

PHANTOMED PARTS
ARE IDENTIFIED IN
FIGURES VI AND IX

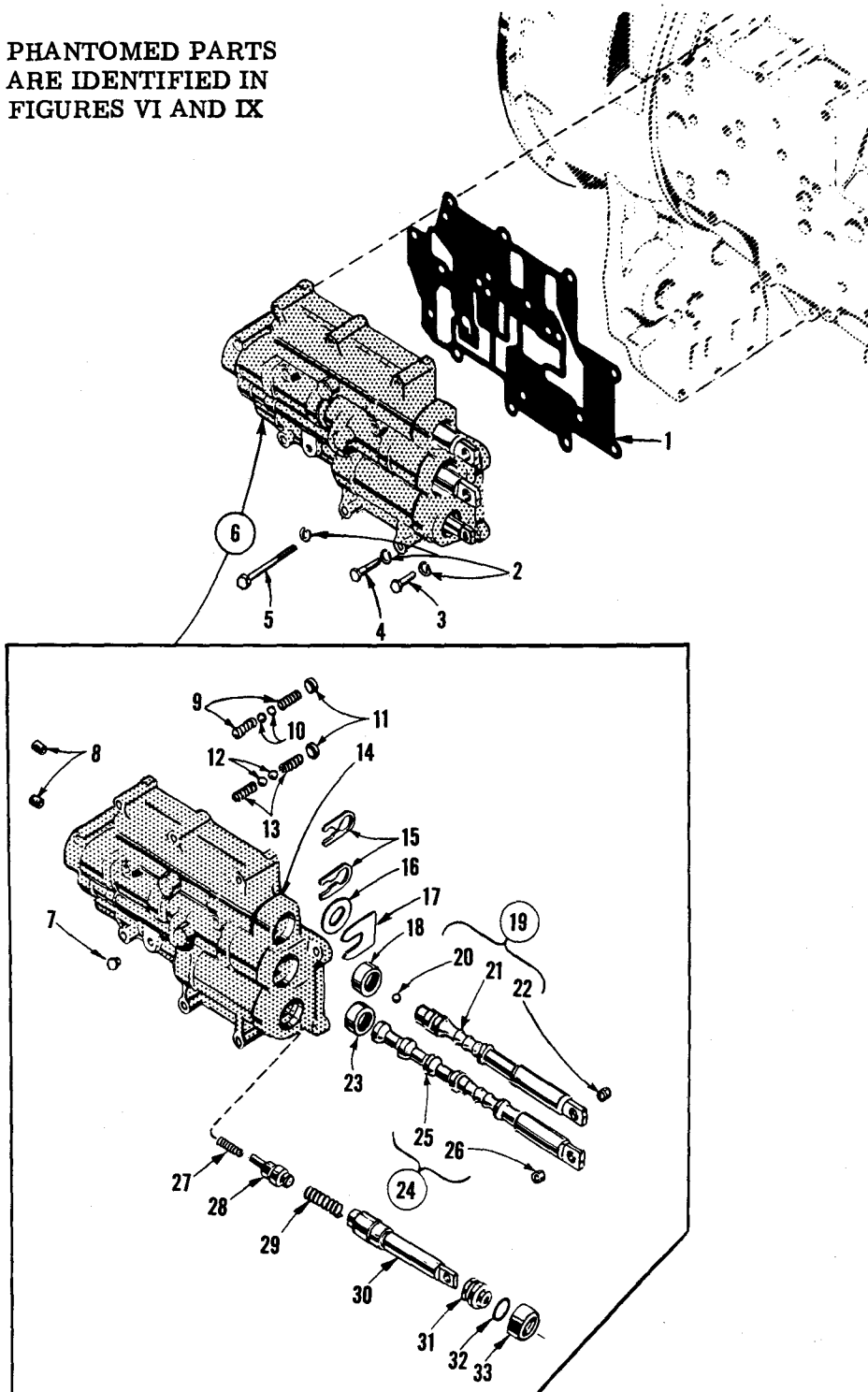


FIG XIX-3. CONTROL VALVE BODY, EXPLODED VIEW

GROUP E
CONTROL VALVE BODY, Figure XIX-3
 (Three Spool with Inching Control)

REF	NOMENCLATURE	PART NO	REQ
1	GASKET, Selector valve body	6772057	1
2	WASHER, Lock, 3/8	103321	11
3	BOLT, Hx hd, 3/8-16 x 1 1/4	179841	2
4	BOLT, Hx hd, 3/8-16 x 2 1/2	179849	6
5	BOLT, Hx hd, 3/8-16 x 3 1/2	186283	3
6	BODY ASSY, Selector valve	6773644	1
7	PLUG, Hx hd, pipe, 1/8	444612	1
8	PLUG, Sq socket, dry seal, 3/8	444660	2
9	SPRING, Range selector detent-2 red coils.	6773631	2
10	BALL, Range selector detent.	145659	2
11	RETAINER, Detent spring.	6772054	2
12	BALL, Fwd and reverse detent	145659	2
13	SPRING, Fwd and reverse detent-2 yellow coils	6773641	2
14	BODY, Control valve.	6772063	1
15	STOP, Valve.	6772053	2
16	WASHER, Inching valve.	6772043	1
17	STOP, Inching valve.	6772049	1
18	SEAL, Selector valve oil	6703159	1
19	VALVE ASSY, Range selector	6772067	1
20	BALL.	145656	1
21	VALVE, Range selector	6772059*	1
22	BUSHING, Valve	6769402	1
23	SEAL, Forward and reverse valve oil.	6703159	1
24	VALVE ASSY, Forward and reverse.	6772069	1
25	VALVE, Forward and reverse.	6772056*	1
26	BUSHING, Valve.	6769402	1
27	SPRING, Inching regulator valve.	6770298	1
28	VALVE, Inching control	6772055	1
29	SPRING, Inching valve.	6772046	1
30	VALVE, Inching	6772052	1
31	PLUG, Inching valve.	6772045	1
32	RING, Inching valve plug seal.	6772051	1
33	SEAL, Inching valve oil.	6772050	1

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

PRESSURE REGULATOR VALVE 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	XX-3
6771321	CRT 3531-1	A	XX-3
6771392	CRT 3531-1	A	XX-3
6771647	CRT 3531-1	A	XX-3
6771924	CRT 3531-1	A	XX-3
6771940	CRT 3531-1	A	XX-3
6772034	CRT 3531-1	A	XX-3
6772118	CRT 3531-1	A	XX-3
6772456	CRT 3531-1	A	XX-3
6773267	CRT 3531-3	A	XX-3
6773297	CRT 3531-1	A	XX-3
6773323	CRT 3531-3	A	XX-3
6773505	CRT 3531-1	A	XX-3
6773629	CRT 3531-1	A	XX-3
6773706	CRT 3531-3	A	XX-3
6773852	CRT 3531-1	A	XX-3

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

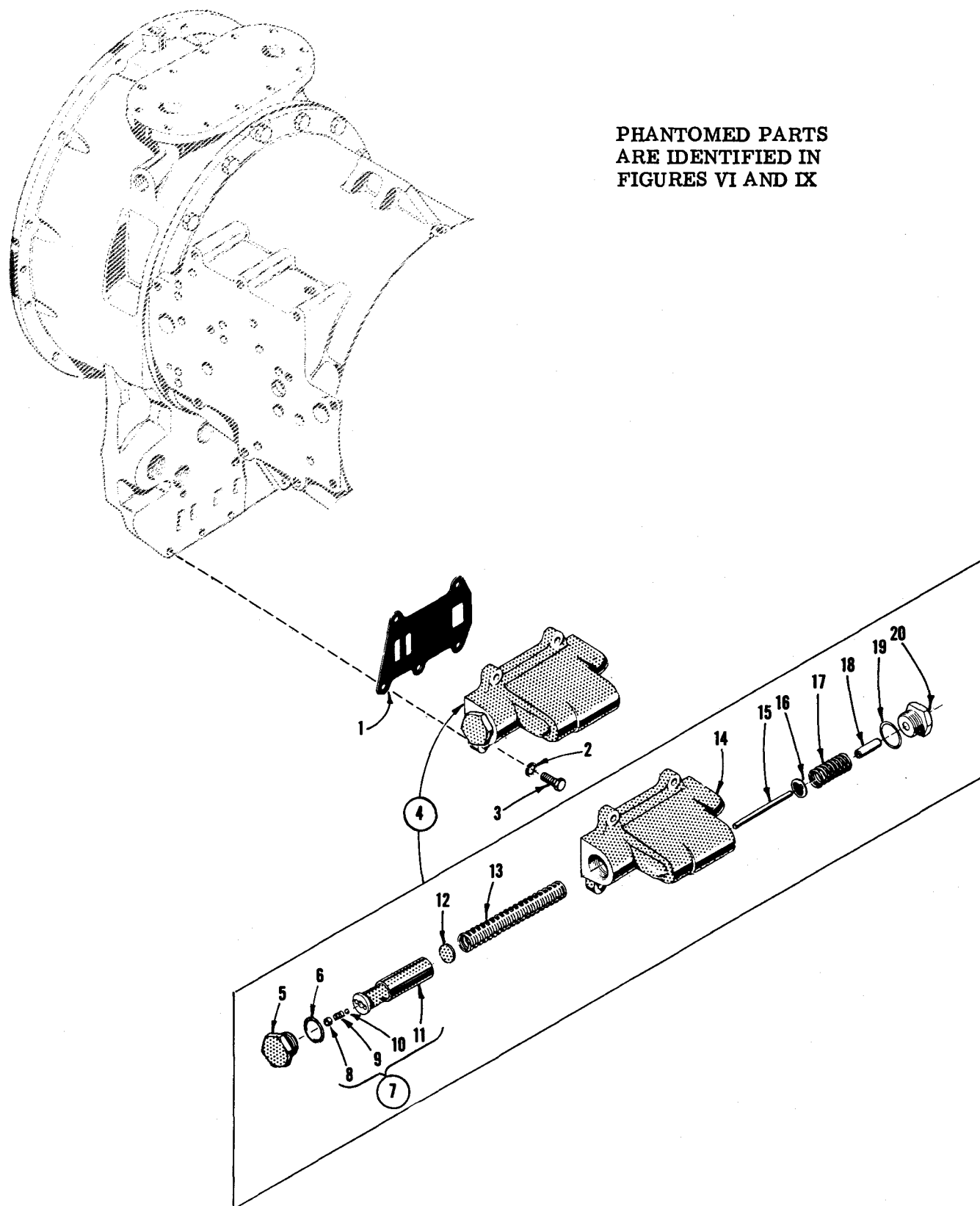


FIG XX. PRESSURE REGULATOR VALVE, EXPLODED VIEW

GROUP A
PRESSURE REGULATOR VALVE, Figure XX

REF	NOMENCLATURE	PART NO	REQ
1	GASKET, Pressure regulator valve body (Avail also in SK 6772003 & 6772004)	6757205	1
2	WASHER, Lock, 3/8	103321	5
3	BOLT, 3/8-16 x 1 1/4	179841	5
4	BODY ASSY, Pressure regulator valve	6772432	1
5	PLUG, Hx hd, straight thread, 1 1/4-12	6756622	1
6	GASKET (Avail also in SK 6772003 & 6772004).	142756	1
7	VALVE ASSY, Main pressure regulator (Prior to S/N 21354 on Assy 6771647 and S/N 22101 on all other models use 6771289. Starting with S/N 21354 on Assy 6771647 and S/N 22101 on all other models use 6772429)	6772429	1
8	RETAINER, Dash pot spring	*	1
9	SPRING	*	1
10	BALL, 1/4 dia	*	1
11	VALVE	*	1
12	SHIM, Main pressure regulator	6770423	AR
13	SPRING, Pressure regulating-2 yellow coils .	6771307	1
14	BODY, Pressure regulator valve (Prior to S/N 21354 on Assy 6771647 and S/N 22101 on all other models use 6759472. Starting with S/N 21354 on Assy 6771647 and S/N 22101 on all other models use 6772427)	6772427	1
15	PIN, Valve guide	6772428	1
16	VALVE, Pressure relief	6756164	1
17	SPRING, Pressure relief valve	6772453	1
18	TUBE, Spring guide	6772452	1
19	GASKET, Relief valve plug (Avail also in SK 6772003 and 6772004)	142756	1
20	PLUG, Pressure relief valve straight thread, 1 1/4-12	6756622	1

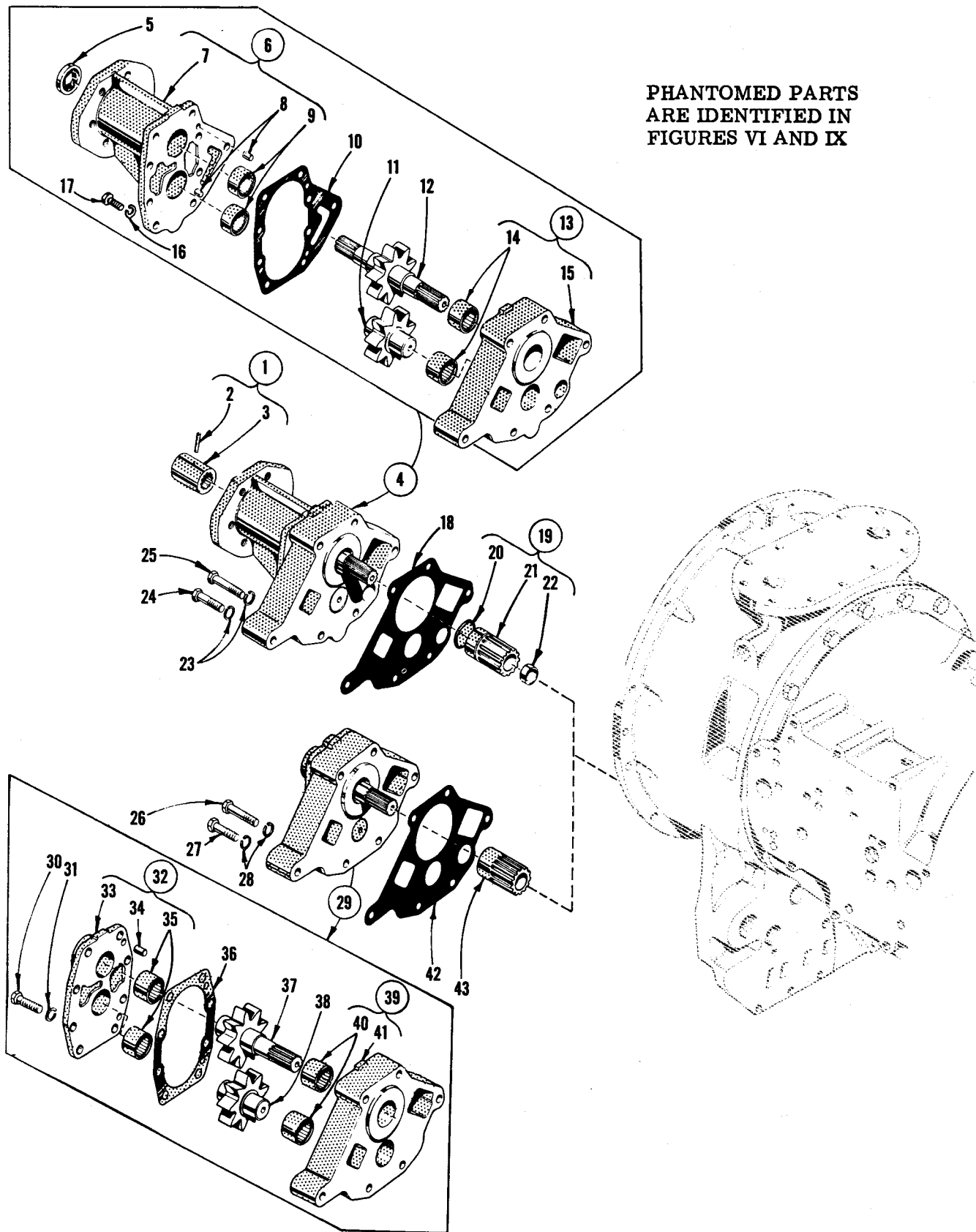
* Serviced as an assy only - not as a detail part.

INPUT-DRIVEN CHARGING OIL PUMP 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	XXI-3
6771321	CRT 3531-1	B	XXI-5
6771392	CRT 3531-1	B	XXI-5
6771647	CRT 3531-1	B	XXI-5
6771924	CRT 3531-1	B	XXI-5
6771940	CRT 3531-1	B	XXI-5
6772034	CRT 3531-1	B	XXI-5
6772118	CRT 3531-1	A	XXI-3
6772456	CRT 3531-1	B	XXI-5
6773267	CRT 3531-3	C	XXI-5
6773297	CRT 3531-1	B	XXI-5
6773323	CRT 3531-3	C	XXI-5
6773505	CRT 3531-1	B	XXI-5
6773629	CRT 3531-1	B	XXI-5
6773706	CRT 3531-3	C	XXI-5
6773852	CRT 3531-1	B	XXI-5

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



PHANTOMED PARTS
ARE IDENTIFIED IN
FIGURES VI AND IX

FIG XXI. INPUT-DRIVEN CHARGING OIL PUMP, EXPLODED VIEW

GROUP A
 INPUT-DRIVEN CHARGING OIL PUMP, Figure XXI
 (With Auxiliary Drive Mounting)

REF	NOMENCLATURE	PART NO	REQ
1	COUPLING ASSY, Auxiliary drive	6771203	1
2	PIN	453676	1
3	COUPLING, Auxiliary drive	*	1
4	PUMP ASSY, Input charging oil with auxiliary drive mounting	6771209	1
5	SEAL, Auxiliary drv oil (Avail also in SK 6772003 and 6772004)	6771207	1
6	COVER ASSY, Oil pump	6771198	1
7	COVER, Oil pump	*	1
8	PIN, Dowel	*	2
9	BEARING, Needle	148415	2
10	GASKET, Pump cover (Avail also in SK 6772003 and 6772004)	6771197	1
11	GEAR, Pump driven	6771199	1
12	GEAR, Pump drive	6757162	1
13	BODY ASSY, Oil pump	6758194	1
14	BEARING, Needle	148415	2
15	BODY, Oil pump	*	1
16	WASHER, Lock, 3/8	103321	4
17	BOLT, Hx hd, 3/8-16 x 1	179839	4
18	GASKET (Avail also in SK 6772003 & 6772004)	6756002	1
19	COUPLING ASSY, Input oil pump	6771961	1
20	RING, Seal "O" type	6764333	1
21	COUPLING	*	1
22	PLUG	5150829	1
23	WASHER, Lock, 3/8	103321	6
24	BOLT, Hx hd, 3/8-16 x 1 3/4	179850	5
25	BOLT, Hx hd, 3/8-16 x 2 1/4	179848	1
26-43	Not used in this group.		

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

PHANTOMED PART
IS IDENTIFIED
IN FIGURE VI

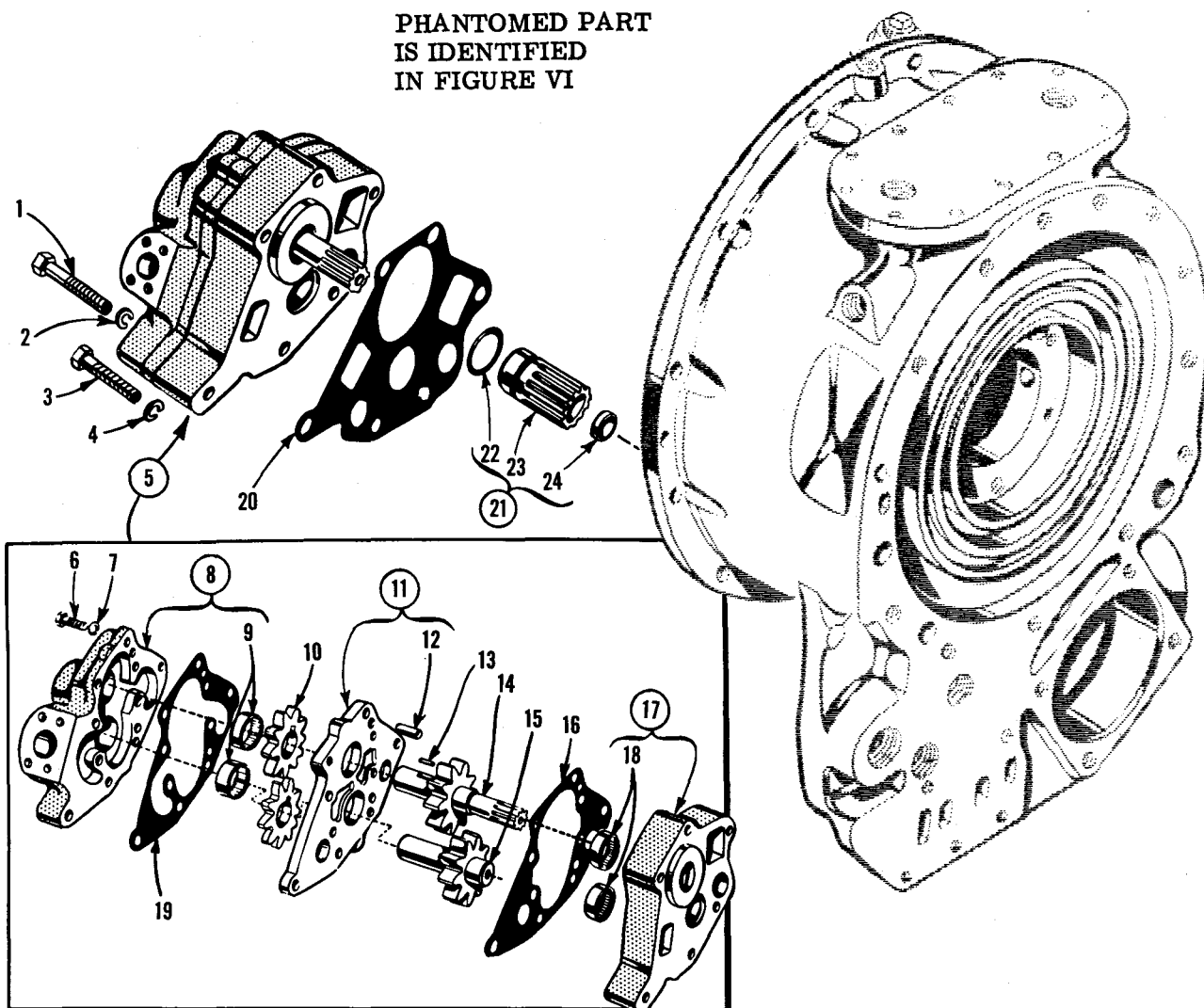


FIG XXI-1. INPUT-DRIVEN CHARGING OIL PUMP, EXPLODED VIEW

GROUP B
INPUT-DRIVEN CHARGING OIL PUMP, Figure XXI

REF	NOMENCLATURE	PART NO	REQ
1-25	Not used in this group.		
26	BOLT, Hx hd, 3/8-16 x 2 1/4	179848	2
27	BOLT, Hx hd, 3/8-16 x 1 3/4	179850	4
28	WASHER, Lock, 3/8	103321	6
29	PUMP ASSY, Input charging oil	6757165	1
30	BOLT, Hx hd, 3/8-16 x 1	179839	4
31	WASHER, Lock, 3/8	103321	4
32	COVER ASSY	6757153	1
33	COVER	*	1
34	PIN, Dowel	*	2
35	BEARING, Needle	148415	2
36	GASKET (Avail also in SK 6772003 & 6772004)	6757324	1
37	GEAR, Drive	6757163	1
38	GEAR, Driven	6757162	1
39	BODY ASSY	6757297	1
40	BEARING, Needle	148415	2
41	BODY	*	1
42	GASKET (Avail also in SK 6772003 & 6772004)	6756002	1
43	COUPLING, Oil pump drive	6756072	1

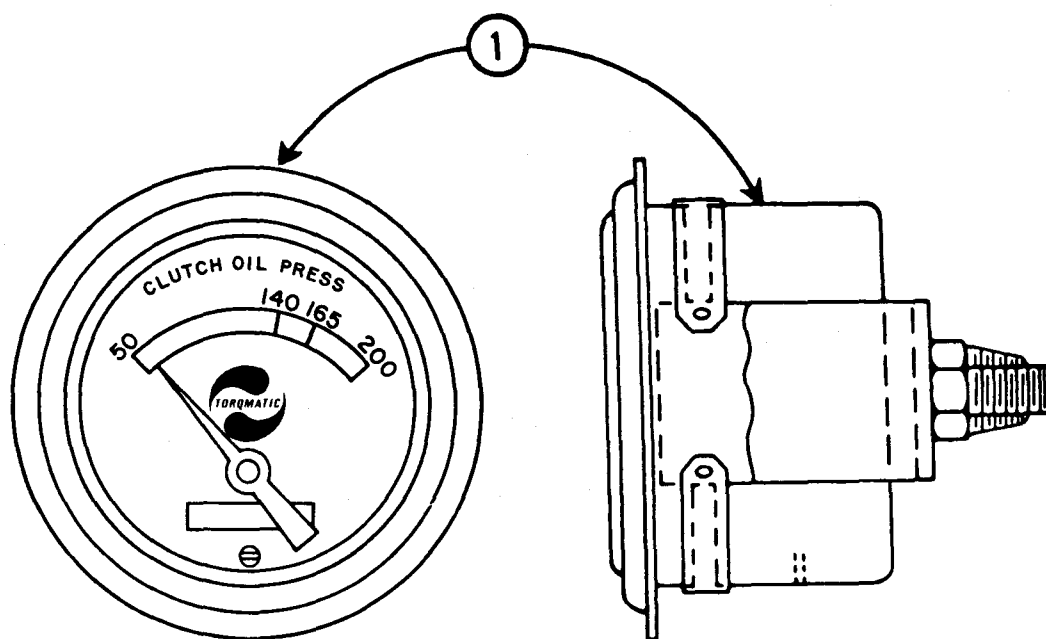
GROUP C
INPUT-DRIVEN CHARGING OIL PUMP, Figure XXI-1

1	BOLT, Hx hd, 3/8-16 x 2 1/4	179848	2
2	WASHER, Lock, 3/8	103321	6
3	BOLT, Hx hd, 3/8-16 x 2 3/4	179850	4
4	WASHER, Lock, 3/8	103321	6
5	PUMP ASSY, Input presr and scavenge oil	6758173	1
6	BOLT, Hx hd, 3/8-16 x 2 1/4	179848	4
7	WASHER, Lock, 3/8	103321	4
8	BODY ASSY, Scavenge oil pump	6769159	1
9	BEARING, Needle	148415	2
10	GEAR, Scavenge	6758529	2
11	PLATE ASSY	6769160	1
12	DOWEL	141199	2
13	ROLLER	6758530	1
14	GEAR, Oil pump drive	6758568	1
15	GEAR, Oil pump idler	6758172	1
16	GASKET, Oil pump	6756124	1
17	BODY ASSY, Input pressure oil pump	6758194	1
18	BEARING, Needle	148415	2
19	GASKET, Scavenge pump	6769413	1
20	GASKET, Pump mounting	6756002	1
21	COUPLING ASSY, Oil pump drive	6771961	1
22	RING, Seal	6764333	1
23	COUPLING	*	1
24	PLUG	5150829	1

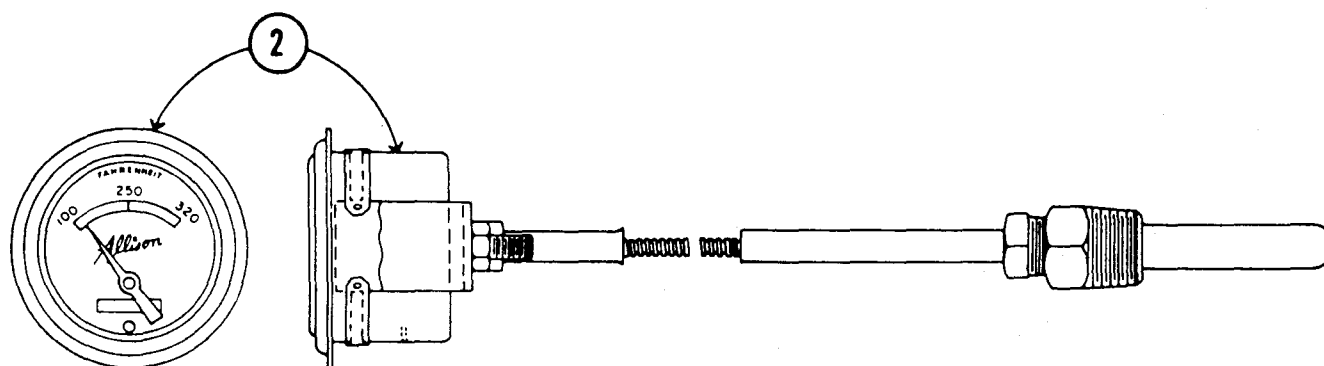
* Serviced as an assy only - not as a detail part.

MISCELLANEOUS OPTIONS GROUP

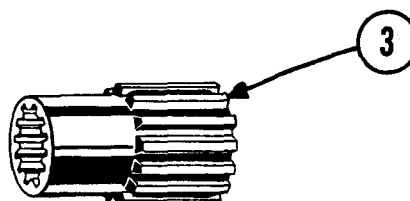
These parts are optional on all Torqmatic
Transmissions listed in this catalog.



CLUTCH OIL PRESSURE GAGE



OIL TEMPERATURE GAGE



IMPLEMENT PUMP DRIVE COUPLING

FIG XXII. CLUTCH OIL PRESSURE GAGE, OIL TEMPERATURE GAGE AND IMPLEMENT PUMP DRIVE COUPLING, EXPLODED VIEW

CLUTCH OIL PRESSURE GAGE, Figure XXII

REF	NOMENCLATURE	PART NO	REQ
1	GAGE, Clu oil presr	6771718	1

OIL TEMPERATURE GAGE, Figure XXII

2	GAGE, Oil temp (W/10 foot capillary)	6756665	1
2	GAGE, Oil temp (W/6 foot capillary)	6756667	1
2	GAGE, Oil temp (W/4 foot capillary)	6759551	1

IMPLEMENT PUMP DRIVE COUPLING, Figure XXII

3	COUPLING, Implement pump drive	6771957	1
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SERVICE INFORMATION LETTERS

(SIL)

SIL 388
Page 1 of 1
May 29, 1959

**SUBJECT: PROCEDURE FOR INSTALLING AND REMOVING
O.D. FIT DRIVE FLANGES**

**EQUIPMENT AFFECTED: ALL 5000 SERIES TRANSMISSIONS
CRT-3331 TRANSMISSIONS
CT-3340 TRANSMISSIONS (Input Flange Only)
TG - TRANSMISSIONS
TC-500, TC-800, TC-900 CONVERTERS**

As a product improvement, the fit between drive shafts and drive flanges has been changed to an O.D. fit. This is a standard SAE fit which minimizes fretting and wear of shaft and flange splines.

Parts interchangeability is not affected by this change except in certain TG transmissions which require a slip-fit flange. A new output shaft P/N 6770109 has been released for use in production and service in these models.

Attached to this letter is a recommended procedure for removing and installing flanges.

Service Manager - Transmissions

PROCEDURE FOR ASSEMBLY
& DISASSEMBLY OF O.D. FIT
FLANGES

This procedure applies to all transmissions having the O.D. fit flange, and a separate retaining washer and bolts or nut holding the flange in the final assembled position.

PROCEDURE FOR ASSEMBLY

1. Make sure that the output shaft is in its most outward position (i. e. all parts between the shaft shoulder and the flange are stacked tight).
 - A typical method is to insert a sleeve over the shaft and pull tight with the washer and bolts as illustrated on Sketch #I. Remove sleeve and washer prior to flange assy.
2. Coat the lip of the output shaft seal with a thin layer of bearing grease.
3. Coat the shaft splines with a thin layer of bearing grease.
4. Heat the flange to a minimum temperature of 250° F prior to assembly.

Suggested methods:

- A - Heat in a controlled temperature furnace at 250° F for a minimum period of 30 min.
 - B - Submerge the flange in a container of oil and heat the oil. (If an Acetylene torch is used, heat the container of oil for 15 minutes with a hot flame.)
5. Immediately upon removing the flange from the heat source, install the flange on the shaft, making sure that the flange is tight against its locating shoulder. (The flange should slide freely to the assembled position.)

CAUTION: Use appropriate equipment for protection when handling the hot flange. Do not let flange cool prior to installation.

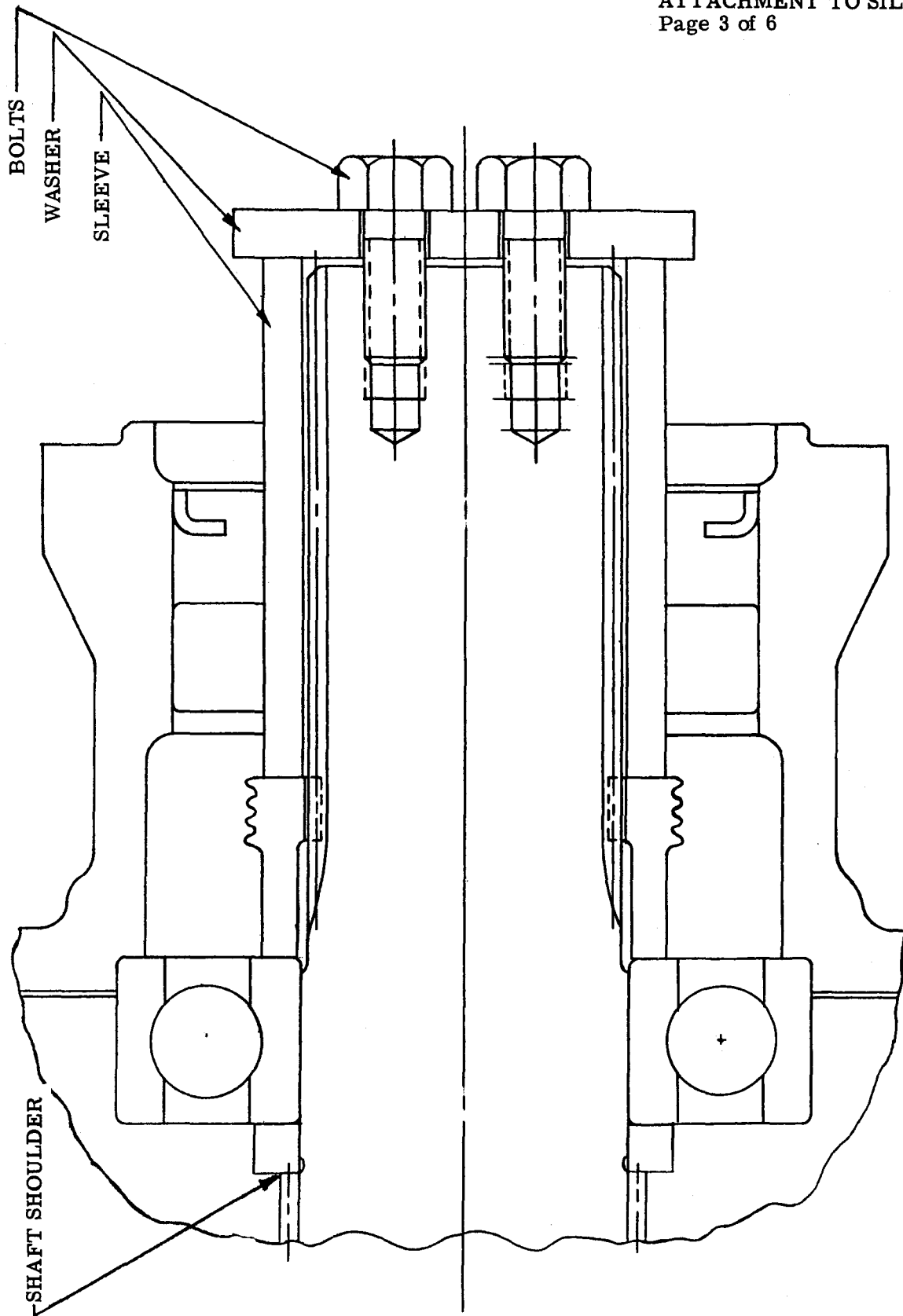
ATTACHMENT TO SIL 388

Page 2 of 6

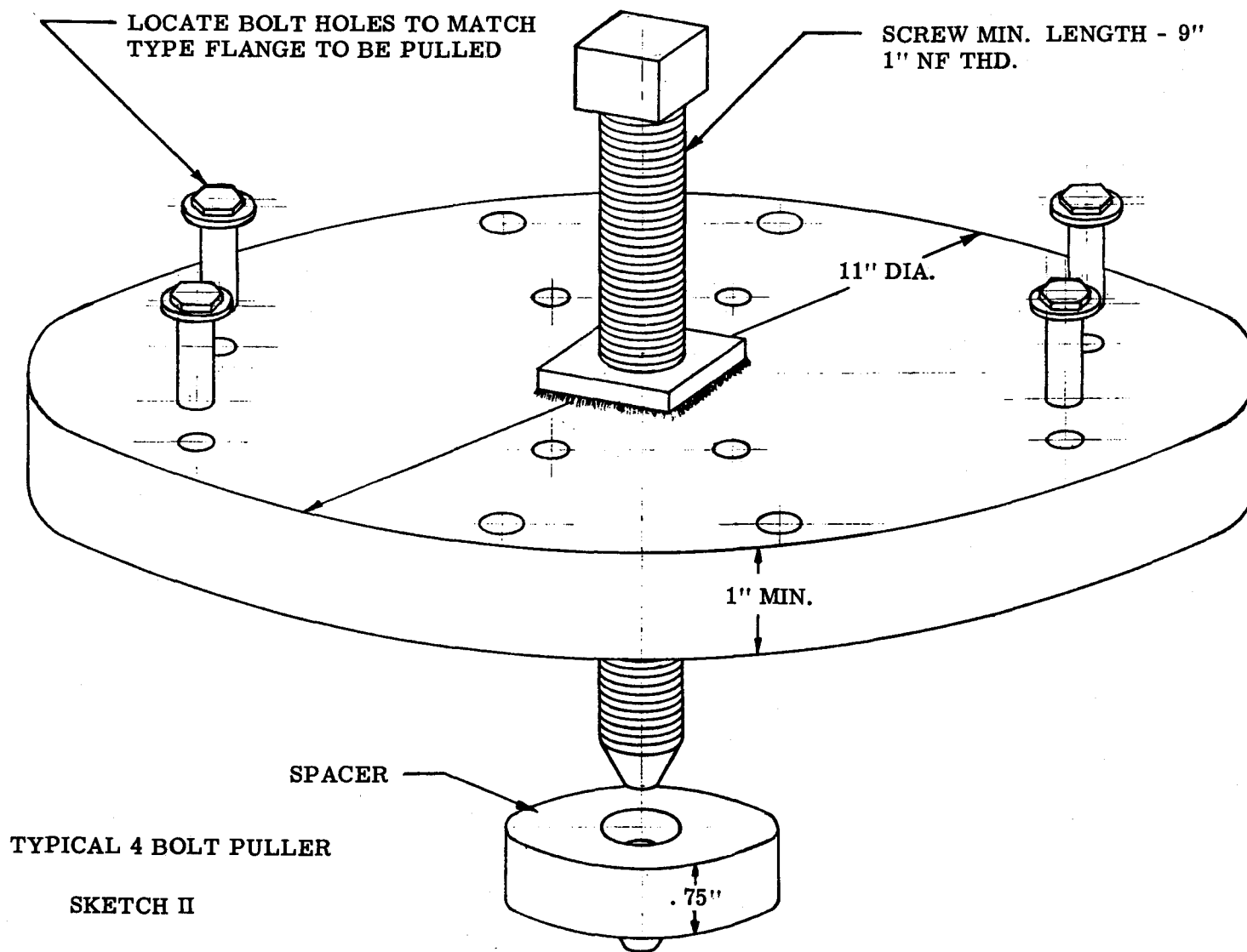
6. Install the retaining washer, lock strip, and bolts and torque the bolts to the proper specifications.
CAUTION: If the flange seizes to the shaft prior to its final assembled position, it is necessary to pull the flange (see disassembly procedure) and repeat the entire assembly procedure. Do not attempt to force the flange with a hammer.
7. After assembly has cooled, it is a good practice to check the bolt torque and, if necessary, re-torque to the proper specifications.

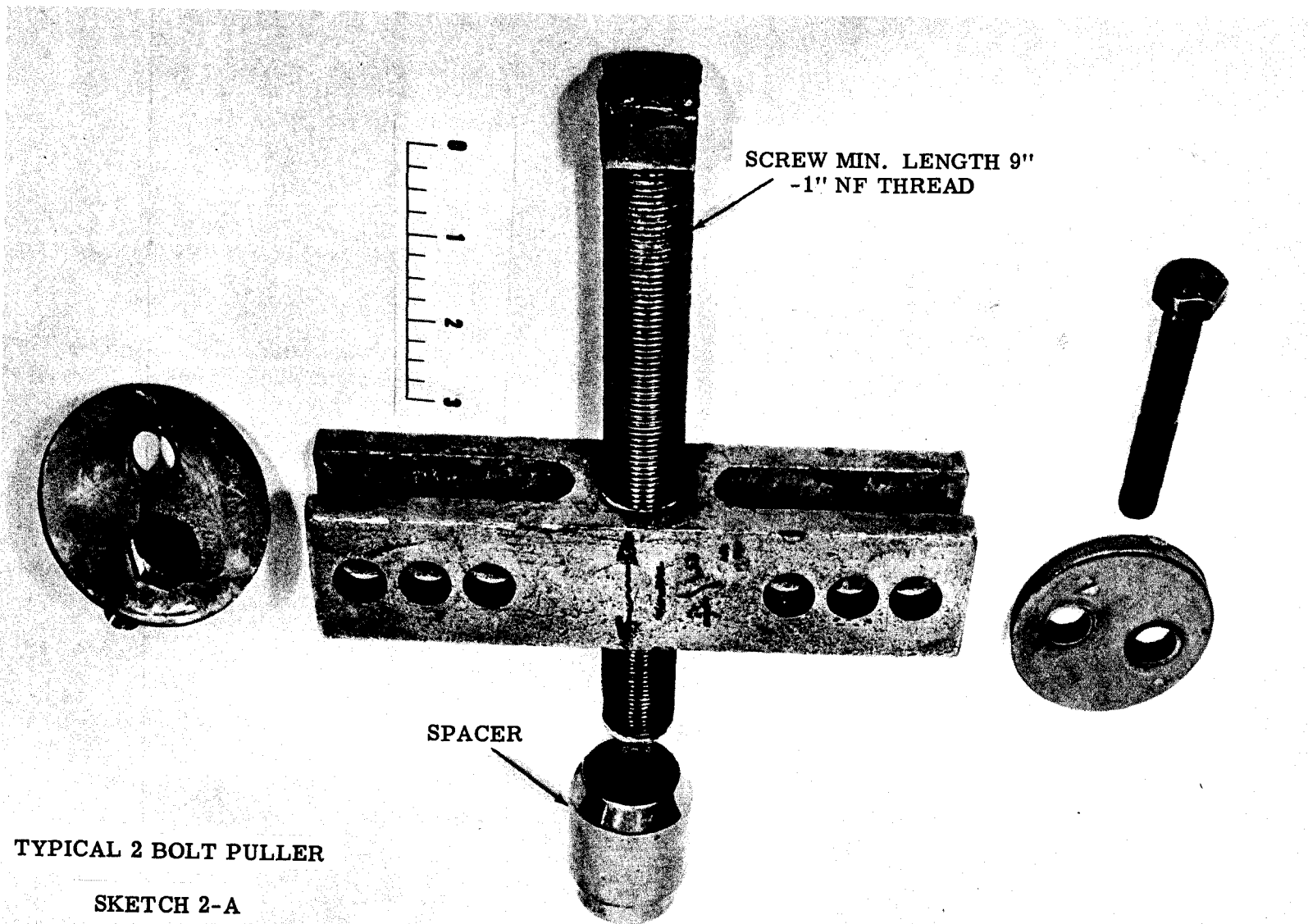
PROCEDURE FOR DISASSEMBLY

1. A heavy-duty puller which can be bolted to the U-joint face of the flange should be used. (A typical 4 bolt model and a typical 2 bolt model are illustrated on Sketch II & IIA.)
CAUTION: A puller which pulls on the O.D. of the flange may deform the pilot diameter and mounting face.
2. In order to protect the tapped holes in the end of the shaft, install a spacer between the puller jack screw point and the end of the shaft.
3. Provide a means for preventing flange rotation when torque is applied to the puller. A typical method is shown on Sketch #III.
CAUTION: Exercise care in selecting a location for bracing against the flange rotation so that other transmission components will not be damaged when the necessary torque is applied in removing the flange.
4. Remove the flange by tightening the puller screw against the spacer and shaft.
CAUTION: Do not use a pry bar or hammer to force the flange at assembly or disassembly as damage to the flange and/or internal parts can result.

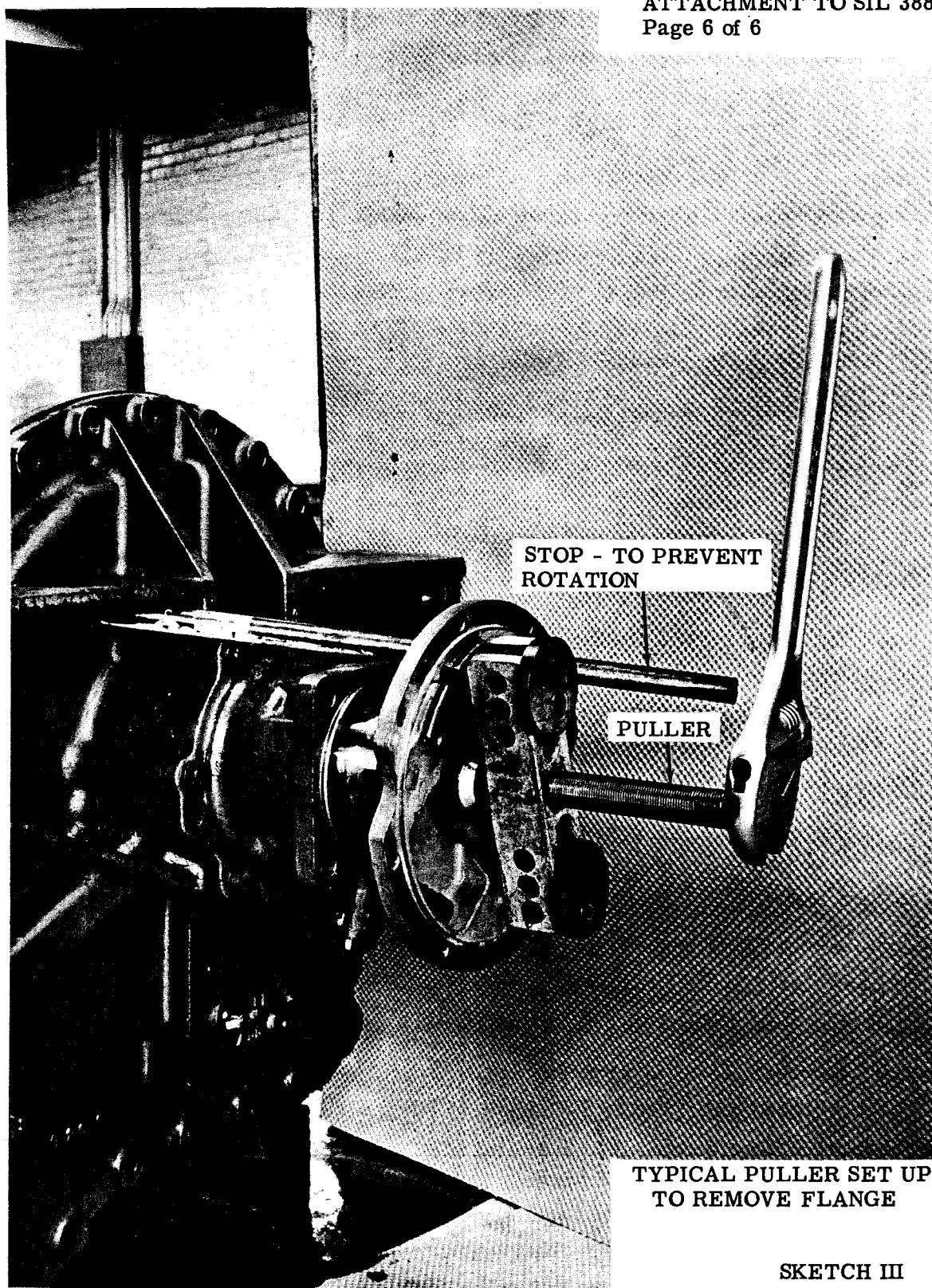


SKETCH I





ATTACHMENT TO SIL 388
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SKETCH III

SIL 467
Page 1 of 1
November 23, 1960

SUBJECT: RELEASE OF NEW PISTON RETURN SPRINGS

EQUIPMENT AFFECTED: CRT-3321, CRT-3331 AND
CRT-3531 TRANSMISSIONS

EFFECTIVE SERIAL NUMBER: S/N 19370 (S/N 19362 ALSO CONFORMS)

In order to eliminate the possibility of bent piston return springs, a new spring, P/N 6772068, has been released to replace spring P/N 6754882.

The new springs are shorter than the old springs but have a higher rate. These changes make the spring highly resistant to permanent bends.

Interchangeability is affected by this change only in that the new springs must not be mingled with the old springs. When used in full sets, either spring may be used for service in all units. It is recommended that the old springs be used up in transmissions with serial numbers below S/N 19370.

Service Manager - Transmissions

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Page 1 of 3
November 18, 1960

SUBJECT: Change in Clutch Cut-off Valve Cup

EQUIPMENT AFFECTED: CRT-3531 Transmissions
CRT-3331 Transmissions
CRT-3321 Transmissions

EFFECTIVE SERIAL NUMBER: Serial Number 19399

In order to eliminate the possibility of the clutch cut-off cup turning over, a new cup and plug have been released. In the new arrangement, the cup spring has been eliminated and the cup snaps over a shoulder on the plug. The cup is held tightly against the plug and is prevented from twisting or turning in the bore. The illustration on Page 3 shows the new arrangement.

The part changes are as follows:

<u>New Part No.</u>	<u>Cancelled Part No.</u>	<u>Part Name</u>
6771913	6768385	Cup, Clutch Cut-off
6771914	6758305	Plug, Clutch Cut-off
	6753155	Spring, Clutch Cut-off

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Page 2 of 3
November 18, 1960

Effect on Interchangeability:

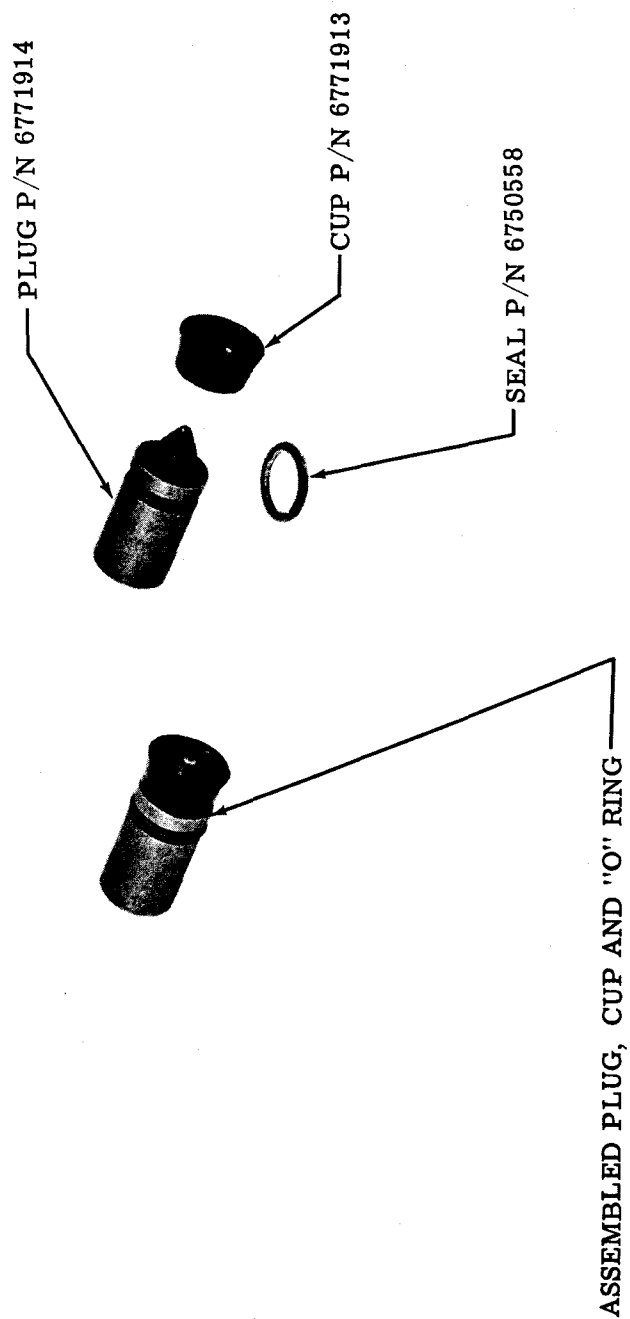
Used together, the new parts may be used for service on all units. The new parts may not be used individually in conjunction with the old parts.

Spare Parts Disposition:

All old parts, in spare parts stock, should be scrapped as soon as the new parts become available.

Service Manager - Transmission Operations

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November 18, 1960



SIL 470
Page 1 of 2
November 30, 1960

SUBJECT: RELEASE OF NEW STATOR ROLLER SPRINGS

EQUIPMENT AFFECTED: CRT 3531 TRANSMISSIONS

EFFECTIVE SERIAL NUMBER: S/N 18758 (S/N 18444 ALSO CONTAINS
THE NEW SPRINGS)

New stator roller springs, P/N 6772109, have been released for use
in CRT 3531 transmissions. These springs supersede springs P/N 6769929.

The new springs are stronger than the old springs and will not take a
permanent flat set. This will insure uniform engagement of the stator
rollers and will increase spring life.

To function properly, the new springs must be installed in the stator
cam as shown in the attached sketch.

The new springs, P/N 6772109, should be used for service in all CRT 3531
transmissions, but must not be mixed with the old springs, P/N 6769929.
(The differences between the springs are shown in the attached sketch.)

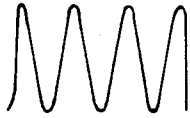
Spare Parts Disposition:

All old springs, P/N 6769929, in spare parts stock, may be returned to
Allison for credit.

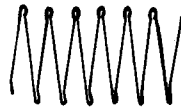
Service Manager - Transmissions Operations

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November 30, 1960

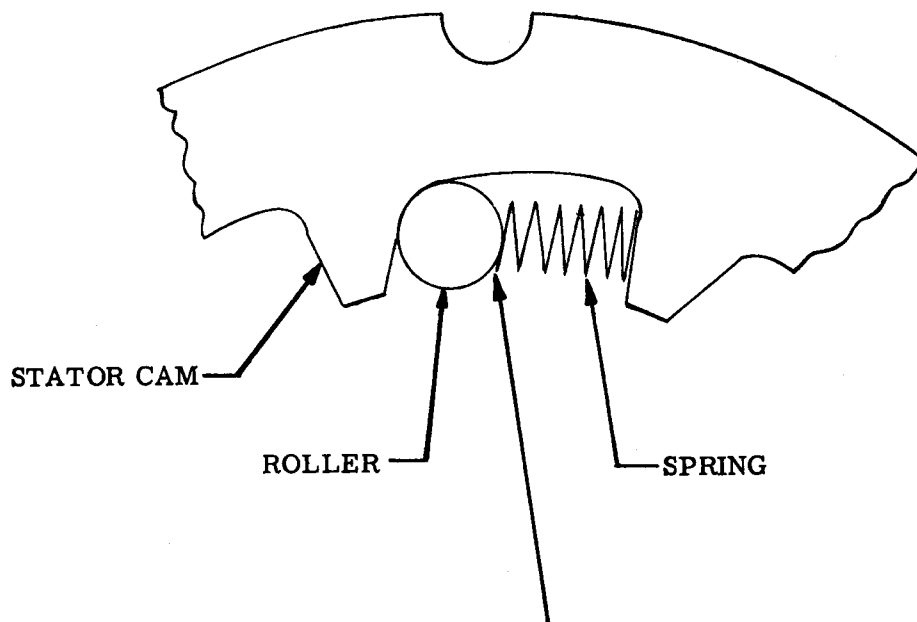
END VIEW OF SPRINGS (2X SIZE)



SPRING P/N 6769929



SPRING P/N 6772109



THE OPEN END OF THE SPRING NEXT TO THE ROLLER
MUST BE TOWARD THE GROUND SLEEVE.

SUBJECT: CHANGE IN STATOR THRUST BEARING

EQUIPMENT AFFECTED: CRT-3531 TRANSMISSIONS
MT TRANSMISSIONS

A new stator thrust bearing, P/N 9417499, has been released to replace bearing, P/N 3732258, for use in MT and CRT-3531 transmissions.

The purpose of the change was to increase the durability of the bearing by eliminating the high differential speed between the cage and races. In the old bearing, there was an inner race on each side of the needle roller cage. In the new bearing, both inner races are on one side of the cage, thus allowing the rollers to bear directly on the stator roller race.

The stator thrust bearing should be installed in the stator assembly as shown in the photograph on page 3. An installing tool, which bears evenly on the full circumference of the bearing shell, should be used and the bearing should be well seated on the shoulder in the bearing bore. Excessive pressure must be avoided. If the bearing shell is bent or distorted, the service life of the bearing will be adversely affected.

Before the stator assembly is installed on the stator race, the race should be carefully inspected. If the face that bears against the thrust bearing is worn, scored, rough, galled or pitted, the race should be discarded and a new one installed.

Starting Serial Numbers:

S/N 19597 - CRT-3531 Transmissions
S/N 1C162* - 61MT - Chevrolet
S/N 1D101 - 61MT - Dodge
S/N 1F236* - 61MT - Ford
S/N 1G101 - 61MT - GM Truck & Coach
S/N 1H112* - 61MT - Hough
S/N 1R110* - 61MT - Reo

* - The following transmissions, with serial numbers below the starting serial numbers listed above, were reworked at Allison and contain the new bearing.

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

SIL 473
Page 2 of 3
January 25, 1961

Ford

S/N 1F102	S/N 1F116	S/N 1F144	S/N 1F154	S/N 1F213
1F104	1F124	1F145	1F204	1F214
1F105	1F125	1F146	1F206	1F215
1F106	1F128	1F147	1F207	1F216
1F107	1F129	1F149	1F208	1F218
1F108	1F131	1F150	1F209	1F219
1F109	1F141	1F151	1F210	1F227
1F110	1F142	1F152	1F211	1F228
1F111	1F143	1F153	1F212	

Chevrolet

S/N 1C136	S/N 1C141	S/N 1C148	S/N 1C153	S/N 1C158
1C137	1C142	1C149	1C154	1C159
1C138	1C144	1C150	1C155	1C160
1C139	1C145	1C151	1C156	

Reo

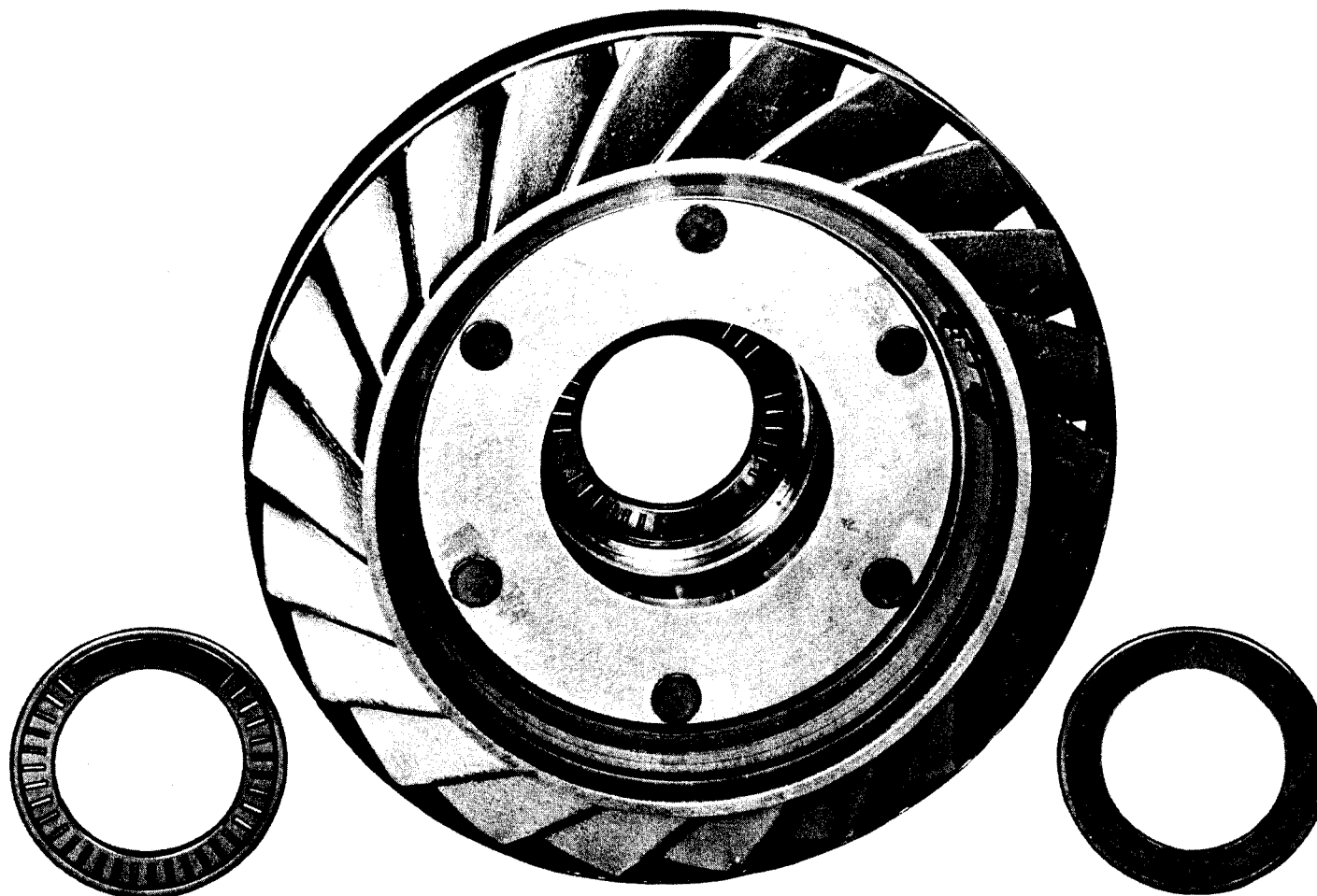
S/N 1R101	S/N 1R102	S/N 1R103
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SPARE PARTS DISPOSITION:

All bearings, P/N 3732258, in spare parts stock, should be scrapped.

All stator assemblies, P/N 6771720 and P/N 6771721, in spare parts stock, should be returned to Allison for rework.

Service Manager - Transmissions Operations



BEARING P/N 9417499

NEW BEARING INSTALLED
IN STATOR AND CAM ASSY.

BEARING P/N 3732258

SIL 474
Page 1 of 2
January 31, 1961

SUBJECT: DESIGN CHANGE IN FILTER ELEMENTS

EQUIPMENT AFFECTED: 5000 SERIES TRANSMISSIONS
3000 SERIES TRANSMISSIONS

Some time ago, the design of PF-132 and PF-151 filter elements was changed from a metal end plate construction, with cork end seals, to tin plated shells, with separate black paper end seals. (See Figure 1, Page 2.) In order to make existing stock usable, the old style elements were reworked by adding a black paper end plate to each end of the element.

The end plate construction has again been changed, with the end plates lock-seamed to the shell. (See Figure 2, Page 2.)

Either of these elements may be used for service, but it is important to note that the adapter plates must not be inserted in the later elements which have the built-in end plates. If the adapter plates are used with the new elements, the element will be too long to fit properly in the filter can.

Service Manager - Transmissions Operations



FIGURE 1

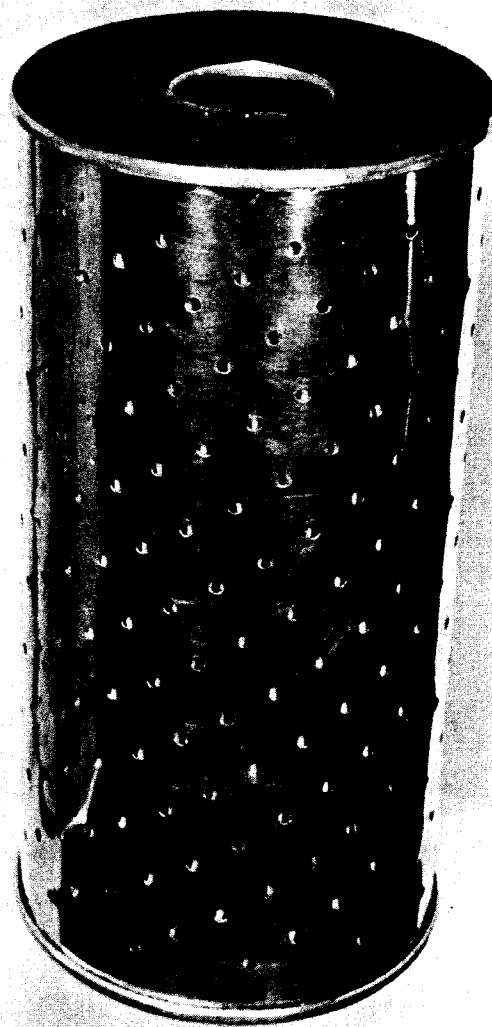


FIGURE 2

This revision supersedes SIL 488.
Please destroy your old letter.

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September 21, 1961
Rev. "A", Nov. 1, 1961

SUBJECT: USE OF SHIMS TO REDUCE DEFLECTION OF
DRIVE FLANGE RETAINER

EQUIPMENT AFFECTED: 5000 SERIES TRANSMISSIONS
3340 SERIES TRANSMISSIONS
CRT-3331-1 TRANSMISSIONS (HEAVY-DUTY
FRONT OUTPUT MODELS ONLY)
TG TRANSMISSIONS

EFFECTIVE SERIAL NUMBERS: S/N 21294 - 5000 SERIES
S/N 1667 - 3340 SERIES
S/N 22004 - CRT-3331
S/N 9899 - TG

Some of the various drive flanges used in the above listed transmissions are secured to the drive shaft by two 1/2" bolts; others are secured by two 3/8" bolts, by one bolt or by a lock nut.

In the configuration which required the two 1/2" bolts, shims have been added to reduce the distance between the retainer and the end of the shaft. This distance must be limited to .008" - .012" to control the deflection of the flange retainer.

A slight deflection is required to hold the retainer tightly against the flange shoulder so that oil cannot seep out around the retainer. Excessive deflection causes the retainer to thrust against the bolt heads at an angle, thereby bending the bolts slightly and eventually causing the bolt heads to break off. A shim pack of the proper thickness accurately controls the deflection to the desired degree.

Two shims have been released for this purpose. Shim P/N 6772140 is .025" thick and shim P/N 6772141 is .005" thick. They are used in combination as required.

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The number of shims required can be determined, after the flange has been installed, by measuring from the shoulder of the flange down to the end of the shaft. Deduct .008" - .012" from this dimension. The difference equals the shim pack thickness required to provide a clearance of .008" - .012" between the shim pack and the retainer.

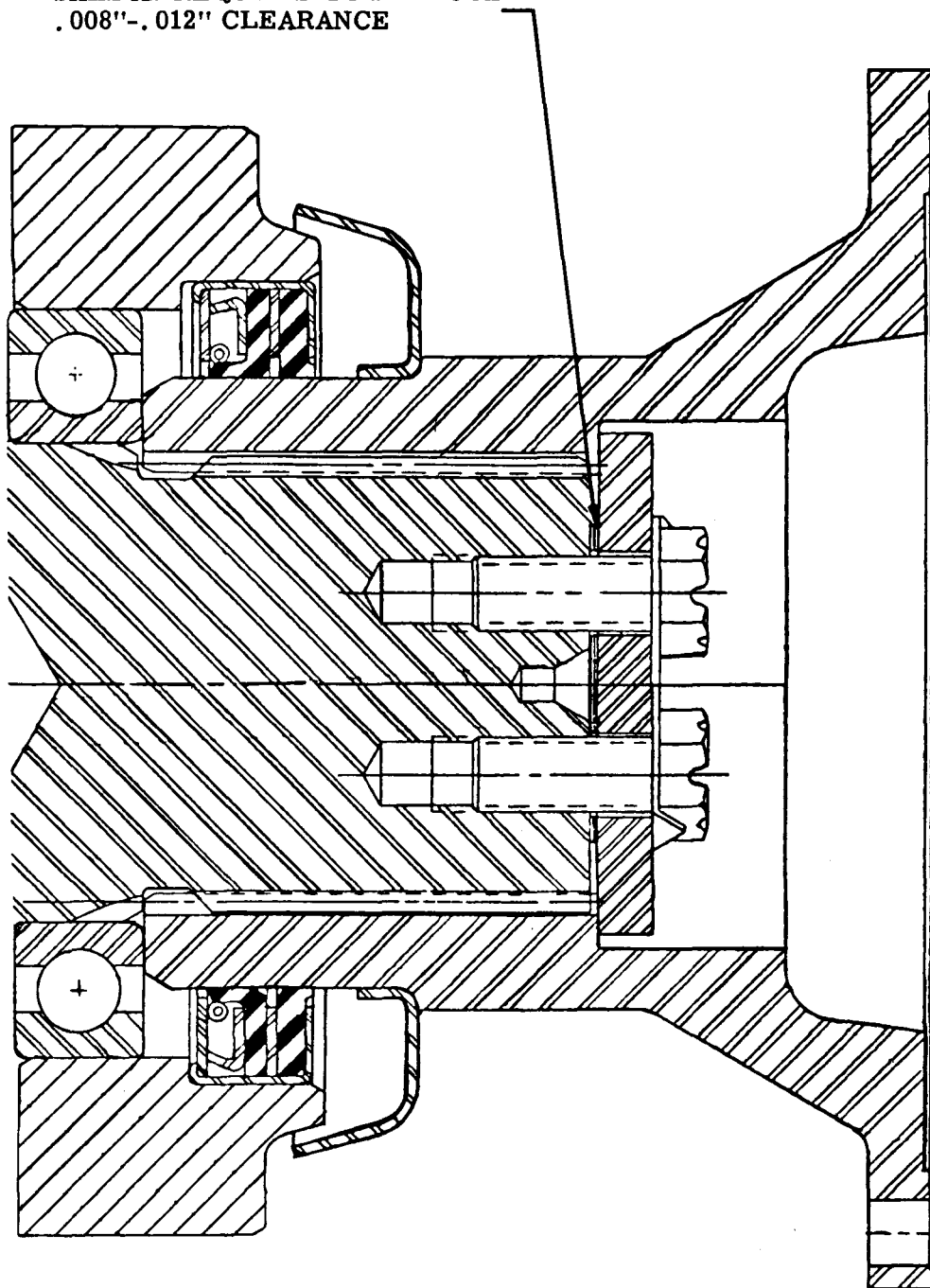
The location of the shims is shown in the illustration on Page 3.

It is recommended that shims be added to all affected transmissions at the next tear-down.

Service Manager - Transmissions

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SHIM AS REQUIRED TO PRODUCE
.008"-.012" CLEARANCE



TYPICAL FLANGE INSTALLATION

SEE PAGE 7 BEFORE USING THIS INDEX

NUMERICAL PARTS INDEX

The numerical parts index lists the parts reference number and the figure number of the illustration in which it appears. The reference numbers are keyed to the group listings. However, you must know the transmission assembly part number to identify the right group. Refer to page 7.

Part numbers for parts marked "Not shown, listed page 00-0" can be found in the group listings on the page indicated.

NUMERICAL PARTS INDEX

PART NO	REFERENCE NO	FIGURE NO	PART NO	REFERENCE NO	FIGURE NO
103026	12	I	179837	9	VI
103026	12	II	179838	14	VI
103320	11	XVI	179839	2	XIV
			179839	37	XVII
103321	11	I	179839	17, 30	XXI
103321	11	II			
103321	8, 13	VI	179840	Replaces 179841	
103321	10	IX	179840	7	XV
103321	3	XIV	179841	Replaced by 179840	
103321	6, 26	XV	179841	3	XIX
103321	14, 38	XVII	179841	4	XIX-1
103321	2	XIX	179841	4	XIX-2
103321	2	XIX-1	179841	3	XIX-3
103321	2	XIX-2	179841	3	XX
103321	2	XIX-3	179842	27	XV
103321	2	XX	179842	15	XVII
103321	16, 23, 28, 31	XXI	179843	14	VI
103321	2, 4, 7	XXI-1			
			179848	25, 26	XXI
103322	3, 7	IX	179848	1, 6	XXI-1
103322	15	XV	179849	5	XIX-1
103322	2, 21, 41	XVII	179849	5	XIX-2
103323	26	XV	179849	4	XIX-3
103325	10	XVIII	179850	24, 27	XXI
103772	21	XIX	179850	3	XXI-1
105456	19	XIX	179851	4	XIX
105456	28	XIX-1	179857	Replaces 179858	
105456	29	XIX-2	179857	16	XV
106643	8	XIII	179858	Replaced by 179857	
106644	18	XIII	179861	4, 8	IX
106644	3	XVII	179862	22	XVII
115308	2	XIII	179882	6	II
115308	31	XVII	179884	27	XV
131642	32	XVII	181343	1	XIII
141159	2	XVI	181379	2	II
141199	12	XXI-1	181397	40	XVII
142756	6, 19	XX	181413	19	XVII
142862	14	XIII	186271	4	V
142862	5	XVII	186283	1	XIX-1
143938	15, 18	XIII	186283	1	XIX-2
143938	24	XVII	186283	5	XIX-3
145643	10	XIV	186628	11	IX
145656	31	XIX	271505	1	XVII
145656	17	XIX-1	271556	9	XVIII
145656	17	XIX-2	272853	34	XVII
145656	20	XIX-3	272855	9	XIII
145659	10	XIX	272858	15	VI
145659	9, 12	XIX-1	444576	6	V
145659	9, 12	XIX-2	444576	16, 19	XIII
145659	10, 12	XIX-3	444576	25	XVII
148415	9, 14, 35, 40	XXI	444592	17	XIII
148415	9, 18	XXI-1	444592	26	XVII
179814	Replaced by 179819		444612	24	XIX-1
179819	Replaces 179814		444612	24	XIX-2
179819	12	XVI	444612	7	XIX-3

NUMERICAL PARTS INDEX

PART NO	REFERENCE NO	FIGURE NO	PART NO	REFERENCE NO	FIGURE NO
444660	7	XIX-1	6754314	9	V
444660	7	XIX-2	6754707	Replaced by 6772661	
444660	8	XIX-3	6754815	9, 12	X
445684	14, 23	XIX	6754832	11	X
445686	23	XVII	6754852	11	VIII
451006	9	II	6754852	3	XI
451006	5	III	6754866	10	VIII
453675	11	XIX	6754866	4	XI
453676	2	XXI	6754867	6	VIII
499204	28	XIX	6754867	2	XI
901210	Replaces 903210		6754882	Replaced by 6772068	
901210	13	V	6755007	12	VIII
903010	2	IV	6755269	2	I
903209	21, 30, 31	VI	6755378	6	VI
903210	Replaced by 901210		6755403	2	VI
903211	5	II	6755488	5	V
903215	9	XVII	6755897	9	IV
903216	1, 3	XV	6755988	16	IV
903311	6	XIV	6756002	18, 42	XXI
903311	17	XV	6756002	20	XXI-1
903312	23	XV	6756030	Replaces 6758391	
907411	5	XVI	6756030	25	VI
954924	19	VIII	6756072	43	XXI
3224773	7	XVI	6756124	16	XXI-1
5150829	22	XXI	6756164	16	XX
5150829	24	XXI-1	6756348	29	XIX
5192276	Replaced by 6772115		6756544	Replaced by 6773842	
5576443	Replaces 6757767		6756586	11	VII
5576443	5	XIII	6756622	5, 20	XX
5576443	29	XVII	6756665	2	XXII
6700213	9	VII	6756667	2	XXII
6700213	11	XII	6756835	19	XV
6703159	13	XIV	6757148	20	VIII
6703159	12	XIX	6757152	10	VII
6703159	15, 23	XIX-1	6757153	32	XXI
6703159	15, 23	XIX-2	6757157	18	VIII
6703159	18, 23	XIX-3	6757162	12, 38	XXI
6703162	9	XIX	6757163	37	XXI
6750259	8	X	6757164	4	VIII
6750259	14	XII	6757165	29	XXI
6750265	Replaced by 6757767		6757178	1	IX
6750337	7	X	6757184	3	I
6750558	17	XIX	6757205	1	XX
6750558	27	XIX-1	6757217	5	XV
6750558	27	XIX-2	6757218	4	XV
6750924	8, 12	XV	6757219	6	IX
6750945	8	XIX	6757224	5	XIV
6752035	9	XVI	6757227	7	VIII
6753155	Not shown, listed page XIX-3		6757228	14	XIV
6753544	4	VI	6757229	1, 3	X
6753866	1	V	6757229	17	XII
6753938	Replaced by 6773373		6757230	7	II
6754299	7	V	6757233	3	VIII

NUMERICAL PARTS INDEX

PART NO	REFERENCE NO	FIGURE NO	PART NO	REFERENCE NO	FIGURE NO
6768445	15	VIII	6769910	33	VI
6768446	6	VII	6769929	Replaced by 6772109	
6768446	1	VIII	6769936	2	IX
6768446	14	X	6769987	6	IV
6768446	14	XI	6769994	7	XIII
6768446	5	XII	6769995	3	XIII
6768450	1	VII	6769996	Replaces 6757382	
6768523	7	XIX	6769996	6	XIII
6768722	11	XVII	6769996	27	XVII
6768725	5	XIX	6770088	8	IV
6768726	Replaced by 6769440		6770168	Replaces 6757350	
6768730	12	XVII	6770169	11	XIII
6768733	33	XVII	6770172	4	I
6768804	13	VIII	6770298	27	XIX-3
6768804	15	XI	6770423	12	XX
6768805	6	XII	6770456	Replaced by 6771720	
6768806	8	VII	6770536	Replaced by 6771286	
6768808	7	VII	6770548	Replaced by 6771289	
6768967	35	XVII	6770811	17	XVII
6768968	18	XVII	6770868	14	VII
6768970	36	XVII	6770873	10	X
6768988	15	VII	6770881	13	IV
6768988	3	XII	6770882	12	IV
6769159	8	XXI-1	6770885	3	IV
6769160	11	XXI-1	6770887	22	VI
6769178	9	I	6770888	17	IV
6769197	8	I	6770889	13	X
6769226	4	I	6770894	5	X
6769402	26, 33	XIX	6770895	Replaced by 6771915	
6769402	19, 21	XIX-1	6770896	7	XII
6769402	19, 21	XIX-2	6770897	5	VIII
6769402	22, 26	XIX-3	6770898	18	IV
6769413	19	XXI-1	6770902	19	VI
6769440	Replaces 6768726		6770903	15	IV
6769440	25	XIX	6770904	8	XII
6769558	9, 12	IX	6770905	2	XV
6769560	1	XII	6770919	1	IV
6769584	10	V	6770930	Replaced by 6771637	
6769585	29	VI	6770953	12	XII
6769590	26	VI	6770955	9	XII
6769643	34	XIX	6771094	Replaced by 6772432	
6769645	24	XIX	6771148	10	I
6769668	Replaced by 6772649		6771197	10	XXI
6769681	Replaces 6768245		6771198	6	XXI
6769681	3	V	6771199	11	XXI
6769715	9	VIII	6771203	1	XXI
6769715	5	XI	6771207	5	XXI
6769716	12	VII	6771209	4	XXI
6769818	4	III	6771273	Replaces 6757463	
6769843	4	I	6771273	2	V
6769851	32	VI	6771287	Replaced by 6771307	
6769876	1	III	6771287	Replaces 6757422	
6769878	2	III			

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PART NO	REFERENCE NO	FIGURE NO	PART NO	REFERENCE NO	FIGURE NO
6757235	Replaced by 6773806		6758261	6	XVIII
6757238	29	XV	6758262	4	XVIII
6757243	2	I	6758274	Replaced by 6772407	
6757244	7	XIV	6758304	20	XIX
6757245	8	XIV	6758305	Replaced by 6771914	
6757246	15	XIV	6758305	18	XIX
6757249	11	XIV	6758305	26	XIX-1
6757251	22	XIX	6758306	15	XIX
6757254	3	II	6758306	30	XIX-2
6757256	8	II	6758312	Replaced by 6771323	
6757263	30	XIX	6768324	3	I
6757264	13	XIX	6758374	21	XV
6757283	8	XVI	6758391	Replaced by 6756030	
6757290	Replaced by 6759024		6758529	10	XXI-1
6757291	4	XVI	6758530	13	XXI-1
6757297	39	XXI	6758568	14	XXI-1
6757324	36	XXI	6759024	Replaced by 6771855	
6757350	Replaced by 6770168		6759024	Replaces 6757290	
6757352	10	XIII	6759024	Replaces 6758148	
6757357	1	XVIII	6759025	5	I
6757382	Replaced by 6769996		6759470	9	XI
6757422	Replaced by 6771287		6759471	11	XI
6757463	Replaced by 6771273		6759473	8	XI
6757712	Replaced by 6772408		6759480	16	V
6757763	30	XVII	6759481	30	XV
6757767	Replaced by 5576443		6759485	16	XII
6757767	Replaces 6750265		6759491	6	X
6757774	4	XIII	6759499	1	XIX
6757774	28	XVII	6759504	5	VII
6757779	Replaced by 6773206		6759504	2	VIII
6757788	4	VII	6759504	13	XI
6757788	16	VIII	6759504	4	XII
6757788	12	XI	6759509	15	X
6757854	4	X	6759513	5	IX
6757993	10	XV	6759517	14	XV
6758030	4	II	6759519	1	XI
6758042	1	VI	6759537	9	XV
6758125	12	VI	6759539	13	XV
6758148	Replaced by 6759024		6759540	18	XV
6758148	5	I	6759541	27	VI
6758149	4	XIV	6759547	10	VI
6758172	15	XXI-1	6759551	2	XXII
6758173	5	XXI-1	6759560	17	VII
6758194	13	XXI	6759967	10	IV
6758194	17	XXI-1	6764333	20	XXI
6758195	20	XVII	6764333	22	XXI-1
6758216	7	VI	6764780	28	VI
6758218	39	XVII	6768245	Replaced by 6769681	
6758235	16	VI	6768267	13	XIII
6758236	11	VI	6768268	6	XVII
6758237	17	VI	6768270	22	XV
6758259	7	XVIII	6768385	Replaced by 6771913	
6758260	5	XVIII	6768445	2	VII

NUMERICAL PARTS INDEX

PART NO	REFERENCE NO	FIGURE NO	PART NO	REFERENCE NO	FIGURE NO
6771289	Replaced by 6772429		6772057	3	XIX-1
6771289	Replaces 6770548		6772057	3	XIX-2
6771307	Replaces 6771287		6772057	1	XIX-3
6771307	13	XX	6772059	18	XIX-1
6771323	Replaces 6758312		6772059	18	XIX-2
6771323	3	VI	6772059	21	XIX-3
6771337	2	X	6772063	14	XIX-3
6771378	15	XIX	6772066	8	XIX-1
6771378	29	XIX-1	6772066	8	XIX-2
6771379	5	XIX	6772067	16	XIX-1
6771380	15	IV	6772067	16	XIX-2
6771478	10	XII	6772067	19	XIX-3
6771637	Replaces 6770930		6772068	Replaces 6754882	
6771637	12	XIII	6772068	16	VII
6771675	2	XVIII	6772068	2	XII
6771718	1	XXII	6772069	20	XIX-1
6771720	Replaced by 6772203		6772069	20	XIX-2
6771720	Replaces 6770456		6772069	24	XIX-3
6771855	Replaces 6759024		6772078	25	XIX-1
6771855	5	I	6772078	25	XIX-2
6771913	Replaces 6768385		6772086	12	XIII
6771913	16	XIX	6772109	Replaces 6769929	
6771913	28	XIX-2	6772109	7	IV
6771914	Replaces 6758305		6772115	Replaces 5192276	
6771914	18	XIX	6772115	6	XIX
6771914	26	XIX-2	6772140	7	I
6771915	Replaces 6770895		6772141	7	I
6771915	23	VI	6772169	12	XIII
6771957	3	XXII	6772179	25	XV
6771961	19	XXI	6772183	Replaces 6757246	
6771961	21	XXI-1	6772183	9	XIV
6772042	Replaced by 6773645		6772187	12	XIV
6772043	16	XIX-3	6772189	12	XIII
6772045	31	XIX-3	6772190	24	XV
6772046	29	XIX-3	6772203	Replaces 6771720	
6772047	Replaced by 6773631		6772203	4	IV
6772047	Replaced by 6773641		6772281	12	XIII
6772049	17	XIX-3	6772335	Replaced by 6773646	
6772050	33	XIX-3	6772407	Replaces 6758274	
6772051	32	XIX-3	6772407	10	II
6772052	30	XIX-3	6772408	Replaces 6757712	
6772053	14	XIX-1	6772408	6	III
6772053	14	XIX-2	6772427	Replaces 6759472	
6772053	15	XIX-3	6772427	14	XX
6772054	11	XIX-1	6772428	15	XX
6772054	11	XIX-2	6772429	Replaces 6771289	
6772054	11	XIX-3	6772429	7	XX
6772055	28	XIX-3	6772432	Replaces 6771094	
6772056	22	XIX-1	6772432	4	XX
6772056	22	XIX-2	6772452	18	XX
6772056	25	XIX-3	6772453	17	XX

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PART NO	REFERENCE NO	FIGURE NO	PART NO	REFERENCE NO	FIGURE NO
6772649	Replaced by 6773857		6773645	Replaces 6772042	
6772649	Replaces 6769668		6773645	6	XIX-2
6772661	Replaces 6754707		6773646	Replaces 6772335	
6772661	5	VI	6773646	6	XIX-1
6773206	Replaces 6757779		6773683	1	XVI
6773206	3	VII	6773684	3	XVI
6773206	14	VIII	6773685	17	X
6773206	10	XI	6773686	10	XVI
6773206	15	XII	6773806	Replaces 6757235	
6773268	7	XVII	6773806	7	XI
6773269	8	XVII	6773842	Replaces 6756544	
6773270	10	XVII	6773842	12	V
6773271	4	XVII	6773857	Replaces 6772649	
6773272	16	X	6773857	11	V
6773275	6	I	6773858	14	V
6773277	13	XVII	6773859	15	V
6773292	16	XVII	7450552	11	XV
6773296	6	III	8347398	18	VI
6773373	Replaces 6753938		8522609	8	V
6773373	1	II	8894450	6	XVI
6773373	1	XIV	9030126	3	XVIII
6773373	28	XV	9409021	11	IV
6773456	7	III	9409036	1	I
6773631	Replaces 6772047		9409059	1	I
6773631	10	XIX-1	9409079	20	VI
6773631	10	XIX-2	9409079	17	VIII
6773631	9	XIX-3	9409131	8	XVIII
6773641	Replaces 6772047		9409513	17	V
6773641	13	XIX-1	9412270	3	III
6773641	13	XIX-2	9415488	Replaced by 9417967	
6773641	13	XIX-3	9417499	5	IV
6773644	Replaces 6772041		9417967	Replaces 9415488	
6773644	6	XIX-3	9417967	14	IV