



G.A.L. Manufacturing Corporation

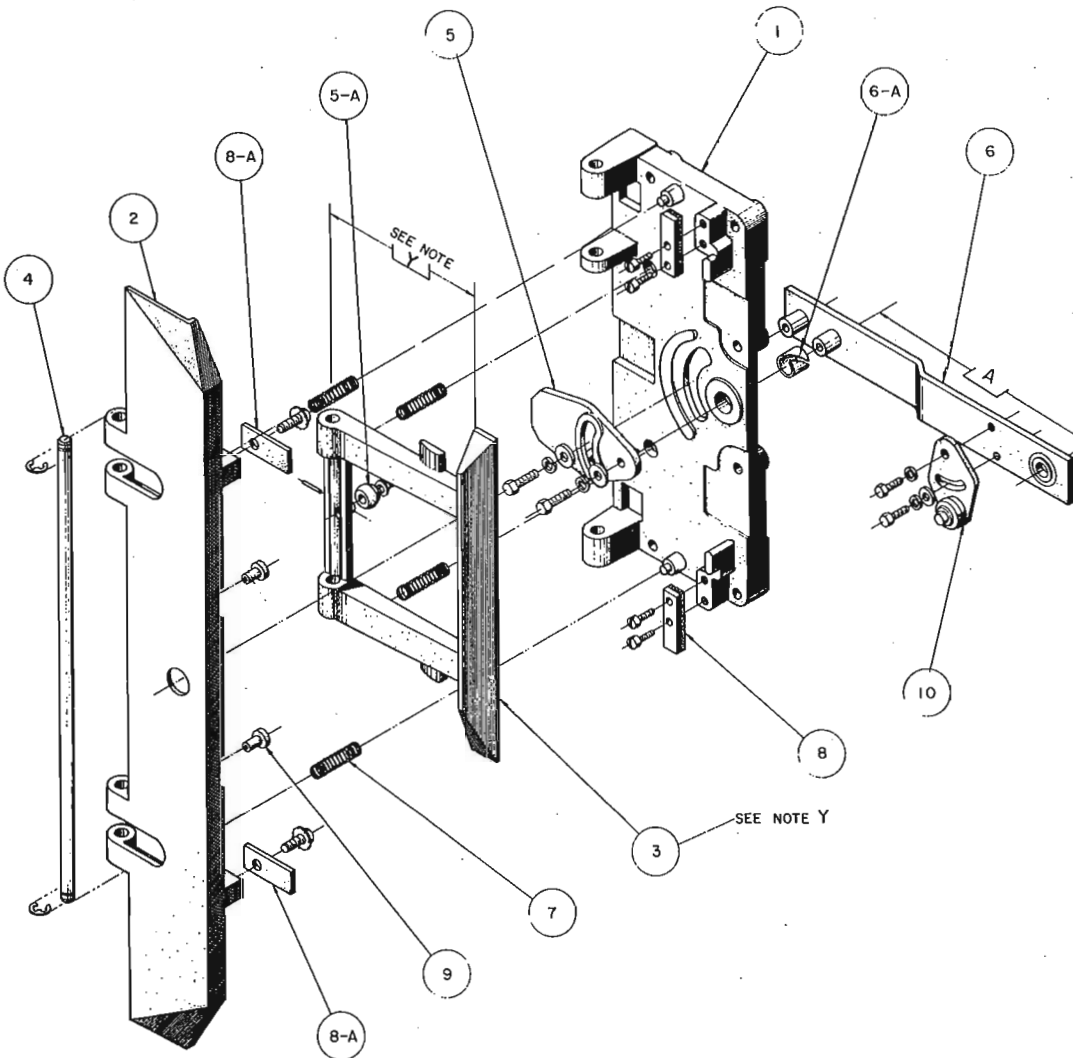
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CLUTCHES

MODEL	ITEM	PART DWG. No.
TYPE L and LW	CLUTCH	OP-30
TYPE LWZ	ZONE LOCK CLUTCH	OP-30Z
TYPE C and CW	CLUTCH	OP-31
TYPE R	CLUTCH	OP-32
TYPE S	CLUTCH	OP-33



TYPE "L" CAR DOOR CLUTCH
(PARTS LIST)

PART NO.	DESCRIPTION	
OP-30-1	TYPE "L" CLUTCH BASE	
OP-30-2	TYPE "L" CLUTCH DOOR OPEN VANE	
OP-30-3	TYPE "L" CLUTCH RETRACTING VANE	
OP-30-4	HINGE PIN	
OP-30-5	TYPE "L" CLUTCH ACTUATING CAM	
OP-30-5A	ACTUATING ROLLER	
* OP-30-6	ACTUATING LINK (ADVISE "A" DIMENSION)	
OP-30-6A	NYLINER BUSHING (2955-A NYLINER)	
OP-30-7	SPRING (4 REQ'D)	
OP-30-8	DOOR OPEN VANE BASE STOP BUMPER	
OP-30-8A	DOOR OPEN VANE STOP	
OP-30-9	MO KEEPER STEM BUMPER	
OP-30-10	RA SAFETY EDGE DOOR CLOSE CAM	

NOTE: WHEN ORDERING SPECIFY THIS DRAWING NUMBER,
PART NUMBER, DESCRIPTION AND HAND.

LEFT HAND SHOWN
RIGHT HAND OPPOSITE AS SHOWN

NOTE "Y"
L CLUTCH : $4\frac{3}{4}$
LW CLUTCH : $6\frac{1}{4}$



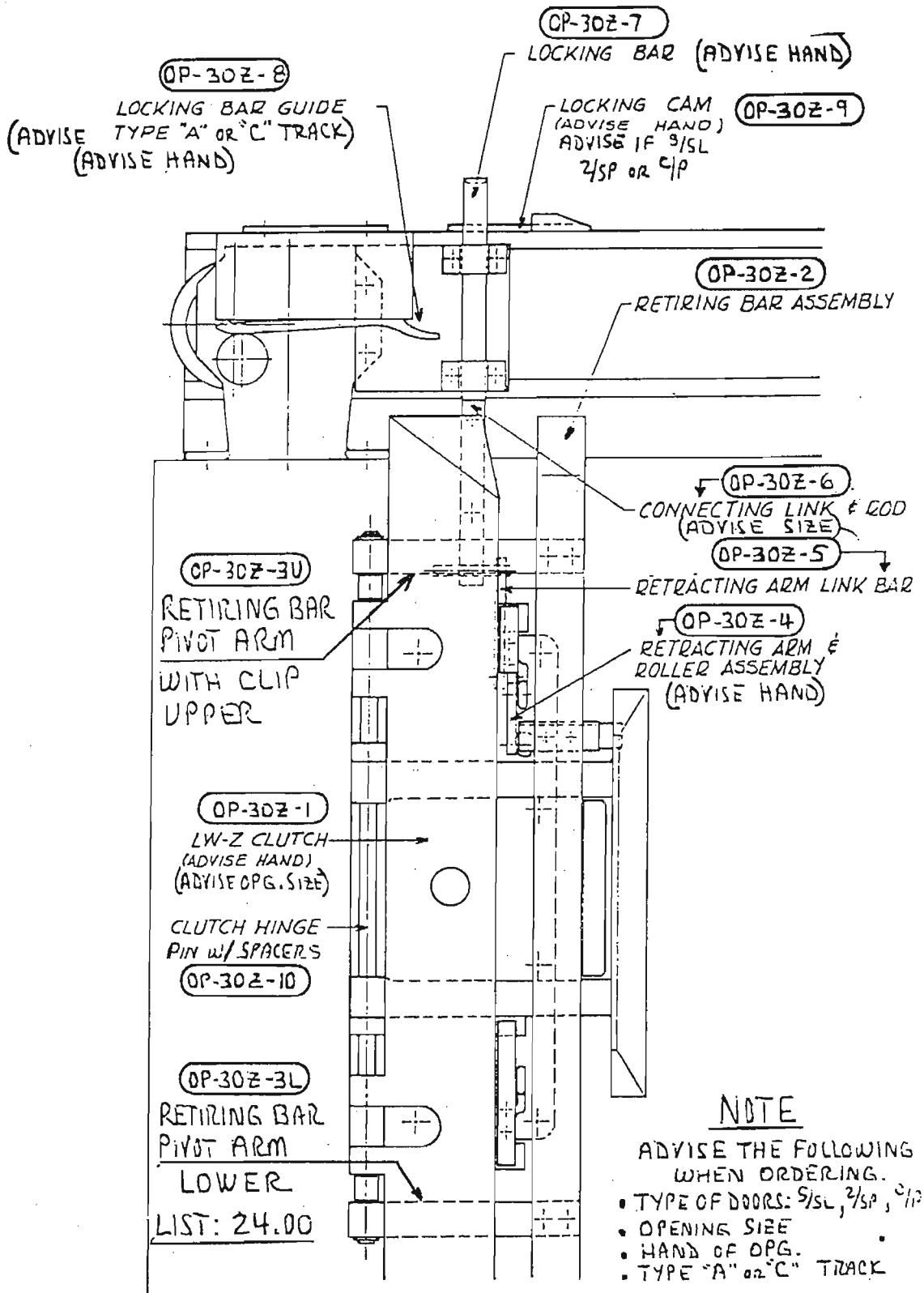
TYPE "L" & "LW"
CAR DOOR CLUTCH

SCALE 3/8"			DATE 11 - 13 - 1974		
DWG BY S C H			CHK BY G F D		
NO	REVISION	DATE	CHK		
					OP - 30

U.S. PAT.
4364454
4423799

U.K. PAT.
2085840
2112352

CAN. PAT.
1168464
1179702



NO.	REVISION	DATE	CHK.

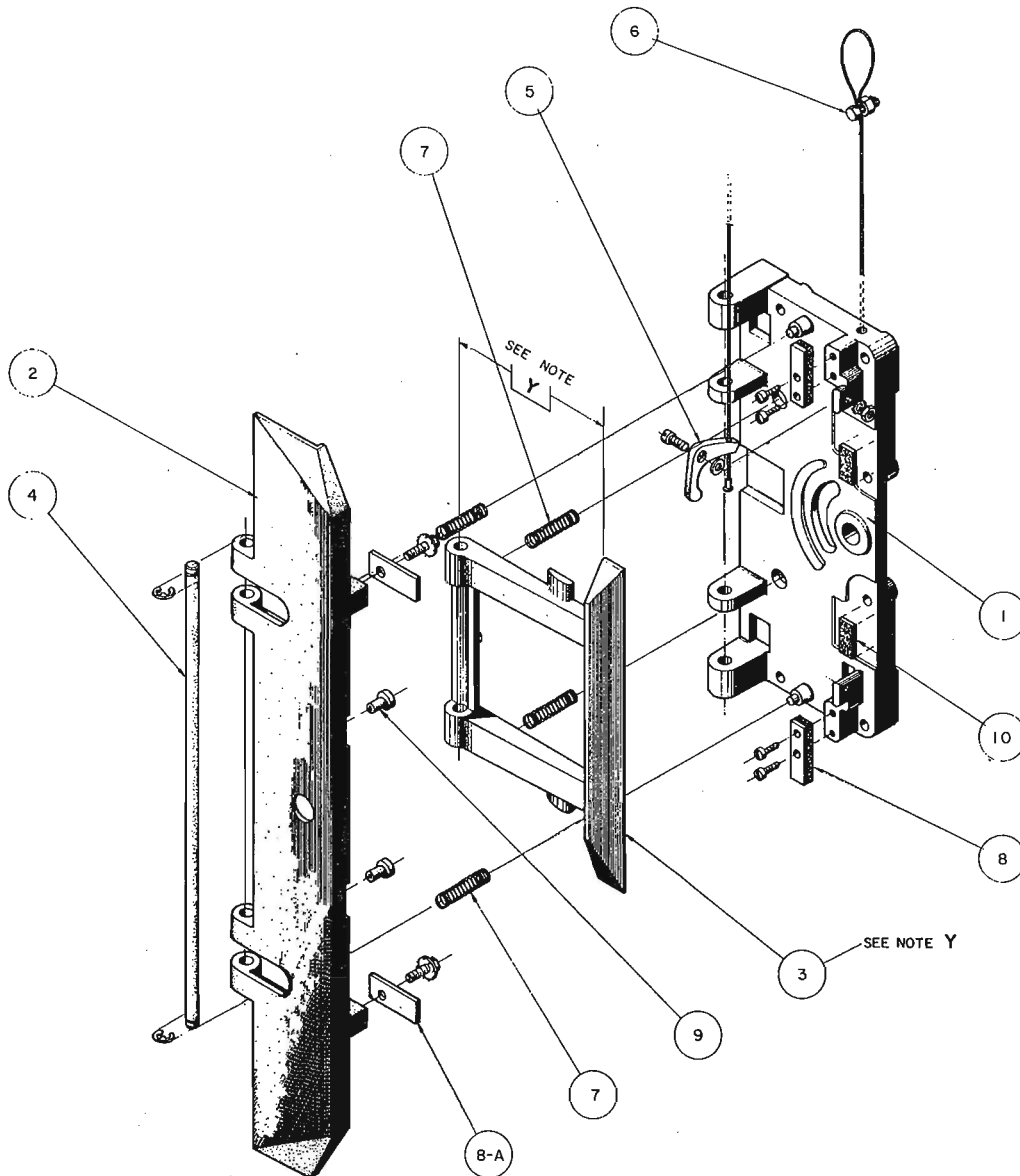


G. A. L. MANUFACTURING CORP.
50 EAST 153rd STREET BRONX, N. Y. 10451

SCALE NONE
DWG. BY *FD*
CHK. BY *L.L.*
DATE 10/23/81

(TYPE "A" HANGER)
CAR DOOR ZONE LOCKING DEVICE
ASSEMBLY

OP-30Z



TYPE "C" CAR DOOR CLUTCH
(PARTS LIST)

PART No.	DESCRIPTION	
OP-31-1	TYPE "C" CLUTCH BASE	
OP-31-2	TYPE "C" CLUTCH DOOR OPEN VANE	
OP-31-3	TYPE "C" CLUTCH RETRACTING VANE	
OP-31-4	HINGE PIN	
OP-31-5	TYPE "C" CLUTCH ACTIVATING LINK	
OP-31-6	TYPE "C" CLUTCH RETRACTING CABLE	
OP-31-7	SPRING (4) REQUIRED	
OP-31-8	DOOR OPEN VANE BASE STOP BUMPER	
OP-31-8A	DOOR OPEN VANE STOP	
OP-31-9	MO KEEPER STEM BUMPER	
OP-31-10	RETRACTING VANE BUMPER	

NOTE: WHEN ORDERING SPECIFY THIS DRAWING NUMBER, PART NUMBER, DESCRIPTION AND HAND.

LEFT HAND SHOWN
RIGHT HAND OPPOSITE AS SHOWN

NOTE Y
C CLUTCH : 4 $\frac{3}{4}$
CW CLUTCH : 6 $\frac{1}{4}$

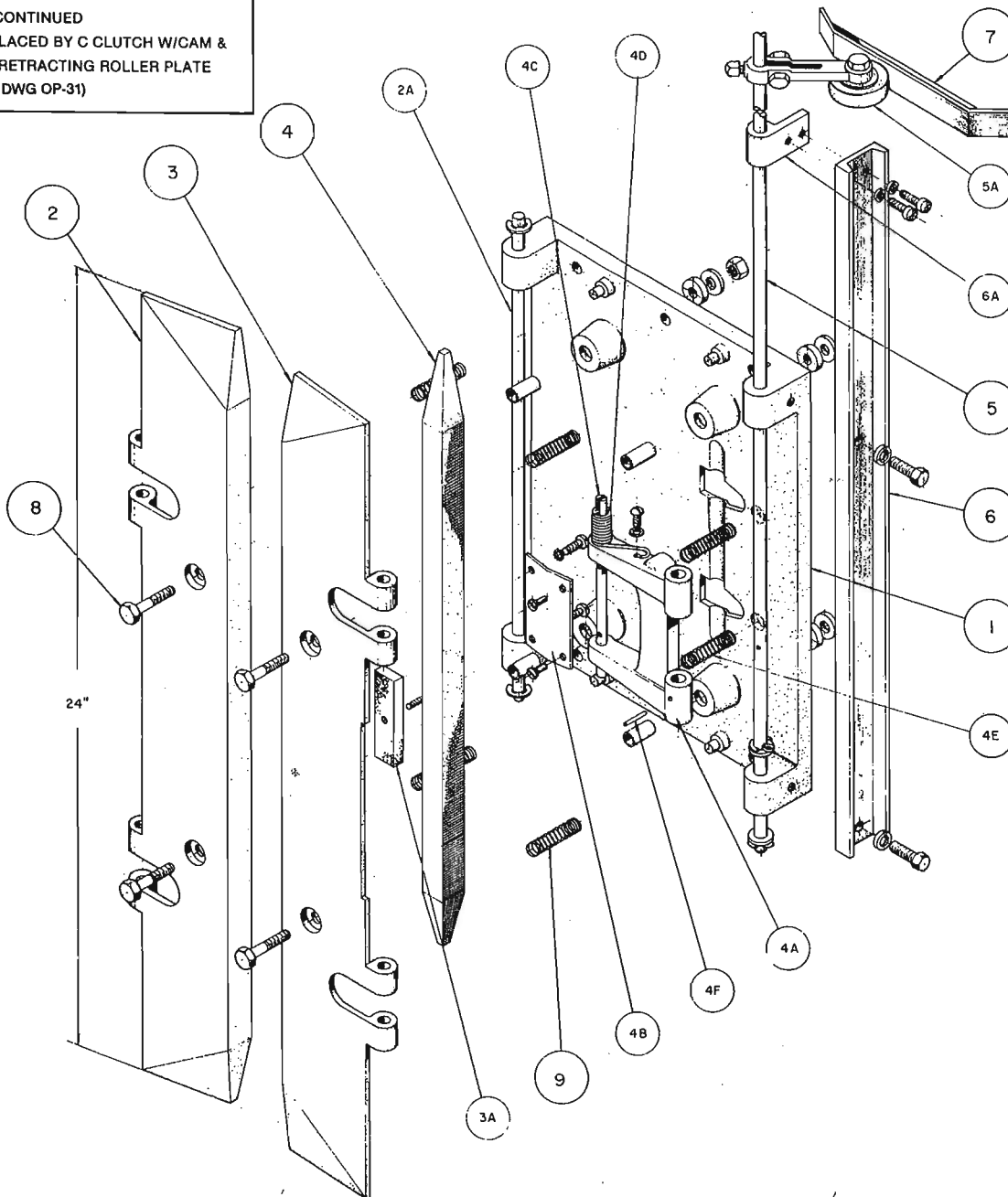


TYPE "C" & "CW"
CAR DOOR CLUTCH

SCALE 3/8"		DATE 11-13-1974	
1	MIN. SALES	7-78	DWG. BY S C H.
NO.	REVISION	DATE	CHK. BY G. F. D.

OP-31

DISCONTINUED
REPLACED BY C CLUTCH W/CAM &
S/S RETRACTING ROLLER PLATE
(SEE DWG OP-31)



TYPE "R" CAR DOOR CLUTCH (PARTS LIST)

PART NO.	DESCRIPTION	
OP-32-1	TYPE "R" CLUTCH BASE	
OP-32-2	DOOR OPEN VANE	
OP-32-2A	DOOR OPEN VANE HINGE PIN	
OP-32-3	DOOR CLOSE VANE	
OP-32-3A	RUBBER BUMPER	
OP-32-4	RETRACTING VANE	
OP-32-4A	ACTIVATING ARM	
OP-32-4B	HINGE	
OP-32-4C	HINGE PIN	
OP-32-4D	HINGE PIN SPRING	
OP-32-4E	ACTIVATING ARM SPRING (4)REQ'D	
OP-32-4F	ROLL PIN	
OP-32-5	CLOSE VANE HINGE PIN	
OP-32-5A	"R" CLUTCH ACTUATING ROLLER ARM	
OP-32-6	SHAFT SUPPORT BRACKET	
OP-32-6A	SHAFT SUPPORT BEARING	
OP-32-7	"R" CLUTCH ACTUATING CAM	
OP-32-8	DOOR VANE ADJUSTING BOLTS (4)REQ'D	
OP-32-9	DOOR VANE SPRING (4)REQ'D	

NOTE: WHEN ORDERING SPECIFY THIS DRAWING
NUMBER, PART NUMBER, DESCRIPTION
AND HAND.

L.H. SHOWN

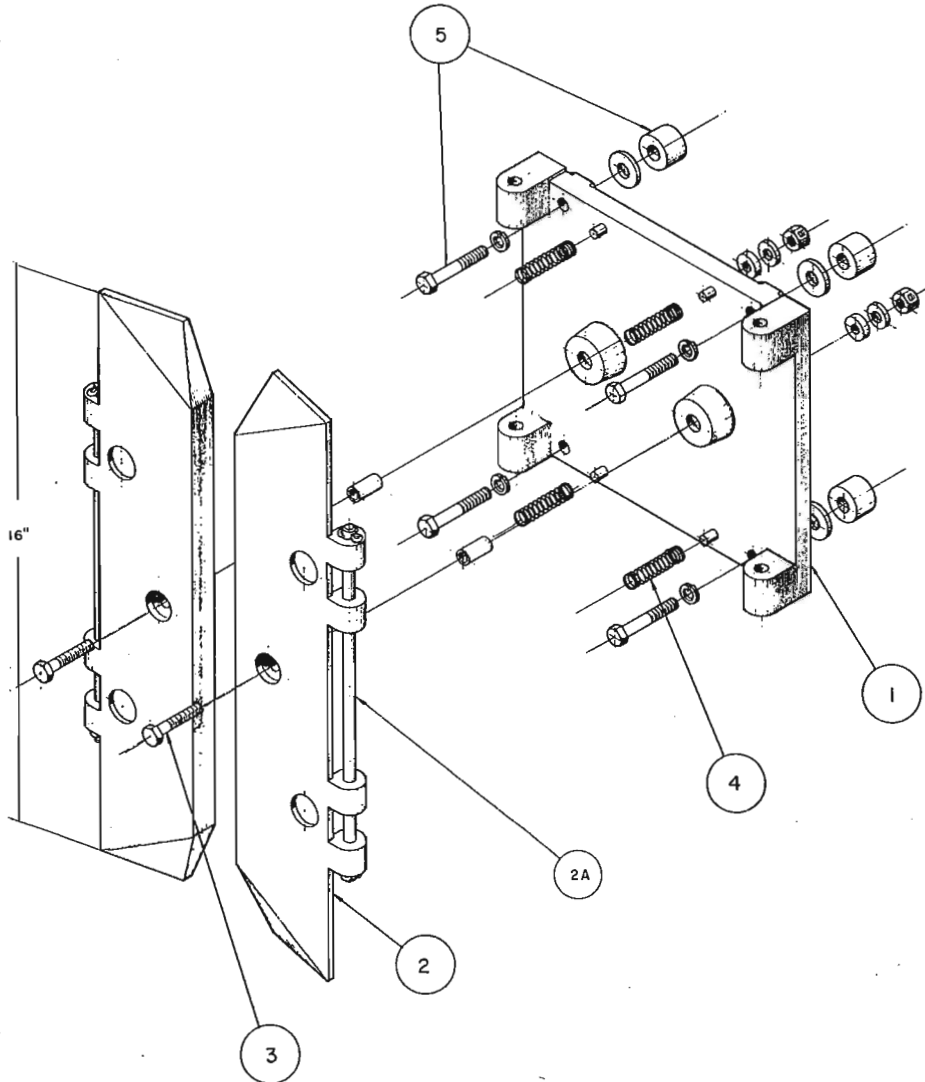
R.H. OPPOSITE AS SHOWN



E. A. L. MANUFACTURING CORP.
50 EAST 153-4 STREET BROOKLYN, N. Y. 10461

TYPE "R" CAR DOOR CLUTCH

MIN. SALES		7-78		SCALE 1/2		DATE 1-20-1975	
NO.	REVISION	DATE	CHK.	DWG. BY	S. C. H.	CH'K. BY	G. F. D.
							OP-32



TYPE "S" CAR DOOR CLUTCH
(PARTS LIST)

PART NO.	DESCRIPTION	
OP-33-1	TYPE "S" CLUTCH BASE	
OP-33-2	LEAF VANE (2) REQ'D.	
OP-33-2A	LEAF VANE HINGE PIN (2) REQ'D.	
OP-33-3	LEAF VANE ADJUSTING BOLTS (2) REQ'D.	
OP-33-4	LEAF VANE SPRINGS (4) REQ'D.	
OP-33-5	MOUNTING HARDWARE AND SPACERS	

NOTE: WHEN ORDERING SPECIFY THIS DRAWING NUMBER, PART NUMBER AND DESCRIPTION.

GAL D. A. L. MANUFACTURING CORP.
50 EAST 151st STREET BRONX, N.Y. 10461
TRADE MARK

TYPE "S"
CAR DOOR CLUTCH

		SCALE 1/2	DATE 1-22-1975
I	MIN. SALES	7-78	DWG. BY S. C. H.
NO.	REVISION	DATE	CHK. BY G. F. D.
			OP-33