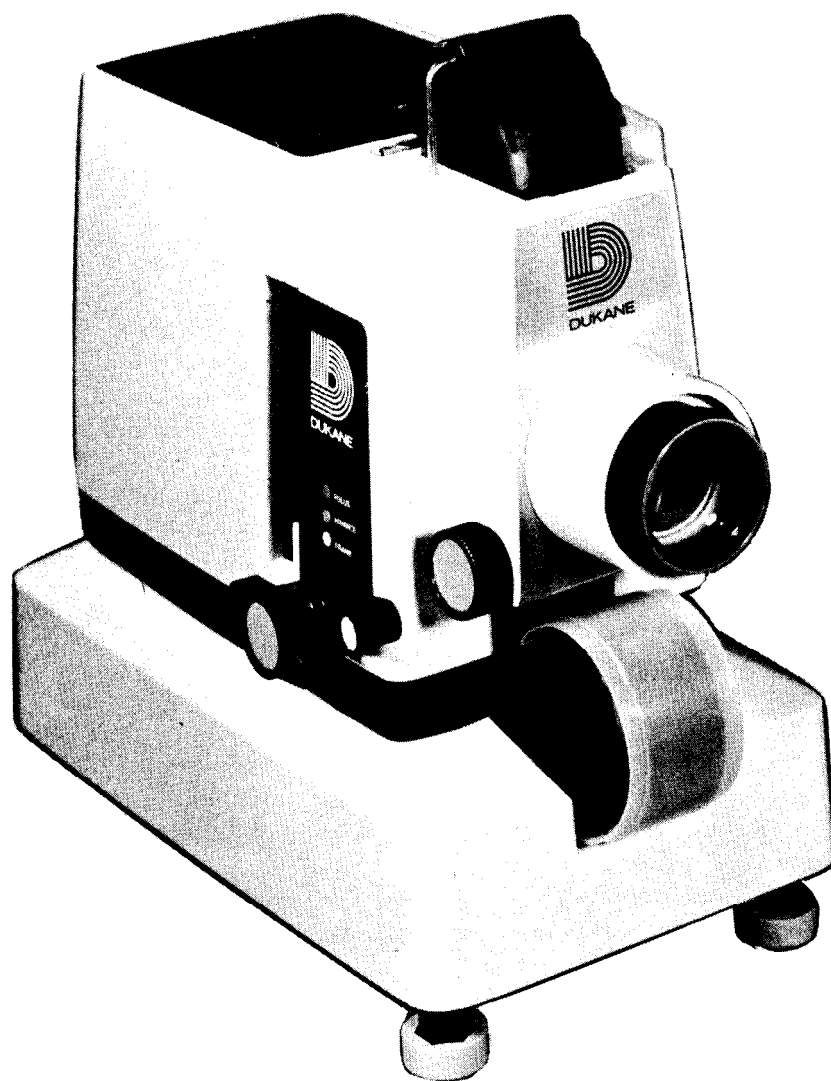


SERVICE AND PARTS MANUAL
MODEL 28A33,28A34,28A35,
28A37,28A53,28A55
FILMSTRIP/SLIDE PROJECTOR



Original Issue
January, 1976
Rev. Feb., 1977

FILMSTRIP/SLIDE PROJECTOR

GENERAL SPECIFICATIONS

POWER:

28A33, 28A34, 28A35, 28A53, 28A55	120V., 60 Hz.
28A37	240 V., 50/60 Hz.

LENS:

28A33, 28A37, 28A53	76 mm (3") F/2.5
28A34	35 mm (1.4") F/2.8
28A35, 28A55	127 mm (5") F/2.8

LAMP:

28A33, 28A35	CAL 300W, 120 VAC.
28A34	CRT 300W, 120 VAC.
28A37	CXH 300W, 240 VAC.
28A53, 28A55	DAK 500W, 120 VAC.

FILM:

Projects standard 35mm single frame filmstrip and film slides with the 178-20 adaptor.

FILM CAPACITY:

200 frames maximum.

SERVICE NOTES

Before the check out procedure begins, it is recommended that a complete mechanical inspection be given to the defective unit. The following list represents a few of the leading mechanical failures due to abusive shipping and handling.

1. Loose screws and mounting hardware.
2. Broken wires.
3. Lenses out of position.
4. Projection lamp loose in socket.
5. Focus wheel jammed.

Mechanical Test:

Insert any 35mm filmstrip into the top of the filmstrip carrier. Pushing down on the filmstrip, advance the filmstrip by turning the advance knob counterclockwise. Use the framing knob to frame the picture. There should be no excessive binding in the framing or advance controls.

Turn focus knob to move lens to its maximum out position; the lens should stop and not fall out of the unit. Next *move*, in the opposite direction, lens to the in position making sure no binding occurs. If focusing knob seems to slip, make sure Item #1-37 or #3-29 is dry and free from lubrication.

Electrical Test:

Plug power cord into 120 V., 60 Hz outlet. Note: Model 28A37 requires a 240 VAC, 50/60 Hz supply. Place the power switch (S1) in the "Fan " position. Only the fan motor should operate with a minimum of mechanical noise. In the "Lamp" position both the projector lamp and the fan motor should operate.

Optical Test:

Install test film into projector and project an 18" picture. Note: A 12" picture for the 28A34. Center picture using framing lever and advance picture through several frames. The image when focused should be essentially free of spherical or chromatic aberrations over complete format with just one focus setting. Distortion should not exceed + 1/2%. If picture is not clear, make sure the condenser lenses (Fig. I-47, I-50 or 3-52, 3-53) are properly seated and the lens system is relatively clean.

The aperture glass (Fig. I-548 or 3-63A) may be removed for easy cleaning. When cleaning the lenses and aperture glass, use a lens tissue or soft line-free cloth.

PARTS AND PRICE LIST

MODELS 28A33, 28A34, 28A35 28A37

28A53, 28A55

ELECTRICAL PARTS

Fig. #2

All parts are shipped F.O.B. St. Charles, Illinois, and PRICES ARE SUBJECT TO CHANGE WITHOUT NOTICE. Orders will be filled at current prices in effect at time of shipment. Minimum billing of five dollars.

<u>CRT. NO.</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>	<u>PRICE</u>
	200-348	Power Cord	\$ 3.00
	191-42	Power Cord Clamp	.10
A1	210-7	Connector	.35
A2	210-3	Connector	.14
L	456-97	Lamp (28A33, 28A35)	8.15
	456-98	Lamp (28A34)	9.90
	456-128	Lamp (28A37)	9.35
	456-158	Lamp (28A53, 28A55)	8.30
M	494-145	Motor (28A33, 28A34, 28A35)	11.50
	494-160	Motor (28A37)	13.50
	494-162	Motor (28A53, 28A55)	9.00
	466-014-06	Lockwasher (2 required)	.02
	992-833-0612	Screw (2 required)	.05
\$1	680-649	Switch	5.00
	530-99-00090	Nut (Inside)	.05
	466-037-09	Lockwasher	.05
	530-99-00145	Nut (Outside)	.05

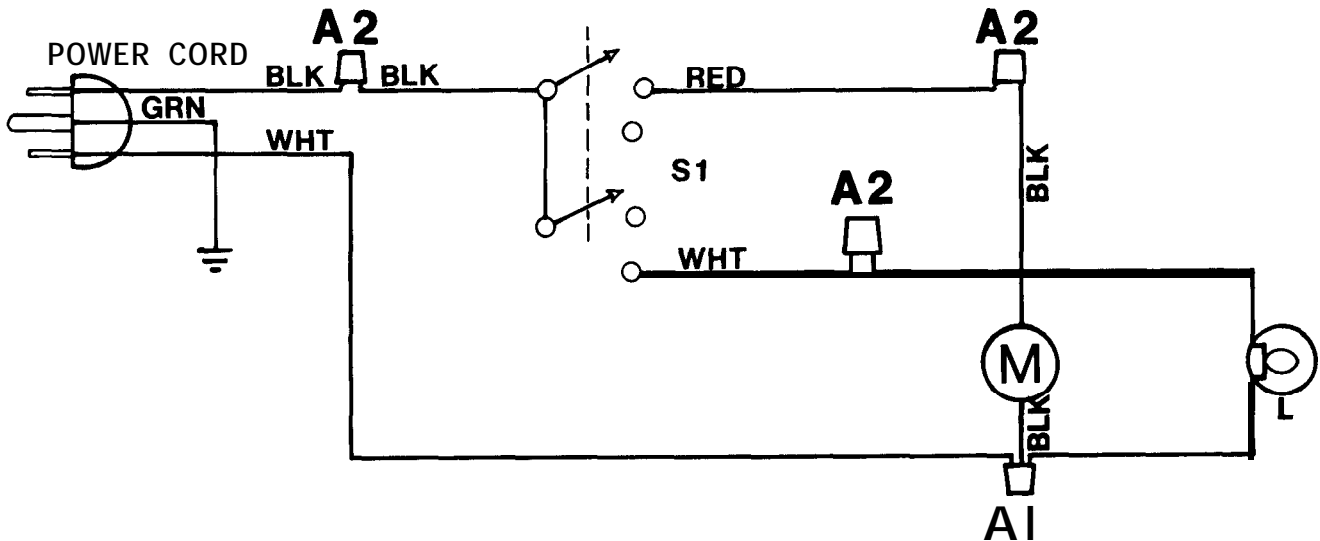


Fig. #2 MODEL 28A33, 28A34, 28A35, 28A37, 28A53, 28A55

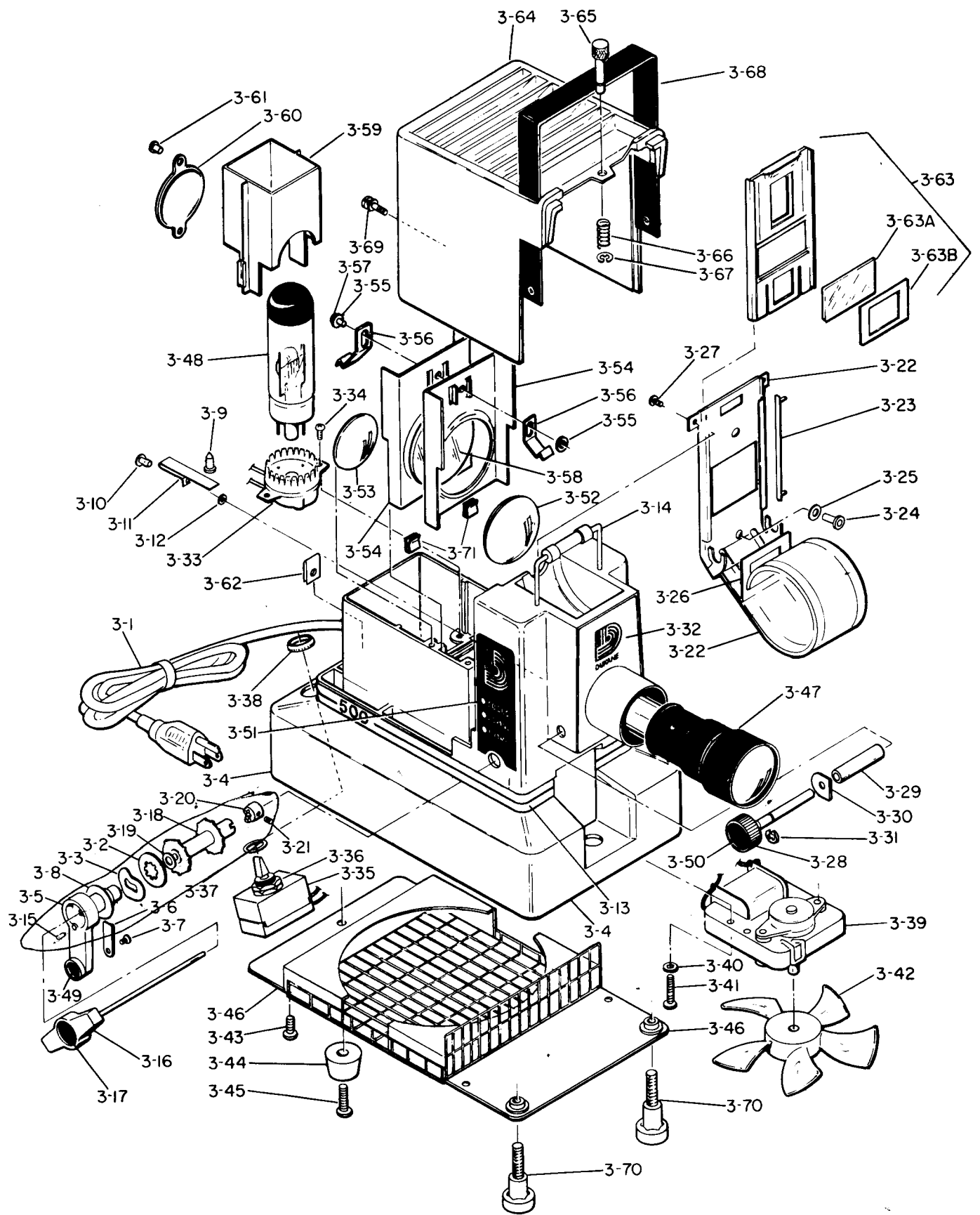


Figure #3
Models 28A53, 28A55



DUKANE

July 17, 1978

A.V. SERVICE BULLETIN NO. 1978-3

MODELS AFFECTED: Silent Filmstrip – 28A33, 28A34, 28A35, 28A37, 28A53, 28A55, 28A56, 28A75.

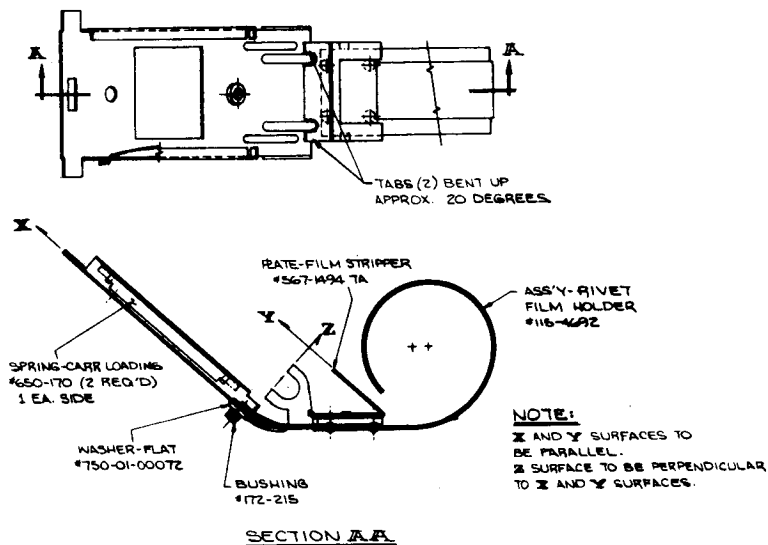
PROBLEM: Difficulty with inserting film into film carrier or film sprocket.

REMEDY: This problem can be caused by the film, film carrier, and film carrier holder.

The film leader must be free of any damaged or torn sprocket holes. A tightly coiled film can be the cause of difficult loading.

The film carrier aperture glass beveled edges must face each other. Chipped or improperly beveled glass should be replaced.

The film carrier holder shape should conform to the drawing below. The surfaces X and Y should be parallel and the Z surface perpendicular to the X and Y surfaces. The two tabs on the film stripper plate should be bent to approximately a 20 degree angle. If this does not correct film jamming at the sprocket, then the film holder should be replaced with Part Number 115-5262. This assembly is complete with the parts shown on the drawing.



A. V. Service Department