CARPET CLEANING PROBLEMS

BROWNING

A. Appearance and Description: A brown to reddish brown discoloration that normally appears on the tips of carpet yarn. This discoloration, when it occurs, is not even but rather splotchy. In most cases, in order to have a browning condition it is necessary to have a cellulosic fiber present. Examples of such fibers are: cotton, jute, flax, hemp, paper, ramie, rayon, acetate, and triacetate. Jute is the most common cellulosic fiber found in carpeting. It is the cellulosic fiber that creates the browning, and not the brown color of the jute. The older the carpet the greater the chance of browning, as the jute becomes more water soluble with age. Today the chances of browning on carpet is much less than in previous years, due to jute being replaced by synthetic backings. Browning is more common on upholstery.

B. Cause:
1. Carpeting was too wet
2. Carpeting was allowed to dry too slowly
3. Age of the carpet
4. Cleaning solution was too highly alkaline
5. Carpet had a lot of shampoo in it
6. Carpet had browned-out prior to cleaning

C. Corrective Measure:
1. Spray Odorless Brown-Out Remover.
2. Re-clean the carpeting with Brown-Out Remover.
3. Use Citric Acid

CARPET SHRINKAGE

A. Appearance and Description: Carpet shrinkage can be recognized by pre-inspecting the carpet before cleaning. By inspecting the outer perimeter and seams you can determine if the carpeting had shrunk. Carpet shrinkage can also cause the tack strip to pull up from the floor, and still remain attached to the strip. If you notice the carpet had shrunk prior to cleaning, you should notify the customer and record it on the invoice.

B. Cause:
1. Over-wetting by cleaning
2. Carpeting had been saturated due to broken pipes or natural causes
3. Overstretched by installer
4. High humidity on a damp slab can also promote shrinkage

C. Corrective Measure:
Re-stretch carpeting, if possible

CHEMICAL SPOTS

A. Appearance and Description: These are the type of spots that give carpet cleaners a difficult time. They usually appear when we are cleaning or after we have left the customer's home. These spots can appear as dark areas, light areas, or spots of varying colors ranging from light yellow to dark red, and are a different color than the carpet. **These types of spots can usually be attributed to some form of chemical that was spilled or used on the carpet.** The customer is usually unaware that something had happened because there were no visible signs of it. There have been several bulletins written on this subject, one of which is attached. This bulletin covers: acids, acne medication, bleaches, insecticides, plant food, and others. It also describes ways in which you can recognize spots or stains. However,

there are some spots that may appear with cleaning that can be reversed. These types of spots are chemical reactions, where our cleaning solution has reacted with something on or in the carpet. We will cover this type of spot since the others have been covered in the attached bulletin.

B. Cause: The exact cause of some chemical reaction spots that we have encountered in the last few years are not known. However, there are some products which we believe have contributed to the problem, and we have had success in treating the following:
1. Dry, sprinkle on deodorants
2. Some insecticides
3. Home treatment of pet spots

C. Corrective Measures: There are two products that will neutralize most chemical reaction spots. They are:
1. Odorless Brown-Out Remover - apply with misting bottle and work into carpet fibers. If the spot disappears, this is the correct method to be using.
2. Household ammonia (one part to eight parts warm water). Apply with misting bottle and work into carpet fibers, blotting up excess moisture with a white towel. If the spot disappears or wipes up onto the towel, this is the correct method to be using.

CHEMICAL SPOTS AND STAINS ON CARPET AND RUGS

There are two kinds of spots that can appear on carpet and rugs: common stains and chemical stains. This brochure is designed to help you identify the difference and bring into perspective what can be done about them.

For common stains, The Carpet and Rug Institute has published a "Carpet and Rug Care Guide" which deals with regular care and common problems. It is available from The Carpet and Rug Institute, P.O. Box 2048, Dalton, Georgia 30720.

This publication deals primarily with chemical stains which are becoming more prevalent due to greater usage of such substances in both the home and away-from-home environments. We are not addressing common stains where the carpet is stained or discolored by foreign materials, but those problems where the dye is either destroyed or changed.

Conclusions reached directly or indirectly in this publication are in no way intended as an indictment of a particular product or substance. On behalf of the industry, The Carpet and Rug Institute will continue to work actively with organizations representing or reducing their harmful effects on carpet and rugs.

Acids
Some toilet bowl cleaners contain hydrochloric acid as well as coloring agents. The acid can dissolve the nylon while the coloring matter stains. There are some dyes which turn bright red when contacted by these products. Tile grout cleaners contain phosphoric acid.

Acne Medications
In the past two years, dozens of products have entered the market containing benzoyl peroxide as an active ingredient. This chemical is a very strong oxidizing agent capable of destroying most dyestuffs used in the carpet. It is also a very effective treatment for acne. Since it was approved by the Food and Drug Administration for over-the-counter sale, products containing it have been responsible for hundreds of complaints of mysterious yellow spots which appear where apparently no spill has taken place. The spots sometimes seem to appear spontaneously for several reasons. First, relatively high humidity is necessary for the bleaching action to begin; there have been reports of spots growing in size during a single rainy day for this reason. Second, the time between the contact and appearance of the spots could be days, the spill having been forgotten. Third, many of the spots appear to have been brushed onto the carpet, from hands and faces rather than spilled. Most of the creams are difficult to wash off the hands and a simple rinse leaves enough to cause bleaching.

These spots begin as orange to yellow as the dye is bleached and progress to lightest yellow as the oxidation proceeds. On blue carpet they may appear slightly pink. In many cases, they exhibit an orange ring or halo, which moves outward as the spot grows. The spot may feel and look chalky from the presence of bentonite (fuller's earth) used in the medication to absorb skin oils. Other textiles such as pillowcases, sheets, towels, upholstery fabrics, and clothing may also be affected. A large fiber producer has researched a number of complaints and found 45% of all spots have been related to benzoyl peroxide. A partial list of products containing benzoyl peroxide is included. In addition, this chemical is contained in some pet shampoos and mange remedies and may easily come in contact with the carpet.

Bleaches
Chlorine bleach (sodium hypochlorite) is used in almost every home and may be eventually spilled. Note that many of the plastic jugs leak a little around the cap and drips can occur as the bleach is carried into the house. "All fabric" type bleaches (oxygen bleach) can also cause bleaching and dye bleeding but are slower acting. Swimming pool chemicals tracked into the

home can bleach carpet. Most mildew killers contain bleach and will affect textiles if used indoors. Spots caused by chlorine will be yellow.

DMSO-Dimethylsulfoxide
Some people call it a miracle drug although the Food and Drug Administration has not approved it for general medical use. It is widely sold as industrial solvent but is also widely used for relief of pain from arthritis, back problems, athletic injuries, and other muscular aches. It is a clear liquid with an odor similar to garlic and causes rapid loss of color on carpet due to its solvent action.

Insecticides
It has been recognized for some time that a few insecticides used indoors could cause color changes on carpet. Research has shown that the products most often involved are DDVP, Malathion, Orthene, and Sumithion. Guidelines for exterminators generally dictate that the insecticide be applied in a fan shaped mist to the baseboard - not the carpet. Most of the complaints investigated have shown that application was in a stream, directly on the carpet. An overall light misting may be used for flea control.

Testing indicates that these products change dyes chemically from one color to another. For example, the red dye component of a beige color is changed to blue, giving the carpet a green cast. Humidity appears to play a significant role in the color change.

This type of complaint has increased substantially due to unusually dry summers nationwide, contributing to a thriving flea population. It should be noted that the above chemicals are also contained in many off-the-shelf consumer insecticides, some whose labels recommend use on carpet.

Plant Foods
Spills of liquid plant foods or leakage from flowerpots have caused oxidation spots. These typically develop near the backing and progress upward to the surface, with the actual spot not being apparent for months. These are usually dull yellow or brown in color.

Strong Alkalis
Drain cleaners contain sodium hydroxide (lye) or sodium hypochlorite (bleach) and can cause bleaching. Oven cleaners are gelled sodium hydroxide.

Urine
These spots also begin at the backing and progress upward over a period of time. They may be dull yellow or even red. The characteristic ammonia-like odor will be present for only a few hours but is replaced by a musty odor. Urine glows faintly under ultraviolet (black) light. The hydrochloric acid in both human and animal vomit has been known to cause spots if not cleaned up very well, or neutralized with baking soda.

Color Change in Carpet
When dealing with color changes in carpet, it is important to know what to look for, how and if it can be corrected. There are several known causes for discoloration and the characteristics may vary.

BHT yellowing: BHT (Butylhydroxytoluene) is a colorless compound. It is an antioxidant. An antioxidant is used in many products to prevent degradation. To focus in more specifically, it is found in rebond carpet pads and adhesives. It is a solid matter but at room temperature, it readily changes from a solid to a gas. Here are some of the factors that contribute to BHT yellowing:

1. BHT must be present
2. Nitrogen oxides in the atmosphere
3. Moisture on the surface
4. Alkaline surface pH
5. Restricted airflow
6. Minimal natural light.

The yellowing process begins when BHT changes from a solid to a gas and migrates to the surface. Restricted airflow keeps the BHT from offgasing from the surface. This allows a reaction with the oxides of nitrogen to form a yellow compound (p-quinone methide). Ultraviolet (sunlight) will retard the yellow from forming.

BHT yellowing may be more prevalent in basements or lower level recreation rooms due to lack of sunlight. If discoloration is from BHT yellowing, it will not occur around the perimeter of the room in a tackless installation or over seaming tape. Also, examine under the furniture that lies on the floor or that has skirting, which can restrict airflow and light because restricted airflow or light contributes to yellowing. Finally, using left over-carpet as runners and inexpensive mats on top of carpet have been known to cause yellowing. The restricted airflow can cause the carpet to yellow. Depending on the carpet color the discoloration may not appear as a true yellow. For example, light blue carpet combined with the BHT yellowing may appear green. After inspection, test an inconspicuous area with 10% citric acid solution.

To correct the yellowing, spray 10% citric acid solutions. Agitate the citric acid uniformly into the pile with a grooming comb or brush. Use extra dry vacuum strokes to reduce the possibility of resoiling. Make sure you dry rapidly and thoroughly. Yellowing is usually correctable, although it can reoccur.

Early stain resistant treatments on carpet were sulfonated phenols. These compounds could yellow with age. It would appear as light yellowing throughout the carpet. Today, the newer stain resistant treatments are made with acrylic and yellowing is no longer a factor.

Ozone Fading is an imbalance of oxygen that can cause high levels of ozone in the air. This will cause the carpet dyes to fade sometimes leaving a yellow cast. This results in an overall light fading that cannot be corrected.

General soiling will sometimes appear gray or yellow in the traffic patterns. Test by cleaning an area; if it cleans up proceed with the cleaning. If the spot does not clean up and the carpet is olefin; it could be oil absorption and cannot be corrected.

Cleaning solutions with optical brighteners or pH greater than 10 can cause dye degradation. Discoloration can appear as several little spots, streaks or overall yellowing. This type of damage cannot be corrected.

Asphalt sealer or oil that is tracked in from the outside can cause yellowing. Normally it is found only in the traffic areas of olefin carpet. It is absorbed into the fibers and is permanent.

Wool fibers are more likely to yellow in summer than in winter because of more ultra violet light. Optical brighteners will accelerate the yellowing in wool. Heat and alkalinity are two more contributors to yellowing in wool.

Benzyl Peroxide is a bleaching agent. It is found in several types of medications. This agent weakens the carpet dyes. This may or may not be apparent before the carpets are cleaned. When the carpets are cleaned, the weakened dye structure is removed from the fibers. The discoloration, depending on the color of the carpet may vary and correction is spot dying.

Pesticides contain chemicals that are not compatible with a lot of carpet dyes. When exposed to alkalinity from cleaning solutions, a chemical reaction may cause the carpet to discolor. This type of discoloration may vary in color as well. Test with citric acid solution to see if the discoloration can be neutralized.

Cellulosic Browning is a yellow or brownish discoloration of the carpeting, usually related to the cellulosic fiber content of the carpet or backing. Over wetting and high alkalinity, could create the conditions necessary for browning to occur. Browning can usually be corrected by an application of acetic acid.

Although the sources were already present, discoloration is usually not detected until after the carpets have been cleaned. Careful inspection, asking the right questions and proper testing will help you find the source.

Fertilizers Bleaching Carpet

Many fertilizers, both liquid and dry forms, contain Potash (potassium chloride). If fertilizers are spilled on or tracked onto carpeting, the end result is a powdery residue, which will absorb moisture from the air.

In this process a small quantity of free chlorine may be released. The chlorine can begin bleaching the carpet dyes, which can result in color change or color loss, which may not be apparent until after cleaning.

If the home or office you are cleaning has live plants, you may want to question the owner about the use of fertilizer, and alert them about the potential for spilled fertilizer affecting the carpet dyes.

Ice-Melting Compounds

Build up of ice-melting compounds results in two major problems. The first is rapid soiling and rapid resoiling even after clean up. The second is dye loss and physical damage to the carpet.

Sometimes, normal cleaning and vacuuming procedures don't effectively remove the buildup nor solve the resulting problems. This is because ice-melting products are salt and other materials resulting in a formula that is alkaline in nature. The alkalinity attacks the acid dye structure of carpeting. The product being salt-based also attracts moisture from the environment which never allows the carpet to completely dry and this causes damage to the latex holding the carpet together and the adhesives holding down a glue down carpet.

To treat the ice-melt build up:

1. Use a regular vacuuming program.
2. Use hot water extraction frequently.
3. Dry the area rapidly.
4. Establish a regular hot water extraction and vacuuming program.

HOW TO DETERMINE WHAT CAUSED THE SPOT

It is important to recognize that these spots don't just happen. They are all caused by the chemical action of some sort whether or not the cause is apparent. Therefore, asking the right questions can often turn up the cause. The following suggestions may be helpful:

1. Where is the spot located in the house? Kid's room? If adolescent's room, acne medications are suspect. Living or dining room? Housewives often have plants and finer furniture here meaning more waxing and cleaning. In front of TV? Many possibilities - a lot of benzoyl peroxide spots occur here. Green discoloration along baseboards suggests insecticides; if overall misting has been used for flea control, entire rooms may be affected.
2. Was there a spill or was it tracked? Spills generally are larger in diameter near the backing than on the surface. Open the pile around the perimeter of the spot. Are just the bases of the tufts affected? If possible, look at the secondary backing. Is it stained? Spills of small drops may not penetrate the pile much, but there should be some sort of pattern indicating it was a spill. Tracking usually limits the spot to the tips of the tufts.
3. Is there a pattern? A spill can often show a pattern resembling an explosion. We occasionally see perfect handprints from acne medicines and some very nice footprints from swimming pool chemicals. Spots every 3 feet or so down a hall indicate a person probably tracked something on one foot. Are they only in traffic areas? Do they lead to or from any particular area?
4. Is there an odor? If the spot smells different from the normal carpet, obviously something foreign has been added.
5. What color are the spots in relation to the carpet color? (Note that dye spots caused in the mill are always darker than the background, never lighter.) Yellow indicates oxidation reactions by strong oxidizers or bleaches. Green or blue may indicate sunlight along with a catalyst. Red spots on tan or beige carpet may suggest strong acids.
6. Many of the chemical agents require moisture to trigger the reaction. For this reason, the discoloration may show up shortly after the carpet is cleaned, with the carpet cleaner being blamed.

What can be done with these spots? Spot dying can restore some carpets if the dye damage is not extensive. Sometimes, nothing can be done; the dye is either destroyed or changed chemically and can't be restored by cleaning or treatments. Carpet manufacturers cannot prevent them since there are a few known dyes which are resistant to such chemical attack. Generally speaking, spots resulting from chemical spills are not covered under warranties since they are certainly not defects in the carpet. Remember that all carpet manufacturing processes are batch or continuous in nature and that all areas of carpet are treated the same. Other than rare dye spots (always darker, never lighter, than the background), these complaints are always the result of a foreign substance of some sort.

The above information represents the best available knowledge at this time. Since lab testing has been done under one set of conditions, other conditions might yield totally different results.

PARTIAL LIST OF MEDICATIONS CONTAINING BENZOYL PEROXIDE
(Brands available may vary by region)

Benzagel (5&10%)
Clearasil (10%)
Desquam-X (5&10%)
Eip-Clear
Loroxide
Oxy-5 (5%)
Oxy-10 (10%)
PanOxyl (5&10%)
Sulfoxyl Lotion
Vanoxide Acne Lotion
Xerac (5&10%)
Porox 7 (5%)
Pan Oxyl Bar (soap)
Propa pH Acne Pads
Berry 5 (5%)
Benz 10 (10%)
Cuticura Acne Clear (5%)
Dry & Clear Acne Medication (10%)
Dry & Clear Acne Cream (10%)
Topex Acne Clearing Medication (10%)
Fostex Anti-Bacterial Acne Gel (5%)
Fostex 10% Benzoyl Peroxide Wash
Stri-Dex BP Medicated Acne Cream(10%)
Oxy Wash Antibacterial Wash (10%)
Clear By Design (2.5% BP)
Noxema 12 Hour Acne Medicine (10%)
Persadox
Persa-Gel (5&10%)

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DULLNESS

A. Appearance or Description: Some carpets may appear to be dull all over, but actually just manufactured to be low in luster (brightness). These carpet fibers are made dull by adding a delusterant to the fiber solution before spinning. However, when we as cleaners see dullness in carpeting, it is not due to the manufacturing process. The dullness that we experience is usually caused by soil, wear, or other problems. The main reason that the carpet fibers appear dull is because the fibers do not reflect light at the same angle as the other areas of the carpeting that are not as soiled or worn.

B. Cause:
1. Soil (not cleaned properly)
2. Wear (abrasion from foot traffic)
3. Blooming (see blooming)
4. Pile reversal (see pile reversal)
5. Abnormal abrasion (rotary scrubber or other mechanical device)
6. Over application of Scotchgard or other protectors
7. Shampoo or soap residue

C. Corrective Measure:
1. Re-clean carpet. Pre-spray when necessary.
2. Explain to customer that fibers are wearing. This is caused by normal traffic and soil.
3. Explain to customer that carpet yarn has bloomed (see blooming).
4. Explain what pile reversal is (see pile reversal).
5. Explain that other cleaning methods such as rotary scrubbing can bloom the carpet yarn.

FADING

A. Appearance and Description: Fading can be divided into three main areas: Sun, Ozone, and Fume. Sun fading is the most common form of fading. Sunlight is comprised of light waves of different lengths. It is the ultraviolet waves that can damage the dye on the textile fibers, causing the colors to change or fade. Most fibers are treated with two or more dyes to produce the desired color. One of the dyes may be affected by sunlight more than the other. This would cause a change in color. If each dye is affected similarly, the overall color may appear lighter. Lighter color fibers usually fade more quickly because there is less dye to produce a color. Almost all carpets will fade eventually. Ozone and fume fading are sometimes combined together and called atmospheric fading. In this condition, dyes sometimes react and may change color when exposed to gaseous pollutants in the air.

Fume fading is a reaction to oxidizers of nitrogen or sulfur in the air. Ozone fading is color change caused by ozone gas in the atmosphere. Ozone is that pleasant odor you smell after a thunderstorm. The color change in atmospheric fading is slow and gradual, starting at the tips of the tuft and progressing toward the backing. The fibers may lighten, turn white, or change from one color to another depending on how many different dyes are affected.

Color changes sometimes become apparent after cleaning and the cleaner is blamed. However, in many cases, the color change had gradually developed, but was not obvious due to the overall soil that had accumulated on the carpet.

B. Cause: Oxidizers of nitrogen, sulfur, salt ozone in the air, and sunlight. The changing of color can be accelerated by heat and humidity.

C. Corrective Measure: Once damage has been done to the carpet dye, there is nothing that can be done to correct. The only thing you can do is to try to inform the customer of the condition and record it on the invoice.

MILDEW

A. Appearance and Description: Mildew is a fungus which grows as a result of moisture, darkness, and poor circulation of air and warmth. It will work its way inside the fibers and remove food material weakening the tuft fibers. The musty odor associated with mildew is an odor produced by bacteria which is growing on the waste from fungus.

B. Corrective Measure: The corrective measure depends upon the state of growth and the damage done by the mildew spores.
   1. The source of the moisture has to be located and corrected.
   2. The damage has to be evaluated.
   3. If there is discoloration on the carpet face, there is little that can be done. The damage usually stems from the backing and the corrective measure could cause more damage. Bleach will kill mold at this point, and bleach will also harm the carpet.
   4. If there is no discoloration on the face of the carpet, and a musty odor is present, the carpet should be pulled back to examine the backing. If the discoloration has just started on the backing, usually an application of a biocide on both front and back of the carpet and the sub floor will inhibit the mildew growth and stop the odor. If the moisture problem has not been corrected, the mildew and odor will reappear.

PERMANENT SPOTS

A. Appearance and Description: Permanent discoloration spots are stains which **will not come out** with any of our spotters. These discolorations are usually caused by products containing a dye such as Kool-Aid, red pop, Hawaiian Punch, etc. There are also discoloration spots which cleaners think are permanent, but are really chemical reaction spots. For more information, refer to Chemical Spots.

B. Cause:
   1. Most products that contain a dye
   2. Furniture stains
   3. Some pet food will stain
   4. Spots that the customer has set by trying to remove them

C. Corrective Measure:
   1. If the stain was caused by a product that contains a dye, sometimes the stain is permanent. Attempt correction with a spot color repair system. If a furniture stain, attempt removal with heat transfer solution or Stanley Steemer Carpet & Upholstery Spot Remover.
   2. If it is a chemical reaction stain, either white vinegar or ammonia will neutralize the stain. For more information, see chemical stains.

PET SPOTS

A. Appearance and Description: There are four main problems with pet or urine spots, and they are:
   1. Urine can bleach out the color of the carpet.
   2. Change the color of the carpet
   3. The spot comes out with cleaning, but reappears
   4. Odor - The problem with urine is that it contains hydrochloric acid. This acid can affect most carpet dyes. The degree to which damage is done to the color of the carpeting varies depending upon many circumstances, such as: the sex, age, size, and what the animal has eaten. The color of the carpeting and the dyes used to make up a certain color also have an impact. The fiber content is also a factor. The length of time the urine has been on the carpeting and the procedure used to treat the stain by the customer can

also determine the extent of damage. These are just a few of the determining factors which affect the amount of damage urine can do. Odor is also a problem. If the urine has not penetrated the carpet backing or padding, the odor normally can be neutralized. However, if it has penetrated the backing, there is little that can be done to neutralize the odor without a great deal of cost.

B. Cause of Damage: Hydrochloric acid
   1. Can bleach out the color to varying degrees
   2. Can weaken the dye sufficiently, so that when the carpet is cleaned some of the dye can be removed
   3. Can change the color of the carpet
   4. Odor

C. Corrective Measures:
   1. If the color has been removed, there is nothing that can be done except to explain to the customer what has happened and how to neutralize the acid to prevent future damage.
   2. Applying Odor Out or Odor Zorb will reduce/eliminate the odor, provided we can get to the source.

PILE REVERSAL

A. Appearance and Description: Pile reversal is the changing direction of the pile or nap. This normally occurs in the traffic areas. When the carpet is viewed from one angle, the surface will appear darker than the rest of the carpet. Viewed from the other side, these spots appear lighter. Sometimes the area looks like water stains. This phenomenon usually occurs on velvet plush carpet. Pile reversal is not a manufacturer's defect, or caused by the cleaner. It also has nothing to do with the quality or cost of the carpet.

B. Cause:
   1. Heavy traffic areas
   2. Areas of frequent pivotal action of the feet (or doors)
   3. Prolonged setting of heavy furniture

C. Corrective Measures: Once pile reversal has started there is nothing that will permanently correct this problem. The only thing that can be done is to notify the customer of the problem and explain how it occurs.

SOIL FILTRATION

A. Appearance and Description: Soil filtration, or sometimes called air filtration, can be recognized by dark lines around baseboards, under doors and curtains, and around cold air registers. This condition can happen anytime the customer's home has a central forced air heating or air conditioning system.

B. Cause: Soil filtration is caused when air is drawn around the perimeter of a room to the cold air return. This air is filtered as it passes over and through the carpet tufts which contain many fibers. These fibers filter some dirt and pollution from the air causing dark lines called soil filtration lines.

C. Corrective Measures: Most of the time soil filtration lines are permanent. They usually can be lightened by cleaning. It is always necessary to explain to the customer the cause.

STREAKING

A. Appearance and Description: Streaking will occur during or after the cleaning process. It can be recognized by light or dark strips that range from about two inches to about 3 feet apart, and run either the length or width of the room.

B. Cause: There are two main causes for streaking carpeting as follows:
   1. By allowing the cleaning solution to pile up at the end of the wand, one of three things can happen:
      - The carpet can be cleaner where the solution piled up
      - The carpet can brown-out where the solution piled up
      - Some of the dye can be removed where the solution piled up
   2. Jet streaking is the other cause, and can be affected by:
      - Improper alignment of the jets
      - Jets are not spraying properly (dirty)
      - Jets are not the same size
      - When cleaning, allowing the jets to spray in the same area every time. This happens on velvet plush carpet.

C. Corrective Measures: Re-cleaning the carpet is the best procedure to take, and should be cleaned perpendicular to the original direction. If the carpet had browned in streaks, use a brown-out treatment.

STICKY CARPET

A. Appearance and Description: This is the condition of the carpet having a sticky feeling all over. In some cases, the customer may have a hard time pushing a vacuum cleaner over the carpet.

B. Cause: The most common reason for sticky carpet is an over application of Scotchgard. Another cause is shampoo in the carpet.

C. Corrective Measure: To remove Scotchgard from the carpet, it will be necessary to pre-spray the carpet with Scotchgard remover. After spraying the carpet, re-clean the carpet thoroughly.

CARPET INSTALLATION PROBLEMS

LOOSE CARPET

A. Appearance and Description: Loose carpeting can happen before, during, or after the carpet has been cleaned. Today, many carpets are manufactured with all synthetic materials and have a tendency to relax when the moisture level becomes high. These types of carpet are constructed with a synthetic primary and secondary backing.

B. Cause:
1. Type of material used in the construction of the carpet
2. Improper stretching during installation

C. Corrective Measure:
1. If the carpeting was loose prior to cleaning, the customer should be told and it should be noted on the invoice.
2. If the carpet was tight and became loose after cleaning and didn't tighten after it had dried, it should be restretched with a power stretcher.

LOOSE FROM THE TACK STRIP

A. Appearance and Description: This problem is what it implies. The carpeting has come off the tack strip. If this problem goes unnoticed, the carpet could shrink to the point where the carpet is not secured. It would be your responsibility to restretch the carpet. If the problem was pointed out to the customer and recorded on the invoice, it would be the customer's responsibility.

B. Cause:
1. Improper installation
2. Carpet had shrunk

C. Corrective Measure:
1. Notify the customer of the problem, and what to expect.
2. Restretch the carpet using a power stretcher.

SPLIT SEAMS

A. Appearance and Description: Split seams are what they imply. The carpet seams have come loose or have spread apart.

B. Cause: Split seams are caused by poor installation, being over-wet from cleaning or flooding, or possibly shrinkage.

C. Corrective Measures: Split seams can normally be corrected by a carpet repairman, but if the technician notices a split seam it should be noted.

CARPET PROBLEMS
(MILL DEFECTS)

BLOOMING

A. Appearance and Description: Blooming or tip flaring is the untwisting or opening of yarn. Most carpet yarns are constructed with two plies, which are twisted together and heatset to keep them in their twisted configuration. Blooming can be found on cut pile or sheared carpeting.

B. Cause:
1. Improper heatsetting
2. Inexpensive carpet (not heatset)
3. A rotary scrubber was used often.

CROCKING

A. Appearance and Description: When a fiber is dyed, it will absorb only a certain amount of dye. Excess dye will not penetrate the fiber. When rubbed with a white cloth, color will transfer. Also, the dye can be walked off the carpet onto an adjoining carpet. Crocking is more likely to occur on dark colors.

B. Cause:
1. Can be a manufacturing defect.
2. The carpet was redyed.

C. Corrective Measure: None. Have customer call manufacturer.

DELAMINATION

A. Appearance and Description: On tufted carpeting, delamination is the separation of primary and secondary backing. The primary backing is the material to which the carpet yarn is tufted into. The secondary backing is the material which covers the primary backing and gives the carpet dimensional stability. There is a coat of latex adhesive which holds the layers together.

The most common delamination problem that we, as cleaners, experience is on foam backed carpeting such as kitchen or indoor / outdoor carpeting.

B. Cause:
1. Insufficient tuft bind or latex. This is a mill defect.
2. Aged or dried latex
3. Inexpensive foam backing used on carpet
4. Heavy objects rolled across carpeting, especially on foam backed carpet
5. Heavy foot traffic or heavy pivotal areas, such as in front of a kitchen sink
6. Flooding, especially heavy foot traffic or rolling objects while carpet is wet.
7. Insufficient cushion density allowing too much flexing of carpet. Also, too thick of a cushion allows excessive flexing resulting in delamination.

DYE BLEEDING

A. Appearance or Description: Dye bleeding is the running of dye when it is wet. The fugitive dye is removed from the fibers and is deposited on an adjacent area or color of the carpet. In solid carpet, the bleeding of dyes might cause the carpet to appear lighter and streaks may also occur. Most carpets are color fast; however, with oriental rugs you might experience dye bleeding. It is always necessary to check for color fastness on oriental rugs, and you must check each and every color. The proper way to check is to apply a small amount of cleaning solution to the color you are checking, at the strength you normally clean with. Then taking a white towel, blot the color and check to see if any color transferred to the white towel. If there was a color transfer, do not clean it.

B. Causes: There can be many causes for dye bleeding, and it is hard to determine the exact cause. Below is a list of some causes.
   1. Manufacturer's defect
   2. Cleaner's error by either letting the cleaning solution pile up at the end of the wand or using a non-approved chemical.
   3. pH of the detergent
   4. Over-wetting or flooding
   5. Temperature of the selected cleaning method (upholstery only)
   6. Prolonged day time (use an air mover/blower, especially on upholstery)

C. Corrective Measures: If a carpet or rug has bled, there is nothing that can remove the color without affecting the other colors. If you believe it is a manufacturer's defect, contact Stanley Steemer International before you make any mention of this to the customer.

PILLING OR FUZZING

A. Appearance or Description: Pilling is a condition which appears mainly with staple fibers, which are short pieces of fiber, twisted together, which make up a carpet yarn. These short fibers can work themselves loose from the carpet tuft when walked on. If these fibers become tangled with other fibers, they create a little ball of fuzz on the surface of the carpet. This is called pilling. Pilling used to be common on older nylon carpets; however, it is not as common today.

B. Cause: Pilling is caused by the breaking off of fibers or the coming loose of staple fibers. These fibers become tangled with other fibers and form a ball of fuzz on the surface of the carpet. This condition is not a manufacturer's defect. Pilling can be accelerated with the use of rotary scrubbers, or a damaged beater bar on a vacuum cleaner.

C. Corrective Measures: Treatment will depend upon the number of pills on the carpet. If there are only a few, they can be cut or pulled off. If there are many, they can be brushed off with a silicone block, or cut off with a clipping or shearing machine. In any case, we as carpet cleaners should not get involved in the removal of pills. This should be done by the customer or a professional carpet repairman.

SHADING

Note: Normal condition of carpet and is not a problem, unless the customer perceives it to be.

A. Appearance or Description: Shading is a characteristic of sheared or cut pile carpet. It looks as if there are color differences throughout the carpet. These color variations are produced by light striking tufts that lie in different directions. It is very important that, after cleaning, the carpet should be groomed in one direction. The purpose of grooming is to lay the tufts in one direction, and when the customer looks at the carpet, it is a uniform color. The main difference between shading and pile reversal is that pile reversal is permanent, where as shading is temporary.

B. Cause: This is a characteristic of cut pile carpet and not a defect.

C. Corrective Measures: Properly grooming carpet will even the color.

SHEDDING

A. Appearance and Description: Shedding is a condition which occurs on cut or sheared pile carpeting. In this type of carpet construction, staple fibers are used. Staple fibers are short pieces of fiber, which are twisted together to form the carpet yarn. Some of these staple fibers are not secured when the yarn is tufted into the primary back. These short pieces of yarn can work loose. When these fibers come loose, it is called shedding. Shedding is very normal and may continue for many months. Shedding will not harm the life or wearability of the carpet.

B. Cause: Shedding is not caused, but rather a normal condition of a sheared or cut pile carpet.

C. Corrective Measures: There is no corrective measure. However, frequent vacuuming by the customer will prevent the fibers from becoming noticeable by others.

SPROUTING

A. Appearance and Description: Sprouts are long tuft ends, which have worked loose and extend above the surface of the pile. These tufts may have latex on the ends.

B. Cause: The problem may have originated during manufacturing, installation or from use. A tuft may have doubled over during the tufting operation and was not sheared off. The ends may then work loose, showing the extra length. Poor tuft bind may also be the cause as the latex compound did not sufficiently penetrate and anchor the tufts or loops, the yarn will pull out easily.

   Improper use of a knee kicker or power stretcher may cause sprouts, especially along walls. It may not be seen until carpet is first vacuumed.

C. Corrective Measure: Sprouting tufts can usually be repaired by cutting the yarn evenly to the level of the pile. You should explain to the customer the cause of the problem, and let the customer make the repair.

The Carpet and Rug Institute
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by Carroll Turner
Technical Services Manager
P.O. Box 2048
Dalton, GA 30720
800-882-8846
www.carpet-rug.com