

GROUP A

OUTPUT DRIVE TRANSFER GEAR HOUSING AND SPEEDOMETER, FIGURE 27

REF NO	NOMENCLATURE	PART NO	REQ	RECOMMENDED SPARES FOR UNITS		
				1-3	4-10	11-25
1	BOLT, HEX HD, 1/2-13 X 1 3/8	179884	6	6	12	18
2	WASHER, LOCK, 1/2	103323	6	6	12	18
3	SEAL	6773311	1	1	3	10
4	RETAINER, BEARING	6757555	1		1	2
5	GASKET, RETAINER	6758563	1	1	3	10
6	GASKET, OUTPUT DRIVE TRANSFER GEAR HOUSING SEE SPI 480	6772162	1	1	3	10
7	BEARING, SINGLE ROW BALL, NO 41314	901598	1	1	2	5
8	HOUSING ASSY, TRANSFER GEAR	6758467	1			1
9	PIN, DOWEL, 3/4 X 1 1/4	107393	2			
10	HOUSING, TRANSFER GEAR	6758466 *	1			
11	TUBE, OUTPUT PUMP PRESS	6757593	1			
12-14	NOT USED IN THIS GROUP.					
15	PIN, DOWEL, 3/4 X 1 1/4	107393	2			
16	PLUG, SQ SOCKET HD, 1 INCH	444678	1			
17	PLUG, HEX HD, 1/4, OIL LEVEL CHECK	444618	2	2	4	8
18	GASKET	6750265	1	1	3	10
19	STRAINER, OIL	6757382	1		1	3
20	WASHER, LOCK, 3/8	103321	6	6	12	18
21	BOLT, HEX HD, 3/8-16 X 7/8	179838	6	6	12	18
22	PLUG, DRAIN, 3/4 PIPE	444592	1	1	2	4
23	SCREW, DRIVE	145372	4		4	8
24	PLATE, NAME	6838494	1		1	2
25	GASKET, INSPECTION COVER PRIOR TO S/N 16381 USE USE 6773446. STARTING WITH S/N 16381 USE 6770879.	6770879	2	2	6	20
26	COVER, INSPECTION PRIOR TO S/N 16381 USE 6769565. STARTING WITH S/N 16381 USE 6770878.	6770878	2			2
27	WASHER, LOCK, 3/8	103321	20	20	40	60
28	BOLT, HEX HD, 3/8-16 X 7/8	179838	20	20	40	60
29-35	NOT USED IN THIS GROUP.					
36-43	NOT USED IN THIS GROUP.					

* SERVICED AS AN ASSY - NOT AS A DETAIL PART

GROUP B

OUTPUT DRIVE TRANSFER GEAR HOUSING AND SPEEDOMETER, FIGURE 27

SAME AS GROUP A, EXCEPT FOR PARTS LISTED BELOW.

REF NO	NOMENCLATURE	PART NO	REQ	RECOMMENDED SPARES FOR UNITS		
				1-3	4-10	11-25
8	HOUSING ASSY, TRANSFER. WHEN REPLACING HOUSING ASSY 6770673 ALSO ORDER LIP TYPE SEALRING 6832487. SEE SPI 615.	6834893	1			1
10	HOUSING, TRANSFER	6834894	* 1			
11	NOT USED IN THIS GROUP.					
12	BAFFLE, OIL COLLECTOR	6771140	1			1
13	WASHER, INTERNAL TOOTH LOCK	115549	2	2	4	6
14	BOLT, HX HD, 3/8-16 X 5/8	179835	2	2	4	6
16	PLUG, SQ SOCKET HD, 1 INCH	444678	1			
34	WASHER, FLAT, 5/8-STARTING WITH S/N 59308	103345	1			
35	BOLT, 5/8-18 X 1-STARTING WITH S/N 59308	271579	1			
29-33	NOT USED IN THIS GROUP.					

GROUP C

OUTPUT DRIVE TRANSFER GEAR HOUSING AND SPEEDOMETER, FIGURE 27

SAME AS GROUP A, EXCEPT FOR PARTS LISTED BELOW.

1-5	NOT USED IN THIS GROUP.					
7	BEARING, SINGLE ROW BALL, ND 41217X1A	903493	1	1	2	5
8	HOUSING ASSY, TRANSFER. WHEN REPLACING HOUSING ASSY 6770673 ALSO ORDER LIP TYPE SEALRING 6832487 SEE SPI 615	6834893	1			1
10	HOUSING, TRANSFER	6834894	* 1			
11	NOT USED IN THIS GROUP.					
12	BAFFLE, OIL COLLECTOR	6771140	1			1
13	WASHER, INTERNAL TOOTH LOCK	115549	2	2	4	6
14	BOLT, HX HD, 3/8 - 16 X 5/8	179835	2	2	4	6
16	PLUG, SQ SOCKET HD, 1 INCH	444678	1			
34	WASHER, FLAT, 5/8-STARTING WITH S/N 59308	103345	1			
35	BOLT, 5/8 - 18 X 1-STARTING WITH S/N 59308	271579	1			

* SERVICED AS AN ASSY - NOT AS A DETAIL PART

GROUP D

OUTPUT DRIVE TRANSFER GEAR HOUSING AND SPEEDOMETER, FIGURE 27-1

REF NO	NOMENCLATURE	PART NO	REQ	RECOMMENDED SPARES FOR UNITS		
				1-3	4-10	11-25
1	RETAINER ASSY	6769787	1		1	2
2	BAFFLE	6757563	1	1	3	10
3	SEAL	6773311	1	1	3	10
4	RETAINER	6769786 *	1			
5	BUSHING	2222424	1		1	2
6	NIPPLE	119247	1		1	2
7	WASHER, LOCK, 1/2	103323	6	6	12	18
8	BCLT, HX HD, 1/2-13 X 1 1/2	186725	8	8	16	24
9	GASKET	6758563	1	1	3	10
10	GEAR, SPEEDO DRIVE	6771332	1		1	2
11	BEARING, SINGLE ROW BALL, NO 41314	901598	1	1	2	5
12	SPACER	6769784	1	1	2	4
13	GASKET, TRANSFER GEAR HOUSING SEE SPI 480	6772162	1	1	3	10
14	HOUSING, TRANSFER GEAR. WHEN REPLACING HOUSING ASSY 6769799 ALSO ORDER LIP TYPE SEALRING 6832487 SEE SPI 615.	6832699	1			1
15	PIN, DOWEL, 3/4 X 1 1/4	107393	2			
16	HOUSING	6832698 *	1			
17	BAFFLE, OIL COLLECTOR	6771140	1			1
18	WASHER, INTERNAL TOOTH LOCK	115549	2	2	4	6
19	BOLT, HX HD, 3/8-16 X 5/8	179835	2	2	4	6
20	PIN, DOWEL, 3/4 X 1 1/4	107393	2			
21	PLUG, HX HD, 1/4 OIL LEVEL CHECK	444618	2	2	4	8
22	PLATE, NAME	6838494	1		1	2
23	SCREW, DRIVE	145372	4		4	8
24	SHAFT AND GEAR, SPEEDO DRIVE	6771331	1		1	2
25	GASKET	552868	1	1	3	10
26	WASHER, 3/32	2222651	1	1	2	4
27	DRIVE SLEEVE ASSY	6768536	1		1	2
28	SEAL	6768417	1	1	3	10
29	WASHER, 11/16 USE AFTER S/N 4685 ONLY	6768418	1		1	2
30	SLEEVE, SPEEDO DRIVE	2043587	1			
31	WASHER, LOCK, 5/16	103320	2	2	4	6
32	BOLT, HX HD, 5/16-18 X 7/8	179817	2	2	4	6

* SERVICED AS AN ASSY - NOT AS A DETAIL PART

GROUP E

OUTPUT DRIVE TRANSFER GEAR HOUSING AND SPEEDOMETER, FIGURE 27

SAME AS GROUP A, EXCEPT FOR PARTS LISTED BELOW.

REF NO	NOMENCLATURE	PART NO	REQ	RECOMMENDED SPARES FOR UNITS		
				1-3	4-10	11-25
1	BOLT, HX HD, 1/2-13 X 3 1/4	179894	6	6	12	18
3-4	NOT USED IN THIS GROUP.					
7	BEARING, SINGLE ROW BALL, ND1314X1A	901314	1	1	2	5
8	HOUSING ASSY, TRANSFER. WHEN REPLACING HOUSING ASSY 6770673 ALSO ORDER LIP TYPE SEALRING 6832487 SEE SPI 615.	6834893	1			1
10	HOUSING, TRANSFER	6834894 *	1			
11	NOT USED IN THIS GROUP.					
12	BAFFLE, OIL COLLECTOR	6771140	1			1
13	WASHER, INTERNAL TOOTH LOCK	115549	2	2	4	6
14	BOLT, HX HD, 3/8 - 16 X 5/8	179835	2	2	4	6
16	PLUG, SQ SOCKET HD, 1 INCH	444678	1			
29	COVER	6757585	1			
30	BOLT, HX HD, 1/2-20 X 1 1/4	9409059	2	2	4	6
31	STRIP, LOCKING	6755269	1	1	2	5
32	WASHER, RETAINER	6769476	1	1	2	3
33	SHIM, .025	6772140	AR	2	4	8
33	SHIM, .005	6772141	AR	2	4	8
34	WASHER, FLAT, 5/8-STARTING WITH S/N 59308.	103345	1			
35	BOLT, 5/8 - 18 X 1-STARTING WITH S/N 59308.	271579	1			

GROUP F

OUTPUT DRIVE TRANSFER GEAR HOUSING AND SPEEDOMETER, FIGURE 27

SAME AS GROUP A, EXCEPT FOR PARTS LISTED BELOW.

1-4	NOT USED IN THIS GROUP					
7	NOT USED IN THIS GROUP					
8	HOUSING ASSY, TRANSFER GEAR	6834893	1			1
10	HOUSING, TRANSFER GEAR	6834894 *	1			
11	NOT USED IN THIS GROUP					
12	BAFFLE, OIL COLLECTOR	6771140	1			1
13	WASHER, INTERNAL TOOTH LOCK	115549	2	2	4	6

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* SERVICED AS AN ASSY - NOT AS A DETAIL PART

GROUP F CONT

OUTPUT DRIVE TRANSFER GEAR HOUSING AND SPEEDOMETER, FIGURE 27

SAME AS GROUP A, EXCEPT FOR PARTS LISTED BELOW.

REF NO	NOMENCLATURE	PART NO	REQ	RECOMMENDED SPARES FOR UNITS		
				1-3	4-10	11-25
14	BOLT, HX HD, 3/8-16 X 5/8	179835	2	2	4	6
16	PLUG, SQ. SOCKET HD, 1 INCH	444678	1			
29-33	NOT USED IN THIS GROUP					
34	WASHER, FLAT, 5/8	103345	1			
35	BOLT, 5/8-18 X 1	271579	1			
36	RETAINER ASSY	6881394	1			
37	BAFFLE, OIL SLINGER	6757563	1			
38	SEAL, OIL	6773311	1			
39	RETAINER	6881393	1			
40	SPACER	6770677	1			
41	BEARING	901314	1			
42	BCLT, 1/2-13 X 1 1/2	186725	6			
43	WASHER, 1/2	103323	6			

ALLISON POWERSHIFT TRANSMISSION 5640-5660-5840-5860 SERIES PARTS CATALOG

NOTES

OUTPUT DRIVE TRANSFER GEAR SECTION

TO FIND DETAIL PARTS FOR YOUR ALLISON POWERSHIFT TRANSMISSION, TURN TO THE GROUP LISTED OPPOSITE THE ASSEMBLY PART NUMBER OF YOUR TRANSMISSION.

A/N*	MODEL	GROUP	A/N*	MODEL	GROUP
6758494	CT 5640-1	D	6773887	CLT 5860-2	G
6759612	CT 5640-1	D	6774020	CLBT 5860-2	H
6759654	CLT 5640-5	B	6774286	CLBT 5860	H
6759723	CT 5640-1	A	6774487	CLBT 5660-3	J
6759725	CBT 5640-9	A	6775286	CLT 5860-1	E
6759745	CLBT 5640-9	A	6775288	CLT 5860-2	G
6759751	CT 5640-1	A	6775289	CLBT 5860-9	E
6759802	CT 5640-1	A	6775948	CLBT 5860-7	G
6759809	CT 5640-1	A	6776836	CLT 5840-1	E
6759810	CBT 5640-9	A	6776926	CLBT 5660-9	E
6759843	CT 5840-2	G	6777062	CLBT 5840-9	E
6759844	CBT 5840-7	G	6777494	CLBT 5860-9	A
6759845	CLT 5840-2	G	6778197	CLT 5660-5	B
6759846	CLBT 5840-7	G	6778852	VCLT 5860-2	G
6759852	CLBT 5840-9	A	6778967	CLT 5660-5	B
6759918	CLT 5640-1	A	6779062	CBT 5860	K
6769703	CLT 5640-1	A	6779063	CBT 5860	K
6769820	CLT 5640-2	G	6779958	CLT 5660-1	A
6770002	CLBT 5640-3	S	6779959	CLT 5660-1	A
6770082	CLT 5640-8	C	6830723	CLBT 5865-9	A
6770083	CLT 5640-2	G	6830856	CLT 5840-1	E
6770154	CLT 5840-2	G	6830861	CLT 5860-1	E
6770286	CLT 5840-9	A	6830862	CLBT 5860-9	E
6770364	CLT 5840-1	E	6830869	CLT 5860-2	G
6770365	CLBT 5640-9	A	6830870	CLBT 5860-7	G
6770377	CLT 5640-1	A	6831042	CLBT 5860-3	B
6770731	CLT 5640-5	B	6831856	CLBT 5865-9	A
6771000	CLBT 5640-3	B	6832157	CLBT 5865-9	A
6771551	CLBT 5860-7	G	6833116	CLT 5860-2	G
6771552	CLBT 5840-7	G	6833117	CLBT 5860-7	G
6771996	CLT 5840-1	F	6833118	VCLBT 5860-2	G
6772073	CLT 5840-1	E	6833835	CLBT 5860-3	H
6772148	CLBT 5840	F	6835203	VCLT 5860-2	F
6772495	CLBT 5840-9	E	6835484	VCLT 5860-2	F
6772842	CLBT 5840-9	E	6836433	VCLT 5860-2	F
6772946	CLT 5640-5	B	6836874	CLBT 5840-9	E
6773386	CLT 5860-1	E	6836973	CLT 5860-1	E
6773614	CLT 5840-1	E	6836984	CLT 5860-3	H
6773831	CLT 5840-1	E	6837611	CLBT 5860-3	B
6773839	CLT 5860-1	E	6838479	CLBT 5865-9	E

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* A/N* - ASSEMBLY NUMBER - FOUND ON YOUR TRANSMISSION NAMEPLATE

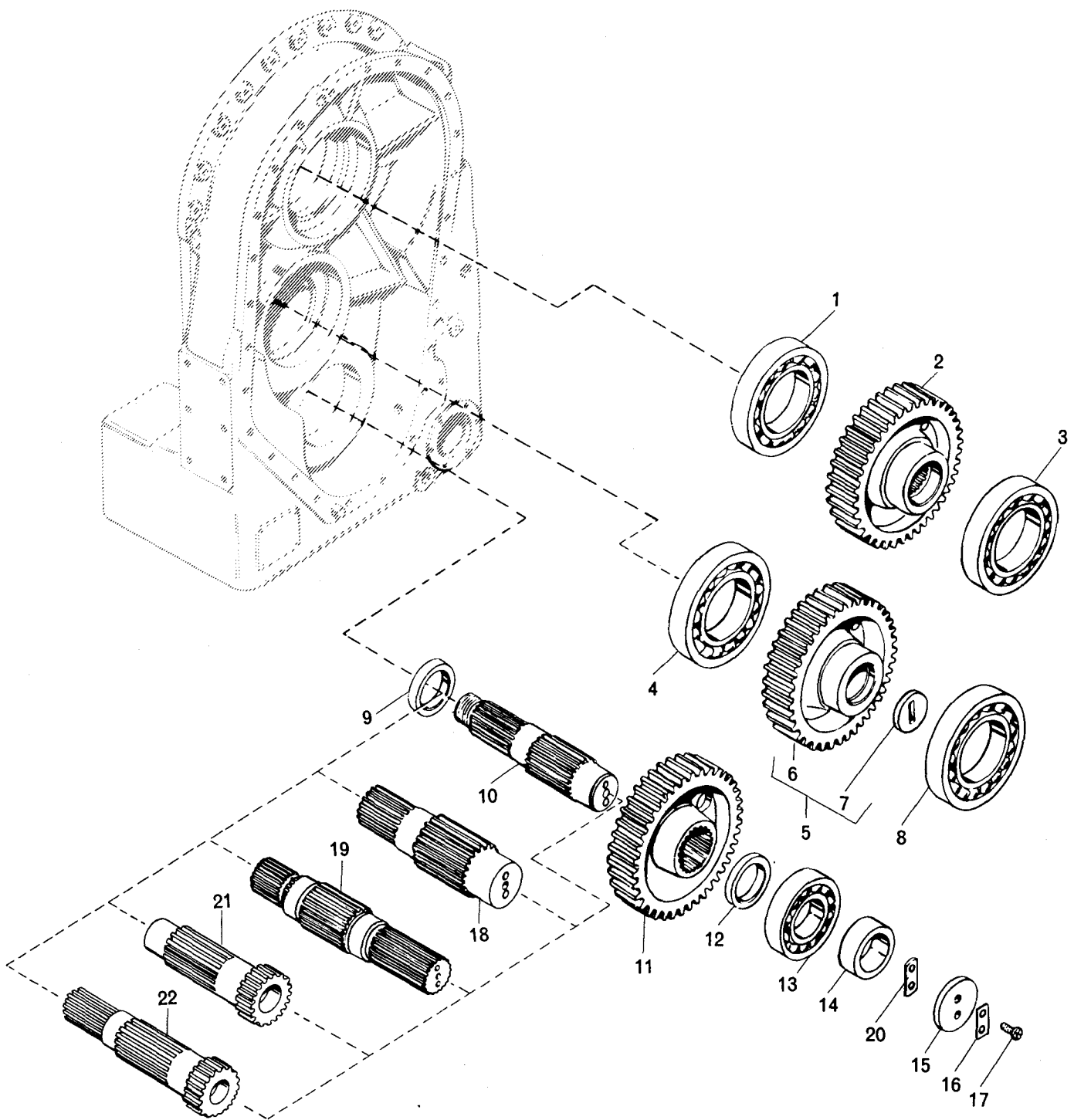
OUTPUT DRIVE TRANSFER GEAR SECTION

TO FIND DETAIL PARTS FOR YOUR ALLISON POWERSHIFT TRANSMISSION, TURN TO
THE GROUP LISTED OPPOSITE THE ASSEMBLY PART NUMBER OF YOUR TRANSMISSION.

A/N*	MODEL	GROUP	A/N*	MODEL	GROUP
68389C7	CLBT 5860-7	G	6839831	VCLT 5865-2	L
68389C8	VCLBT 5860-2	G	6881160	CLT 5840-1	E
6839551	CLT 5865-1	E	6881392	CLT 5860-5	M
6839641	CLBT 5860-3	H	6881439	CLBT 5860-2	M

* A/N* - ASSEMBLY NUMBER - FOUND ON YOUR TRANSMISSION NAMEPLATE

Note: Illustration begins next page - - -



4641B

FIG 28 OUTPUT DRIVE TRANSFER GEAR

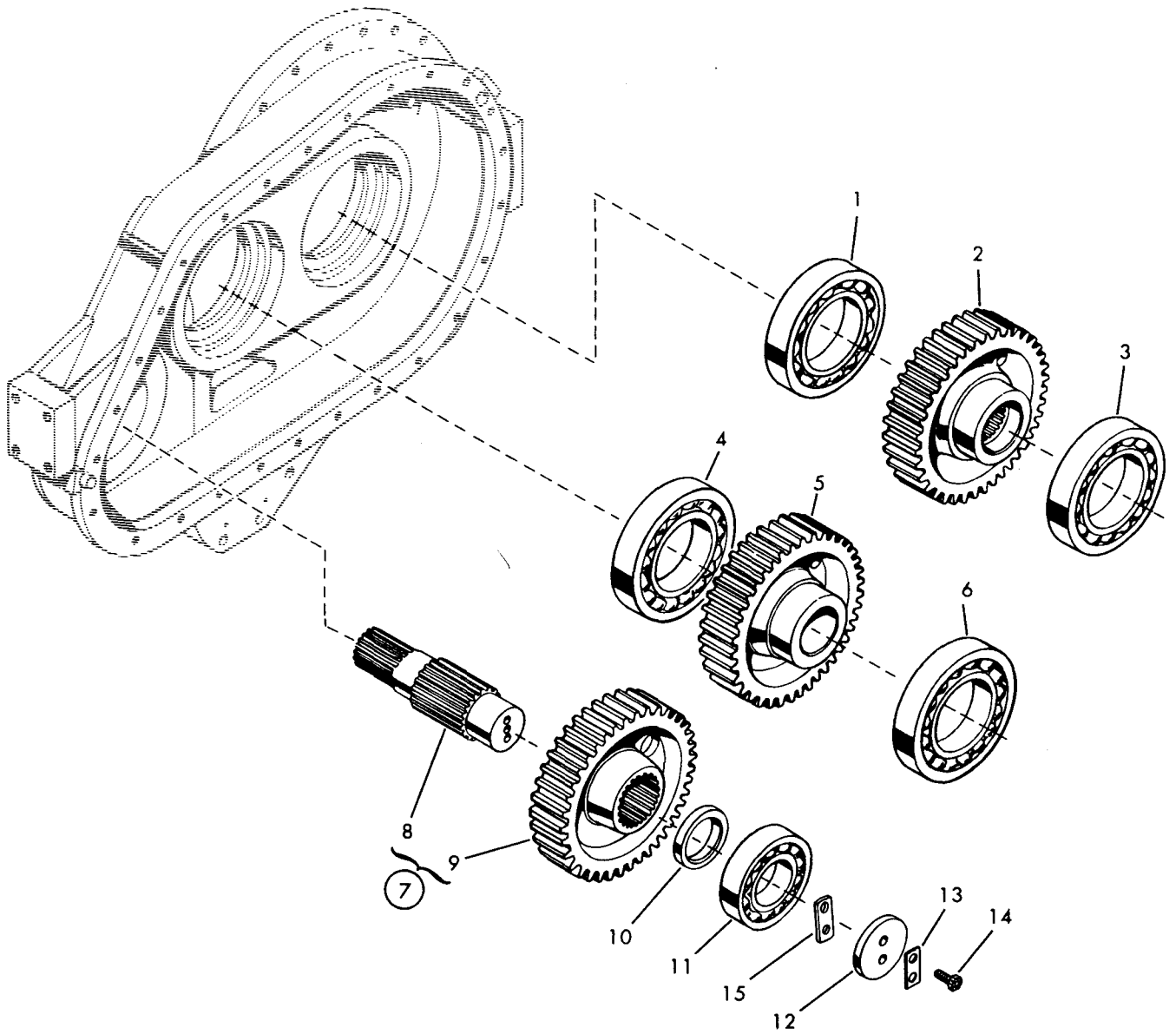


FIG 28-1. OUTPUT DRIVE TRANSFER GEAR

ALLISON POWERSHIFT TRANSMISSION 5640-5660-5840-5860 SERIES PARTS CATALOG

NOTES

GROUP A

OUTPUT DRIVE TRANSFER GEAR, FIGURE 28

REF NO	NOMENCLATURE	PART NO	REQ	RECOMMENDED SPARES FOR UNITS		
				1-3	4-10	11-25
1	BEARING, SINGLE ROW BALL, ND 3222	903222	1	1	2	5
2	GEAR, OUTPUT DRIVE	6757523	1		1	2
3	BEARING, SINGLE ROW BALL, ND 3222	903222	1	1	2	5
4	BEARING, SINGLE ROW BALL, ND 1222	901222	1	1	2	5
5	GEAR ASSY, OUTPUT IDLER	6838496	1		1	2
6	GEAR, OUTPUT IDLER	6838497 *	1			
7	PLUG, OUTPUT IDLER GEAR	6757536	1			
8	BEARING, SINGLE ROW BALL, ND 1222	901222	1	1	2	5
9	SPACER	6757534	1		1	3
10	NOT USED IN THIS GROUP.					
11	GEAR, OUTPUT DRIVEN	6757557	1		1	2
12	SPACER	6757534	1		1	3
13	BEARING, SINGLE ROW BALL, ND 1314	901314	1	1	2	5
14	NOT USED IN THIS GROUP.					
15	RETAINER, OUTPUT SHAFT	6769476	1		1	2
16	STRIP, LOCK	6755269	1	1	2	5
17	BOLT, HX HD, 1/2-20 X 1 1/4	9409059	2	2	4	6
18	SHAFT, OUTPUT DRIVEN	6770094	1		1	2
19	NOT USED IN THIS GROUP.					
20	SHIM, .025	6772140	AR	2	4	8
20	SHIM, .005	6772141	AR	2	4	8
21-22	NOT USED IN THIS GROUP.					

GROUP B

OUTPUT DRIVE TRANSFER GEAR, FIGURE 28

SAME AS GROUP A, EXCEPT FOR PARTS LISTED BELOW.

14	SPACER	6770677	1		1	3
15-18	NOT USED IN THIS GROUP.					
19	SHAFT, OUTPUT DRIVEN	6774044	1		1	2
20	NOT USED IN THIS GROUP.					

* SERVICED AS AN ASSY - NOT AS A DETAIL PART

GROUP C

OUTPUT DRIVE TRANSFER GEAR, FIGURE 28

SAME AS GROUP A, EXCEPT FOR PARTS LISTED BELOW.

REF NO	NOMENCLATURE	PART NO	REQ	RECOMMENDED SPARES FOR UNITS		
				1-3	4-10	11-25
2	GEAR, OUTPUT DRIVE	6838581	1		1	2
5	NOT USED IN THIS GROUP.					
6	GEAR, OUTPUT IDLER	6838582	1		1	2
7	NOT USED IN THIS GROUP.					
11	GEAR, OUTPUT DRIVEN	6769789	1		1	2

GROUP D

OUTPUT DRIVE TRANSFER GEAR, FIGURE 28

SAME AS GROUP A, EXCEPT FOR PARTS LISTED BELOW.

18	SHAFT, OUTPUT DRIVEN	6757531	1		1	2
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GROUP E

OUTPUT DRIVE TRANSFER GEAR, FIGURE 28

SAME AS GROUP A, EXCEPT FOR PARTS LISTED BELOW.

10	SHAFT, OUTPUT DRIVEN	6770646	1		1	2
18-19	NOT USED IN THIS GROUP.					

GROUP F

OUTPUT DRIVE TRANSFER GEAR, FIGURE 28

SAME AS GROUP A, EXCEPT FOR PARTS LISTED BELOW.

9	SPACER	6759314	1		1	3
14	SPACER	6770677	1		1	3
15-21	NOT USED IN THIS GROUP.					
22	SHAFT, OUTPUT DRIVEN	6759323	1		1	2

GROUP G

OUTPUT DRIVE TRANSFER GEAR, FIGURE 28-1

REF NO	NOMENCLATURE	PART NO	REQ	RECOMMENDED SPARES FOR UNITS		
				1-3	4-10	11-25
1	BEARING, SINGLE ROW BALL, ND 3222	903222	1	1	2	5
2	GEAR, OUTPUT DRIVE	6838581	1		1	2
3	BEARING, SINGLE ROW BALL, ND 3222	903222	1	1	2	5
4	BEARING, SINGLE ROW BALL, ND 1222	901222	1	1	2	5
5	GEAR, OUTPUT IDLER	6838582	1		1	2
6	BEARING, SINGLE ROW BALL, ND 1222	901222	1	1	2	5
7	SHAFT ASSY, OUTPUT	6772202	1			
8	SHAFT, OUTPUT DRIVEN	6770097	1		1	2
9	GEAR, OUTPUT DRIVEN	6769789	1		1	2
10	SPACER	6757534	1		1	3
11	BEARING, SINGLE ROW BALL, ND 1314	901314	1	1	2	5
12	RETAINER, OUTPUT SHAFT	6769476	1		1	2
13	STRIP, LOCK	6755269	1	1	2	5
14	BOLT, HX HD, 1/2-20 X 1 1/4	9409059	2	2	4	6
15	SHIM, .025	6772140	AR	2	4	8
15	SHIM, .005	6772141	AR	2	4	8

GROUP H

OUTPUT DRIVE TRANSFER GEAR, FIGURE 28

SAME AS GROUP A, EXCEPT FOR PARTS LISTED BELOW.

14	SPACER	6770677	1		1	3
18	NOT USED IN THIS GROUP.					
19	SHAFT, OUTPUT DRIVEN	6774044	1		1	2

GROUP J

OUTPUT DRIVE TRANSFER GEAR, FIGURE 28

SAME AS GROUP A, EXCEPT FOR PARTS LISTED BELOW.

14	SPACER	6770677	1		1	3
15	RETAINER, OUTPUT SHAFT	6768324	1		1	2
18	NOT USED IN THIS GROUP.					
19	SHAFT, OUTPUT DRIVEN	6774044	1		1	2

GROUP K

OUTPUT DRIVE TRANSFER GEAR, FIGURE 28

SAME AS GROUP A, EXCEPT FOR PARTS LISTED BELOW.

REF NO	NOMENCLATURE	PART NO	REQ	RECOMMENDED SPARES FOR UNITS		
				1-3	4-10	11-25
2	GEAR, OUTPUT DRIVE	6779082	1		1	2
12	SPACER	6759314	1		1	3
13-20	NOT USED IN THIS GROUP.					
21	SHIFT, OUTPUT DRIVEN	6779043	1		1	2

GROUP L

OUTPUT DRIVE TRANSFER GEAR, FIGURE 28

SAME AS GROUP A, EXCEPT FOR PARTS LISTED BELOW.

2	GEAR, OUTPUT DRIVE	6838580	1		1	2
9	SPACER	6759314	1		1	3
14	SPACER	6770677	1		1	3
15-21	NCT USED IN THIS GROUP					
22	SHAFT, OUTPUT DRIVEN	6759323	1		1	2

GROUP M

OUTPUT DRIVE TRANSFER GEAR, FIGURE 28

SAME AS GROUP A, EXCEPT FOR PARTS LISTED BELOW.

2	GEAR, OUTPUT DRIVE	6779082	1		1	2
12	SPACER	6759314	1		1	2
13-21	NCT USED IN THIS GROUP					
22	SHIFT, OUTPUT DRIVEN	6759323	1		1	2

OUTPUT DRIVE TRANSFER GEAR HOUSING COVER AND SPEEDOMETER SECTION

TO FIND DETAIL PARTS FOR YOUR ALLISON POWERSHIFT TRANSMISSION, TURN TO
THE GROUP LISTED OPPOSITE THE ASSEMBLY PART NUMBER OF YOUR TRANSMISSION.

A/N*	MODEL	GROUP	A/N*	MODEL	GROUP
6758494	CT 5640-1	A	6773887	CLT 5860-2	F
6759612	CT 5640-1	A	6774020	CLBT 5860-2	B
6759654	CLT 5640-5	B	6774286	CLBT 5860	D
6759723	CT 5640-1	C	6774487	CLBT 5660-3	D
6759725	CBT 5640-9	C	6775286	CLT 5860-1	C
6759745	CLBT 5640-9	C	6775288	CLT 5860-2	F
6759751	CT 5640-1	C	6775289	CLBT 5860-9	C
6759802	CT 5640-1	C	6775948	CLBT 5860-7	F
6759809	CT 5640-1	C	6776836	CLT 5840-1	C
6759810	CBT 5640-9	C	6776926	CLBT 5660-9	G
6759843	CT 5840-2	F	6777062	CLBT 5840-9	C
6759844	CBT 5840-7	F	6777494	CLBT 5860-9	C
6759845	CLT 5840-2	F	6778197	CLT 5660-5	D
6759846	CLBT 5840-7	F	6778967	CLT 5660-5	D
6759852	CLBT 5840-9	C	6778852	VCLT 5860-2	F
6759918	CLT 5640-1	C	6779062	CBT 5860	J
6769703	CLT 5640-1	G	6779063	CBT 5860	J
6769820	CLT 5640-2	F	6779958	CLT 5660-1	C
6770002	CLBT 5640-3	D	6779959	CLT 5660-1	C
6770082	CLT 5640-8	G	6830723	CLBT 5865-9	C
6770083	CLT 5640-2	F	6830856	CLT 5840-1	C
6770154	CLT 5840-2	F	6830861	CLT 5860-1	C
6770286	CLT 5840-9	C	6830862	CLBT 5860-6	C
6770364	CLT 5840-1	C	6830869	CLT 5860-2	F
6770365	CLT 5640-9	C	6830870	CLBT 5860-7	F
6770377	CLT 5640-1	C	6831042	CLBT 5860-3	B
6770731	CLT 5640-5	D	6831856	CLBT 5865-9	C
6771000	CLBT 5640-3	D	6832157	CLBT 5865-9	C
6771551	CLBT 5860-7	F	6833116	CLT 5860-2	F
6771552	CLBT 5840-7	F	6833117	CLBT 5860-7	F
6771956	CLT 5840-1	E	6833118	VCLBT 5860-2	F
6772073	CLT 5840-1	C	6833835	CLBT 5860-3	D
6772148	CLBT 5840	E	6835203	VCLT 5860-2	D
6772455	CLBT 5840-9	C	6835484	VCLT 5860-2	D
6772842	CLBT 5840-9	C	6836433	VCLT 5860-2	D
6772946	CLT 5640-5	D	6836874	CLBT 5860-9	C
6773386	CLT 5860-1	C	6836973	CLT 5860-1	C
6773614	CLT 5840-1	C	6836984	CLT 5860-3	D
6773831	CLT 5840-1	C	6837611	CLBT 5860-3	D
6773839	CLT 5860-1	C	6838479	CLBT 5865-9	C

CONTINUED ON NEXT PAGE

* A/N* - ASSEMBLY NUMBER - FOUND ON YOUR TRANSMISSION NAMEPLATE

OUTPUT DRIVE TRANSFER GEAR HOUSING COVER AND SPEEDOMETER SECTION

TO FIND DETAIL PARTS FOR YOUR ALLISON POWERSHIFT TRANSMISSION, TURN TO
THE GROUP LISTED OPPOSITE THE ASSEMBLY PART NUMBER OF YOUR TRANSMISSION.

A/N*	MODEL	GROUP	A/N*	MODEL	GROUP
68389C7	CLBT 5860-7	F	6839831	VCLT 5865-2	D
68389C8	VCLBT 5860-2	F	6881160	CLT 5840-1	C
6839551	CLT 5865-1	C	6881392	CLT 5860-5	J
6839641	CLBT 5860-3	B	6881439	CLBT 5860-2	J

* A/N* - ASSEMBLY NUMBER - FOUND ON YOUR TRANSMISSION NAMEPLATE

Note: Illustration begins next page - - -

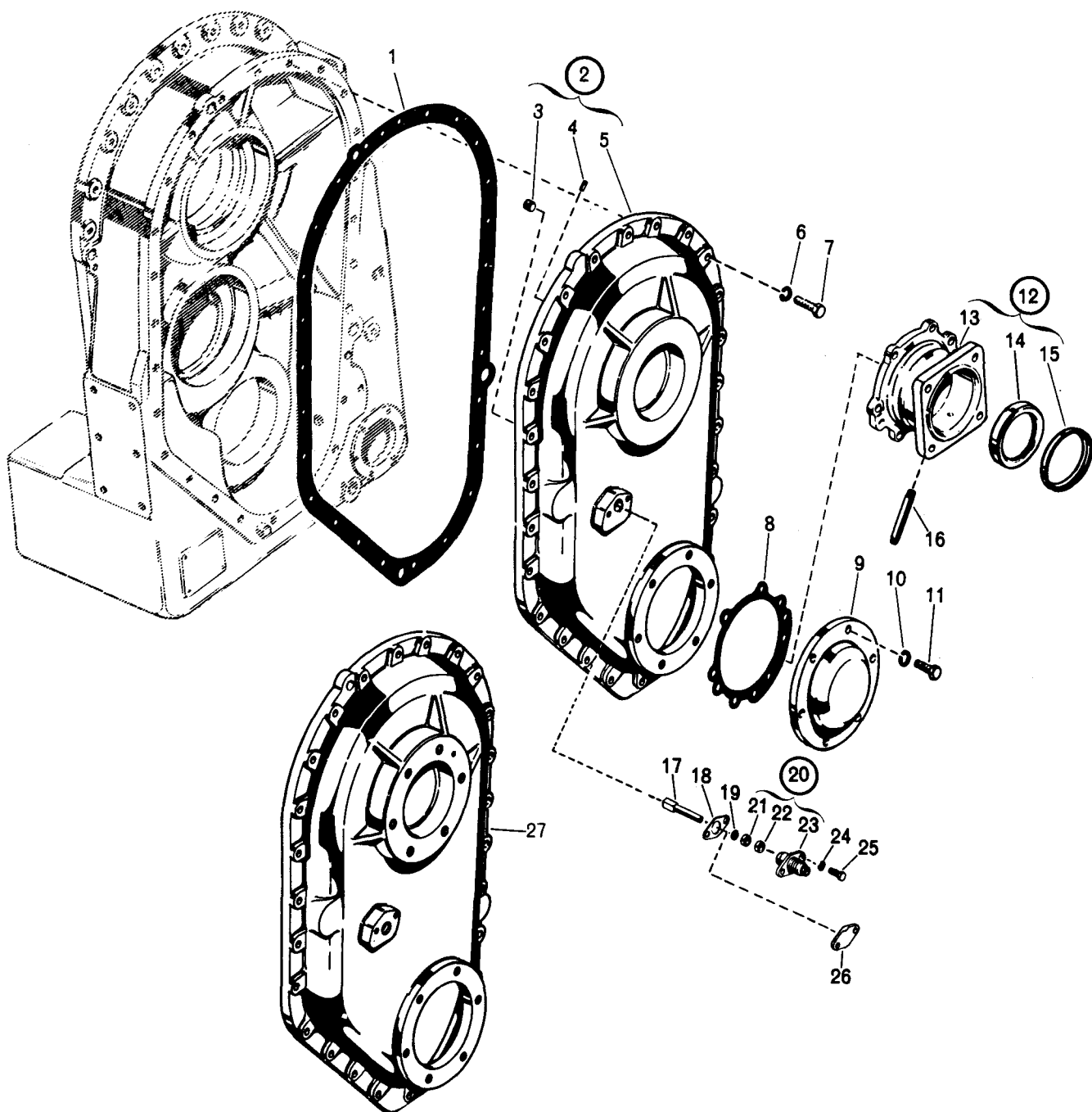


FIG 29 OUTPUT DRIVE TRANSFER GEAR HOUSING COVER AND SPEEDOMETER

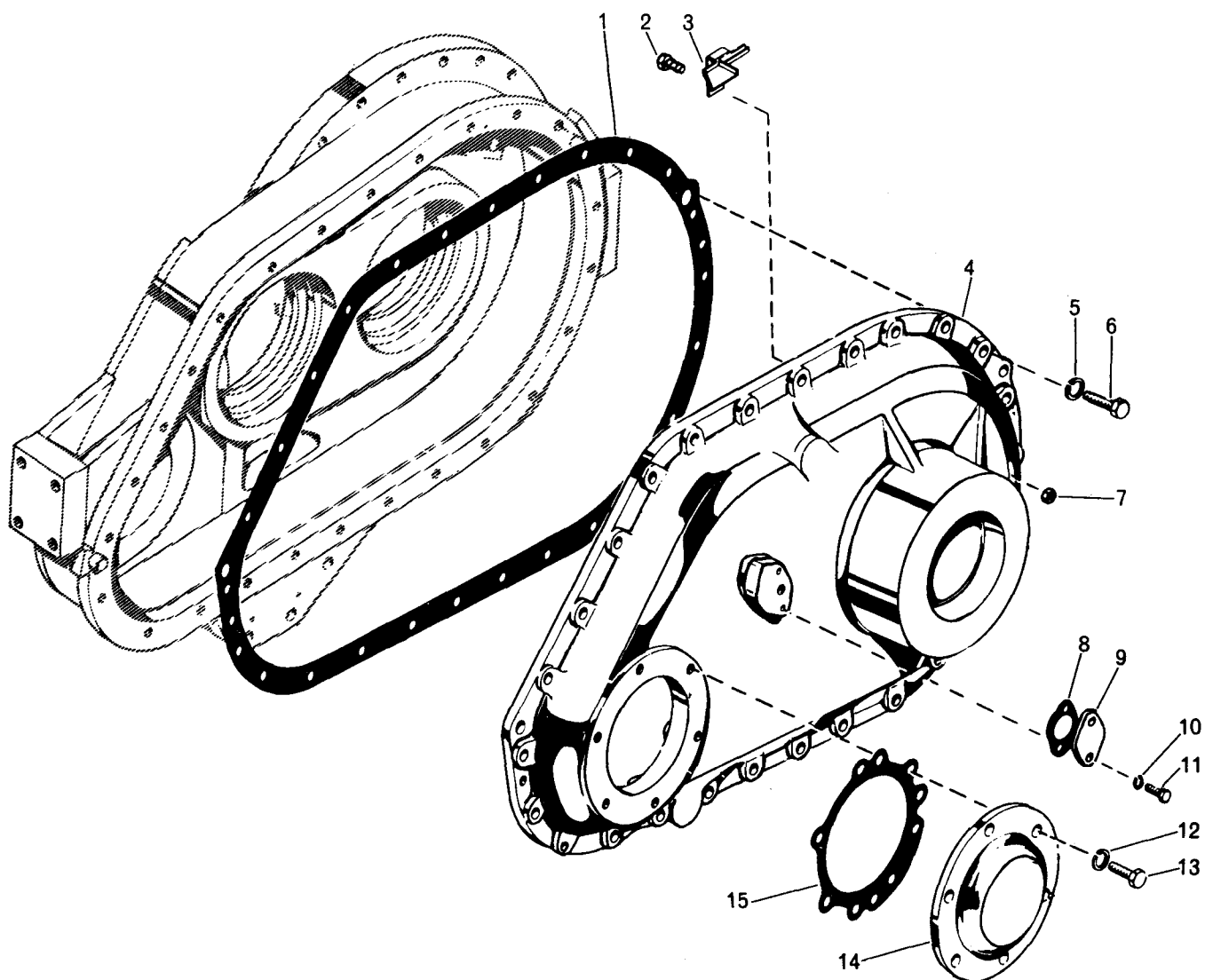


FIG 29-1 OUTPUT DRIVE TRANSFER GEAR HOUSING COVER AND SPEEDOMETER

ALLISON POWERSHIFT TRANSMISSION 5640-5660-5840-5860 SERIES PARTS CATALOG

NOTES

GROUP A

OUTPUT DRIVE TRANSFER GEAR HOUSING COVER AND SPEEDOMETER, FIGURE 29

REF NO	NOMENCLATURE	PART NO	REQ	RECOMMENDED SPARES FOR UNITS		
				1-3	4-10	11-25
1	GASKET, TRANSFER GEAR COVER	6756313	1	1	3	10
2	COVER ASSY, TRANSFER GEAR HOUSING	6757594	1			1
3	PLUG, SQ SOCKET HD, 1 INCH	444678	2			
4	PIN, DOWEL, 1/4 X 5/8	141195	1			
5	COVER, TRANSFER HOUSING	6757539 *	1			
6	WASHER, LOCK, 1/2	103323	26	26	52	78
7	BOLT, HX HD, 1/2-13 X 1 3/4	179887	26	26	52	78
8	GASKET, RETAINER	6758563	1	1	3	10
9	RETAINER	6757585	1		1	2
10	WASHER, LOCK, 1/2	103323	6	6	12	18
11	BOLT, HX HD, 1/2-13 X 1 3/8	179884	6	6	12	18
12-16	NOT USED IN THIS GROUP.					
17	SHAFT, SPEEDO DRIVE	6757602	1		1	2
18	GASKET	552868	1	1	3	10
19	WASHER, 3/32	2222651	1	1	2	4
20	DRIVE SLEEVE ASSY	6768536	1		1	2
21	SEAL	6768417	1	1	3	10
22	WASHER, 11/16	6768418	1		1	2
23	SLEEVE, SPEEDO DRIVE	2043587	1			
24	WASHER, LOCK, 5/16	103320	2	2	4	6
25	BOLT, HX HD, 5/16-18 X 7/8	179817	2	2	4	6
26	NOT USED IN THIS GROUP.					
27	NOT USED IN THIS GROUP.					

GROUP B

OUTPUT DRIVE TRANSFER GEAR HOUSING COVER AND SPEEDOMETER, FIGURE 29

SAME AS GROUP A, EXCEPT FOR PARTS LISTED BELOW.

9	NOT USED IN THIS GROUP.					
11	BOLT, HX HD, 1/2-13 X 1 1/2	186725	6	6	12	18
12	RETAINER ASSY, BEARING	6768878	1		1	2
13	RETAINER, BEARING	6768877 *	1			
14	SEAL	6773311	1	1	3	10
15	BAFFLE, OIL	6757563	1	1	3	10

CONTINUED ON NEXT PAGE

* SERVICED AS AN ASSY - NOT AS A DETAIL PART

GROUP B CONT

OUTPUT DRIVE TRANSFER GEAR HOUSING COVER AND SPEEDOMETER, FIGURE 29

SAME AS GROUP A, EXCEPT FOR PARTS LISTED BELOW.

REF NO	NOMENCLATURE	PART NO	REQ	RECOMMENDED SPARES FOR UNITS		
				1-3	4-10	11-25
16	NIPPLE	119247	1		1	2

GROUP C

OUTPUT DRIVE TRANSFER GEAR HOUSING COVER AND SPEEDOMETER, FIGURE 29

SAME AS GROUP A, EXCEPT FOR PARTS LISTED BELOW.

2-4	NOT USED IN THIS GROUP.					
5	COVER, TRANSFER GEAR HOUSING	6771509	1			1

GROUP D

OUTPUT DRIVE TRANSFER GEAR HOUSING COVER AND SPEEDOMETER, FIGURE 29

SAME AS GROUP A, EXCEPT FOR PARTS LISTED BELOW.

2-4	NOT USED IN THIS GROUP.					
5	COVER, TRANSFER GEAR HOUSING	6771509	1			1
9	NOT USED IN THIS GROUP.					
11	BOLT, HX HD, 1/2 - 13 X 1 1/2	186725	6	6	12	18
12	RETAINER ASSY, BEARING	6768878	1		1	2
13	RETAINER, BEARING	6768877 *	1			
14	SEAL	6772311	1	1	3	10
15	BAFFLE, OIL	6757563	1	1	3	10
16	NIPPLE	119247	1		1	2

GROUP E

OUTPUT DRIVE TRANSFER GEAR HOUSING COVER AND SPEEDOMETER, FIGURE 29

SAME AS GROUP A, EXCEPT FOR PARTS LISTED BELOW.

9	NOT USED IN THIS GROUP.					
11	BOLT, HX HD, 1/2-13 X 2 3/4	179892	6	6	12	18
12	RETAINER ASSY, BEARING	6768878	1		1	2
13	RETAINER, BEARING	6768877 *	1			

CONTINUED ON NEXT PAGE

* SERVICED AS AN ASSY - NOT AS A DETAIL PART

GROUP E CONT

OUTPUT DRIVE TRANSFER GEAR HOUSING COVER AND SPEEDOMETER, FIGURE 29

SAME AS GROUP A, EXCEPT FOR PARTS LISTED BELOW.

REF NO	NOMENCLATURE	PART NO	REQ	RECOMMENDED SPARES FOR UNITS		
				1-3	4-10	11-25
14	SEAL	6773311	1	1	3	10
15	BAFFLE, OIL	6757563	1	1	3	10
16	NIPPLE	119247	1		1	2

GROUP F

OUTPUT DRIVE TRANSFER GEAR HOUSING COVER AND SPEEDOMETER, FIGURE 29-1

1	GASKET, TRANSFER GEAR HOUSING COVER	6770288	1	1	3	10
2	BOLT, HX HD, 3/8-24 X 1	181364	2	2	4	6
3	BAFFLE, OIL TRANSFER USED ONLY ON 6771142 COVER	6771146	1		1	2
4	COVER, TRANSFER GEAR HOUSING	6771509	1			1
5	WASHER, LOCK, 1/2	103323	26	26	52	78
6	BOLT, HX HD, 1/2-13 X 1 3/4	179887	26	26	52	78
7	NUT, LOCK, 3/8-24	6771159	2	2	4	6
8	GASKET	552868	1	1	3	10
9	COVER	6771300	1		1	2
10	WASHER, LOCK, 5/16	103320	2	2	4	6
11	BOLT, HX HD, 5/16-18 X 7/8	179817	2	2	4	6
12	WASHER, LOCK, 1/2	103323	6	6	12	18
13	BOLT, HX HD, 1/2-13 X 1 3/4	179884	6	6	12	18
14	RETAINER	6757585	1		1	2
15	GASKET	6758563	1	1	3	10

GROUP G

OUTPUT DRIVE TRANSFER GEAR HOUSING COVER AND SPEEDOMETER, FIGURE 29

SAME AS GROUP A, EXCEPT FOR PARTS LISTED BELOW.

2-4	NCT USED IN THIS GROUP.					
5	COVER, TRANSFER GEAR HOUSING	6771509	1			1
17	NOT USED IN THIS GROUP.					
19-23	NCT USED IN THIS GROUP.					
26	COVER, SPEEDO MOUNTING	6771300	1		1	2

GROUP H

OUTPUT DRIVE TRANSFER GEAR HOUSING COVER AND SPEEDOMETER, FIGURE 29

SAME AS GROUP A, EXCEPT FOR PARTS LISTED BELOW.

REF NO	NOMENCLATURE	PART NO	REQ	RECOMMENDED SPARES FOR UNITS		
				1-3	4-10	11-25
17	NCT USED IN THIS GROUP.					
19-23	NCT USED IN THIS GROUP.					
26	COVER, SPEEDOMETER MOUNTING	6771300	1		1	2

GROUP J

OUTPUT DRIVE TRANSFER GEAR HOUSING COVER AND SPEEDOMETER, FIGURE 29

SAME AS GROUP A, EXCEPT FOR PARTS LISTED BELOW.

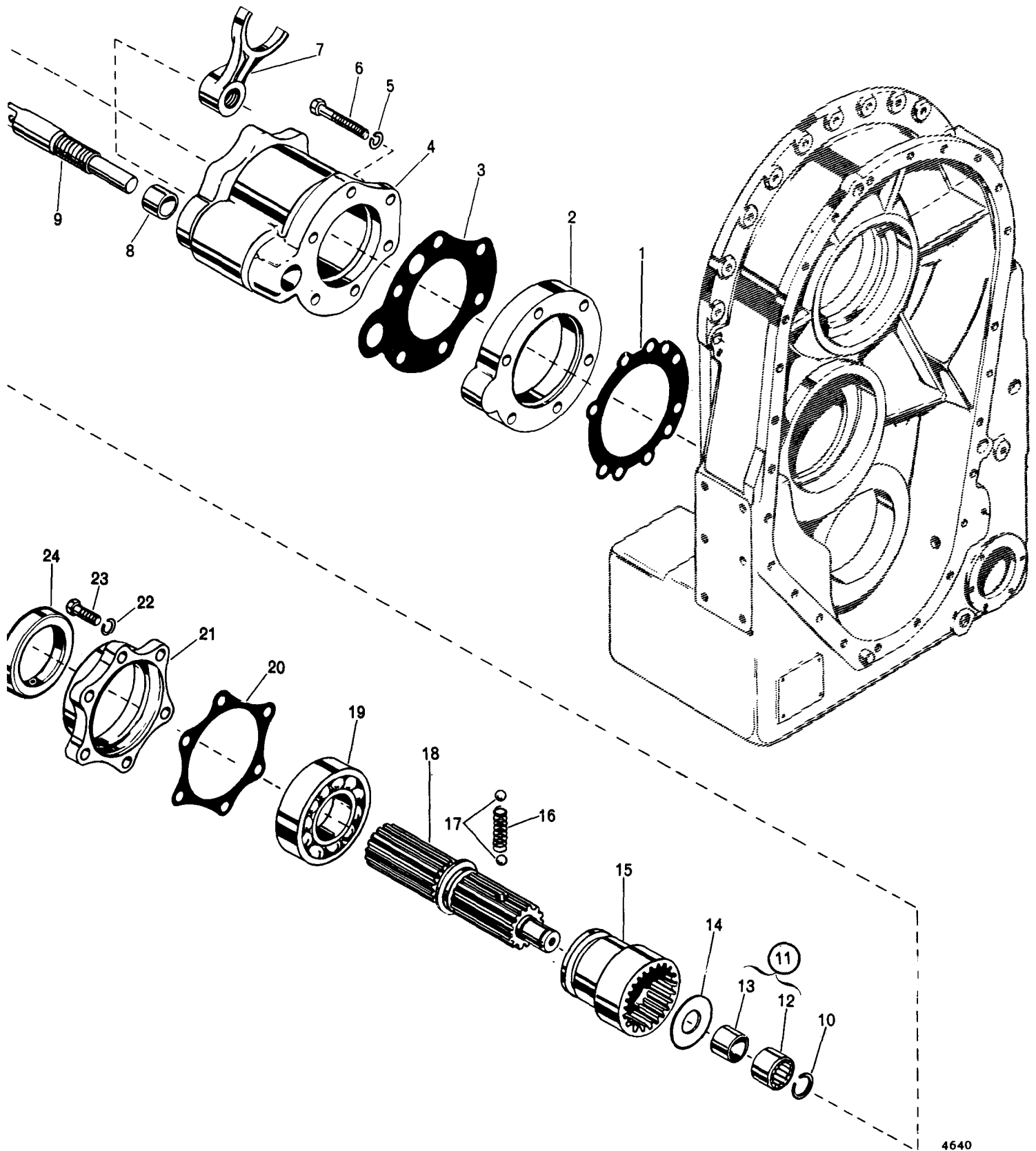
2-5	NCT USED IN THIS GROUP.					
9-16	NCT USED IN THIS GROUP.					
27	COVER, TRANSFER HOUSING	6779037	1			1

OUTPUT DISCONNECT CLUTCH SECTION

TO FIND DETAIL PARTS FOR YOUR ALLISON POWERSHIFT TRANSMISSION, TURN TO
THE GROUP LISTED OPPOSITE THE ASSEMBLY PART NUMBER OF YOUR TRANSMISSION.

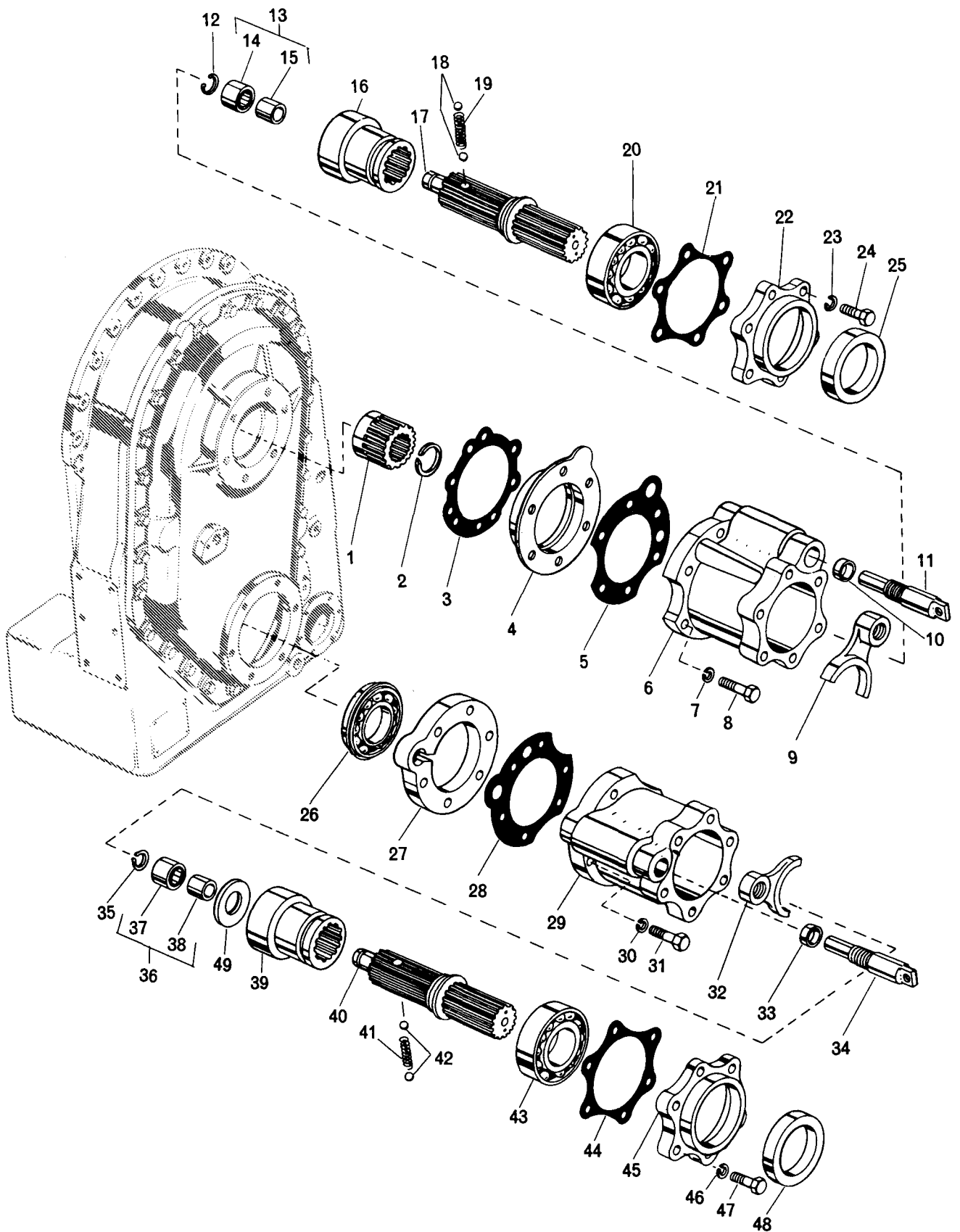
A/N*	MODEL	GROUP	A/N*	MODEL	GROUP
6771996	CLT 5840-1	A	6835484	VCLT 5860-2	A
6772148	CLBT 5840	A	6836433	VCLT 5860-2	A
6779062	CBT 5860	B	6839831	VCLT 5865-2	A
6779063	CBT 5860	B	6881392	CLT 5860-5	C
6835203	VCLT 5860-2	A	6881439	CLBT 5860-2	C

* A/N* - ASSEMBLY NUMBER - FOUND ON YOUR TRANSMISSION NAMEPLATE



4640

FIG 30 OUTPUT DISCONNECT CLUTCH



4618A

FIG 30-1. OUTPUT DISCONNECT CLUTCH

ALLISON POWERSHIFT TRANSMISSION 5640-5660-5840-5860 SERIES PARTS CATALOG

NOTES

GROUP A

OUTPUT DISCONNECT CLUTCH, FIGURE 30

REF NO	NOMENCLATURE	PART NO	REQ	RECOMMENDED SPARES FOR UNITS		
				1-3	4-10	11-25
1	GASKET, ADAPTER	6758563	1	1	3	10
2	ADAPTER	6772008	1			1
3	GASKET, OUTPUT DRIVE	6772012	1	1	3	10
4	HOUSING, OUTPUT DRIVE	6772009	1			1
5	WASHER, LOCK, 1/2	103323	6	6	12	18
6	BOLT, HX HD, 1/2-13 X 2 3/4	179892	6	6	12	18
7	FCRK, DISCONNECT	6756396	1		1	2
8	SEAL	7994981	1		3	10
9	SHAFT, DISCONNECT FORK	6755193	1	1	1	2
10	RING, SNAP	6751633	1	1	2	5
11	BEARING ASSY	6754783	1	1	2	5
12	BEARING, NEEDLE, TORRINGTON DC-BH 2216X	6751634	*			
13	RACE, NEEDLE BEARING INNER	6751632	*			
14	WASHER, THRUST	6751631	1	1	2	5
15	COUPLING, DISCONNECT	6751630	1		1	2
16	SPRING, DETENT	5171417	1	1	2	5
17	BALL, DETENT, 1/2 DIA	145657	2	2	4	8
18	SHAFT, OUTPUT DRIVE	6756388	1		1	2
19	BEARING, SINGLE ROW BALL, NO 3313XR1A	903313	1	1	2	5
20	GASKET, BEARING RETAINER	6755672	1	1	3	10
21	RETAINER, BEARING	6772011	1			1
22	WASHER, LOCK, 1/2	103323	6	6	12	18
23	BOLT, HX HD, 1/2-13 X 1 1/2	179885	6	6	12	18
24	SEAL	6773311	1	1	3	10

GROUP B

OUTPUT DISCONNECT CLUTCH, FIGURE 30-1

1	GEAR	6779036	1		1	2
2	RING, SNAP	6754835	1	1	2	5
3	GASKET, ADAPTER	6779038	1	1	3	10
4	ADAPTER	6779039	1			1
5	GASKET, OUTPUT DRIVE	6772012	1	1	3	10
6	HOUSING, OUTPUT DRIVE	6779041	1			1
7	WASHER, LOCK, 1/2	103323	6	6	12	18

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* SERVICEC AS AN ASSY - NOT AS A DETAIL PART

GROUP B CONT

OUTPUT DISCONNECT CLUTCH, FIGURE 30-1

REF NO	NCMENCLATURE	PART NO	REQ	RECOMMENDED SPARES FOR UNITS		
				1-3	4-10	11-25
8	BOLT, HX HD, 1/2-13 X 1 3/4	179887	6	6	12	18
9	FORK, DISCONNECT	6756396	1		1	2
10	SEAL	7994981	1	1	3	10
11	SHAFT, DISCONNECT FORK	6755193	1		1	2
12	RING, SNAP	6751633	1	1	2	5
13	BEARING ASSY	6754783	1	1	2	5
14	BEARING, NEEDLE, TORRINGTON DC-BH 2216X	6751634 *	1			
15	RACE, NEEDLE BEARING INNER	6751632 *	1			
16	COUPLING, DISCONNECT	6751630	1		1	2
17	SHAFT, OUTPUT DRIVE	6779042	1		1	2
18	BALL, DETENT, 1/2 DIA	145657	2	2	4	8
19	SPRING, DETENT	5171417	1	1	2	5
20	BEARING, SINGLE ROW BALL, ND 3313XR1A	903313	1	1	2	5
21	GASKET, BEARING RETAINER	6755672	1	1	3	10
22	RETAINER, BEARING	6772011	1			1
23	WASHER, LOCK, 1/2	103323	6	6	12	18
24	BOLT, HX HD, 1/2-13 X 1 1/2	179885	6	6	12	18
25	SEAL	6773311	1	1	3	10
26	BEARING, SINGLE ROW BALL, ND 41217X1A	903493	1	1	2	5
27	ADAPTER	6772008	1			1
28	GASKET, OUTPUT DRIVE	6772012	1	1	3	10
29	HOUSING, OUTPUT DRIVE	6779041	1			1
30	WASHER, LOCK, 1/2	103323	6	6	12	18
31	BOLT, HX HD, 1/2-13 X 2 3/4	179892	6	6	12	18
32	FORK, DISCONNECT	6756396	1		1	2
33	SEAL	7994981	1	1	3	10
34	SHAFT, DISCONNECT FORK	6775193	1		1	2
35	RING, SNAP	6751633	1	1	2	5
36	BEARING ASSY	6754783	1	1	2	5
37	BEARING, NEEDLE, TORRINGTON DC-BH 2216X	6751634 *	1			
38	RACE, NEEDLE BEARING INNER	6751632 *	1			
39	COUPLING, DISCONNECT	6751630	1		1	2
40	SHAFT, OUTPUT DRIVE	6779042	1		1	2
41	SPRING, DETENT	5171417	1	1	2	5
42	BALL, DETENT, 1/2 DIA	145657	2	2	4	8
43	BEARING, SINGLE ROW BALL, ND3313XR1A	903313	1	1	2	5
44	GASKET, BEARING RETAINER	6755672	1	1	3	10

CONTINUED ON NEXT PAGE

* SERVICED AS AN ASSY - NOT AS A DETAIL PART

GROUP B CONT

OUTPUT DISCONNECT CLUTCH, FIGURE 30-1

REF NO	NOMENCLATURE	PART NO	REQ	RECOMMENDED SPARES FOR UNITS		
				1-3	4-10	11-25
45	RETAINER, BEARING	6772011	1			1
46	WASHER, LOCK, 1/2	103323	6	6	12	18
47	BOLT, HX HD, 1/2-13 X 1 102	179885	6	6	12	18
48	SEAL	6773311	1	1	3	10
49	NOT USED IN THIS GROUP					

GROUP C

OUTPUT DISCONNECT CLUTCH, FIGURE 30-1

SAME AS GROUP B, EXCEPT FOR PARTS LISTED BELOW.

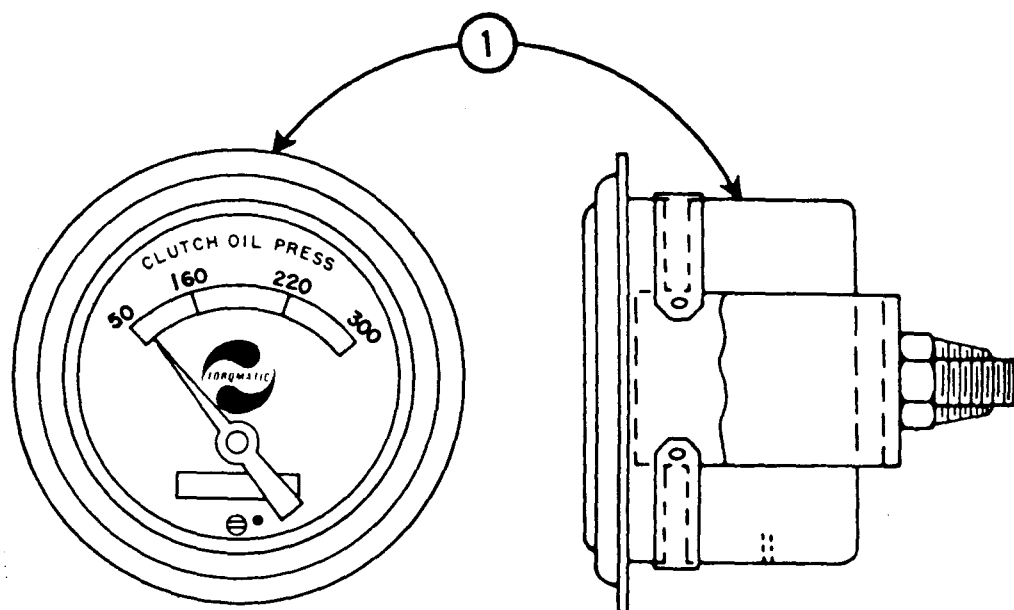
17	SHIFT, OUTPUT DRIVE	6756388	1		1	2
29	HOUSING, OUTPUT DRIVE	6772009	1			1
40	SHIFT, OUTPUT DRIVE	6756388	1		1	2
49	SPACER	6751631	1			

ALLISON POWERSHIFT TRANSMISSION 5640-5660-5840-5860 SERIES PARTS CATALOG

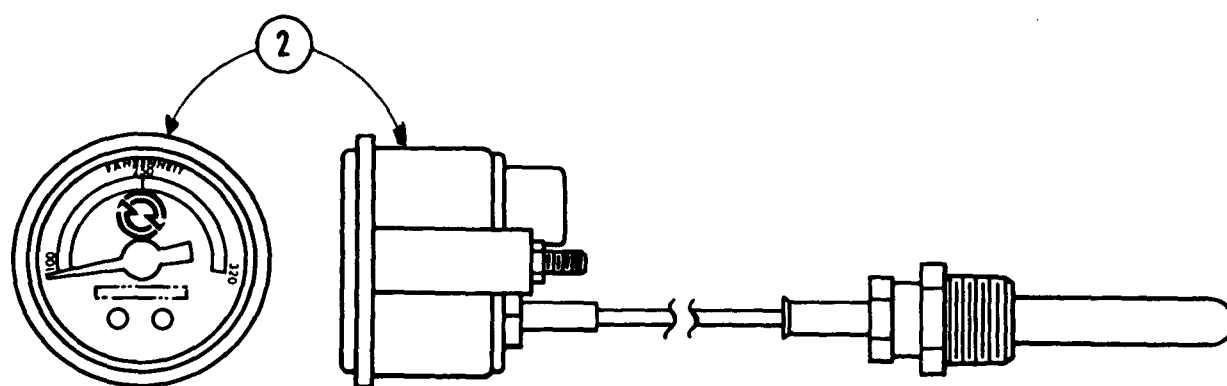
NOTES

MISCELLANEOUS OPTIONS SECTION

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



CLUTCH OIL PRESSURE GAGE



OIL TEMPERATURE GAGE

FIG 31. CLUTCH OIL PRESSURE GAGE AND OIL TEMPERATURE GAGE

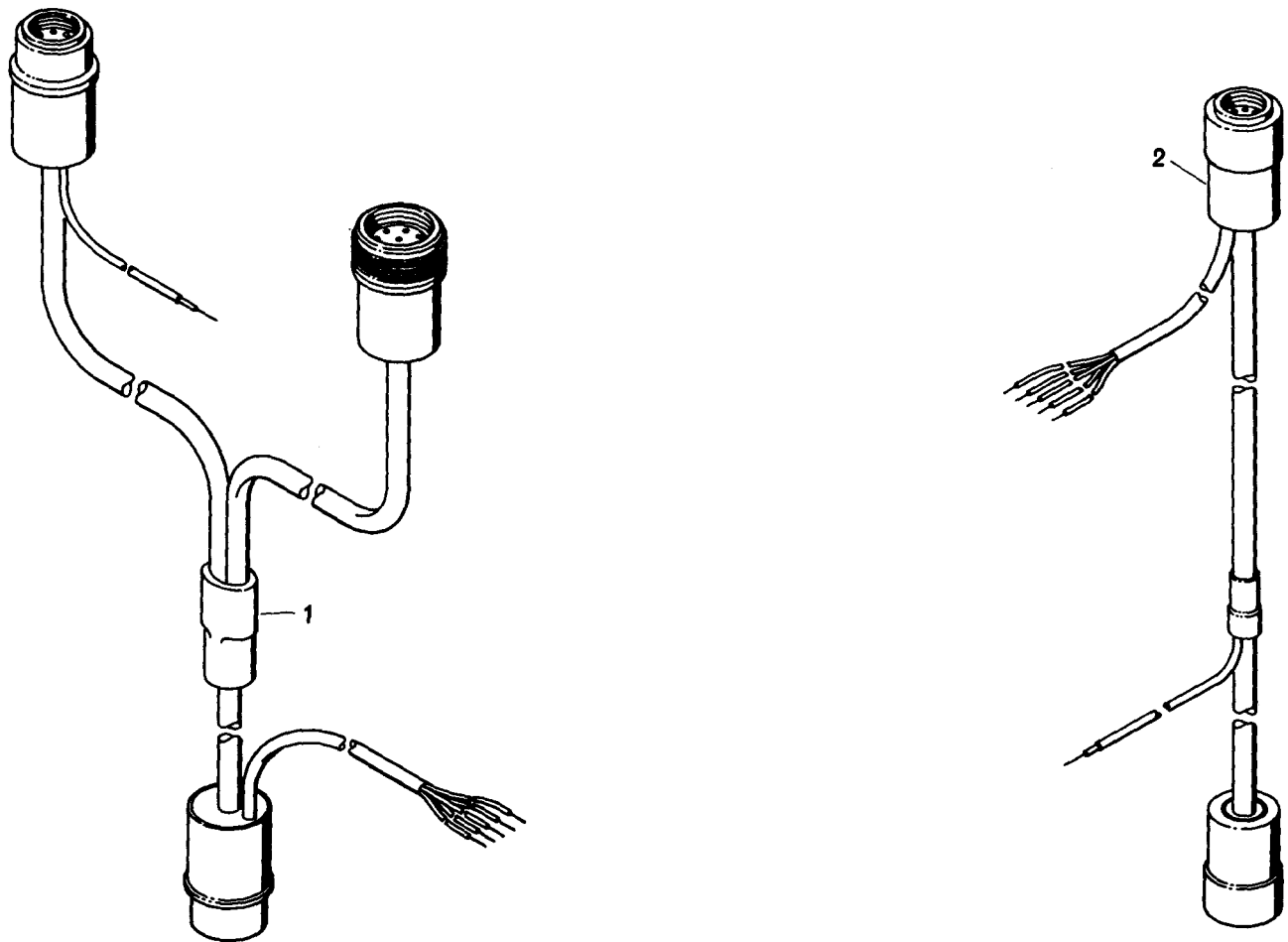
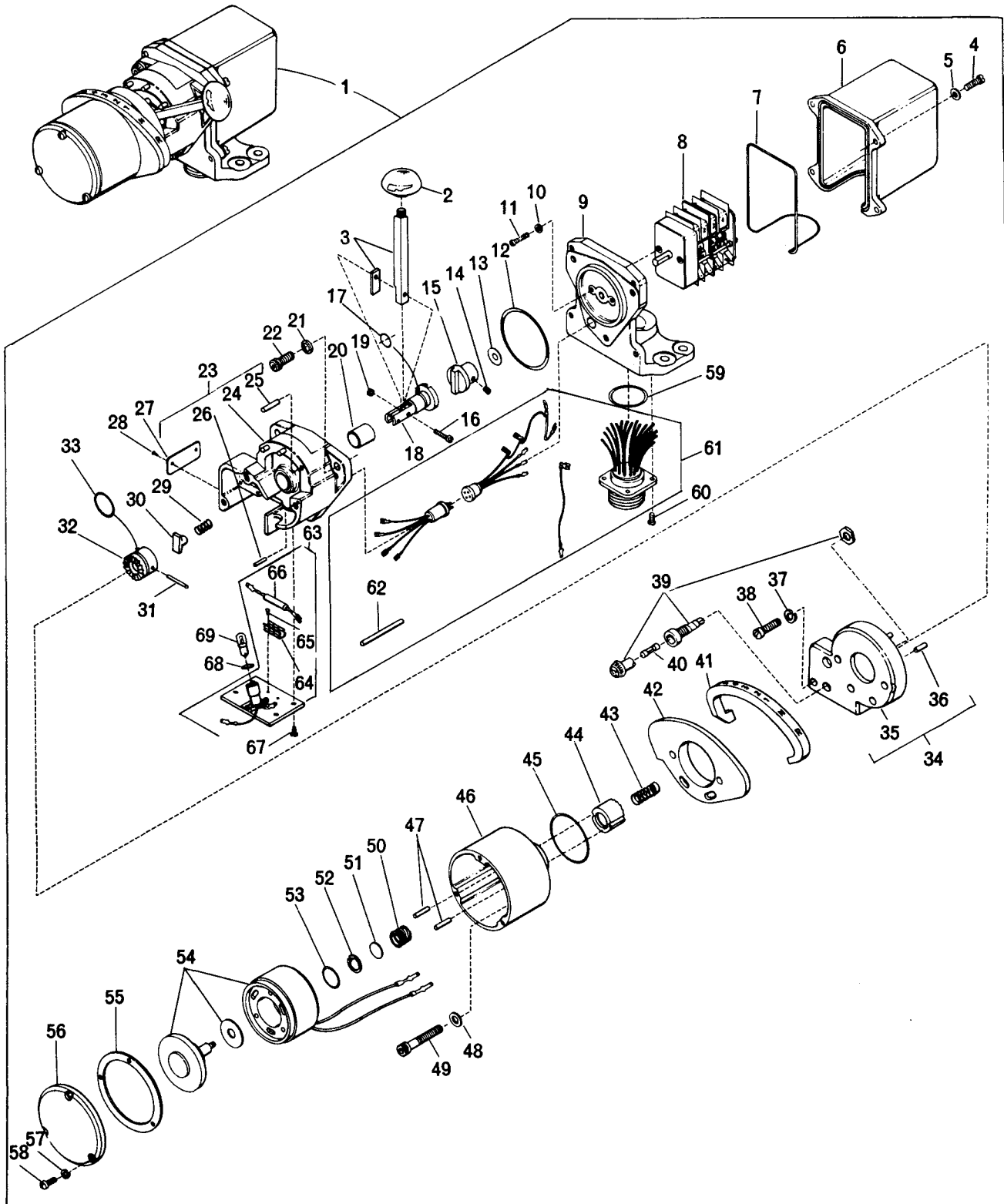


FIG 31-1 CONTROL VALVE BODY WIRING HARNESS



10050A

FIG 31-2. ELECTRIC CONTROL SHIFT TOWER

CLUTCH OIL PRESSURE GAGE, FIGURE 31

REF NO	NCMENCLATURE	PART NO	REQ	RECOMMENDED SPARES FOR UNITS		
				1-3	4-10	11-25

1	GAGE, CLU OIL PRESR	6777328	1			
---	-------------------------------	---------	---	--	--	--

OIL TEMPERATURE GAGE, FIGURE 31

2	GAGE, OIL TEMP W/10 FOOT CAPILLARY	6838457	1	1	2	3
2	GAGE, OIL TEMP W/6 FOOT CAPILLARY	6838458	1	1	2	3
2	GAGE, OIL TEMP W/4 FOOT CAPILLARY	6838459	1	1	2	3

CCNTRCL VALVE BODY WIRING, HARNESS, FIGURE 31-1

1	HARNESS, WIRING, 18 FT. -Y-	6836600	1			
1	HARNESS, WIRING, 70 FT.-Y-	6834839	1			
2	HARNESS, WIRING, 7 FT.	6834077	1		1	2
2	HARNESS, WIRING, 20 FT.	6836694	1			
2	HARNESS, WIRING, 27 FT.	6834075	1			
2	HARNESS, WIRING, 70 FT.	6834840	1			

24 VOLT ELECTRIC CONTROL SHIFT TOWER, FIGURE 31-2

1	TOWER, SHIFT - 24 VOLT	6836515	1			
2	KNOB, HANDLE	6839310	1			
3	HANDLE	6839309	1			
4	SCREW, 10-24 X 5/8	6839336	4			
5	WASHER		4			
6	COVER, SWITCH	6839306	1			
7	SEAL, COVER - CEMENT IN-	6839342	1			
8	MICROSWITCH ASSY	6839304	1			
9	HOUSING, MICROSWITCH		1			
10	WASHER, NO. 6	6839307	2			
11	SCREW, 6-32 X 3/4	6839308	2			
12	RING, O, 2 11/16 OD	6839344	1			
13	SHIM, 1.00 O.D. 17/64 I.D.	6839343	AR			
14	SCREW, SET, 10-32 X 1/4	6839315	1			
15	ADAPTER, DRIVE	6839314	1			
16	PIN, BOLT	6839311	1			
17	RING, O, 9/16 O.D.	6839345	1			

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24 VOLT ELECTRIC CONTROL SHIFT TOWER, FIGURE 31-2 CCNT

REF NO	NOMENCLATURE	PART NO	REQ	RECOMMENDED SPARES FOR UNITS		
				1-3	4-10	11-25
18	KEY, ROTARY	6839317	1			
19	NUT, BOLT PIN	6839312	1			
20	BUSHING	6839313	1			
21	WASHER, LOCK 5/16	6839338	2			
22	SCREW, ALLEN HEAD, 5/16-18 X 5/8	6839337	3			
23	HOUSING ASSY, CONTROL SHIFT TOWER		1			
24	HOUSING		1			
25	PIN		3			
26	PIN		2			
27	PLATE, NAME	6835351	1			
28	SCREW, DRIVE		2			
29	SPRING, LEVELER	6839318	1			
30	LEVELER	6839316	1			
31	PIN, KEY ROTARY	6839320	1			
32	CLUTCH-INNER	6839319	1			
33	RING, O, 1 1/8 O.D.	6839346	1			
34	COVER ASSY, CONTROL TOWER HOUSING		1			
35	COVER		1			
36	PIN		2			
37	WASHER, LOCK, 1/4	6839355	3			
38	SCREW, 1/4-20 X 1	6839339	3			
39	HOLDER, FUSE	6839335	1			
40	FUSE-OBTAIN LOCALLY-	SFE9	1			
41	INDICATOR	6839327	1			
42	SUPPORT, INDICATOR	6839328	1			
43	SPRING, CLUTCH	6839321	1			
44	CLUTCH-OUTER-	6839324	1			
45	RING, O, 2 1/8 O.D.	6839348	1			
46	HOUSING, SOLENOID CONNECTORS		1			
47	PIN, GUIDE	6839330	2			
48	WASHER, 17/64 X 1/2 X 1/16	6839326	2			
49	SCREW, 1/4-20 X 1 3/4	6839325	2			
50	SPRING, CVERRIDE	6839323	1			
51	SEAT, SPRING	6839322	1			
52	RING, RETAINER	6839331	1			
53	RING, O, 15/16	6839347	1			
54	SOLENOID, W/2 NO. 40 CONNECTORS-24 VOLT-	6839361	1			
55	GASKET	6839351	1			
56	COVER, SOLENOID	6839332	1			

CONTINUED ON NEXT PAGE

24 VOLT ELECTRIC CONTROL SHIFT TOWER, FIGURE 31-2 CONT

REF NO	NOMENCLATURE	PART NO	REQ	RECOMMENDED SPARES FOR UNITS		
				1-3	4-10	11-25
57	WASHER, LOCK, NO. 8	6839334	3			
58	SCREW, 8/32 X 1/2	6839333	3			
59	RING, O, 1 1/2 C.D.	6839350	1			
60	SCREW, 6-32 X 3/8-SELF TAPING-	6839341	4			
61	KIT ASSY, WIRING HARNESS	6839357	1			
62	TUBING, SHRINK	6839352	9			
63	PLATE ASSY, LIGHT SOCKET-24 VOLT TOWER -	6839360	1			
64	CLIP, RESISTOR		1			
65	RIVET		2			
66	RESISTOR, 24 VOLT TOWER	6839340	1			
67	SCREW, 6-32 X 3/8	6839341	4			
68	RING, O, 3/8 O.D.	6839349	1			
69	BULB-OBTAIN LOCALLY-	1816	1			

12 VOLT ELECTRIC CONTROL SHIFT TOWER, FIGURE 31-2

SAME AS 24 VOLT, EXCEPT FOR PARTS LISTED BELOW.

1	TOWER, SHIFT-12 VOLT-	6836514	1			
54	SOLENOID, W/2 NO. 40 CONNECTORS-12 VOLT-	6839329	1			
63	PLATE ASSY, LIGHT SOCKET-12 VOLT-	6839359	1			
64-66	NOT USED IN 12 VOLT SHIFT TOWER					

ALLISON POWERSHIFT TRANSMISSION 5640-5660-5840-5860 SERIES PARTS CATALOG

NOTES

SUPPLEMENTAL PARTS INFORMATION
(SPI)

ALLISON POWERSHIFT TRANSMISSION 5640-5660-5840-5860 SERIES PARTS CATALOG

NOTES

This is Rev. "C" to S.I.L. 340. Please destroy
your Rev. "B" copy.

SPI 340
Page 1 of 2
November 12, 1970
Revision "C"

Subject: Cancellation of Rear Oil Pump Assembly

Equipment Affected: CT, CLT, CBT, CLBT 5000 and 6000 Series
Transmissions

Effective Serial Number: 47641

The rear oil pump assembly, sometimes referred to as a push-start pump, has been eliminated from all models of the 5000 and 6000 series transmissions. The primary purpose of this pump was to "charge" the transmission converter to permit the vehicle to be started by pushing. However, since introduction, due to size and design of vehicles using these transmissions, push starting is impractical, therefore oil pump is not functionally required.

The part number changes necessary are as follows:

<u>New Part No.</u>	<u>Old Part No.</u>	<u>Qty.</u>	<u>Part Name</u>
6833673	677217 4	1	Housing Assy., Output Drive (Straight-thru Model)
	6750288	1	Snapring
	6768438	1	Pump Assy., Rear Oil
	6768437	1	Body, Rear Oil Pump
	6768439	1	Gear, Pump Drive
	6768350	1	Gear, Pump Driven
	676844 1	1	Cover, Rear Dump
	113989	9	Screw
	141195	1	Pin, Dowell

SPI 340
Page 2 of 2
November 12, 1970
Revision "C"

Interchangeability

New output drive housing assembly can be used on any 5000 or 6000 straight-thru model prior to S/N 47641 back to and including S/N 20549, but the push-start pump cannot be used. To service prior to S/N 20549 refer to Service Information Letter No. 480.

Spare Parts Information

Snapring P/N 6750288 will be maintained for servicing all transmissions prior to the Effective Serial Number (S/N) 47641.

All remaining old parts are hereby completely cancelled for customer service.

Rev. "C" IMPORTANT: When a push-start pump assembly is eliminated from output housing P/N 6772174, a spacer is required in the vacant space. Spacer P/N 6779160 has been released and is available for this purpose.

NOTE: This spacer is not for stack control, but a hydraulic plug for the exhaust port at this location - it must be used. Snapring P/N 6750288 is required to retain the spacer.

Service Manager
Transmissions Products

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Page 1 of 9
May 1, 1961

SUBJECT: Design Changes in Transmission Rear Cover Area

EQUIPMENT AFFECTED: 5640-5840-5940 Series Transmissions
(Straight-thru Models only).

EFFECTIVE SERIAL NUMBER: S/N 20549

The transmission rear cover area of 5640-5840-5940 Series transmissions has been redesigned to increase the durability of the rear output bearing and to reduce the injurious effects of driveline thrust and vibration.

In this redesign, the rear cover was strengthened, the span between the output bearings was increased, forced lubrication to the rear bearing was provided. Also, two bolts were added to the rear cover to provide greater rigidity and to prevent washing out of the rear cover gasket. In addition, the flange retaining bolts, in 5640 and 5840 models, were replaced by a self-locking nut.

The parts changes are as follows:

<u>New Part No.</u>	<u>Old Part No.</u>	<u>Part Name</u>
6772174	6769984	Cover Assembly, Transmission Rear
6772162	6771966 & 6771965	Gasket, Rear Cover Gasket, Rear Cover
271569		Bolt, Rear Cover (2)
103325		Washer, Rear Cover Bolt (2)
6772171	6770834	Housing Assembly, Transmission
6772163	6770095	Shaft, Output (5640-5840)
6772163	6770823	Shaft, Output (5940)
6772166	6768503	Retainer Assembly, Rear Bearing
6772161	6758563	Gasket, Rear Bearing Retainer
271560	186725	Bolt, Rear Bearing Retainer (8)
103325	103323	Washer, Rear Bearing Retainer Bolt (8)
6772155	6771332	Gear, Speedo Drive
6772158	6771331	Gear & Shaft Assembly, Speedo Drive
6772154	6759537	Spacer, Speedo Gear
6768722		Pin, Speedo Gear Lock
6772182	6771067	Nut, Output Flange Retaining

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<u>New Part No.</u>	<u>Old Part No.</u>	<u>Part Name</u>
	9409059	Bolt, Output Flange Retaining (2)
	6768324	Washer, Output Flange Retaining
	6755269	Lockstrip, Output Flange Bolt (The new nut supersedes the old nut, in 5940 models; the bolts, washer and lockstrip, in 5640-5840 models.)
6772116	6769940	Flange, Output
6772116	6769630	Flange, Output
6772116	6768526	Flange, Output
6772168	6769939	Flange, Output
6772168	6771437	Flange, Output
6772186	6770662	Flange Assembly, Output
6772172	6769993	Flange
6772551	6770597	Lever, Parking Brake Apply
6772550	6772511	Lever, Parking Brake Apply

The relative positions of the new parts are shown in Sketch No. 5.

EFFECT ON INTERCHANGEABILITY: The changes detailed in this letter became effective in production with transmission serial number 20549, therefore all transmissions with serial numbers above S/N 20548 contain the new parts and must be serviced with the new parts. In addition, a number of transmissions with serial numbers below S/N 20549 have been modernized. These units, which are identified by the letter "V" stamped on the nameplate, also require the new parts for service.

Of the new parts, only the housing assembly, P/N 6772171, and the output flange retaining nut, P/N 6772182, may be used individually as replacements for the parts they supersede. (The superseded nut was used on 5940 models only.) If any of the other new parts are used in transmissions with serial numbers below S/N 20549, which do not bear the letter "V", the entire group of new parts must be used.

The superseded parts may be used in only those transmissions which have serial numbers below S/N 20549, which do not bear the letter "V".

The old transmission housing may be reworked to accept the new rear cover assembly by drilling and tapping two additional bolt holes. A rework procedure is given on page 3.

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SPARE PARTS INFORMATION: All old parts in spare parts stock should be used.

A supply of all old parts, except the housing assembly, P/N 6770834, and the nut, P/N 6771067, will be maintained for service.

HOUSING REWORK PROCEDURE: For best results, all parts should be removed from the housing before the drilling operation is performed. This will make it easier to remove the cuttings. The drilled holes must be accurately located and must be drilled square with the face of the housing. Either of the methods given below may be used.

1. Special Template

- a. Fabricate a special template similar to the one illustrated in Sketch #2. Please note that this sketch shows only how to make the template. It does not show how to drill the holes.
- b. Install the template on the right side of the housing, as shown in Sketch #3. Use a rear cover dowel pin and a 5/8-11 bolt to align the template, making sure that the curved portion is flush with the I.D. of the housing. Mark the location of the right side hole with a center punch. NOTE: The dowel pin required for this operation may be removed from the old rear cover or may be made by turning down a piece of 3/4" rod to .745" O.D.
- c. Turn the template over and install it on the left side of the housing. Align as in Step b. Mark the location of the left side hole with a center punch.
- d. Mask the oil passages directly below the points where the holes are to be drilled. This will prevent cuttings from getting into the passages.
- e. Drill the holes to a maximum depth of 1.27". (See Sketch #1)
NOTE: Both holes will break through.
- f. Tap the holes to a minimum full thread depth of 1.04".

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2. Rear Cover for Template

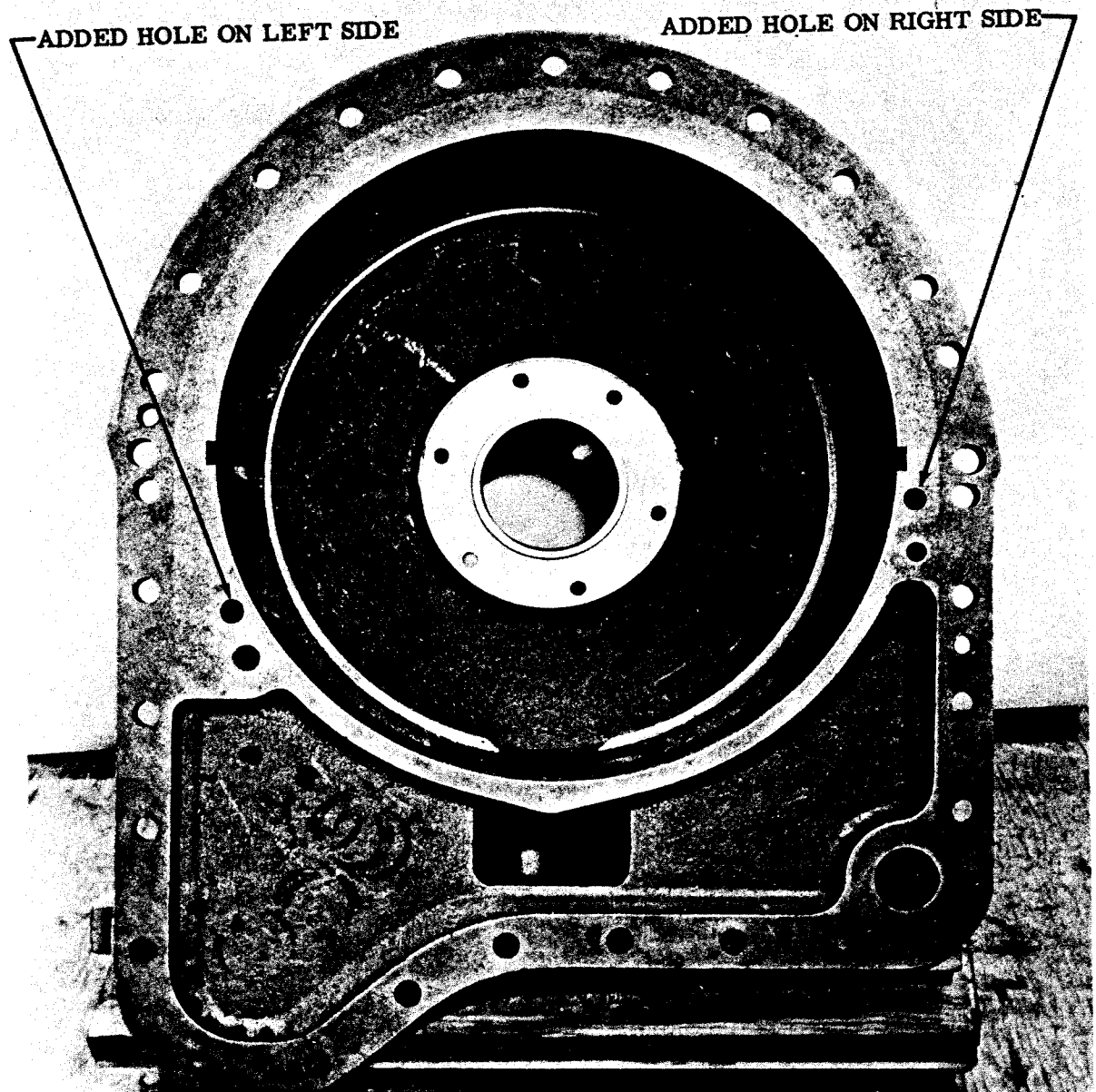
- a. Fabricate a special center punch as shown in Sketch #4.
- b. Install the new rear cover assembly, P/N 6772174, on the transmission housing.
- c. Insert the special center punch in the bolt holes in the rear cover and mark the hole locations on the transmission housing.
- d. Remove the rear cover and drill and tap the two holes in the transmission housing. (Steps d., e., and f. above.)

Before reassembling the transmission, make sure that all cuttings are cleaned out and that all oil passages are free of obstructions.

Service Manager - Transmissions Operations

SKETCH NO. 1

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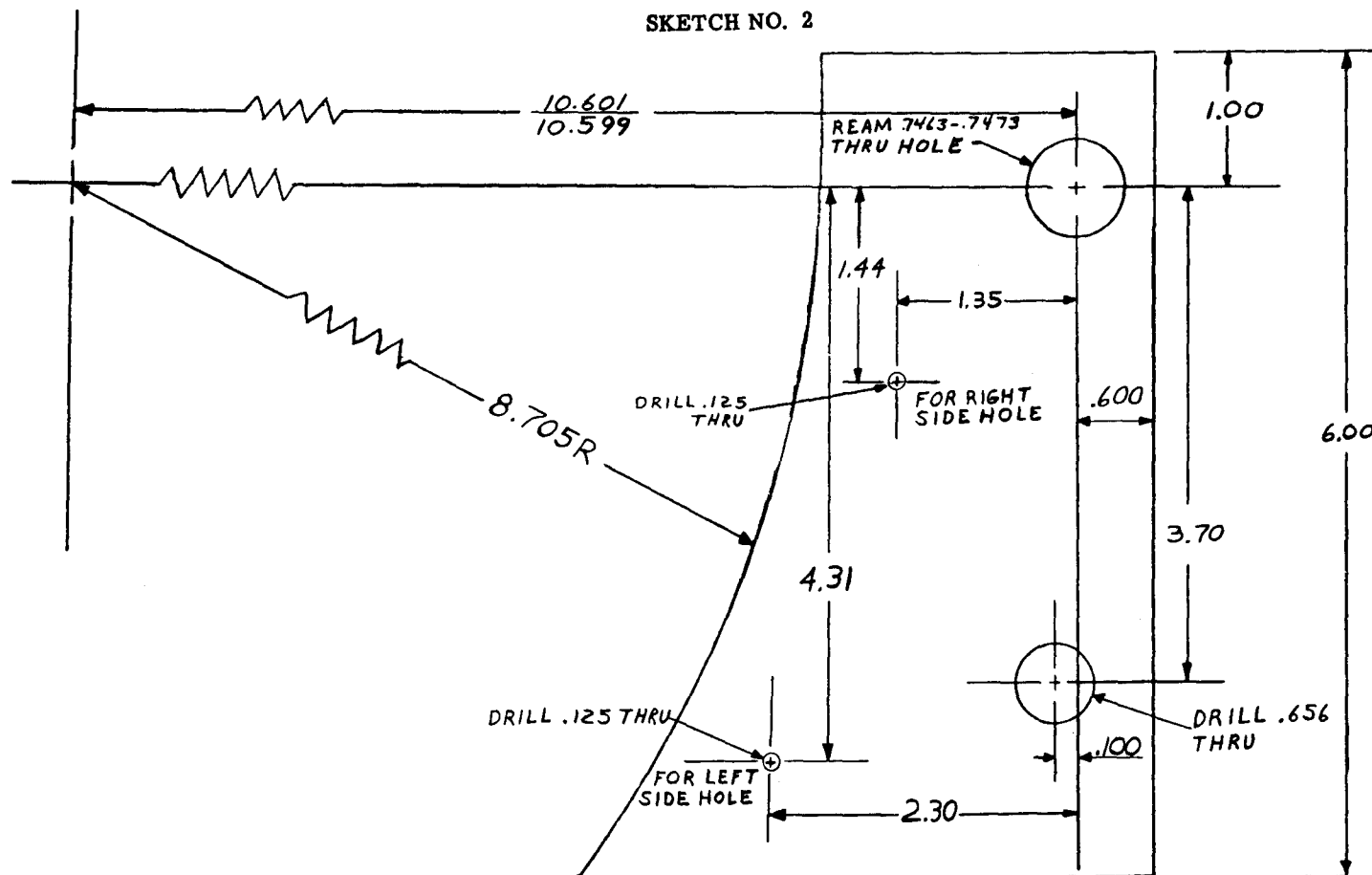


DRILL TWO HOLES AS SHOWN - $17/32$ DIA. TO 1.27 MAXIMUM DEPTH

TAP BOTH HOLES - $5/8-11$ UNC-2B - 1.04 MINIMUM FULL THREAD

REAR VIEW OF TRANSMISSION HOUSING
5640-5840-5940 SERIES

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May 1, 1961

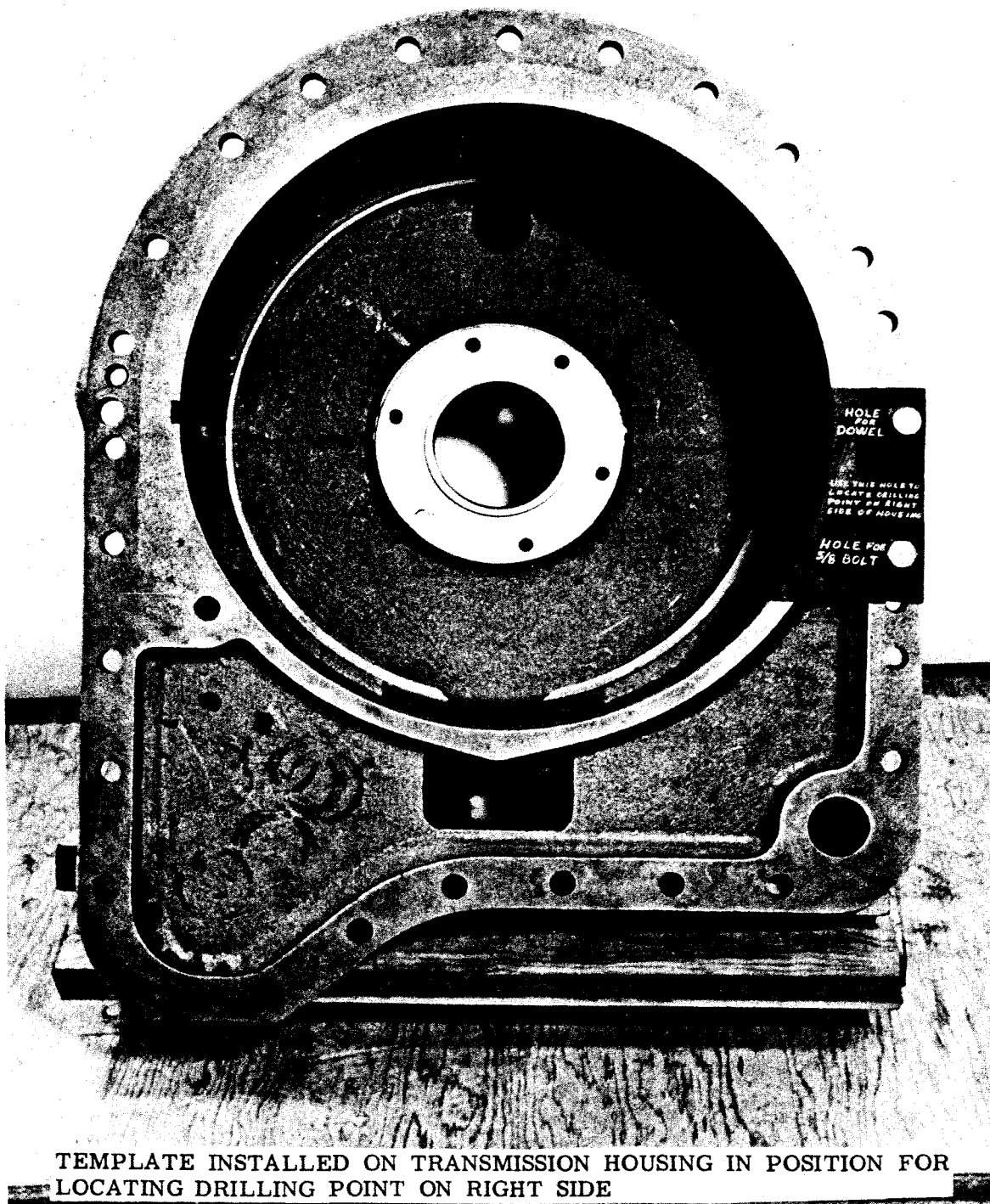


THIS DRAWING IS NOT TO SCALE. DO NOT USE FOR A PATTERN

TEMPLATE TO LOCATE ADDITIONAL BOLT HOLES IN TRANSMISSION
HOUSING - 5640-5840-5940 SERIES TRANSMISSIONS

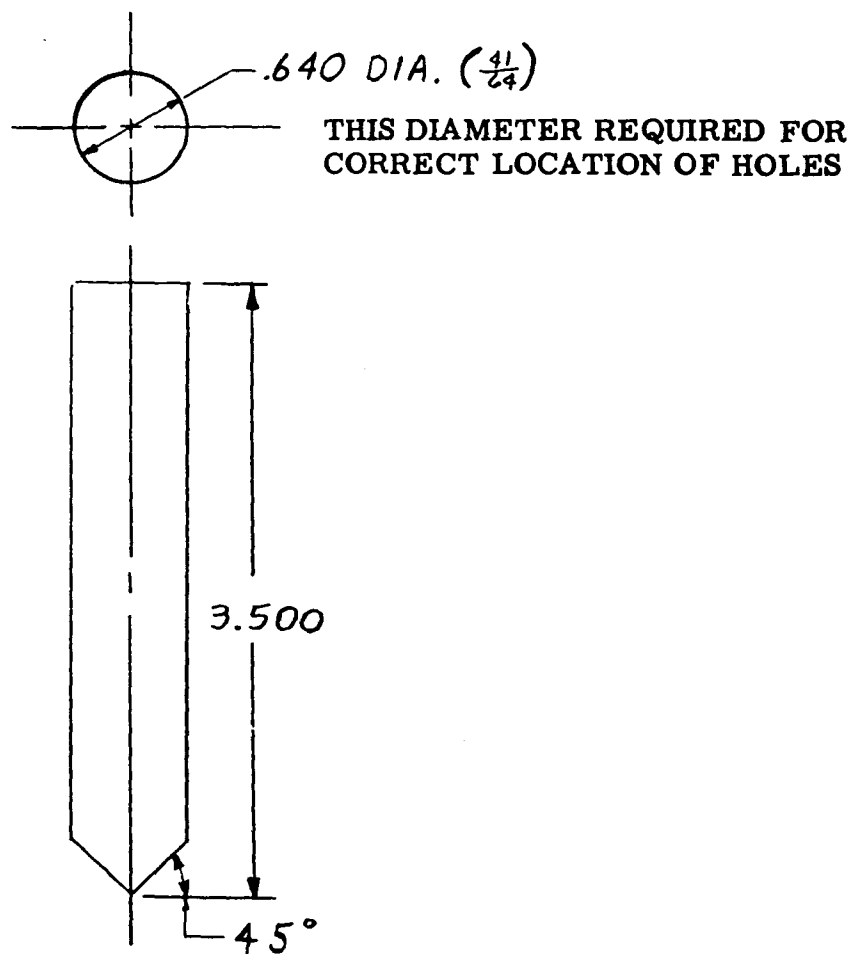
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SKETCH NO. 3



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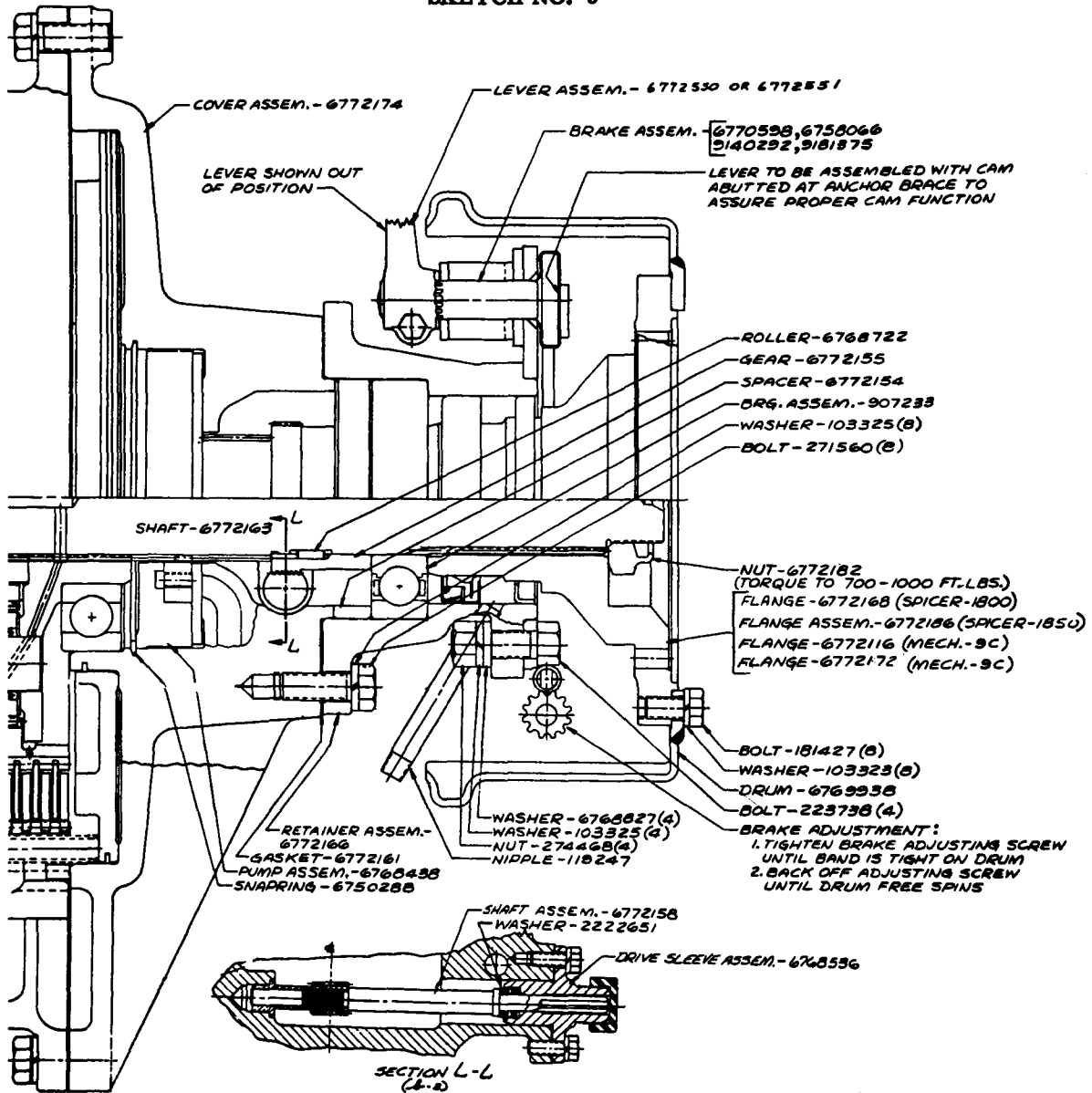
SKETCH NO. 4



CENTER PUNCH TO BE USED TO
LOCATE DRILLING POINTS FOR
ADDITIONAL HOLES IN TRANS-
MISSION HOUSING - 5640-5840-5940
SERIES TRANSMISSIONS

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SKETCH NO. 5



SPI 533
Page 1 of 3
December 5, 1962

Subject: Change In Transmission Breather

Equipment Affected: HT-70 Transmissions
4000 Series Transmissions
5640-5840-5940 Series Transmissions
5660-5860-5960-6060 Series Transmissions

Effective Serial Numbers: S/N 162 - HT and 4000 Series
S/N 28566 - 5000 and 6000 Series
(S/N 28547 and S/N 28503 also conform.)

In certain machines, the breather on the transmission is virtually inaccessible. As a result, it is rarely serviced and eventually becomes completely clogged with dirt.

As a solution to this problem, a new breather arrangement has been released. With this arrangement, the breather can be left in its original position, or, with the addition of necessary connecting parts, can be mounted elsewhere on the machine. Or, a hose can be run from the transmission housing to the engine crankcase, thus allowing the transmission to breathe through the crankcase breather filter. (In this case, pressurization of the transmission should not exceed 2 psi.)

The old breather, P/N 1528732, has been replaced by a new breather, P/N 6774565, and a plug assembly, P/N 6774301. The plug assembly provides a 1/4" NPSC female straight pipe thread at the present breather opening in the transmission housing. The nipple will accommodate either the new breather or a hose connection. (See sketches on Pages 3 and 4.)

Although the old breather will be available for service on older transmissions, the new plug assembly and breather can be installed if desired.

Caution: Only one breather is required - do not install a second breather on the fill tube.

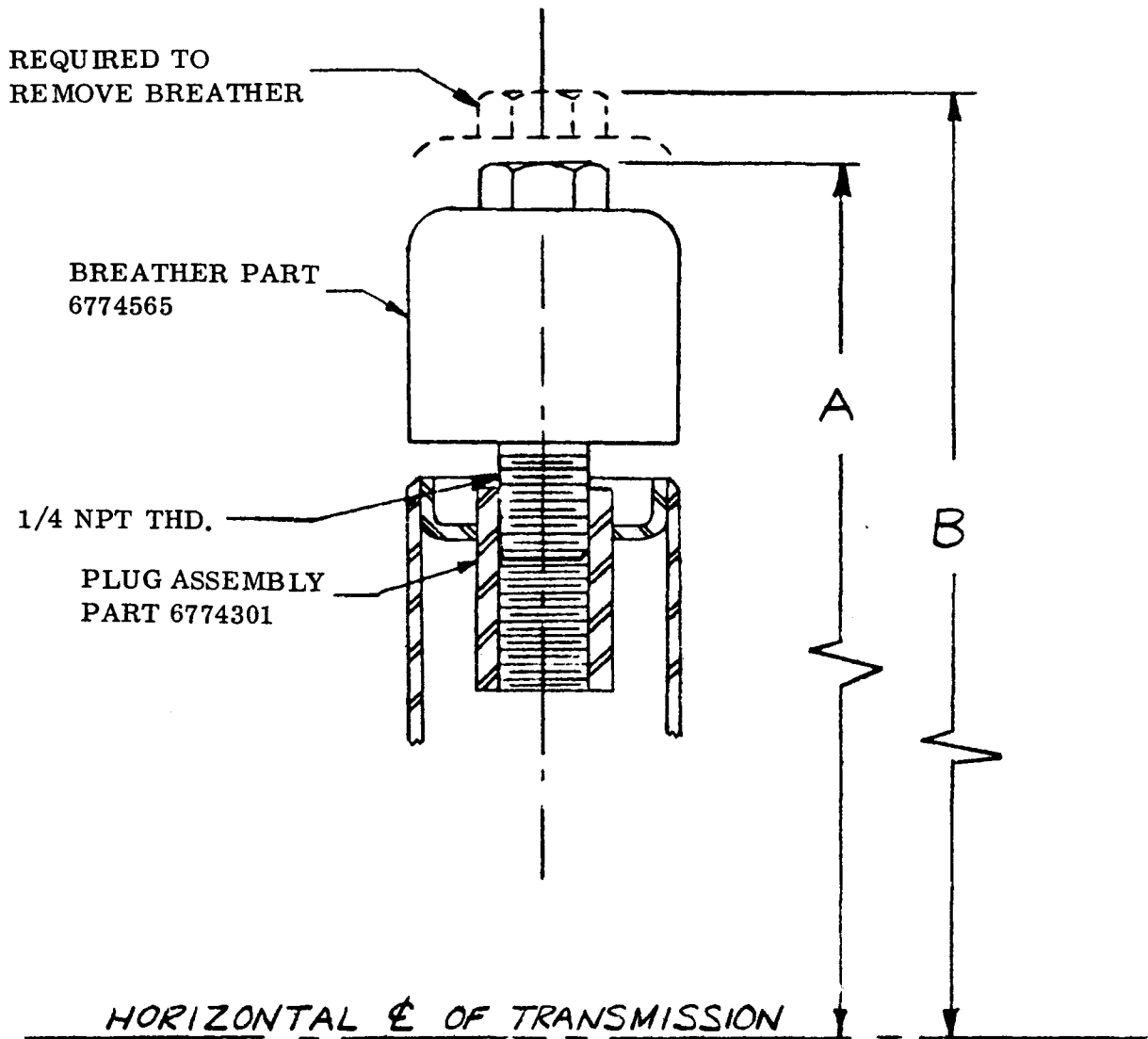
Oil fill tube covers or openings should fit tightly to prevent dirt infiltration.

Spare Parts Information

All old breathers, P/N 1528732, in spare parts stock, should be used in transmissions which have serial numbers below the starting serial numbers listed above.

INSTALLATION DIMENSIONS

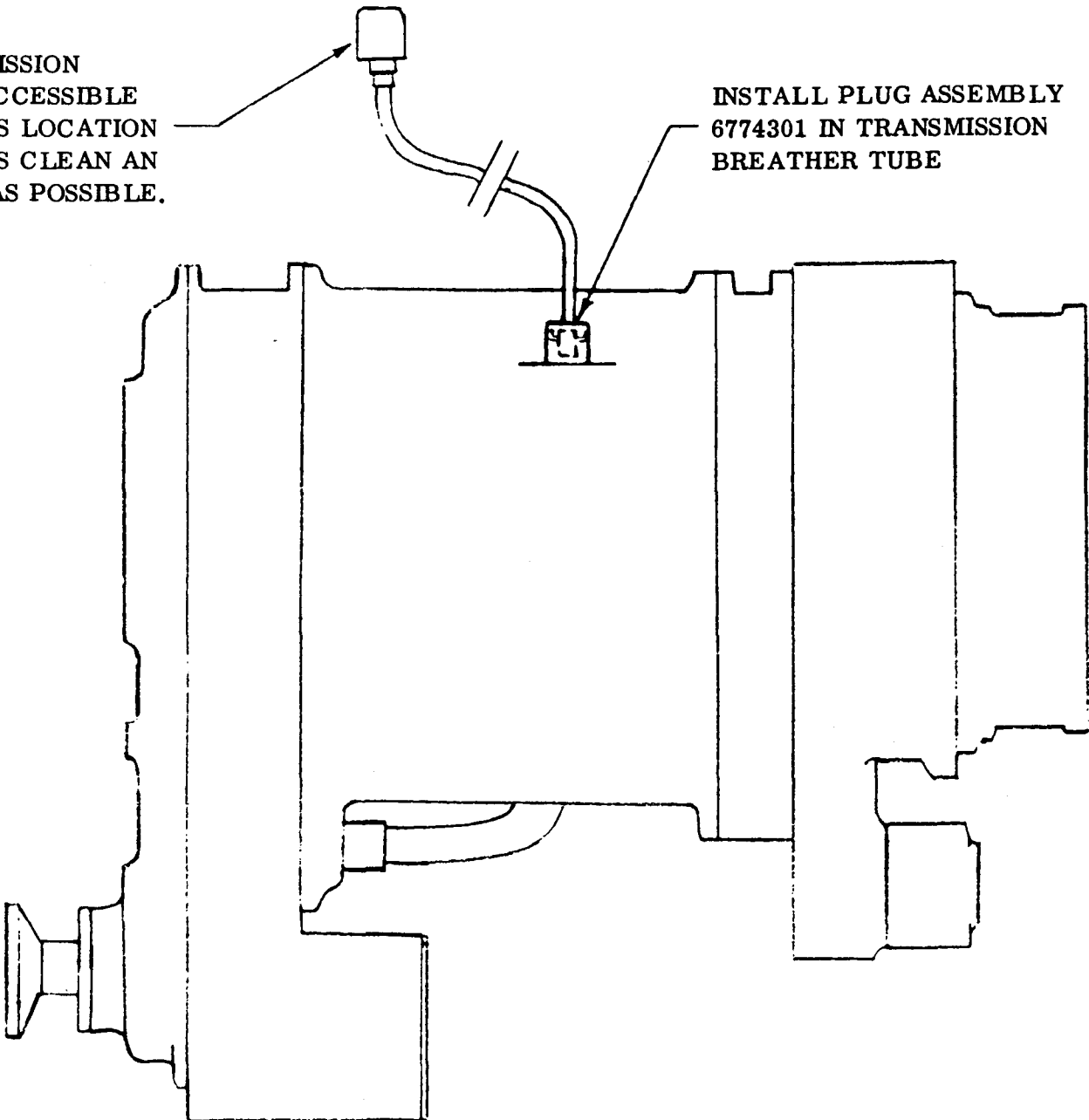
TRANSMISSION	A	B
HT 70 & 4460	8.89 Max.	9.29 Max.
5000 & 6000	9.82 Max.	10.22 Max.



BREATHER ASSEMBLY
HT 70, 4000, 5000, & 6000 SERIES
TRANSMISSIONS

MOUNT TRANSMISSION
BREATHER IN ACCESSIBLE
LOCATION. THIS LOCATION
SHOULD BE IN AS CLEAN AN
ENVIRONMENT AS POSSIBLE.

INSTALL PLUG ASSEMBLY
6774301 IN TRANSMISSION
BREATHER TUBE



Service Manager
Transmissions Products

Revision Note: The purpose of this revision is to add spindle bolt and washer part numbers and to clarify interchangeability and spare parts information. Please destroy your old letter.

SPI 557
Page 1 of 5
Rev. "B" 6-5-64

Subject: Increased Capacity Bearing For Accessory Drive Idler Gear

Equipment Affected: 5630 and 5631 Series Transmissions
5640, 5840 and 5940 Series Transmissions
5660, 5860, 5960 and 6060 Series Transmissions

A new accessory drive idler gear bearing has been released for use in all 5000 series and 6000 series transmissions except CRT-5000 models which do not have a side-mounted P.T.O. The change was made to provide a bearing which has a greater capacity to absorb the loads imposed by the power take off and the charging pump.

The new bearing is thicker than the old bearing and has a larger O.D., therefore it was necessary to also change the accessory drive idler gear, the spindle and the converter housing.

The part number changes are listed below.

5640, 5660, 5840, 5860, 5940, 5960 and 6060 Series

<u>New Part Number</u>	<u>Old Part Number</u>	<u>Part Name</u>
901310	901210	Bearing, Accessory Drive Idler Gear
6774736	6759021	Spindle, Accessory Drive Idler Gear
6774735	6756368	Gear, Accessory Drive Idler
8892840	6753893	Snpring, Accessory Drive Idler Gear
6774718	6770830	Housing Assy., Converter
6774719	6773401	Housing Assy., Converter
6774725	6770858	Housing Assy., Converter
6774726	6770212	Housing Assy., Converter
6774726	6771391	Housing Assy., Converter (6774726 supersedes both 6770212 and 6771391)
6774727	6770211	Housing Assy., Converter
6774729	6773911	Housing Assy., Converter
6774731	6771654	Housing Assy., Converter
6774732	6770210	Housing Assy., Converter
6774733	6770209	Housing Assy., Converter

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 Page 2 of 5
 Rev. "B" 6-5-64

Models with a top PTO require two gears, two bearings, and two spindles.

NOTE: Old housings which have sufficient wall thickness in the spindle bore area can be reworked to the new configuration. See "Converter Housing Rework Procedure" below and sketches on Page 4.

CRT-5630 and CRT-5631 Series (Except models which do not have a side-mounted PTO)

<u>New Part Number</u>	<u>Old Part Number</u>	<u>Part Name</u>
901310	903210	Bearing, Accessory Drive Idler Gear
6774736	6756364	Spindle, Accessory Drive Idler Gear
6774735	6756368	Gear, Accessory Drive Idler
8892840	6753893	Snpring, Accessory Drive Idler Gear
6774716	6771646	Housing Assy., Converter
179891	179867	Bolt, Spindle
103323	103322	Washer, Spindle Bolt

NOTE: Old CRT-5630 and CRT-5631 housings can not be reworked to the new configuration.

Effect on Parts Interchangeability

The new spindle P/N 6774736 can be used to replace the old spindle P/N 6759021 but cannot be used to replace spindle P/N 6756364. Neither of the old spindles can be used in place of the new spindle. None of the other new parts are interchangeable, individually with the old parts. The new parts may be used for service in all transmissions but must be used as a group.

NOTE: The sketches on Page 5 will be of help in identifying the service parts required in a specific transmission.

Spare Parts Information

All old parts in spare parts stock should be used. All parts except housings and spindle 6759021 should be maintained for service.

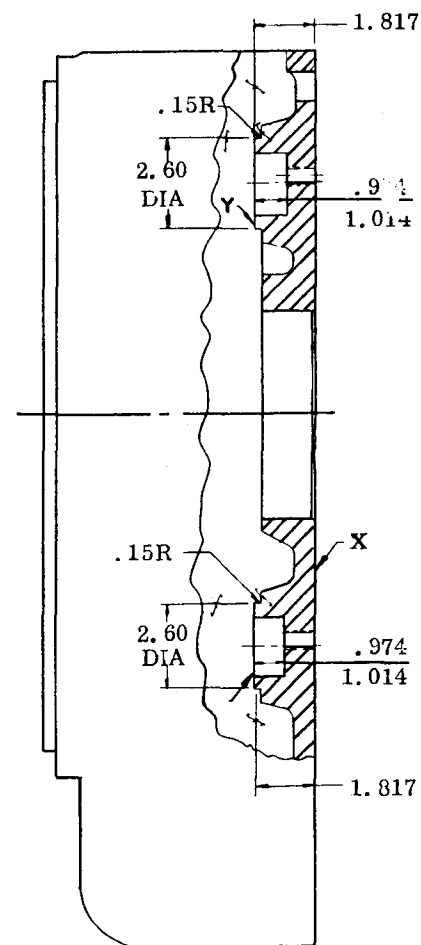
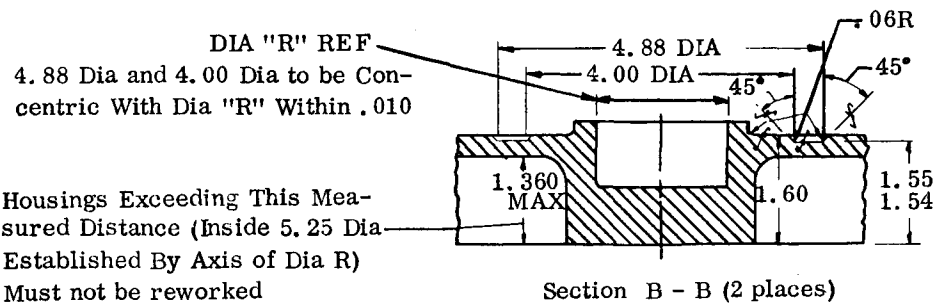
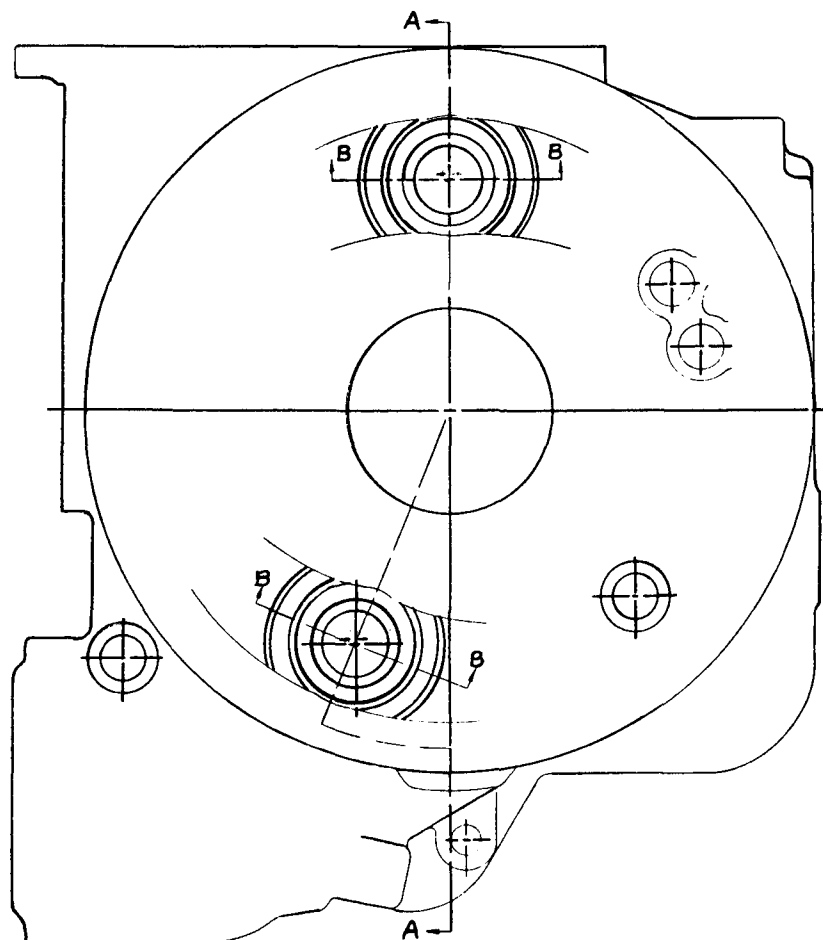
SPI 557
Page 3 of 5
Rev. "B" 6-5-64

Converter Housing Rework Procedure

1. Measure the depth of the cast vane cavities on the rear face of the converter housing. If the depth of the cavities adjacent to the spindle bores, inside a 5.25 circumference established by the centerline of the bore, exceeds 1.360", the housing must not be reworked. See Section B-B on Page 4.
 2. Completely disassemble the converter housing assembly, including the removal of the idler gears and spindles.
 3. Machine the housing to the dimensions given in Section A-A and B-B on Page 4. Make sure the housing is clean and free of burrs.
 4. Install the bearing P/N 901310 into the idler gear P/N 6774735, with the bearing manufacturers identification on the side opposite the snapping groove. Install the snapping P/N 8892840, making sure it is fully seated.
 5. Install a straight shank headless guide pin into the spindle retaining bolt hole. Position the idler gear and bearing assembly over the spindle bore. The snapping side of the gear should be next to the converter housing.
 6. Grease the spindle P/N 6774736 and the spindle bore. Insert the spindle over the guide pin and into the bearing and spindle bore. The spindle must be perfectly centered over the guide pin. Press or drive the spindle into the bore until it is fully seated.
- NOTE: The fit between the spindle and its bore, and between the spindle and the bearing I. D. is an interference fit. If facilities are available, the spindle can be chilled in dry ice for thirty minutes prior to installation. It can be installed easily, but any position corrections must be made immediately before the spindle seizes to the housing.
7. Remove the guide bolt and install the regular retaining bolt and lockwasher. Tighten the bolt to 67-80 ft. -lbs. torque.

Service Manager
Transmission Operations

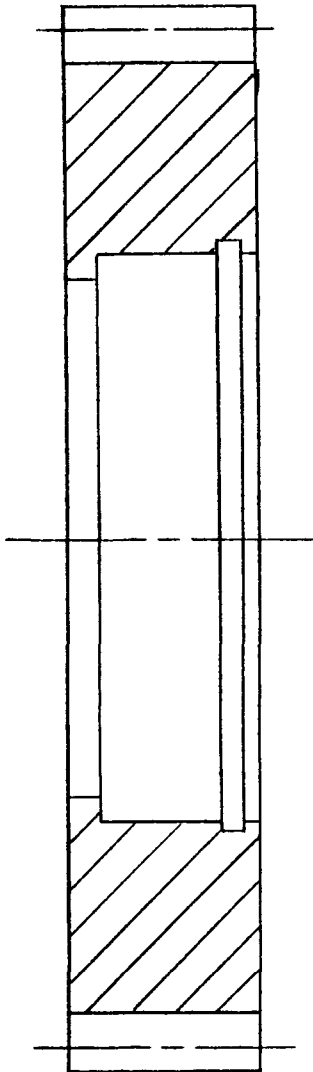
SPI 557
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August 9, 1963



Section A - A

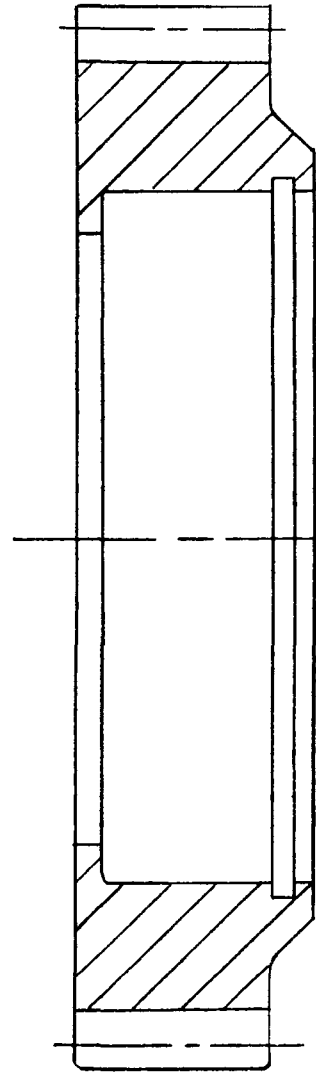
Surfaces Y Must be Parallel
With Surface X Within .003

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Page 5 of 5
August 9, 1963



CROSS-SECTION OF
GEAR P/N 6756368

THIS GEAR IS FOR USE WITH
THE OLD HOUSING
& BEARING. EITHER
SPINDLE CAN BE USED



CROSS-SECTION OF
GEAR P/N 6774735

THIS GEAR IS FOR USE WITH
THE NEW HOUSING,
BEARING & SPINDLE

SPI 576

Page 1 of 6

Rev. "B"

April 12, 1968

This is Rev. "B" to S.P.I. 576 to reflect 5660 and 5860 trimmer changes. Please destroy your original copy.

Subject: Oil Pressure and Clutch Trimmer Changes

Equipment Affected: 5640, 5660, 5840, 5860, 5940, 5960 and 6060 Series Transmissions (Note: 5640, 5840 and 5940 series transmissions are affected by the pressure change but not by the trimmer changes)

Rev. "B" Effective serial Number: Pressure Changes - 38793 - All 5640, 5840, 5660 & 5860
- 37997 - All 5960 and 6060
Trimmer Changes - 36359 - All 5960 and 6060
- 44678 - All 5660 and 5860

When a series of hydraulic clutches are used in a transmission, it is necessary to "time" the clutches to prevent excessive slippage, shift shock, overlap and engine runaway. The timing is done primarily by one or more trimmer valves which control the oil flow to the clutch pistons. If the oil flow is somewhat restricted, the clutch plates will slip and the clutch-up will be smooth; however, excessive slippage can cause the clutch plates to overheat and eventually fail. If the flow is not restricted or is restricted very little, the clutch-up will be severe.

In the original design of the 6061 series, the intermediate clutch was timed to apply faster than the same clutch in earlier models. The low and reverse clutches were timed to apply slower than in earlier models. This timing arrangement has proved so effective that it is now being released to all 5000 and 6000 series transmissions which include the six-speed manual valve body.

Another 6061 design feature being released to all 5000 and 6000 series transmissions (except CRT 5000 series) is a single main oil pressure schedule. Originally, two pressure schedules were required. In low range and reverse range, main oil pressure was approximately 50 to 70 psi higher than it was in the other ranges. In the 6061 design, the pressure is the same in all ranges. This change was made by designing the main pressure booster plug so that it no longer functions as a valve. It now simply blocks the booster signal oil passage so that booster pressure can have no effect on the main pressure regulator valve.

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Rev. "B"

April 12, 1968

With the use of the new booster plug, main pressure is as follows for all models:

<u>Range</u>	<u>Conditions</u>	<u>Pressure Limits</u>
All	1500 rpm input speed Output stalled	170-185 psi
All	Full throttle, normal operating output speed	170-210 psi

Rev. "B" Parts Changes (Trimmer Valve Changes)

<u>New Part No.</u>	<u>Old Part No.</u>	<u>Part Name</u>
6776682	6774327	Valve Body Assy. (5960, 6060), Control
6831252	6776682	Valve Body Assy. (5660, 5860), Control
6776679	6773191	Valve, Neutral Trimmer
6776678	6773191	Valve (5960, 6060), Intermediate Trimmer
6773191	6776678	Valve (5660, 5860), Intermediate Trimmer
6776676	6759965	Spring, Outer Inter. Trimmer Valve
6776677	None	Spring (5960, 6060), Inner Inter. Trimmer Valve
None	6776677	Spring (5660, 5860), Inner Inter. Trimmer Valve
6770530	6759968	Stop (5960, 6060), Inter. Trimmer Valve
6759968	6770530	Stop (5660, 5860), Inter. Trimmer Valve
6776675	6759271	Cover, Valve Body End
6776681	6773196	Plate, Oil Transfer (see Item 5 below)

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Rev. "B"

April 12, 1968

Description of Changes

1. Neutral trimmer valve 6773191 has a .051-.053 diameter orifice. Neutral trimmer valve 6776679 has a .040-.042 diameter orifice. This change increases the time required to apply low and reverse ranges.
2. Intermediate trimmer valve 6773191 has a .051-.053 diameter orifice. Intermediate trimmer valve 6776678 has a .069-.071 diameter orifice and a dot of green paint for identification. This change decreases the time required to apply the intermediate clutch.
3. The only difference between spring 6759965 and spring 6776676, and between cover 6759271 and cover 6776675, is a dot of green paint for identification purposes. Parts with the green dot must be assembled together. This is to prevent the interchanging of the two trimmer valves.
4. Valve stop 6759968 has a 3/4" O. D. Valve stop 6770530 has a 1/2" O. D. This change was required by the addition of an inner spring 6776677 to the intermediate trimmer valve spring. The new stop fits inside the inner spring.
5. Main oil going from the valve body to the intermediate clutch passes through a hole in the oil transfer plate. In the old plate 6773196, the hole is 1/4" in diameter. In the new plate 6776681, the hole is 1/2" in diameter. The larger hole allows the apply oil to move to the clutch faster and in greater volume.

Note: The old plate can be reworked to the new configuration by reworking as shown on the attached sketch.

Parts Changes (Pressure Changes)

<u>New Part No.</u>	<u>Old Part No.</u>	<u>Part Name</u>
6776683	6770558	Valve Body Assy. , Main Pressure Regulator
6776683	6770633	Valve Body Assy. , Main Pressure Regulator
(6776683 replaces both 6770558 and 6770633)		
6776689	6770077	Filter Adapter Assy. (And Main Pressure Regulator Valve Body)
6776688	6770078	Valve Body Assy. , Main Pressure Regulator