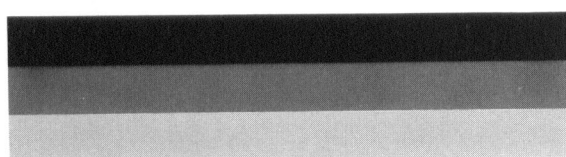


**FUNK
MANUFACTURING
COMPANY**

A horizontal bar composed of three segments: a thick black segment on the left, a medium-thick grey segment in the middle, and a thin white segment on the right.

PARTS LIST

SPEC 8684 MODEL HMD 334NVC

FUNK MANUFACTURING

This parts list is divided into two sections, which are Bill of Material and drawing documents. The drawings are listed either in build level sequence directly associated to B/M levels or in alpha-numerical order. The drawing documents can be found in the back of the parts book following the B/M.

The B/M represents the stage or levels at which the transmission is assembled. These levels also refer to the reference numbers on the supporting drawings.

The drawings which support these build levels can be found in the information narrative on the right side of the B/M. The drawing will be listed as "asm per" followed by a drawing number, or if it uses the drawing number of the component part number it will be listed as a "drawing" in the narrative. When the word "drawing" appears in the information narrative, you will only find a drawing in the book if the component parts are serviceable.

To determine the part number of the required part, look through the drawings and locate the part needed. Then note the drawing number in the lower right hand corner and the reference number of the particular part required. Now go to the B/M listing and find that drawing number appears in the "asm per" narrative or in the component part column when "drawing" is used as the narrative. Now the part number can be determined by dropping down to the next build level and matching the reference number noted from the drawing with the right hand portion of the reference number on the Bill of Material.

EXAMPLE:

1	(1st level)	XXXXXXX	ASM FRT CVR SERV	1.00
			**ASM PER XXXXXXXX	
1-1	(2nd level)	XXXXXXX	ASM FRT CVR SERV	1.00
			REPL XXXXX FOR SERV.	
			**ASM PER XXXXXXXX	
			N/A XXXXX & XXXXX SEL	
1-1-1	(3rd level)	XXXXXXX	CVR.FRT ASM SERV	1.00
			REPL XXXXX FOR SERV.	
			**ASM PER XXXXXXXX	
			N/A XXXXX & XXXXX SEL	
			(NON SERVICEABLE DETAILS)	
1-1-2	(3rd level)	XXXXXXX	SEAL RING	1.00
1-1-3	(3rd level)	XXXXXXX	COVER, OIL PASSAGE	1.00
1-1-4	(3rd level)	XXXXXXX	CAPSCREW	3.00
1-1-5	(3rd level)	XXXXXXX	ASM, VLV CONV	1.00
			DRAWING (NON SERVICEABLE	
			DETAILS ASM DWG NOT INCL)	
1-1-6	(3rd level)	XXXXXXX	PLUG PIPE	1.00
3	(1st level)	XXXXXXX	CONV. ASM	12.75
			DRAWING	1.00
3-1	(2nd level)	XXXXXXX	IMPELLER CONVERTER	1.00
3-2	(2nd level)	XXXXXXX	HUB, IMPELLER	1.00
3-3	(2nd level)	XXXXXXX	O RING	1.00
3-4	(2nd level)	XXXXXXX	CAPSCREW	12.00

** SUPPORT DRAWING

SPEC. NO.
8684

DESCRIPTION
HMD334NVC

ENG. REVISION #C 7/30/80 ECM
9.39, 4.54, 2.97, 1.44, REF 101 & 103 OPP
INPUT: REF 102 INPUT SIDE: REF 3 INC.
SPEED DRIVE

REFERENCE NO.

COMPONENT PART

DESCRIPTION

DRAWING

QTY.

0

HMD334XXX

ASM. DROP TRANS

1-00
FOR ASM-SEE ASM DWG HMD334XXX B/M

0-1-1

40281135

IAG GROUP

1-00 BILL OF MATERIAL

0-1-2

4028947

TAG, WARNING

1-00

0-1-2

4003228

TAG, APPROVAL

1-00

1

4031750

GRP ADAPTER HSG

ASM PER HMD332XXX, HMD334XXX OR

1-1

4031377

HVD. MTR. ADAP.

1-00

1-2

F73125250

SEAL RING

1-00

1-3

F1006024

CAPSCREW

4-00

1-4

F15006

STARWASHER

3-00

1-5

F18006

WASHER

1-00

1-2

4031896

ASM. COUPLING

DRAWING

3

4033252

GRP. TRANS. DROP

1-00
ASM PER 4033001 DWG: N/A-4033150 SEL

3-1

4033220

CASE GROUP

1-00
ASM PER APPLICABLE TRANS GRP DWG
N/A 4033232

3-1-1

4033032

CASE, MAIN

1-00

3-1-2

F402208

BEARING

1-00

3-1-3

F41308

BEARING

1-00

3-1-4

F40407

BEARING

1-00

3-1-5

F41310

BEARING

1-00

3-1-6

F40408

RETAINER, BEARING

1-00

3-1-7

40330061

GASKET BRG RET

1-00

3-1-8

F1007016

CAPSCREW

6-00

3-1-9

F17007N

WASHER, FLAT

6-00

3-1-10

4029006

RETAINER BEARING

1-00

3-1-11

4029014

GSKT

2-00

3-1-12

F1004016

CAPSCREW

8-00

3-1-13

F17004N

WASHER, FLAT

10-00

3-1-14

4031729

ASM SHIFT CAP

1-00
ASM PER 4033002; N/A 4033119&SEE CRY

3-1-15

4030079

CAP, SHIFTER

1-00

3-1-16

F6E021

OIL SEAL

1-00

3-1-17

F2531224

PIN, ROLL

1-00

3-1-18

F40187204

SPRING

1-00

3-1-19

F74000120

BALL

1-00

3-1-20

4031953

ASM SHFT BRKT

1-00

3-1-21

40312752

FORK SHIFTER

1-00

BILL OF MATERIAL

9684 SPEC. NO.

DESCRIPTION
FMD334NVC

ENG. REVISION #C 7/30/80 ECN 103 OPP
9-397-4-54-2-97-1-44:REF 101 & 3 INC.
INPUT SIDE:REF
SPEED DRIVE

[illegible]

DESCRIPTION
FMC334NVC
SPEC. NO. 9684
ENG. REVISION #C 7/30/80 ECM
9-39-5-54-2-97-1-44-REF 101 & 103 OPP
INPUT:REF 102 INPUT SIDE:REF 3 INC.
SPEEDO DRIVE

REFERENCE NO.	COMPONENT PART	DESCRIPTION	QTY.	DRAWING
3-2-5-1-2	4031021B	GEAR, 2ND STAGE	1-00	ASM PER 4034210 DWG R/M
3-2-5-10P	F4602610P	BEARING	2-00	
3-2-5-6	40311366	GEAR, 2ND STAGE	1-00	
3-2-7	40311728	ASM GEAR	1-00	
3-2-7-1	4031017B	GEAR 2ND STAGE	2-00	BILL OF MATERIAL
3-2-7-2	F4602611	BEARING, THR, 2STG	1-00	
3-2-8	40311011	ASM SHAFT	1-00	
3-2-9	40311757	GEAR, 3RD STAGE	1-00	
3-2-10	40311022A	GEAR, 3RD STAGE	1-00	
3-2-11	40311022A	GEAR, 3RD STAGE	1-00	
3-2-11	40311814	GEAR, 3RD STAGE	1-00	
3-2-11	40290018	COLLAR, SHIFTING	2-00	
3-2-11	40290009	WASHER, THRUST	1-00	ASM PER 4034212 DWG R/M
3-2-11	40311602	ASM GEAR	1-00	
3-2-11	4030025A	GEAR OUT 53T	1-00	
3-2-11	F4603016P	BEARING	2-00	
3-2-11	4031069	SPCR OUT SHF	1-00	ASM PER 4034208 DWG R/M
3-2-11	40311605	ASM, GEAR	1-00	
3-2-17-1	40300268	GEAR OUTPUT SHAFT	1-00	
3-2-17-2	F4603016P	BEARING	1-00	
3-2-17-3	F460308P	BEARING	1-00	ASM PER DWG 4033004 W/A 4031773 & SEE CRT
3-2-17-4	F46030069	WASHER, THR, SHAFT	1-00	
3-2-17-5	40311732	GRP, OUTPUT SHAFT	1-00	
3-2-17-6	40311732	GRP, OUTPUT SHAFT	1-00	
3-2-17-7	40333041	SHF OUTPUT	1-00	1-00 2-00 1-00 1-00 1-00 1-00 8-00 4-00 1-00 1-00 1-00 1-00 1-00 1-00 1-00
3-2-17-8	F460309	BEARING	1-00	
3-2-17-9	F4603031	BEARING	2-00	
3-2-17-10	40290007	BEARING, RETAINER	1-00	
3-2-17-11	40290044	GEAR OUT	1-00	
3-2-17-12	F4603012C	SNAP RING	1-00	
3-2-17-13	F46030175	SAFETY WIRE	1-00	
3-2-17-14	F4603006	WASHER	8-00	
3-2-17-15	F46030024	CAPSCREW BRG	4-00	
3-2-17-16	F46030007	RETAINER BRG	1-00	
3-2-17-17	F46030130	SEAL	1-00	
3-2-17-18	F46030020	WASHER	1-00	
3-2-17-19	F460300224	WASHER	1-00	
3-2-17-20	F460300224	WASHER	1-00	
3-2-17-21	F460300224	WASHER	1-00	
3-2-17-22	F460300224	WASHER	1-00	

SPEC. NO.
8684

DESCRIPTION
HMD334NVC

ENG. REVISION #C 7/30/80 ECM
9-39-4-56-2-97-1-44; REF 101 & 103 OPP
INPUT; REF 102 INPUT SIDE; REF 3 INC.
SPEED00 DRIVE

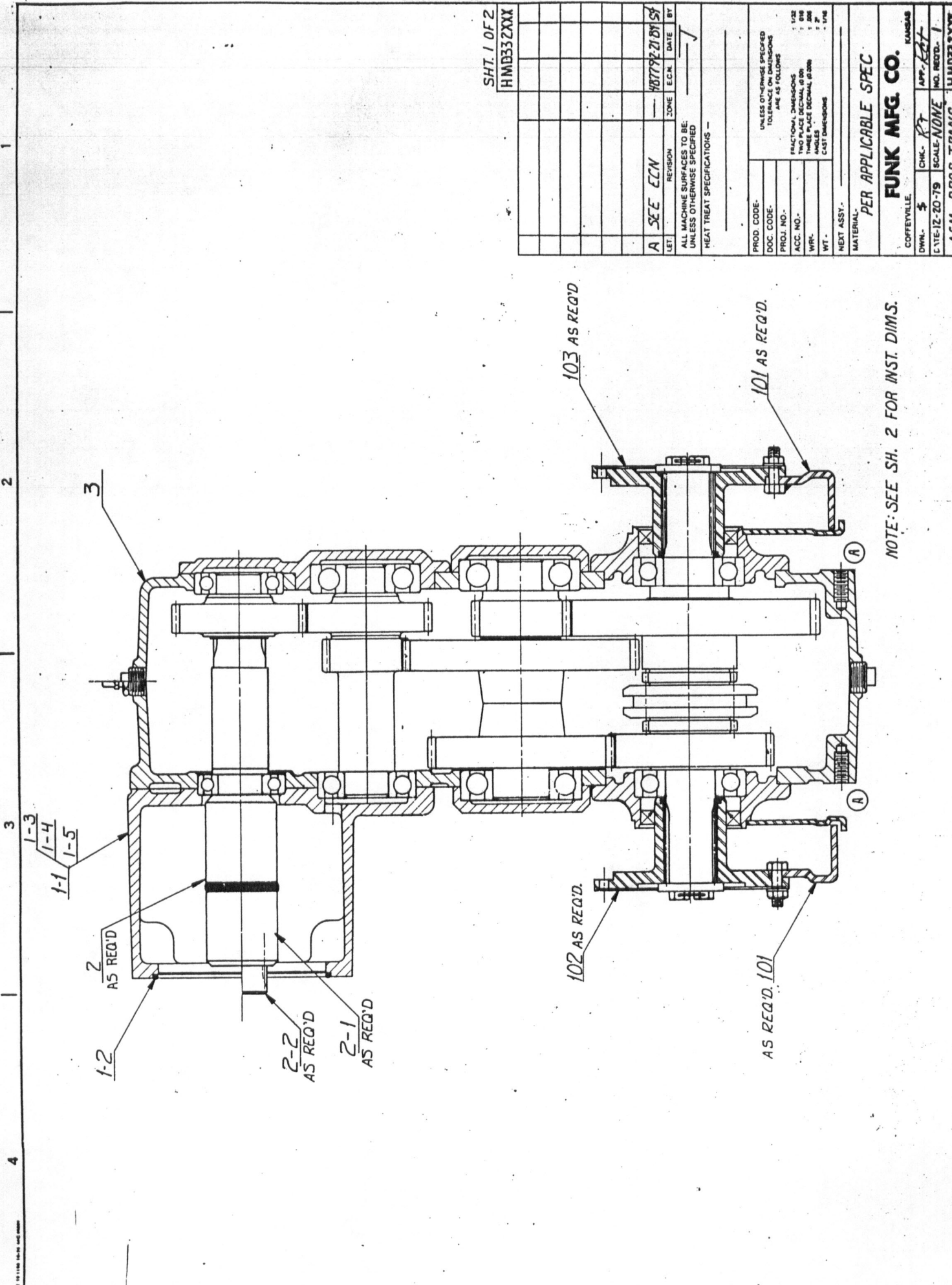
REFERENCE NO.	COMPONENT PART	DESCRIPTION	QTY.	DRAWING
3-3-16	F1004516R	CAPSCREW	2-00	ASM PER APPLICABLE TRANS GRP DWG 8/M
3-4	4031820	GRP, SHF, INPUT	1-00	
3-4-1	4030063A	SHAFT, INPUT	1-00	ASM PER 4033005 DWG 8/M
3-4-2	F19010181	SNAP, RING	1-00	
3-4-3	4031380	SPCR, INPUT SHF	1-00	
3-4-4	F402208	BEARING	1-00	
3-5	4031734	ASM, DISCONNECT	1-00	
3-3-1	4030960	HOUSING, DISC.	1-00	ASM PER 40121392 & 4002727 DWG 8/M
3-3-2	F63021	OIL SEAL	1-00	
3-3-3	F63067	PLUG, EXPANSION	2-00	
3-3-4	4010504	SHAFT, SHIFTER	1-00	
3-3-5	4010512	ASM, FORK, SHIFTER	1-00	
3-3-6	F2521922	PIN, ROLL	1-00	
3-3-7	F40110315	BEARING	1-00	
3-3-8	F33900704	SNAP, RING	1-00	
3-3-9	40312704	COLLAR, SHIFTING	1-00	
3-3-10	40330043A	SHF OUT DISC	1-00	
3-3-11	F613321640	BEARING	1-00	
3-3-12	F377030224	OIL SEAL	1-00	
3-3-13	4012817	WA CPN FLG	1-00	
3-3-14	F1004516R	CAPSCREW	2-00	
3-3-15	F1800320	SAFETY WIRE	4-00	
3-3-16	F180004	WASHER	1-00	
3-3-17	F744000120	BALL	1-00	
3-3-18	40TR7204	SPRING	1-00	
3-3-19	4010508	SCREW, CAP, DETENT	1-00	
3-3-20	4010518	SCREW, CPN FLG	3-00	
3-3-21	F110063	SCREW, DRIVE	2-00	
3-3-22	4010500	PLT, NAME SERIAL NO	1-00	
3-3-23	4011733	GRP, BRK	1-00	
3-7	4012800	GRP, PARKING BRK	1-00	
101-1				BILL OF MATERIAL
101-1	4012810	ASM, DRUM PARK BRK	1-00	FOR SERVICEABLE ITEMS & REF NOS. SEE DWG 40121406
101-1	4012821	WASHER, CLIPPED	8-00	
101-1	F16202	LOCK WASHER	8-00	
101-1	F13006000	HEX NUT	1-00	
101-1	4012826	GRP BRAKE BACKING	1-00	

SPEC. NO.
8684

ENG. REVISION #C 7/30/80 ECN
9-39, 4-54, 2-97, 1-44, REF 101 & 103 OPP
INPUT, REF 102 INPUT SIDE, REF 3 INC.
SPEED DRIVE

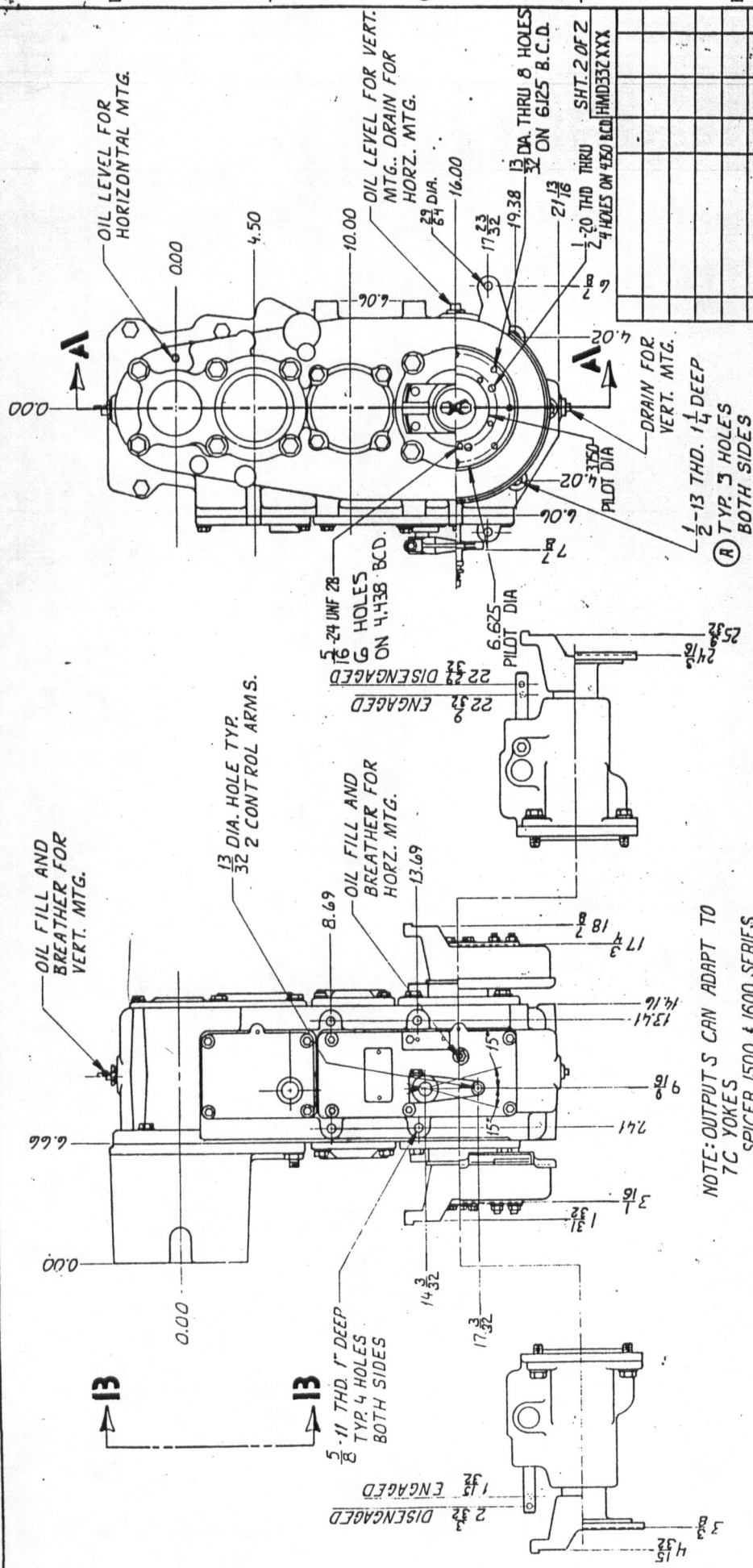
REFERENCE NO.	COMPONENT PART	DESCRIPTION	QTY.	DRAWING
101-2	F1005014	CAPSCREW	4.00	
101-3	F15005	STARWASHER	4.00	
102	4012815	FLG, CPN	1.00	
103	4012014	GRP, FLANGE CPN	1.00	
103-1	4012815	FLG, CPN	1.00	
202	F23048	PLUG, SHIPPING	1.00	
				BILL OF MATERIAL

HMD332XXA

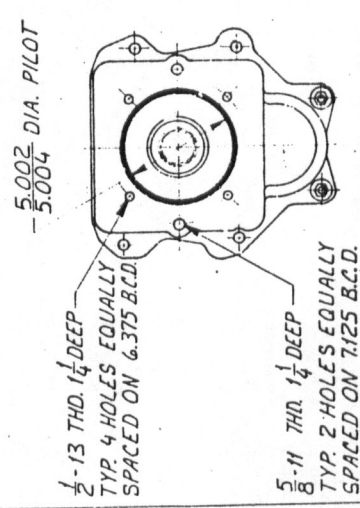


NOTE: SEE SH. 2 FOR INST. DIMS.

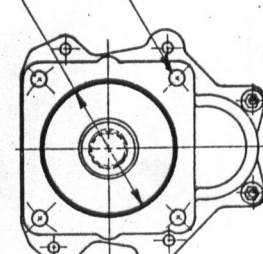
SHT. 1 OF 2		HMD332XXX	
A SEE ECTN		ZONE	DATE
LET	REVISION	E.C.N.	BY
ALL MACHINE SURFACES TO BE UNLESS OTHERWISE SPECIFIED			
HEAT TREAT SPECIFICATIONS -			
UNLESS OTHERWISE SPECIFIED TOLERANCES ON DIMENSIONS ARE AS FOLLOWS			
FRACTIONAL DIMENSIONS			
TWO PLACE DECIMAL, 0.00			
THREE PLACE DECIMAL, 0.000			
ANGLES			
CAST DIMENSIONS			
NEXT ASSY.			
MATERIAL			
PER APPLICABLE SPEC			
FUNK MFG. CO.			
COFFEYVILLE, KANSAS			
DRAWN	CHKD	APP'D	NO. REV'D
J2-20-79	R7	ECTN	1
SCALE		NONE	
ASM. DROP TRANS.		HMD332XXX	
SHT. 1 OF 2		SHT. 1 OF 2	



NOTE: OUTPUTS CAN ADAPT TO
7C YOKES
SPICER 1500 & 1600 SERIES
MECH 7C & 5C SERIES



VIEW 13-13
FOR S.A.E. "C" HYD. MOTOR MODELS (HMD334X2C)



VIEW 13-13
FOR S.A.E. "D" HYD. MOTOR MODELS (HMD334XD)

NOTE: SHEET 1 IS FOR ASM. PURPOSES ONLY

LET.	REV.	DATE	BY
A	SEE SH. 1		

ALL MACHINE SURFACES TO BE UNLESS OTHERWISE SPECIFIED	HEAT TREAT SPECIFICATIONS

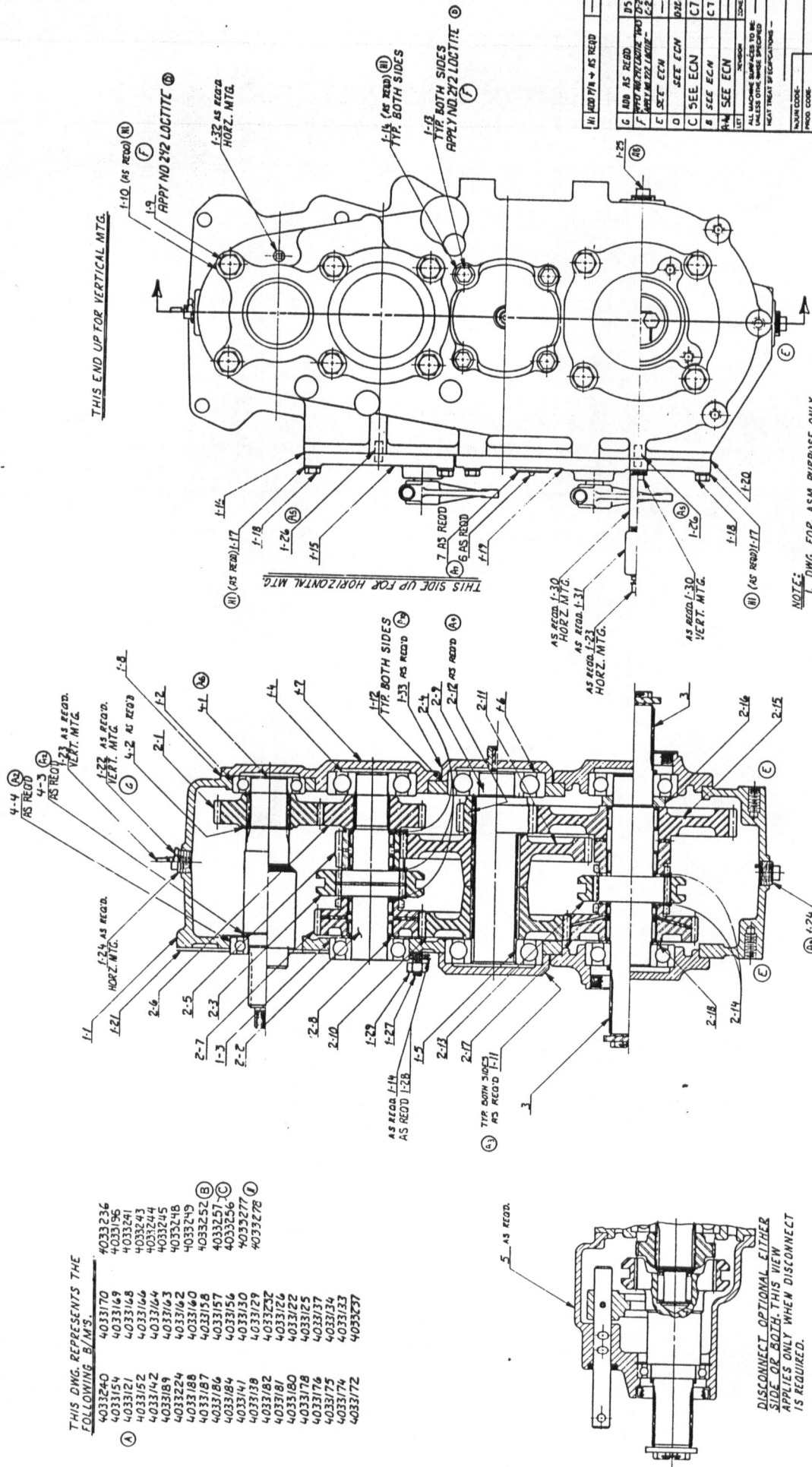
PROD. CODE	UNLESS OTHERWISE SPECIFIED TOLERANCES ON DIMENSIONS ARE AS FOLLOWS:
DOC. CODE	FRACTIONAL DIMENSIONS ± 1/32
PROJ. NO.	NO. HOLE DEPTH ± 0.005
ACC. NO.	NO. HOLE DEPTH ± 0.005
WEL.	THICKNESS ± 0.005
WT.	ANGLES ± 2°
	CAST DIMENSIONS ± 0.010

COFFEYVILLE	SEE SH. 1
DWN.	
CHK.	
APP.	
SCALE	NONE
NO. RECD.	1
DATE	12-20-75
ASM., DROP TRANS	HMD332XXX

FUNK MFG. CO.

THIS DWG. REPRESENTS THE FOLLOWING B/M'S.

4033236	4033170	4033240	4033236
4033166	4033169	4033154	4033166
4033241	4033168	4033221	4033241
4033243	4033166	4033152	4033243
4033245	4033164	4033142	4033245
4033245	4033162	4033181	4033245
4033248	4033162	4033254	4033248
4033249	4033160	4033188	4033249
4033252	4033158	4033187	4033252
4033257	4033157	4033184	4033257
4033256	4033156	4033186	4033256
4033277	4033150	4033141	4033277
4033278	4033129	4033181	4033278
	4033232	4033182	
	4033126	4033181	
	4033122	4033180	
	4033125	4033178	
	4033137	4033176	
	4033136	4033175	
	4033174	4033174	
	4033237	4033172	



DISCONNECT OPTIONAL EITHER
SIDE OR BOTH. THIS VIEW
APPLIES ONLY WHEN DISCONNECT
IS REQUIRED.

NOTE:

1. DWG. FOR ASM. PURPOSE ONLY. GEARS SHOWN MAY VARY IN SIZE AND CONFIGURATION.
2. STANDARD TORQUE TO BE APPLIED TO BOLTS PER GRADE AND SIZE UNLESS OTHERWISE SPECIFIED.

4 SPEED
NON SYNCRONIZED

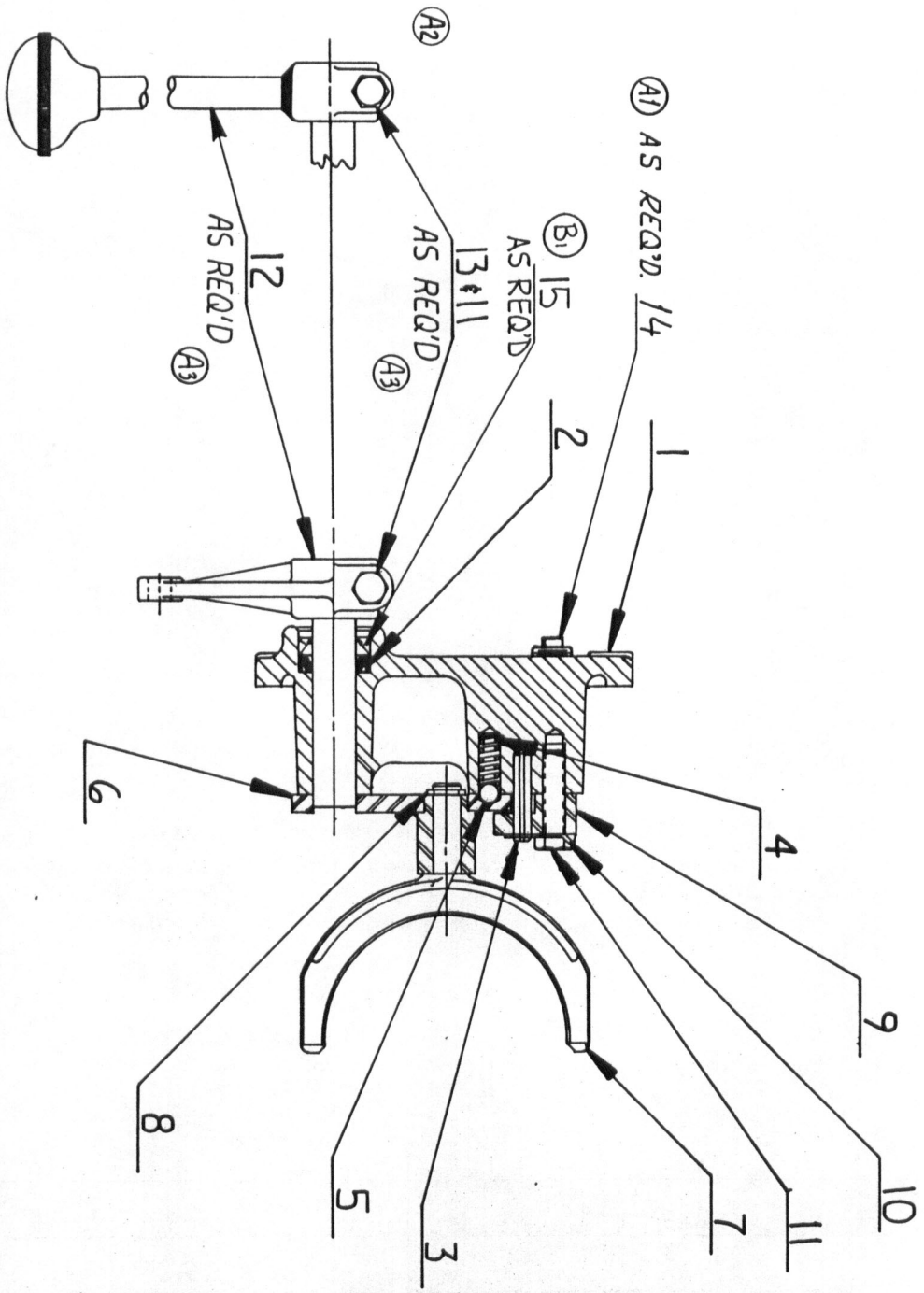
[illegible]

4033001

THIS DWG. REPRESENTS THE
FOLLOWING B/M'S.

- 4031729 4033217 (A)
- 4031117 4031914
- 4031931 4031917
- 4031946

4033002



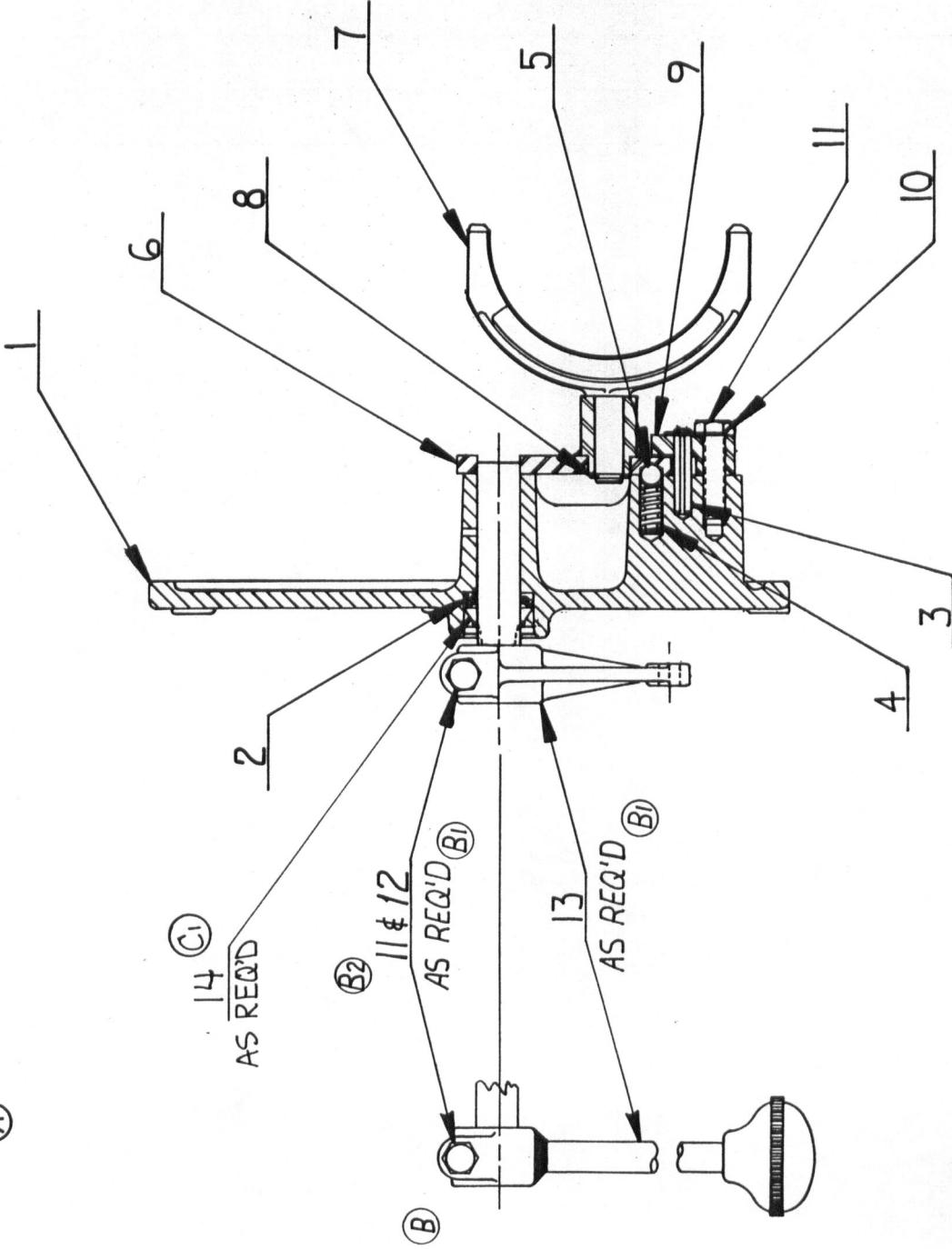
ALL MACHINE SURFACES TO BE: UNLESS OTHERWISE SPECIFIED HEAT TREAT SPECIFICATIONS -			
NOUN CODE -			
PROD. CODE -			
DOC. CODE -			
PROJ. NO. -			
ACC. NO. -			
WRL -			
WT. -			
NEXT ASSY. -			
MATERIAL -			
COFFEYVILLE, KANSAS			
FUNK MFG. CO.			
DWN. - VERON			
CHK. - R			
DATE - 11-13-78			
SCALE - NONE			
NO. REQD. - 1			
DWG. ASM. SHIFT CAP			
4033002			

LET.	REVISION	ZONE	ECN.	DATE	BY
C	ADDED 4031946			441508-12-81PM	
B1	SEE ECN			39818 B-28-81 B1	
A1	ADDED	-	34425307	GA	

UNLESS OTHERWISE SPECIFIED
TOLERANCE ON DIMENSIONS
ARE AS FOLLOWS:

FRACTIONAL DIMENSIONS	± 1/32
TWO PLACE DECIMAL (.00)	± .010
THREE PLACE DECIMAL (.000)	± .005
ANGLES	± 2'
CAST DIMENSIONS	± 1/16

4031945 ④

[illegible]

**ALL MACHINE SURFACES TO BE:
UNLESS OTHERWISE SPECIFIED
HEAT TREAT SPECIFICATIONS —**

NOUN CODE-	
PROD. CODE-	
DOC. CODE-	
PROJ. NO.-	
ACC. NO.-	
WR ² -	
WT.-	

UNLESS OTHERWISE SPECIFIED
TOLERANCE ON DIMENSIONS
ARE AS FOLLOWS:

FRACTIONAL DIMENSIONS	± 1/32
TWO PLACE DECIMAL (0.00)	± .010
THREE PLACE DECIMAL (0.000)	± .005
ANGLES	± 2°
CAST DIMENSIONS	± 1/16

NEXT ASSY:- _____	REF. LCS- _____
-------------------	-----------------

MATERIAL-

PER APPLICABLE B/M.

FUNK MFG. CO.

COFFEYVILLE,

KANSAS

DWN.-

CHK: KZ

APP:-

DATE-

8-24-78

SCALE- NONE

NO. REQ'D.- 1

DW

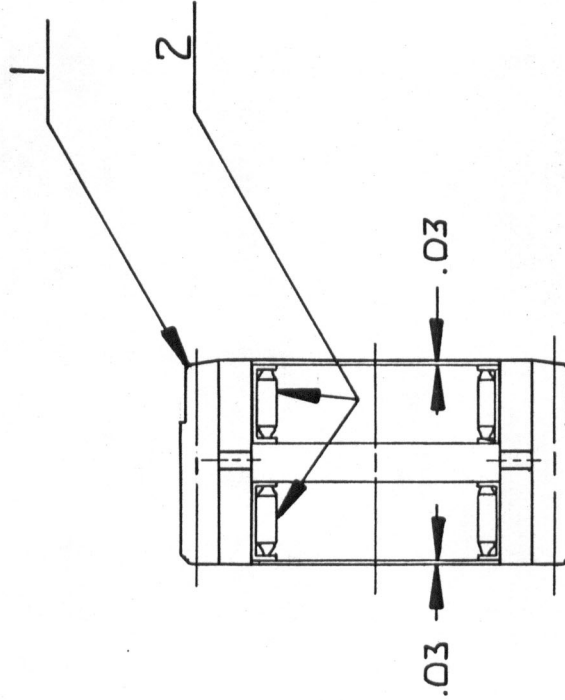
G ASM SHIFT CAP

4034206

THIS DWG REPRESENTS THE FOLLOWING
B/M'S:

4031727

4034211



NOTE

1. GEAR & BRGS. MUST BE SERVICED AS AN ASSY. (GEAR WITH THE BRGS. PRESSED INTO IT.)
2. DWG FOR ASM PURPOSE ONLY. GEAR SHOWN MAY VARY IN SIZE & CONFIGURATION.

LET.	REVISION	ZONE	EC.N.	DATE
ALL MACHINE SURFACES TO BE: UNLESS OTHERWISE SPECIFIED				
HEAT TREAT SPECIFICATIONS --				

NOUN CODE-	
PROD. CODE-	
DOC. CODE-	
PROJ. NO.-	
ACC. NO.-	
WRC-	
WT.-	
NEXT ASSY.-	
MATERIAL-	
REF. LCS-	

UNLESS OTHERWISE SPECIFIED TOLERANCE ON DIMENSIONS ARE AS FOLLOWS:

FRACTIONAL DIMENSIONS ± 1/3
TWO PLACE DECIMAL (0.00) ± .01
THREE PLACE DECIMAL (0.000) ± .00
ANGLES ± 2°
CAST DIMENSIONS ± 1/1

PER APPLICABLE B/M

FUNK MFG. CO.

COFFEYVILLE, KANSAS

DWN. *JS*

CHK. *RS*

APP.

DATE- 8-31-78 SCALE- NONE NO. REQD.- 1

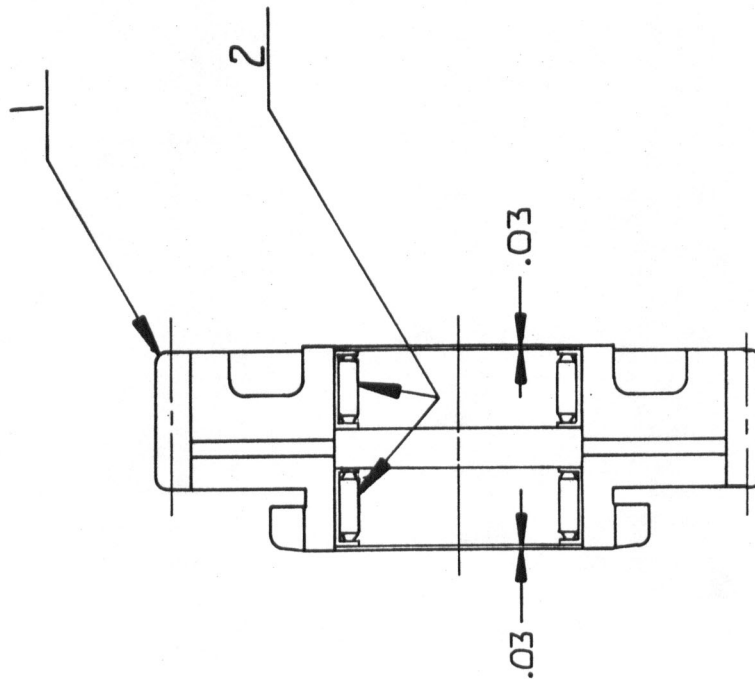
DWG. ASM. GEAR

4034211

4034211

4031728

4034210



1. GEAR & BRGS. MUST BE SERVICED AS AN ASSY. (GEAR WITH BRGS. PRESSED INTO IT.)

2. DWG. FOR ASM PURPOSE ONLY.
GEAR SHOWN MAY VARY IN SIZE
‡ CONFIGURATION.

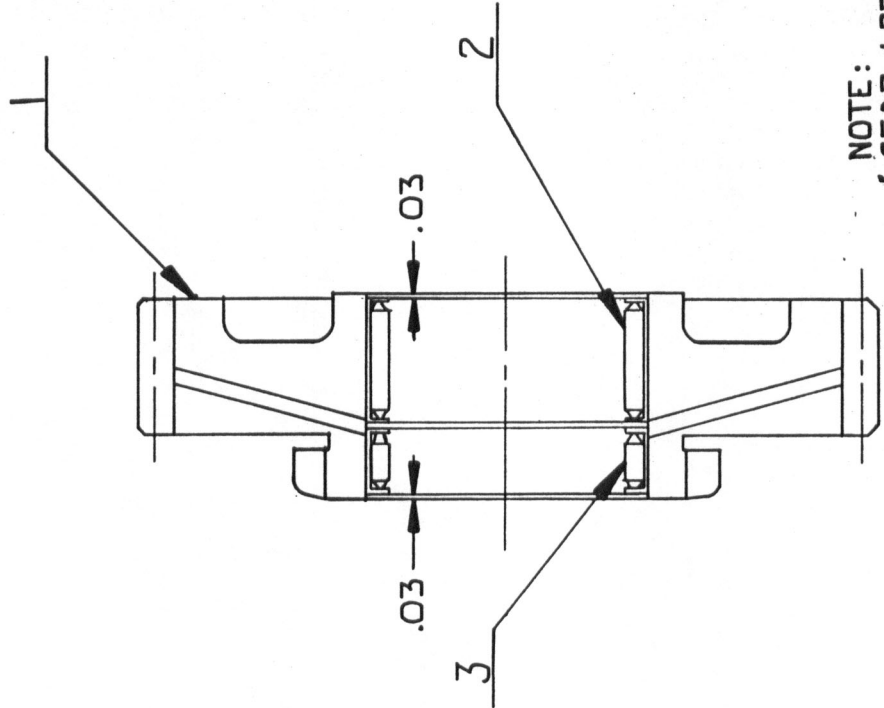
[illegible]

[illegible]

4034208

THIS DWG REPRESENTS THE FOLLOWING
B/M'S 4031601, 4031605

4034208



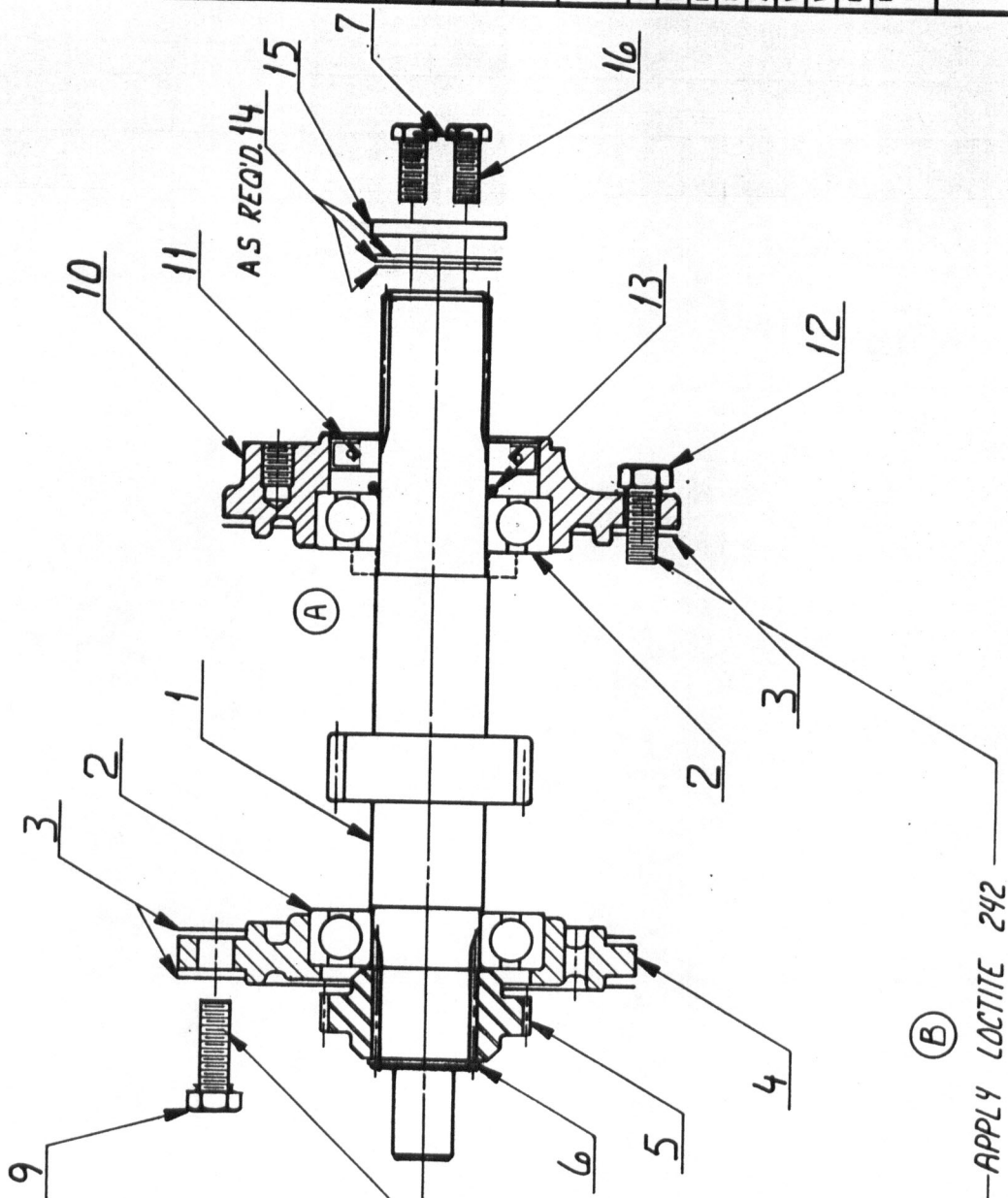
NOTE:
1. GEAR & BRGS. MUST BE SERVICED
AS AN ASSY. (GEAR WITH THE
BRGS. PRESSED INTO IT.)
2. DWG. FOR ASM PURPOSE ONLY.
GEAR SHOWN MAY VARY IN SIZE
& CONFIGURATION.

LET.	REVISION	ZONE	EC.N.	DATE	BY
ALL MACHINE SURFACES TO BE: UNLESS OTHERWISE SPECIFIED					
HEAT TREAT SPECIFICATIONS --					
NOUN CODE- --					
PROD. CODE- --					
DOC. CODE- --					
PROJ. NO.- --					
ACC. NO.- --					
WIR- --					
WT.- --					
NEXT ASSY.- --					
REF. LCS- --					
MATERIAL- --					
PER APPLICABLE B/M					
FUNK MFG. CO.					
COFFEYVILLE, KANSAS					
DWN.- J.T.					
CHK.-					
APP.-					
DATE- 8-29-78					
SCALE- NONE					
NO. REQD.- 1					
DWG. ASM. GEAR					
4034208					

4033004

**THIS DWG. REPRESENTS THE
FOLLOWING B/M'S.**

4031732



LET.		REVISION	ZONE	E.C.N.	DATE	BY
C	REMOVED REF NO B			52085	8-12-87	J P
B	ADDED "APPLY LOCITE 242"	—		50033	5-23-85	EDH
A	ADD SPACER VIEW	—		47316	3-9-81	\$

ALL MACHINE SURFACES TO BE:
UNLESS OTHERWISE SPECIFIED

HEAT TREAT SPECIFICATIONS —

NOUN CODE-
PROD. CODE-50300
DOC. CODE-
PROJ. NO.-
ACC. NO.-
WFR-
WT.-

UNLESS OTHERWISE SPECIFIED
TOLERANCE ON DIMENSIONS
ARE AS FOLLOWS:

FRACTIONAL DIMENSIONS
TWO PLACE DECIMAL (0.00)
THREE PLACE DECIMAL (0.000)
ANGLES
CAST DIMENSIONS

NEXT ASSY.-	NONE	REF. LCS-
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MATERIAL- PER APPLICABLE B/M

FUNK MFG. CO.

COFFEYVILLE

KANSAS

OWN.-	VERON	CHK.-	R 7
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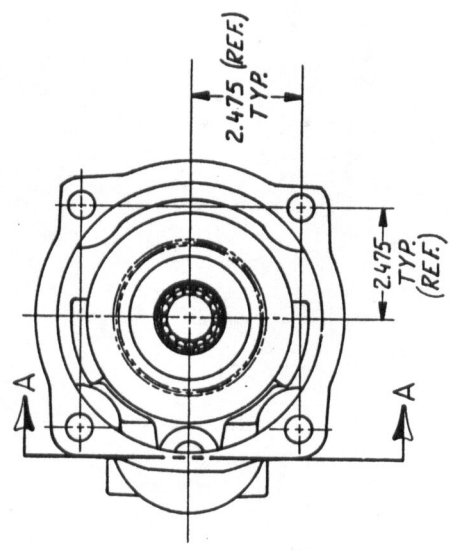
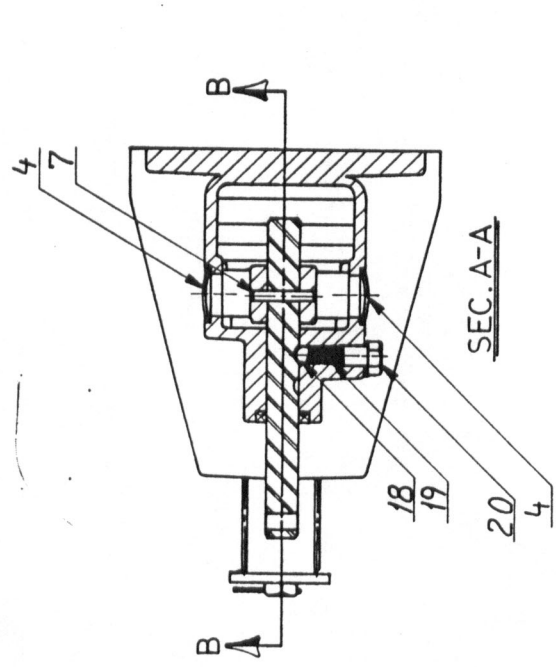
APP:- 95

DATE-5-29-79 SCALE-NONE

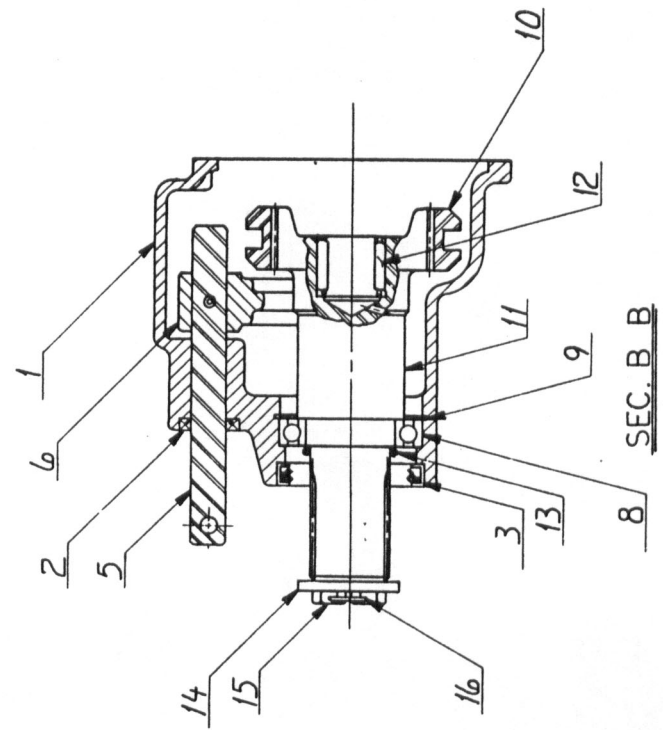
NO. REQ'D.- 1

DWG., OUTPUT SHAFT.

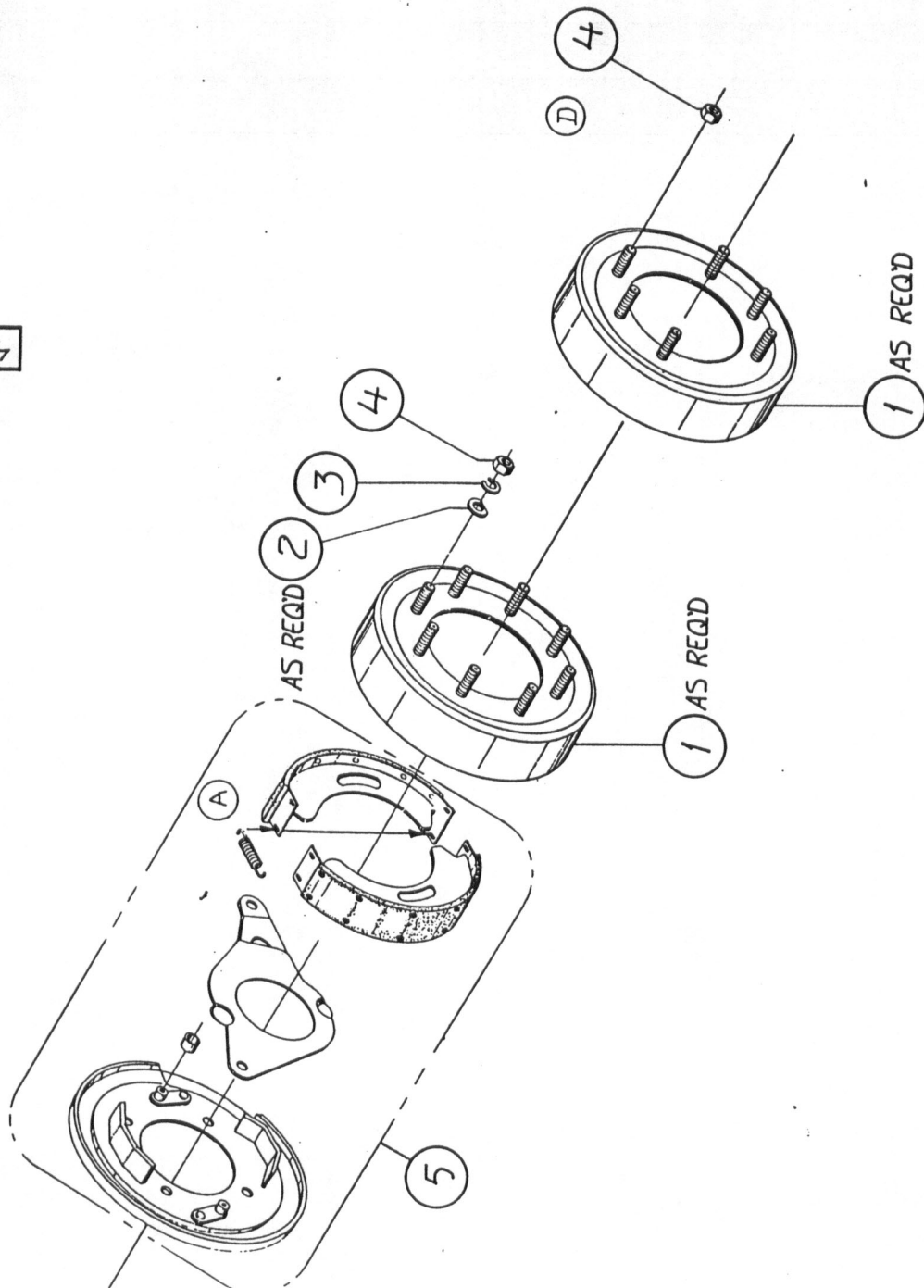
4033004



THIS DWG. REPRESENTS
THE FOLLOWING B/M'S
4031734

[illegible]

4001856
4001470
4012800
© 4023738



FUNK MFG. CO.

[illegible]

