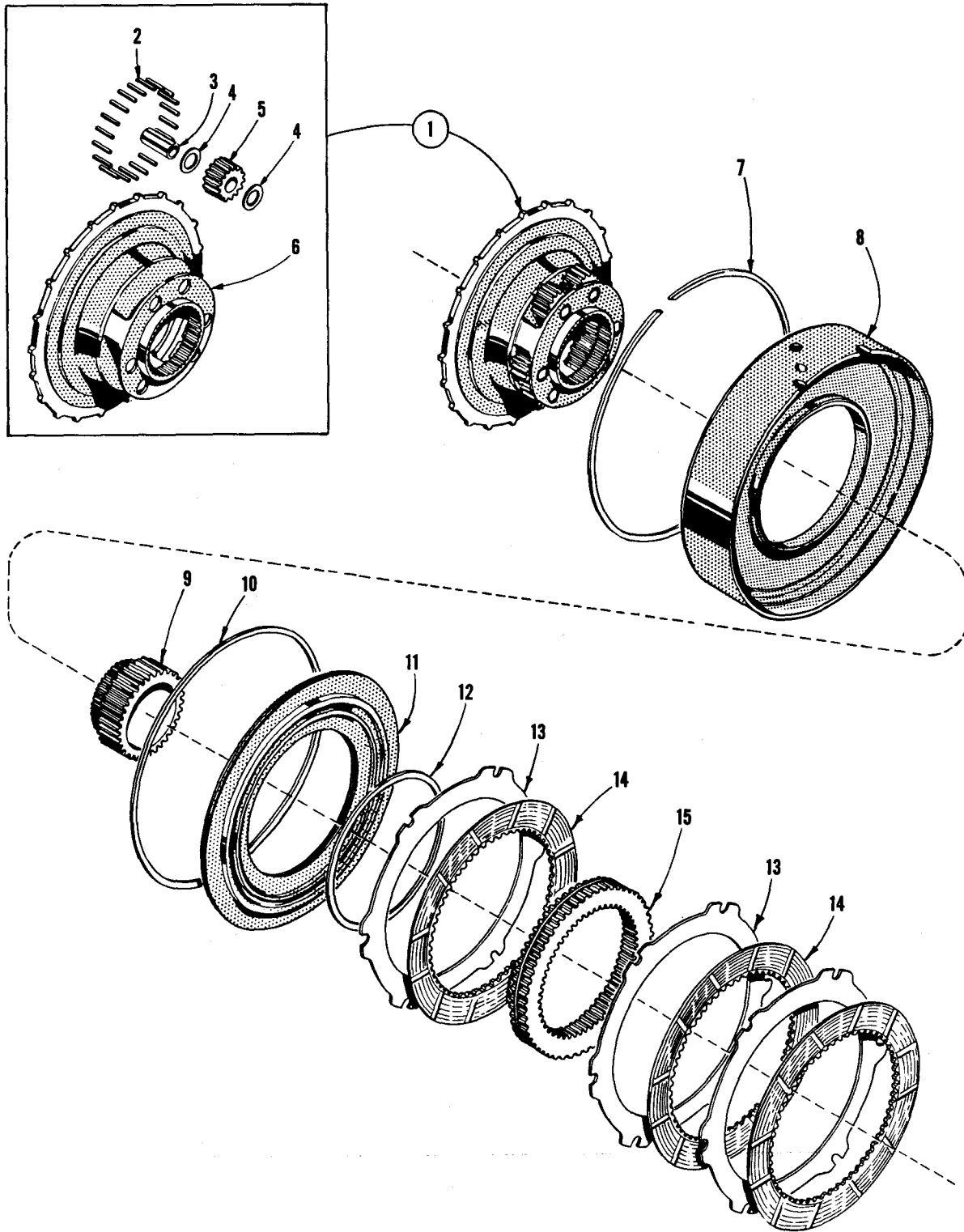


FIG XI. HIGH-RANGE PLANETARY AND CLUTCH, EXPLODED VIEW

GROUP A
HIGH-RANGE PLANETARY AND CLUTCH, Figure XI

REF	NOMENCLATURE	PART NO	REQ
1	CARRIER ASSY, High range clutch	6759519	1
2	ROLLER, Planetary pinion	6754867	120
3	PIN, Planetary pinion	6754852	6
4	WASHER, Pinion thrust	6754866	12
5	PINION, Plnt carrier (Matched set of 6). . .	6769715	1 set
6	CARRIER, High range	*	1
7	RING, Carrier retainer internal snap.	6773806	1
8	HOUSING, High range piston	6759473	1
9	GEAR, Low range sun	6759470	1
10	RING, Piston outer seal (Avail also in SK 6772003 & 6772004)	6773206	1
11	PISTON, High range clutch	6759471	1
12	RING, Piston inner seal (Avail also in SK 6772003 & 6772004)	6757788	1
13	PLATE, External splined clutch	6759504	3
14	PLATE, Internal splined clutch	6768446	3
15	GEAR, High range planetary ring	6768804	1

* Serviced as an assy only - not as a detail part.

LOW RANGE PLANETARY AND CLUTCH GROUP

To find detail parts for your Allison Torqmatic Transmission, turn to the group and page listed opposite the assembly part number of your transmission.

A/N*	MODEL	GROUP	PAGE
6771074	CRT 3531-1	A	XII-3
6771321	CRT 3531-1	A	XII-3
6771392	CRT 3531-1	A	XII-3
6771647	CRT 3531-1	A	XII-3
6771924	CRT 3531-1	A	XII-3
6771940	CRT 3531-1	A	XII-3
6772034	CRT 3531-1	A	XII-3
6772118	CRT 3531-1	A	XII-3
6772456	CRT 3531-1	A	XII-3
6773267	CRT 3531-3	B	XII-3
6773297	CRT 3531-1	A	XII-3
6773323	CRT 3531-3	B	XII-3
6773505	CRT 3531-1	A	XII-3
6773629	CRT 3531-1	A	XII-3
6773706	CRT 3531-3	B	XII-3
6773852	CRT 3531-1	A	XII-3

*A/N (Assembly number) found on your transmission name plate.

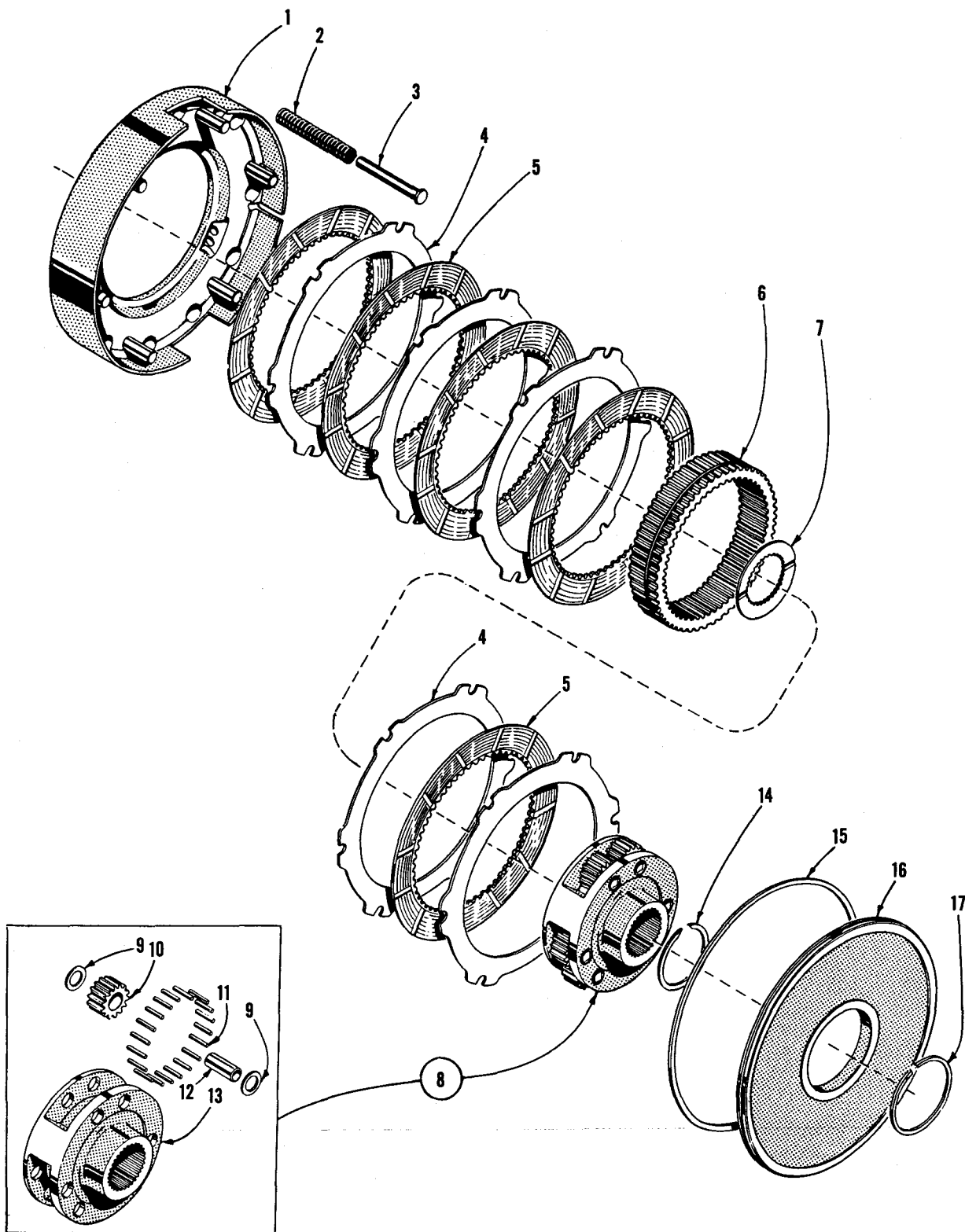


FIG XII. LOW-RANGE PLANETARY AND CLUTCH, EXPLODED VIEW

GROUP A
LOW-RANGE PLANETARY AND CLUTCH, Figure XII

REF	NOMENCLATURE	PART NO	REQ
1	ANCHOR, High and low range clutch	6769560	1
2	SPRING, Piston return (Do not mix with spring 6754882 in this clutch. See SIL 467)	6772068	12
3	PIN, Spring guide	6768988	12
4	PLATE, External splined low-range clutch . . .	6759504	5
5	PLATE, Internal splined low-range clutch . . .	6768446	5
6	GEAR, Low range planetary ring	6768805	1
7	WASHER, Thrust	6770896	1
8	CARRIER ASSY, Low range planetary	6770904	1
9	WASHER, Pinion thrust	6770955	12
10	PINION, Low range plnt (Matched set of 6). .	6771478	1 set
11	ROLLER, Planetary pinion	6700213	96
12	PIN, Planetary pinion	6770953	6
13	CARRIER, Planetary	*	1
14	RING, Carrier retainer external snap	6750259	1
15	RING, Piston outer seal (Avail also in SK 6772003 & 6772004)	6773206	1
16	PISTON, Low range planetary	6759485	1
17	RING, Piston inner hook type seal (Avail also in SK 6772003 & 6772004)	6757229	1

GROUP B
LOW-RANGE PLANETARY AND CLUTCH, Figure XII
Same as Group A, except for parts listed below.

14 Not used in this group.

* Serviced as an assy only - not as a detail part.

TRANSFER GEAR HOUSING GROUP

To find detail parts for your Allison Torqmatic Transmission, turn to the group and page listed opposite the assembly part number of your transmission.

A/N*	MODEL	GROUP	PAGE
6771074	CRT 3531-1	A	XIII-3
6771321	CRT 3531-1	A	XIII-3
6771392	CRT 3531-1	B	XIII-3
6771647	CRT 3531-1	C	XIII-3
6771924	CRT 3531-1	A	XIII-3
6771940	CRT 3531-1	A	XIII-3
6772034	CRT 3531-1	A	XIII-3
6772118	CRT 3531-1	A	XIII-3
6772456	CRT 3531-1	A	XIII-3
6773297	CRT 3531-1	D	XIII-3
6773505	CRT 3531-1	E	XIII-4
6773629	CRT 3531-1	A	XIII-3
6773852	CRT 3531-1	C	XIII-3

* A/N (Assembly number) found on your transmission name plate.

ALLISON TORQMATIC TRANSMISSION SERIES 3531-1 AND 3531-3 PARTS CATALOG

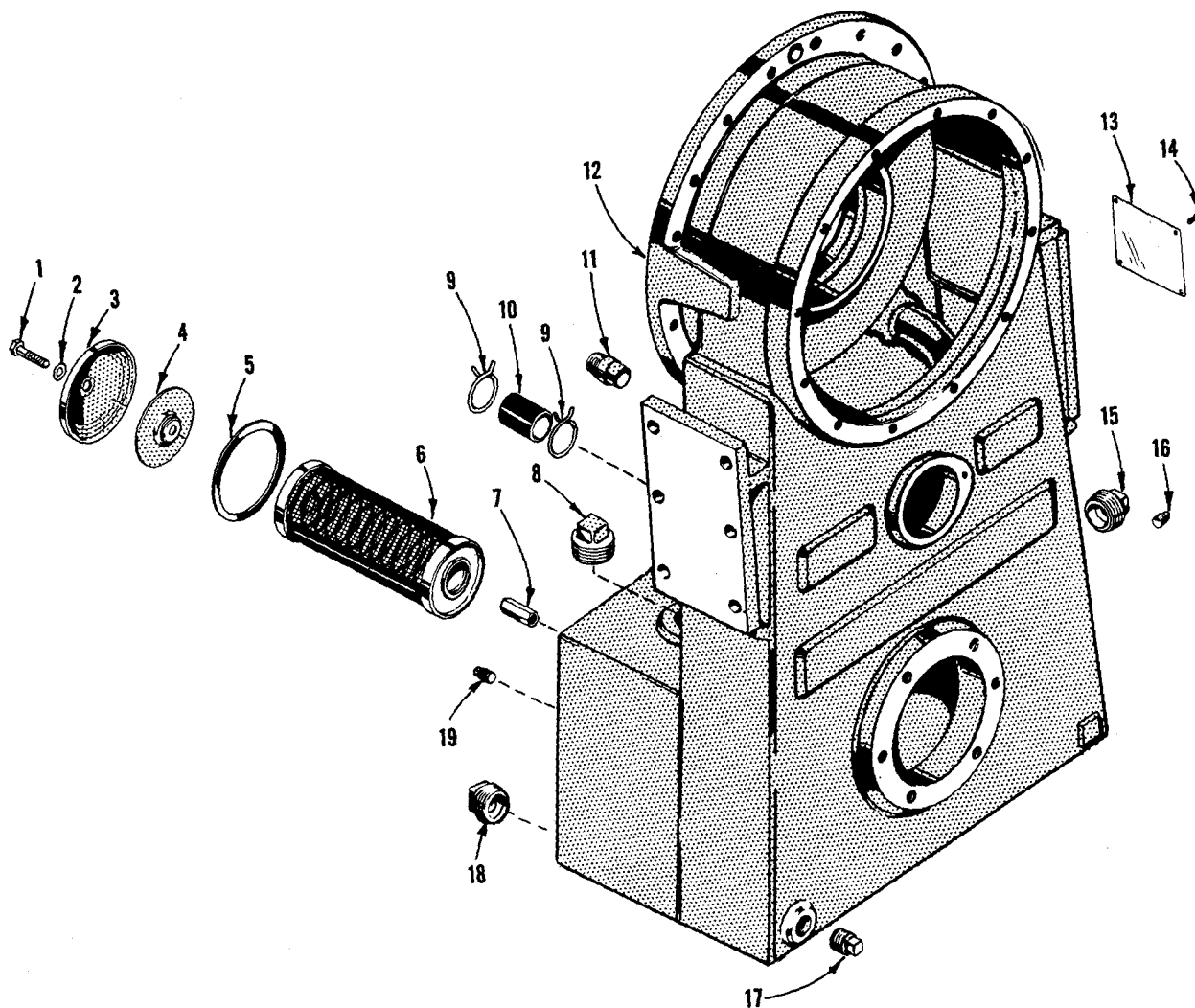


FIG XIII. TRANSFER GEAR HOUSING, EXPLODED VIEW

GROUP A
TRANSFER GEAR HOUSING, Figure XIII

REF	NOMENCLATURE	PART NO	REQ
1	BOLT, Hx hd, oil screen, 5/16-24 x 1 1/2 . . .	181343	1
2	WASHER, Plain, 11/32	115308	1
3	COVER, Oil screen	6769995	1
4	RETAINER, Oil screen	6757774	1
5	GASKET, Oil screen cover (Avail also in SK 6772003 & 6772004)	5576443	1
6	SCREEN, Oil	6769996	1
7	COUPLING, Oil screen	6769994	1
8	PLUG, Pipe, 1 1/2	106643	1
9	CLAMP, Hose	272855	2
10	HOSE, Converter housing drain	6757352	1
11	NIPPLE, 3/4 NPTF	6770169	1
12	HOUSING, Transfer gear (When replacing Housing 6771637 use Kit P/N 6773332)	6771637	1
13	PLATE, Name	6768267	1
14	SCREW, Drive	142862	4
15	PLUG, Oil filler, 1 1/4	143938	1
16	PLUG, Oil level check, sq hd pipe, 1/4	444576	1
17	PLUG, Sump drain, sq hd, 3/4	444592	1
18-19	Not used in this group.		

GROUP B
TRANSFER GEAR HOUSING, Figure XIII
Same as Group A, except for parts listed below.

12	HOUSING, Transfer gear (When replacing Housing 6772281 use Kit P/N 6773332)	6772281	1
15-16	Not used in this group.		
18	PLUG, Oil filler, sq socket hd pipe, 1 1/4 . .	106644	1
19	PLUG, Oil level check, sq hd pipe, 1/4. . . .	444576	1

GROUP C
TRANSFER GEAR HOUSING, Figure XIII
Same as Group B, except for parts listed below.

12	HOUSING, Transfer gear (Prior to S/N 23564 use Kit P/N 6773332)	6772169	1
18	PLUG, Oil filler, sq hd pipe, 1 1/4	143938	1

GROUP D
TRANSFER GEAR HOUSING, Figure XIII
Same as Group C, except for parts listed below.

11	Not used in this group.		
12	HOUSING, Transfer gear (pump clearance) (When replacing Housing 6772086 use Kit 6773333)	6772086	1

GROUP E

TRANSFER GEAR HOUSING, Figure XIII

Same as Group C, except for parts listed below.

REF	NOMENCLATURE	PART NO	REQ
11	Not used in this group.		
12	HOUSING, Transfer gear.	6772189	1

FRONT OUTPUT SHAFT GROUP

To find detail parts for your Allison Torqmatic Transmission, turn to the group and page listed opposite the assembly part number of your transmission.

A/N*	MODEL	GROUP	PAGE
6771074	CRT 3531-1	B	XIV-3
6771321	CRT 3531-1	B	XIV-3
6771392	CRT 3531-1	B	XIV-3
6771647	CRT 3531-1	A	XIV-3
6771924	CRT 3531-1	B	XIV-3
6771940	CRT 3531-1	B	XIV-3
6772034	CRT 3531-1	B	XIV-3
6772118	CRT 3531-1	B	XIV-3
6772456	CRT 3531-1	B	XIV-3
6773297	CRT 3531-1	B	XIV-3
6773505	CRT 3531-1	A	XIV-3
6773629	CRT 3531-1	B	XIV-3
6773852	CRT 3531-1	A	XIV-3

* A/N (Assembly number) found on your transmission name plate.

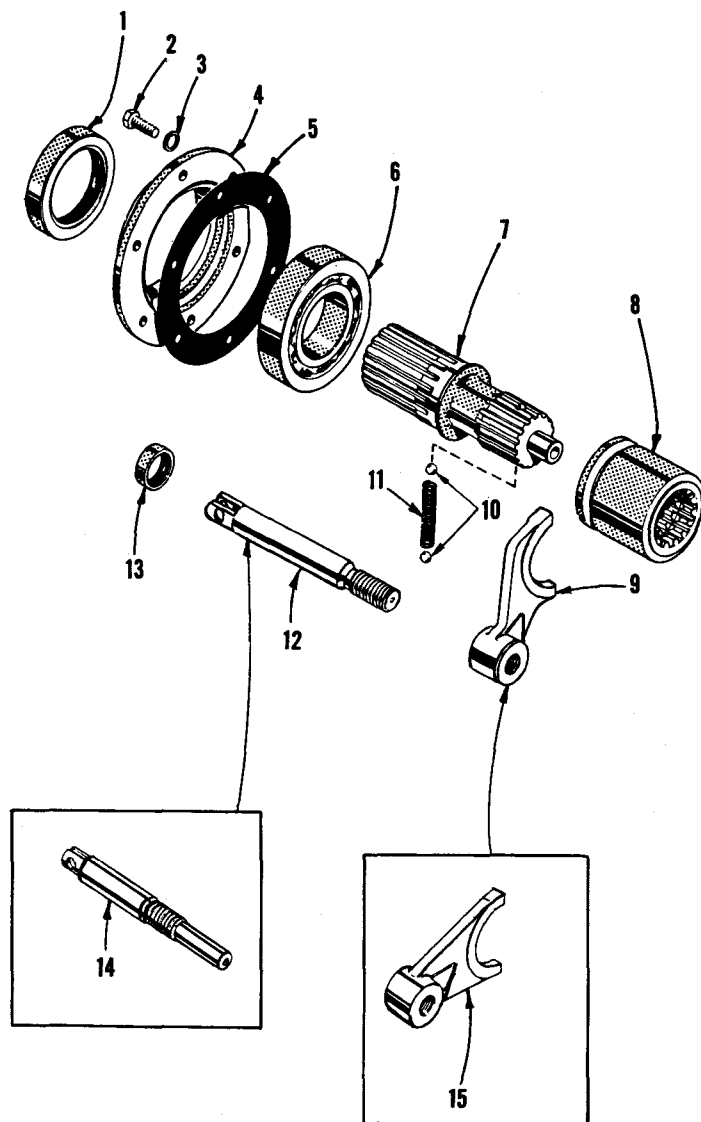


FIG XIV. FRONT OUTPUT SHAFT, EXPLODED VIEW

GROUP A
FRONT OUTPUT SHAFT, Figure XIV

REF	NOMENCLATURE	PART NO	REQ
1	SEAL, Flange oil (Avail also in SK 6772003 & 6772004)	6773373	1
2	BOLT, Hx hd, 3/8-16 x 1	179839	6
3	WASHER, Lock, 3/8	103321	6
4	RETAINER, Front output bearing	6758149	1
5	GASKET, Bearing retainer (Avail also in SK 6772003 & 6772004)	6757224	1
6	BEARING, Single row ball (ND 3311XR1A).	903311	1
7	SHAFT, Front output	6757244	1
8	COUPLING, Front output shaft	6757245	1
9	FORK, Shifter	6772183	1
10	BALL, Detent, 3/8	145643	2
11	SPRING, Detent	6757249	1
12	SHAFT, Shifter fork	6772187	1
13	SEAL, Shifter fork shaft (Avail also in SK 6772003 & 6772004)	6703159	1
14-15	Not used in this group.		

GROUP B
FRONT OUTPUT SHAFT, Figure XIV

Same as Group A, except for parts listed below.

9	Not used in this group.		
12	Not used in this group.		
14	SHAFT, Shifter fork	6757228	1
15	FORK, Shifter	6757246	1

TRANSFER GEARS AND REAR OUTPUT SHAFT GROUP

To find detail parts for your Allison Torqmatic Transmission, turn to the group and page listed opposite the assembly part number of your transmission.

A/N*	MODEL	GROUP	PAGE
6771074	CRT 3531-1	A	XV-3
6771321	CRT 3531-1	A	XV-3
6771392	CRT 3531-1	A	XV-3
6771647	CRT 3531-1	A	XV-3
6771924	CRT 3531-1	A	XV-3
6771940	CRT 3531-1	A	XV-3
6772034	CRT 3531-1	A	XV-3
6772118	CRT 3531-1	A	XV-3
6772456	CRT 3531-1	A	XV-3
6773297	CRT 3531-1	C	XV-3
6773505	CRT 3531-1	B	XV-3
6773629	CRT 3531-1	A	XV-3
6773852	CRT 3531-1	D	XV-4

* A/N (Assembly number) found on your transmission name plate.

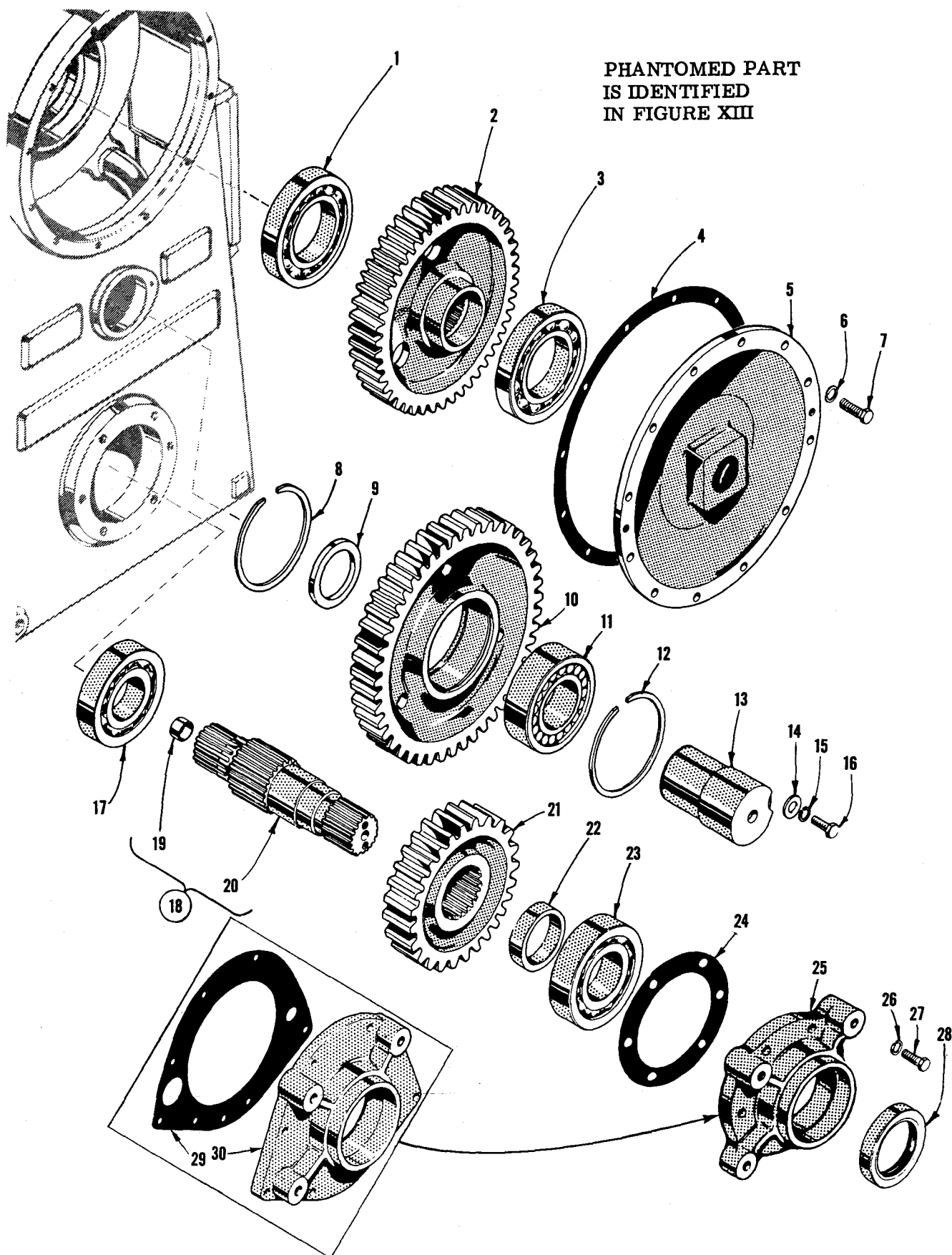


FIG XV. TRANSFER GEARS AND REAR OUTPUT SHAFT, EXPLODED VIEW

GROUP A
TRANSFER GEARS AND REAR OUTPUT SHAFT, Figure XV
(0.659:1 Overdrive)

REF	NOMENCLATURE	PART NO	REQ
1	BEARING, Single row ball (ND 3216XR1A)	903216	1
2	GEAR, Transfer drive	6770905	1
3	BEARING, Single row ball (ND 3216XR1A)	903216	1
4	GASKET, Transfer drive gear cover (Avail also in SK 6772003 & 6772004)	6757218	1
5	COVER, Transfer drive gear	6757217	1
6	WASHER, Lock, 3/8	103321	12
7	BOLT, Hx hd, 3/8-16 x 1 1/4	179840	12
8	RING, Bearing retainer internal snap	6750924	1
9	SPACER, Idler gear bearing	6759537	1
10	GEAR, Transfer idler	6757993	1
11	BEARING, Transfer idler gear double roller (Hyatt A25213Z)	7450552	1
12	RING, Bearing retainer internal snap	6750924	1
13	SPINDLE, Output idler gear	6759539	1
14	WASHER, Spindle retainer	6759517	1
15	WASHER, Lock, 7/16	103322	1
16	BOLT, Hx hd, 7/16-14 x 7/8	179857	1
17	BEARING, Single row ball (ND 3311XR1A)	903311	1
18	SHAFT ASSY, Rear output	6759540	1
19	BUSHING	6756835	1
20	SHAFT, Rear output	*	1
21	GEAR, Transfer driven	6758374	1
22	SPACER, Transfer driven gear	6768270	1
23	BEARING, Single row ball (ND3312XR1A)	903312	1
24-25	Not used in this group.		
26	WASHER, Lock, 3/8	103321	8
27	BOLT, Hx hd, 3/8-16 x 1 3/8	179842	8
28	SEAL, Rear oil (Avail also in SK 6772003 & 6772004)	6773373	1
29	GASKET, Rear bearing retainer (Avail also in SK 6772003 & 6772004)	6757238	1
30	RETAINER, Rear bearing	6759481	1

GROUP B
TRANSFER GEARS AND REAR OUTPUT SHAFT, Figure XV
(0.659:1 Overdrive)

5	Not used in this group. (See Fig. XVI)		
24	GASKET, Rear bearing retainer (Avail also in SK 6772004)	6772190	1
25	RETAINER, Rear bearing	6772179	1
26	WASHER, Lock, 1/2	103323	6
27	BOLT, Hx hd, 1/2-13 x 1 3/8	179884	6

GROUP C
TRANSFER GEARS AND REAR OUTPUT SHAFT, Figure XV
(0.659:1 Overdrive)

Same as Group A, except for parts listed below.

5	Not used in this group. (See Fig. XVI)		
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* Serviced as an assy only - not as a detail part.

GROUP D

TRANSFER GEARS AND REAR OUTPUT SHAFT, Figure XV

Same as Group A, except for parts listed below.

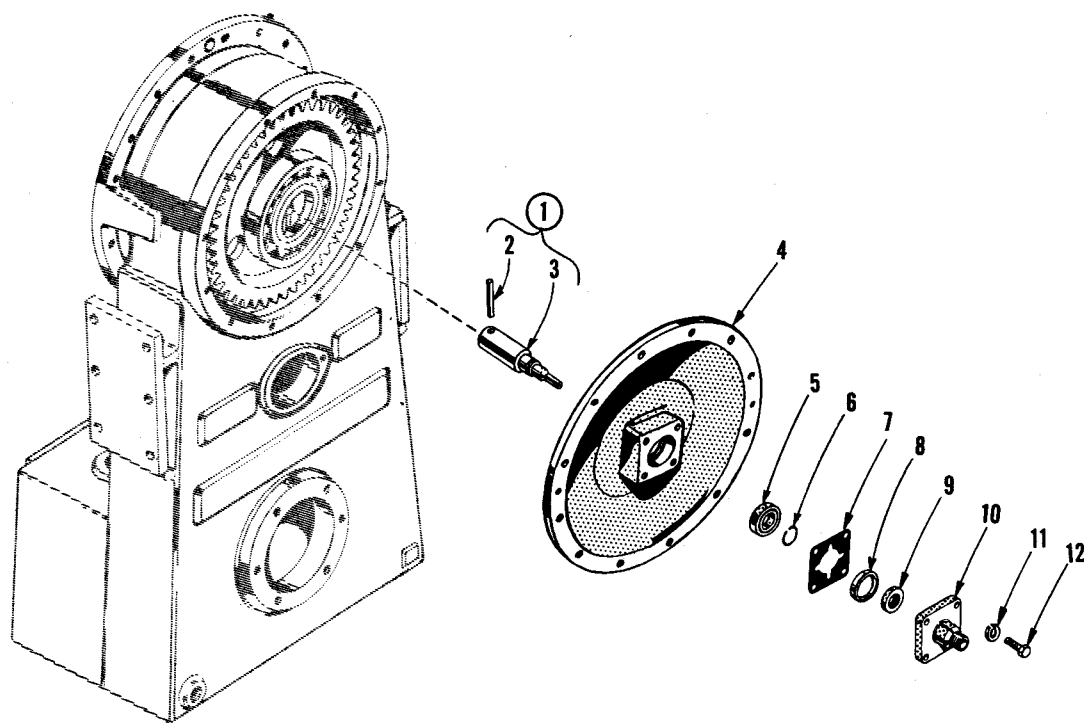
REF	NOMENCLATURE	PART NO	REQ
24	GASKET, Rear bearing retainer (Avail also in SK 6772003 and 6772004)	6772190	1
25	RETAINER, Rear bearing.	6772179	1
26	WASHER, Lock, 1/2	103323	6
27	BOLT, Hx hd, 1/2-13 x 1 3/8	179884	6
29-30	Not used in this group.		

SPEEDOMETER DRIVE GROUP

To find detail parts for your Allison Torqmatic Transmission, turn to the group and page listed opposite the assembly part number of your transmission.

A/N*	MODEL	GROUP	PAGE
6773297	CRT 3531-1	A	XVI-3
6773505	CRT 3531-1	A	XVI-3

*A/N (Assembly number) found on your transmission name plate.



PHANTOMED PART
IS IDENTIFIED
IN FIGURE XIII

FIG XVI. SPEEDOMETER DRIVE, EXPLODED VIEW

GROUP A
SPEEDOMETER DRIVE, Figure XVI

REF	NOMENCLATURE	PART NO	REQ
1	SHAFT ASSY, Speedometer drive	6773683	1
2	PIN, Dowel	141159	1
3	SHAFT, Speedometer drive	6773684*	1
4	COVER, Output drive gear.	6757291	1
5	BEARING, Single row ball (ND 3202 NR1214A). . .	907411	1
6	RING, Bearing retaining snap.	8894450	1
7	GASKET, Speedometer drive adapter	3224773	1
8	SPACER, Bearing	6757283	1
9	SEAL, Speedometer drive oil	6752035	1
10	ADAPTER, Speedometer drive	6773686	1
11	WASHER, Lock, 5/16.	103320	4
12	BOLT, Hx hd, 5/16-18 x 3/8.	179819	4

* Serviced as an assy only - not as a detail part.

OIL SUMP ADAPTER GROUP

To find detail parts for your Allison Torqmatic Transmission, turn to the group and page listed opposite the assembly part number of your transmission.

A/N*	MODEL	GROUP	PAGE
6773267	CRT 3531-3	A	XVII-3
6773323	CRT 3531-3	A	XVII-3
6773706	CRT 3531-3	A	XVII-3

*A/N (Assembly number) found on your transmission name plate.

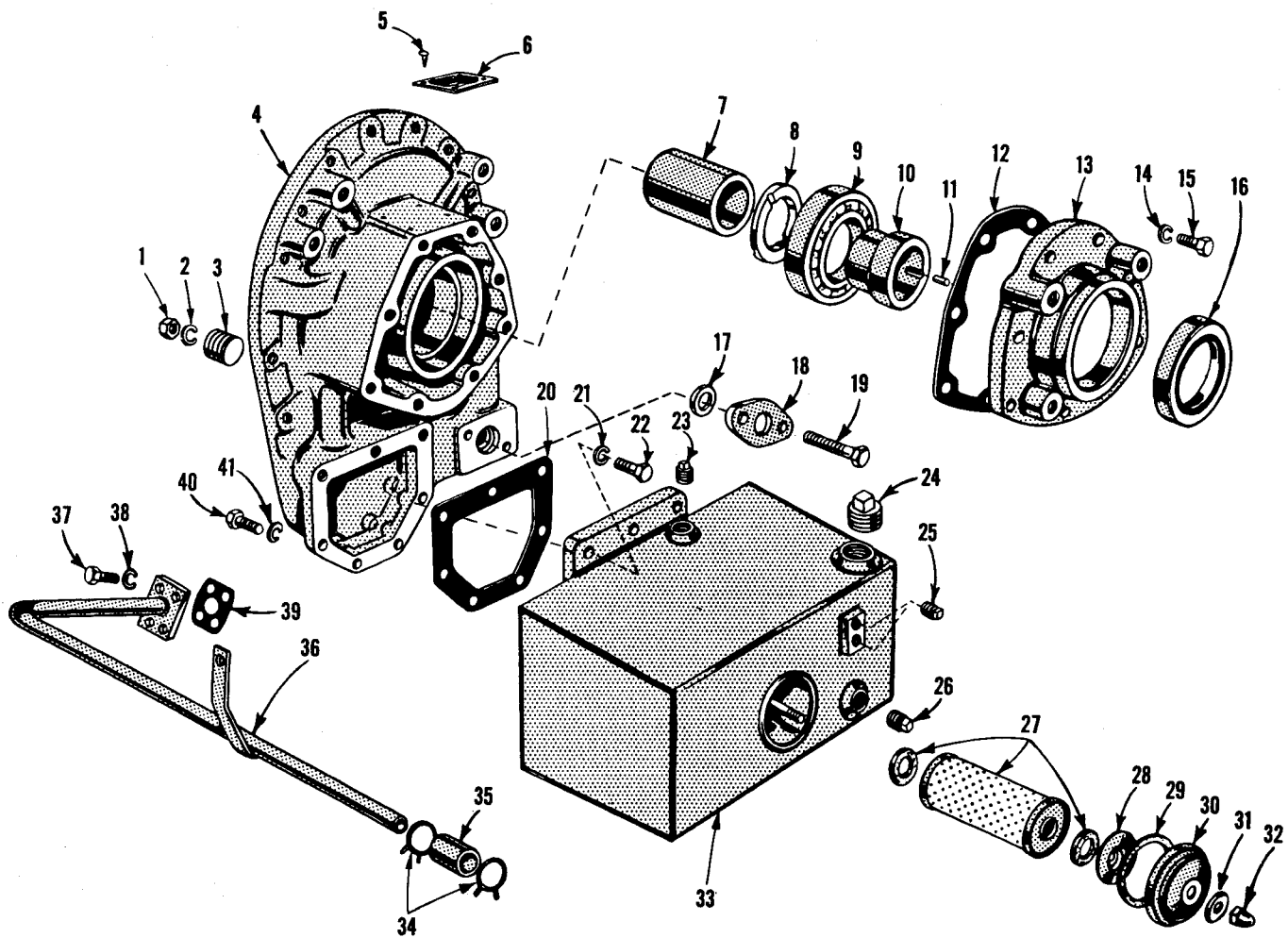


FIG XVII. OIL SUMP ADAPTER, EXPLODED VIEW

GROUP A
OIL SUMP ADAPTER, Figure XVII

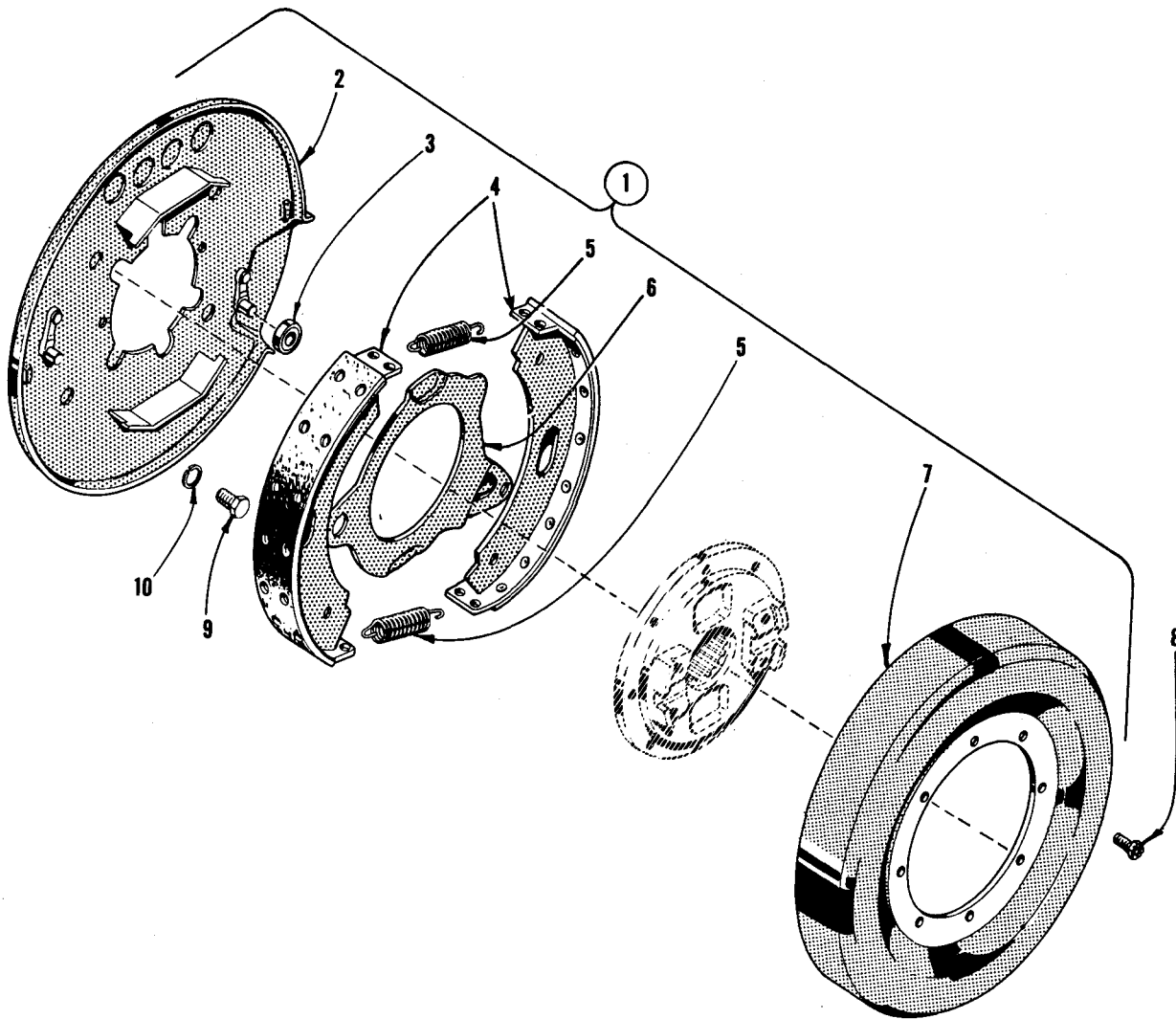
REF	NOMENCLATURE	PART NO	REQ
1	NUT, Hx, 7/16	271505	2
2	WASHER, Lock, 7/16.	103322	2
3	PLUG Hx socket, 1 1/4.	106644	1
4	ADAPTER, Transmission sump.	6773271	1
5	SCREW, Drive No. 4 x 1/4.	142862	4
6	PLATE, Transmission name.	6768268	1
7	SPACER.	6773268	1
8	WASHER, Thrust.	6773269	1
9	BEARING, Single row ball (ND 3215X1A)	903215	1
10	SLEEVE.	6773270	1
11	PIN, Sleeve retaining	6768722	1
12	GASKET, Bearing retainer.	6768730	1
13	RETAINER, Rear bearing.	6773277	1
14	WASHER, Lock, 3/8	103321	8
15	BOLT, Hx hd, 3/8-16 x 1 3/8	179842	8
16	SEAL, Output flange oil	6773292	1
17	SEAL, Pump suction	6770811	1
18	PLATE, Seal retainer.	6768968	1
19	BOLT, Hx hd, 7/16-20 x 3 1/2	181413	2
20	GASKET, Sump.	6758195	1
21	WASHER, Lock, 7/16	103322	3
22	BOLT, Hx hd, 7/16-14 x 1 1/2.	179862	3
23	PLUG, Sq hd pipe, 3/8	445686	1
24	PLUG, Oil filler, sq hd pipe, 1 1/4	143938	1
25	PLUG, Oil level check, sq hd pipe, 1/4.	444576	2
26	PLUG, Sump drain, sq hd pipe, 3/4	444592	1
27	SCREEN, Oil	6769996	1
28	RETAINER, Oil screen.	6757774	1
29	GASKET, Oil screen cover.	5576443	1
30	COVER, Oil screen	6757763	1
31	WASHER, Plain, 11/32 x 11/16 x .065	115308	1
32	NUT, Crown, 5/16.	131642	1
33	SUMP, Transmission oil.	6768733	1
34	CLAMP, Hose	272853	2
35	HOSE, Pump tube	6768967	1
36	TUBE, Scavenge pump return.	6768970	1
37	BOLT, Hx hd, 3/8-16 x 1	179839	4
38	WASHER, Lock, 3/8	103321	4
39	GASKET, Pump tube	6758218	1
40	BOLT, Hx hd, 7/16-20 x 1 1/4.	181397	4
41	WASHER, Lock, 7/16.	103322	4

PARKING BRAKE GROUP

To find detail parts for your Allison Torqmatic Transmission, turn to the group and page listed opposite the assembly part number of your transmission.

A/N*	MODEL	GROUP	PAGE
6771074	CRT 3531-1	A	XVIII-3
6771321	CRT 3531-1	A	XVIII-3
6771392	CRT 3531-1	A	XVIII-3
6771647	CRT 3531-1	A	XVIII-3
6771924	CRT 3531-1	A	XVIII-3
6771940	CRT 3531-1	A	XVIII-3
6772118	CRT 3531-1	A	XVIII-3
6772456	CRT 3531-1	B	XVIII-3
6773267	CRT 3531-3	A	XVIII-3
6773297	CRT 3531-1	A	XVIII-3
6773323	CRT 3531-3	A	XVIII-3
6773505	CRT 3531-1	A	XVIII-3
6773852	CRT 3531-1	B	XVIII-3

* A/N (Assembly number) found on your transmission name plate.



PHANTOMED PART
IDENTIFIED IN
FIGURE I

FIG XVIII. PARKING BRAKE, EXPLODED VIEW

GROUP A
PARKING BRAKE, Figure XVIII

REF	NOMENCLATURE	PART NO	REQ
1	BRAKE ASSY, Parking	6757357	1
2	PLATE, Brake backing	6771675	1
3	ROLLER	9030126	1
4	SHOE & LINING	6758262	2
5	SPRING, Brake shoe return	6758260	2
6	LEVER, Operating cam	6758261	1
7	DRUM, Brake	6758259	1
8	BOLT, Hx hd, self-locking, 3/8-24 x 3/4	9409131	8
9	BOLT, Hx hd, 5/8-11 x 1 1/4	271556	3
10	WASHER, Lock, 5/8	103325	3

GROUP B
PARKING BRAKE, Figure XVIII

Same as Group A, except for parts listed below.

8 Not used in this group.

CONTROL VALVE BODY GROUP

To find detail parts for your Allison Torqmatic Transmission, turn to the group and page listed opposite the assembly part number of your transmission.

A/N*	MODEL	GROUP	PAGE
6771074	CRT 3531-1	A	XIX-3
6771321	CRT 3531-1	B	XIX-5
6771392	CRT 3531-1	A	XIX-3
6771647	CRT 3531-1	C	XIX-5
6771924	CRT 3531-1	A	XIX-3
6771940	CRT 3531-1	A	XIX-3
6772034	CRT 3531-1	A	XIX-3
6772118	CRT 3531-1	A	XIX-3
6772456	CRT 3531-1	A	XIX-3
6773267	CRT 3531-3	D	XIX-7
6773297	CRT 3531-1	D	XIX-7
6773323	CRT 3531-3	E	XIX-9
6773505	CRT 3531-1	D	XIX-7
6773629	CRT 3531-1	D	XIX-7
6773706	CRT 3531-3	D	XIX-7
6773852	CRT 3531-1	D	XIX-7

* A/N (Assembly number) found on your transmission name plate.

PHANTOMED PARTS
ARE IDENTIFIED IN
FIGURES VI, IX AND XIII

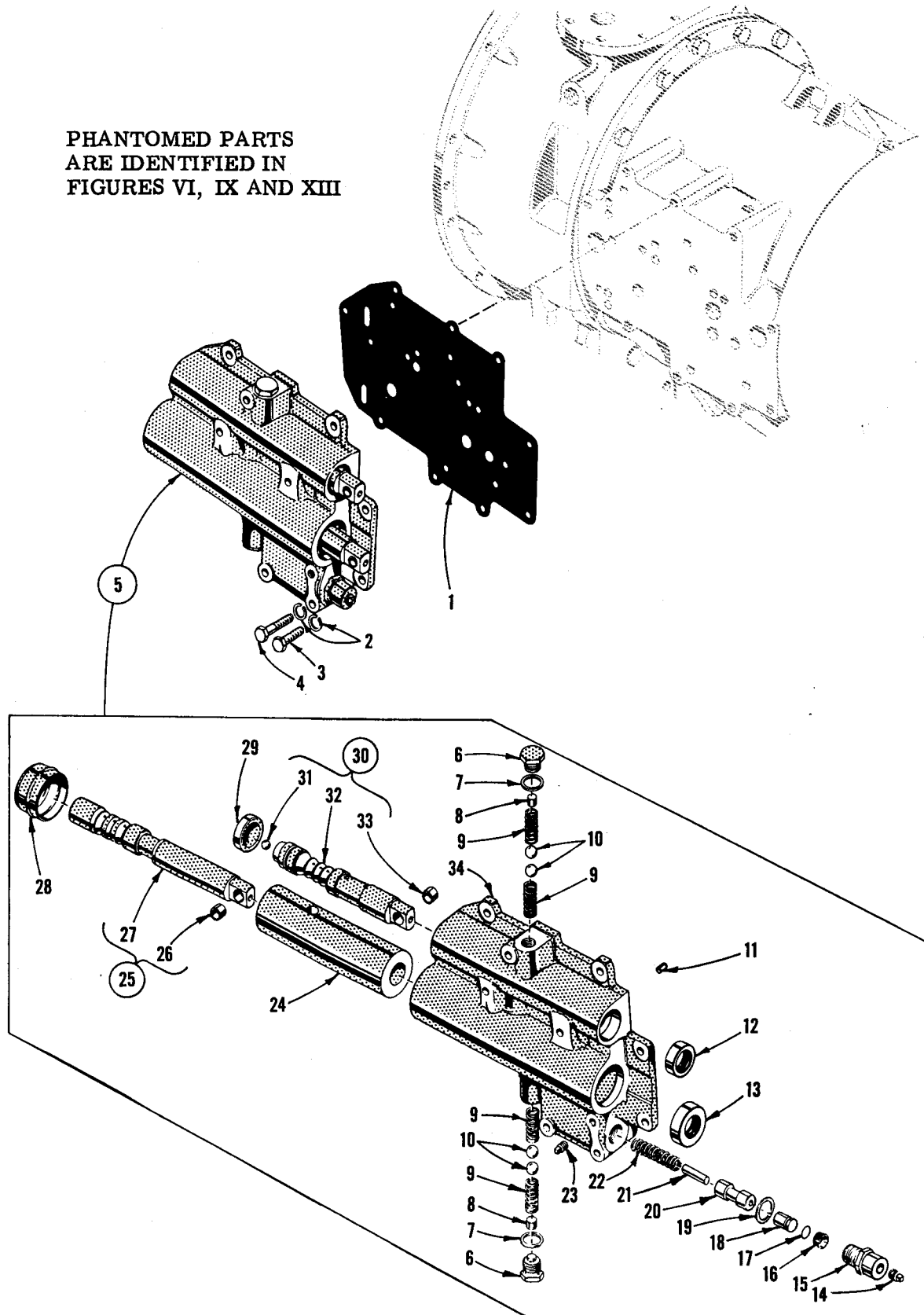


FIG XIX. CONTROL VALVE BODY, EXPLODED VIEW

GROUP A
CONTROL VALVE BODY, Figure XIX
(Inching Control with Hydraulic Actuated Clutch Cut-off Valve)

REF	NOMENCLATURE	PART NO	REQ
1	GASKET, Selector valve body (Avail also in SK 6772003 & 6772004)	6759499	1
2	WASHER, Lock, 3/8	103321	11
3	BOLT, Hx hd, 3/8-16 x 1 1/4	179841	6
4	BOLT, Hx hd, 3/8-16 x 3	179851	5
5	BODY ASSY, Selector valve	6768725	1
6	PLUG, Hx hd, 3/4-16 UNF	6772115	2
7	GASKET, Copper (Avail also in SK 6772003 & 6772004)	6768523	2
8	PIN, 3/8 x .535	6750945	2
9	SPRING	6703162	4
10	BALL, 5/8	145659	4
11	PIN, Spring type A	453675	1
12	SEAL (Avail also in SK 6772003 & 6772004)	6703159	1
13	SEAL (Avail also in SK 6772003 & 6772004)	6757264	1
14	PLUG, Pipe, 1/8	445684	1
15	PLUG, Cut-off valve retainer	6758306	1
16	CUP, Clu cut-off valve plug (See SIL 468).	6771913	1
17	RING, Seal (Available also in SK 6772003 & 6772004)	6750558	1
18	PLUG, Clutch cut-off valve (See SIL 468) . .	6771914	1
19	GASKET, Annular, 7/8 (Avail also in SK 6772003 & 6772004)	105456	1
20	VALVE, Clu cut-off	6758304	1
21	PIN, 3/8 x 1 3/8	103772	1
22	SPRING	6757251	1
23	PLUG, Pipe, 1/8	445684	1
24	SLEEVE, Forward and reverse shift valve . .	6769645	1
25	VALVE ASSY, Forward and reverse	6769440	1
26	BUSHING	6769402	1
27	VALVE, Forward and reverse	*	1
28	CUP	499204	1
29	PLUG, Range selector valve	6756348	1
30	VALVE ASSY, Range selector	6757263	1
31	BALL, 15/32 dia	145656	1
32	VALVE, Range selector	*	1
33	BUSHING	6769402	1
34	BODY, Valve selector	6769643	1

* Serviced as an assy only - not as a detail part.

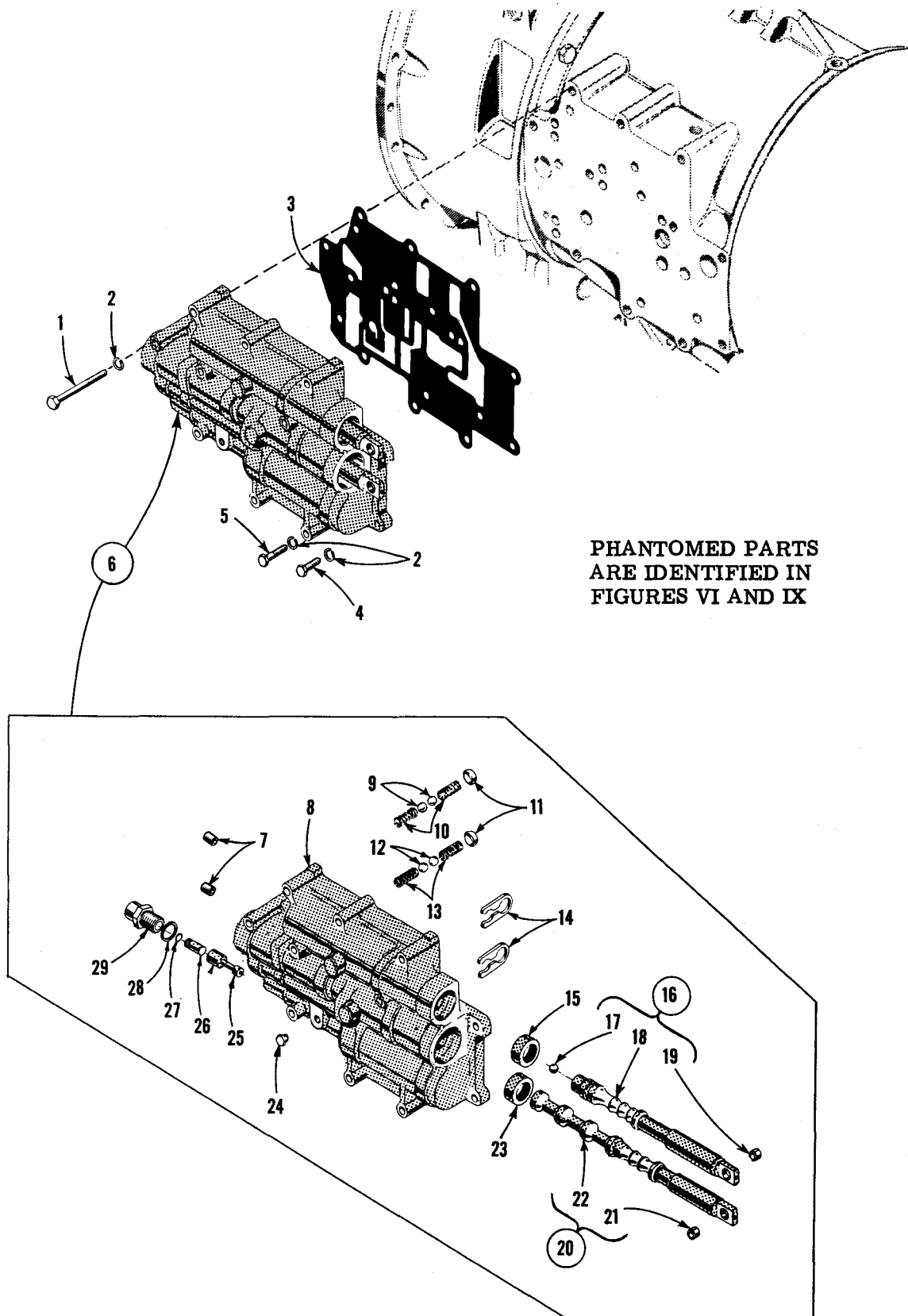


FIG XIX-1. CONTROL VALVE BODY, EXPLODED VIEW

GROUP B
CONTROL VALVE BODY, Figure XIX
(Inching Control with Air Actuated Clutch Cutoff Valve)
Same as Group A, except for parts listed below.

REF	NOMENCLATURE	PART NO	REQ
5	BODY ASSY, Selector valve	6771379	1
14	Not used in this group.		
15	PLUG, Cut-off valve retainer	6771378	1
16	Not used in this group.		
18	PLUG, Clutch cut-off valve	6758305	1

GROUP C
CONTROL VALVE BODY, Figure XIX-1
(Inching Control with Air Actuated Clutch Cut-off Valve)

1	BOLT, Hx hd, 3/8-16 x 3 1/2	186283	3
2	WASHER, Lock, 3/8	103321	11
3	GASKET, Control valve body	6772057	1
4	BOLT, Hx hd, 3/8-16 x 1 1/4	179841	2
5	BOLT, Hx hd, 3/8-16 x 2 1/2	179849	6
6	BODY ASSY, Selector valve	6773646	1
7	PLUG, Sq socket hd, 3/8 dry seal	444660	2
8	BODY, Control valve	6772066	1
9	BALL, Detent	145659	2
10	SPRING, Range selector detent- 2 red coils	6773631	2
11	RETAINER, Detent spring	6772054	2
12	BALL, Detent	145659	2
13	SPRING, Fwd and reverse detent-2 yellow coils	6773641	2
14	STOP, Valve	6772053	2
15	SEAL, Selector valve oil	6703159	1
16	VALVE ASSY, Range selector	6772067	1
17	BALL	145656	1
18	VALVE, Range selector	6772059*	1
19	BUSHING, Valve	6769402	1
20	VALVE ASSY, Forward and reverse	6772069	1
21	BUSHING, Valve	6769402	1
22	VALVE, Forward and reverse	6772056*	1
23	SEAL, Forward and reverse valve	6703159	1
24	PLUG, Hx hd, 1/8 pipe	444612	1
25	VALVE, Clutch cut-off	6772078	1
26	PLUG, Valve	6758305	1
27	RING, Cut-off valve plug	6750558	1
28	GASKET, Cut-off valve plug	105456	1
29	PLUG, Cut-off valve retainer	6771378	1

* Serviced as an assy only - not as a detail part.

PHANTOMED PARTS
ARE IDENTIFIED IN
FIGURES VI AND IX

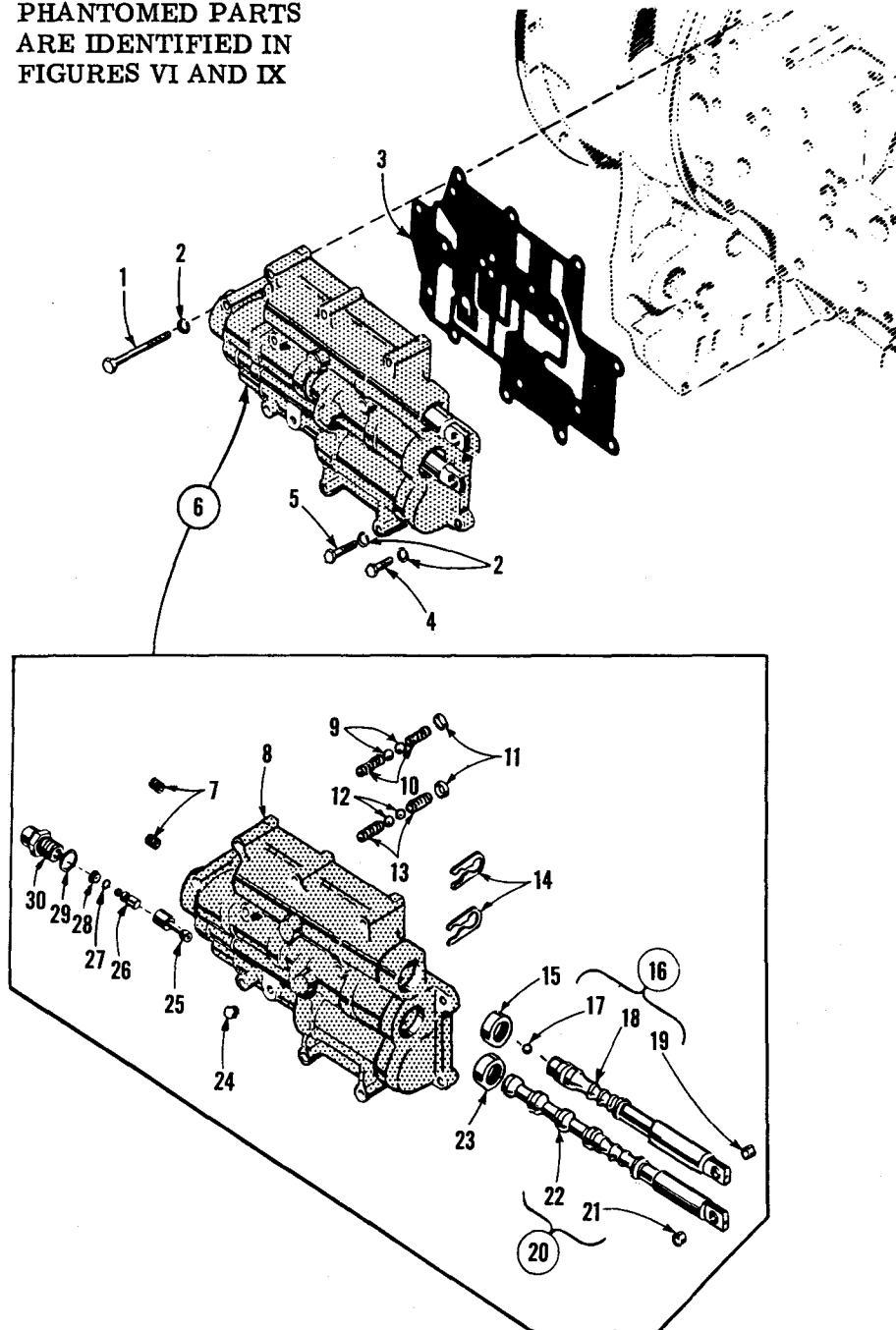


FIG XIX-2. CONTROL VALVE BODY, EXPLODED VIEW

GROUP D
CONTROL VALVE BODY, Figure XIX-2
(Inching Control with Hydraulic Actuated Clutch Cutoff)

REF	NOMENCLATURE	PART NO	REQ
1	BOLT, Hx hd, 3/8-16 x 3 1/2	186283	3
2	WASHER, Lock, 3/8	103321	11
3	GASKET, Control valve body	6772057	1
4	BOLT, Hx hd, 3/8-16 x 1 1/4	179841	2
5	BOLT, Hx hd, 3/8-16 x 2 1/2	179849	6
6	BODY ASSY, Control valve.	6773645	1
7	PLUG, Sq socket, dry seal, 3/8	444660	2
8	BODY, Control valve.	6772066	1
9	BALL, Detent selector valve.	145659	2
10	SPRING, Range selector detent- 2 red coils	6773631	2
11	RETAINER, Detent spring.	6772054	2
12	BALL, Detent, forward and reverse valve.	145659	2
13	SPRING, Fwd and reverse detent- 2 yellow coils	6773641	2
14	STOP, Valve.	6772053	2
15	SEAL, Selector valve oil	6703159	1
16	VALVE ASSY, Range selector	6772067	1
17	BALL.	145656	1
18	VALVE, Range selector	6772059*	1
19	BUSHING, Valve.	6769402	1
20	VALVE ASSY, Forward and reverse.	6772069	1
21	BUSHING, Valve.	6769402	1
22	VALVE, Forward and reverse.	6772056*	1
23	SEAL, Forward and reverse valve.	6703159	1
24	PLUG, Hx hd, pipe, 1/8	444612	1
25	VALVE, Clutch cut-off	6772078	1
26	PLUG, Clutch cut-off valve	6771914	1
27	RING, Valve plug seal.	6750558	1
28	SEAL, Valve cup	6771913	1
29	GASKET, Plug	105456	1
30	PLUG, Cut-off valve retainer	6758306	1

* Serviced as an assy only - not as a detail part.