

Film-Tech

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FILM NEEDS FOR THE

REEL PEOPLE

H-50-28

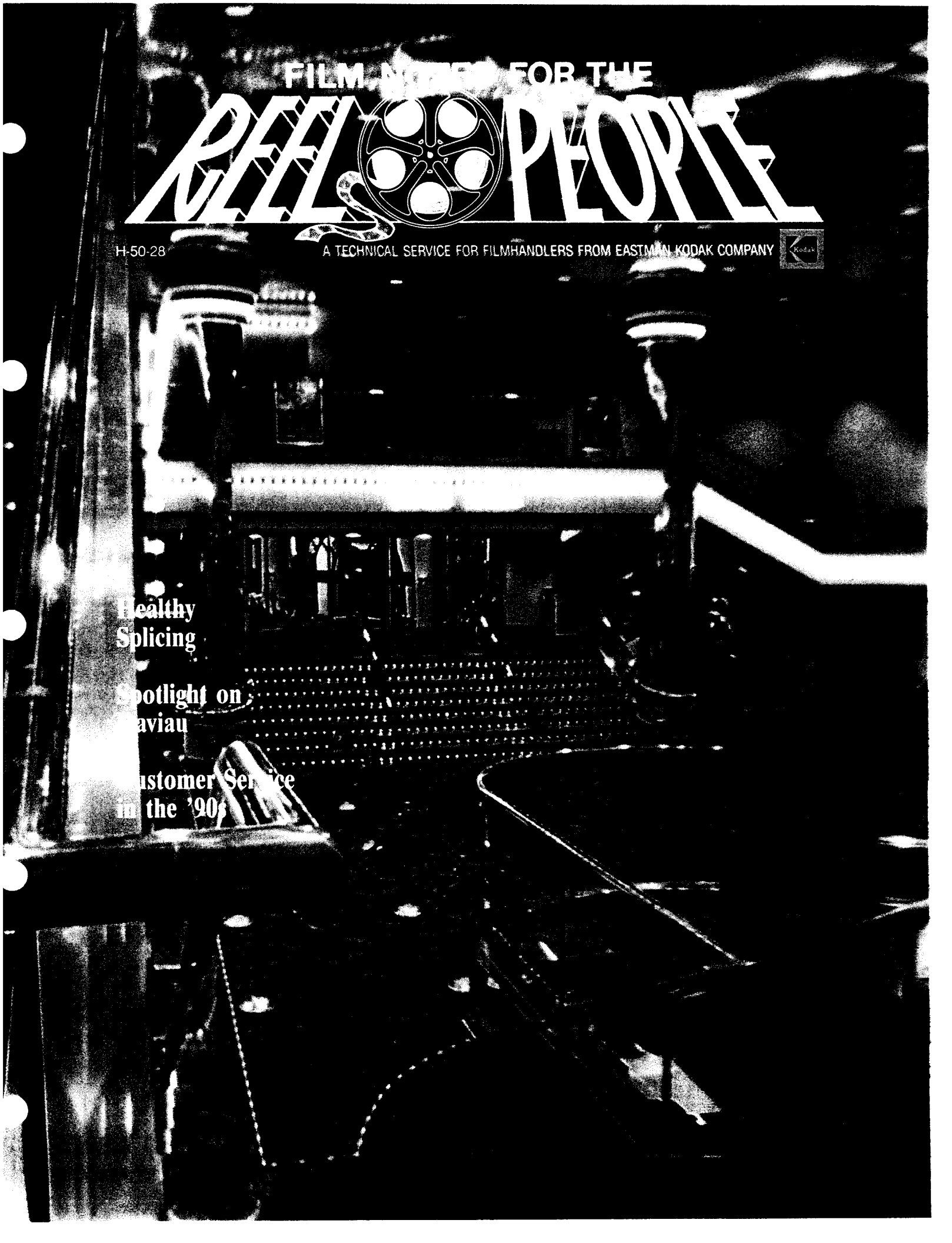
A TECHNICAL SERVICE FOR FILMHANDLERS FROM EASTMAN KODAK COMPANY



Healthy
Splicing

Spotlight on
Gaviau

Customer Service
in the '90s



FILM NOTES FOR THE REEL PEOPLE

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SUMMER 1992

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Spotlight on Daviau

EDITOR'S MAILBOX

Dear Editor:

I attended your *Film From Start To Finish* seminar with the Dallas projectionists union in May. I found it very helpful and full of good ideas. Keep up the good work!

But I wanted to add one of my own: A great deal of dust moves around in the air when the door is opened to the projection booth. In my particular situation, some of the concession supplies are stored in the booth and the platters are close to the doors, so the continual opening of the door gets a lot of dirt on the film unnecessarily. Please ask management to try to keep traffic out of the booth.

A projectionist
Motion Picture Machine Operators Local #249

Dear Editor:

Occasionally a word used in conversation doesn't look correct on the printed page. A notable example is my choice of the phrase "over-exposed" when speaking of the 65 mm negative of *Lawrence of Arabia*. The point that I was attempting to convey was one of a highly saturated, dense negative—much heavier than I have seen on more recent films.

I had the opportunity to speak to Freddie Young about a better way to convey this point and he would consider a more proper phrase to be "fully exposed." Somehow, the term "over" brings a negative connotation to the phrase. The fact is that within the range of printable or acceptable exposures, Freddie's negative is fully exposed within the range of proper exposures. I'll state again that I feel that this manner of exposure most certainly played a major part in the fact that we were able to get the quality that we did out of the Eastman Color Negative after almost thirty years.

Sincerely,
Robert A. Harris

Editor's Note: Robert Harris refers to information contained in his interview on film restoration in our last issue of *Film Notes for the Reel People*.

The editors wish to thank Edwards Theatres for the cover art for this issue and American Multi-Cinema for their technical advice and interior photo contributions.

CUSTOMER SERVICE IN THE '90's

Concessions represent the primary profit center for many exhibitors. This area of the movie business has remarkable room for growth by increasing per capita consumption and by introducing new food items to attract those who currently do not purchase anything. While research in this area remains relatively undeveloped, our research results indicate that relatively small changes in policy may produce major increases in concession sales, and that without at least some modification of existing practices, the industry can expect declines as the audience mix evolves in the next several years.

Consider the following:

- Data indicates that about one in three moviegoers visits the concession stand and makes a purchase. Although many of these customers share with someone else, we estimate almost half of all patrons consume nothing in the theatre. There is almost no good information on why this proportion is so high, but some evidence collected for other purposes allows us to see the basic patterns.
- Considerably over half of all patrons entering movie theatres indicate that they will purchase concessions but only one-third actually do so. Even taking the sharing of concessions into account, we estimate that approximately 30% of those who intend to buy concessions fail to do so. No one has studied the reasons for this, but it seems likely that the main deterrent is fear of missing the beginning of the movie. This can occur for at least three reasons:
 - (1) Arriving at the theatre just before show time;
 - (2) Long lines at the box-office;
 - (3) Long lines at the concession stand.

A secondary reason for the failure of patrons to convert their intentions into purchases may be the absence of attractive items. This point is addressed below.

- From the point at which moviegoers leave their homes, attend a movie, and return home, over 60% eat a meal in a restaurant. An important reason why nearly 40% of patrons do not intend to eat at the theatre is that they

have just eaten or are expecting to eat after seeing the movie. If the concession strategy takes this into account—by competing with or complementing restaurant dining—considerable numbers of new customers can be recruited to the concession stand.



- As people form families and grow older, they become increasingly concerned about their health and its relation to nutrition. Since the mix of movie patrons will now shift toward aging baby boomers, concessionaires must begin to stock and promote snack foods attractive to this group or they will soon experience a dramatic decrease in per capita sales. Research shows that concern for health does not mean a commitment to health food. For most people, it expresses itself as a commitment not to “waste” calories. They do not decide to purchase a snack and then pick the most attractive selection. Instead, they inspect the selection and only make a purchase if it is exactly what they want.

This conditional commitment creates the necessity for a much better fit between theatre offerings and audience preference.

Because of the underdeveloped state of the evidence about these issues, we cannot offer a definitive program to address them. But the evidence and the underlying dynamics of the industry's trajectory allow us to point to a number of immediate measures and to outline an approach to longer term innovations.

Selling to Those Who Intend to Purchase

The most accessible source of new revenues are those customers who expect to buy concessions but change their mind because of the impending beginning of their movie. There are a number of short and long term measures to alleviate this problem:

- We stress the importance of reducing lines at theatres. These types of measures will give patrons greater time to purchase concessions before their movie begins. Appointing one or two concession employees to fill and butter popcorn and fill drink cups frees other employees to stand in one spot and serve customers. Patrons are encouraged to get into a rapidly-moving line when a serving person is clearly visible and customers ahead of them are receiving their merchandise promptly. There is a great deal of wasted motion in a concession stand when the serving employee does not remain in one spot adjacent to a cash register. Implementation of this service procedure should significantly increase per capita sales.
- New or remodeled theatre structures should allow for concession purchases before tickets are bought. The most advantageous design would allow those on the ticket line to buy concessions without losing their place. But simple access to concessions for non-ticket holders would be an important improvement, since most people arrive in groups and can easily divide up the ticket and concession purchases.
- Sale of concessions in auditoriums before the movie begins or during (extended) trailers has also been tried by several exhibitors with very good results. Care must be given to the potential for disruptions, since audiences are increasingly sensitive to the overall experience.

These suggestions rest on existing knowledge and address only the issues which we know are significant in creating the gap between intended and actual purchases of concessions.



Movie Going and Dining Out

There has been no systematic research which addresses the full spectrum of reasons why nearly 40% of moviegoers do not expect to consume concessions. We can expect this proportion to grow in the future, since older patrons are more likely to be part of this already considerable cohort. There is, therefore, a pressing need for analytic information which can guide exhibitors.

The coupling of movie going and dining out should be looked upon as an important context in which to formulate theatre policy. Several possibilities can be considered:

- Coordination of multiple movie schedules with nearby restaurant menus and service (both before and after shows), patterned after the successful symbiosis developed in the New York legitimate theatre district. This can include concessions which complement restaurant menus. Joint promotion with restaurants could amplify the effectiveness of such a program.
- Restaurants attached to multiplex theatres can specialize in delivering meals in time for the start of movies, and could offer food which was not available in nearby restaurants. The offerings can be altered during the daily cycle to match changing tastes from afternoon to evening to late night.
- Memorabilia may be attractive to many patrons, particularly at major openings. Posters, books about movies, novels upon which current movies are based, and videos of movies related to currently playing movies all have potential. Care should be taken to allow patrons to purchase such items when exiting the theatre.

New food products must be introduced at movie concession stands. Moreover, the fast food industry has discovered that new product introductions are a continuous necessity; and this seems likely to be critical for the movie industry as well.

This report excerpted from: "Aging Baby-Boomers and Declining Leisure-Time: Strategic Implications for the Movie Industry," Courtesy of Marketcast, Inc., Needham, Massachusetts.

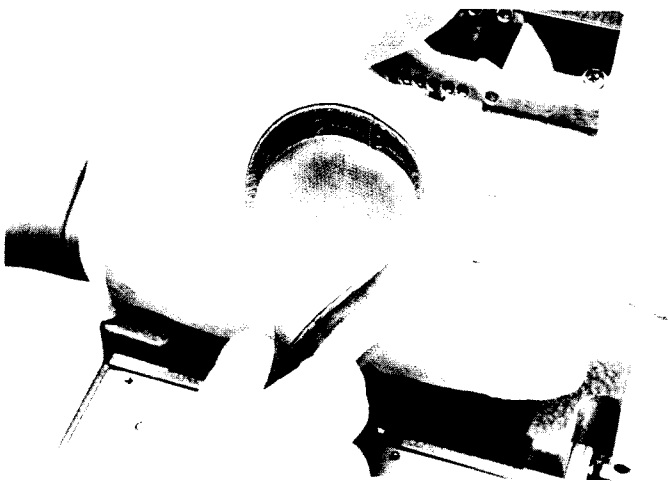
HEALTHY SPLICING

A splice is only as good as its splicer. The film splicer of the modern day projection booth remains one of the least recognized elements in the presentation process, yet it has a direct effect on the finished product. The 90's moviegoer demands a quality presentation. Bad splices, film breaks, and a poor image can tarnish a specific theatre's reputation.

The life of a film splicer increases as certain parts are maintained. For example, splicing tape must endure the rigors of the film transport path, but still allow a blade and perf punch to alter its shape. Dull and broken blades cause most bad splices. Replacing blades remains the easiest splicer task.

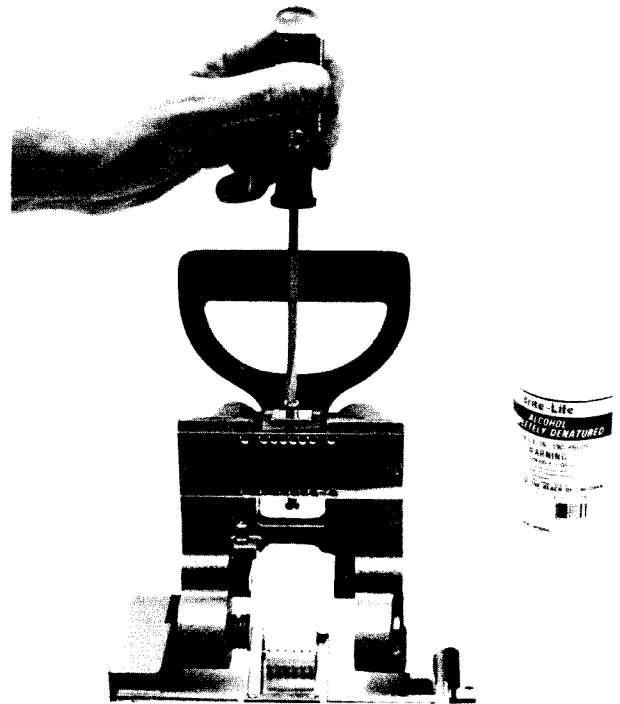
The perf punch and die set aggressively punch holes through two layers of adhesive with every splice. This action of punching holes not only dulls but changes the surface of the perf set.

The film cutter acts as a pair of scissors. The only purpose of this cutter is to cut film. The tiniest nick in either side causes bad cuts. The resulting splice is damaged.



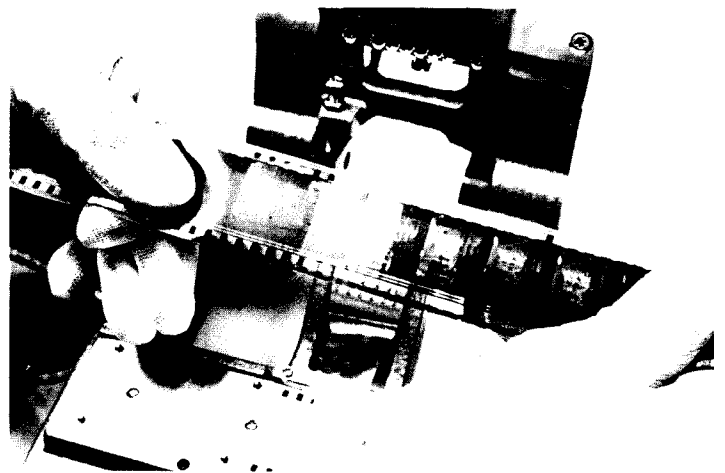
Accurate Usage

As obvious as it may seem, a tape splicer should be used to perform only three functions: cutting film, connecting film, and removing excess adhesive. Using a splicer to cut other substances such as wire, strapping tape, paper clips, etc., will dull the blade, loosen the handle, and misalign the set screws.



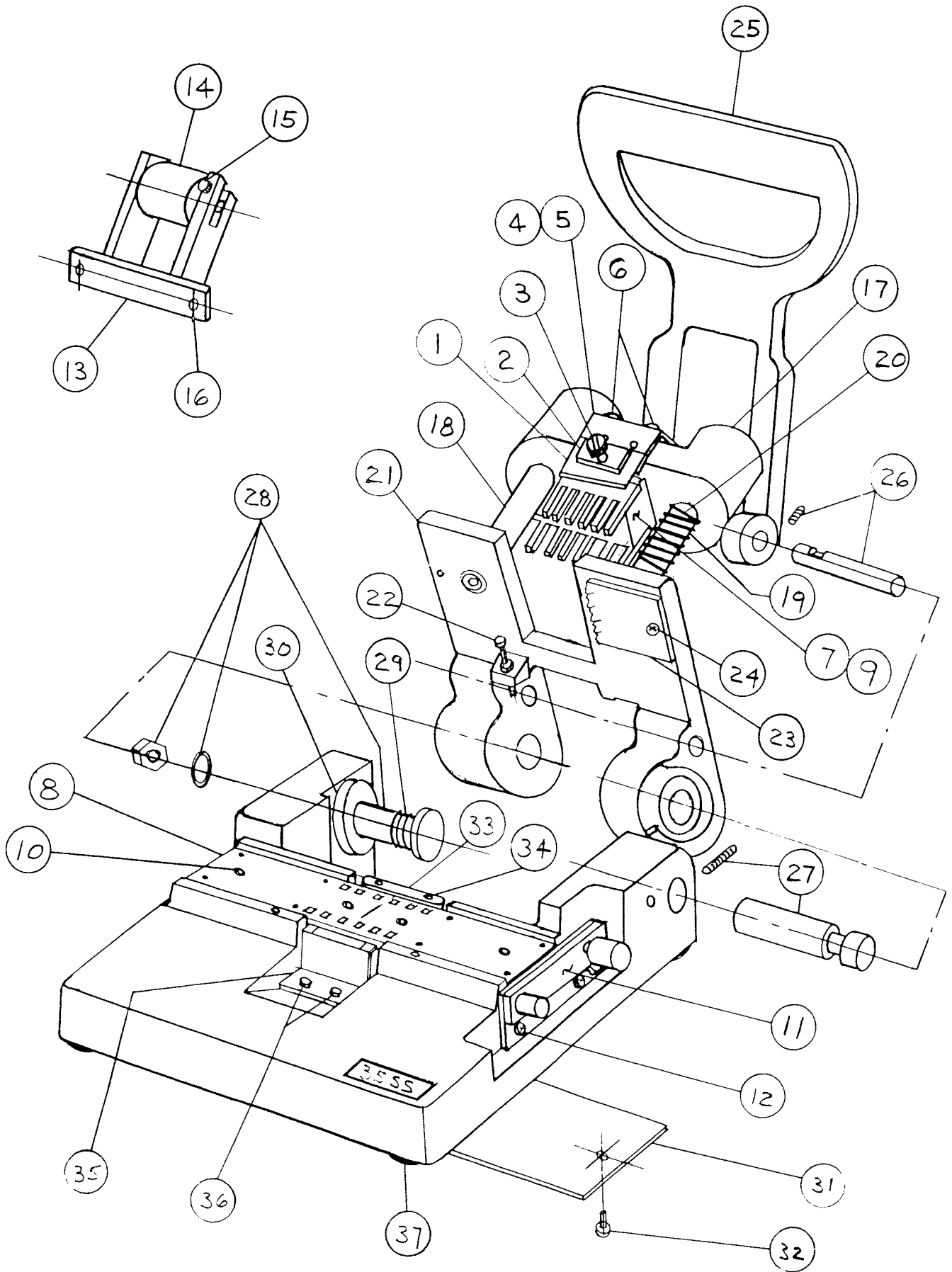
Cutting Film

Use the film cutter to cut only film. Lay the film in the perf die and close the upper jaw. With the cutting blade up, pull slightly down on exposed film. Then swing the cutting blade down. This action makes a clean cut. Always use the same cutter for both sides of a splice. Alignment changes from cutter to cutter.



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Drawing of Typical 35 mm Tape Splicer



35 MM Parts List—Models #35-SS...#35-DS...#35-SDS

Ref. No.	Part No.	Description
1	NT-6B	Tape Cutter Blade
2	NT-7B	Blade Pressure Plate
3	NT-8	Blade Positioning Screw
4	NT-1B	Rear Blade Holder
5	NT-2B	Front Blade Holder
6	NT-2C	Blade Holder Screw & Washer
7		35 mm Perf Punch
8	NT-35PD	35 mm Perf Die (Sold as Set Only)
9	NT-35PC	Punch Mounting Screw
10	NT-35DC	Die Mounting Screw & Washer
11	NT-9B	Film Cutter Assembly (35-SS & 35-DS)
	NT-9BS	Straight Film Cutter for #35-SDS
	NT-9BD	Diagonal Film Cutter for #35-SDS
12	NT-9C	Film Cutter Mounting Screw & 2 Spacers
13	NT-16B	Tape Holder Bracket
14	NT-12B	Tape Holder Roller
15	NT-12C	Tape Roller Retainer Assembly
16	NT-16C	Tape Holder Mounting Screw
	NT-28B	Complete Second Tape Holder Add-On Kit
17	NT-3B	Perforator Punch Base
18	NT-38L	LH Guide Post w/Bolt & Washer
19	NT-38R	RH Guide Post w/Bolt & Washer
20	NT-4	Guide Post Spring
21	NT-22B	Upper Jaw
22	NT-11C	Handle Stop Screw & Nut
23	NT-21B	Stripper Plate
24	NT-21C	Stripper Plate Screw & Spacer
25	NT-11	Handle
26	NT-4H	Handle Pivot Pin & Set Screw
27	NT-22H	Upper Jaw Pivot Pin & Set Screw
28	NT-221	Upper Jaw Pivot Arbor Bolt Spacer & Nut
29	NT-225	Upper Jaw Spring
30	NT-224	Upper Jaw Spacer
31	NT-18B	Base Clean-Out Plate
32	NT-18C	Plate Mounting Screw
33	NT-13B	Rear Tape Guide
34	NT-13C	Rear Tape Guide Screw
35	NT-15B	Front Tape Guide
36	NT-15C	Front Tape Guide Screw
37	NT-17B	Rubber Feet (Set of 4)

Connecting Film

Lay film in the perf die to edge and align on the frame line. The film must lay flat over all registration pins. Pull splicing tape across the joint and rub down with the edge of thumb. Repeat on opposite side. If the tape does not lay flat against the film surface then lift off and try again.

Removing Excess Adhesive

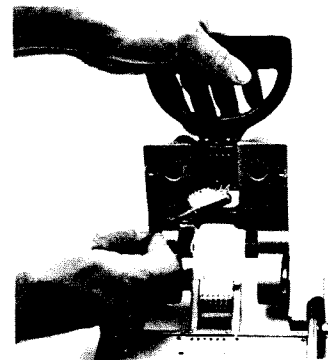
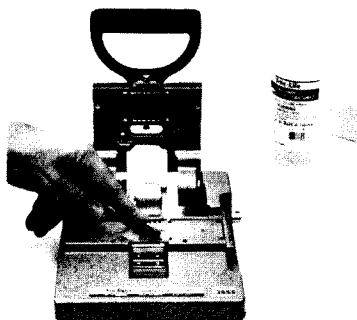
Removal of adhesive occurs as the upper jaw clamps the film in place with the blades and perf set cutting off the unneeded tape. The handle moves the upper jaw causing the blades to cut against the side of the perf die while the perf punch cuts into the perf die. A hard cut signifies a problem. Most handles break due to excessive force to make the cut. Damage also occurs to the perf set this way. Blade alignment and adhesive buildup create hard cuts. Moving the handle down to punch the splice requires a double punch. This first punch cuts the adhesive and second pushes floating adhesive perf through the perf die. This effort will reduce the chance of adhesive perf dropping onto the projector sound drum and sprockets.

Maintenance & Cleaning

Splicers require very little maintenance. But what they **do** require is **CRITICAL!**

- The set screws need tightening monthly. They hold the handle and upper jaw in place.
- The cutter has a spring tension adjustment as part of its hinge. Tension is increased or decreased by a set screw, as required. Improper tension will cause rough cuts.
- Cutting the adhesive needs properly adjusted blades. The front and rear blade holders allow adjustments to the blade alignment. The upper jaw guide post needs lubricating monthly. (TRI-FLOW or XECOTE are suitable lubricants.) Rust will form in booths with high humidity. The guide post and perf punch base must move smoothly for the entire splicer to perform correctly.

Cleaning seems to be the most neglected splicer activity. The average eight-plex makes one thousand splices a month—considering three feature film changes per week, buildup of trailers, leader, reels, and so forth. Each splice creates sixteen adhesive perfs: sixteen-thousand sticky perfs



a month looking for a way out of the splicer base. Add in the adhesive that builds up on the blades, perf set, and cutter, plus all the dirt that collects along the way. A splicer in this condition will self-destruct soon!

The best cleaning procedure demands monthly cleanings by spraying down adhesive contact areas with alcohol. Use a toothbrush to scrub off the glue. A cotton swab removes most of the sticky perfs from the splicer base. Use alcohol and a toothbrush to get the remainder. Pay special attention to the perf punch and die when cleaning because they are difficult to scrub. Do not use compressed air to remove sticky perfs. Clean the blades by removing them and scrubbing both sides. Do not hold the blade while cleaning. Lay the blade flat, scrub, then turn over and repeat. Remember, a clean splicer produces healthy splices.

SPOTLIGHT ON DAVIAU

Of 6,000 eligible movies in the past 11 years, only 55 feature films were selected for Oscar Nominations for cinematography. Although the chances of one person getting five nominations were slim at best, Allen Daviau did it.

He earned his first Oscar Nomination in 1981 for *E.T.: The Extraterrestrial*. It was only his second film. The first was *Harry Tracy*, a small film he still cherishes like a first love. There were other nominations for *The Color Purple* (1985), *Empire of the Sun* (1987), *Avalon* (1990) and *Bugsy* (1992). Daviau hasn't won an Oscar... not yet.

Daviau grew up in Los Angeles. As a teenager, he had a talent for walking past studio gate guards by posing as someone's nephew, so he could watch movies being made. After high school, Daviau audited film classes at local universities, and ended up working on two of Steven Spielberg's "student" movies, as camera operator on *Slipstream* and photographing *Amblin*.

He spent most of the '60s and '70s honing his skills by shooting an early form of music video as well as educational and industrial films, documentaries and commercials. In 1979, Daviau shot his first TV movie, *The Boy Who Drank Too Much*, and within a year he segued into films for the big screen.

During the 1980s, Daviau was in the front ranks of a new breed of cameramen who ignored old boundaries and explored fresh territory. He was selective in his feature work. Daviau's work comprises an impressive and diverse array: John Schlesinger's *The Falcon and the Snowman*, George Miller's *Twilight Zone: The Movie*, three films of Steven Spielberg—*E.T.*, *The Color Purple* and *Empire of the Sun*, Barry Levinson's *Avalon*.

"You better believe in a film if you commit to it, otherwise the passion just isn't going to be there," Daviau says. "I've spent a lot of time waiting for films that never happened. I've also waited for films that turned out to be totally different from what I expected. At the same time, I've been fortunate to be associated with many films that have achieved critical success."

But new challenges arose as he prepared to shoot *Bugsy*. Although he grew up in the Los Angeles of the '40s and '50s, the landscape of the '90s is quite a different scenario.



"It was very frustrating for Barry (Levinson) to see how little survived compared to Baltimore, where he was able to find so many places he remembered from his childhood. Very few of those 50-year-old Los Angeles locations still exist, or if they do, they are much different," Daviau recalls. "We relied on Dennis Gassner, the production designer, who did *Miller's Crossing*, *The Grifters*, and *Barton Fink* to build *Ciro's* club and the interior of an ocean liner on a sound stage. One of the great tactile attributes of a '40s film is that emphatic texture. If you can cause an audience to immerse themselves in that "texture," you have a better chance of making them feel what it was like to be in that time and place.

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Having collaborated as a cinematographer on three occasions with Steven Spielberg, *Bugsy* provided another opportunity to work with Barry Levinson following their critically-acclaimed work on *Avalon*. "Because of the intensity of filmmaking, a person is not always ready to begin another project immediately following wrapping one," Daviau explains. "Barry himself had no intention of doing another film right away until Warren Beatty called him about *Bugsy*. Warren had been developing this script with Jim Toback since 1984. He wanted to play the part. He wanted Barry to direct. I remembered reading and hearing about Bugsy Siegel and Mickey Cohen throughout my formative years in Los Angeles. Their names were as familiar as the mayor's. The picture revolves around people in two worlds, Hollywood and organized crime, each looking glamorous to the other. When Barry Levinson and Mark Johnson asked me to do it, I couldn't resist."

Although Allen Daviau is accustomed to working with a variety of acting talent, *Bugsy* represents his first venture into film driven by a powerful star. "Although Barry pays a lot of attention to choosing the right actors and then creating an environment where he can get the most from them, this film was initiated by Warren to play the role he wanted to play," he states. "Sometimes, they disagreed about the approach to a scene. Barry likes to use multiple cameras; Warren does not because multiple shots often require making compromises with lighting and angles. You don't light a master shot the same way you do a close-up, so if you are shooting both at the same time, there are adjustments to be made."

We shot most of *Avalon* with multiple cameras. It was an ensemble cast with lots of kids, so Barry wanted to cover spontaneous actions and reactions that we might not be able to repeat. On *Bugsy*, we used two cameras, but not all the time. It's a love story, so you want the stars to look good. *Avalon* and *Bugsy* are very different films, so a lot of what we did on *Bugsy*, we did for the first time together. We had many locations, and a lot of small rooms to light on *Avalon*. There were a lot of locations on this film too, but there was much more adapting of those sites by the production designer, and there were more elaborate sets.

A cinematographer's contribution to a motion picture is at once basic yet very delicate. The audience in essence **sees** and **feels** through the senses of the cinematographer. Therefore, the more senses he uses to paint his vision on the film, the more subtle nuances for the viewer to appreciate. Allen Daviau comments on being moved by musical scoring: "Although we ended up with a wonderful theme for *Bugsy*, it wasn't completed until the film was being edited. We had to evoke our own reminiscences of the '40s. On *Avalon*, I had Randy Newman's main piano theme song playing in my head every moment we shot. It inspired the way I lit. Music really makes a difference in the finished product as well. I recall being distraught about one shot we couldn't re-do in *E.T.*

Steven Spielberg told me not to worry: "...when John Williams puts his French horns under it, you'll look brilliant."

Because he is so selective about the film projects he accepts, Daviau spends time between films with commercials, which often provide fertile ground for experimentation. "With today's technology," he enthuses, "we have more freedom to interpret reality or to invent new realities. In the '90s we are just beginning to see the evolution of digital intermediate technology. Cameramen will be able to spend more time in postproduction, and not just color timing in the lab. I shot a spot for McDonald's and the "golden arches" on the set weren't yellow enough. If this was a movie, we'd paint them a more saturated yellow, but McDonald's was nervous about that. I thought about lighting them brighter, but that would also make them paler. But I knew I could restore the color saturation in telecine by saturating the yellow during secondary color correction without affecting the other colors. I boosted the specific luminance of the arches through lighting and restored the color electronically. Soon, we'll be able to do things like that by scanning film into digital format and making those kinds of changes at a film-resolution computer workstation. The ability to do that will become part of our visual vocabulary. I've been following Kodak's development of a high-resolution electronic intermediate system for film. The use of that technology should make a big difference in the '90s."

Although Daviau sees useful applications for a marriage of technology and art, he strongly encourages a back-to-basics approach to learn artistic composition: "I urge people who are interested in cinematography to start with still photography, to work in the darkroom. You need to understand how the photographic process works. People often have the misconception that this is just glamorous work, but you cannot function unless you can think photographically. When you go out on location, maybe you are given great natural light. You take this "given" and add to it. I chose to shoot most of *Bugsy* with Eastman 5294 film because I like the way it holds a broad range of contrast. Eastman alone has six or seven different films to choose from with different speeds and other imaging characteristics. But you still must be able to think photographically. You are not always given radiant natural light. When I was shooting *Empire of the Sun*, we were filming a big exterior in Shanghai, and it became so unexpectedly dark that morning that I couldn't use the 100-speed Eastman 5247 film and still get enough depth of field. So I used the 250-speed 5297 daylight film which had just come out and got beautiful, rich deep images in light that seemed like late dusk."

Daviau simultaneously embraces his art, his craft, and innovative techniques. We look forward to more of his insight and film visions as we move through the '90s.

**MOTION PICTURE AND
TELEVISION IMAGING
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