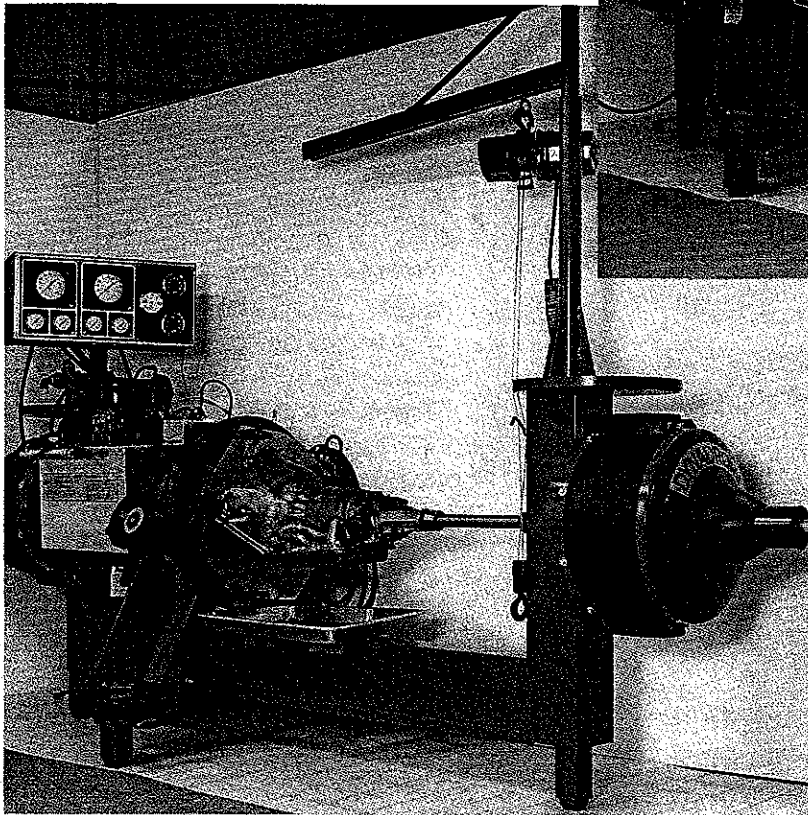
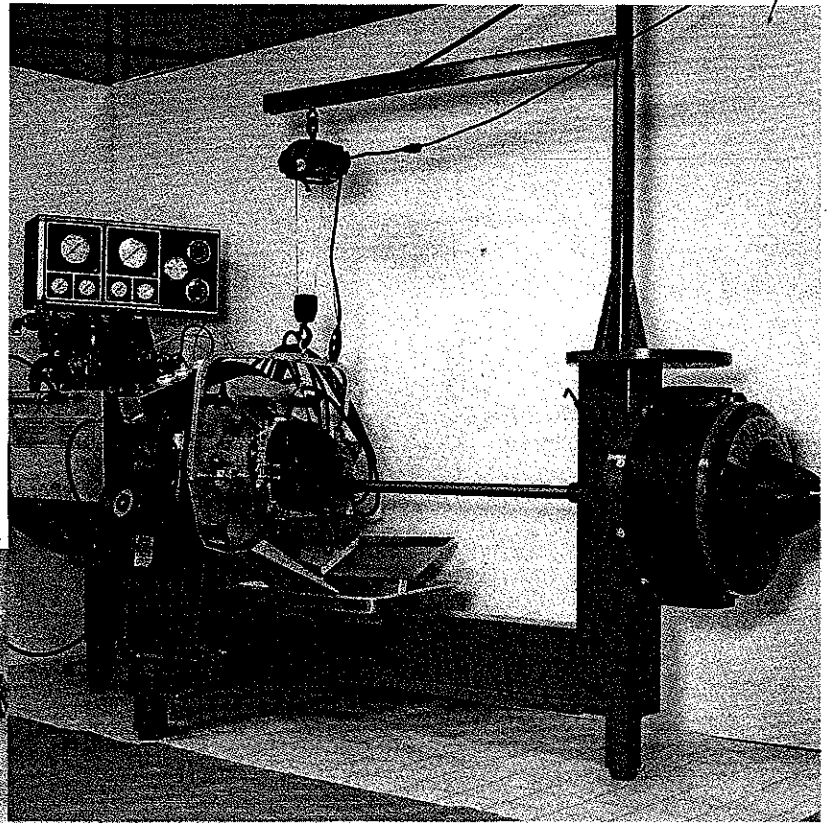


# ★ MARK 3 + 10 DYNADROME ★

A COMPLETE Automatic Transmission Testing/Training System in one unit!  
TRANSAXLES PLUS REAR WHEEL DRIVETRAINS - American, European & Japanese

RWD's-Pass Cars, Pick Ups and 4 WD's. An ingenious mounting engine and transmission permits testing RWD types. The engine remains upright in all positions. An uncompromised Transaxle test unit with full capacity to test RWD's.

**A TWO-IN-ONE for only  
a little more than the cost  
of one Transaxle Unit.**



## TRANSAXLE DRIVETRAINS

The Mark 3 + 10 is the result of 4 years of Design Research with a 27 claim patent granted and others pending.

A handwheel change-over in a few minutes.

A long list of exclusive features enhances performance in the Transaxle mode, while the performance on RWD's compares with the World Famous MARK 3 DYNADROMES.

AUTOMATIC DRIVETRAINS ARE  
HERE — NOW.

## REAR WHEEL DRIVETRAINS

# AUTOMATIC TRANSMISSION TESTING

## EXCELLENCE IN ONE 2-IN-1 UNIT

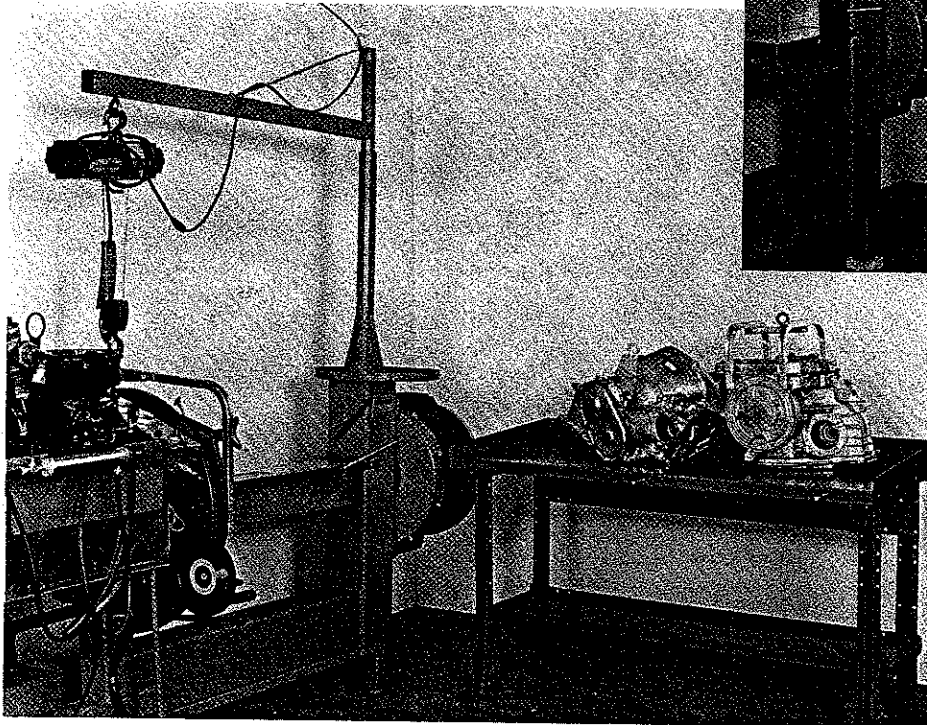
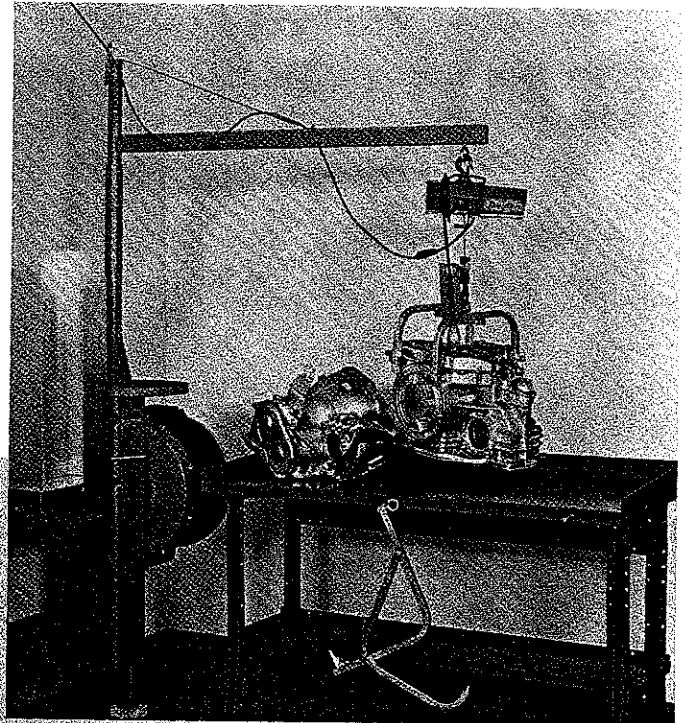
FROM THE DESIGNER/BUILDER WITH 25 YEARS EXPERIENCE  
SPACE & COST SAVINGS PLUS PERFORMANCE  
A BREAKTHROUGH FOR REBUILDERS AND INSTRUCTORS  
QUALITY REBUILDING AND SUPER TRAINING



*Effective Simulated Vehicle-on-Road Testing*



- An Electric Jib Crane with Slings picks up the Transaxle from the staging table.
  - An aluminum guard over the exposed shaft retracts for easy installation access.
  - Engineered slings keeps the transmission horizontal for easy installation.
- (The work bench is not supplied).



**DYNADROMES** are a Complete System with Trans-Adapters available for all the World's Automatics, including the Transaxle Drivetrains.

TransAdapters are supplied with a Cabinet — wall mounted or bench supported.

Ask for our 20 page Pamphlet — everything you need to know about quality testing and training equipment.

The TransAdapting System Engineered in 1959 is still in use in 1985!

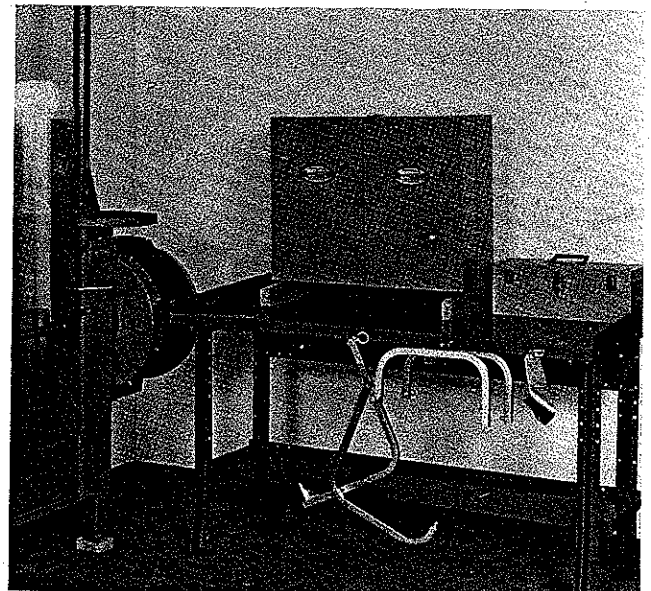
**TRANSADAPTERS** are engineered from blueprints supplied by factory transmission engineers. Coverage is Guaranteed thru current American models. European and Japanese make/model/years are supplied on special order.

A Training Set is available for training purposes — Instructors choice.

**DYNADROMES** can be supplied as a complete ready to use system or without engine and handling means.

Ask for a quote to meet your specific needs and budget. Lease Plans available.

**NOW IS THE TIME!**

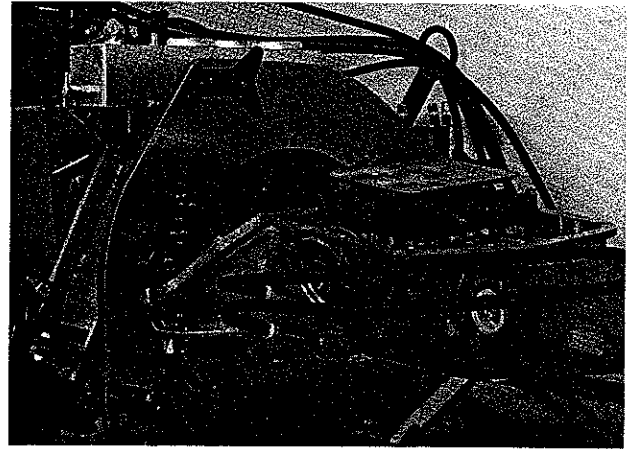




The Turreted Headstock - a feature of every Unit built by Deltadynamics since 1959 - is retained in all DYNADROMES including the Mark 3+10 - a most important feature.

The Turreted Headstock also makes it possible to engineer TransAdapters for all the World's Transmissions - past, present and FUTURE.

Transmissions come off the Dynadrome ready to paint, label and ship. The invaluable TURRETED HEADSTOCK permits ultra fast access to Hydraulic Controls WITHOUT DRAINING THE FLUID.

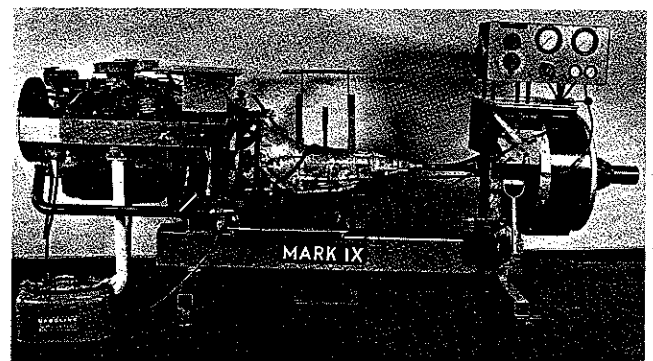


A major feature is rollover for repair without disturbing the transmission installation in any way. A latch with ignition interrupter and red warning light prevents cranking or starting the engine with Headstock unlatched. Turretting the Master Adapter Plate permits many transmissions to be mounted on one Master Plate. On completion of test the fluid is drained by tilting the transmission 90° - with a "flick of the wrist."

DYNADROMES are invaluable for use anywhere from Engrg Labs down thru rebuilding shops - anywhere downstream from Production line test facilities - over 200 in schools.

Special purpose DYNADROMES designed and built to meet special needs are available. Engine can be supplied by customer for mounting on Adapter Plate furnished - Powerplant Testing as well as Transmission.

Training available before, during or after shipment - in our shop or by VIDEO CASSETTE.



Deltadynamics manufactures Dynadromes® under Exclusive License of Lucia Patents protecting owner/users of Dynadromes against patent infringement lawsuits.

Patent Number 4,520,659 and others pending.

You can count on Parts, Service and Trans-Adapter Updating plus Patent Protection on your DYNADROME - 250 supplied since 1960. The Worlds only proven equipment. Get the Complete Story on DYNADROMES and what one will do for you. Come to Green Bay and witness demonstrations first hand.

## **DELTADYNAMICS, Inc.**

*Designers & Builders of Automatic Transmission Testing Equipment for 25 years*

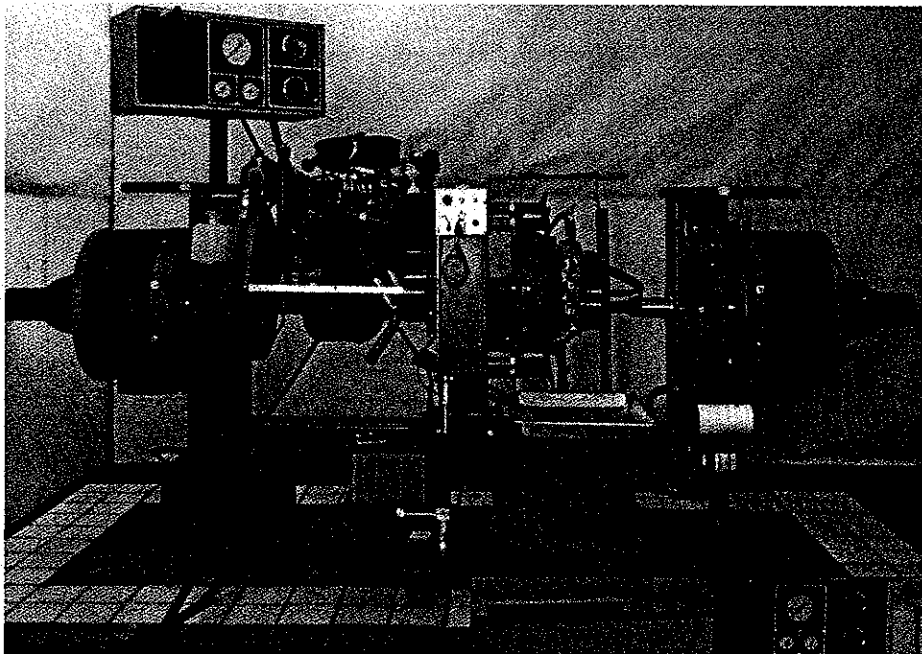
**Box 8401**

**Phone (414) 434-3757**

**Green Bay, WI 54308**

Form 101 Printed in USA





# MARK 10 TRANSAXLE

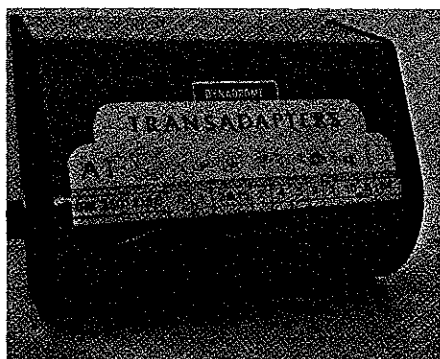
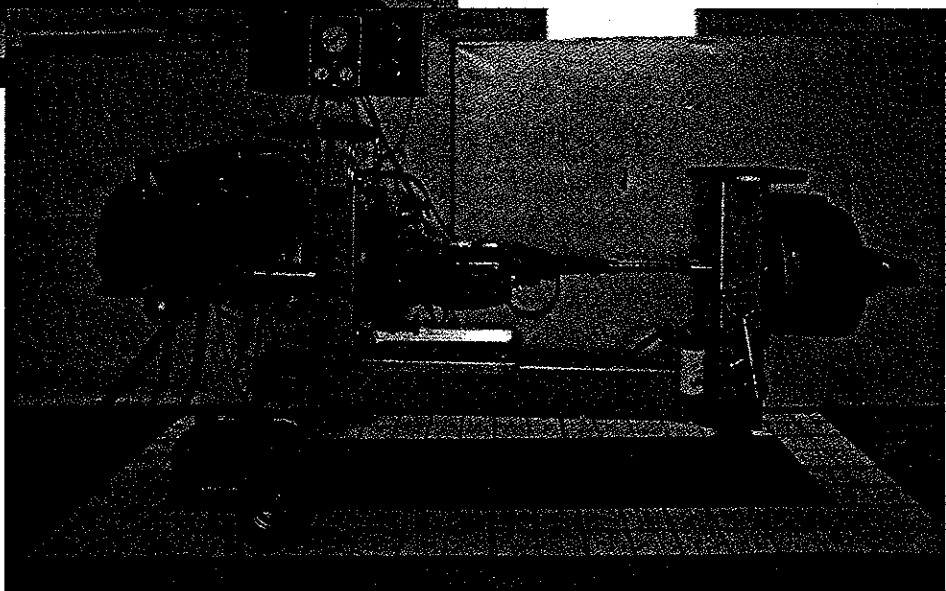
**DYNADROME**®

With TRANSADAPTERS For  
TRANSAXLE DRIVETRAINS  
OF POPULAR TYPES

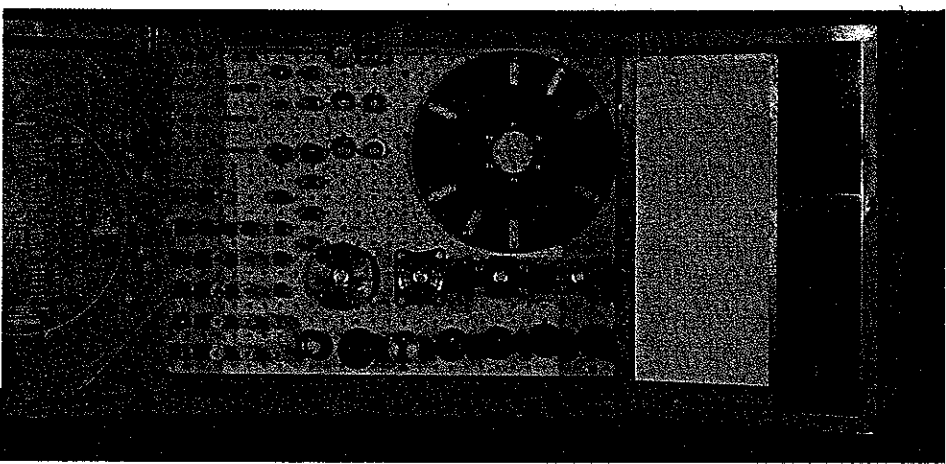
# MARK 3 RWD

**DYNADROME**®

**ALSO AVAILABLE  
USED/RECONDITIONED  
MARK 3's  
(Trade-ins on  
the MARK 3 + 10)**



**ANOTHER  
BREAKTHROUGH**



CHARTER SUPPLIER  
MEMBER



## TransAdapters

THE HEART OF A SYSTEM PROVEN OVER 25 YEARS  
WITH EASY OPERATOR INSTRUCTIONS - PROVEN IN OVER  
250 INSTALLATIONS WORLDWIDE - since the 1940 Hydramatic!  
COVERAGE AS ORDERED

CHARTER SUPPLIER  
MEMBER





TRANSADAPTER INSTRUCTIONS FOR AMERICAN BIG 3 PASSENGER CAR MODELS

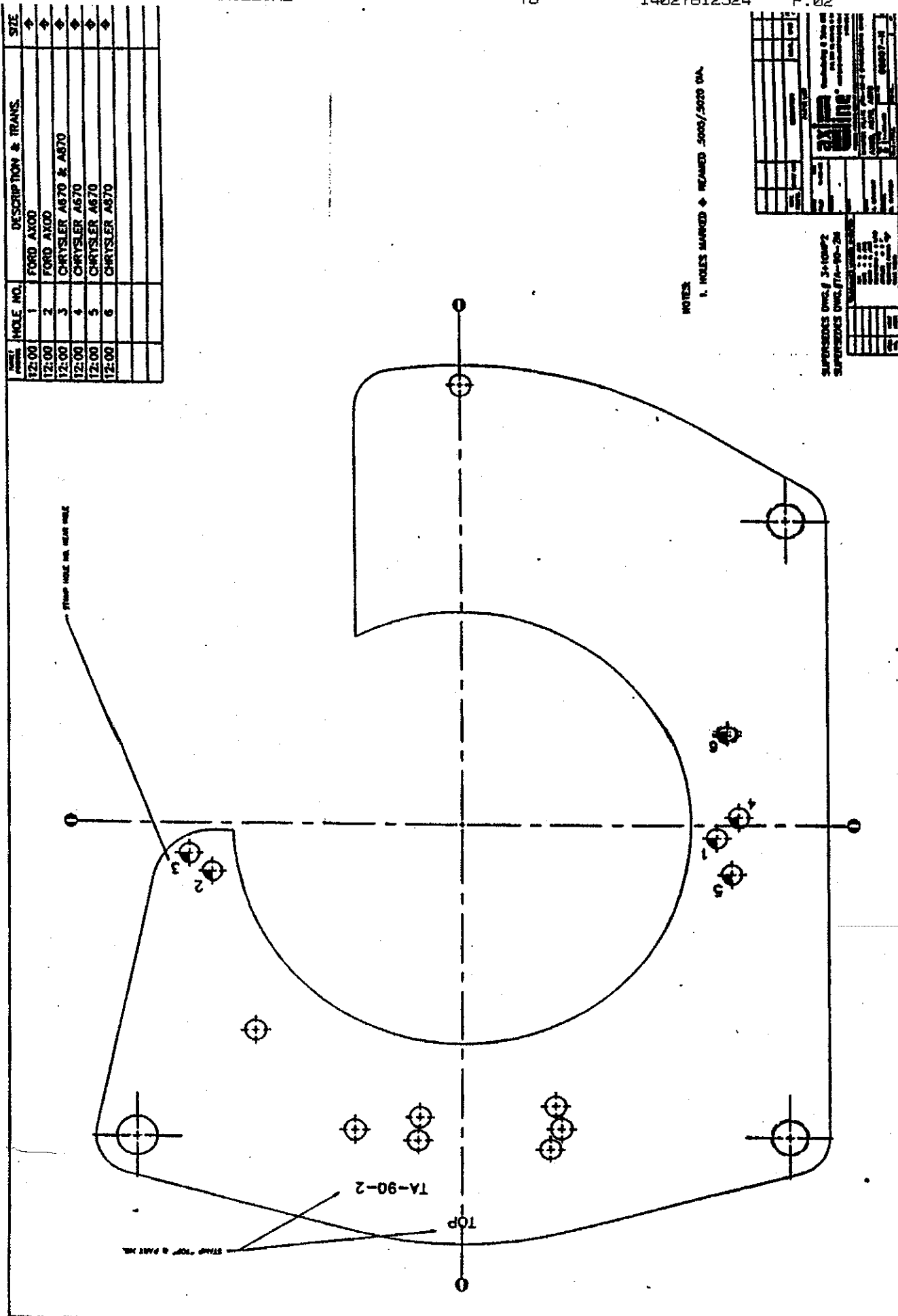
TRANSMISSION MAKE/MODEL	TURRET POSITION	HORSESHOE SPACER	DOWEL PIN #	DOWEL PIN LOCATION	FLEX PLATE	MASTER SLEEVE PILOT GROOVE	PILOT DUSHING	SPOOL #	SPOOL SPACER	OUTPUT #
<b>CHRYSLER</b>										
TF-6 (904)	6:00	3	2	12 & 23	2	6	4	78	4	18
TF-8 (904)	6:00	3	2	9 & 14	2	6	4	78	4	18
TF-8 (727A)	6:00	3	2	9 & 14	2	6	4	78	4	14
TF-8 (727B)	6:00	3	2	11 & 20	2	6	4	78	4	14
<b>GENERAL MOTORS</b>										
TURBO 350 350C 700R4 200R4 200 200C 375	1:30	-	1	2 & 15	2	4	5	2 Or 2 M	3	10
TURBO 400	1:30	-	1	2 & 15	2	4	5	2	3	8/19
200 (Chevette-Opel-Luv)	12:00	-	13	27 & 28	3	6	9	2 Or 2 M	-	10
TURBO 700R4 200C (Sm. bell 5-10 type)	9:00	-	15	31 & 32	3	7	10	2 M	3	10
<b>FORD</b>										
C-5	1:30	3	2	1 & 18	2	2	8	8	5	5
FMX	1:30	3	2	1 & 18	2	2	8	8	5	4
C-6 Round Top	12:00	-	2	3 & 16	2	2	8	8	5	4
C-6 Flat Top/E40D	6:00	-	2	10 & 13	2	2	8	8	5	4
C-6 Sm. bell hsg. E40D	1:30	-	2	1 & 18	2	2	8	8	5	4
C-4 Small case	1:30	3	2	1 & 18	2	2	8	8	5	5
C-4 Large case	1:30	-	2	1 & 18	2	2	8	8	5	5
C-6 Inter. Diesel E40D	6:00	-	3	10 & 30	2	2	8	8	5	4
AOD	1:30	2	2	1 & 18	2	2	8	8	5	5
<b>INTERNATIONAL</b>										
727	6:00	3	14	26 & 29	2	6	4	78	-	34
<b>USE SECONDARY PLATE</b>										
G-3 (2.3L)	6:00	-	12	3 & 4	3	4	10	*14/13	-	2
G-3 (2.8L)	6:00	-	28	2 & 5	3	4	10	15	-	2
G-4 (2.8L)	6:00	-	12	2 & 5	3	4	10	15	-	5
A4LD	6:00 12:00	2	12	2 & 5	3**	4	10	15	5	2

\* #14 Spool has fine thread. #13 Spool has coarse thread.

\*\* #3 Requires an A4LD Special Flexplate Spacer.



DATE	HOLE NO.	DESCRIPTION & TRANS.	SIZE
12:00	1	FORD AX00	◆
12:00	2	FORD AX00	◆
12:00	3	CHRYSLER A670 & A670	◆
12:00	4	CHRYSLER A670	◆
12:00	5	CHRYSLER A670	◆
12:00	6	CHRYSLER A670	◆



NOTES  
 1. HOLES MARKED ◆ REAMED .5000/.5020 DIA.

SUPERSEDES DWG. # 24-10MP2  
 SUPERSEDES DWG. # TA-90-24

DATE	BY	CHKD	APP'D	REV

DATE	BY	CHKD	APP'D	REV



M310A DYNADROME

TRANSAXLE

TRANSADAPTER SET UP INSTRUCTIONS

Transmission Model - AXOD

Part No.	Description	I.D. No.
TA 90-2	Master Plate	TA 90-2
	Horse Shoe Spacer	NR*
	Secondary Plate	NR*
17112	Dowel Pin	31
	Special Stud	40
18050	Flex Plate	3
17020	Pilot Sleeve	2
	Groove	6
	Pilot Bushing	10
16191	Spool	3
	Spool Spacer	NR*
	Output Left	26
	Output Right	27
	Pivot Spacer LENGTH IS 6.455"	AXOD OR G.M. G.M. LENGTH IS 6.410"

\* - None Required





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AUTO POWER  
Technology

February 1, 1985

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TECHNICAL REPORT

MARK 3 + 10 DYNADROME

T R A N S A X L E

TRANSADAPTER SET UP INSTRUCTIONS

Part No.                      Transmission Model - GM 125                      I.D. NO.

Description

Part No.	Description	I.D. NO.
TA 84-1	Master Plate	TA 84-1
16502/16503	Horse Shoe Spacer 1/2"	4
	Secondary Plate	NR
17111	Dowel Pins	30
	Special Clamp or Bolt	NR
18050	Flex Plate	3
17020	Pilot Sleeve	2
	Groove	2
17170	Pilot Bushing	10
16021	Spool	2M
	Spool Spacer	NR
15962	Output LT	21
15963	Output RT	22
19600/19601	Pivot Spacer	G

NOTES: NR - None Required  
NI - No I.D. No.



SUPPLEMENT TO TRANSADAPTER INSTRUCTIONS

GM THM 125

Dowel Pin: #30

Dowel Pin Location: 5 & 18

Flex Plate: #3

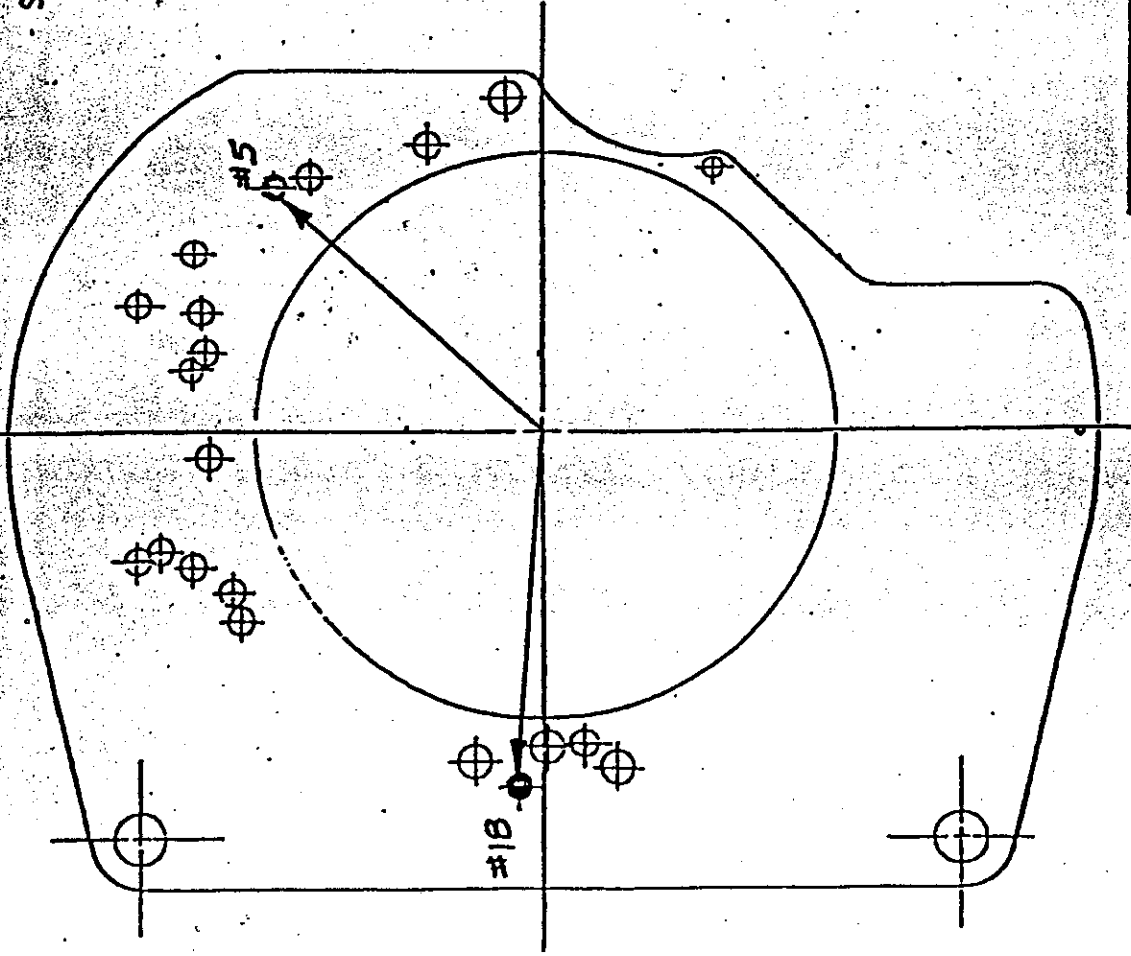
Pilot Sleeve: #2  
Groove: #2

Pilot Bushing: #10

Spool: 2M

Output: Lt.-21  
Rt.-22

Pivot Spacer: G



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APPROVED BY:

SCALE:  $\frac{1}{4}'' = 1''$

DATE: 12-3-84

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REVISED

MASTER PLATE & DOWEL PIN

DRAWING NUMBER







SUPPLEMENT TO TRANSDUPTER INSTRUCTIONS  
PART 3-10

FORD AXOD

Dowel Pin: 31  
Special Bolts: 40  
Dowel Pin Location: 1 & 2

Flex Plate: #3

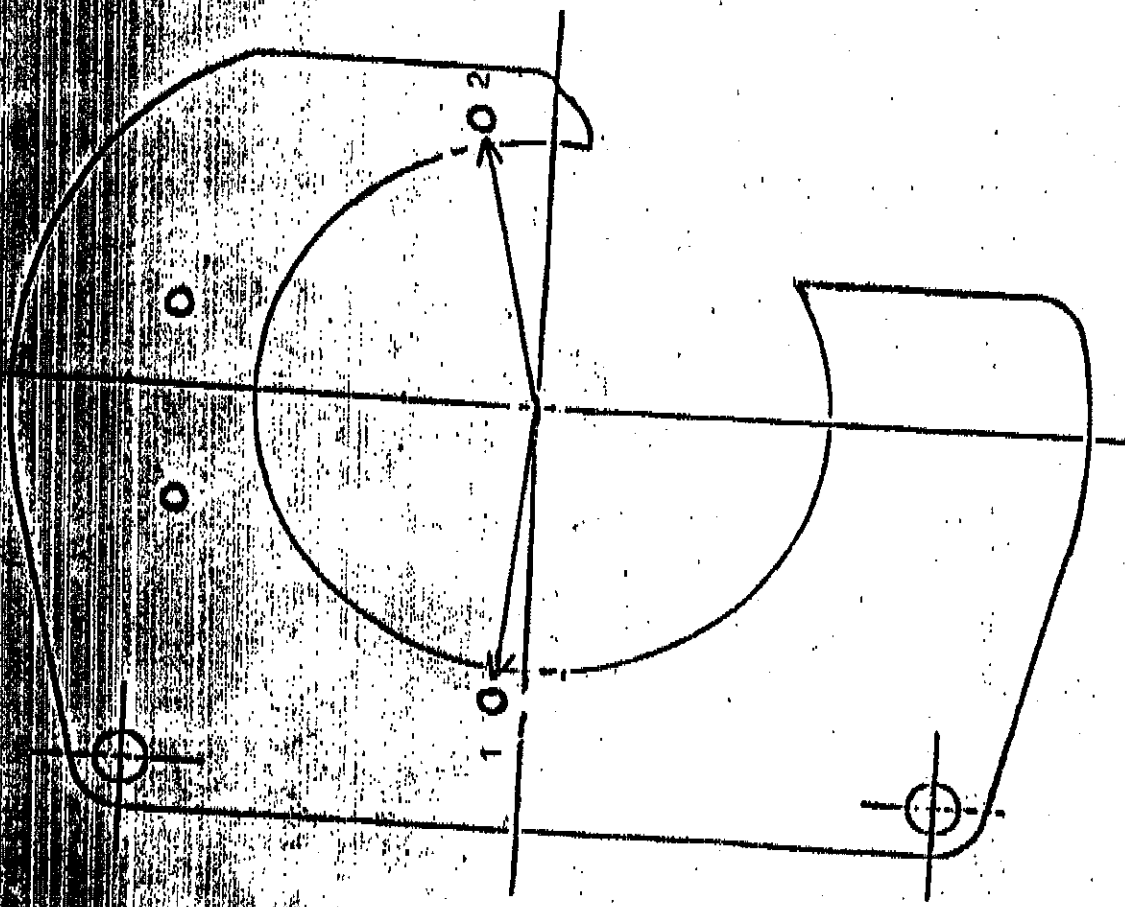
Pilot Sleeve: #2  
Groove: #6

Pilot Bushing: #10

Spool: #3

Output: # 26 & 27

Pivot Spacer: AXOD



APPROVED BY:		DRAWN BY TTTD	
SCALE 1/4" = 1"		REVISED	
MASTER PLATE & DOWEL PIN			







87290 - Turret Knobs

TRANSADAPTER INSTRUCTIONS FOR AMERICAN BIG 3 PASSENGER CAR MODELS

TRANSMISSION MAKE/MODEL	TURRET POSITION	HORSESHOE SPACER	DOWEL PIN #	DOWEL PIN LOCATION	FLEX PLATE	MASTER SLEEVE PILOT GROOVE	PILOT BUSHING	SPOOL #	SPOOL SPACER	OUTPUT #
			<b>USE MASTER PLATE</b>							
<b>CHRYSLER</b>										
TF-6 (904)	6:00	3	2	12 & 23	2	6	4	78	4	1
TF-8 (904)	6:00	3	2	9 & 14	2	6	4	78	4	1
TF-8 (727A)	6:00	3	2	9 & 14	2	6	4	78	4	1
TF-8 (727B)	6:00	3	2	11 & 20	2	6	4	78	4	1
<b>GENERAL MOTORS</b>										
TURBO 350 350C 700R4 200R4 200 200C 375	1:30	-	1	2 & 15	2	4	5	2 Or 2 M	3	
TURBO 400	1:30	-	1	2 & 15	2	4	5	2	3	8/
200 (Chevette-Opel-Luv)	12:00	-	13	27 & 28	3	6	9	2 Or 2 M	-	
TURBO 700R4 200C (Sm. bell B-10 type)	9:00	-	15	31 & 32	3	7	10	2 M	-	
<b>FORD</b>										
C-5	1:30	3	2	1 & 18	2	2	8	8	5	
FMX	1:30	3	2	1 & 18	2	2	8	8	5	
C-6 Round Top	12:00	-	2	3 & 16	2	2	8	8	5	
C-6 Flat Top	6:00	-	2	10 & 13	2	2	8	8	5	
C-6 Sm. bell hsg.	1:30	-	2	1 & 18	2	2	8	8	5	
C-4 Small case	1:30	3	2	1 & 18	2	2	8	8	5	
C-4 Large case	1:30	-	2	1 & 18	2	2	8	8	5	
C-6 Inter. Diesel	6:00	-	3	10 & 30	2	2	8	8	5	
AOD	1:30	2	2	1 & 18	2	2	8	8	5	
<b>INTERNATIONAL</b>										
727	6:00	3	14	26 & 29	2	6	4	78	-	
			<b>USE SECONDARY PLATE</b>							
C-3 (2.3L)	6:00	-	12	3 & 4	3	4	10	*14/13	-	
C-3 (2.8L)	6:00	-	28	2 & 5	3	4	10	15	-	
C-4 (2.8L)	6:00	-	12	2 & 5	3	4	10	15	-	
A4LD	6:00 12:00	2	12	2 & 5	3**	4	10	15	5	

\* #14 Spool has fine thread. #13 Spool has coarse thread.

\*\* #3 Requires an A4LD Special Flexplate Spacer. 88954

5422

3.0L Can go on AXOD Plate - 12:00

2.8L

3.0L





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TECHNICAL REPORT

MARK 3 + 10 DYNADROME

T R A N S A X L E

TRANSADAPTER SET UP INSTRUCTIONS

Part No.                      Transmission Model - FORD ATX                      I.D. NO.

	Description	
TA 881	Master Plate	TA 88-1
	Horse Shoe Spacer	NR
	Secondary Plate	NR
17112	Dowel Pins	31
17118	Special Bolts	38
18050	Flex Plate	3
17020	Pilot Sleeve	2
	Groove	6
17170	Pilot Bushing	10
16191	Spool	3
	Spool Spacer	NR
15961	Output RT	20
15961	Output LT	20
19600	Pivot Spacer	F

NOTES: NR - None Required

SUPPLEMENT TO TRANSADAPTER INSTRUCTIONS  
 MARK 3+10

FORD ATX

Dowel Pin: 31  
 Special Bolts: 38  
 Dowel Pin Location: 3 & 20

Flex Plate: #3

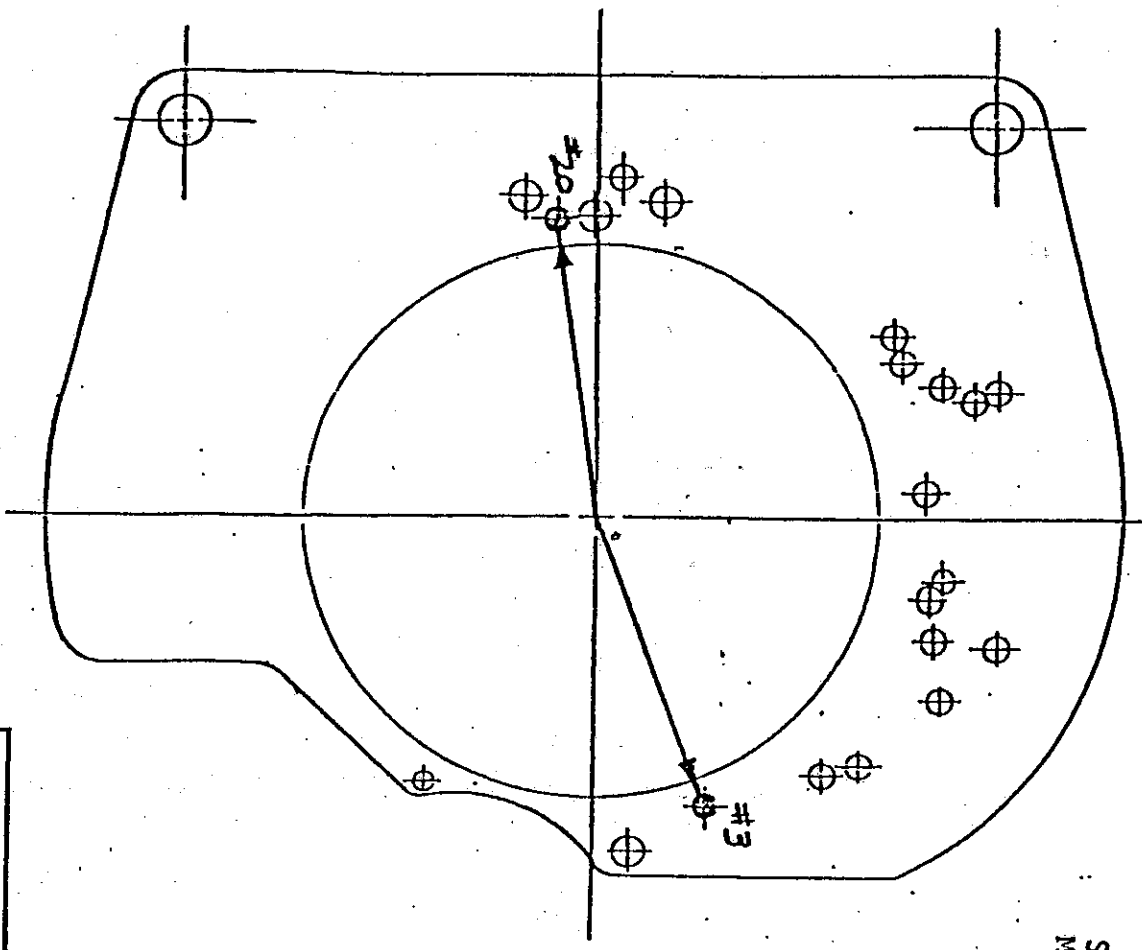
Pilot Sleeve: #2  
 Groove: #6

Pilot Bushing: #10

Spool: #3

Output: #20

Pivot Spacer: P



DELTADYNAMICS, INC.

SCALE: 1/4" = 1"

DATE: 12-3-84

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REVISED

MASTER PLATE & DOWEL PIN

DRAWING NUMBER



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MARK 3 + 10 DYNADROME

T R A N S A X L E

TRANSADAPTER SET UP INSTRUCTIONS

Part No.

Transmission Model - GM 440 T

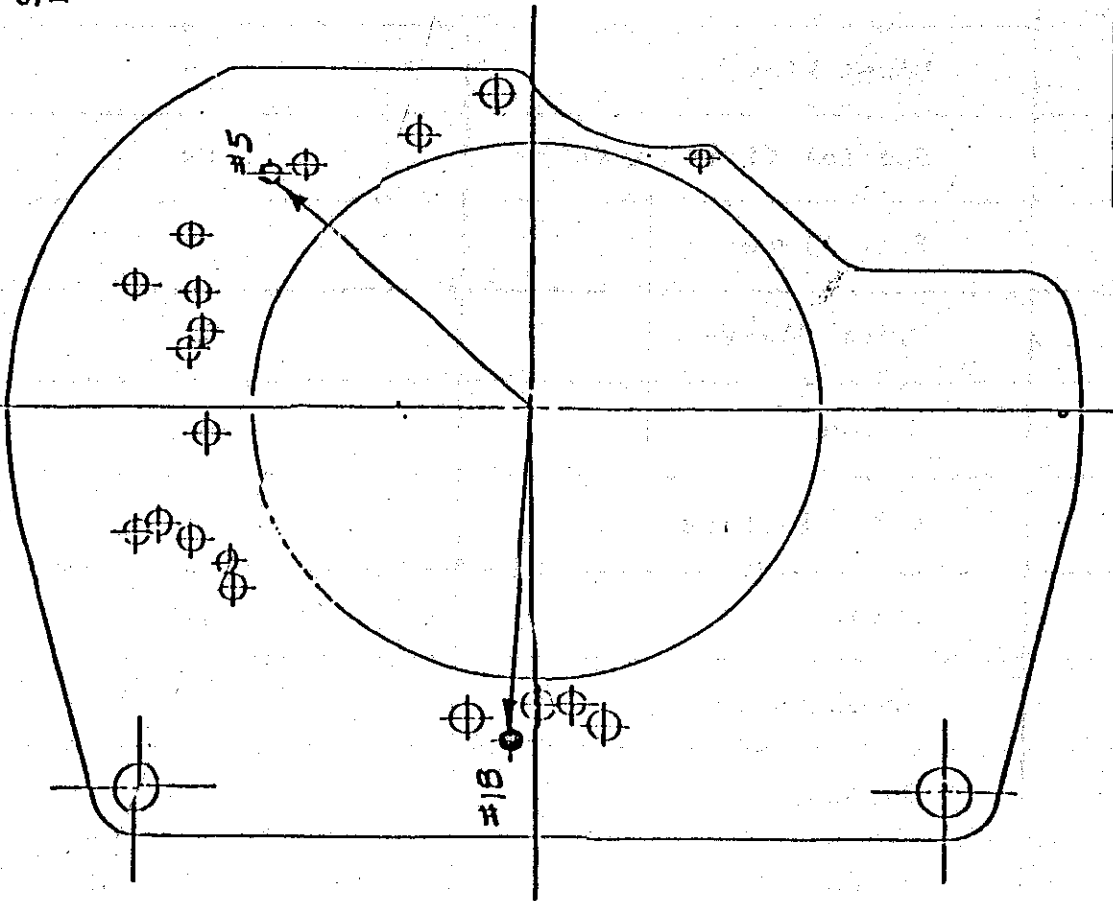
I.D. NO.

Description

Part No.	Description	I.D. NO.
TA 88-1	Master Plate	TA 88-1
16502/16503	Horse Shoe Spacer 1/2"	4
	Secondary Plate	NR
17111	Dowel Pins	30
	Special Clamp or Bolt	NR
18050	Flex Plate	3
17020	Pilot Sleeve	2
	Groove	6
17170	Pilot Bushing	10
16021	Spool	2M
	Spool Spacer	NR
15962	Output LT	21
15963	Output RT	22 or 25
19600/19601	Pivot Spacer	G

NOTES: NR - None Required  
NI - No I.D. No.

SUPPLEMENT TO TRANSADAPTER INSTRUCTIONS  
 MARK 3+10



GM TEM 440 T

Dowel Pin: #30

Dowel Pin Location: 5 & 18

Flex Plate: #3

Pilot Sleeve: #2  
 Groove: #6

Pilot Bushing: #10

Spool: 2M

Output: Lt.-21  
 Rt.-22 or 25

Pivot Spacer: G

DELTADYNAMICS, INC.

APPROVED BY:

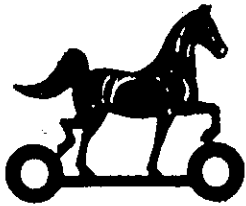
SCALE:  $\frac{1}{4}'' = 1''$

DATE: 12-3-84

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REVISED

MASTER PLATE & DOWEL PIN



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MARK 3 + 10 DYNADROME

T R A N S A X L E

TRANSADAPTER SET UP INSTRUCTIONS

Part No.            Transmission Model - CHRYSLER 404            I.D. NO.

	Description	
TA 88-1	Master Plate	TA 88-1
16502/16503	Horse Shoe Spacer 1/2"	4
	Secondary Plate	NR
17113	Dowel Pin	32
17119	Dowel Pin	35
	Spec. Bolt	39
18050	Flex Plate	3
17020	Pilot Sleeve	2
	Groove	5
17070	Pilot Bushing	4
16021	Spool	2M
16039	Spool Spacer	2
15964	Output LT	23
15965	Output RT	24
19602	Pivot Spacer	C

NOTES:    NR - None Required  
              NI - No I.D. No.

SUPPLEMENT TO TRANSADAPTER INSTRUCTIONS  
 Mark 3+10

CHRY. A404 (1.7L) Engine

Dowel Pins: #32 & #35

Spec. Bolt: #39

Dowel Pin Location: 1 & 19

Flex Plate: #3

Pilot Sleeve: #2  
 Groove: #5

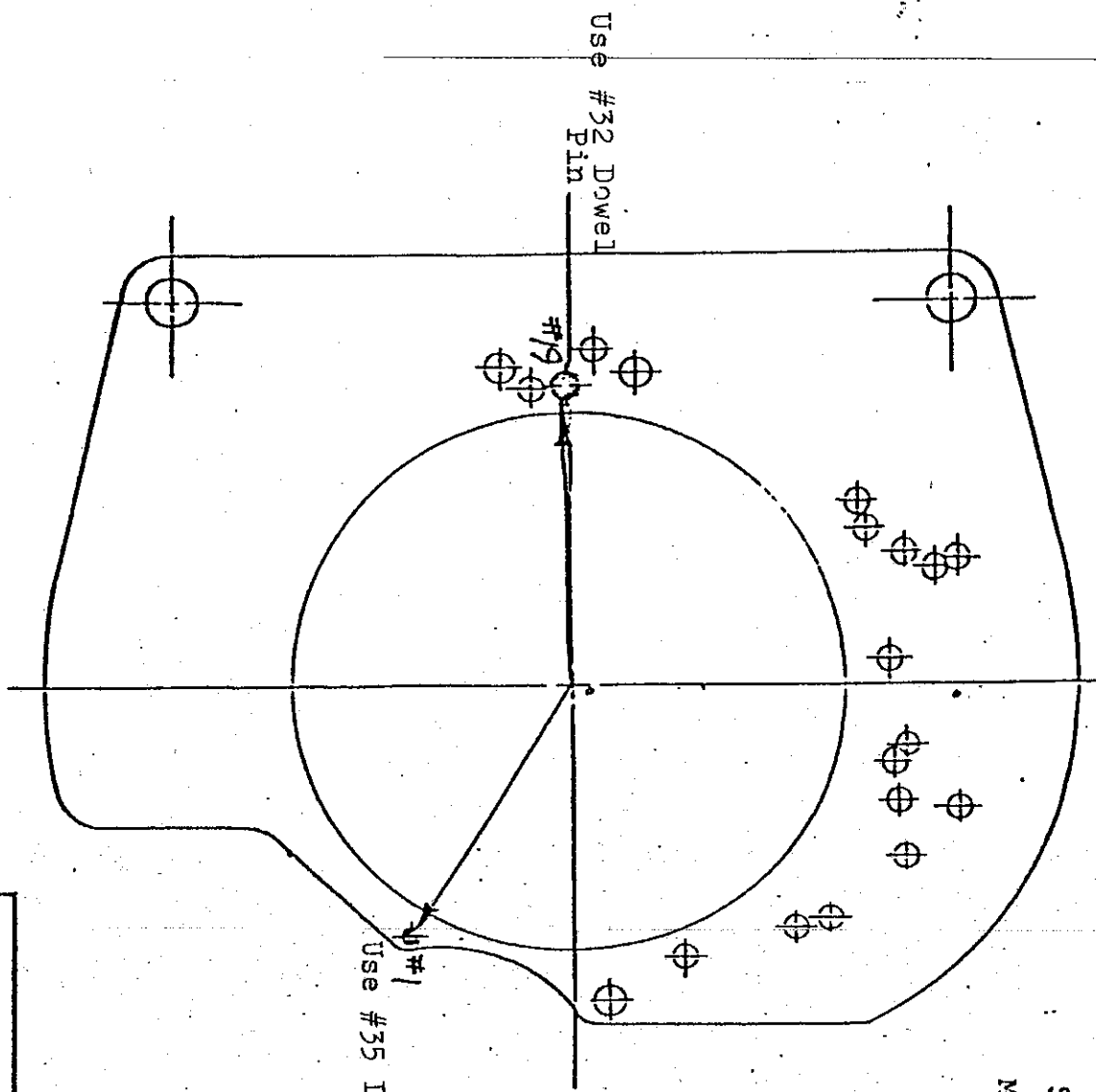
Pilot Bushing: #4

Spool: 2M

Spool Spacer: #2

Output: Lt.-23  
 Rt.-24

Pivot Spacer: 0



DELTADYNAMICS, INC.

SCALE: 1/4" = 1"

DATE: 12-3-84

APPROVED BY:

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MASTER PLATE & DOWEL PIN

DRAWING NUMBER



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MARK 3 + 10 DYNADROME

TRANSAXLE

TRANSADAPTER SET UP INSTRUCTIONS

Part No.            Transmission Model - CHRYSLER A413            I.D. NO.

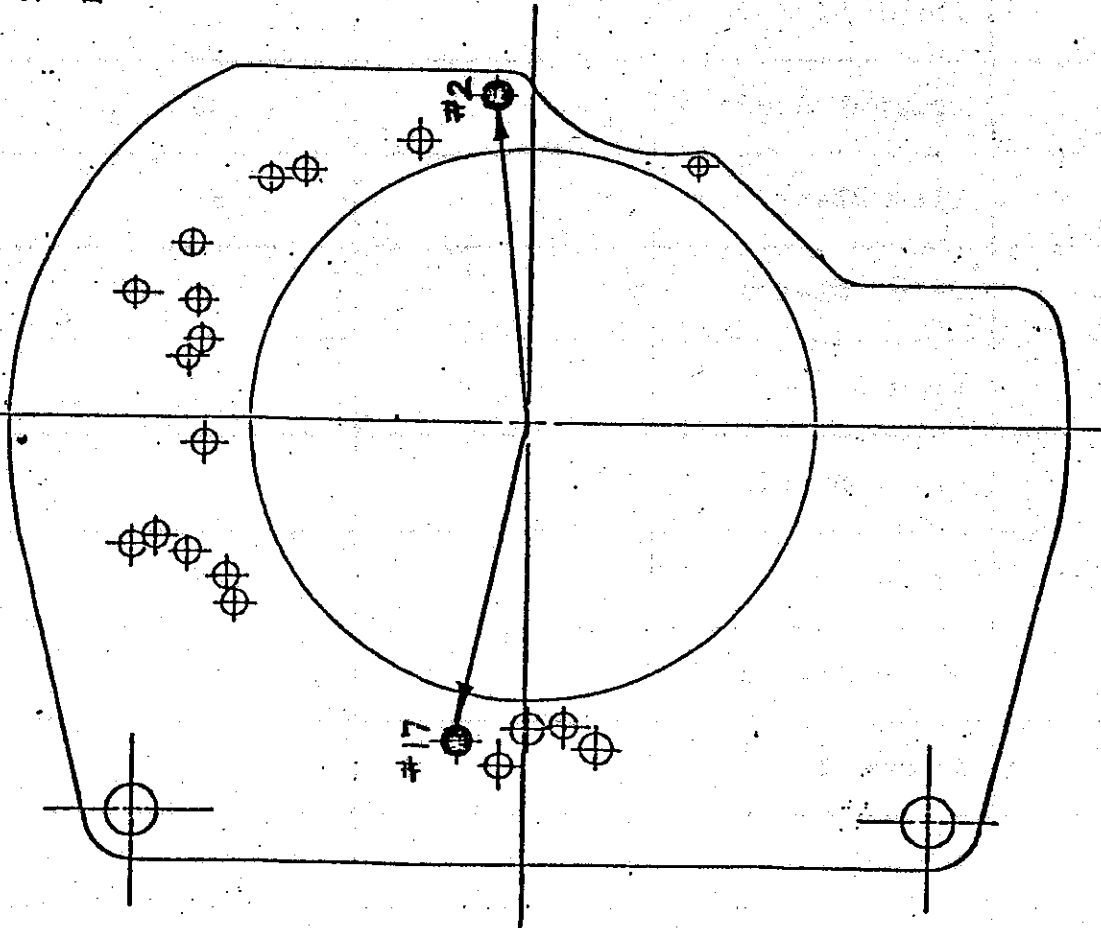
Description

Part No.	Description	I.D. NO.
TA 88-1	Master Plate	TA 88-1
16502/16503	Horse Shoe Spacer 1/2"	4
	Secondary Plate	NR
17113	Dowel Pins	32
17116	Special Stud	36
18050	Flex Plate	3
17020	Pilot Sleeve	2
	Groove	5
17070	Pilot Bushing	4
16021	Spool	2M
16039	Spool Spacer	2
15964	Output LT	23
15965	Output RT	24
19602	Pivot Spacer	C

NOTES:    NR - None Required  
              NI - No I.D. No.

SUPPLEMENT TO TRANSADAPTER INSTRUCTIONS

Mark 3+10



CHRY. A413 (2.2L) Engine

Dowel Pin: #32

Special Stud: #36

Dowel Pin Location: 2 & 17

Flex Plate: #3

Pilot Sleeve: #2

Groove: #5

Pilot Bushing: #4

Spool: 2M

Spool Spacer: #2

Output: Lt.-23

Rt.-24

Pivot Spacer: C

DELTADYNAMICS, INC.

APPROVED BY:

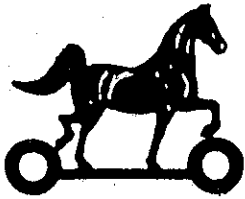
SCALE: 1/4" = 1"

DATE: 12-3-84

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MASTER PLATE & DOWEL PIN



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SYSTEMS

TECHNICAL REPORT

MARK 3 + 10 DYNADROME

TRANSAXLE

TRANSADAPTER SET UP INSTRUCTIONS

Part No.                      Transmission Model - CHRYSLER 470                      I.D. NO.

Description

TA 88-1	Master Plate	TA 88-1
16502/16503	Horse Shoe Spacer 1/2"	4
	Secondary Plate	NR
17114/17115	Dowel Pins	33 and 34
17117	Special Stud	37
18050	Flex Plate	3
17020	Pilot Sleeve	2
	Groove	5
17070	Pilot Bushing	4
16021	Spool	2M
16039	Spool Spacer	2
15964	Output LT	23
15965	Output RT	24
19602	Pivot Spacer	C

NOTES: Use one Dowel (#17115 with special 37 Stud and one Dowel (#171  
NR - None Required  
NI - No I.D. No.

SUPPLEMENT TO TRANSADAPTER INSTRUCTIONS

Mark 3+10

CHRY. A470 (2.6L) Engine

Dowel Pins: #33 & #34

Spec. Stud: #37

Dowel Pin Location: 2 & 21

Flex Plate: #3

Pilot Sleeve: #2  
Groove: #5

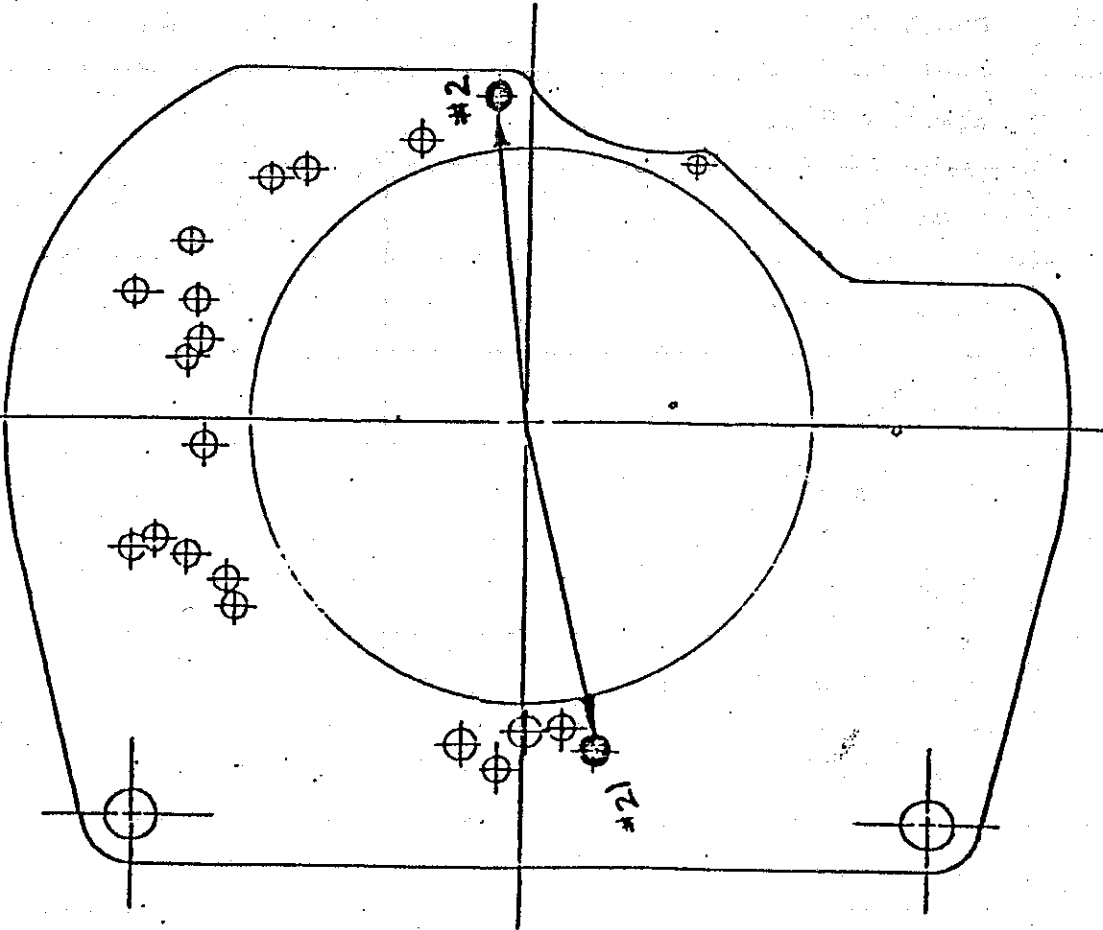
Pilot Bushing: #4

Spool: 2M

Spool Spacer: #2

Output: Lt.-23  
Rt.-24

Pivot Spacer: C



DELTADYNAMICS, INC.

APPROVED BY:

SCALE: 1/4" = 1"

DATE: 12-3-84

DRAWN BY TTD

REVISED

MASTER PLATE & DOWEL PIN

DRAWING NUMBER



**DELTA DYNAMICS, Inc.**

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AUTO POWER  
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Engine • Automatic Transmissi  
TESTING/TRAINING  
SYSTEMS

**TECHNICAL REPORT**

MARK 3 + 10 DYNADROME

T R A N S A X L E

TRANSADAPTER SET UP INSTRUCTIONS

Part No.

Transmission Model - GM 125

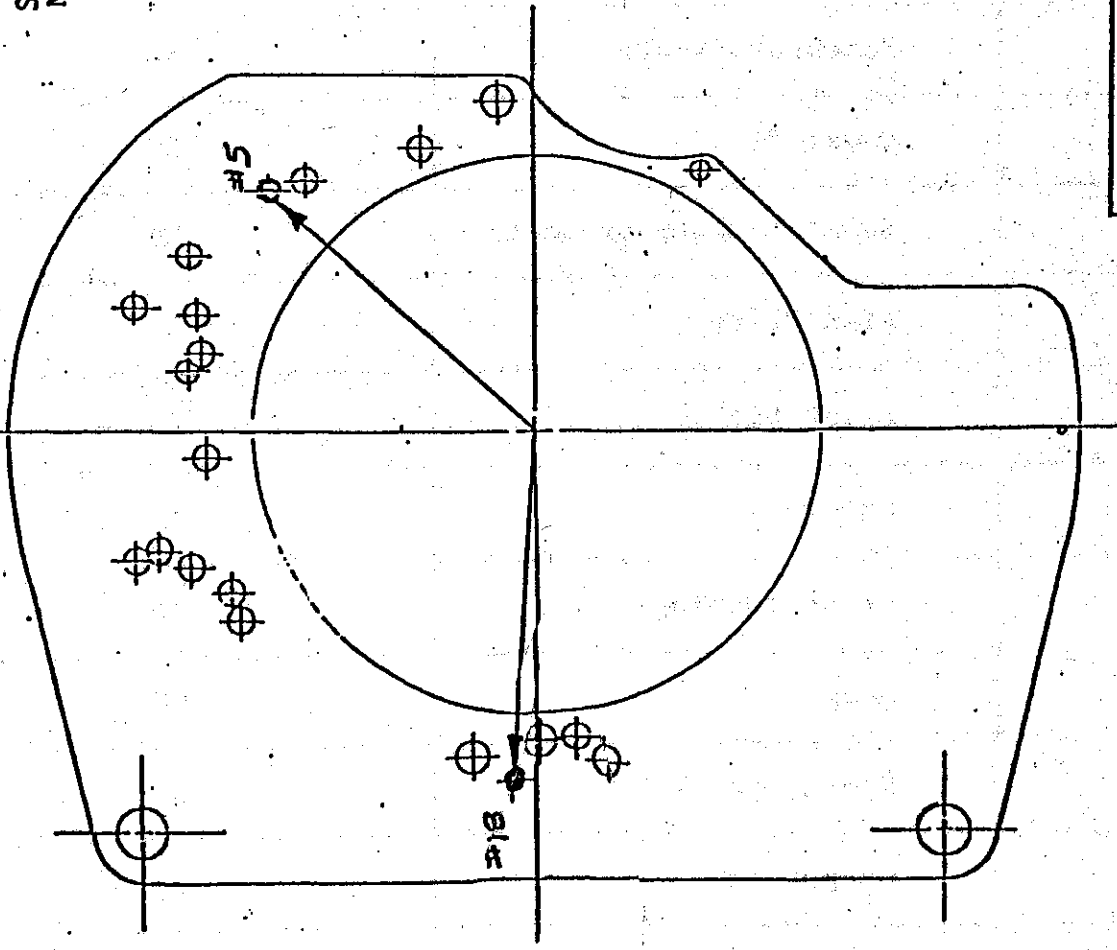
I.D. NO.

Description

Part No.	Description	I.D. NO.
TA 88-1	Master Plate	TA 88-1
16502/16503	Horse Shoe Spacer 1/2"	4
	Secondary Plate	NR
17111	Dowel Pins	30
	Special Clamp or Bolt	NR
18050	Flex Plate	3
17020	Pilot Sleeve	2
	Groove	6
17170	Pilot Bushing	10
16021	Spool	2M
	Spool Spacer	NR
15962	Output LT	21
15963	Output RT	22
19600/19601	Pivot Spacer	G

NOTES: NR - None Required  
NI - No I.D. No.

SUPPLEMENT TO TRANSADAPTER INSTRUCTIONS  
MARK 3+10



GM THM 125

Dowel Pin: #30

Dowel Pin Location: 5 & 18

Flex Plate: #3

Pilot Sleeve: #2  
Groove: #6

Pilot Bushing: #10

Spool: 2M

Output: Lt.-21  
Rt.-22

Pivot Spacer: G

DELTADYNAMICS, INC.

APPROVED BY:

SCALE: 1/4" = 1"

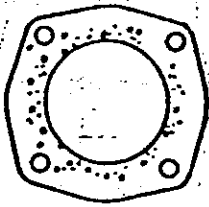
DATE: 12-3-84

DRAWN BY TTD

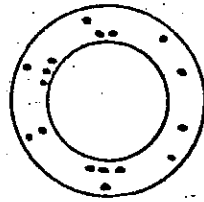
REVISED

MASTER PLATE & DOWEL PIN

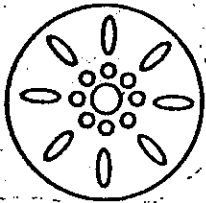
ILLUSTRATION OF THE UNIVERSAL ADAPTER PARTS



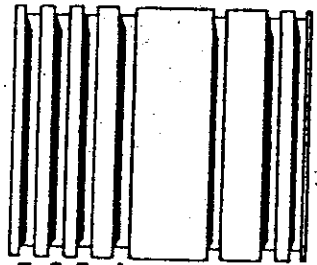
MASTER  
PLATE



SECONDARY  
PLATE



FLEX PLATE



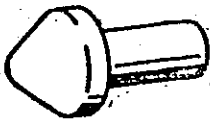
BIG END 7 6 5 4 3 2 1 GROOVE  
CONVERTER PILOT SLEEVE



HORSESHOE  
SPACER



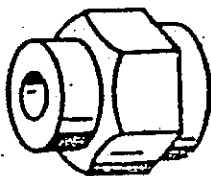
SPACER



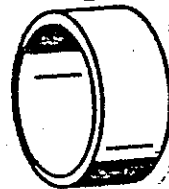
DOWEL  
PIN



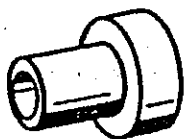
CAP WASHER



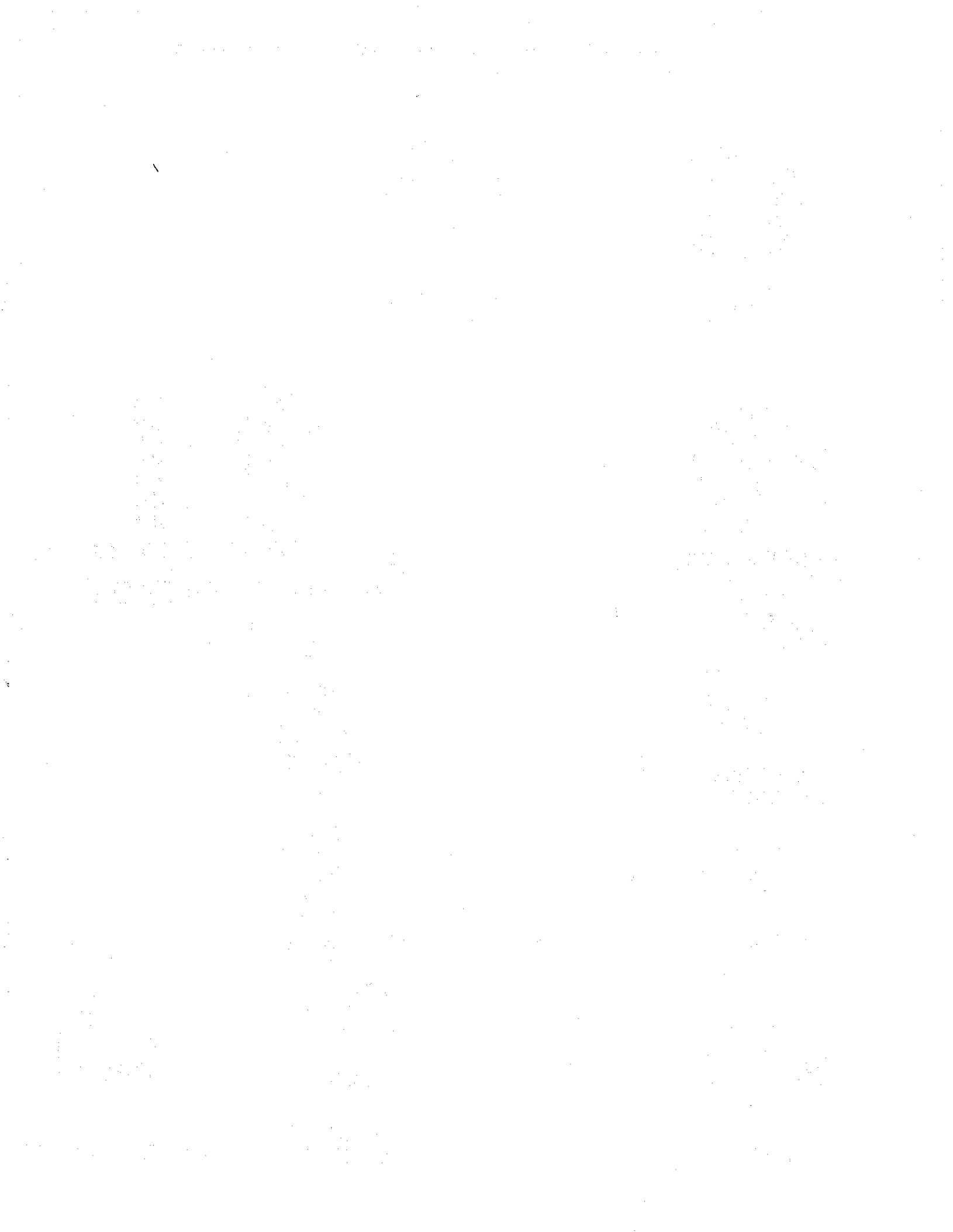
SPOOL

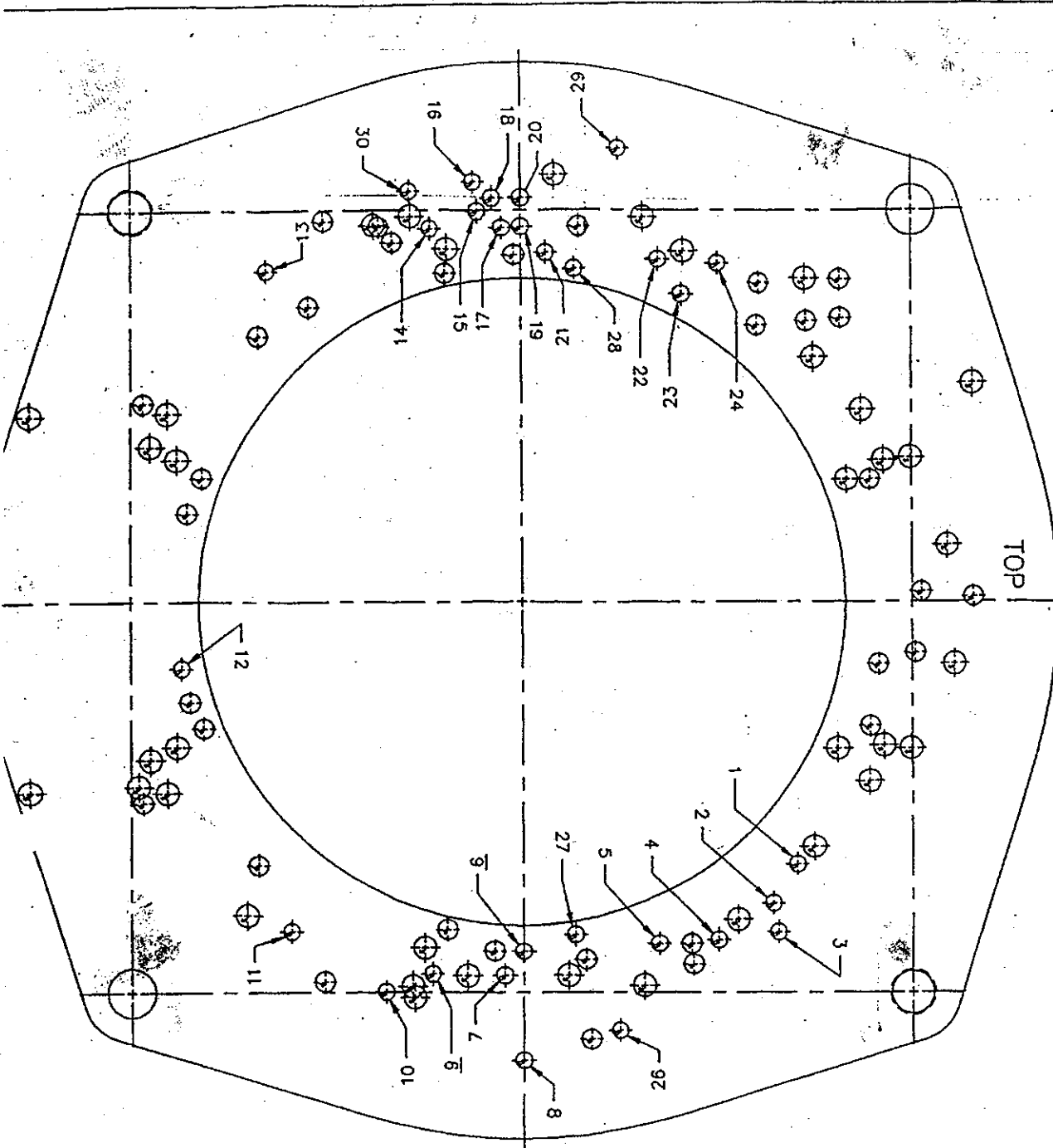


PILOT  
BUSHING



OUTPUT CONNECTOR





**CHRYSLER** BOWEL PIN LOCATION  
ON MASTER PLATE

TF-6	904	12 & 23
TF-6	904	9 & 14
TF-8	727A	9 & 14
TF-8	727B	11 & 20

**GENERAL MOTORS**

TURBOHYDRAMATIC 350	2 & 15
TURBOHYDRAMATIC 350C	2 & 15
TURBOHYDRAMATIC 700R4	2 & 15
TURBOHYDRAMATIC 200R4	2 & 15
TURBOHYDRAMATIC 200R4	2 & 15
TURBOHYDRAMATIC 200C	2 & 15
TURBOHYDRAMATIC 400	2 & 15
TURBOHYDRAMATIC 375	2 & 15
TURBOHYDRAMATIC 200	27 & 28
(CHEVETTE, OPEL & LUV)	

**FORD**

C-6	ROUND TOP	3 & 16
C-6	FLAT TOP	10 & 13
C-6	SMALL BELL HOUSING	1 & 18
C-4	SMALL CASE	1 & 18
C-4	LARGE CASE	1 & 18
C-5		1 & 18
AOD		1 & 18
C-6 INTER. DIESEL		10 & 30
FMX		1 & 18

**INTERNATIONAL**

727	26 & 29
-----	---------

AXI.LINE

Manufacturing & Sales Office  
10000 17th Street  
Houston, TX 77035  
713-861-1111

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Houston, TX 77035  
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M310A DYNADROME

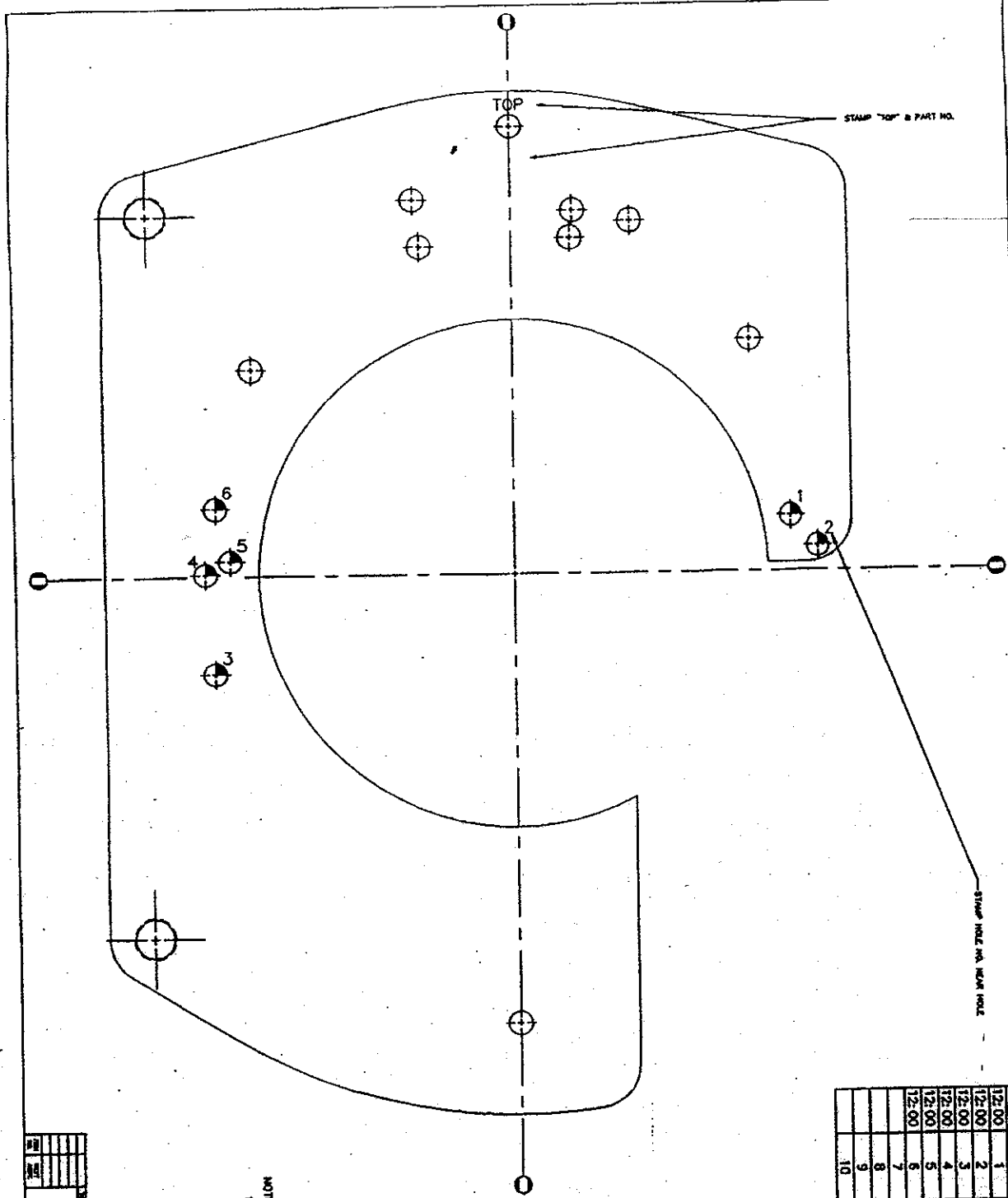
TRANSAXLE

TRANSADAPTER SET UP INSTRUCTIONS

Transmission Model - AXOD

Part No.	Description	I.D. No.
TA 90-2	Master Plate	TA 90-2
	Horse Shoe Spacer	NR*
	Secondary Plate	NR*
17112	Dowel Pin	31
	Special Stud	40
18050	Flex Plate	3
17020	Pilot Sleeve	2
	Groove	6
	Pilot Bushing	10
16191	Spool	3
	Spool Spacer	NR*
	Output Left	26
	Output Right	27
	Pivot Spacer	AXOD

\* - None Required



NOTES:  
 1. HOLES MARKED & REAMED .5005/.5020 DIA.

QTY	HOLE NO.	DESCRIPTION & TRANS.	SIZE
12-00	1	FORD AXOD	◆
12-00	2	CHRYSLER A870 & A870	◆
12-00	3	CHRYSLER A870	◆
12-00	4	CHRYSLER A870	◆
12-00	5	FORD AXOD	◆
12-00	6	CHRYSLER A870	◆
	7		
	8		
	9		
	10		

**EXLINE** Manufacturing & Sales Division  
 10000 Ford Road, Detroit, MI 48202  
 (313) 486-1000

DATE	REV	BY	CHKD

**SUPPLEMENT TO TRANSADAPTER INSTRUCTIONS**  
**Mask 3+10**

Master Plate TA 90-2

Cylinder 604 570

Horsehoe spacer No. 4

Dowel Pin 33

Dowel Pin location 3, 4 or 5

Special Stud No. 40

Flex Plate #3

Pilot Sleeve #2

Groove #5

Pilot Bushing #4

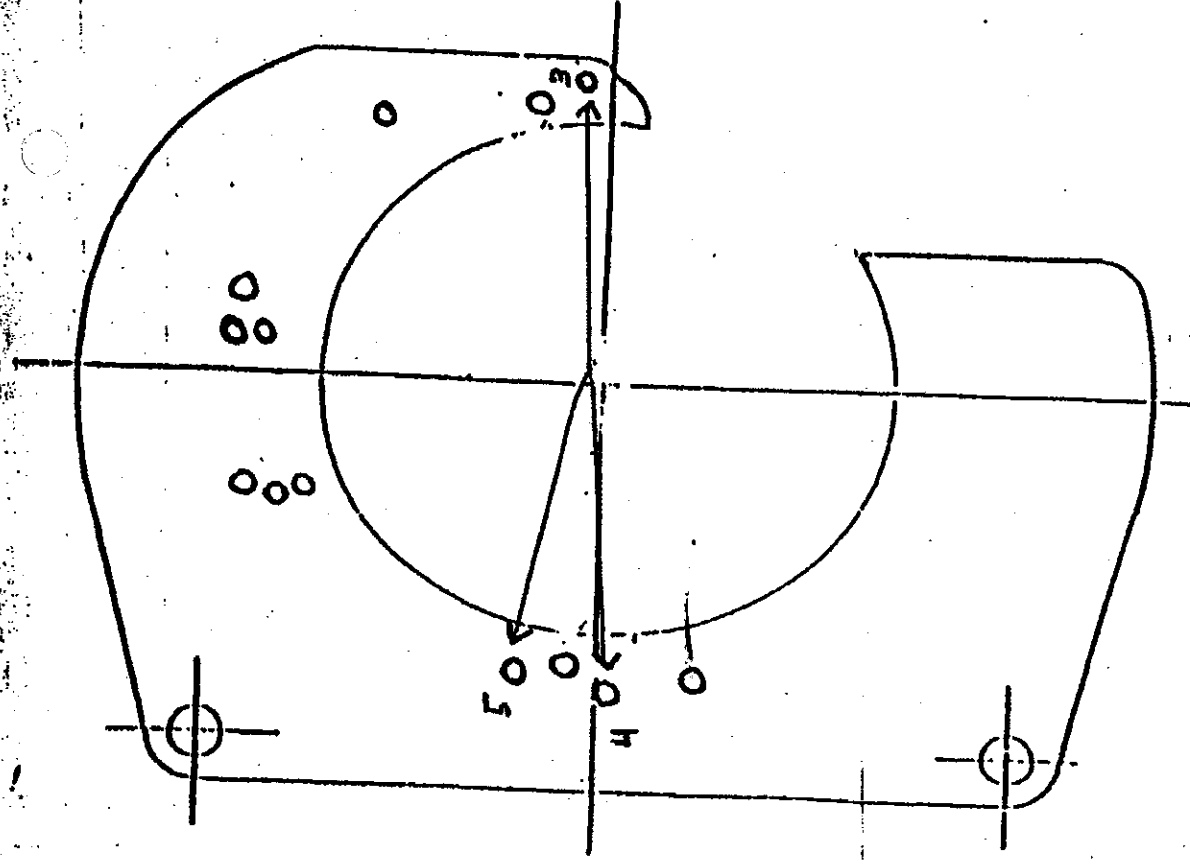
Spool #2M

Spool Spacer #2

Output Left 28

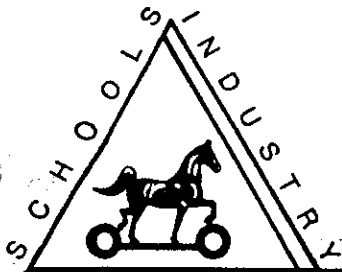
Output Right 29

Pivot Spacer C



SCALE: $\frac{1}{4}'' = 1''$	APPROVED BY:	DRAWN BY TTD
		REVISED
<b>MASTER PLATE &amp; DOWEL PIN</b>		
DRAWING NUMBER		

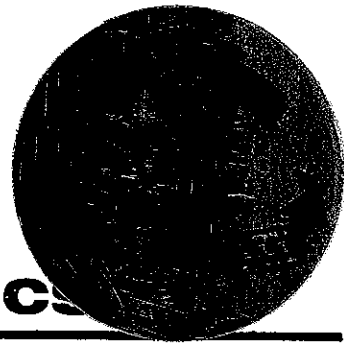




Automatic Transmission  
Technology

**DELTADYNAMICS**

**DYNADROMES**



P.O. Box 8401  
Green Bay, Wis.  
54308-8401  
414-434-3757

October, 1985

TO TRADE & INDUSTRIAL SUPERVISORS AND DIRECTORS:

For 20 years we have endeavored to assist Automatic Transmission Instructors by supplying high integrity Testing/Training Equipment.

We are taking this opportunity to remind Instructors of the safety aspects of our equipment some of which is now 20 years old. We are very proud and protective of our perfect record of designing/building safe equipment for Instructors and students use.

We are suggesting that the condition of your Deltadynamics equipment be reviewed at this time as it relates to safe operations.

I am sure that you are aware of the safety implications in today's world but am attaching a reprint from TIME, and also reminding you of the availability of the book "Teacher Liability in School Shop Accidents."

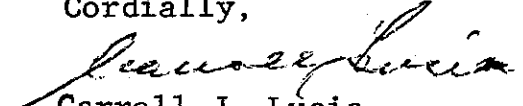
As you know the World of work is hazardous and training youth in the "trades" may be especially hazardous. The Courts are awarding unbelievable recompense for the smallest damage to the human body and its ability to participate in the World of work.

We suggest you bring the attached to the attention of Automotive Instructors having the responsibility for safe operation of shop equipment including our Transmission Testing Equipment now presumed to be in operation in your Automotive Shop.

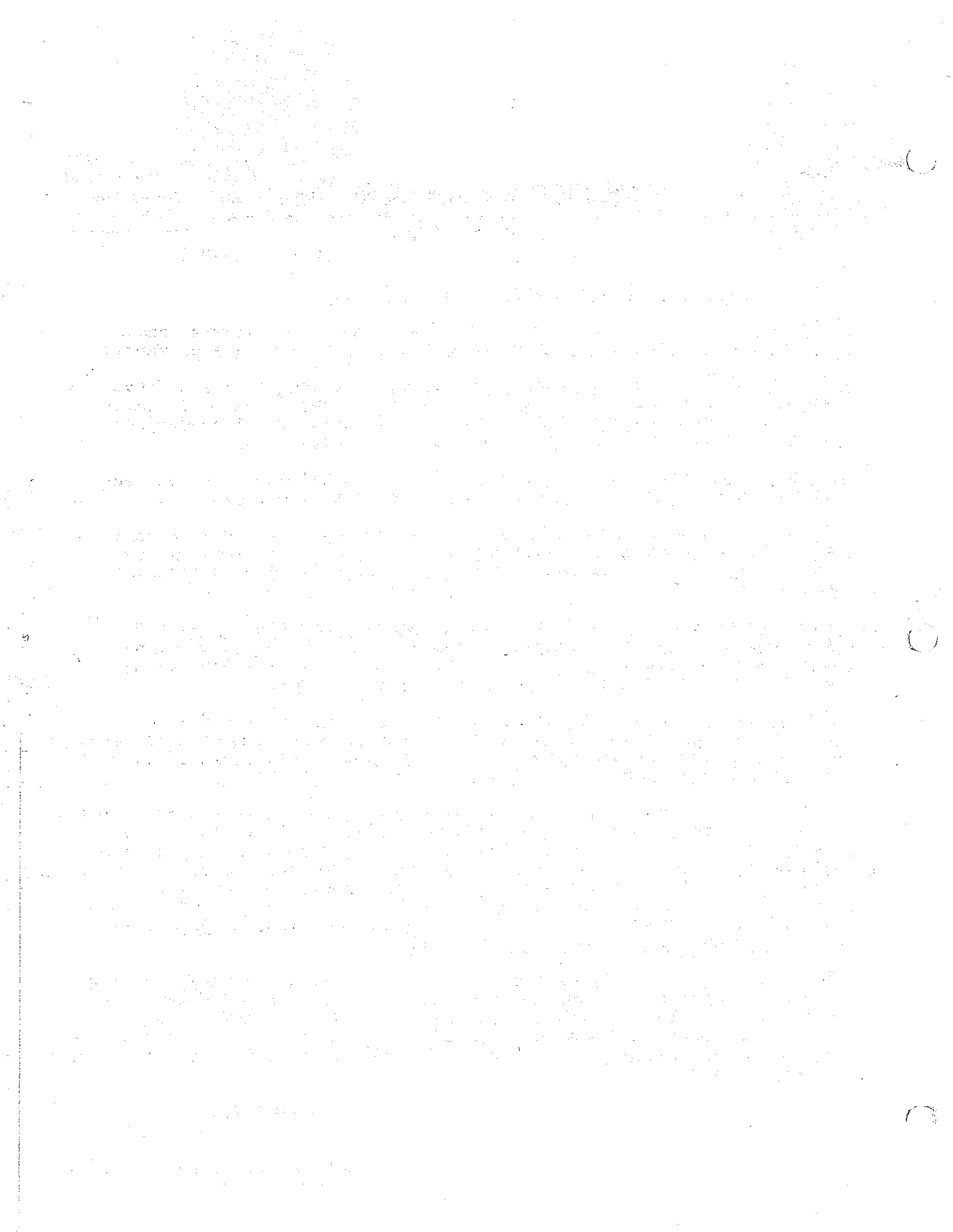
We are very proud of our safe designs having never experienced a serious injury to Instructor or Students with 200 school installations over 20 years. Some of these are 10-20 years old and no doubt are needing upgrading in safety as well as the hardware/software. We first aspired to work closely with Schools on upgrading Automatic Transmissions offerings by supporting Instructors. Since then we have supplied 200 Instructors with this type of major training equipment without a serious accident involving student or Instructor.

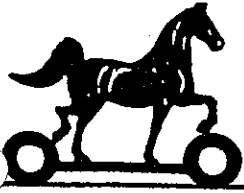
Today the Automatic Transmission includes the entire Front Wheel Drive-train, placing a new burden on the Instructor. First and foremost we hope to work closely with the Instructor on SAFE OPERATION as well as on the "technicals." We have developed a safe Mark 3+10 Dynadrome but we need the cooperation of the current Instructor to maintain the excellent safety record.

Cordially,

  
Carroll J. Lucia,  
President

CJL/mt  
Encl.





**DELTA DYNAMICS, Inc.**

GREEN BAY, WIS.

DRIVETRAIN  
TECHNOLOGY

AUTOMATIC TRANSMISSION  
TESTING/TRAINING  
SYSTEMS

TECHNICAL REPORT

## Insurance Shock

### *Premiums up, coverage down*

**B**usiness executives and public officials lately have been receiving a new kind of letter bomb: their insurance bill. These days many letters from insurers announce increases in annual premiums for liability coverage of 50%, 100% or even 1,000%. The rocketing price of insurance has created a crisis for everything from manufacturers to municipalities. Doctors, tavern-keepers, high schools, bowling alleys, exterminators and banks are all being hit hard. Says Don Benninghoven, executive director of the League of California Cities: "This is the most serious issue I can ever remember cities dealing with." In the end, citizens and consumers will pay the bill in the form of higher taxes and prices.

Drained by a growing number of huge personal-injury awards, insurers are struggling to increase profitability by boosting rates and even refusing to renew risky policies. Many of their rejected customers are having a hard time finding insurance at any price. Says Robert Rear-den, president of Duncan Peek, an Atlanta insurance-brokerage firm: "At times it's extremely frustrating. The other day a salesman here said to me, 'I need an extra day off. It's tiring delivering all this bad news.'" Many businesses and local governments have been forced to go uninsured, thereby risking bankruptcy or at the very least a fiscal squeeze if they encounter a large lawsuit.

The insurance shock is forcing communities to curb services and boost taxes. Northfield (Ill.) Township High School District 225 canceled its summer basketball and baseball programs this year for lack of coverage. In Blue Island (pop. 22,000), a Chicago suburb, citizens held a noisy meeting last month to debate a 30% tax increase. Reason: the city's insurance premiums had jumped from \$175,000 to \$435,000 in one year. In July the Southern California Rapid Transit District came within nine hours of idling its 2,500 buses for lack of insurance. The annual premium rose from \$67,000 to \$3.2 million.

Businesses have been hit just as hard. Even firms that have never had a suit filed against them have difficulty if they are in a troubled industry. Day care has become a high-risk business because of sexual-abuse cases. Liquor stores have been denied coverage because they are sometimes liable for death and injury caused by drunken customers. Bismarck Food Service, which sells beer at Detroit's Tiger Stadium, saw its insurance bill increase from \$50,000 in 1983 to \$1 million.

The airline industry could face large insurance-premium increases as the result of this year's string of fatal accidents. The crash of a Japan Air Lines 747 is expected to cost the carrier and its insurance company as much as \$200 million in compensation to victims' families. Last week Delta Air Lines, facing heavy costs from its

L-1011 crash in Dallas, asked a U.S. District Court to require the Federal Government to share responsibility. The carrier contends that federal air-traffic controllers were at fault in the crash because they failed to warn the pilot sufficiently of bad weather conditions.

The rise in product-liability lawsuits, notably in the case of the Dalkon Shield intrauterine birth control device, has resulted in ballooning insurance rates for manufacturers. And Union Carbide's Bhopal disaster, which prompted more than \$100 billion in lawsuits, has helped make toxic-pollution insurance virtually impossible for most chemical companies to obtain.

Professionals ranging from doctors to accountants have been hit with bills large enough to make them think twice about their career choices. An estimated 18% of obstetricians in the U.S. will switch to other specialties this year because coverage against malpractice suits now runs as high as \$72,000 a year. Says Dr. Harry Cole, president of the St. Louis Metropolitan Medical Society: "It's getting frightening. Unless we can get some relief, we're going to see high-risk patients having difficulties finding doctors to treat them."

Property-and-casualty insurance companies say they have no choice but to hike rates because they are scrambling to recover from \$3.8 billion in red ink last year. Some of the current losses are the result of a six-year rate war in which most insurers slashed premiums with competitive abandon. But a greater problem is the growing number and size of personal-injury lawsuits. Says Rudolph F. Landolt, president of Chicago's Kemper Group of Insurance Companies: "You have an accident, and everyone involved gets sued. We live in litigious times." Insurance companies blame courts for being far too generous in determining liability and juries for granting exorbitant awards. "There is no limit to it," says Albert Abend, spokesman for Hartford's Aetna. "There are no federal standards. What kind of business environment is this?"

**C**onsumer advocates respond that insurers are pushing rates higher than necessary. Last month Ralph Nader and Robert Hunter, president of the National Insurance Consumer Organization, asked the Justice Department to investigate whether the insurance industry is illegally boycotting some businesses. "What we are witnessing," said Hunter, "is a manufactured crisis intended to bloat insurer profits and reduce victims' rights."

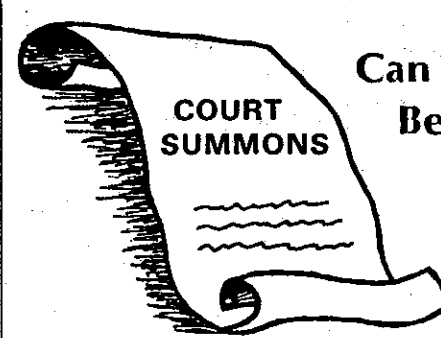
Meanwhile, many desperate businesses and municipalities have started practicing do-it-yourself insurance. The smaller cities and companies do this by joining together to create a reserve of cash from which claims can be paid. Larger ones simply salt away what they think will be enough money to cover any lawsuit. Then they start hoping that they will not be sued.

—By Stephen Koeppe. Reported by Lee Griggs/Chicago, with other bureaus

**li·a·bil·i·ty** \,līə'biləd.ē, -lətē, -i\ n -ES 1 a : the quality or state of being liable (the ~ of an insurer) b : LIKELIHOOD (the ~ to take to their beds at the drop of a hat —Osbert Lancaster) 2 : something for which one is liable: as a (1) : an amount that is owed whether payable in money, other property, or services — compare ACCRUED LIABILITY, CAPITAL LIABILITY (2) liabilities pl : pecuniary obligations : DEBTS — compare ASSET b : an obligation or duty which is owed by the person to another to refrain from some act or to conduct himself to the latter or to perform some act or to do something for the benefit of the latter and for breach of which the law gives a remedy to the latter (as damages, restriction, specific performance, injunction, accountability and responsibility to another enforceable by legal or criminal sanctions 3 : something that works as a disadvantage : DRAWBACK (effects on the growing self of a child that will be his liability instead of assets —Bingham Day) (the very traits which made him a success . . . are likely to be serious liabilities at a later stage —P.B.Sears) syn see DEBT

liability insurance n : insurance against loss resulting from liability for injury or damage to the persons or property of others  
 liability limit n : the maximum amount an insurance company agrees to pay as or injury to a single person  
 liability in-

**DANGER**  
**THE SET COLLAR MUST BE TIGHTENED**  
**SECURELY BEFORE OPERATING**  
**IMPORTANT**



**Can You  
Be  
Sued?**

**Teacher Liability  
in School-Shop Accidents**

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