This is a quick, neat procedure which will return selected individual cows to breeding soundness.

Indications for surgery:
1. Obviously gaping or damaged vulvar lips beyond 20 days post partum.
2. Noticeable air in the vagina detected on 2 sequential examinations at herd check. These are not subtle; the vagina feels like an inflated football. There is accompanying vaginitis and metritis.

Procedure:
1. Caudal epidural analgesia is administered.
2. The perineal area is scrubbed.
3. The vulvae are carefully assessed to determine the lower limit of the surgical intervention and that place may be marked if desired. This point is usually about 7 cm above the ventral commissure of the vulvae. Below this point the vulvae are nearly vertically oriented and above this point they angle forward toward the anus.
4. A 1 cm strip of skin/vaginal mucosa is removed with straight scissors beginning on each lip at the previously determined lower point, and meeting at the dorsal commissure of the vulvae. Attempt to remove more mucosa than skin.
5. Starting at the ventral extremity of the closure with 0 PDS on a cutting needle place a row of vertical simple continuous sutures in the subcutis/sub-mucosa. Leave a long tail at the beginning of this line for future use. End this line with a sub-cuticular clove hitch. Do not cut the suture free.
6. With the same suture strand come back down the closure line with horizontally placed subcuticular sutures and tie to the tail left at the beginning, or tie another sub-cuticular clove hitch. Pay particular attention to making each stitch entry and exit right at the base of the dermis and sweeping widely laterally. These details will promote a tight leak proof line of closure with good strength.
7. Make a final pass of the needle into the submucosa and exiting through the skin lateral to the closure line as far as possible. Cut off suture at skin level. This buries the knot and ends which tend to accumulate manure if left on the surface.

Aftercare:
Any remaining suture material left after 2 to 3 weeks may be removed but I have experienced little need for this. There seems to be no need for an episiotomy prior to the next calving.

Results
Barring any other abnormalities these cows quickly clean up their metritis/vaginitis and return to breeding soundness.